CELLECTA®
INNOVATION IN INSULATION

Sound Proofing Solutions

New Build, Refurbishment and Conversion

Floors Walls Ceilings Underfloor Heating

PART E SOLUTIONS

SECTION 5 SOLUTIONS

Contents


UK Production Facility


Automated Production


Extensive Stock Holding

Why CELLECTA?

CELLECTA is proud to be the UK's leading innovator and manufacturer of high performing and environmentally friendly acoustic floor and wall treatments, underfloor heating systems, and technical insulation boards.
For over 25 years our products have been successfully installed in a myriad of residential, commercial, educational, healthcare, and industrial buildings.

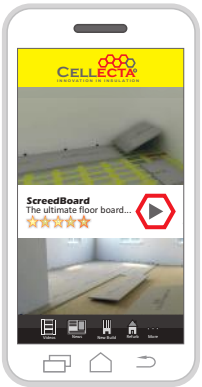
CELLECTA's team of experienced technical consultants offer unrivalled customer support, supplying the very best advice on the most suitable products to satisfy current legislation. Our team can also offer RIBA Certified CPD's, arrange quick and efficient deliveries of our products and provide first class after sales service, including installation advice to ensure customer satisfaction.

01634 29-66-77

FREE services offered by CELLECTA:

- Technical and installation advice
- Architectural drawings and NBS specs
- U-value and imposed load calculations
- Site surveys and take-off service
- Arrange acoustic testing
- Present RIBA certified CPDs

For on the go access to information, including installation videos & technical data, download the CELLECTA app for smart phones and tablet devices.



Featured Products

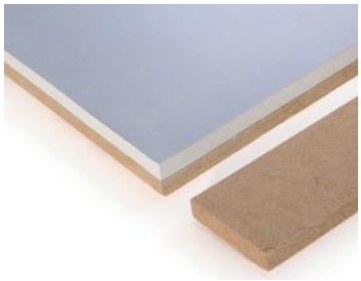
1 DECKfon® Battens P.55

Resilient Composite Battens

- Outstanding acoustic performance
- Two heights' available: **45mm** and **70mm**
- Suitable for all floor types
- **Robust Detail FFT1** and **FFT3** compliant
- FSC® certified timber Third party tested
- **45, 70mm** x 45mm x 2400mmm (under 25kg/m² load)

2 HiGYP® 30TM P.80

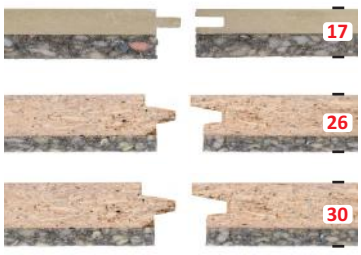
High Performance Wall Lining Treatment



- Outstanding acoustic performance
- Only 45mm overall thickness (30mm + 15mm)
- Suitable for masonry walls with timber separating floors covered with **ScreedBoard 28**
- Baffles provide a 15mm service cavity
- Patented system
- **30mm** x 1200mm x 2400mm

3 DECKfon® 17T, 26T, 30T P.75

Composite Acoustic Overlay Floorboards for Refurbishment and Conversion Projects



- Excellent acoustic performance
- Incorporates a moisture resistant T & G floorboard
- Ideal for upgrading existing floors
- Recycled resilient layers
- **17**, **26**, **30mm** x 600mm x 2400mm

YELOfon® ES5 & ES10

Perimeter Edge Strips

4

YELOfon® FS P.87

"L" Profiled Perimeter Flanking Strips

5

CELLECTA®

6 ScreedBoard® 28 P.66

High Density Composite Acoustic Floorboard

- Unrivalled performance
- Robust Detail proprietary treatment: **E-FS-3**, **E-FT-5**, **E-FT-6** & **FFT4** compliant
- Compatible with steel, concrete & timber floors
- Looks and feels like screed
- Accepts all types of floor coverings
- **28mm** x 600mm x 1200mm

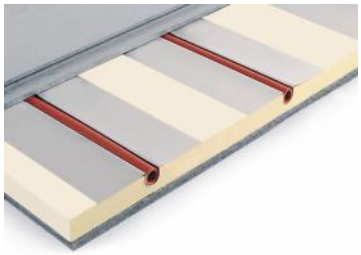
7 YELOfon® HD10+ P.31

UK's No.1 Under Screed Resilient Layer

- Superior sound deadening properties
- Robust detail **E-FC-5**, **E-FC-17** & **E-FC-18**
- Suitable for all types of concrete floors
- Supplied in a kit, including edge strip and tape
- Lightweight, easy to cut and install rolls
- Works in conjunction with **XFLOOR** UFH boards
- **10mm** x 1.5m x 33.33m (<20kg per roll)

8 Mojave® P.63

Dry Laid Acoustic & UFH System



- Dry installation, quick and easy to install
- Rapid response times
- Works with all pipe diameters (10-20mm), manifolds and controls
- High compressive strength, accepts all finishes
- Outstanding acoustic performance Robust Detail **E-FS-3**, **E-FT-5** & **E-FT-6** treatment

9 Gobi® P.42

Dry Laid Acoustic & UFH Levelling System

- Levels all types of separating floors
- Works with all pipe diameters and controls
- Rapid response times
- Dry installation, speeds up build process
- High compressive strength, accepts all finishes
- Outstanding acoustic performance Robust Detail **FFT2** compliant

Building Regulations

Approved Document E of the English & Welsh Building Regulations, and Section 5 of Scottish Building Standards address a number of areas: increased noise levels suffered by occupants of multi-storey dwellings, demands for higher density housing, greater use of noise producing equipment and, above all, absolute assurance that prescribed dB values are achieved.

CELLECTA manufactures an extensive range of high performance acoustic insulation solutions that can achieve the demanding legislative requirements with proven cost effective constructions.

Part E

Legislative Requirements

All separating floors and walls must be constructed in such a way as to achieve minimum sound insulation values.

Section 5

Methods of compliance

Pre-Completion Testing (PCT)

This method of compliance requires the contractor to test a minimum of 1:10 units adopting each specific construction. Tests must be carried out by an accredited acoustic engineer with the structure needing to achieve the minimum prescribed acoustic values.

Airborne sound tested to BS EN ISO 140-4 1998

Impact sound tested to BS EN ISO 140-7 1998

Building Regulation & Standards performance requirements

	England & Wales Part E	
	New Build	*Change of Use*
Airborne (Walls & Floors)	≥45 dB $D_{nT,w}+C_{tr}$	≥43dB $D_{nT,w}+C_{tr}$
Impact (Floors)	≤62 dB $L_{nT,w}$	≤64dB $L_{nT,w}$

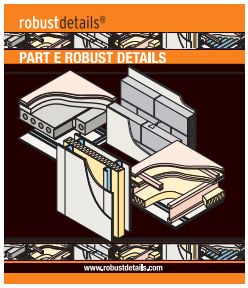
	Scottish Building Standards Section 5	
	New Build & Conversions	*Traditional Buildings*
Airborne (Walls & Floors)	>56dB $D_{nT,w}$ (1)	>53dB $D_{nT,w}$ (1)
Impact (Floors)	<56dB $L_{nT,w}$	<58dB $L_{nT,w}$

(1) Effect of C_{tr} not taken into account

Robust Details (RD)

This method of compliance eliminates the need for continual testing. Specifiers can select from a number of rigorously tested approved robust construction details that will, if installed correctly, provide a level of sound insulation in excess of Part E requirements. Contractors simply register each unit adopting the detail with Robust Details Limited, tel.03300 882141 www.robustdetail.com and pay a registration fee.

Robust Details handbook



All CELLECTA floating floor treatments (**FFTs**) exceed the acoustic performance values required to achieve Robust Detail compliance and have been independently validated by the **British Board of Agrément** and carry the **BBA** Robust Detail verified mark.

RD Compliant Treatment

RD Proprietary Treatment

BBA VERIFIED RD DATA

Minimum performance value achieved

	Robust Detail Standards
	New Build
Airborne: (Walls & Floors)	≥47 dB $D_{nT,w}+C_{tr}$
Impact: (Floors)	≤60 dB $L_{nT,w}$

Robust Detail Product Performance

Proprietary Treatments - Separating Floors
CELLECTA offers a number of exclusive proprietary treatments for separating floors, with more undergoing assessment. Should one be adopted, no alternative products may be installed, ensuring outstanding acoustic performance and compliance with legislative requirements.

E-FS-3: **ScreedBoard® 28** composite acoustic treatment or when incorporating an underfloor heating system: **Mojave®** (**ScreedBoard® 20** dense overlay board, **XFLO®** insulation board & **FIBRE*fon*® 8** resilient layer).
See pages 21 & 22 for full details.

E-FC-5 & E-FC-18: **YELO*fon*® HD10+** *System*, comprising of **YELO*fon*® HD10+** (resilient layer with *Surebond* facing), **E-strip** (perimeter edge strip) & **J-strip** (acoustic joining tape).
See pages 31 & 47 for full details.

E-FC-17: **YELO*fon*® HD10+ *System* & ULTRA ceiling system**, comprising of **YELO*fon*® HD10+** (resilient layer with *Surebond* facing), **E-strip** (perimeter edge strip), **J-strip** (acoustic joining tape) and **CELLECTA AH50** acoustic hangers.
See page 36 for full details.

E-FC-18 & E-FC-19: **RUBBER*fon*® Impact 6** (high density resilient layer), **RUBBER*fon*® Edge strip** (perimeter edge strip) & **HG tape** (joining tape).
See pages 37 & 47 for full details.

E-FT-5: **ScreedBoard® 28** composite acoustic treatment or when incorporating an underfloor heating system: **Mojave®** (**ScreedBoard® 20** dense overlay board, **XFLO®** insulation board & **FIBRE*fon*® 8** resilient layer).
See pages 58 & 59 for full details.

E-FT-6: **ScreedBoard® 28** composite acoustic treatment or when incorporating an underfloor heating system: **Mojave®** (**ScreedBoard® 20** dense overlay board, **XFLO®** insulation board & **FIBRE*fon*® 8** resilient layer).
See pages 66 & 67 for full details.

Robust Details - Separating Walls
A multitude of both generic and proprietary separating wall constructions are available. Full details of compatible separating wall and floor combinations can be found in the Robust Details handbook. CELLECTA's range of PCT wall treatments can be found on page 80.

Changing a registered Robust Detail
Registered Robust Detail plot constructions can easily be changed on-line, free of charge. Simply log into your account at **www.robustdetails.com**, click on the amend plot option, followed by the drop down box of the wall and/or floor type that you are changing.

Generic Treatments - Separating Floors
CELLECTA's extensive range of generic treatments have been independently tested in a UKAS accredited laboratory to prescribed standards, and exceed the minimum acoustic performance values stipulated by Robust Detail Limited.

Steel - concrete composite and concrete floors
E-FS-1, E-FC-1, 2 & 7: Experience has shown that the mass of the floor and the ceiling treatment will exceed the required airborne acoustic values, thus eliminating the need for additional testing. However each floating floor treatment's **(FFT)** impact sound performance needs to be assessed and must achieve a minimum impact improvement of *rd* ΔL_w 17dB.

E-FC-8 Two treatments are required for this Robust Detail:
1) An approved under screed resilient layer
2) A 4.5mm (min) bonded acoustic floor covering with a minimum impact improvement of *rd* ΔL_w 17dB.

Steel, timber & metal joist floors
E-FS-2, E-FT-1, E-FT-2 & E-FT-3: The **FFT** must achieve minimum airborne and impact improvement values:
Airborne: *rd* $\Delta R_w + C_{tr}$ = 13dB
Impact: *rd* ΔL_w 15dB

All CELLECTA acoustic treatments exceed the minimum performance values required by Robust Detail Limited, and the data published in this manual has been independently verified by the British Board of Agrément (BBA).

Robust Detail Registration Procedure

STEP 1 Using the Robust Detail handbook and this manual, select a structural floor/wall combination

STEP 2 Choose a CELLECTA acoustic treatment and resilient flanking strip

STEP 3 Select a ceiling treatment

STEP 4 Register the chosen construction with Robust Detail Limited (RDL) and notify Building Control by forwarding them a set of purchase statements issued to you by RDL

STEP 5 Install each layer in accordance with the manufacturers' instructions and Robust Detail installation checklist

✓ **Part E** satisfied

✓ **Section 5** satisfied

Acoustic and Underfloor Heating Solutions

To satisfy the demands for underfloor heating systems embodied within the floor structure, CELLECTA's innovative approach has resulted in a range of acoustic treatments with UFH fully integrated. Each treatment delivers market leading performance, whatever the floor structure or heating source.

Dry Laid Levelling Solution

CELLECTA's **Gobi**® is the ideal solution to level an uneven concrete separating floor and provide all the benefits an underfloor heating system can deliver, with the added advantages of rapid heat transfer capabilities and outstanding acoustic performance. The dry laid system combines **HiDECK**® **Structural** boards capable of accepting a multitude of floor finishes, **XFLO**® **JB-FF** (foil faced) insulation boards and Robust Detail compliant **RUBBER*fon***® **Cradle & Batten** System.
Gobi® is suitable for a multitude of domestic, educational, commercial and healthcare underfloor heating projects.

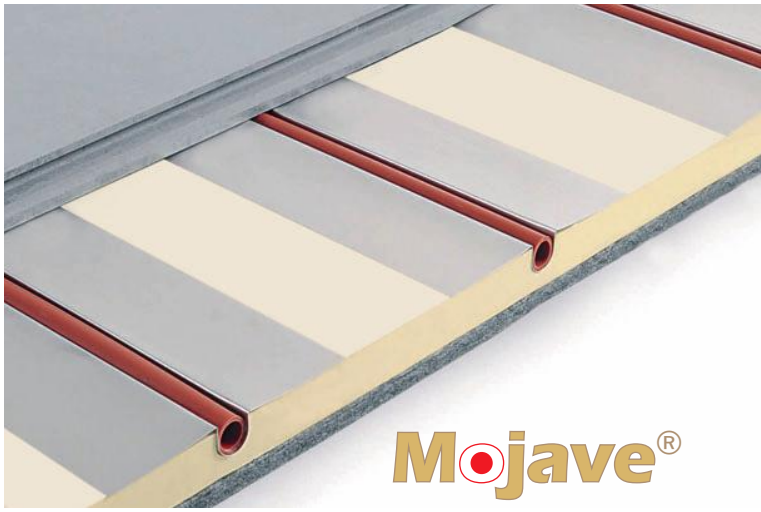
Key Benefits of CELLECTA's Gobi® System

- Fully adjustable to suit desired floor height
- Dry installation
- Rapid heating response times
- Outstanding acoustic performance
- Robust Detail compliant treatment
- Compatible with any pipe diameter: 10-20mm
- Weighs from as little as 32kg/m², compared to 170kg/m² for a 75mm screed
- Accepts all floor finishes, including ceramic tiles, LVT, and vinyls
- Components made from 100% recycled, high impact polypropylene
- 100% recycled gypsum and cellulose decking board
- FSC certified timber battens ISO 9001 and 14001 certified production

HiDECK® Structural XFLO® JB-FF RUBBER*fon*® Cradles

Dry Laid Shallow Platform Solution

CELLECTA's **Mojave**® is an award winning, dry laid underfloor heating system specifically designed for level floors. The system is able to deliver unrivalled thermal response times, and market leading acoustic performance. The system comprises of **ScreedBoard**® **20** high conductivity overlay board, **ULTRAplate** aluminium diffusion plate or high grade diffusion foil, **XFLO**® high compressive insulation boards, and if required, a proven resilient layer to ensure compliance with current legislation. Numerous component combinations are available to suit different floor types, height criteria, output and acoustic performance requirements.
Mojave® is the ideal floor system for a myriad of domestic, educational, commercial and healthcare UFH projects.



Key Benefits of CELLECTA's Mojave® System

- Dry laid, speeding up the build process
- Outstanding acoustic performance
- Rapid heat response times
- Proven performance
- Robust Detail compliant treatment
- Compatible with any pipe diameter from 10-20mm
- Typically weighs only 27kg/m², compared to 170kg/m² for a 75mm screed
- Accepts all floor finishes, including ceramic tiles, LVT and vinyls
- ISO 9001 & 140001 certified production
- Environmentally friendly

ScreedBoard® ULTRAplate XFLO® FIBRE*fon*® RUBBER*fon*®

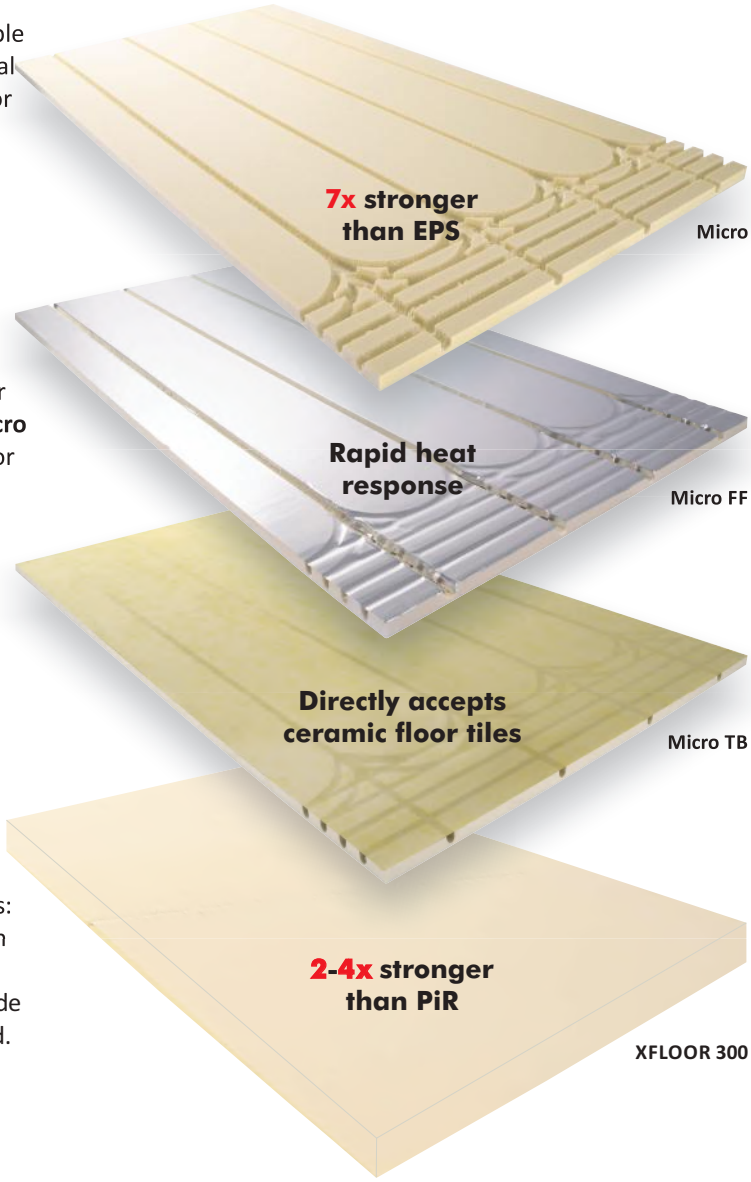
housebuilder product awards 2020 winner
Best Services Product

Low Profile Solutions

XFLO® Micro low profile underfloor heating insulation boards have an ultra-high compressive strength that is able to withstand the rigours of both domestic and commercial flooring applications. Once covered with **ScreedBoard®** or a floor decking, they provide an effective thermal barrier for limited height applications.

XFLO® Micro FF boards have all the benefits of **Micro** boards, with the added advantage of an aluminium foil facing for greater thermal diffusion, providing superior response times.

XFLO® Micro TB[1] patent pending, low profile underfloor heating insulation boards combine all the benefits of **Micro** boards with a unique membrane facing, that enables floor tiles to be directly adhered.



Key Benefits of CELLECTA Micro boards

- Low profile - 15, 18, 20 or 25mm
- Ultra-high compressive strength - 500kPa
- Manufactured to suit pipe and centres required
- Rapid heat response
- Able to directly accept floor tiles[1]
- Excellent thermal performance

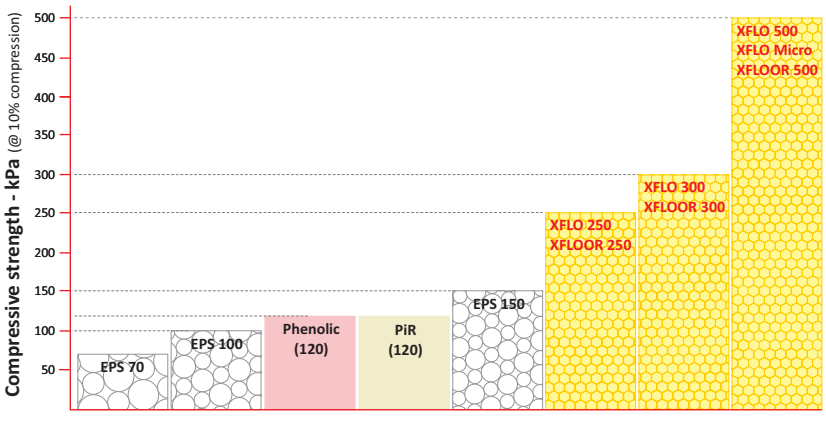
Embedded within a Screed Solution

CELLECTA's **XFLOOR** insulation boards are available in three compressive grades to suit different loading conditions: 250, 300 & 500kPa, with **XFLOOR 500** being 7x stronger than soft expanded polystyrene (EPS) and 4x stronger than PiR or phenolic boards. Numerous thickness' are available to provide design flexibility and ensure the required U-value is achieved. The boards are suitable for a multitude of residential, commercial, educational and healthcare UFH projects.

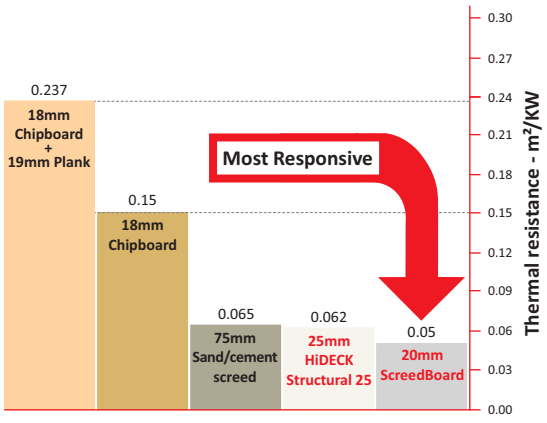
Key Benefits of CELLECTA XFLOOR Insulation

- Superior compressive strength 250, 300 & 500kPa
- BM TRADA third party certifiied
- ISO 9001 & 140001 certified production
- Very low water absorption
- Robust Detail compliant
- 100% Recyclable

Insulation board compressive strengths



Thermal resistance of screed & boards



RIBA Certified CPDs

To provide ongoing support to architects and specifiers, CELLECTA offers 4 RIBA certified seminars, presented by fully trained experienced technical consultants. Each CPD is designed to be engaging and thought provoking. Attendees will receive up-to-date technical information and legislative requirements. To book a CPD, either call CELLECTA **01634 29-66-77** or send an email to **technical@cellecta.co.uk**

BUILDING ACOUSTICS CPD FOR ARCHITECTS

- Soundproofing & compliance with Part E and Section 5
- Legislation made simple
- Methods of compliance: PCT & Robust Details
- New build, refurbishment and conversion
- Solutions for floors, walls & ceiling

FLOOR LEVELLING SOLUTIONS CPD FOR ARCHITECTS

- Problems with uneven separating floors
- Legislative requirements
- Dry laid and screed solutions
- Solutions for steel and concrete floors
- Integration of an underfloor heating system

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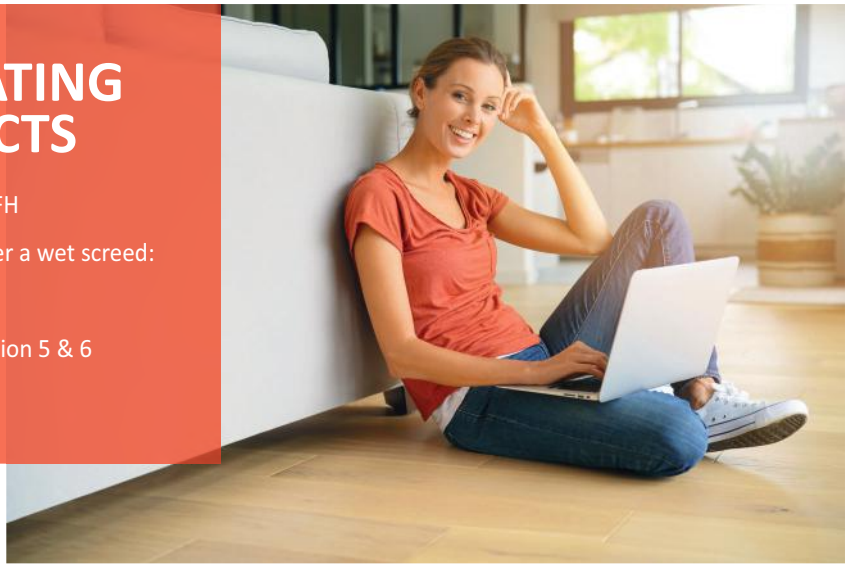
RIBA Certified CPDs

UNDERFLOOR HEATING CPD FOR ARCHITECTS

- Understanding the different types of UFH
- When to utilise a dry laid treatment over a wet screed: benefits and disadvantages of each
- How to comply with Part E & L and Section 5 & 6
- The future of floor designs



INSULATED SUSPENDED GROUND FLOORS CPD FOR ARCHITECTS

- What is a suspended ground floor
- Types of insulated suspended ground floors: Benefits and advantage of each
- How to comply with Part L and Section 6
- On site practicalities

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Why would you specify anything else?

HEXATHERM®
High Compressive Strength Insulation Boards

Mojave®
Dry Laid Rapid Response UFH System

YELOfon® HD10+
UK's No.1 Under screed Acoustic Layer

ScreedBoard®
UK's No.1 High Density, Interlocking Screed Replacement Floorboard

DECKfon®
Composite Acoustic Battens ans Overlays

Award Winning Solutions in Sound Reduction and Thermal Insulation

HEXATHERM high performance extruded polystyrene thermal insulation boards are the ideal choice for a multitude of domestic, commercial and industrial applications. Specific types are available for swimming pools, basements, floors, roofs and cavity closers applications. Unique physical properties include high compressive strength, very low water absorption and excellent long-term thermal performance.

Mojave is a quick and easy to install, dry laid underfloor heating system that delivers unrivalled thermal response times, and market leading acoustic performance. The system incorporates CELLECTA's renowned **ScreedBoard**, **XFLO**, and if required, proven resilient layer to ensure compliance with Part E of the Building Regulations. Numerous Mojave combinations are available to suit different floor types, height criteria and thermal output.

YELO*fon* HD10+ is the ultimate acoustic resilient layer for under screed applications. The acclaimed high density, polyethylene carried 3 of its own Robust Details: E-FC-5, 17 & 18. Unlike rubber, it's easy to carry, lay and cut to size. The system delivers unrivalled proven acoustic performance, with over 12.5 million m² successfully installed.

ScreedBoard is an multi award winning, 100% recycled screed replacement board, ideal for a multitude of new build and refurbishment applications. The board's low thermal resistance enables an underfloor heating system to respond far quicker than a traditional screed or chipboard covering. In addition, Its high density provides outstanding acoustic performance, with the ScreedBoard 28 carrying three proprietary Robust Details: E-FS-3, E-FT-5 and 6, as well as being fully FFT4 compliant.

DECK*fon* range of high performance soundproofing products are designed for a number of specific applications. DECK*fon* Battens are suitable for both new build concrete and timber floors and DECK*fon* acoustic overlay floorboards (17T, 26T & 30T) are ideal treatments for refurbishment and conversion projects

To see the complete range of products go to www.cellecta.co.uk

GWP <5

100% Recyclable Recycled

zero ODP

housebuilder product awards 2020 Winner Best Services Product

CELLECTA®
INNOVATION IN INSULATION

Steel Separating Floors

Introduction

Steel frame buildings have become more popular due to their speed of build, near zero wastage on site, reduced on-site labour costs, resistance to corrosion and dimensional stability.

To satisfy this demand, CELLECTA has developed an extensive range of acoustic treatments specifically designed for each application that will ensure each floor structure exceeds legislative requirements, with the majority also being Robust Detail compliant.

Key Benefits of CELLECTA Steel Floor Acoustic Solutions

- Outstanding acoustic performance
- Cost effective, proven constructions
- Extensive range of Robust Detail and PCT solutions
- Third party verified data
- ISO 9001 & 14001 certified production
- Environmentally friendly

Type of steel floor		Acoustic treatment finish				Acoustic treatment selector			
Steel / concrete	Metal joists	T&G MDF / Chipboard	ScreedBoard (HD Gypsum)	Screed	Acoustic layer bonded to floor	RD ref.	Floating floor treatment type	CELLECTA acoustic treatment	Page No.
⬡		⬡				E-FS-1	FFT 1 Deep batten system	DECK*fon*® Batten 70	14
⬡		⬡				E-FS-1	FFT 2 Cradle & batten system	RUBBER*fon*® Cradles & Batten	14
⬡		⬡				E-FS-1	FFT 3 Standard batten system	DECK*fon*® Batten 45	14
⬡			⬡			E-FS-1	FFT 4 Resilient platform floor system	ScreedBoard® 30	14
⬡		⬡				E-FS-1	FFT 5 Shallow platform floor system	FIBRE*fon*® 12C, 21C, 28C	14
⬡				⬡		PCT solution	Under screed resilient layer	YELO*fon*® HD10+ *System*	18
⬡					⬡	PCT solution	Bonded floor covering	RUBBER*fon*® ULTRAtop 3, 5	Not shown
	⬡	⬡				E-FS-2	FFT 1 Deep batten system	DECK*fon*® Batten 70	20
	⬡		⬡			E-FS-3	Resilient platform floor system	ScreedBoard® 28	21

Type of steel floor		UFH floor finish				Acoustic + UFH treatment selector			
Steel / concrete	Metal joists	HiDECK Structural Board	ScreedBoard	Screed	Ceramic / Stone floor tiles	RD ref.	Floating floor treatment type	CELLECTA acoustic and underfloor heating system	Page No.
⬡		⬡				E-FS-1	FFT 2 Cradle & batten system	Gobi® Dry Laid *System*	16
⬡			⬡			E-FS-1	FFT 4 Resilient platform floor system	Mojave® Dry Laid *System*	16
⬡				⬡		-	Under screed resilient layer with thermal insulation	YELO*fon*® HD10+ *System* + HEXATHERM® XFLOOR 250, 300	18
⬡					⬡	-	High density impact sound deadening resilient layer with high compressive strength routed thermal insulation	RUBBER*fon*® ULTRAtop 3, 5 + XFLO® ULTRAboard 15, 18, 20, 25	19
	⬡	⬡				E-FS-2	FFT 1 Deep batten system	DECK*fon*® Batten 70 + XFLO JB-FF	20
	⬡		⬡			E-FS-3	Resilient platform floor system	Mojave® Dry Laid *System*	22

Steel-concrete composite separating floor

Robust Detail E-FS-1 / V-FS-1

CELLECTA floating floor treatment laid on in-situ concrete slab supported by profiled metal deck

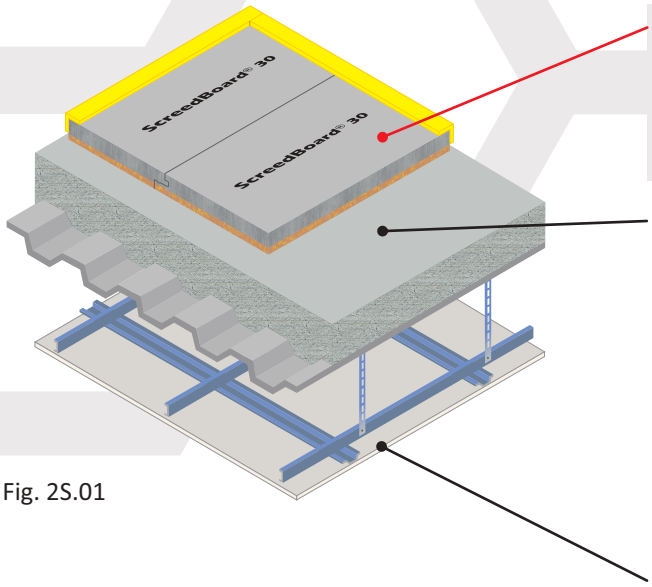
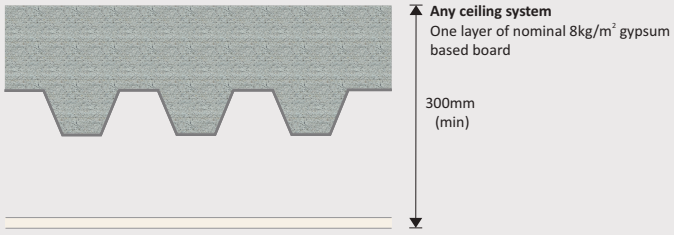


Fig. 2S.01

Floating floor acoustic treatment options	**FFT1 - CELLECTA DECK*fon*® Batten 70** **FFT2 - CELLECTA RUBBER*fon*® Cradles** **FFT3 - CELLECTA DECK*fon*® Batten 45** **FFT4 - CELLECTA ScreedBoard® 30** **FFT5 - CELLECTA FIBRE*fon*® 12C/21C/28C**
Structural floor	In-situ concrete slab supported by profiled metal decking: • "Shallow" or "deep" profiled metal decking • Overall distance from top surface of concrete to underside of ceiling treatment 300mm (min) • Concrete thickness 80mm (min) at shallowest point and 130mm (min) at deepest point • Concrete density 2200kg/m^3 (min)
Ceiling	See Table 2S.01a for ceiling treatment options

Table 2S.01a

Ceiling Treatment Options



Acoustic Performance

Rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013 as detailed in Appendix D of the Robust Details hand book (minimum value required *rd* ΔL_w = 17dB).
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

Third Party Accreditation and Approvals

RD Compliant Treatments
BBA VERIFIED RD DATA
NHBC LABC warranty Premier Guarantee Accepted
bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Recycled
zero ODP

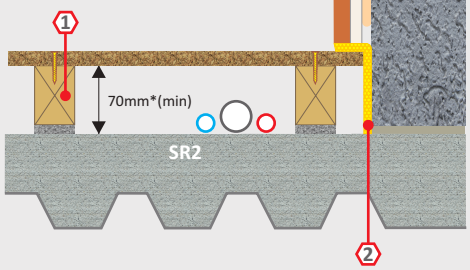
01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

Table 2S.01b

FFT1 Resilient composite deep batten system

1 **DECK*fon*® Batten 70**
Deep acoustic batten: 75mm x 45mm x 2400mm
*Height indicated when floor is loaded to 25kg/m²

2 **YELO*fon*® ES5/120**
Perimeter edge strip: 5mm x 120mm x 50m



Airborne	Impact	Building Regs
56dB $D_{nT,w}+C_{tr}$	42dB $L_{nT,w}$ *rd* ΔL_w = 27dB	≥+8dB

BBA VERIFIED RD DATA

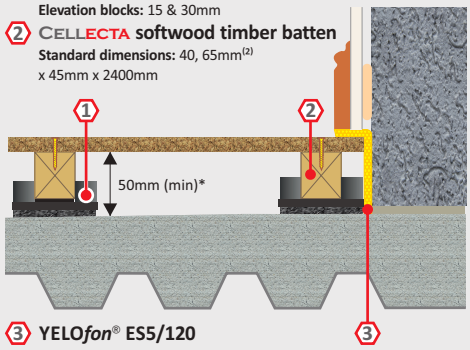
Additional item required to complete treatment: 18mm (min) tongue & groove flooring board

Table 2S.01c

FFT2 Resilient cradle and batten levelling system

1 **RUBBER*fon*® Cradles**
10mm high x 100mm x 100mm
Levelling packers: 2, 3 & 5mm
Elevation blocks: 15 & 30mm

2 **CELLECTA softwood timber batten**
Standard dimensions: 40, 65mm(2) x 45mm x 2400mm



3 **YELO*fon*® ES5/120**
Perimeter edge strip: 5mm x 120mm x 50m

Airborne	Impact	Building Regs
54dB $D_{nT,w}+C_{tr}$	44dB $L_{nT,w}$ *rd* ΔL_w = 25dB	≥+8dB

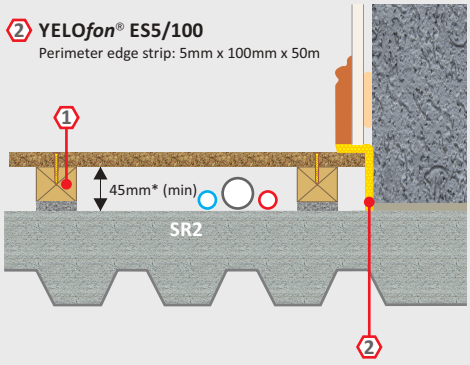
Additional item required to complete treatment: 18mm (min) tongue & groove flooring board.
(2) Other height battens available upon request. *Height indicated when floor is loaded to 25kg/m²

Table 2S.01d

FFT3 Resilient composite standard batten system

1 **DECK*fon*® Batten 45**
Standard acoustic batten: 50mm x 45mm x 2400mm
*Height indicated when floor is loaded to 25kg/m²

2 **YELO*fon*® ES5/100**
Perimeter edge strip: 5mm x 100mm x 50m



Airborne	Impact	Building Regs
54dB $D_{nT,w}+C_{tr}$	44dB $L_{nT,w}$ *rd* ΔL_w = 25dB	≥+8dB

BBA VERIFIED RD DATA

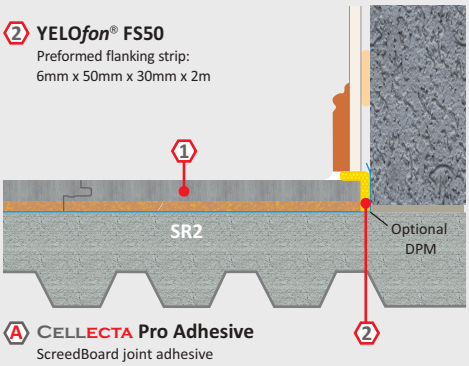
Additional item required to complete treatment: 18mm (min) tongue & groove flooring grade

Table 2S.01e

FFT4 Resilient overlay platform floor system

1 **ScreedBoard® 30** high performance, dense acoustic composite overlay board
Dimensions: 30mm x 600mm x 1200mm
Weight: 27.20kg/m² / 19.58kg/board

2 **YELO*fon*® FS50**
Preformed flanking strip:
6mm x 50mm x 30mm x 2m



A **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m²

Airborne	Impact	Building Regs
54dB $D_{nT,w}+C_{tr}$	47dB $L_{nT,w}$ *rd* ΔL_w = 22dB	≥+8dB

CLASS B*fl*, S1 BS EN13501-1

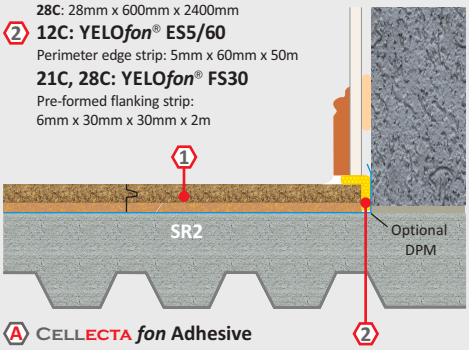
Additional item required: **ScreedBoard** fixing tools

Table 2S.01f

FFT5 Resilient shallow overlay platform floor system

1 **FIBRE*fon*® 12C, 21C, 28C**
12C: 12mm x 600mm x 2400mm
21C: 21mm x 600mm x 2400mm
28C: 28mm x 600mm x 2400mm

2 **12C: YELO*fon*® ES5/60**
Perimeter edge strip: 5mm x 60mm x 50m
21C, 28C: YELO*fon*® FS30
Pre-formed flanking strip:
6mm x 30mm x 30mm x 2m



A **CELLECTA *fon* Adhesive**
Floorboard joint adhesive
Bottle size: 1L / 33m²

12C Airborne	12C Impact	21C Airborne	21C Impact	28C Airborne	28C Impact	Building Regs
51dB $D_{nT,w}+C_{tr}$	48dB $L_{nT,w}$ *rd* ΔL_w = 21dB	52dB $D_{nT,w}+C_{tr}$	51dB $L_{nT,w}$ *rd* ΔL_w = 18dB	52dB $D_{nT,w}+C_{tr}$	48dB $L_{nT,w}$ *rd* ΔL_w = 21dB	≥+8dB

Construction notes
Ceiling treatments detailed can be used with any **FFT** listed in Table 2S.01b-f.
Slab/levelling screed must be to SR2 Standard when adopting FFT1, 3, 4 or 5.
No services should be installed within the treatment when adopting FFT5.
Materials must be installed in accordance with manufacturers' and Robust Detail instructions to achieve required acoustic performance values. Wall treatments MUST be isolated from the floating floor with **YELO*fon* ES** or **FS** perimeter flanking strip.

Steel-concrete composite separating floor

Robust Detail E-FS-1 / V-FS-1

CELLECTA dry laid resilient systems incorporating underfloor heating
In-situ concrete slab supported by profiled metal deck

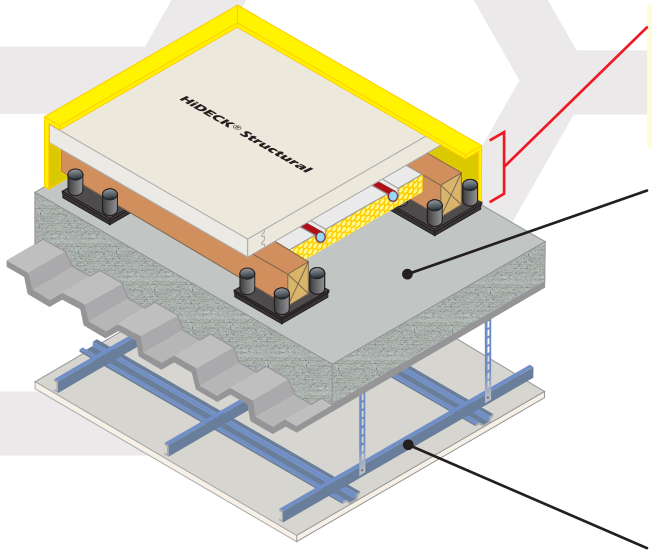
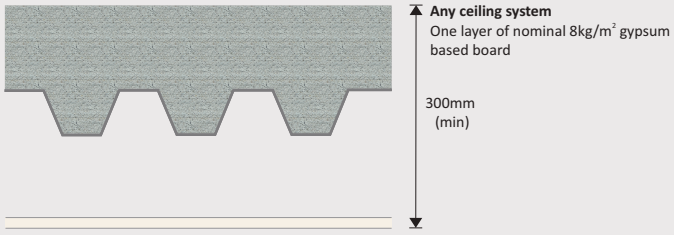


Fig. 2S.02

Floating floor acoustic treatment incorporating UFH options	**FFT2 - CELLECTA Gobi®** cradle & batten system incorporating UFH **FFT4 - CELLECTA Mojave®** platform floor system incorporating UFH
Structural floor	In-situ concrete slab supported by profiled metal decking: • "Shallow" or "deep" profiled metal decking • Overall distance from top surface of concrete to underside of ceiling treatment 300mm (min) • Concrete thickness 80mm (min) at shallowest point and 130mm (min) at deepest point • Concrete density 2200kg/m^3 (min)
Ceiling	See Table 2S.02a for ceiling treatment options

Table 2S.02a

Ceiling Treatment Options



Construction notes
Ceiling treatments detailed can be used with any **FFT** listed in Table 2S.02b-c.
Slab/levelling screed must be to SR2 Standard when adoping the **Mojave** system.
Materials must be installed in accordance with manufacturers' and Robust Detail instructions to achieve required acoustic performance values. Wall treatments MUST be isolated from the floating floor with **YELO*fon* ES** or **FS** perimeter flanking strip.

Acoustic Performance

Rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013 as detailed in Appendix D of the Robust Details hand book (minimum value required *rd* ΔL_w = 17dB).
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

Third Party Accreditation and Approvals

RD Compliant Treatments
BBA VERIFIED RD DATA
NHBC LABC warranty Premier Guarantee Accepted
bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Recycled
zero ODP

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

Acoustic treatments incorporating UFH — Robust Detail E-FS-1 / V-FS-1 + UFH

Un-even sub-floor

Table 2S.02b

FFT2 Dry laid resilient cradle and batten levelling system incorporating underfloor heating

CELLECTA Gobi® C2-25

Components

(1) **HiDECK® Structural 25**[(1)]
High conductivity structural board:
25mm x 600mm x 1200mm
Weight: 31.25kg/m²
Thermal resistance: 0.0625m²K/W

(A) **CELLECTA Pro Adhesive**
HiDECK joint adhesive
Bottle size: 1L / 16m² coverage

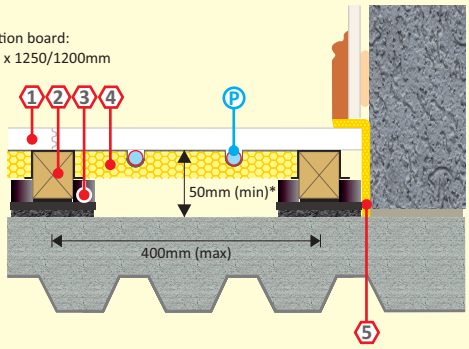
(2) **CELLECTA softwood timber batten**
Standard dimensions[(2)]**:** 40, 65mm x 45mm x 2400mm
Chain of custody: PEFC & FSC

(3) **RUBBER*fon*® Cradles**
Dimensions: 10mm high x 100mm x 100mm
Levelling packers: 2, 3, 5mm
Stackable elevation blocks: 15, 30mm

(4) **XFLO® JB-FF**
Foil faced high strength routed XPS insulation board:
Dimensions: 30, 40, 50mm x 300/340mm x 1250/1200mm
Pipe centre: 150, 200, 300mm
Pipe bore size (OD): 10 - 20mm
(manufactured to suit)

(5) **YELO*fon*® ES5/120**
Perimeter edge strip:
5mm x 120mm x 50m

(P) UFH water pipe (by others)



Airborne
54dB $D_{nT,w}$ + C_{tr}

Impact
44dB $L_{nT,w}$
rd ΔL_w = 25dB

Building Regs
≥+8dB

(1)
CLASS A1

(1) 28 & 30mm also available to satisfy higher non-domestic loading conditions.
(2) Other height battens available upon request.
*Height indicated when floor is loaded to 25kg/m²

Level sub-floor (laid to SR2 standard)

Table 2S.02c

FFT4 Dry laid resilient overlay platform floor system incorporating UFH

CELLECTA Mojave® S1-10

Dry laid acoustic treatment incorporating
underfloor heating system

(1) **ScreedBoard® 20**
High conductivity overlay board:
Dimensions: 20mm x 600mm x 1200mm
Weight: 25kg/m² / 18.00kg/board
Thermal resistance: 0.05m²K/W

(A) **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

(2) **ULTRAplate**
Aluminium heat diffuser plate (to suit pipe installed):
Dimensions: 130mm x 1000mm

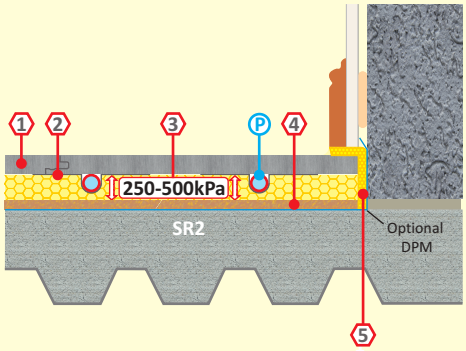
(3) **XFLO® 250, 300, 500**
High compressive strength routed XPS insulation board:
Dimensions: 15-75mm x 600mm x 1200/2500mm
Compressive strengths available: 250, 300, 500kPa
Pipe centre: 150, 200, 300mm
Pipe bore size (OD): 10 - 20mm (manufactured to suit)

(4) **FIBRE*fon*® 10**
High compressive strength resilient layer:
Dimensions: 10mm x 600mm x 1200mm
Weight: 2.20kg/m² / 1.58kg/board

(5) **YELO*fon*® ES5/120**
Perimeter edge strip:
5mm x 120mm x 50m

(P) UFH water pipe (by others)

housebuilder product awards 2020 winner
Best Services Product



Airborne
54dB $D_{nT,w}$ + C_{tr}

Impact
41dB $L_{nT,w}$
rd ΔL_w = 28dB

Building Regs
≥+8dB

CLASS Bfl, S1
BS EN13501-1

Steel-concrete composite separating floor

Screed laid on CELLECTA YELO*fon*® HD10+ resilient layer *System*
In-situ concrete slab supported by profiled metal deck

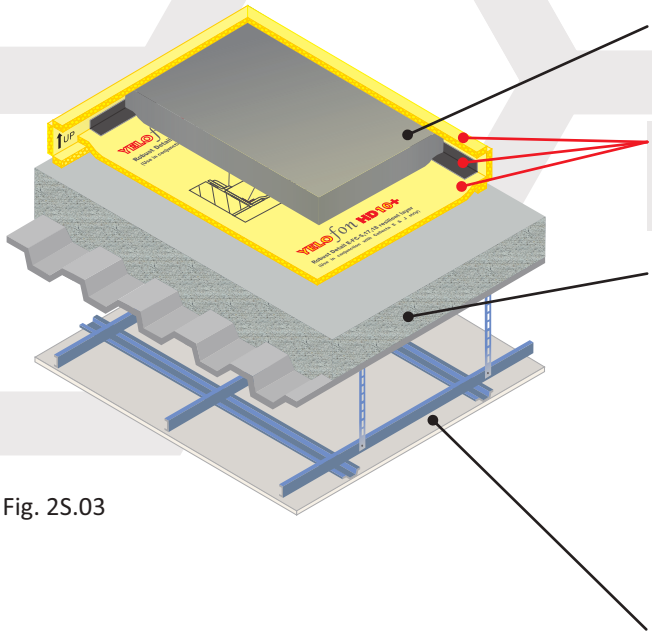


Fig. 2S.03

Screed
- 65mm (min) sand cement screed
- 40mm proprietary screed, nominal 80kg/m^2 mass per unit area

3 part resilient layer system
1. CELLECTA YELO*fon*® HD10+
2. YELO*fon*® **E-strip** perimeter edge strip
3. **J-strip** acoustic joining tape

Structural floor

In-situ concrete slab supported by profiled metal decking:
- "Shallow" or "deep" profiled metal decking
- Overall distance from top surface of concrete to underside of ceiling treatment 300mm (min)
- Concrete thickness 80mm (min) at shallowest point and 130mm (min) at deepest point
- Concrete density 2200kg/m^3 (min)

Ceiling

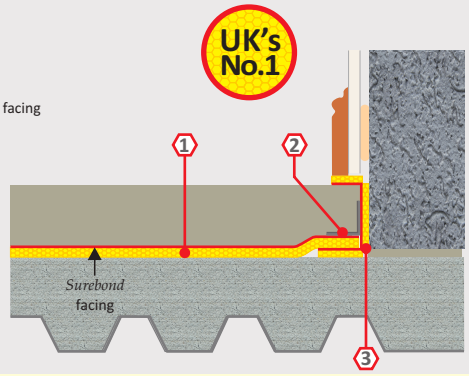
See Table 2S.03b for ceiling treatment options

Table 2S.03a

Installation Options

Resilient layer system laid under screed

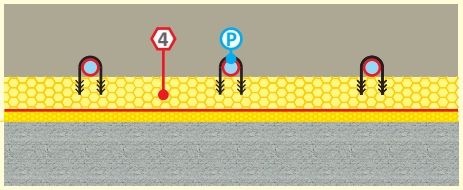
1. **YELO*fon*® HD10+**
   High density polyethylene foam with *Surebond* facing
   Dimensions: 10mm x 1.5m x 33.33m (50m²)
2. **YELO*fon*® J-strip**
   Ultra high grab acoustic joining tape
   Dimensions: 2.5mm x 75mm x 40m
3. **YELO*fon*® E-strip**
   Self adhesive perimeter edge strip
   Dimensions: 7mm x 200mm x 33m



Resilient layer system laid under screed containing underfloor heating

4. **HEXATHERM® XFLOOR 250, 300**
   High performance extruded polystyrene
   Compressive strength: 250, 300kPa
   Dimensions: 25-160mm x 600mm x 2500mm

P UFH water pipe (by others)



Underfloor heating systems within screed (without thermal insulation)

Ensure fixings used to secure the UFH do not penetrate the HD10+

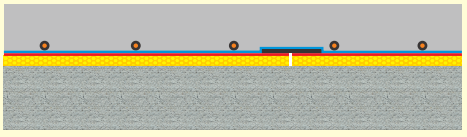
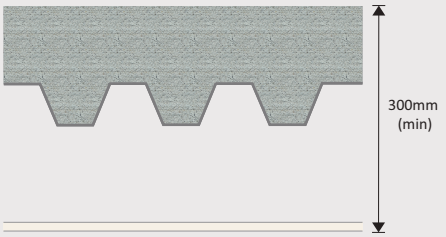


Table 2S.03b

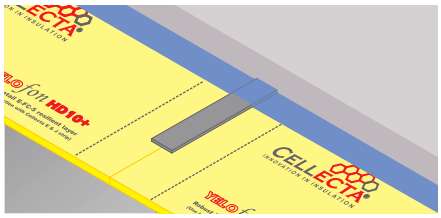
Ceiling Treatment Options

Any ceiling system
One layer of nominal 8kg/m^2 gypsum-based board



Proprietary Screeds

When using a proprietary free flowing screed, **HD10+** rolls can be tightly butted together and the joint sealed with **J-strip**.
Care should be taken to ensure there are no gaps in the resilient layer. Cover the **HD10+** with a 500 gauge (min) polythene sheet, taping all joins and lapping up around the perimeter by 150mm.



Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve required acoustic performance values.
Wall treatments MUST be isolated from the floating floor with YELO*fon* **E-Strip** perimeter edge strip.

Acoustic Performance

Airborne:	**54dB $D_{nT,w} + C_{tr}$**	**Building Regs**
Impact:	**49dB $L_{nT,w}$**	**+ 8dB**

PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

Third Party Accreditation and Approvals

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Foam

zero ODP

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

Steel-concrete composite separating floor

Acoustic + UFH

CELLECTA XFLO® Micro low profile UFH insulation boards bonded to resilient layer
Tiles or wooden floor covering
In-situ concrete slab supported by profiled metal deck

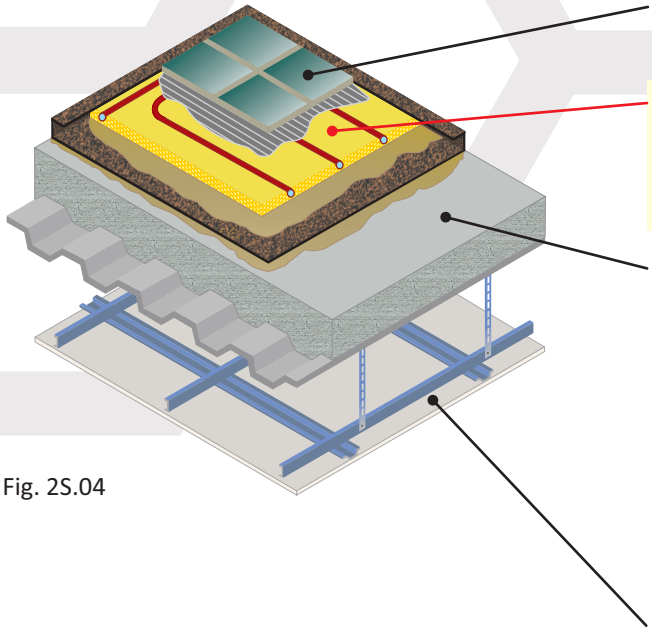


Fig. 2S.04

Floor finish	**Ceramic, stone, porcelain tiles** **Wooden flooring**
UFH insulation board with resilient layer	**CELLECTA XFLO® Micro TB** low profile underfloor heating insulation board adhered to **CELLECTA RUBBER*fon*® ULTRAtop 3, 5** fully bonded to concrete slab
Structural floor	In-situ concrete slab supported by profiled metal decking: • "Shallow" or "deep" profiled metal decking • Overall distance from top surface of concrete to underside of ceiling treatment 300mm (min) • Concrete thickness 80mm (min) at shallowest point and 130mm (min) at deepest point • Concrete density 2200kg/m³ (min)
Ceiling	See Table 2S.04b for ceiling treatment options

Table 2S.04a

Installation Options

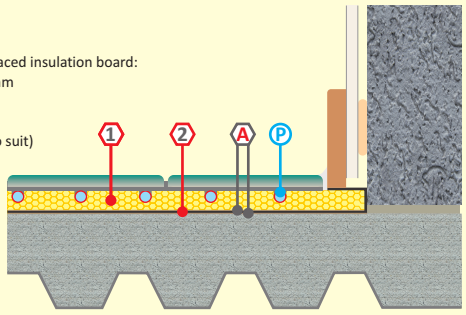
Low profile UFH board adhered to resilient layer bonded to level floor slab

① **XFLO® Micro TB 15, 18, 20, 25**
Ultra high compressive strength, tile membrane faced insulation board:
Dimensions: 15, 18, 20, 25mm x 600mm x 1200mm
Compressive strengths available: 500kPa
Pipe centre: 150, 200mm
Pipe bore size (OD): 10 - 16mm (manufactured to suit)

② **RUBBER*fon*® ULTRAtop 3, 5**
High density recycled rubber/cork
Dimensions: 3mm x 1m x 15m , 5mm x 1m x 12m

Ⓐ **CELLECTA HB724**
High bond floor adhesive
Coverage: 14L/46m²

Ⓟ **UFH water pipe** (by others)



Low profile UFH board adhered to resilient layer bonded to levelled floor slab

④ **CELLECTA RL24**
Rapid drying levelling screed
Size: 20kg bag
Coverage: 4m² @3mm

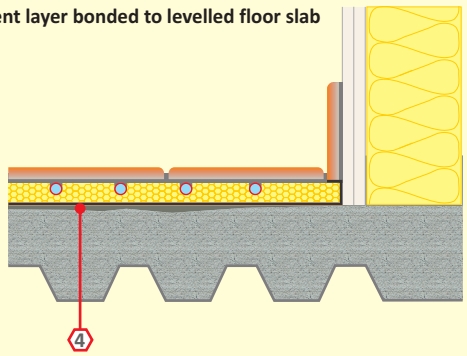
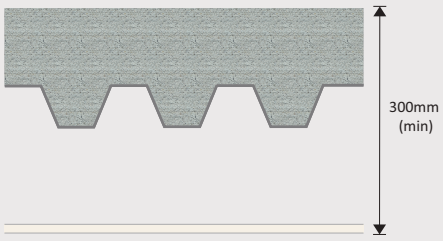


Table 2S.04b

Ceiling Treatment Options

Any ceiling system
One layer of nominal 8kg/m² gypsum-based board



Construction notes
Slab/levelling screed must be to SR2 Standard before installing treatment.
Materials must be installed in accordance with manufacturers' instructions to achieve required acoustic performance values.
Wall treatments MUST be isolated from the floating floor with the **RUBBER*fon* ULTRAtop**.

Acoustic Performance

Airborne:	**47dB $D_{nT,w} + C_{tr}$**
Impact:	**57dB $L_{nT,w}$**

PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

Third Party Accreditation and Approvals

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada
2015

Environmental Credentials

GWP <5

100% Recyclable Rubber

zero ODP

UltraBEAM metal joist separating floor

Robust Detail E-FS-2

CELLECTA DECK*fon*® Batten 70 floating floor system
Hadley Group UltraBEAM metal joists
Use with lightweight metal frame walls only

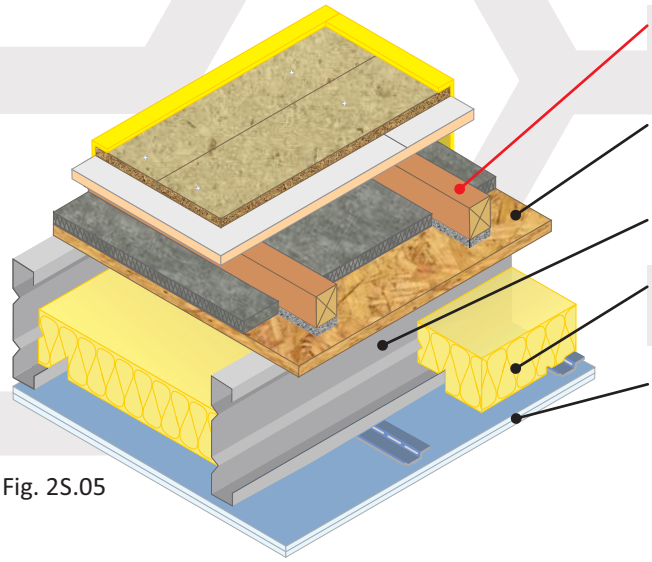


Fig. 2S.05

Floating floor treatment	**FFT1 - CELLECTA DECK*fon*® Batten 70** (See Table 2S.05a/b for full details)
Floating decking	22mm thick (min) wood based board, density 600kg/m^3
Joists	225mm (min) deep UltraBEAM metal joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m^3)
Ceiling	See Table 2S.05c for ceiling treatment options

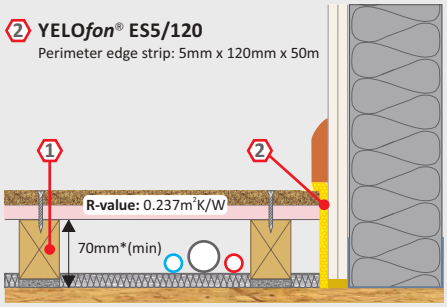
Robust Detail option, change to E-FS-3
Refer to page 7 on how to change a registered Robust Detail

Installation Options

Table 2S.05a

FFT1 Resilient composite deep batten system

1. **DECK*fon*® Batten 70**
   Deep acoustic batten: 75mm x 45mm x 2400mm
   *Height indicated when floor is loaded to 25kg/m^2
2. **YELO*fon*® ES5/120**
   Perimeter edge strip: 5mm x 120mm x 50m



Airborne	Impact	Building Regs
51dB $D_{nT,w}$+ C_{tr} *rd* ΔR_w = 19dB	52dB $L_{nT,w}$ *rd* ΔL_w = 16dB	≥+5dB

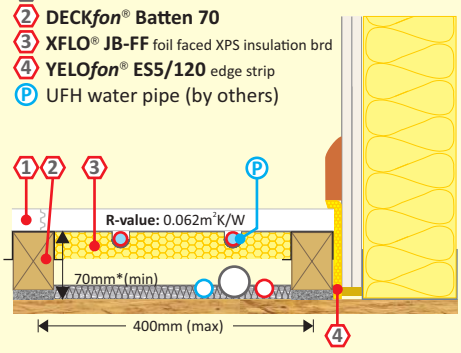
BBA VERIFIED RD DATA

Additional component required to complete treatment
18mm (min) tongue & groove flooring board
19mm Gypsum-based board nominal 13.5kg/m^2
Sound absorbing quilt laid between batten:
○ 15mm CELLECTA FIBRE*fon* Micro 15 non-itch polyester quilt
● 25mm (min) 10 - 33kg/m^3 or 13mm (min) 33 - 36kg/m^3 mineral wool

Table 2S.05b

FFT1 Resilient composite deep batten system incorporating UFH

1. HiDECK® Structural 25[1]
A. CELLECTA Pro Adhesive
2. DECK*fon*® Batten 70
3. XFLO® JB-FF foil faced XPS insulation brd
4. YELO*fon*® ES5/120 edge strip
P. UFH water pipe (by others)



Airborne	Impact	Building Regs
52dB $D_{nT,w}$+ C_{tr} *rd* ΔR_w = 18dB	52dB $L_{nT,w}$ *rd* ΔL_w = 16dB	≥+5dB

(1) CLASS A1

Additional component required to complete treatment
Sound absorbing quilt laid between battens:
○ 15mm CELLECTA FIBRE*fon* Micro 15 non-itch polyester quilt
● 25mm (min) 10-33kg/m^3 or 13mm (min) 33-36kg/m^3 mineral wool

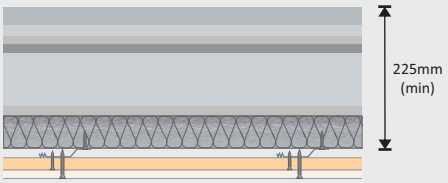
Table 2S.05c

Ceiling Treatment Options

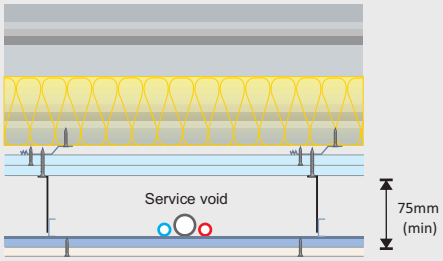
Ceiling boards must not penetrate or touch joists
16mm (min) metal resilient bars mounted at right angles to the joist at 400mm centres.

Ceiling treatment
CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m^2) fixed with 32mm screws and 12.5mm (nominal 10kg/m^2) fixed with 42mm screws, with all joists staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m^2) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m^2) fixed with 42mm screws, with all joists staggered.



Sacrificial ceiling (optional)
Metal ceiling system with a 75mm (min) void fixed to underside of primary ceiling.
One layer of nominal 8kg/m^2 gypsum based board.



Sound absorbing quilt fitted between joists
○ 50mm CELLECTA FIBRE*fon* MICRO 50
● 100mm (min) mineral wool quilt -10-36kg/m^3

Acoustic Performance

Rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013. Airborne performance tested in accordance with BS EN ISO 10140-2 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-1: 2013 as detailed in Appendix C of the Robust Details hand book (minimum value required *rd* ΔR_w + C_{tr}= 13dB *rd* ΔL_w = 15dB).
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

RD Compliant Treatment · BBA VERIFIED RD DATA · GWP <5 · 100% Recycled Gypsum · zero ODP

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Metal C-section joist separating floor

Robust Detail E-FS-3

CELLECTA ScreedBoard® 28 laid on sub-floor
Metal C-section joists
Use with lightweight metal frame walls only

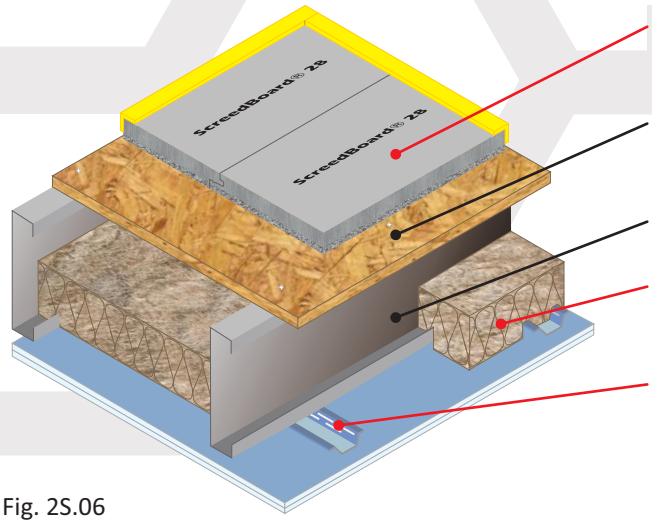


Fig. 2S.06

Floating floor treatment	**CELLECTA ScreedBoard® 28** (See Table 2S.06a for full details)
Floor decking	18mm thick (min) wood based board, density 600kg/m^3
Joists	200mm[(1)] (min) deep metal C-section joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m^3)
Ceiling	See Table 2S.06b for ceiling treatment options featuring 30mm deep CELLECTA **HP30** resilient bars

(1) 254mm(min) required for Robust Detail applications

FASTRACKCAD ARCHITECTURAL CAD DATABASES

Available on bimstore.co

nbsPlus

Table 2S.06a

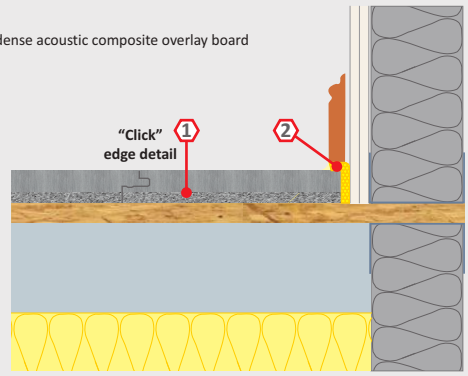
Installation Details

Resilient overlay platform floor system

① **ScreedBoard® 28** Ultra high performance, dense acoustic composite overlay board
Dimensions: 28mm x 600mm x 1200mm
Weight: 26kg/m² / 18.72kg/board

Ⓐ **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

② **YELO*fon*® FS50**
Preformed flanking strip
6mm x 50mm x 30mm x 2m



CLASS B*fl*,S1
BS EN13501-1

Additional items required:
CELLECTA ScreedBoard fixing tools
Sound absorbing quilt laid between joists:
○ 50mm CELLECTA **FIBRE*fon* Micro 50** non-itch polyester wool
● 100mm (min) Mineral wool 10-36kg/m^3

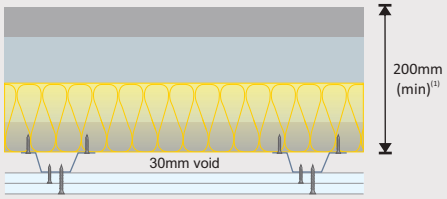
Table 2S.06b

Ceiling Treatment Options

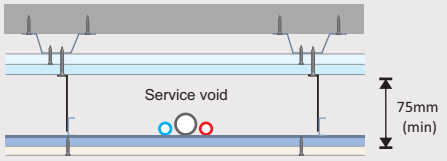
Ceiling board fixings must not penetrate or touch the floor joists
30mm CELLECTA **HP30** Resilient Bars (3m long) mounted at right angles to the joists at 600mm (max) centres.

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m^2) fixed with 32mm screws and 12.5mm (nominal 10kg/m^2) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m^2) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m^2) fixed with 42mm screws, with all joints staggered.



Sacrificial ceiling (optional)
Metal ceiling system with a 75mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m^2 gypsum based board.



Construction notes
Materials must be installed in accordance with manufacturers' and Robust Detail instructions to achieve required acoustic performance values.
Wall treatments MUST be isolated from the floating floor with **YELO*fon* FS50** perimeter flanking strip.

Acoustic Performance

Airborne:	**54dB $D_{nT,w} + C_{tr}$**	**Building Regs**
Impact:	**55dB $L_{nT,w}$**	**+ 5dB**

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Gypsum

zero ODP

Metal C-section joist separating floor

Robust Detail E-FS-3 + UFH

CELLECTA Mojave® acoustic/UFH floating floor system laid on timber sub-deck
Metal C-section joists and lightweight metal frame walls only

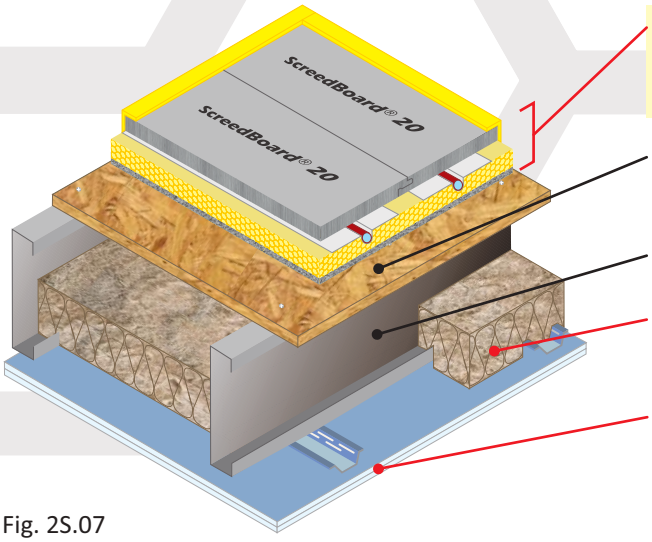


Fig. 2S.07

Acoustic + UFH treatment	**CELLECTA Mojave® S1/8** acoustic treatment incorporating underfloor heating (see Table 2S.07a for full details)
Floor decking	18mm thick (min) wood based board, density 600kg/m^3
Joists	200mm(1) (min) deep metal C-section joists
Absorbing material	50mm **CELLECTA FIBRE*fon*® Micro 50** 100mm (min) quilt insulation (10-36kg/m^3)
Ceiling	See Table 2S.07b for ceiling treatment options featuring 30mm deep **CELLECTA HP30** resilient bars

(1) 254mm(min) required for Robust Detail applications

FASTRACKCAD ARCHITECTURAL CAD DATABASES

Available on bimstore.co

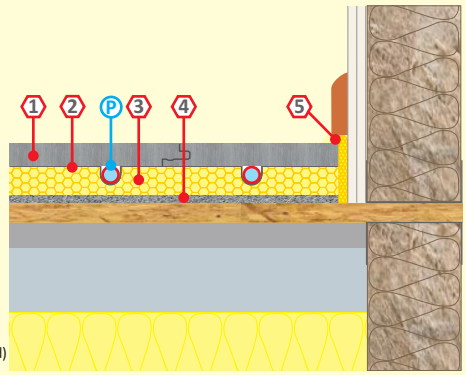
NBSPlus

Table 2S.07a

Installation Details

Resilient overlay platform floor system incorporating underfloor heating

Mojave® S1/8
Dry laid acoustic treatment incorporating underfloor heating system



1 **ScreedBoard® 20**
High conductivity overlay board
Dimensions: 20mm x 600mm x 1200mm
Weight: 25kg/m² / 18.00kg/board
Thermal resistance: 0.05m²K/W

A **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

2 **ULTRAplate**
Aluminium heat diffuser plate (to suit pipe installed)
Dimensions: 130mm x 1000mm

3 **XFLO® 250/300/500**
High compressive strength routed XPS insulation board
Dimensions: 15-75mm x 600mm x 2500mm
Pipe centre: 150, 200, 300mm
Pipe bore size (OD): 10 - 20mm (manufactured to suit)

4 **FIBRE*fon*® 8**
High performance resilient layer
Dimensions: 8mm x 600mm x 1200mm
Weight: 1kg/m² / 0.72kg/board

5 **YELO*fon*® ES5/100**
Perimeter edge strip
Dimensions: 5mm x 100mm x 50m

P UFH water pipe (by others)

Additional item required:
CELLECTA ScreedBoard fixing tools

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BS EN13501-1

housebuilder product awards 2020 winner
Best Services Product

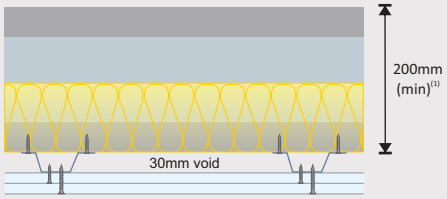
Table 2S.07b

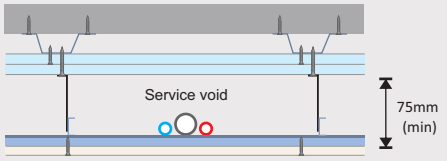
Ceiling Treatment Options

Ceiling board fixings must not penetrate or touch the floor joists
30mm **CELLECTA HP30** Resilient Bars (3m long) mounted at right angles to the joists at 600mm (max) centres.

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m^2) fixed with 32mm screws and 12.5mm (nominal 10kg/m^2) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m^2) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m^2) fixed with 42mm screws, with all joints staggered.





Construction notes
Materials must be installed in accordance with manufacturers' and Robust Detail instructions to achieve required acoustic performance values.
Wall treatments MUST be isolated from the floating floor with **YELO*fon* ES5/100** perimeter flanking strip.

Acoustic Performance

Airborne:	55dB $D_{nT,w} + C_{tr}$	Building Regs
Impact:	54dB $L_{nT,w}$	+ 5dB

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

RD Proprietary Treatment

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Gypsum

zero ODP

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Concrete Separating Floors

Introduction

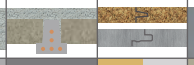
In most cases, the mass of a concrete floor accounts for the airborne sound that needs to be eliminated to conform with the required acoustic values, which leaves impact sound to be resolved. This can be addressed with one of CELLECTA's acoustic treatments, which have been specifically designed to suit each application.

Each treatment combines a high performance resilient layer and perimeter flanking strip that, when installed correctly, will exceed the acoustic standards of Approved Document E and Section 5, with the majority also being **Robust Details** compliant.

Key Benefits of CELLECTA Concrete Floor Acoustic Insulation

- Outstanding acoustic performance
- Cost effective, proven constructions
- Wide range of **Robust Details** and PCT solutions
- BBA verified data
- ISO 9001 & 14001 certified production
- **Environmentally friendly**

Concrete Separating Floors - Solution Finder

Type of concrete floor			Acoustic treatment finish			Acoustic treatment selector			
									
Pre-cast plank	In-situ	Beam & block	T & G board	Screed	Acoustic layer bonded to floor	RD ref.	Floating floor treatment type	CELLECTA acoustic treatment	Page No.
⬢			⬢			E-FC-1	FFT 1 Deep batten system	DECK*fon*® Batten 70	26
⬢			⬢			E-FC-1	FFT 2 Cradle & batten system	RUBBER*fon*® Cradles & Batten	26
⬢			⬢			E-FC-1	FFT 3 Standard batten system	DECK*fon*® Batten 45	26
⬢			⬢			E-FC-1	FFT 4 Resilient platform floor system	ScreedBoard® 30	26
⬢			⬢			E-FC-1	FFT 5 Shallow platform floor system	FIBRE*fon*® 12C, 21C, 28C	26
⬢				⬢		E-FC-4 use E-FC-19	Under screed resilient layer	RUBBER*fon*® Impact 6	37
⬢				⬢		E-FC-5	Under screed resilient layer	YELO*fon*® HD10+ *System*	31
⬢				⬢	⬢	E-FC-8	Bonded floor covering & under screed resilient layers	DECK*fon*® ULTRAlay 5, YELO*fon*® HD5 & XFLOOR 250, 300	33
⬢					⬢	PCT option for E-FC-9	Bonded acoustic floor covering	RUBBER*fon*® ULTRAtop 3, 5	34
⬢				⬢		PCT option for E-FC-12	Under screed resilient layer	RUBBER*fon*® Impact 3	35
⬢				⬢		E-FC-17	Under screed resilient layer	YELO*fon*® HD10+ *System* & AH50 hangers	36
⬢				⬢		E-FC-19	Under screed resilient layer	RUBBER*fon*® Impact 6	37
⬢				⬢		PCT solution	Under screed resilient layers	YELO*fon*® HD5 & XFLOOR 250, 300	38
	⬢		⬢			E-FC-2	FFT 1 Deep batten system	DECK*fon*® Batten 70	40
	⬢		⬢			E-FC-2	FFT 2 Cradle & batten system	RUBBER*fon*® Cradles & Batten	40
	⬢		⬢			E-FC-2	FFT 3 Standard batten system	DECK*fon*® Batten 45	40
	⬢		⬢			E-FC-2	FFT 4 Resilient platform floor system	ScreedBoard® 30	40
	⬢		⬢			E-FC-2	FFT 5 Shallow platform floor system	FIBRE*fon*® 12C, 21C, 28C	40
	⬢				⬢	PCT option for E-FC-10	Bonded acoustic floor covering	RUBBER*fon*® ULTRAtop 3, 5	45
	⬢				⬢	PCT option for E-FC-10	Bonded acoustic floor covering	DECK*fon*® Ultralay 5	46
	⬢			⬢		E-FC-18	Under screed resilient layer	YELO*fon*® HD10+ *System*	47
	⬢			⬢		E-FC-18	Under screed resilient layer	RUBBER*fon*® Impact 6	47
	⬢				⬢	E-FC-18	Bonded acoustic floor covering	RUBBER*fon*® ULTRAtop 5	47
		⬢		⬢		PCT option for E-FC-6	Under screed resilient layer	YELO*fon*® HD10+ *System*	49
		⬢	⬢			E-FC-7	FFT 1 Deep batten system	DECK*fon*® Batten 70	50
		⬢	⬢			E-FC-7	FFT 2 Cradle & batten system	RUBBER*fon*® Cradles & Batten	50
		⬢	⬢			E-FC-7	FFT 3 Standard batten system	DECK*fon*® Batten 45	50
		⬢	⬢			PCT solution	Resilient platform floor system	ScreedBoard® 30	51

Tongue & groove chipboard / MDF floorboard

Interlocking tongue & groove **ScreedBoard®**

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Concrete Separating Floors - Solution Finder

Type of concrete floor			UFH floor finish				Acoustic + UFH treatment selector			
Pre-cast plank	In-situ slab	Beam & block	HiDECK Structural Board	ScreedBoard	Screed	Ceramic / Stone floor tiles	RD ref.	Floating floor treatment type	CELLECTA acoustic and underfloor heating system	Page No.
⬡			⬡				E-FC-1	**FFT 2** Cradle & batten system	**Gobi**® Dry Laid *System*	28
⬡				⬡			E-FC-1	**FFT 4** Resilient platform floor system	**Mojave**® Dry laid *System*	28
⬡					⬡		E-FC-5	Under screed resilient layer	**YELO*fon*® HD10+ & XFLOOR**	31
⬡					⬡		E-FC-8	Bonded floor covering & under screed resilient layers	**DECK*fon*® ULTRAlay 5, YELO*fon*® HD5 & XFLOOR**	33
⬡					⬡		PCT option for E-FC-12	Under screed resilient layers	**RUBBER*fon*® Impact 3 & XFLOOR**	35
⬡					⬡		E-FC-17	Under screed resilient layer	**YELO*fon* HD10+, XFLOOR & AH50 hangers**	36
⬡					⬡		E-FC-19	Under screed resilient layer	**RUBBER*fon*® Impact 6 & XFLOOR**	37
⬡					⬡		PCT solution	Under screed resilient layers	**YELO*fon*® HD5 & XFLOOR**	38
	⬡		⬡				E-FC-2	**FFT 2** Cradle & batten system	**Gobi**® Dry Laid *System*	40
	⬡			⬡			E-FC-2	**FFT 4** Resilient platform floor system	**Mojave**® Dry Laid *System*	40
	⬡				⬡		E-FC-18	Under screed resilient layer	**YELO*fon*® HD10+ & XFLOOR**	Not shown
	⬡				⬡		E-FC-18	Under screed resilient layer	**RUBBER*fon*® Impact 6 & XFLOOR**	Not shown
	⬡					⬡ (1)	PCT solution	Resilient floor incorporating UFH system	**RUBBER*fon*® ULTRAtop 3, 5 & XFLO® Micro TB**	48
		⬡			⬡		PCT option for E-FC-6	Under screed resilient layer	**YELO*fon*® HD10+ & XFLOOR**	49
		⬡	⬡				E-FC-7	**FFT 2** Cradle & batten system	**Gobi**® Dry Laid *System*	50
		⬡		⬡			PCT solution	Resilient platform floor system	**Mojave**® Dry Laid *System*	51

(1) **XFLO Micro TB** boards can directly accept floor tiles or be overlayed with timber flooring.

Pre-cast concrete plank separating floor

Robust Detail E-FC-1

CELLECTA floating floor treatment laid on pre-cast concrete plank with fully bonded screed

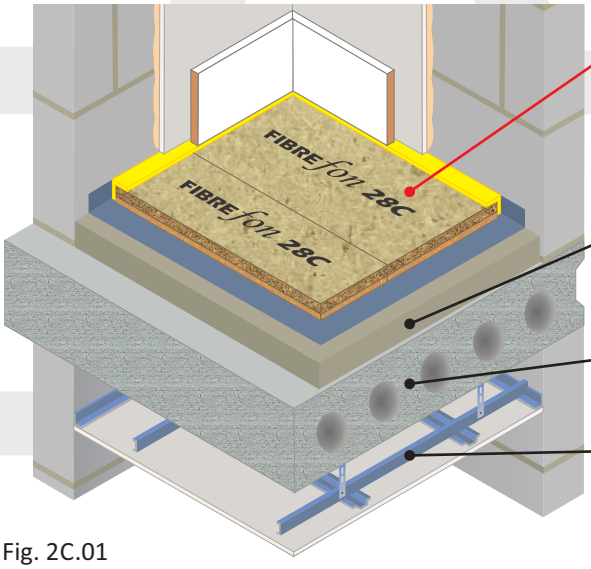


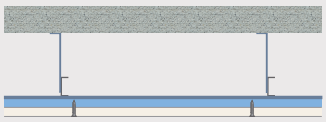
Fig. 2C.01

Floating floor acoustic treatment options	**FFT1 - CELLECTA DECK*fon*® Batten 70** **FFT2 - CELLECTA RUBBER*fon*® Cradles** **FFT3 - CELLECTA DECK*fon*® Batten 45** **FFT4 - CELLECTA ScreedBoard® 30** **FFT5 - CELLECTA FIBRE*fon*® 12C, 21C, 28C**
Screed	40mm (min) screed directly applied to plank. Sand: cement or proprietary screed 80kg/m^2 (min) mass per unit area
Structural floor	• 150mm (min) pre-cast concrete floor plank • 300kg/m^2 (min) mass per unit area
Ceiling	See Table 2C.01a for ceiling treatment options

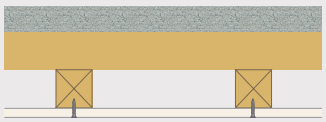
Table 2C.01a

Ceiling Treatment Options

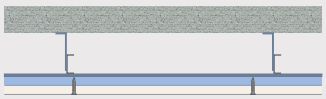
CT1 Metal ceiling - 100mm void



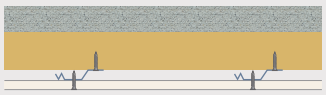
CT2 Timber batten & counter battens



CT3 Metal ceiling - 75mm void



CT4 Timber batten & metal resilient bars



Acoustic Performance

Rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013 as detailed in Appendix D of the Robust Details hand book (minimum value required *rd* ΔL_w = 17dB).
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

Third Party Accreditation and Approvals

RD Compliant Treatments
BBA VERIFIED RD DATA
NHBC LABC warranty Premier Guarantee Accepted
bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Recycled
zero ODP

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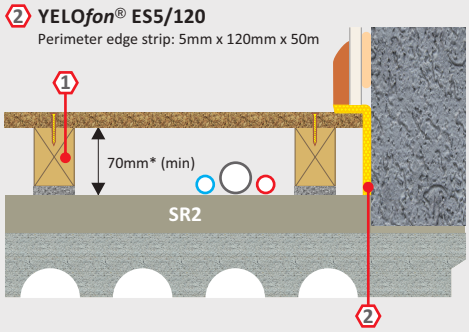
Table 2C.01b

FFT1 Resilient composite deep batten system

1 **DECK*fon*® Batten 70**
Deep acoustic batten: 75mm x 45mm x 2400mm
*Height indicated when floor is loaded to 25kg/m²

2 **YELO*fon*® ES5/120**
Perimeter edge strip: 5mm x 120mm x 50m



Airborne	Impact	Building Regs
54dB $D_{nT,w}+C_{tr}$	47dB $L_{nT,w}$ *rd* ΔL_w = 27dB	≥+8dB

BBA VERIFIED RD DATA

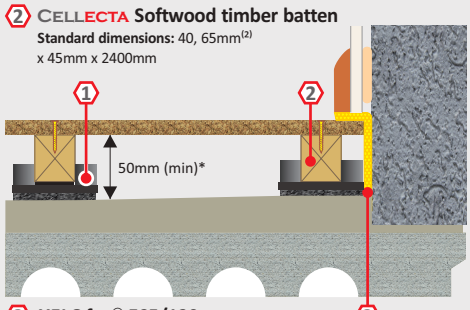
Additional item required to complete treatment: 18mm (min) tongue & groove flooring board

Table 2C.01c

FFT2 Resilient cradle and batten levelling system

1 **RUBBER*fon*® Cradles**
Dimensions: 10mm high x 100mm x 100mm
Levelling packers: 2, 3 & 5mm
Elevation blocks: 15 & 30mm

2 **CELLECTA Softwood timber batten**
Standard dimensions: 40, 65mm[2] x 45mm x 2400mm



3 **YELO*fon*® ES5/120**
Perimeter edge strip: 5mm x 120mm x 50m

Airborne	Impact	Building Regs
52dB $D_{nT,w}+C_{tr}$	49dB $L_{nT,w}$ *rd* ΔL_w = 25dB	+5dB

BBA VERIFIED RD DATA

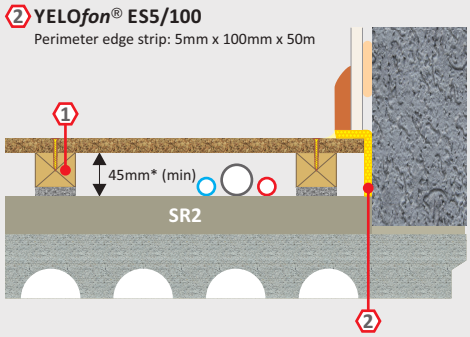
Additional item required to complete treatment: 18mm (min) tongue & groove flooring board.
[2] Other height battens available upon request. *Height indicated when floor is loaded to 25kg/m²

Table 2C.01d

FFT3 Resilient composite standard batten system

1 **DECK*fon*® Batten 45**
Standard acoustic batten: 50mm x 45mm x 2400mm
*Height indicated when floor is loaded to 25kg/m²

2 **YELO*fon*® ES5/100**
Perimeter edge strip: 5mm x 100mm x 50m



Airborne	Impact	Building Regs
52dB $D_{nT,w}+C_{tr}$	49dB $L_{nT,w}$ *rd* ΔL_w = 25dB	+5dB

BBA VERIFIED RD DATA

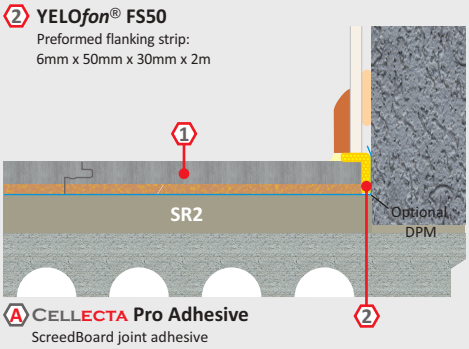
Additional item required to complete treatment: 18mm (min) tongue & groove flooring board

Table 2C.01e

FFT4 Resilient overlay platform floor system

1 **ScreedBoard® 30** high performance, dense acoustic composite overlay board
Dimensions: 30mm x 600mm x 1200mm
Weight: 27.20kg/m² / 19.58kg/board

2 **YELO*fon*® FS50**
Preformed flanking strip:
6mm x 50mm x 30mm x 2m



A **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m²

Airborne	Impact	Building Regs
52dB $D_{nT,w}+C_{tr}$	52dB $L_{nT,w}$ *rd* ΔL_w = 22dB	≥+8dB

CLASS B*fl*, S1 BS EN13501-1

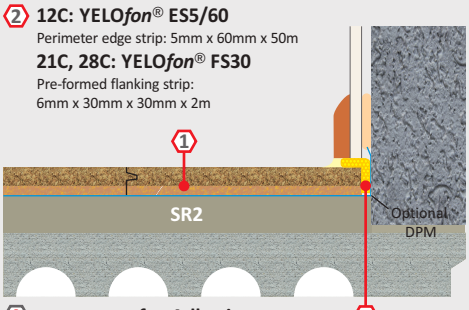
Additional items required: **ScreedBoard fixing tools**

Table 2C.01f

FFT5 Resilient shallow overlay platform floor system

1 **FIBRE*fon*® 12C, 21C, 28C**
12C: 12mm x 600mm x 2400mm
21C: 21mm x 600mm x 2400mm
28C: 28mm x 600mm x 2400mm

2 **12C: YELO*fon*® ES5/60**
Perimeter edge strip: 5mm x 60mm x 50m
21C, 28C: YELO*fon*® FS30
Pre-formed flanking strip:
6mm x 30mm x 30mm x 2m



A **CELLECTA *fon* Adhesive**
Floorboard joint adhesive
Bottle size: 1L / 33m²

12C Airborne	12C Impact	21C Airborne	21C Impact	28C Airborne	28C Impact	Building Regs
50dB $D_{nT,w}+C_{tr}$	53dB $L_{nT,w}$ *rd* ΔL_w = 21dB	50dB $D_{nT,w}+C_{tr}$	56dB $L_{nT,w}$ *rd* ΔL_w = 18dB	50dB $D_{nT,w}+C_{tr}$	53dB $L_{nT,w}$ *rd* ΔL_w = 21dB	≥+5dB

Construction notes
Ceiling treatments detailed can be used with any **FFT** listed in Table 2C.01b-f.
Slab/levelling screed must be to SR2 Standard when adopting FFT1, 3, 4 or 5.
No services should be installed within the treatment when adopting FFT5.
Materials must be installed in accordance with manufacturers' and Robust Detail instructions to achieve required acoustic performance values. Wall treatments MUST be isolated from the floating floor with **YELO*fon* ES** or **FS** perimeter flanking strip.

Separating floor - Pre-cast concrete plank

Robust Detail E-FC-1 + UFH

CELLECTA dry laid resilient systems incorporating underfloor heating
Pre-cast concrete plank with fully bonded screed

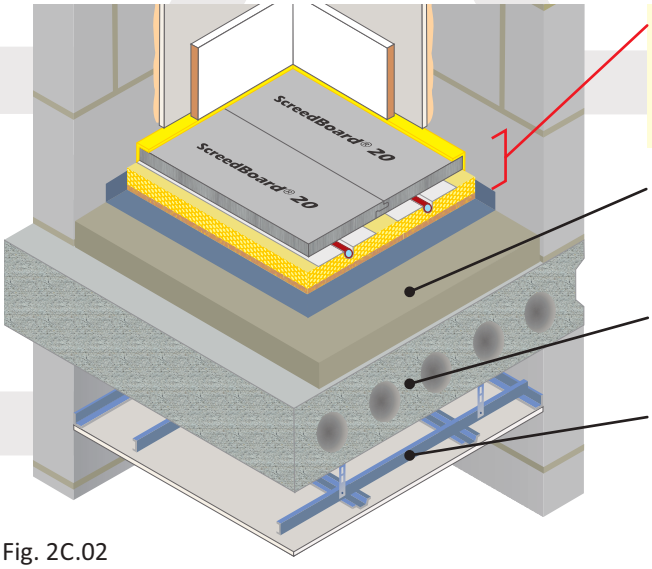


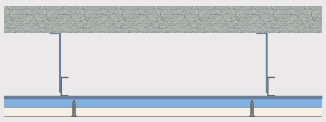
Fig. 2C.02

Floating floor acoustic treatment incorporating UFH options	**FFT2 - CELLECTA Gobi® C2-25** cradle & batten system incorporating UFH **FFT4 - CELLECTA Mojave® S1-10** platform floor system incorporating UFH
Screed	40mm (min) screed directly applied to plank. Sand: cement or proprietary screed 80kg/m² (min) mass per unit area
Structural floor	• 150mm (min) pre-cast concrete floor plank • 300kg/m² (min) mass per unit area
Ceiling	See Table 2C.02a for ceiling treatment options

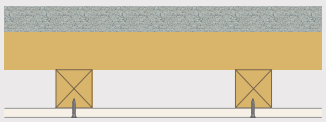
Table 2C.02a

Ceiling Treatment Options

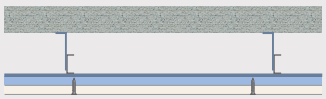
CT1 Metal ceiling - 100mm void



CT2 Timber batten & counter battens



CT3 Metal ceiling - 75mm void



CT4 Timber batten & metal resilient bars

Construction notes
Ceiling treatments detailed can be used with any FFT listed in Table 2C.01b-c.
Slab/levelling screed must be to SR2 Standard when adopting the Mojave system.
Materials must be installed in accordance with manufacturers' and Robust Detail instructions to achieve required acoustic performance values. Wall treatments MUST be isolated from the floating floor with **YELO*fon* ES** or **FS** perimeter flanking strip.

Acoustic Performance

Rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013 as detailed in Appendix D of the Robust Details hand book (minimum value required *rd* ΔL_w = 17dB).
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

Third Party Accreditation and Approvals

RD Compliant Treatments
BBA VERIFIED RD DATA
NHBC LABC warranty Premier Guarantee Accepted
bmtrada 2015

Environmental Credentials

GWP <5
100% Recycled Gypsum
zero ODP

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

Acoustic treatments incorporating UFH

Robust Detail E-FC-1 + UFH

Un-even Sub-floor

Table 2C.02b

FFT2 Dry laid resilient cradle and batten levelling system incorporating underfloor heating

CELLECTA Gobi® (C2-25 shown)

Components

1. **HiDECK® Structural 25**[1]
   High conductivity structural board:
   Dimensions: 25mm x 600mm x 1200mm
   Weight: 31.25kg/m²
   Thermal resistance: 0.0625m²K/W

A. **CELLECTA Pro Adhesive**
   HiDECK joint adhesive
   Bottle size: 1L / 16m² coverage

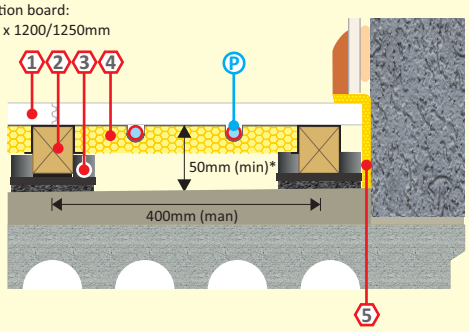
2. **CELLECTA softwood timber batten**[2]
   Standard dimensions: 40, 65mm x 45mm x 2400mm
   Chain of custody: PEFC & FSC

3. **RUBBER*fon*® Cradles**
   Dimensions: 10mm high x 100mm x 100mm
   Levelling packers: 2, 3, 5mm
   Stackable elevation blocks: 15, 30mm

4. **XFLO® JB-FF**
   Foil faced high strength routed XPS insulation board:
   Dimensions: 30, 40, 50mm x 300/340mm x 1200/1250mm
   Pipe centre: 150, 200, 300mm
   Pipe bore size (OD): 10 - 20mm
   (manufactured to suit)

5. **YELO*fon*® ES5/120**
   Perimeter edge strip:
   5mm x 120mm x 50m

P. UFH water pipe (by others)



Airborne
54dB $D_{nT,w}+C_{tr}$

Impact
49dB $L_{nT,w}$
rd ΔL_w = 25dB

Building Regs
≥+8dB

BBA VERIFIED RD DATA

(1)
CLASS A1
BS EN13501-1

[1] 28 & 30mm also available to satisfy higher non-domestic loading conditions.
[2] Other height battens available upon request.
*Height indicated when floor is loaded to 25kg/m²

Level Sub-floor (Laid to SR2 Standard)

Table 2C.02c

FFT4 Dry laid resilient overlay platform floor system incorporating UFH

CELLECTA Mojave® (S1-10 shown)
Dry laid acoustic treatment incorporating
underfloor heating system

1. **ScreedBoard® 20**
   High conductivity overlay board
   Dimensions: 20mm x 600mm x 1200mm
   Weight: 25kg/m² / 18.00kg/board
   Thermal resistance: 0.05m²K/W

A. **CELLECTA Pro Adhesive**
   ScreedBoard joint adhesive
   Bottle size: 1L / 33m² coverage

2. **ULTRAplate**
   Aluminium heat diffuser plate (to suit pipe installed):
   Dimensions: 130mm x 1000mm

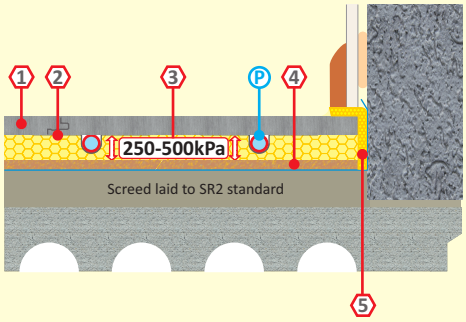
3. **XFLO® 250, 300, 500**
   High compressive strength routed XPS insulation board
   Dimensions: 15-75mm x 600mm x 1250/2500mm
   Compressive strengths available: 250, 300, 500kPa
   Pipe centre: 150, 200, 300mm
   Pipe bore size (OD): 10 - 20mm (manufactured to suit)

4. **FIBRE*fon*® 10**
   High compressive strength resilient layer
   Dimensions: 10mm x 600mm x 1200mm
   Weight: 2.20kg/m² / 1.58kg/board

5. **YELO*fon*® ES5/120**
   Perimeter edge strip:
   5mm x 120mm x 50m

P. UFH water pipe (by others)

housebuilder product awards 2020 WINNER
Best Services Product



Airborne
54dB $D_{nT,w}+C_{tr}$

Impact
51dB $L_{nT,w}$
rd ΔL_w = 24dB

Building Regs
≥+8dB

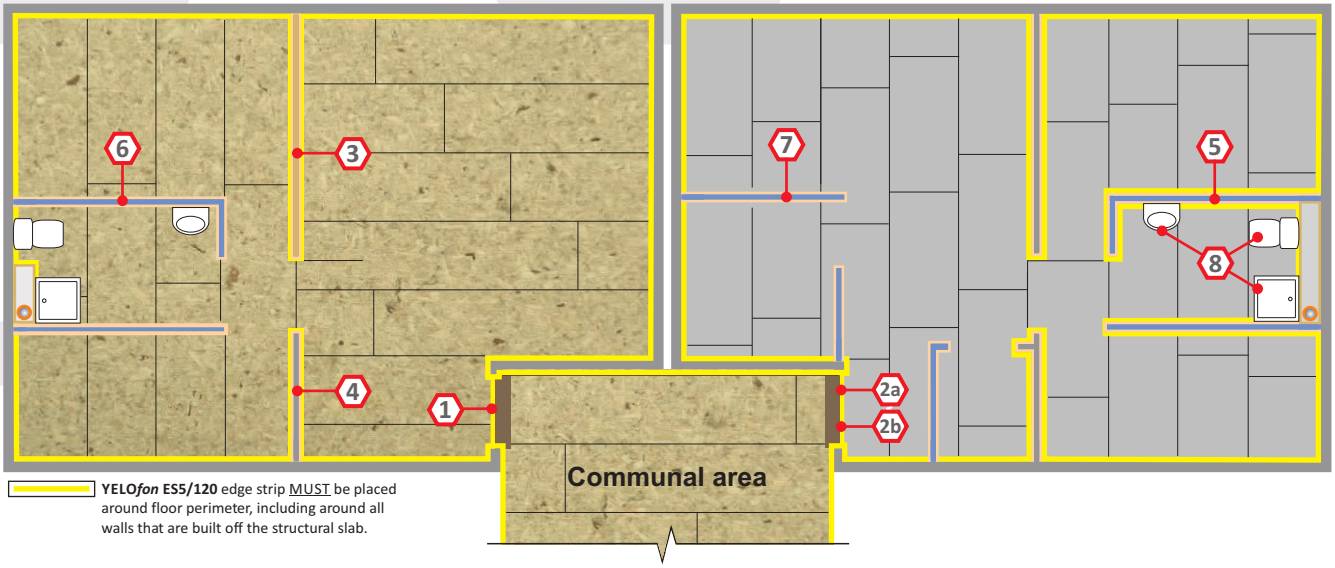
CLASS B*fl*, S1
BS EN13501-1

Floating floor treatment design & installation details: FFT1, 2, 3, 4 & 5

The acoustic performance of the floor will be compromised if the floating floor treatment is not completely isolated from the structural floor, soil pipes, door frames, the surrounding walls and their treatments. To address this risk, each potential problem area needs to be detailed accordingly.

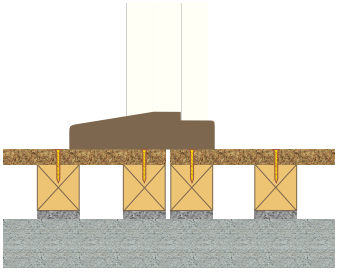
Batten based floating floor treatments

Overlay floating floor treatments



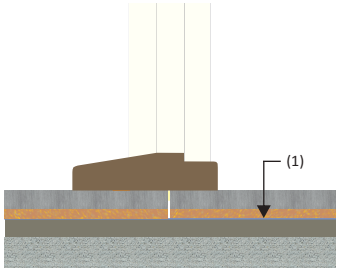
YELO*fon* ES5/120 edge strip MUST be placed around floor perimeter, including around all walls that are built off the structural slab.

1 Door threshold FFT1, 2, 3



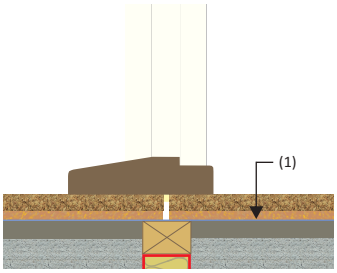
Double up battens each side of the door threshold to provide additional support.
Refer to Part B and Section 2 fire safety regulations

2a Door threshold FFT4 (ScreedBoard 30)



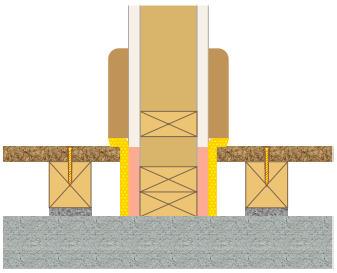
Leave a 5mm (min) gap between the habitable area treatment and the communal area treatment.

2b Door threshold FFT5



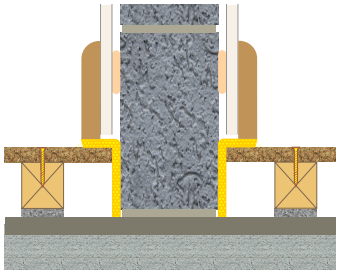
(1) On recently levelled floors, install a DPM below the **FFT4**, **FFT5** floating floor treatment.

3 Timber stud partition built off the structural floor



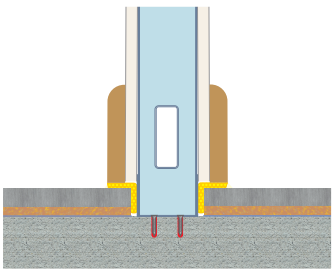
Lightweight internal walls built off the structural floor MUST be isolated from the floating floor treatment (**FFT1**, **2**, **3**) with **YELO*fon* ES strip**.

4 Internal blockwork wall built off the structural floor



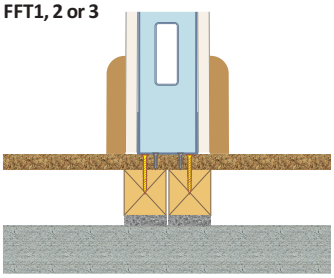
Internal block work walls built off the structural floor must be isolated from the floating floor treatment with **YELO*fon* ES** or **FS strip**.

5 Metal frame partition built off structural floor



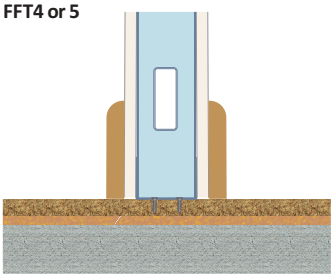
Lightweight internal walls built off the structural floor must be isolated from the floating floor treatment (**FFT4, 5**) with **YELO*fon* FS strip**.

6 Non-load bearing partition built off FFT1, 2 or 3



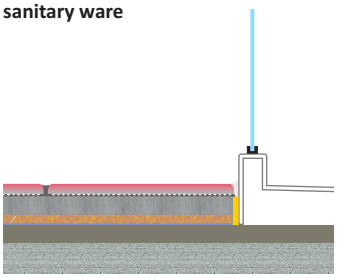
Double up battens under internal non-load bearing walls.

7 Non-load bearing partition built off FFT4 or 5



Internal non-load bearing walls can be built directly off the floor treatment. Fixings MUST not penetrate the resilient layer.

8 Shower trays, bath surrounds and sanitary ware



Shower trays, bath surrounds and sanitary ware built off the structural floor should be isolated from the floor treatment and any floor finishes with **YELO*fon* ES** or **FS edge** strip.

Separating floor - Pre-cast concrete plank

Robust Detail E-FC-5

Screed laid on CELLECTA YELO*fon*® HD10+ resilient layer *System*
Pre-cast concrete floor plank

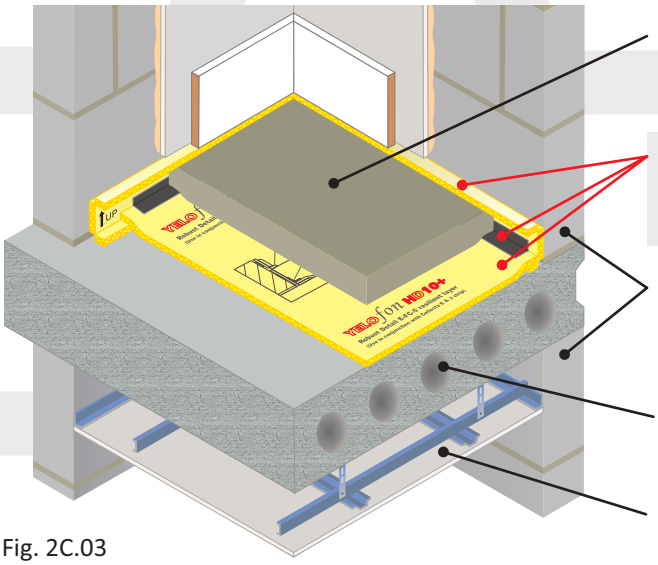


Fig. 2C.03

Floating Screed	• 65mm (min) sand cement screed • 40mm proprietary screed, nominal 80kg/m² mass per unit area
3 part resilient layer system	**1. CELLECTA YELO*fon*® HD10+** **2. YELO*fon*® E-strip** perimeter edge strip **3. J-strip** acoustic joining tape
External flanking walls	• 100mm (min) aggregate concrete block 1350-1600kg/m³ or 1850-2300kg/m³ • 100mm (min) aircrete block 450-800kg/m³
Structural floor	• 150mm (min) pre-cast concrete floor plank • 300kg/m² (min) mass per unit area
Ceiling	See Table 2C.03b for ceiling treatment options

Over 12,500,000m² successfully installed

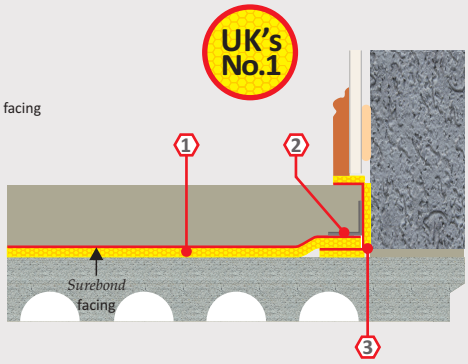
FASTRACKCAD ARCHITECTURAL CAD DATABASES — Available on bimstore.co — NBSPlus

Table 2C.03a

Installation Options

Resilient layer system laid under screed

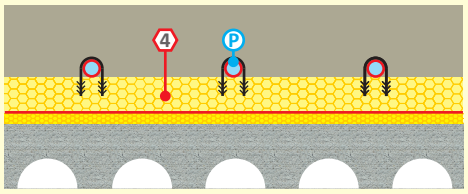
1. **YELO*fon*® HD10+**
   High density polyethylene foam with *Surebond* facing
   Dimensions: 10mm x 1.5m x 33.33m (50m²)
2. **YELO*fon*® J-strip**
   Ultra high grab acoustic joining tape
   Dimensions: 2.5mm x 75mm x 40m
3. **YELO*fon*® E-strip**
   Self adhesive perimeter edge strip
   Dimensions: 7mm x 200mm x 33m



Resilient layer system laid under screed containing underfloor heating system

4. **HEXATHERM® XFLOOR 250, 300**
   High performance extruded polystyrene
   Compressive strength: 250, 300kPa
   Dimensions: 250 - 20, 25, 30, 35 x 600 x 2500mm
   300 - 40, 50, 60, 75, 80, 90, 100, 120, 140, 160 x 600 x 2500mm

Ⓟ UFH water pipe (by others)



Underfloor heating systems within screed (without thermal insulation)

Proprietary Screeds
When using a proprietary free flowing screed, **HD10+** rolls can be tightly butted together and the joint sealed with **J-strip**.
Care should taken to ensure there are no gaps in the resilient layer.
Cover the **HD10+** with a 500 gauge (min) polythene sheet, taping all joins and lapping up around the perimeter by 150mm.

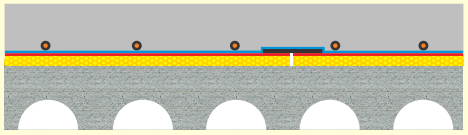
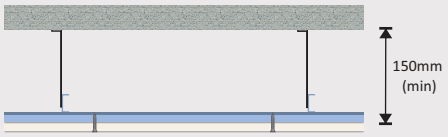


Table 2C.03b

Ceiling Treatment Options

CT0 Metal ceiling - 150mm void
To be used with 150mm (min) depth concrete planks

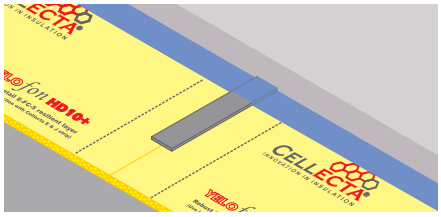


One layer of nominal 8kg/m² gypsum-based board

CT1 Metal ceiling - 100mm void
To be used with 200mm (min) depth concrete planks

One layer of nominal 8kg/m² gypsum-based board

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve required acoustic performance values.
Wall treatments must be isolated from the floating floor with **YELO*fon* E-Strip** perimeter edge strip.



Acoustic Performance

Airborne:	**52dB $D_{nT,w} + C_{tr}$**	**Building Regs**
Impact:	**54dB $L_{nT,w}$**	**+ 5dB**

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

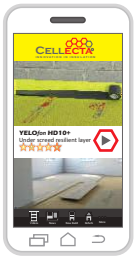
RD Proprietary Treatment — NHBC LABC warranty Premier Guarantee Accepted — bmtrada 2015

Environmental Credentials

GWP <5 — 100% Recyclable Foam — zero ODP

Design & installation details - YELO*fon*® HD10+

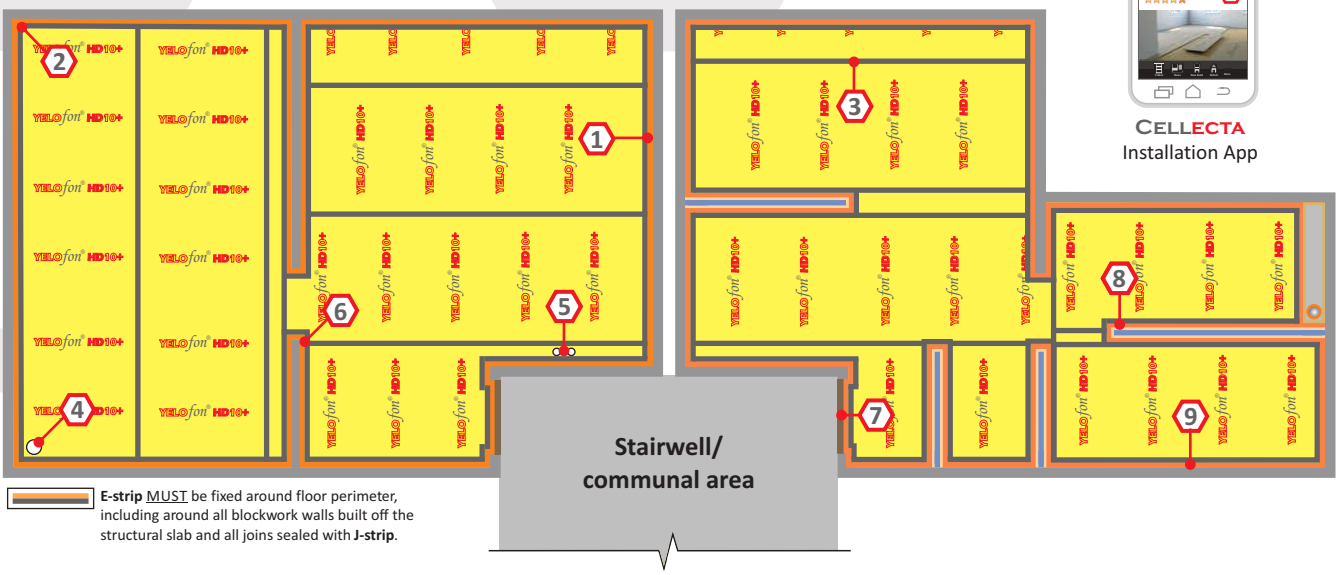
The acoustic performance of the floor will be compromised if the screed is not completely isolated from the structural slab, soil pipes, door frames, the surrounding walls and their treatments. To address this risk, each potential problem area needs to be detailed accordingly.



CELLECTA
Installation App

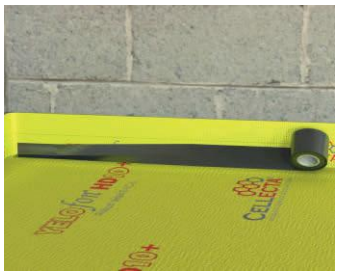
Partitions installed off the floor screed

Partitions installed before the floor finish is laid



E-strip MUST be fixed around floor perimeter, including around all blockwork walls built off the structural slab and all joins sealed with **J-strip**.

1 Perimeter detail

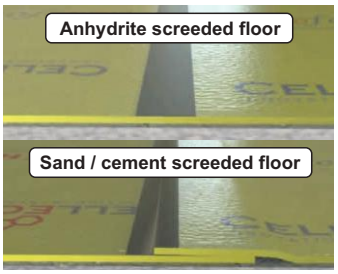


Stick the **E-strip** around the whole floor perimeter, folding up the bottom flap as you go. Overlap the flap with the **HD10+** (by at least 40mm) and seal the joint with **J-strip**.

2 Room corners

In corners, mitre the **E-strip's** upper and lower flaps to allow them to fold in. The bottom flap must then be overlapped by the **HD10+** by at least 40mm, with the joint sealed with **J-strip**.

3 Joining rolls

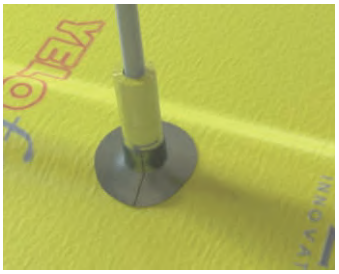


Anhydrite: Butt join and seal joint with **J-strip** and cover the **HD10+** with 500 gauge polythene sheet. **Sand/cement:** Overlap by 150mm and seal joint with **J-strip**.

4 Soil pipes

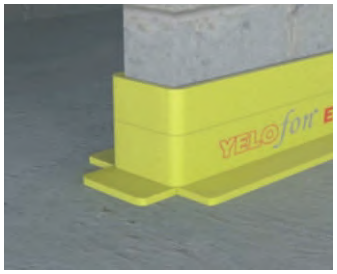
Soil pipes and services that penetrate through the **HD10+** or **E-strip** should be isolated from the screed by wrapping them in **E-strip** and sealing the joints with **J-strip**.

5 Services



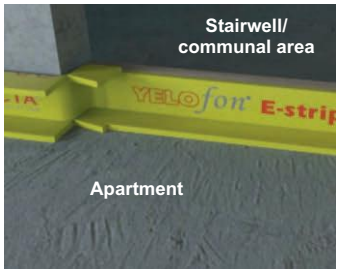
Service pipes should be secured to the structural slab with strapping and covered with **HD10+**. Alternatively, they can be laid over the **HD10+** and held in position with **J-strip** until the screed is applied.

6 Doorways



Ensure **E-strip** goes under all door frames to eliminate the risk of acoustic flanking.

7 Thresholds

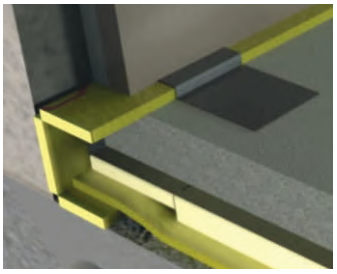


To stop acoustic flanking at the threshold, fix a timber batten across the door opening to act as a ***"stop"*** and stick the **E-strip** to it. Trim off excess strip with a sharp knife.

8 Partitions

Stick the **E-strip** to the partition built off the slab, folding up its bottom flap. Overlap with **HD10+** and seal all joints and gaps with **J-strip**.

9 Wall treatments



Ensure the wall treatments is fully isolated from the screed. Before installing the wall treatment, fold down the upper **E-strip** flap and tape it to the screed. Install the treatment. Remove the tape and trim off any excess **E-strip** that sticks out from under the skirting.

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Pre-cast concrete plank separating floor

Robust Detail E-FC-8

CELLECTA DECK*fon*® ULTRAlay 5 acoustic floor covering adhered to screed
Screed laid on CELLECTA isolation layers

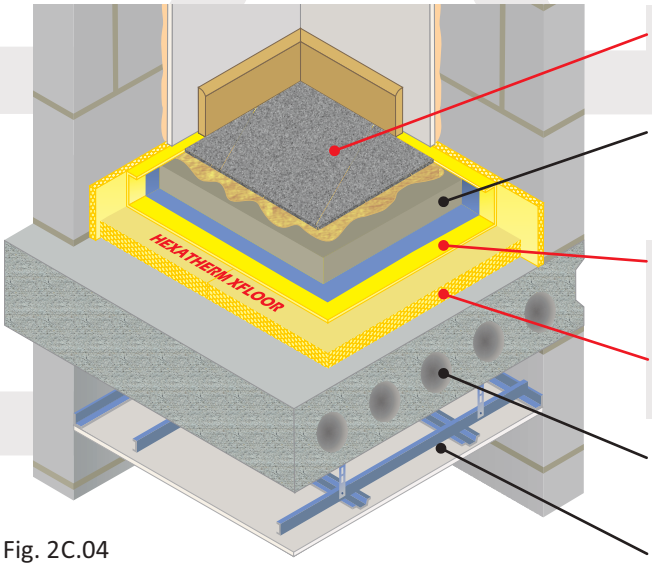


Fig. 2C.04

Resilient layer	5mm **DECK*fon*® ULTRAlay 5** acoustic floor covering fully bonded to screed
Floating screed	• 65mm (min) sand cement screed • 40mm proprietary screed, nominal 80kg/m² mass per unit area
1st Isolation layer	5mm **CELLECTA YELO*fon*® HD5** extruded polyethylene (30kg/m³)
2nd Isolation layer	25mm (min) **CELLECTA XFLOOR 250, 300** extruded polystyrene insulation board
Structural floor	• 150mm (min) pre-cast concrete floor plank • 300kg/m² (min) mass per unit area
Ceiling	See Table 2C.04b for ceiling treatment options

FASTRACKCAD ARCHITECTURAL CAD DATABASES

Available on bimstore.co

NBS Plus

Table 2C.04a

Installation Options

Resilient layer bonded to screed

① **DECK*fon*® ULTRAlay 5**
High density recycled acoustic floor covering
Dimensions: 5mm x 1.2m x 10m (12m²)

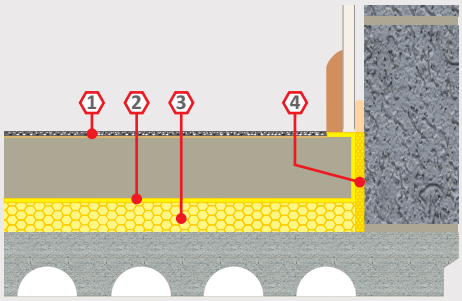
Ⓐ **CELLECTA HB724**
High bond floor adhesive
Coverage: 14kg / 46m²

Resilient layers under screed

② **YELO*fon*® HD5**
5mm extruded polyethylene (30kg/m³)
Dimensions: 5mm x 1.5m x 75m (112.5m²)

③ **HEXATHERM® XFLOOR 250, 300**
High performance extruded polystyrene
Compressive strength: 250, 300kPa
Dimensions: 20-160mm x 600mm x 2500mm

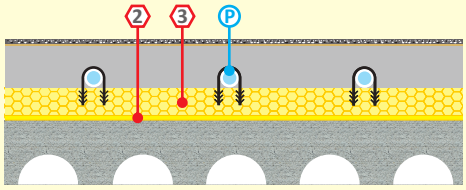
④ **YELO*fon*® ES10/100**
Perimeter edge strip
Dimensions: 10mm x 100mm x 50m



IMPORTANT
If adopting this treatment, all four components MUST be installed:
1) **DECK*fon* ULTRAlay 5** (acoustic floor covering)
2) **YELO*fon* HD5** (isolation layer 1)
3) **HEXATHERM XFLOOR 250, 300** (isolation layer 2)
4) **YELO*fon* ES10/100** (perimeter edge strip)

Underfloor heating system incorporated within screed

Ⓟ UFH water pipe (by others)

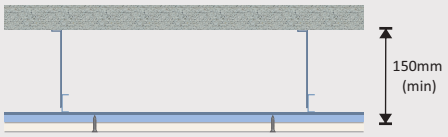


Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values.
Wall treatments MUST be isolated from the floating floor with **YELO*fon* HD5** and **ES10/100** perimeter edge strip.

Table 2C.04b

Ceiling Treatment Options

CT0 Metal ceiling - 150mm void
To be used with 150mm (min) depth concrete planks



One layer of nominal 8kg/m² gypsum-based board

CT1 Metal ceiling - 100mm void
To be used with 200mm (min) depth concrete planks

One layer of nominal 8kg/m² gypsum-based board

rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013 as detailed in Appendix D of the Robust Details hand book (minimum value required *rd* ΔL_w = 17dB).
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7:

Acoustic Performance

Airborne:	**52dB $D_{nT,w} + C_{tr}$**	**Building Regs**
Impact:	**40dB $L_{nT,w}$** **rd ΔL_w = 31dB**	**+ 5dB**

Third Party Accreditation and Approvals

RD Compliant Treatment

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Foam

zero ODP

Pre-cast concrete plank separating floor

PCT solution to Robust Detail: E-FC-9

CELLECTA RUBBER*fon*® ULTRAtop 3, 5 acoustic floor covering fully bonded to structural concrete floor
Suitable for Floor type 2.1[1]

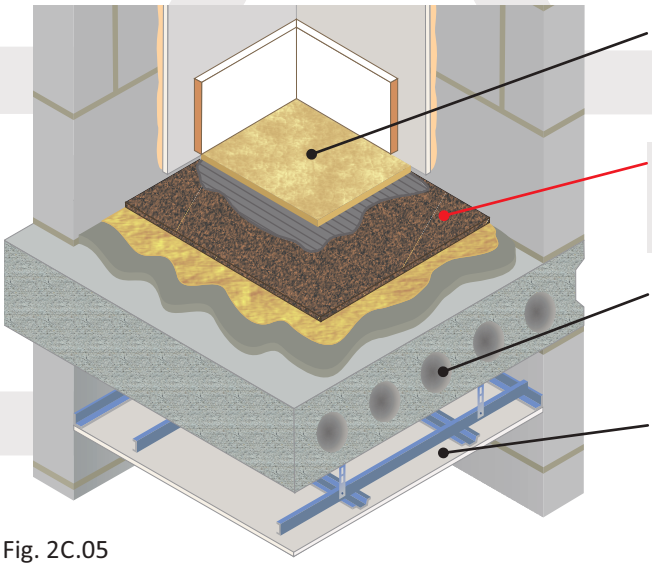


Fig. 2C.05

Floor finish (installed after acoustic testing)	Carpet Wooden flooring Ceramic tiles[2]
Bonded resilient floor covering	**CELLECTA RUBBER*fon*® ULTRAtop 3, 5** Fully bonded to the concrete slab with **CELLECTA HB724** adhesive
Structural floor	• 150mm (min) pre-cast concrete floor plank, with 10mm (min) bonded levelling screed • 300kg/m² (min) mass per unit area
Ceiling	See Table 2C.05b for ceiling treatment options

Table 2C.05a

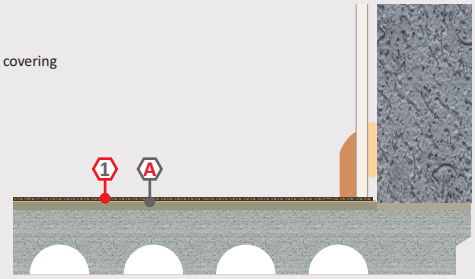
Installation Options

Resilient layer bonded to screed

1 **RUBBER*fon*® ULTRAtop 3**
High density recycled rubber/cork acoustic floor covering
Dimensions: 3mm x 1m x 15m (15m²)

A **CELLECTA HB724**
High bond floor adhesive
Coverage: 14kg/46m²

Airborne	*Impact*
55dB $R_w + C_{tr}$	58dB $L_{n,w}$
Building Regs	ΔL_w = 21dB
≥ +5dB	

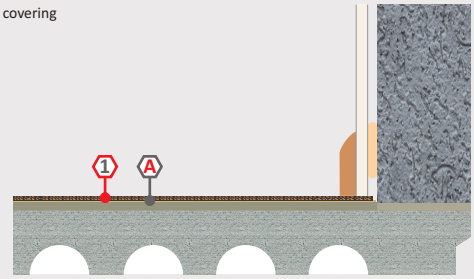


Resilient layer bonded to screed

1 **RUBBER*fon*® ULTRAtop 5**
High density recycled rubber/cork acoustic floor covering
Dimensions: 5mm x 1m x 10m (10m²)

A **CELLECTA HB724**
High bond floor adhesive
Coverage: 14kg/46m²

Airborne	*Impact*
55dB $R_w + C_{tr}$	56dB $L_{n,w}$
Building Regs	ΔL_w = 23dB
≥ +5dB	

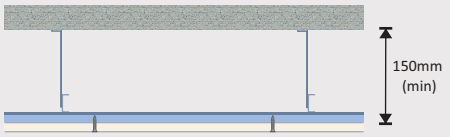


Construction notes
[1] Floor type 2.1: Pre-cast concrete base with ceiling and acoustic floor covering.
[2] Ceramic tile must be installed in accordance with the manufacturers instructions.

Table 2C.05b

Ceiling Treatment Options

CT0 Metal ceiling - 150mm void
To be used with 150mm (min) depth concrete planks



One layer of nominal 8kg/m² gypsum-based board

CT1 Metal ceiling - 100mm void
To be used with 200mm (min) depth concrete planks

One layer of nominal 8kg/m² gypsum-based board

Acoustic Performance

Test data quoted has been conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with Approved Document E: Annex B: Procedures for sound insulation testing.
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998
ΔL_w measured in accordance with BS EN ISO 140-8

Third Party Accreditation and Approvals

SRL Performance Tested
NHBC LABC warranty Premier Guarantee Accepted
bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Rubber
zero ODP

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Pre-cast concrete plank separating floor

PCT solution to Robust Detail: E-FC-12

Screed laid on CELLECTA RUBBER*fon*® Impact 3 resilient layer

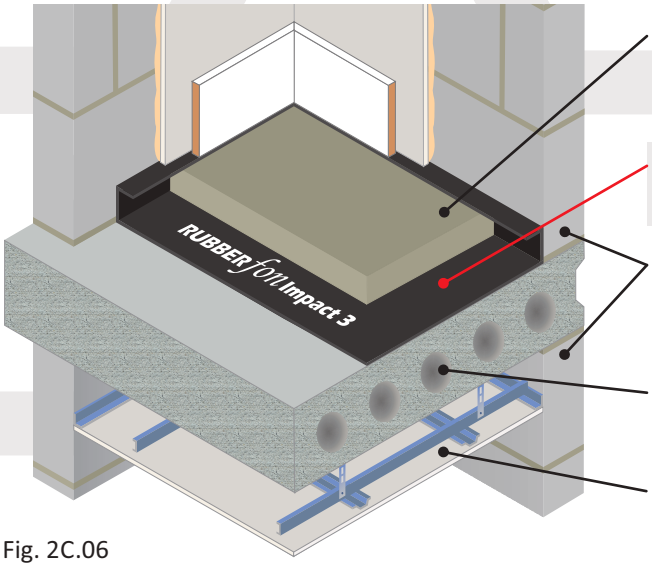

Fig. 2C.06

Floating screed	• 65mm (min) sand cement screed • 40mm proprietary screed, nominal 80kg/m² mass per unit area
2 part resilient layer system	**1. CELLECTA RUBBER*fon*® Impact 3** **2. CELLECTA HG-tape** high grab tape
External flanking walls	• 100mm (min) aggregate concrete block 1350-1600kg/m³ or 1850-2300kg/m³ • 100mm (min) aircrete block 450-800kg/m³
Structural floor	• 150mm (min) pre-cast concrete floor plank • 300kg/m² (min) mass per unit area
Ceiling	• See Table 2C.06b for ceiling treatment options

FASTRACKCAD ARCHITECTURAL CAD DATABASES

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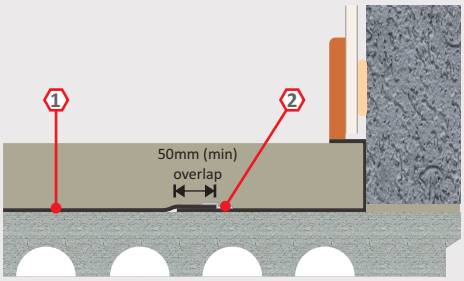
Table 2C.06a

Installation Options

Resilient layer laid under screed

① **RUBBER*fon*® Impact 3**
High density recycled rubber
Dimensions: 3mm x 1m x 15m (15m²)

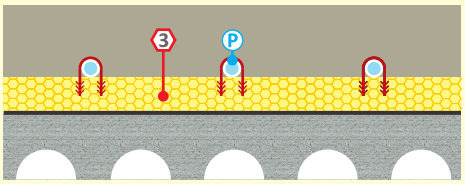
② **CELLECTA HG-tape**
High grab jointing tape
Dimensions: 50mm x 50m



Resilient layer system laid under screed containing underfloor heating system

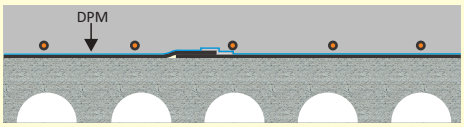
③ **HEXATHERM® XFLOOR 250, 300**
High performance extruded polystyrene
Compressive strength: 250, 300kPa
Dimensions: 250 - 20, 25, 30, 35 x 600 x 2500mm
300 - 40, 50, 60, 75, 80, 90, 100, 120, 140, 160 x 600 x 2500mm

Ⓟ UFH water pipe (by others)



Underfloor heating systems within screed (without thermal insulation)

Proprietary Screeds
When using a proprietary free flowing screed, **Impact 3** rolls should be overlapped and with all joints sealed with **HG tape**.
Care should taken to ensure there are no gaps in the resilient layer.
Cover the **Impact 3** with a 500 gauge (min) polythene sheet, taping all joins and lapping up around the perimeter by 150mm.

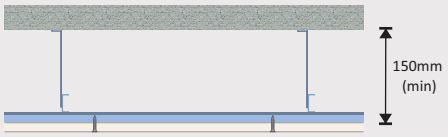


Ensure fixings used to secure the UFH do not penetrate the Impact 3

Table 2C.06b

Ceiling Treatment Options

CT0 Metal ceiling - 150mm void
To be used with 150mm (min) depth concrete planks



One layer of nominal 8kg/m² gypsum-based board

CT1 Metal ceiling - 100mm void
To be used with 200mm (min) depth concrete planks

One layer of nominal 8kg/m² gypsum-based board

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve required acoustic performance values.
RUBBER*fon* Impact 3 should be turned up around the floor's perimeter to ensure the wall treatments are isolated from the screed.

Robust Detail option, change to E-FC-5
Refer to page 7 on how to change a registered Robust Detail

Acoustic Performance

Airborne:	51dB $D_{nT,w} + C_{tr}$	Building Regs
Impact:	57dB $L_{nT,w}$	+ 5dB

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Rubber

zero ODP

Pre-cast concrete plank separating floor

Robust Detail E-FC-17

Screed laid on CELLECTA YELO*fon*® HD10+ resilient layer *System* incorporating CELLECTA ULTRA ceiling treatment

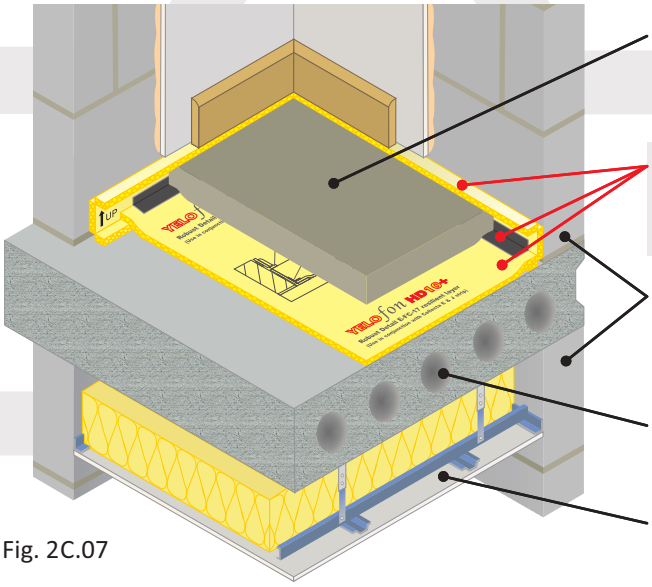


Fig. 2C.07

Floating screed	• 65mm (min) sand cement screed • 40mm proprietary screed, nominal 80kg/m² mass per unit area
3 part resilient layer system	**1. CELLECTA YELO*fon*® HD10+** **2. YELO*fon*® E-strip** perimeter edge strip **3. J-strip** acoustic joining tape
External flanking walls	• 100mm (min) aggregate concrete block 1350-1600kg/m³ or 1850-2300kg/m³ • 100mm (min) aircrete block 450-800kg/m³
Structural floor	• 150mm (min) pre-cast concrete floor plank • 300kg/m² (min) mass per unit area
Ceiling	See Table 2C.07b for ceiling treatment

Over 12,500,000m² successfully installed

Table 2C.07a

Table 2C.07b

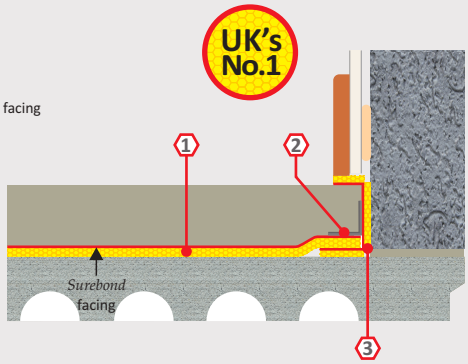
Installation Options

Resilient layer system laid under screed

① **YELO*fon*® HD10+**
High density polyethylene foam with *Surebond* facing
Dimensions: 10mm x 1.5m x 33.33m (50m²)

② **YELO*fon*® J-strip**
Ultra high grab acoustic joining tape
Dimensions: 2.5mm x 75mm x 40m

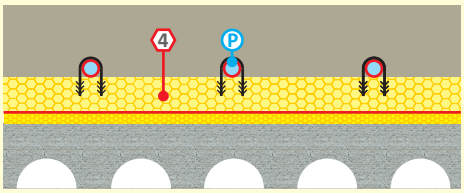
③ **YELO*fon*® E-strip**
Self adhesive perimeter edge strip
Dimensions: 7mm x 200mm x 33m



Resilient layer system laid under screed containing underfloor heating system

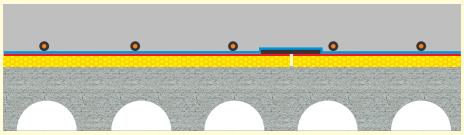
④ **HEXATHERM® XFLOOR 250, 300**
High performance extruded polystyrene
Compressive strength: 250, 300kPa
Dimensions: 250 - 20, 25, 30, 35 x 600 x 2500mm
300 - 40, 50, 60, 75, 80, 90, 100, 120, 140, 160 x 600 x 2500mm

Ⓟ UFH water pipe (by others)



Underfloor heating systems within screed (without thermal insulation)

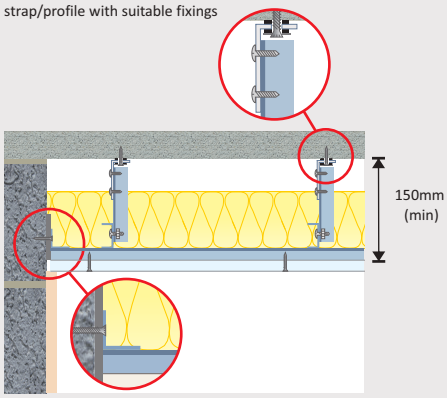
Proprietary Screeds
When using a proprietary free flowing screed, **HD10+** rolls can be tightly butted together and the joint sealed with **J-strip**.
Care should taken to ensure there are no gaps in the resilient layer.
Cover the **HD10+** with a 500 gauge (min) polythene sheet, taping all joins and lapping up around the perimeter by 150mm.



Ensure fixings used to secure the UFH do not penetrate the HD10+

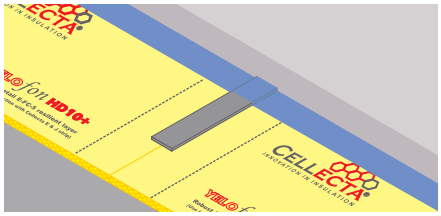
Ceiling Treatment Options

CELLECTA ULTRA Ceiling: Metal frame ceiling system incorporating CELLECTA AH50 acoustic hangers
Unique rubber isolated hanger fixed to MF ceiling strap/profile with suitable fixings



One layer of 15mm nominal 10kg/m² gypsum-based board

CELLECTA C-strip
Self adhesive acoustic flanking strip stuck around the perimeter walls to isolate the ceiling
Dimensions: 5mm x 75mm x 10m



Acoustic Performance

Airborne:	**52dB $D_{nT,w} + C_{tr}$**	**Building Regs**
Impact:	**52dB $L_{nT,w}$**	**+ 5dB**

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

RD Proprietary Treatment

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Foam

zero ODP

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Pre-cast concrete plank separating floor

Robust Detail E-FC-19

Screed laid on CELLECTA RUBBER*fon*® Impact 6 resilient layer

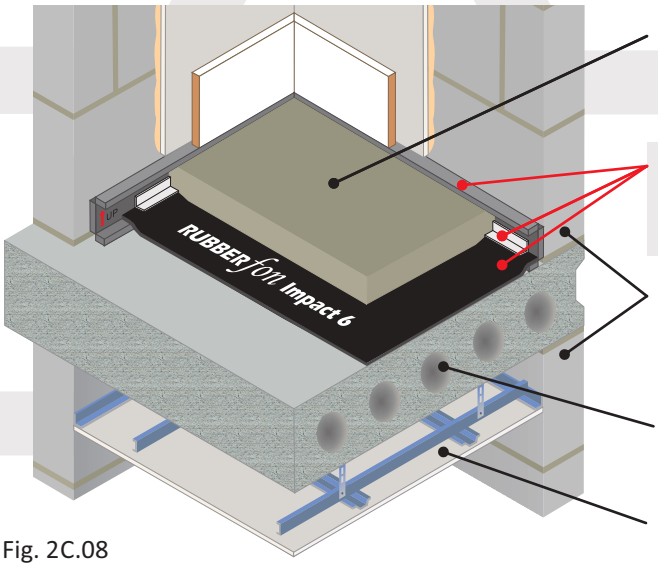


Fig. 2C.08

Floating screed	• 65mm (min) sand cement screed • 40mm proprietary screed, nominal 80kg/m² mass per unit area [1]
3 part resilient layer system	**1. CELLECTA RUBBER*fon*® Impact 6** **2. RUBBER*fon*® Edge** perimeter edge strip **3. CELLECTA HG-tape** high grab tape
External flanking walls	• 100mm (min) aggregate concrete block 1350-1600kg/m³ or 1850-2300kg/m³ • 100mm (min) aircrete block 450-800kg/m³
Structural floor	• 150mm (min) pre-cast concrete floor plank • 300kg/m² (min) mass per unit area
Ceiling	• See Table 2C.08b for ceiling treatment options

FASTRACKCAD ARCHITECTURAL CAD DATABASES

Available on bimstore.co

NBSPlus

Table 2C.08a

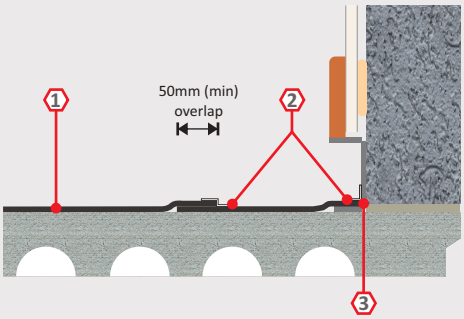
Installation Options

Resilient layer laid under screed

① **RUBBER*fon*® Impact 6**
High density recycled rubber
Dimensions: 6mm x 1m x 8m (8m²)

② **CELLECTA HG-tape**
High grab jointing tape
Dimensions: 50mm x 50m

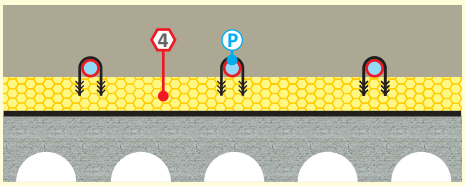
③ **RUBBER*fon*® Edge**
Self adhesive perimeter edge strip
Dimensions: 5mm x 200mm x 40m



Resilient layer system laid under screed containing underfloor heating system

④ **HEXATHERM® XFLOOR 250, 300**
High performance extruded polystyrene
Compressive strength: 250, 300kPa
Dimensions: 250 - 20, 25, 30, 35 x 600 x 2500mm
300 - 40, 50, 60, 75, 80, 90, 100, 120, 140, 160 x 600 x 2500mm

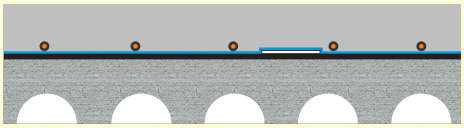
Ⓟ UFH water pipe (by others)



Underfloor heating systems within screed (without thermal insulation)

Proprietary Screeds

When using a proprietary free flowing screed, **Impact 6** rolls can be tightly butted together and the joint sealed with **HG tape**.
Care should taken to ensure there are no gaps in the resilient layer.
Cover the **Impact 6** with a 500 gauge (min) polythene sheet, taping all joins and lapping up around the perimeter by 150mm.

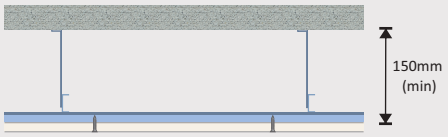


Ensure fixings used to secure the UFH do not penetrate the Impact 6

Table 2C.08b

Ceiling Treatment Options

CT0 Metal ceiling - 150mm void
To be used with 150mm (min) depth concrete planks

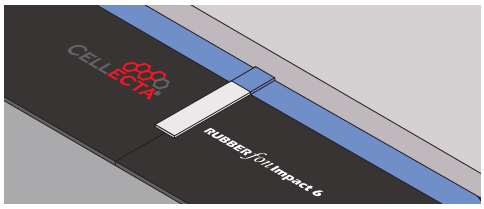


One layer of nominal 8kg/m² gypsum-based board

CT1 Metal ceiling - 100mm void
To be used with 200mm (min) depth concrete planks

One layer of nominal 8kg/m² gypsum-based board

Construction notes
[1] Contact the technical for further information (01634 296677).
Materials must be installed in accordance with manufacturers' instructions to achieve required acoustic performance values.
Wall treatments MUST be isolated from the screed with



Acoustic Performance

Airborne:	**51dB $D_{nT,w} + C_{tr}$**	**Building Regs**
Impact:	**56dB $L_{nT,w}$**	**+ 5dB**

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

RD Proprietary Treatment

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Rubber

zero ODP

Pre-cast concrete plank separating floor

Acoustic + UFH

Screed laid on CELLECTA resilient layers

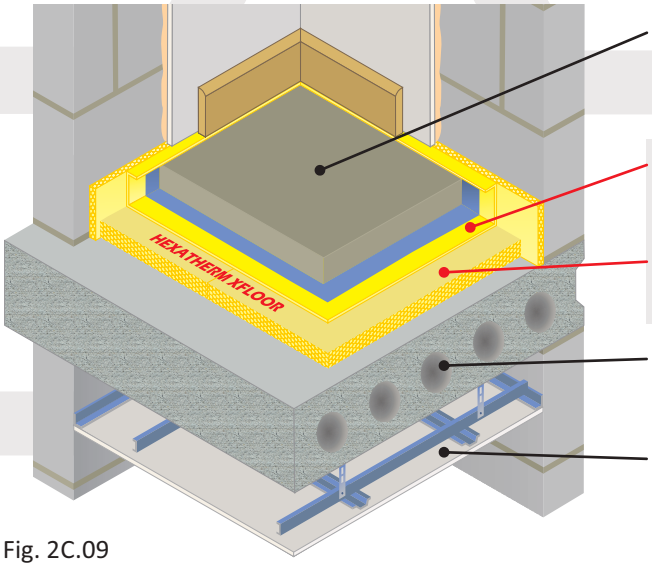


Fig. 2C.09

Floating screed	• 65mm (min) sand cement screed • 40mm proprietary screed, nominal 80kg/m² mass per unit area
1st Isolation layer	5mm CELLECTA **YELO*fon*® HD5** extruded polyethylene (30kg/m³)
2nd Isolation layer	25mm (min) CELLECTA **XFLOOR 250, 300** extruded polystyrene insulation board
Structural floor	• 150mm (min) pre-cast concrete floor plank • 300kg/m² (min) mass per unit area
Ceiling	See Table 2C.09b for ceiling treatment options

Table 2C.09a

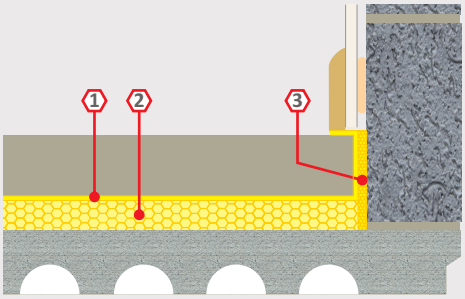
Installation Options

Resilient layers under screed

① **YELO*fon*® HD5**
5mm extruded polyethylene (30kg/m³)
Dimensions: 5mm x 1.5m x 75m (112.5m²)

② **HEXATHERM® XFLOOR 250, 300**
High performance extruded polystyrene
Compressive strength: 250, 300kPa
Dimensions: 250 - 20, 25, 30, 35 x 600 x 2500mm
300 - 40, 50, 60, 75, 80, 90, 100, 120, 140, 160 x 600 x 2500mm

③ **YELO*fon*® ES10/100**
Perimeter edge strip
Dimensions: 10mm x 100mm x 50m



IMPORTANT
If adopting this treatment, all three our components must be installed:
1) **YELO*fon* HD5** (isolation layer 1)
2) **HEXATHERM XFLOOR 250, 300** (isolation layer 2)
3) **YELO*fon* ES10/100** (perimeter edge strip)

Underfloor heating system incorporated within screed

Ⓟ UFH water pipe (by others)

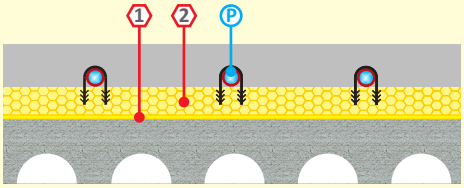
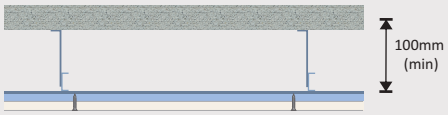


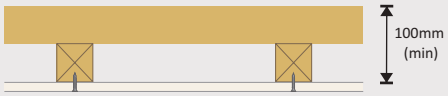
Table 2C.09b

Ceiling Treatment Options

Any metal frame ceiling system providing 100mm (min) ceiling void

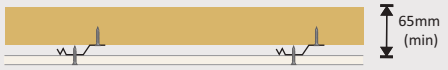


Timber battens & counter battens



One layer of nominal 8kg/m² gypsum-based board

Timber battens & metal resilient bars



One layer of nominal 10kg/m² gypsum-based board

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values.
Wall treatments MUST be isolated from the floating floor with **YELO*fon* HD5** and **ES10/100** perimeter edge strip.

Acoustic Performance

Airborne:	**54dB $D_{nT,w} + C_{tr}$**	**Building Regs**
Impact:	**54dB $L_{nT,w}$**	**+ 5dB**

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Foam

zero ODP

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

RUBBERfon® Cradle & Batten System

Acoustic Floor Levelling System

— 45mm wide kiln dried PEFC/FSC certified timber batten

— 5mm thick, high impact packer

— 3mm thick, high impact packer

— 2mm thick, high impact packer

10mm

— High impact, recycled polypropylene cradle, with integral recycled rubber resilient pad

— 15mm stackable, high impact elevation block

— 30mm stackable, high impact elevation block

FFT2 Compliant Components

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

SRL Performance Tested

100% Recycled Polypro

FSC www.fsc.org FSC® C102671 The mark of responsible forestry

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

In-situ concrete slab separating floor

Robust Detail E-FC-2

CELLECTA floating floor treatment laid on structural floor
In-situ concrete slab

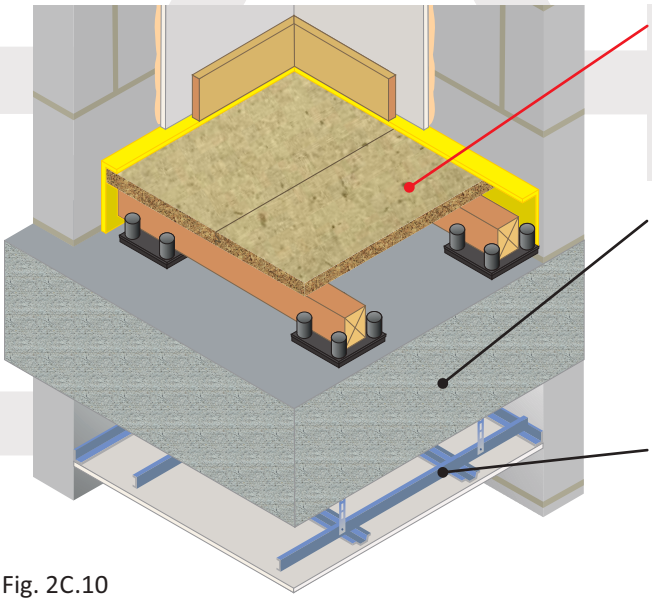


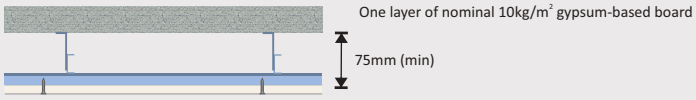
Fig. 2C.10

Floating floor acoustic treatment options	**FFT1 - CELLECTA DECK*fon*® Batten 70** **FFT2 - CELLECTA RUBBER*fon*® Cradles** **FFT3 - CELLECTA DECK*fon*® Batten 45** **FFT4 - CELLECTA ScreedBoard® 30** **FFT5 - CELLECTA FIBRE*fon*® 12C/21C/28C**
Structural floor	• 250mm (min) in-situ concrete slab, 2400kg/m^3 density without screed • 200mm (min) in-situ concrete slab 2400kg/m^3 density with screed: 40mm sand & cement screed or 80kg/m^2 (min) proprietary screed directly applied to slab
Ceiling	See Table 2C.10a for ceiling treatment options

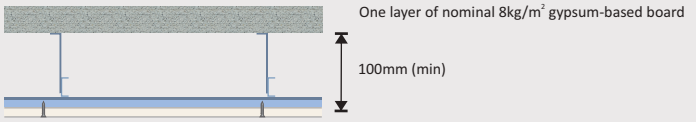
Table 2C.10a

Ceiling Treatment Options

Any ceiling system - 75mm void



Any ceiling system - 100mm void



Acoustic Performance

rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013 as detailed in Appendix D of the Robust Details hand book (minimum value required *rd* ΔL_w = 17dB).
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

Third Party Accreditation and Approvals

RD Compliant Treatments
BBA VERIFIED RD DATA
NHBC LABC warranty Premier Guarantee Accepted
bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Recycled
zero ODP

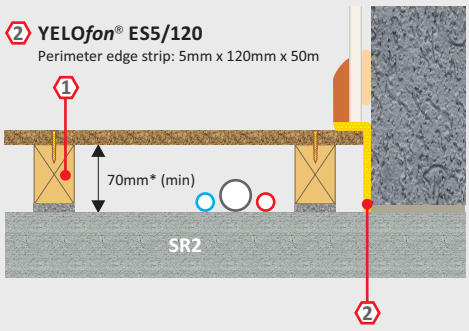
01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

Table 2C.10b

FFT1 Resilient composite deep batten system

1 **DECK*fon*® Batten 70**
Deep acoustic batten: 75mm x 45mm x 2400mm
*Height indicated when floor is loaded to 25kg/m²

2 **YELO*fon*® ES5/120**
Perimeter edge strip: 5mm x 120mm x 50m



Airborne	Impact	Building Regs
57dB $D_{nT,w}+C_{tr}$	43dB $L_{nT,w}$	≥+8dB
	rd ΔL_w = 27dB	

BBA VERIFIED RD DATA

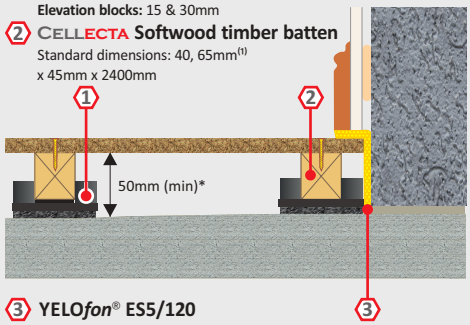
Additional item required to complete treatment: 18mm (min) tongue & groove flooring board

Table 2C.10c

FFT2 Resilient cradle and batten levelling system

1 **RUBBER*fon*® Cradles**
10mm high x 100mm x 100mm
Levelling packers: 2, 3 & 5mm
Elevation blocks: 15 & 30mm

2 **CELLECTA Softwood timber batten**
Standard dimensions: 40, 65mm[1] x 45mm x 2400mm



3 **YELO*fon*® ES5/120**
Perimeter edge strip: 5mm x 120mm x 50m

Airborne	Impact	Building Regs
55dB $D_{nT,w}+C_{tr}$	45dB $L_{nT,w}$	≥+8dB
	rd ΔL_w = 25dB	

BBA VERIFIED RD DATA

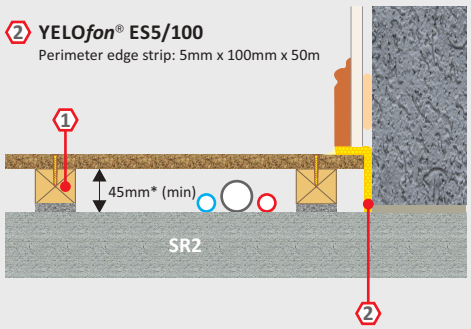
Additional item required to complete treatment: 18mm (min) tongue & groove flooring board.
[1] Other height battens available upon request. *Height indicated when floor is loaded to 25kg/m²

Table 2C.10d

FFT3 Resilient composite standard batten system

1 **DECK*fon*® Batten 45**
Standard acoustic batten: 50mm x 45mm x 2400mm
*Height indicated when floor is loaded to 25kg/m²

2 **YELO*fon*® ES5/100**
Perimeter edge strip: 5mm x 100mm x 50m



Airborne	Impact	Building Regs
55dB $D_{nT,w}+C_{tr}$	45dB $L_{nT,w}$	≥+8dB
	rd ΔL_w = 25dB	

BBA VERIFIED RD DATA

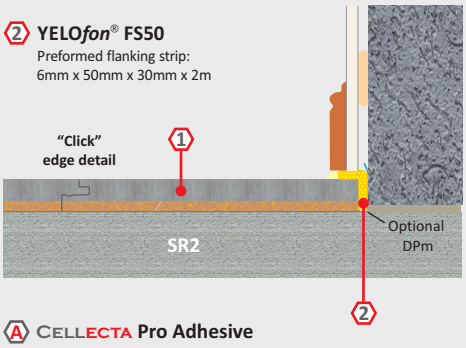
Additional item required to complete treatment: 18mm (min) tongue & groove flooring board

Table 2C.10e

FFT4 Resilient overlay platform floor system

1 **ScreedBoard® 30** high performance, dense acoustic composite overlay board
Dimensions: 30mm x 600mm x 1200mm
Weight: 27.20kg/m² / 19.58kg/board

2 **YELO*fon*® FS50**
Preformed flanking strip:
6mm x 50mm x 30mm x 2m



Airborne	Impact	Building Regs
55dB $D_{nT,w}+C_{tr}$	48dB $L_{nT,w}$	≥+8dB
	rd ΔL_w = 22dB	

CLASS Bfl,S1 BS EN13501-1

A **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m²

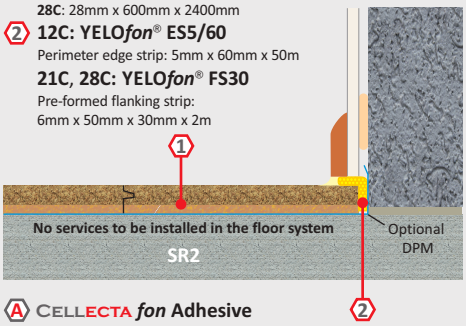
Additional item required: ScreedBoard fixing tools

Table 2C.10f

FFT5 Resilient shallow overlay platform floor system

1 **FIBRE*fon*® 12C, 21C, 28C**
12C: 12mm x 600mm x 2400mm
21C: 21mm x 600mm x 2400mm
28C: 28mm x 600mm x 2400mm

2 **12C: YELO*fon*® ES5/60**
Perimeter edge strip: 5mm x 60mm x 50m
21C, 28C: YELO*fon*® FS30
Pre-formed flanking strip:
6mm x 50mm x 30mm x 2m



A **CELLECTA *fon* Adhesive**
Acoustic floorboard joint adhesive
Bottle size: 1L / 33m²

12C Airborne	12C Impact	21C Airborne	21C Impact	28C Airborne	28C Impact	Building Regs
51dB $D_{nT,w}+C_{tr}$	49dB $L_{nT,w}$	51dB $D_{nT,w}+C_{tr}$	52dB $L_{nT,w}$	51dB $D_{nT,w}+C_{tr}$	49dB $L_{nT,w}$	≥+5dB
	rd ΔL_w = 21dB		*rd* ΔL_w = 18dB		*rd* ΔL_w = 21dB	

Construction notes
Ceiling treatments detailed can be used with any **FFT** listed in Table 2C.10b-f.
Slab/levelling screed must be to SR2 Standard when adopting FFT1, 3, 4 or 5.
No services should be installed within the treatment when adopting FFT5.
Materials must be installed in accordance with manufacturers' and Robust Detail instructions to achieve required acoustic performance values. Wall treatments MUST be isolated from the floating floor with **YELO*fon* ES** or **FS** perimeter flanking strip.

In-situ concrete slab separating floor

Robust Detail E-FC-2 + UFH

CELLECTA dry laid resilient systems incorporating underfloor heating
In-situ concrete slab

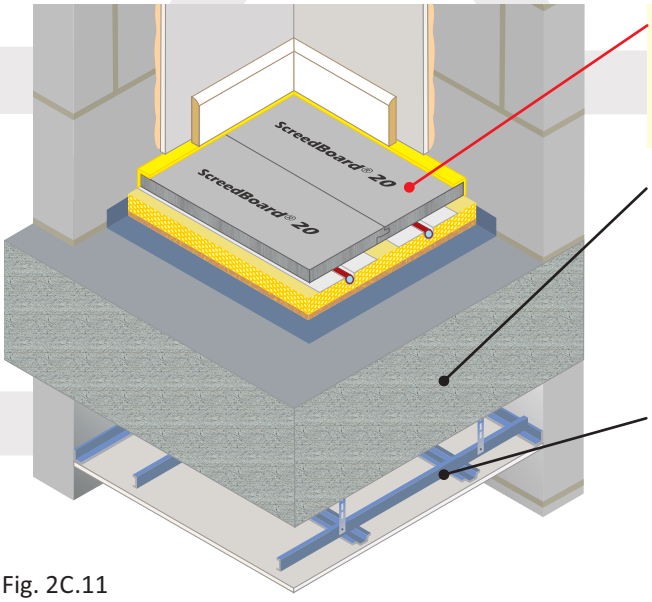


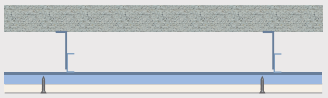
Fig. 2C.11

Floating floor acoustic treatment options	**FFT2 - CELLECTA Gobi®** cradle & batten system incorporating UFH **FFT4 - CELLECTA Mojave®** platform floor system incorporating UFH
Structural floor	• 250mm (min) in-situ concrete slab, 2400kg/m^3 density without screed • 200mm (min) in-situ concrete slab 2400kg/m^3 density with screed: 40mm sand & cement screed or 80kg/m^2 (min) proprietary screed directly applied to slab
Ceiling	See Table 2C.11a for ceiling treatment options

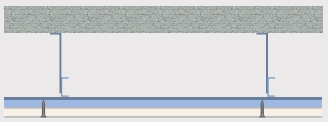
Table 2C.11a

Ceiling Treatment Options

Any ceiling system - 75mm void



Any ceiling system - 100mm void



Construction notes
Ceiling treatments detailed can be used with any **FFT** listed in Table 2C.11b-c.
Slab/levelling screed must be to SR2 Standard when adopting the **Mojave** system.
Materials must be installed in accordance with manufacturers' and Robust Detail instructions to achieve required acoustic performance values. Wall treatments MUST be isolated from the floating floor with **YELO*fon* ES** or **FS** perimeter flanking strip.

Acoustic Performance

rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013 as detailed in Appendix D of the Robust Details hand book (minimum value required *rd* ΔL_w = 17dB).
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

Third Party Accreditation and Approvals

Environmental Credentials

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

Acoustic treatments incorporating UFH

Robust Detail E-FC-2 + UFH

Un-even sub-floor

Table 2C.11b

FFT2 Dry laid resilient cradle and batten levelling system incorporating underfloor heating

CELLECTA Gobi® (C2-25 shown)

Components

1. **HiDECK® Structural 25**[1]
   High conductivity structural board:
   Dimensions: 25mm x 600mm x 1200mm
   Weight: 31.25m²
   Thermal resistance: 0.0625m²K/W

A. **CELLECTA Pro Adhesive**
   HiDECK joint adhesive
   Bottle size: 1L / 16m² coverage

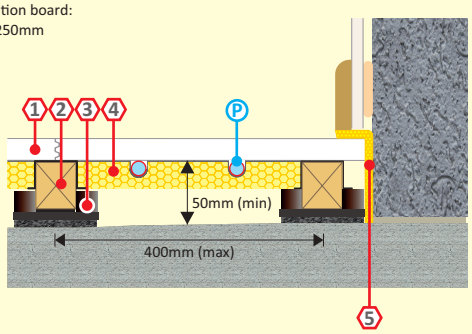
2. **CELLECTA softwood timber batten**[2]
   Standard dimensions: 40, 65mm x 45mm x 2400mm
   Chain of custody: PEFC & FSC

3. **RUBBER*fon*® Cradles**
   Dimensions: 10mm high x 100mm x 100mm
   Levelling packers: 2, 3, 5mm
   Stackable elevation blocks: 15, 30mm

4. **XFLO® JB-FF**
   Foil faced high strength routed XPS insulation board:
   Dimensions: 30, 40, 50mm x 300mm x 1250mm
   Pipe centre: 150, 200, 300mm
   Pipe bore size (OD): 10 - 20mm
   (manufactured to suit)

5. **YELO*fon*® ES5/120**
   Perimeter edge strip:
   5mm x 120mm x 50m

P. UFH water pipe (by others)



Airborne
55dB $D_{nT,w}$ + C_{tr}

Impact
45dB $L_{nT,w}$
rd ΔL_w = 25dB

Building Regs
≥+8dB

(1)
CLASS A1
BS EN13501-1

[1] 28 & 30mm available to satisfy higher non-domestic loading conditions.
[2] Other height battens available upon request.

Level sub-floor (Laid to SR2 standard)

Table 2C.11c

FFT4 Dry laid resilient overlay platform floor system incorporating UFH

CELLECTA Mojave® (S1/10 shown)
Dry laid acoustic treatment incorporating underfloor heating system

1. **ScreedBoard® 20**
   High conductivity overlay board:
   Dimensions: 20mm x 600mm x 1200mm
   Weight: 25kg/m² / 18.00kg/board
   Thermal resistance: 0.05m²K/W

A. **CELLECTA Pro Adhesive**
   ScreedBoard joint adhesive
   Bottle size: 1L / 33m² coverage

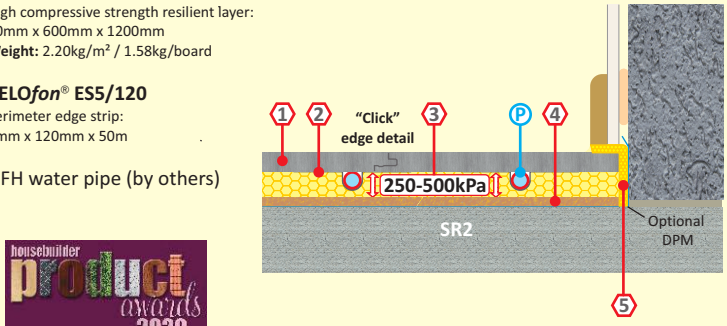
2. **ULTRAplate**
   Aluminium heat diffuser plate (to suit pipe installed):
   Dimensions: 130mm x 1000mm

3. **XFLO® 250, 300, 500**
   High compressive strength routed XPS insulation board:
   Compressive strengths available: 250, 300, 500kPa
   Dimensions: 15-75mm x 600mm x 1200/2500mm
   Pipe centres: 150, 200, 300mm
   Pipe bore size (OD): 10 - 20mm (manufactured to suit)

4. **FIBRE*fon*® 10**
   High compressive strength resilient layer:
   10mm x 600mm x 1200mm
   Weight: 2.20kg/m² / 1.58kg/board

5. **YELO*fon*® ES5/120**
   Perimeter edge strip:
   5mm x 120mm x 50m

P. UFH water pipe (by others)



Airborne
55dB $D_{nT,w}$ + C_{tr}

Impact
46dB $L_{nT,w}$
rd ΔL_w = 24dB

Building Regs
≥+8dB

CLASS Bfl,S1
BS EN13501-1

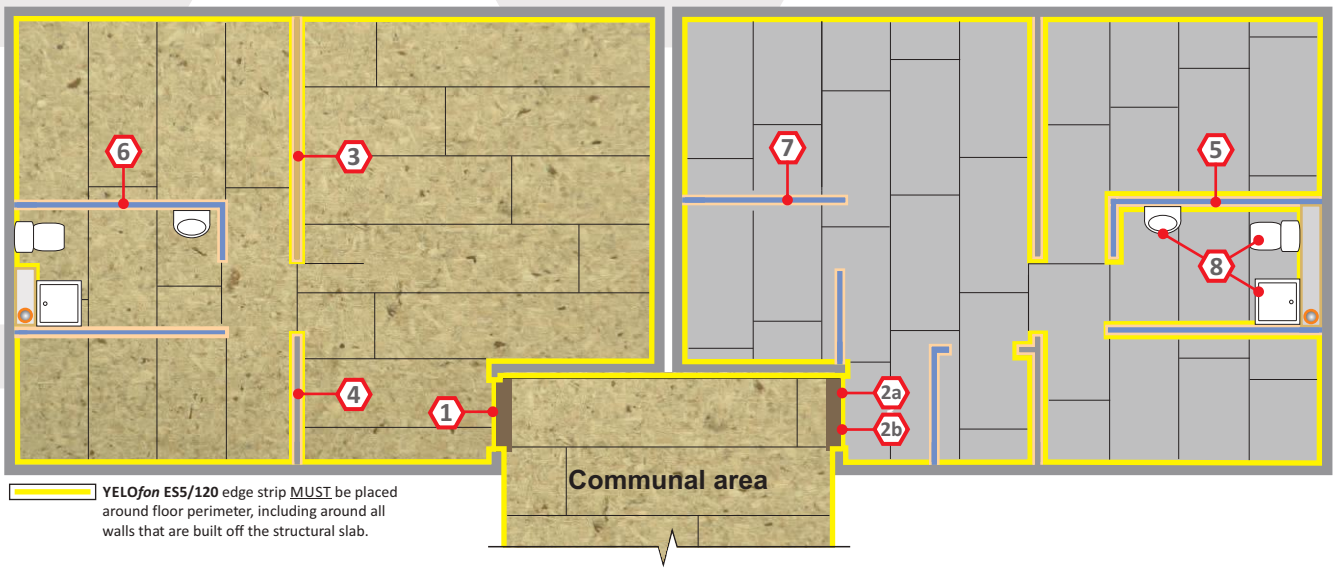
housebuilder product awards 2020 winner
Best Services Product

Floating floor treatment design & installation details: FFT1, 2, 3, 4 & 5

The acoustic performance of the floor will be compromised if the floating floor treatment is not completely isolated from the structural floor, soil pipes, door frames, the surrounding walls and their treatments. To address this risk, each potential problem area needs to be detailed accordingly.

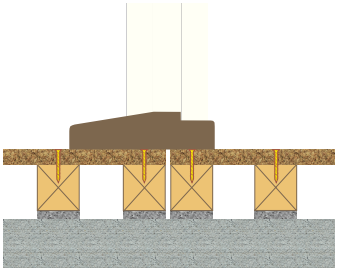
Batten based floating floor treatments

Overlay floating floor treatments



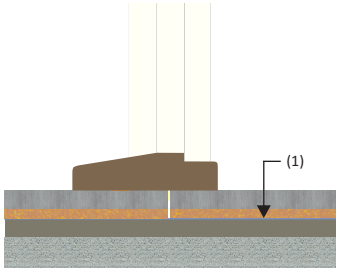
YELO*fon* ES5/120 edge strip MUST be placed around floor perimeter, including around all walls that are built off the structural slab.

1 Door threshold FFT1, 2, 3



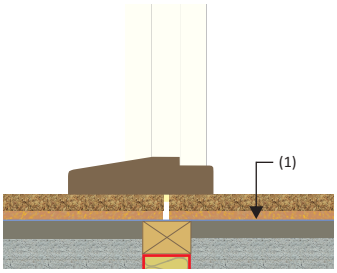
Double up battens each side of the door threshold to provide additional support.
Refer to Part B and Section 2 fire safety regulations

2a Door threshold FFT4 (ScreedBoard 30)



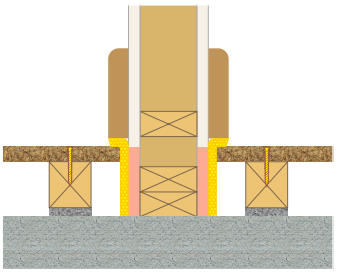
Leave a 5mm (min) gap between the habitable area treatment and the communal area treatment.

2b Door threshold FFT5



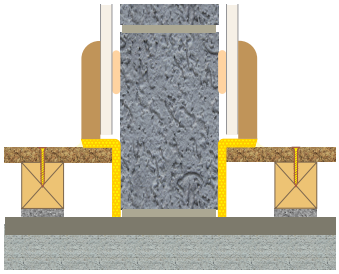
(1) On recently levelled floors, install a DPM below the **FFT4**, **FFT5** floating floor treatment.

3 Timber stud partition built off the structural floor



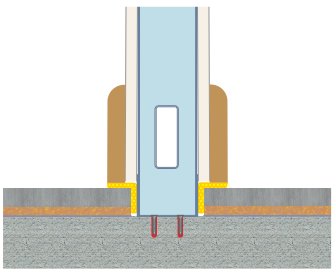
Lightweight internal walls built off the structural floor MUST be isolated from the floating floor treatment (**FFT1**, **2**, **3**) with **YELO*fon* ES strip**.

4 Internal blockwork wall built off the structural floor



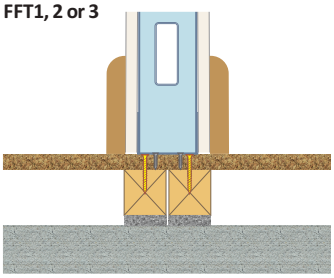
Internal block work walls built off the structural floor must be isolated from the floating floor treatment with **YELO*fon* ES** or **FS strip**.

5 Metal frame partition built off structural floor



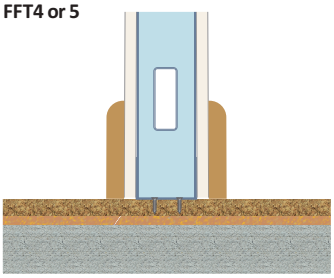
Lightweight internal walls built off the structural floor must be isolated from the floating floor treatment (**FFT4, 5**) with **YELO*fon* FS strip**.

6 Non-load bearing partition built off FFT1, 2 or 3



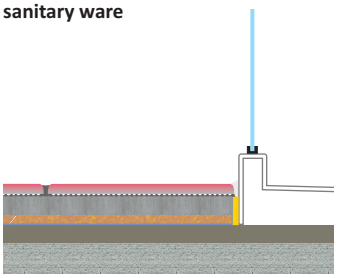
Double up battens under internal non-load bearing walls.

7 Non-load bearing partition built off FFT4 or 5



Internal non-load bearing walls can be built directly off the floor treatment. Fixings MUST not penetrate the resilient layer.

8 Shower trays, bath surrounds and sanitary ware

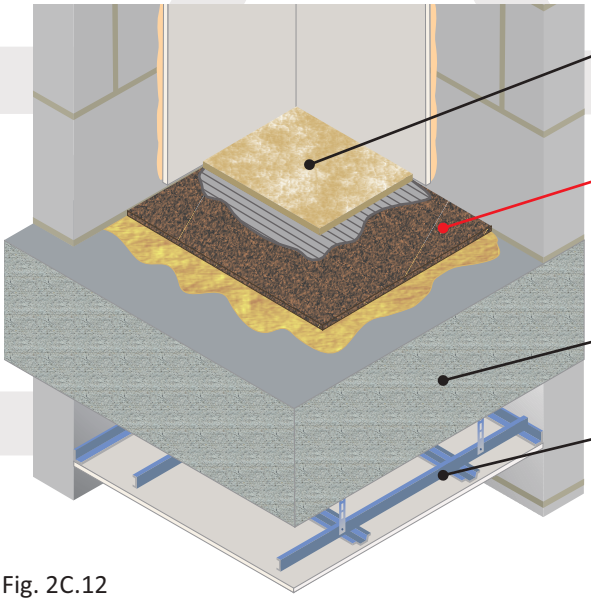


Shower trays, bath surrounds and sanitary ware built off the structural floor should be isolated from the floor treatment and any floor finishes with **YELO*fon* ES** or **FS edge** strip.

In-situ concrete slab separating floor

PCT solution to Robust Detail: E-FC-10

CELLECTA RUBBER*fon*® ULTRAtop 3*, 5 acoustic floor covering fully bonded to structural concrete floor
Suitable for Floor type 1.1[1]



Floor finish (installed after acoustic testing)	Carpet Wooden flooring Ceramic tiles[2]
Bonded resilient floor covering	**CELLECTA RUBBER*fon*® ULTRAtop 3*** **CELLECTA RUBBER*fon*® ULTRAtop 5** Fully bonded to the concrete slab with **CELLECTA HB724** floor adhesive
Structural floor	175mm (min) in-situ concrete slab, 2400kg/m³ density
Ceiling	See Table 2C.12b for ceiling treatment options

Fig. 2C.12

Table 2C.12a

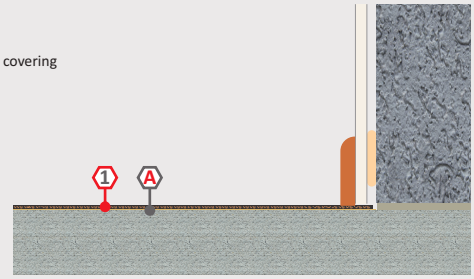
Installation Options

Resilient layer bonded to concrete floor

① **RUBBER*fon*® ULTRAtop 3***
High density recycled rubber/cork acoustic floor covering
Dimensions: 3mm x 1m x 15m (15m²)

Ⓐ **CELLECTA HB724**
High bond floor adhesive
Coverage: 14kg/46m²

Airborne	Impact
58dB $R_w + C_{tr}$	54dB $L_{n,w}$
Building Regs	ΔL_w = 21dB
≥ +5dB	



Resilient layer bonded to concrete floor

② **RUBBER*fon*® ULTRAtop 5**
High density recycled rubber/cork acoustic floor covering
Dimensions: 5mm x 1m x 10m (10m²)

Ⓐ **CELLECTA HB724**
High bond floor adhesive
Coverage: 14kg/46m²

Airborne	Impact
55dB $R_w + C_{tr}$	52dB $L_{n,w}$
Building Regs	ΔL_w = 23dB
≥ +5dB	

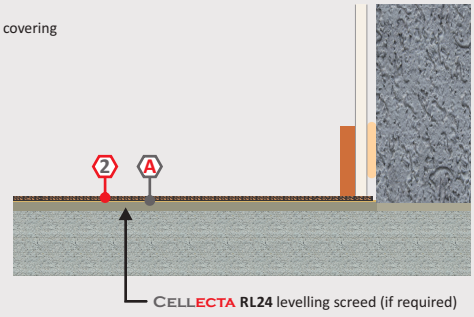
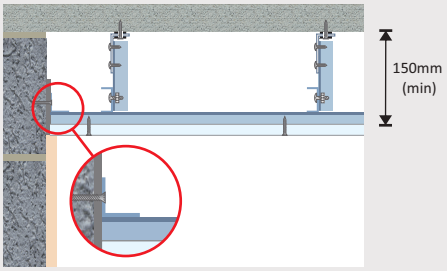


Table 2C.12b

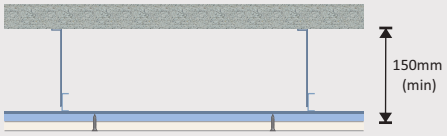
Ceiling Treatment Options

Any metal frame ceiling system hung off CELLECTA AH50 acoustic hangers - 150mm void



One layer of nominal 10kg/m² gypsum-based board

Any metal frame ceiling system - 150mm void



One layer of nominal 10kg/m² gypsum-based board

Construction notes
[1] Floor type 1.1: Concrete base with ceiling and soft floor covering.
[2] Ceramic tile must be installed in accordance with the manufacturer's instructions.

Acoustic Performance

Test data quoted has been conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with Approved Document E: Annex B: Procedures for sound insulation testing.
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998
ΔL_w measured in accordance with BS EN ISO 140-8
*Pre-completion testing required prior to full Robust Detail status being awarded.

Third Party Accreditation and Approvals

CRD Candidate* Treatment No.284
NHBC LABC warranty Premier Guarantee Accepted
bmtrada 2015

Environmental Credentials

GWP <5
100% Recycled Rubber
zero ODP

In-situ concrete slab separating floor

PCT solution to Robust Detail: E-FC-10

CELLECTA DECK*fon*® ULTRAlay 5 acoustic floor covering fully bonded to structural concrete floor
Suitable for floor type 1.1[a]

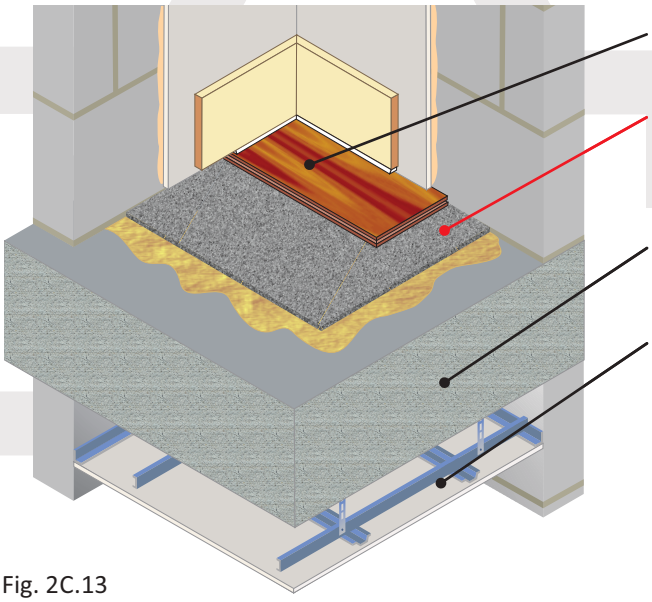


Fig. 2C.13

Floor finish (installed after acoustic testing)	Carpet Wooden flooring
Resilient layer	**CELLECTA DECK*fon*® ULTRAlay 5** fully bonded to the concrete floor slab with **CELLECTA HB724** floor adhesive
Structural floor	175mm (min) in-situ concrete floor slab 2400kg/m³ (min) density
Ceiling	See Table 2C.13b for ceiling treatment options

Table 2C.13a

Installation Options

Resilient layer bonded to concrete floor

① **DECK*fon*® ULTRAlay 5**
High density recycled acoustic floor covering
Dimensions: 5mm x 1.2m x 10m (12m²)

Ⓐ **CELLECTA HB724**
High bond floor adhesive
Coverage: 14kg/46m²

Airborne	*Impact*
53dB $R_w + C_{tr}$	45dB $L_{n,w}$
Building Regs	31dB ΔL_w
≥ +8dB	

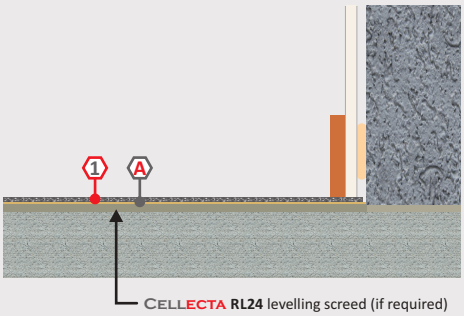
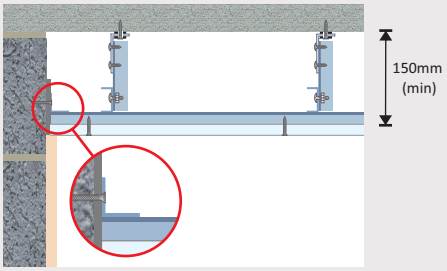


Table 2C.13b

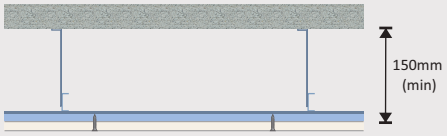
Ceiling Treatment Options

Any metal frame ceiling system hung off CELLECTA AH50 acoustic hangers - 150mm void



One layer of nominal 10kg/m² gypsum-based board

Any ceiling system - 150mm void



One layer of nominal 10kg/m² gypsum-based board

Construction notes
[a] Part E floor type 1.1: Concrete base with ceiling and soft floor covering.

Acoustic Performance

Test data quoted has been conducted in a UKAS accredited laboratory in accordance with Approved Document E: Annex B: Procedures for sound insulation testing.
Airborne results tested in accordance with BS EN ISO 140-3:1995
Impact results tested in accordance with BS EN ISO 140-6: 1998
ΔL_w measured in accordance with BS EN ISO 140-8: 1998 and do not include the additional benefit of a ceiling treatment.

Third Party Accreditation and Approvals

SRL Performance Tested
NHBC LABC warranty Premier Guarantee Accepted
bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Foam
zero ODP

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

In-situ concrete slab separating floor

Robust Detail E-FC-18

Screed laid on CELLECTA resilient layer system or bonded acoustic floor covering
In-situ concrete slab

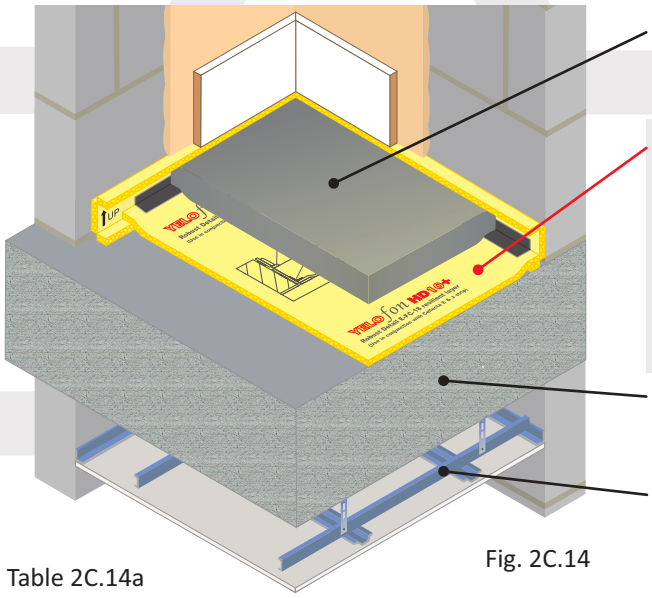


Fig. 2C.14

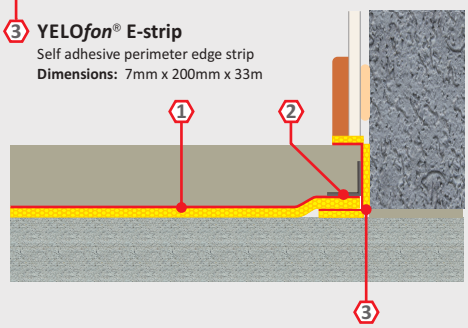
Screed (if required)	• 65mm (min) sand cement screed • 40mm proprietary screed, nominal 80kg/m² mass per unit area
Acoustic treatment options	**A** CELLECTA **YELO*fon*® HD10+** under screed resilient layer, **E-strip** (edge strip) and **J-strip** (acoustic joining tape) **B** CELLECTA **RUBBER*fon*® Impact 6** under screed resilient layer, **Edge strip** & **HG tape** **C** CELLECTA **RUBBER*fon*® ULTRAtop 5** bonded floor covering
Structural floor	225 (min) in-situ concrete slab, 2400kg/m³ density without screed
Ceiling	See Table 2C.14d for ceiling treatment options

Table 2C.14a

A **Under screed resilient layer system**

UK's No.1

1. **YELO*fon*® HD10+**
   High density polyethylene foam with *Surebond* facing
   Dimensions: 10mm x 1.5m x 33.33m (50m²)
2. **YELO*fon*® J-strip**
   Ultra high grab acoustic joining tape
   Dimensions: 2.5mm x 75mm x 40m
3. **YELO*fon*® E-strip**
   Self adhesive perimeter edge strip
   Dimensions: 7mm x 200mm x 33m

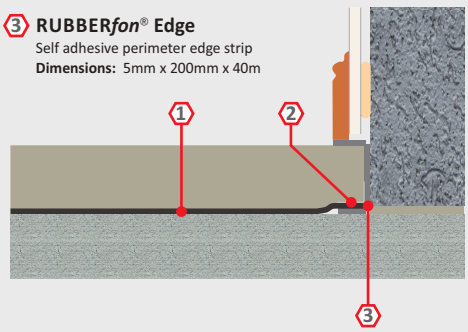


Airborne	55dB $D_{nT,w}+C_{tr}$
Impact	50dB $L_{nT,w}$
Building Regs	≥+8dB

Table 2C.13b

B **Under screed resilient layer system**

1. **RUBBER*fon*® Impact 6**
   High density recycled rubber
   Dimensions: 6mm x 1m x 8m (8m²)
2. **CELLECTA HG-tape**
   High grab jointing tape
   Dimensions: 50mm x 50m
3. **RUBBER*fon*® Edge**
   Self adhesive perimeter edge strip
   Dimensions: 5mm x 200mm x 40m



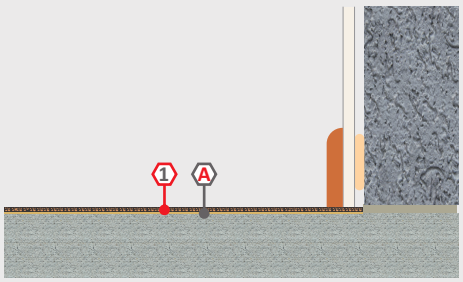
Airborne	55dB $D_{nT,w}+C_{tr}$
Impact	52dB $L_{nT,w}$
Building Regs	≥+8dB

Table 2C.14c

C **Bonded acoustic floor covering**

1. **RUBBER*fon*® ULTRAtop 5**
   High density recycled rubber/cork acoustic floor covering
   Dimensions: 5mm x 1m x 10m (10m²)

A CELLECTA **HB724**
High bond floor adhesive
Coverage: 14kg/46m²

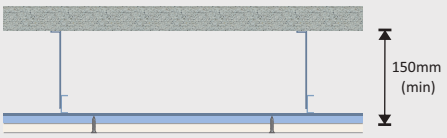


Airborne	53dB $D_{nT,w}+C_{tr}$
Impact	45dB $L_{nT,w}$ *rd* ΔL_w = 31dB
Building Regs	≥+8dB

Table 2C.13d

Ceiling Treatment

Any metal frame ceiling system - 150mm (min) void
To be used with 225mm (min) depth concrete slab



One layer of nominal 10kg/m² gypsum-based board

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values. Wall treatments must be isolated from the floating floor with appropriate edge strip, bonded floor covering or a flexible acoustic sealant.

Acoustic Performance

rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013 as detailed in Appendix D of the Robust Details hand book (minimum value required *rd* ΔL_w = 17dB).
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

RD Compliant Treatment · BBA VERIFIED RD DATA · GWP <5 · 100% Recyclable Recycled · zero ODP

In-situ concrete slab separating floor

Acoustic + UFH

CELLECTA XFLO® Micro TB routed low profile UFH insulation boards bonded to RUBBER*fon*® resilient layer
Tiles or wooden floor covering

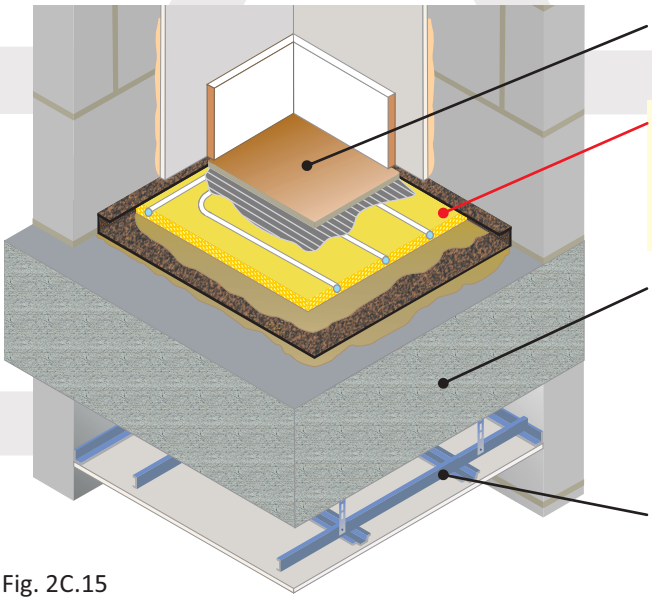


Fig. 2C.15

Floor finish	**Ceramic, stone, porcelain floor tiles, wooden flooring**
UFH insulation board with resilient layer	**CELLECTA XFLO® Micro TB** tile membrane faced low profile underfloor heating insulation board adhered to **CELLECTA RUBBER*fon*® ULTRAtop 3, 5** fully bonded to concrete slab
Structural floor	• 225mm (min) in-situ concrete slab, 2400kg/m³ density without screed • 200mm (min) in-situ concrete slab 2400kg/m³ density with screed: 40mm sand & cement screed or 80kg/m² (min) proprietary screed directly applied to slab
Ceiling	See Table 2C.15b for ceiling treatment options

FASTRACKCAD ARCHITECTURAL CAD DATABASES

Available on bimstore.co

NBSPlus

Table 2C.15a

Installation Options

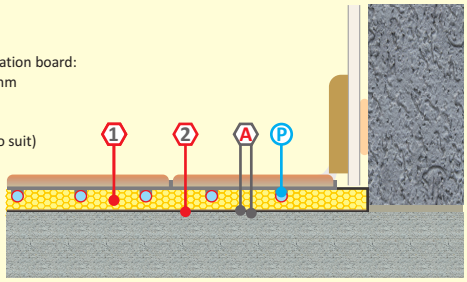
Low profile UFH board bonded to level floor slab:

① **XFLO® Micro TB 15, 18, 20, 25**
Ultra high compressive strength routed XPS insulation board:
Dimensions: 15, 18, 20, 25mm x 600mm x 1200mm
Compressive strengths available: 500kPa
Pipe centre: 150, 200mm
Pipe bore size (OD): 10 - 16mm (manufactured to suit)

② **RUBBER*fon*® ULTRAtop 3, 5**
High density recycled rubber/cork
3mm x 1m x 15m (15m²)
5mm x 1m x 10m (10m²)

Ⓐ **CELLECTA HB724**
High bond floor adhesive
Coverage: 14kg/46m²

Ⓟ UFH water pipe (by others)



Low profile UFH board adhered to resilient layer bonded to levelled floor slab

③ **CELLECTA RL24**
Rapid drying levelling screed
Size: 20kg bag
Coverage: 4m² @ 3mm

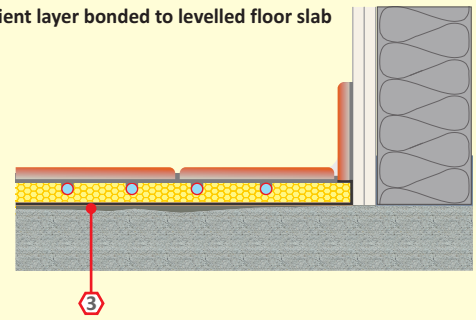
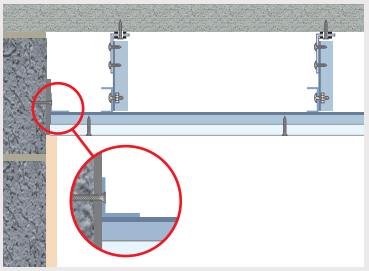


Table 2C.15b

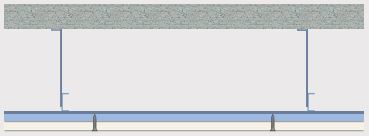
Ceiling Treatment Options

Any metal frame ceiling system hung off CELLECTA AH50 acoustic hangers - 150mm void



One layer of nominal 10kg/m² gypsum-based board

Any ceiling system - 150mm void



One layer of nominal 10kg/m² gypsum-based board

Construction notes
Slab/levelling screed must be to SR2 Standard before installing treatment. Materials must be installed in accordance with manufacturers' instructions to achieve required acoustic performance values.

Acoustic Performance

		Building Regulations
Airborne:	53dB $D_{nT,w} + C_{tr}$	
Impact:	52dB $L_{nT,w}$	+ 8dB

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recycled Rubber

zero ODP

Modified beam & block separating floor

PCT solution to Robust Detail: E-FC-6

Screed laid on CELLECTA YELO*fon*® HD10+ resilient layer *System*
Beam and block floor with precast or in-situ edge beams

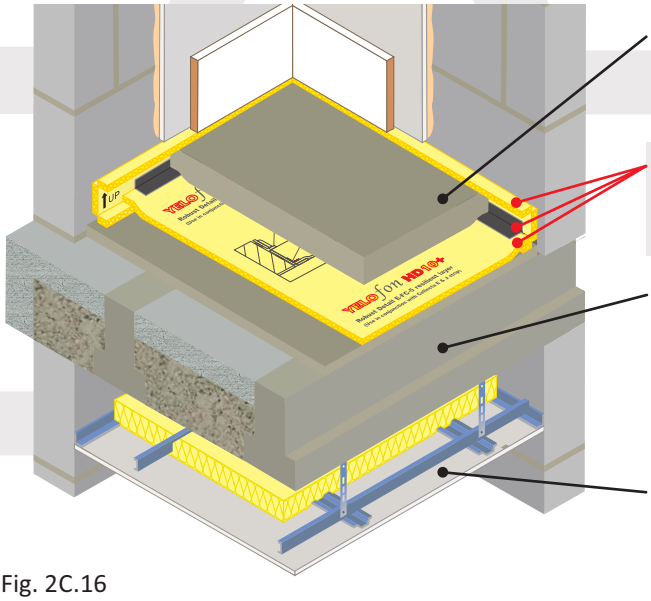


Fig. 2C.16

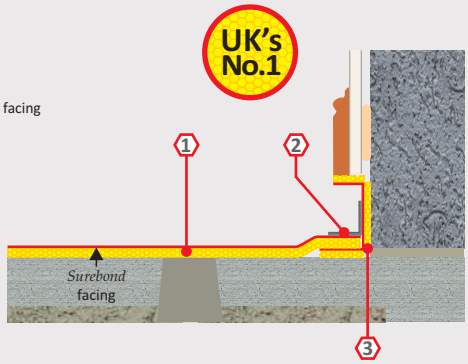
Floating screed	• 65mm (min) sand cement screed • 40mm proprietary screed, nominal 80kg/m² mass per unit area
3 part resilient layer system	**1. CELLECTA YELO*fon*® HD10+** **2. YELO*fon*® E-strip** perimeter edge strip **3. J-strip** acoustic joining tape
Structural floor	Beam and block, min 100mm thick dense aggregate infill blocks, min 50mm concrete topping, min strength class C20, to floor blocks, min 300kg/m² (min) combined mass per unit area
Ceiling	See Table 2C.16b for ceiling treatment

Table 2C.16a

Installation Options

Resilient layer system laid under screed

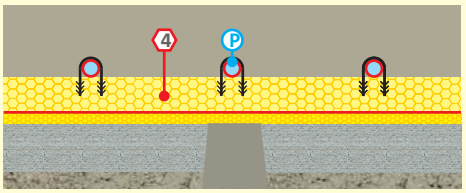
1. **YELO*fon*® HD10+**
   High density polyethylene foam with *Surebond* facing
   Dimensions: 10mm x 1.5m x 33.33m (50m²)
2. **YELO*fon*® J-strip**
   Ultra high grab acoustic joining tape
   Dimensions: 2.5mm x 75mm x 40m
3. **YELO*fon*® E-strip**
   Self adhesive perimeter edge strip
   Dimensions: 7mm x 200mm x 33m



Resilient layer system laid under screed containing underfloor heating system

4. **HEXATHERM® XFLOOR 250, 300**
   High performance extruded polystyrene
   Compressive strength: 250, 300kPa
   Dimensions: 250 - 20, 25, 30, 35 x 600 x 2500mm
   300 - 40, 50, 60, 75, 80, 90, 100, 120, 140, 160 x 600 x 2500mm

Ⓟ UFH water pipe (by others)



Underfloor heating systems within screed (without thermal insulation)

Proprietary Screeds

When using a proprietary free flowing screed, **HD10+** rolls can be tightly butted together and the joint sealed with **J-strip**.
Care should taken to ensure there are no gaps in the resilient layer.
Cover the **HD10+** with a 500 gauge (min) polythene sheet, taping all joins and lapping up around the perimeter by 150mm.

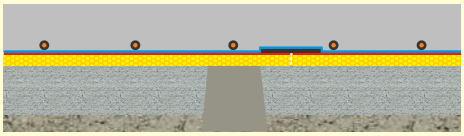
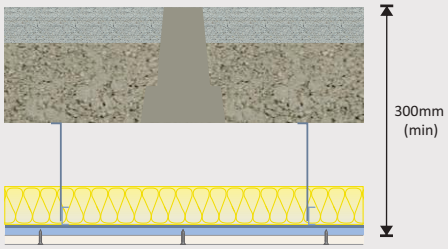


Table 2C.16b

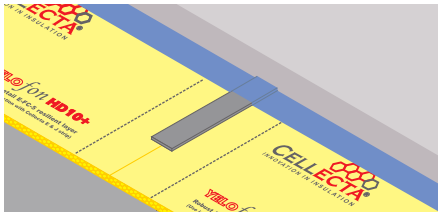
Ceiling Treatment Options

Metal frame ceiling system providing a overall depth of not less than 300mm from top of beam and ceiling board



One layer of nominal 10kg/m² gypsum-based board 50mm (min) fibre quilt (min 10kg/m³) in ceiling void to cover whole ceiling board area

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values. Wall treatments MUST be isolated from the floating floor with **YELO*fon* E-strip**.



Acoustic Performance

Airborne:	**53dB $D_{nT,w} + C_{tr}$**	**Building Regs**
Impact:	**51dB $L_{nT,w}$**	**+ 5dB**

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Foam
zero ODP

Modified beam & block separating floor

Robust Detail E-FC-7

CELLECTA floating floor treatment laid on beam and block floor with precast or in-situ edge beams
For use with dense aggregate block flanking walls only

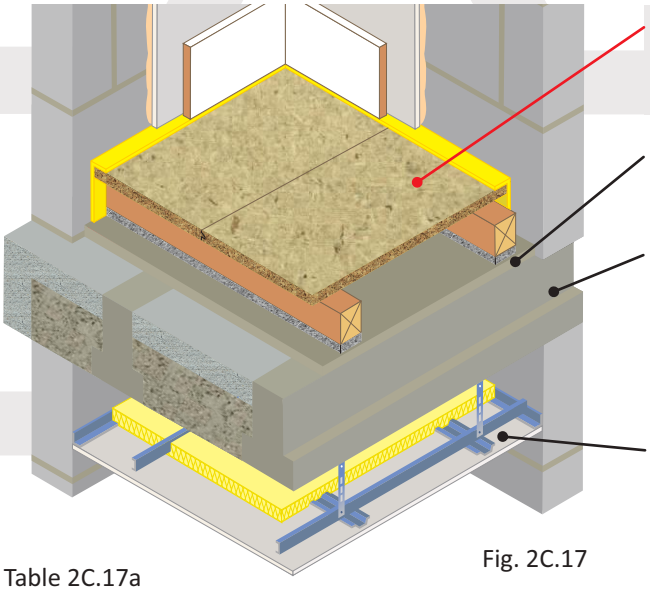


Fig. 2C.17

Floating floor acoustic treatment options	**FFT1 - CELLECTA DECK*fon*® Batten 70** **FFT2 - CELLECTA RUBBER*fon*® Cradles** **FFT3 - CELLECTA DECK*fon*® Batten 45**
Levelling screed	20mm (min), only required when using **FFT1** or **FFT3**
Structural floor	Beam and block, min 100mm thick dense aggregate infill blocks, min 50mm concrete topping, min strength class C20, to floor blocks, min 300kg/m² (min) combined mass per unit area
Ceiling	See Table 2C.17d for ceiling treatment options

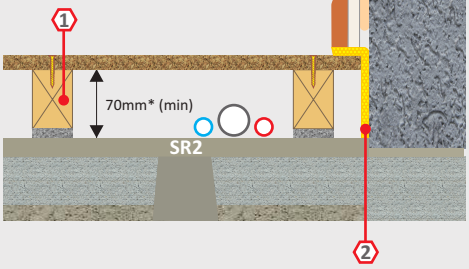
FASTRACK CAD ARCHITECTURAL CAD DATABASES — Available on bimstore.co — NBS Plus

Table 2C.17a

FFT1 Resilient composite deep batten system

1 DECK*fon*® Batten 70
Deep acoustic batten: 75mm x 45mm x 2400mm
*Height indicated when floor is loaded to 25kg/m²

2 YELO*fon*® ES5/120
Perimeter edge strip: 5mm x 120mm x 50m



Airborne	53dB $D_{nT,w}+C_{tr}$
Impact	49dB $L_{nT,w}$ *rd* ΔL_w = 27dB
Building Regs	≥+8dB

BBA VERIFIED RD DATA

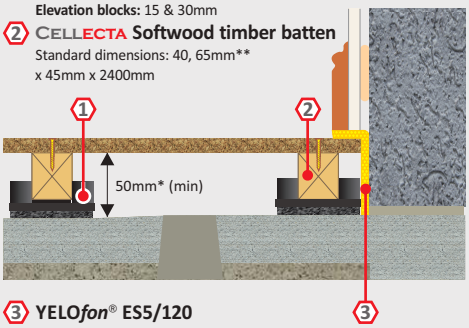
Additional item required to complete treatment: 18mm (min) tongue & groove flooring board

Table 2C.17b

FFT2 Resilient cradle and batten system

1 RUBBER*fon*® Cradles
10mm high x 100mm x 100mm
Levelling packers: 2, 3 & 5mm
Elevation blocks: 15 & 30mm

2 CELLECTA Softwood timber batten
Standard dimensions: 40, 65mm**
x 45mm x 2400mm



3 YELO*fon*® ES5/120
Perimeter edge strip: 5mm x 120mm x 50m

Airborne	53dB $D_{nT,w}+C_{tr}$
Impact	51dB $L_{nT,w}$ *rd* ΔL_w = 25dB
Building Regs	≥+8dB

BBA VERIFIED RD DATA

Additional items required to complete treatment:
18mm (min) tongue & groove flooring board
40mm (min) x 45mm timber batten

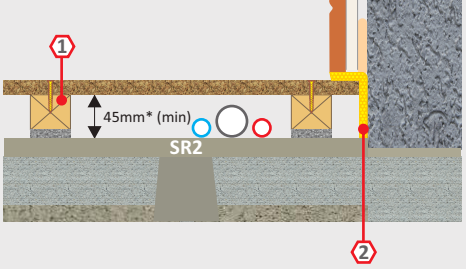
*Height indicated when floor is loaded to 25kg/m². ** Other batten sizes available upon request

Table 2C.17c

FFT3 Resilient composite standard batten system

1 DECK*fon*® Batten 45
Deep acoustic batten: 50mm x 45mm x 2400mm
*Height indicated when floor is loaded to 25kg/m²

2 YELO*fon*® ES5/100
Perimeter edge strip: 5mm x 100mm x 50m



Airborne	53dB $D_{nT,w}+C_{tr}$
Impact	51dB $L_{nT,w}$ *rd* ΔL_w = 25dB
Building Regs	≥+8dB

BBA VERIFIED RD DATA

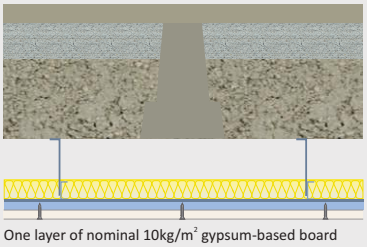
Additional item required to complete treatment: 18mm (min) tongue & groove flooring board

Table 2C.17d

Ceiling Treatment

All E-FC-7 floors must have a minimum depth of 300mm between the top of the beams and ceiling board

Only suspended metal frame systems may be used



One layer of nominal 10kg/m² gypsum-based board 25mm (min) fibre quilt (min 10kg/m³) in ceiling void to cover whole ceiling board area

Construction notes
Slab/levelling screed must be to SR2 Standard when adopting FFT1 or 3. Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values. Wall treatments MUST be isolated from the floating floor with **YELO*fon* ES5** edge strip.

Acoustic Performance

rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013 as detailed in Appendix D of the Robust Details hand book (minimum value required *rd* ΔL_w = 17dB).
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

RD Compliant Treatment — BBA VERIFIED RD DATA — GWP <5 — 100% Recycled Foam — zero ODP

01634 29-66-77 — cellecta.co.uk — technical@cellecta.co.uk

Modified beam & block separating floor

PCT solution to Robust Detail: E-FC-7

CELLECTA ScreedBoard® 30 laid on beam and block floor with precast or in-situ edge beams
For use with dense aggregate block flanking walls only

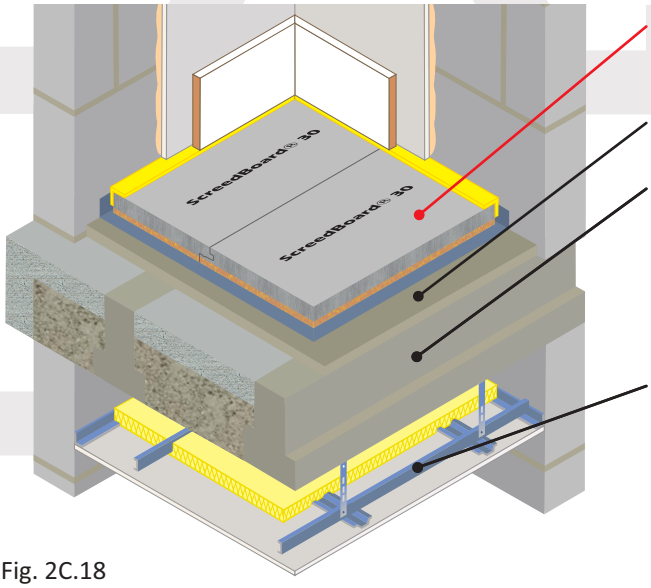


Fig. 2C.18

Floating floor treatment	**CELLECTA ScreedBoard® 30** (See Table 2C.18a for full details)
Levelling screed	10mm (min) levelling screed
Structural floor	Beam and block, min 100mm thick dense aggregate infill blocks, min 50mm concrete topping, min strength class C20, to floor blocks, min 300kg/m^2 (min) combined mass per unit area
Ceiling	See Table 2C.18b for ceiling treatment options

Table 2C.18a

Installation Details

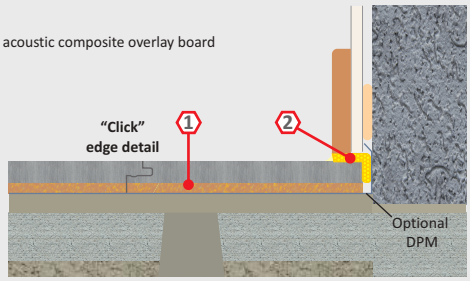
Resilient overlay platform floor system

① **ScreedBoard® 30** high performance, dense acoustic composite overlay board
Dimensions: 30mm x 600mm x 1200mm
Weight: 27.20kg/m² / 19.58kg/board

Ⓐ **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L/33m² coverage

② **YELO*fon*® FS50**
Preformed flanking strip:
6mm x 50mm x 30mm x 2m

Additional items required:
CELLECTA ScreedBoard fixing tools

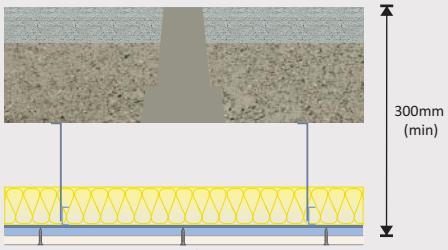


CLASS B*fl*,S1
BS EN13501-1

Table 2C.18b

Ceiling Treatment Options

Metal frame ceiling system providing a overall depth of not less than 300mm from top of beam and ceiling board



One layer of nominal 10kg/m^2 gypsum-based board 25mm (min) fibre quilt (min 10kg/m^3) in ceiling void to cover whole ceiling board area

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values. Slab/levelling screed must be to SR2 Standard. Wall treatments must be isolated from the floating floor with **YELO*fon* FS strip**.

Acoustic Performance

Airborne:	**54dB $D_{nT,w} + C_{tr}$**	**Building Regs**
Impact:	**55dB $L_{nT,w}$**	**+ 5dB**

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Gypsum
zero ODP

Modified beam & block separating floor

PCT solution to Robust Detail: E-FC-7 + UFH

CELLECTA Mojave® acoustic/UFH floating floor system
Modified beam and block floor with precast or in-situ edge beams
For use with dense aggregate block flanking walls only

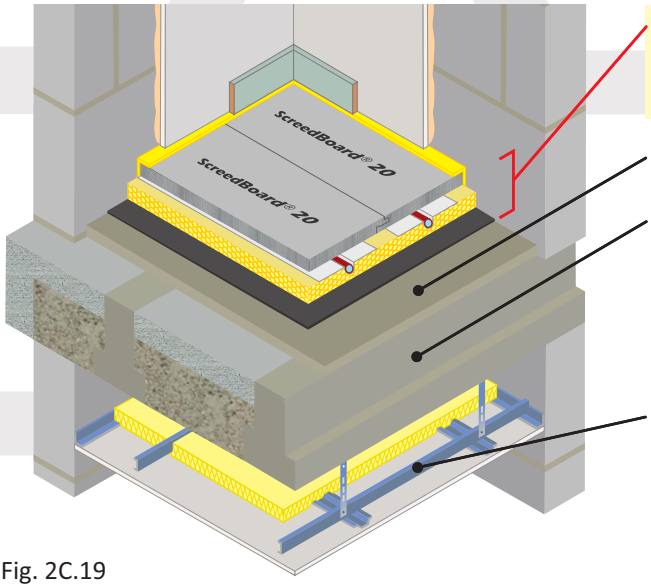


Fig. 2C.19

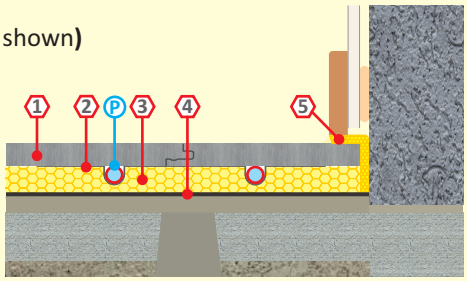
Acoustic + UFH treatment	CELLECTA **Mojave®** acoustic treatment incorporating underfloor heating (see Table 2C.19a for full details)
Levelling screed	10mm (min) levelling screed
Structural floor	Beam and block, min 100mm thick dense aggregate infil blocks, min 50mm concrete topping, min strength class C20, to floor blocks, min 300kg/m^2 (min) combined mass per unit area
Ceiling	See Table 2C.19b for ceiling treatment options

Table 2C.19a

Installation Details

Resilient overlay platform floor system incorporating underfloor heating

CELLECTA Mojave® (S1/3 shown)
Dry laid acoustic treatment incorporating underfloor heating system



1 ScreedBoard® 20
High conductivity overlay board
Dimensions: 20mm x 600mm x 1200mm
Weight: 25kg/m² / 18.00kg/board
Thermal resistance: 0.05m²K/W

A CELLECTA Pro Adhesive
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

2 ULTRAplate
Aluminium heat diffuser plate (to suit pipe installed)
Dimensions: 130mm x 1000mm

3 XFLO® 250/300/500
High compressive strength routed XPS insulation board
Dimensions: 15-75mm x 600mm x 1200/2500mm
Pipe centres: 150, 200, 300mm
Pipe bore size (OD): 10 - 20mm (manufactured to suit)

4 RUBBER*fon*® Impact 3
High density recycled rubber
Dimensions: 3mm x 1m x 15m (15m²)

5 YELO*fon*® ES5/120
Perimeter edge strip
Dimensions: 5mm x 120mm x 50m

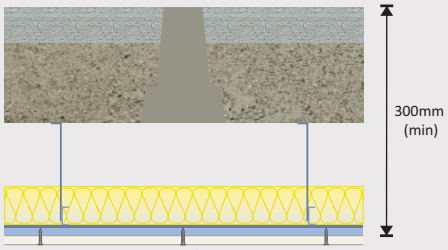
P UFH water pipe (by others)

CLASS B*fl*,S1
BS EN13501-1

Table 2C.19b

Ceiling Treatment Options

Metal frame ceiling system providing a overall depth of not less than 300mm from top of beam and ceiling board



One layer of nominal 10kg/m^2 gypsum-based board 25mm (min) fibre quilt (min 10kg/m^3) in ceiling void to cover whole ceiling board area

Construction notes
Slab/levelling screed must be to SR2 Standard when adopting the Mojave system.
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values. Wall treatments must be isolated from the floating floor with **YELO*fon* ES5/120**.

Acoustic Performance

Airborne:	**53dB $D_{nT,w} + C_{tr}$**	**Building Regs**
Impact:	**51dB $L_{nT,w}$**	**+ 5dB**

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Gypsum
zero ODP

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Timber Separating Floors - New Build

Introduction

By nature, timber floors are low in mass, making them more susceptible to poor acoustic performance and therefore more challenging to ensure compliance.
Cellecta's acoustic treatments for new build timber floors add mass to the structure and dramatically reduce impact sound transmission at source. The addition of plasterboards, a dry screed panel or proprietary screed will add further mass and increase the floors acoustic performance. Resilient ceiling bars will de-couple the ceiling from the floor above and a fibrous slab or quilt will absorb sound in the ceiling void.
Each acoustic treatment combines a high performance resilient layer and perimeter flanking strip that, when installed correctly, will exceed the legislative acoustic standards, with many treatments being Robust Detail compliant.

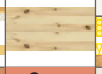
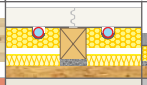
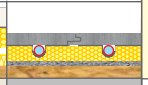
Key Benefits of CELLECTA Timber Floor Acoustic Treatments

- Provide outstanding acoustic performance
- Extensive range of Robust Details available
- Cost effective constructions
- Third party data
- **Environmentally friendly**

Acoustic treatments selector

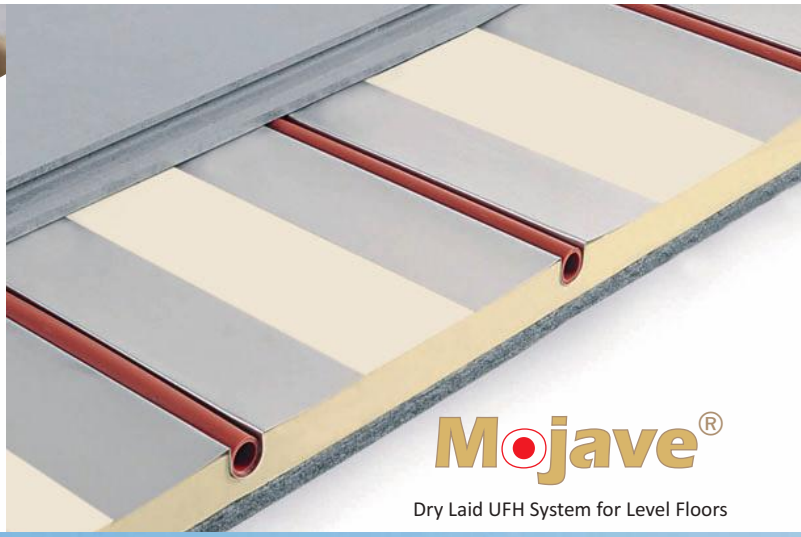
Type of timber floor				Acoustic treatment finish						
I-joists	Solid joists	Metal web	Cross laminate timber	T & G Chipboard	ScreedBoard (high density Gypsum)	Screed	RD ref.	Floating floor treatment type	CELLECTA acoustic treatment	Page No.
⬡				⬡			E-FT-1	FFT 1 Deep batten system	DECK*fon*® Batten 70	55
⬡						⬡	PCT option for E-FT-4	Under screed resilient layers	YELO*fon*® HD10+ *System* + FIBRE*fon*® 15	56
⬡					⬡		E-FT-5	Resilient platform floor system	ScreedBoard® 28	58
	⬡			⬡			E-FT-2	FFT 1 Deep batten system	DECK*fon*® Batten 70	61
	⬡				⬡		PCT solution	Resilient platform floor system	ScreedBoard® 28	62
		⬡		⬡			E-FT-3	FFT 1 Deep batten system	DECK*fon*® Batten 70	64
		⬡			⬡		E-FT-6	Resilient platform floor system	ScreedBoard® 28	66
			⬡		⬡		PCT solution	Resilient platform floor system	ScreedBoard® 28	68

Acoustic + UFH treatments selector

Type of timber floor				UFH treatment finish					
									
I-joists	Solid joists	Metal web	Cross laminate timber	HiDECK Structural (HD gypsum)	ScreedBoard (HD gypsum)	RD ref.	Floating floor treatment type	CELLECTA acoustic treatment	Page No.
⬢				⬢		E-FT-1	FFT 1 Deep batten system	DECK*fon*® Batten 70 + XFLO® JB + HiDECK® Structural 25	55
⬢					⬢	E-FT-5	Resilient platform floor system	Mojave® S1-8 Dry laid *System*	59
	⬢			⬢		E-FT-2	FFT 1 Deep batten system	DECK*fon*® Batten 70 + XFLO® JB + HiDECK® Structural 25	61
	⬢				⬢	PCT solution	Resilient platform floor system	Mojave® S2-8 Dry laid *System*	63
		⬢				E-FT-3	FFT 1 Deep batten system	DECK*fon*® Batten 70 + XFLO® JB + HiDECK® Structural 25	64
		⬢		⬢		E-FT-6	Resilient platform floor system	Mojave® S1-8 Dry laid *System*	67
			⬢		⬢	PCT solution	Resilient platform floor system	Mojave® S1-8 Dry laid *System*	69

Gobi®

Dry Laid UFH System
For Uneven Floors



Mojave®

Dry Laid UFH System for Level Floors

Timber I-joist separating floor

Robust Detail E-FT-1 / V-FT-1

CELLECTA DECK*fon*® Batten 70 acoustic treatment laid on timber sub-deck
Use with timber frame walls only

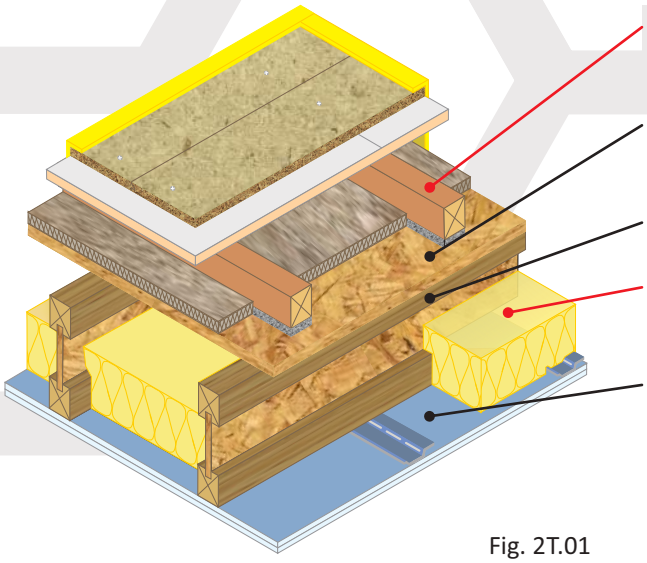


Fig. 2T.01

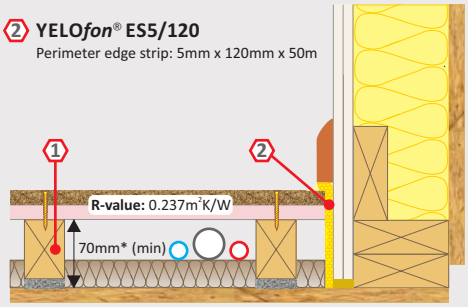
Floating floor treatment	**FFT1 - CELLECTA DECK*fon*® Batten 70**[1] (See Table 2T.01a & b for full details)
Floor decking	15mm (min) thick wood based board, density 600kg/m³ (min)
Joists	235mm[2] (min) timber I-joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m³)
Ceiling	See Table 2T.01c for ceiling treatment options

[1] DECKfon Batten 80 required for V-FT-1 applications
[2] 240mm (min) required for V-FT-1 applications

Tables 2T.01a & b

FFT1 Resilient composite deep batten system

1. **DECK*fon*® Batten 70**
   Deep acoustic batten: 75mm x 45mm x 2400mm
   *Height indicated when floor is loaded to 25kg/m²
2. **YELO*fon*® ES5/120**
   Perimeter edge strip: 5mm x 120mm x 50m



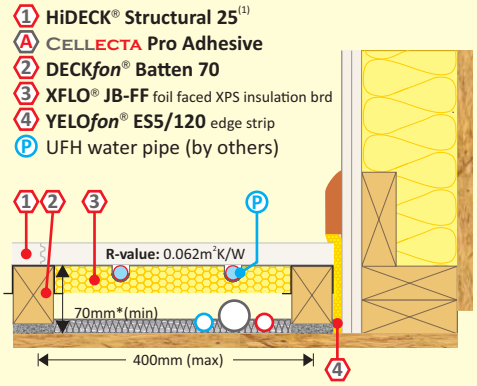
Airborne	55dB $D_{nT,w}$+ C_{tr} *rd* ΔR_w = 19dB
Impact	54dB $L_{nT,w}$ *rd* ΔL_w = 16dB
Building Regs	≥+5dB

BBA VERIFIED RD DATA

Additional components required to complete treatment:
18mm (min) tongue & groove flooring board
Gypsum-based board nominal 13.5kg/m²
Sound absorbing quilt laid between batten:
○ 15mm CELLECTA FIBRE*fon* Micro 15 non-itch polyester quilt
● 25mm (min) 10-33kg/m³ or 13mm (min) 33-36kg/m³ mineral wool

FFT1 Resilient composite deep batten system incorporating UFH

1. **HiDECK® Structural 25**[1]
   A CELLECTA Pro Adhesive
2. **DECK*fon*® Batten 70**
3. **XFLO® JB-FF** foil faced XPS insulation brd
4. **YELO*fon*® ES5/120** edge strip
   P UFH water pipe (by others)



Airborne	54dB $D_{nT,w}$+ C_{tr} *rd* ΔR_w = 18dB
Impact	54dB $L_{nT,w}$ *rd* ΔL_w = 16dB
Building Regs	≥+5dB

(1) CLASS A1

Additional items required to complete treatment:
Sound absorbing quilt laid between battens:
○ 15mm CELLECTA FIBRE*fon* Micro 15 non-itch polyester quilt
● 25mm (min) 10 - 33kg/m³ or 13mm (min) 33 - 36kg/m³ mineral wool

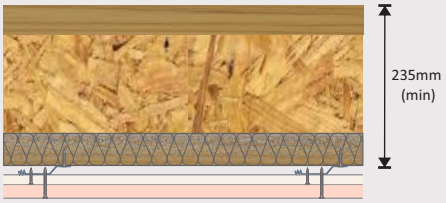
Table 2T.01c

Ceiling Treatment Options

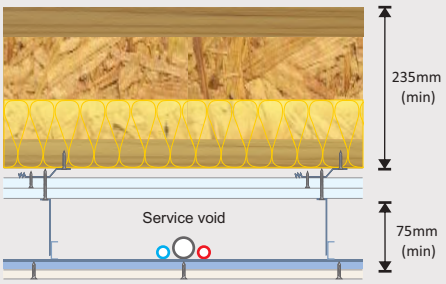
Ceiling boards must not penetrate or touch joists
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

Ceiling treatment
CT1-Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m²) fixed with 32mm screws and 12.5mm (nominal 10kg/m²) fixed with 42mm screws, with all joints staggered.

CT2-Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.



Sacrificial ceiling (optional)
Metal ceiling system with a 75mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.



Sound absorbing quilt fitted between joists
○ 50mm CELLECTA FIBRE*fon* Micro 50
● 100mm (min) mineral wool quilt -10-33kg/m³

Acoustic Performance

rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013. Airborne performance tested in accordance with BS EN ISO 10140-2 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-1: 2013 as detailed in Appendix C of the Robust Details hand book (minimum value required *rd* ΔR_w + C_{tr}= 13dB *rd* ΔL_w = 15dB).
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

Timber I-joist separating floor

PCT solution to Robust Detail: E-FT-4

Screed laid on CELLECTA resilient layers
Acoustic treatment laid on timber sub-deck
Use with timber frame walls only

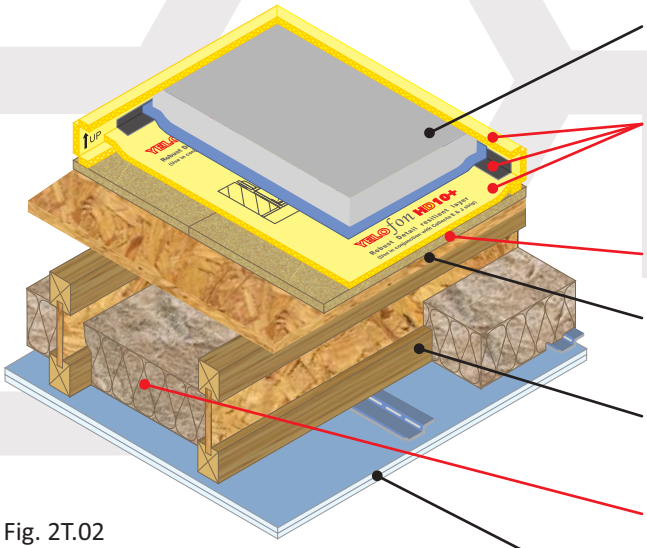


Fig. 2T.02

Screed	35mm proprietary screed, nominal 80kg/m² mass per unit area
3 part resilient layer system	**1.** 10mm CELLECTA **YELO*fon*® HD10+** **2. YELO*fon*® E-strip** perimeter edge strip **3. J-strip** acoustic joining tape
2nd resilient layer	15mm CELLECTA **FIBRE*fon*® 15**
Structural floor	15mm thick (min) wood based board, density 600kg/m³ (min)
Floor joists	220mm (min) timber I-joists at 400mm (max) centres
Sound absorbing material	○ 50mm CELLECTA **FIBRE*fon*® Micro 50** ● 100mm (min) quilt insulation (10-36kg/m³)
Ceiling	See Table 2T.02b for ceiling treatment options

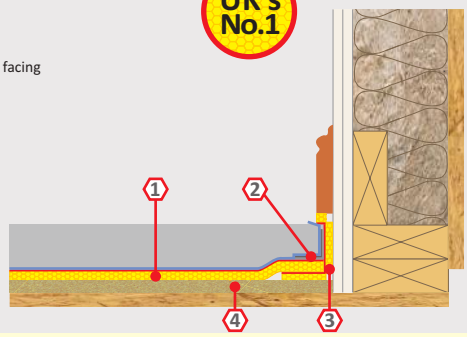
Table 2T.02b

Installation Options

Resilient layers laid under screed

UK's No.1

1. **YELO*fon*® HD10+**
   High density polyethylene foam with *Surebond* facing
   Dimensions: 10mm x 1.5m x 33.33m (50m²)
2. **YELO*fon*® J-strip**
   Ultra high grab acoustic joining tape
3. **YELO*fon*® E-strip**
   Self adhesive perimeter edge strip
4. **FIBRE*fon*® 15**
   Woodfibre resilient layer
   Dimensions: 15mm x 600mm x 1200mm



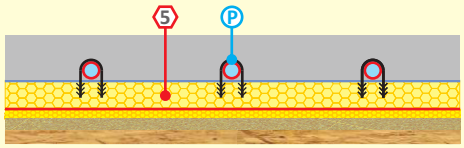
Resilient layer system laid under screed containing underfloor heating system

5. **HEXATHERM® XFLOOR 250, 300, 500 (kPa)**
   High performance extruded polystyrene
   Dimensions: 25-160mm x 600mm x 2500mm

Ⓟ UFH water pipe (by others)

The structural walls and floor must be designed to withstand the load imposed by the floor treatment. Caution

Ensure fixings used to secure the pipe do NOT penetrate the HD10+

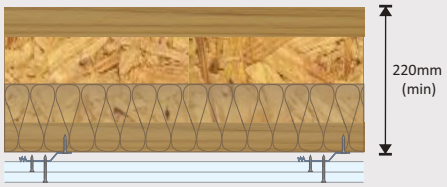


Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values.
Wall treatments MUST be isolated from the floating floor with **YELO*fon* E-Strip** perimeter edge strip.
Services must not puncture primary ceiling lining (except cables, which should be sealed with flexible sealant).

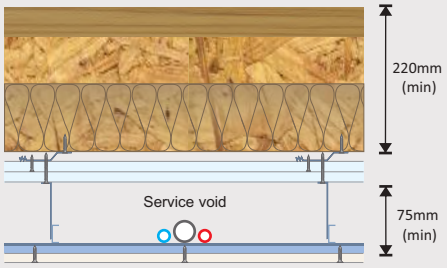
Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

CT2-Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.



Sacrificial ceiling (optional)
Metal ceiling system with a 100mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.



Sound absorbing quilt fitted between joists
○ 50mm CELLECTA **FIBRE*fon* Micro 50** quilt
● 100mm (min) mineral wool quilt -10-33kg/m³

Acoustic Performance

Airborne:	57dB $D_{nT,w} + C_{tr}$	Building Regs
Impact:	52dB $L_{nT,w}$	+ 5dB

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

SRL Performance Tested

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Foam

zero ODP

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Project References

Project
64 bedroom luxury care home, Chelmsford

Type of Construction
Timber frame

Project Size
1800m²

Product Installed
ScreedBoard® 28 composite acoustic overlay
YELO*fon*® FS50 perimeter flanking strip

Project
New retirement development, Falmouth

Type of Construction
Cross laminate timber (CLT)

Project Size
3200m²

Products Installed
Mojave® S1-8 UFH System (**ScreedBoard® 20** conductive overlay board + 30mm **XFLO® FIBRE*fon*® 8** resilient layer **YELO*fon*® ES5/100** perimeter edge strip)

Project
New apartments, Liverpool

Type of Construction
Timber frame

Project Size
600m²

Product Installed
ScreedBoard® 28 composite acoustic overlay
YELO*fon*® FS50 perimeter flanking strip

Project
New Travelodge hotel, Rhyl

Type of Construction
Timber Frame

Project Size
1400m²

Product Installed
DECK*fon*® 26T composite acoustic overlay
YELO*fon*® FS30 perimeter flanking strip

Timber I-joist separating floor

Robust Detail E-FT-5

CELLECTA ScreedBoard® 28 laid on timber sub-floor
Use with timber frame walls only

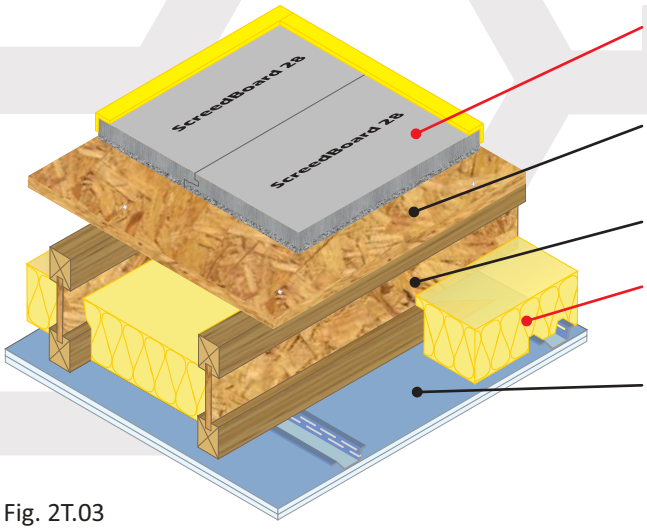


Fig. 2T.03

Floating floor treatment	**CELLECTA ScreedBoard® 28** (See Table 2T.03a for full details)
Floor decking	15mm[(1)] (min) thick wood based board, density 600kg/m³ (min)
Joists	235mm[(2)] (min) timber I-joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m³)
Ceiling	See Table 2T.03b for ceiling treatment options

[(1)] 18mm(min) required for Robust Detail applications
[(2)] 240mm (min) required for Robust Detail applications when adopting CT3 ceiling treatment

FASTRACKCAD ARCHITECTURAL CAD DATABASES
Available on bimstore.co
NBSPlus

Table 2T.03a

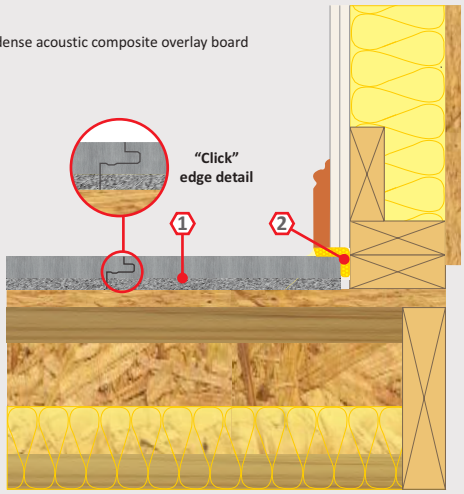
Installation Details

Resilient overlay platform floor system

① **ScreedBoard® 28** Ultra high performance, dense acoustic composite overlay board
28mm x 600mm x 1200mm
Weight: 26kg/m² / 18.72kg/board

Ⓐ **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

② **YELO*fon*® FS50**
Preformed flanking strip:
6mm x 50mm x 30mm x 2m



Additional items required:
CELLECTA ScreedBoard® fixing tools
Sound absorbing quilt laid between joists:
○ 50mm CELLECTA **FIBRE*fon*® Micro 50** non-itch polyester wool
● 100mm (min) Mineral wool 10-33kg/m³

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values.
Wall treatments MUST be isolated from the floating floor with **YELO*fon* FS50** flanking strip.
Services must not puncture primary ceiling lining (except cables, which should be sealed with flexible sealant).

Table 2T.03b

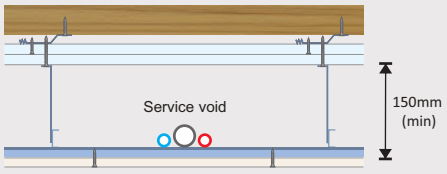
Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m²) fixed with 32mm screws and 12.5mm (nominal 10kg/m²) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Plus sacrificial ceiling
Metal ceiling system with a 150mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.



CT3 30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres.

Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Acoustic Performance

Airborne:	51dB $D_{nT,w} + C_{tr}$	Building Regs
Impact:	55dB $L_{nT,w}$	+ 5dB

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

RD Proprietary Treatment

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

CLASS B*fl*,S1
BS EN13501-1
2017

Environmental Credentials

GWP <5

100% Recyclable Gypsum

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

Timber I-joist separating floor

Robust Detail E-FT-5 + UFH

CELLECTA Mojave® acoustic / UFH floating floor system laid on timber sub-deck
Use with timber frame walls only

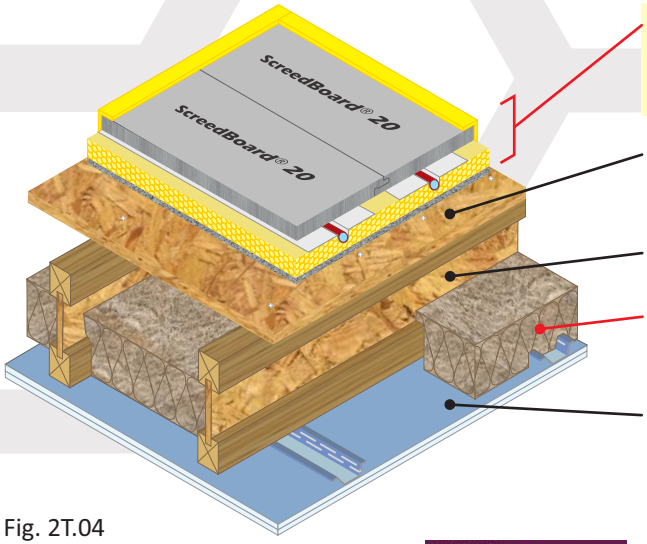


Fig. 2T.04

Table 2T.04a

Acoustic + UFH treatment	**CELLECTA Mojave® S1/8** acoustic treatment incorporating underfloor heating (see Table 2T.04a for full details)
Floor decking	15mm[(1)] (min) thick wood based board, density 600kg/m³ (min)
Joists	235mm[(2)] (min) timber I-joist
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m³)
Ceiling	See Table 2T.04b for ceiling treatment options featuring 30mm deep CELLECTA **HP30** resilient bars

[(1)] 18mm(min) required for Robust Detail applications
[(2)] 240mm (min) required for Robust Detail applications when adopting CT3 ceiling treatment

housebuilder product awards 2020 winner — Best Services Product

FASTRACKCAD ARCHITECTURAL CAD DATABASES

Available on bimstore.co

nbsPlus

Table 2T.04b

Installation Details

Resilient overlay platform floor system incorporating underfloor heating

CELLECTA Mojave® S1/8
Dry laid acoustic treatment incorporating underfloor heating system

1 ScreedBoard® 20
High conductivity overlay board
Dimensions: 20mm x 600mm x 1200mm
Weight: 25kg/m² / 18.00kg/board
Thermal resistance: 0.05m²K/W

A CELLECTA Pro Adhesive
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

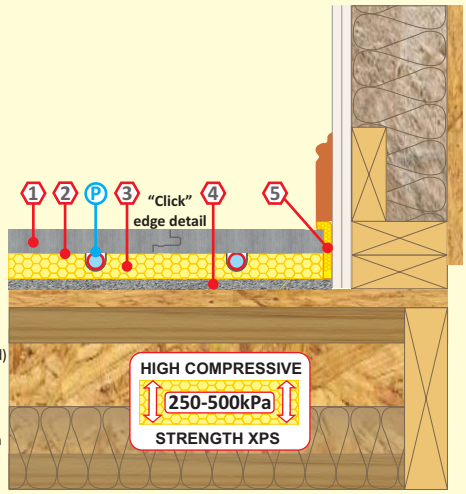
2 ULTRAplate
Aluminium heat diffuser plate (to suit pipe installed)
Dimensions: 130mm x 1000mm

3 XFLO® 250, 300, 500 (kPa)
High compressive strength routed XPS insulation
Dimensions: 15-75mm x 600mm x 2500mm
Pipe centre: 150, 200, 300mm
Pipe bore size (OD): 10 - 20mm
(manufactured to suit)

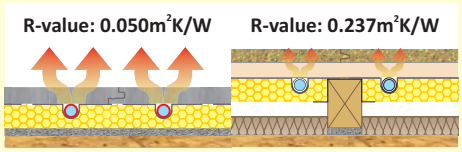
4 FIBRE*fon*® 8
High performance resilient layer
Dimensions: 8mm x 600mm x 1200mm
Weight: 1kg/m² / 0.72kg/board

5 YELO*fon*® ES5/100
Perimeter edge strip
Dimensions: 5mm x 100mm x 50m

Ⓟ UFH water pipe (by others)



Screedboard 20 is **5x more thermally conductive** than an 18mm chipboard + 19mm plasterboard plank combination, enabling the underfloor heating system to be more responsive and the heat source to run more efficiently at a lower temperature.



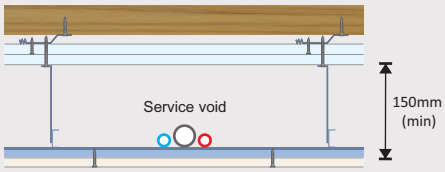
Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m²) fixed with 32mm screws and 12.5mm (nominal 10kg/m²) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Plus sacrificial ceiling
Metal ceiling system with a 150mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.



CT3 30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres.

Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Acoustic Performance

Airborne:	52dB $D_{nT,w} + C_{tr}$	Building Regs
Impact:	55dB $L_{nT,w}$	+ 5dB

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

RD Proprietary Treatment

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

CLASS B*fl*,S1 BS EN13501-1 2017

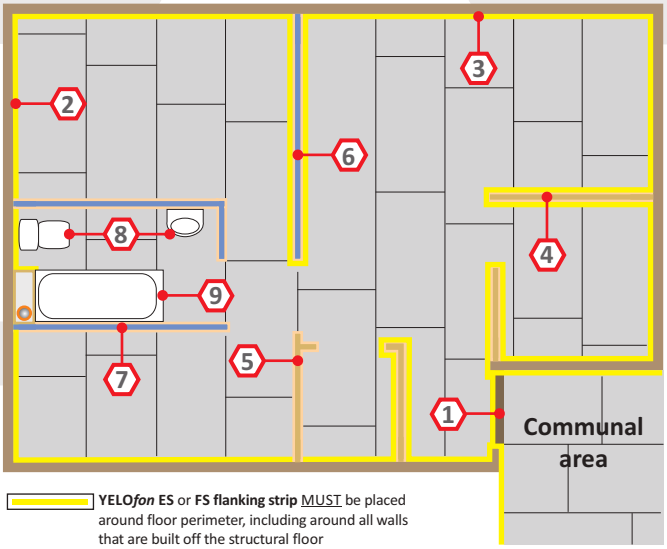
Environmental Credentials

GWP <5

100% Recyclable Gypsum

Floating floor treatment design & installation details: ScreedBoard® 20/28

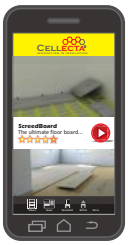
The acoustic performance of the floor structure will be compromised if the **ScreedBoard**'s are not completely isolated from the sub-floor, soil pipes, door frames, surrounding walls and their treatments. To address this risk, each potential problem area needs to be detailed accordingly.



YELO*fon* ES or **FS flanking strip** MUST be placed around floor perimeter, including around all walls that are built off the structural floor

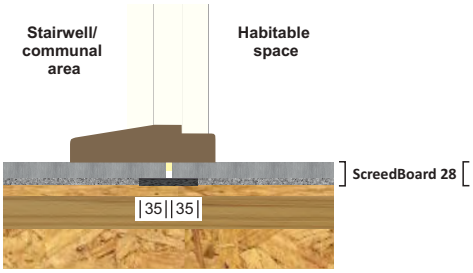
Fixing tools & adhesive required

A. Hand or skill saw
B. Club hammer
C. ScreedBoard "Fixing batten"
D. ScreedBoard "Pull bar"
E. CELLECTA Pro Adhesive (1Ltr)
+ Packing shims (not shown)



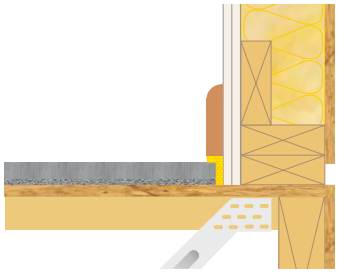
Installation video on the CELLECTA app

1 Door threshold



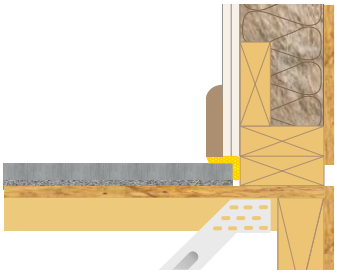
To add additional support, trim off 35mm of the resilient later from the leading edges and install a 75mm wide **RUBBER*fon* Threshold Support Strip (TSS)**.

2 Wall treatment installed before the floor treatment



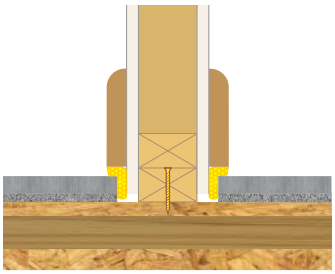
Wall treatments MUST be isolated from the **ScreedBoard 20/ 28** with **YELO*fon* ES** or **FS** strip.

3 Wall treatment installed after the floor treatment



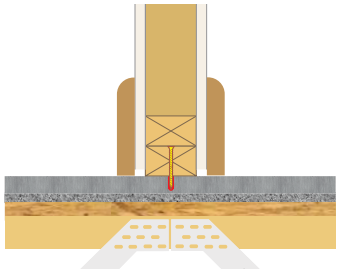
Wall treatments MUST be isolated from the **ScreedBoard 20/ 28** with **YELO*fon* ES** or **FS** strip.

4 Timber stud partition built off the structural floor



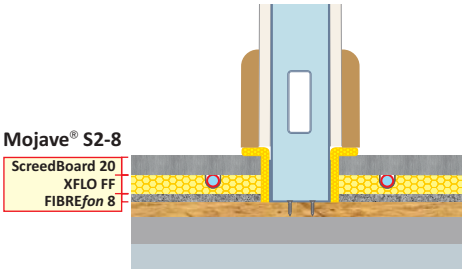
Internal timber stud walls built off the structural floor MUST be isolated from the **ScreedBoard 20/28** with **YELO*fon* ES** or **FS** strip.

5 Non-load bearing timber stud partition built off the floor treatment



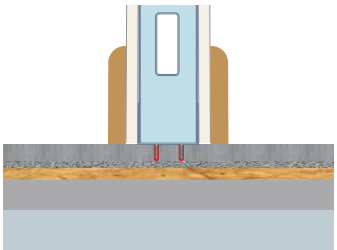
Non-load bearing timber stud walls can be built directly off the **ScreedBoard 20/28**. Care should be taken to ensure screws DO NOT penetrate the resilient layer.

6 Metal frame partition built off the structural floor



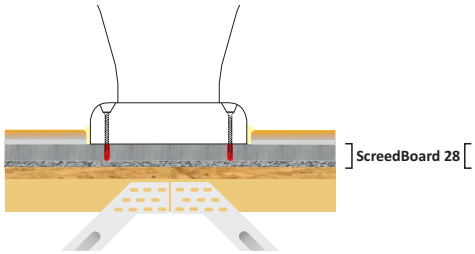
Internal metal frame walls built off the structural floor MUST be isolated from the **ScreedBoard 20/28** with **YELO*fon* ES** or **FS** strip.

7 Non-load bearing metal frame partition built off the floor treatment



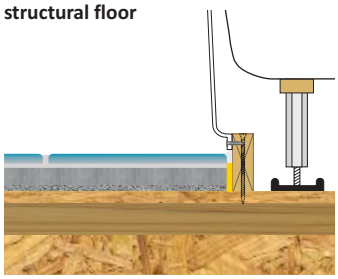
Non-load bearing metal frame walls can be built directly off the **ScreedBoard 20/28**. Care should be taken to ensure screws DO NOT penetrate the resilient layer.

8 Sanitary ware built off the floor treatment.



Sanitary ware can be built directly off the **ScreedBoard 20/28**. Ensure the screws do not penetrate the resilient layer.

9 Baths, shower trays built off the structural floor



Baths and shower trays built off the structural floor should be isolated from the **ScreedBoard 20/ 28** and any floor finished **YELO*fon* ES** or **FS** strip.

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Solid timber joist separating floor

Robust Detail E-FT-2 / V-FT-2

CELLECTA DECK*fon*® Batten 70 acoustic treatment laid on timber sub-deck
Use with timber frame walls only

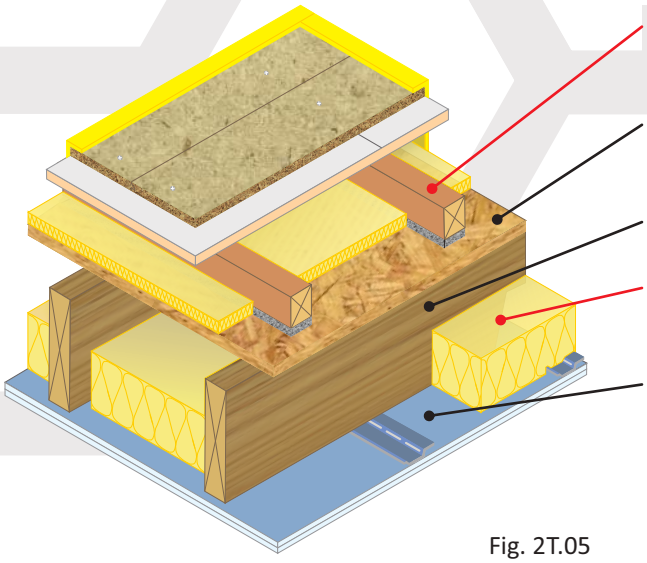


Fig. 2T.05

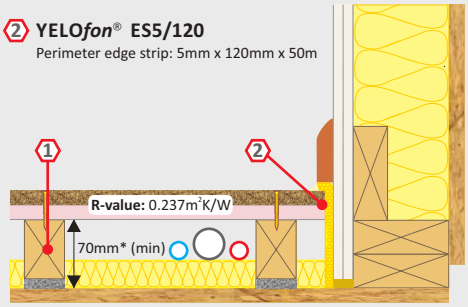
Floating floor treatment	**FFT1 - CELLECTA DECK*fon*® Batten 70**[1] (See Table 2T.05a & b for full details)
Floor decking	11mm (min) thick wood based board, density 600kg/m³ (min)
Joists	220mm[2] (min) solid timber joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m³)
Ceiling	See Table 2T.05c for ceiling treatment options

[1] DECK*fon* Batten 80 required for V-FT-1 applications
[2] 240mm (min) required for V-FT-1 applications

Tables 2T.05a & b

FFT1 Resilient composite deep batten system

1. **DECK*fon*® Batten 70**
   Deep acoustic batten: 75mm x 45mm x 2400mm
   *Height indicated when floor is loaded to 25kg/m²
2. **YELO*fon*® ES5/120**
   Perimeter edge strip: 5mm x 120mm x 50m



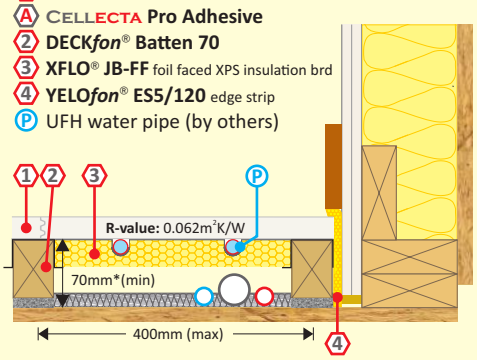
Airborne	55dB $D_{nT,w}$+ C_{tr} *rd* ΔR_w = 19dB
Impact	54dB $L_{nT,w}$ *rd* ΔL_w = 16dB
Building Regs	≥+5dB

BBA VERIFIED RD DATA

Additional layers required to complete treatment:
18mm (min) tongue & groove flooring board
Gypsum-based board nominal 13.5kg/m²
Sound absorbing quilt laid between batten:
○ 15mm CELLECTA **FIBRE*fon* Micro 15** non-itch polyester quilt
● 25mm (min) 10-33kg/m³ or 13mm (min) 33-36kg/m³ mineral wool

FFT1 Resilient composite deep batten system incorporating UFH

1. **HiDECK® Structural 25**[1]
   A CELLECTA **Pro Adhesive**
2. **DECK*fon*® Batten 70**
3. **XFLO® JB-FF** foil faced XPS insulation brd
4. **YELO*fon*® ES5/120** edge strip
   P UFH water pipe (by others)



Airborne	54dB $D_{nT,w}$+ C_{tr} *rd* ΔR_w = 18dB
Impact	54dB $L_{nT,w}$ *rd* ΔL_w = 16dB
Building Regs	≥+5dB

(1) CLASS A1

Additional component required to complete treatment:
Sound absorbing quilt laid between battens:
○ 15mm CELLECTA **FIBRE*fon* Micro 15** non-itch polyester quilt
● 25mm (min) 10 - 33kg/m³ or 13mm (min) 33 - 36kg/m³ mineral wool

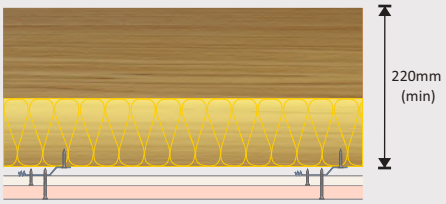
Table 2T.05c

Ceiling Treatment

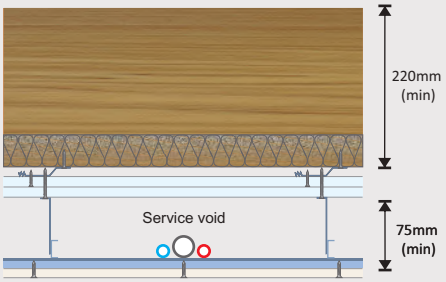
Ceiling boards must not penetrate or touch joists
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

Ceiling treatment
CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m²) fixed with 32mm screws and 12.5mm (nominal 10kg/m²) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.



Sacrificial ceiling (optional)
Metal ceiling system with a 75mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.



Sound absorbing quilt fitted between joists
○ 50mm CELLECTA **FIBRE*fon* Micro 50**
● 100mm (min) mineral wool quilt -10-33kg/m³

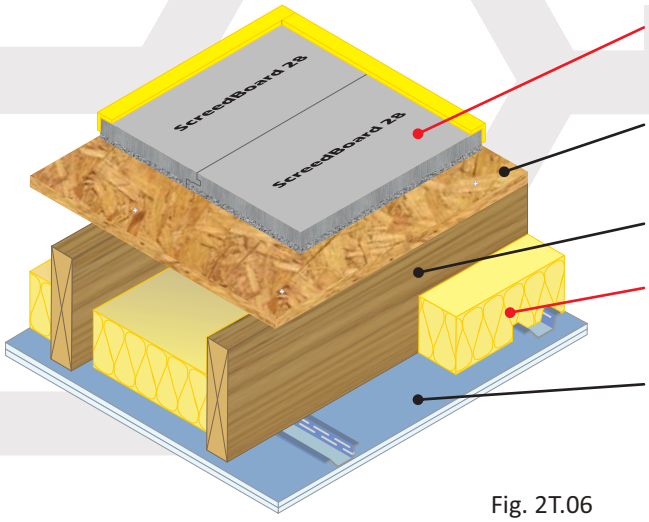
Acoustic Performance

rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013. Airborne performance tested in accordance with BS EN ISO 10140-2 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-1: 2013 as detailed in Appendix C of the Robust Details hand book (minimum value required *rd* ΔR_w + C_{tr}= 13dB *rd* ΔL_w = 15dB).
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

RD Compliant Treatment · GWP <5 · 100% Recycled Foam · zero ODP · FSC C102871

Solid timber joist separating floor

CELLECTA ScreedBoard® 28 laid on timber sub-floor
Use with timber frame walls only



Floating floor treatment	**FFT1 - CELLECTA DECK*fon*® Batten 70** (See Table 2T.06a & b for full details)
Floor decking	11mm (min) thick wood based board, density 600kg/m³ (min)
Joists	220mm (min) solid timber joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m³)
Ceiling	See Table 2T.06b for ceiling treatment options

Fig. 2T.06

Table 2T.06a

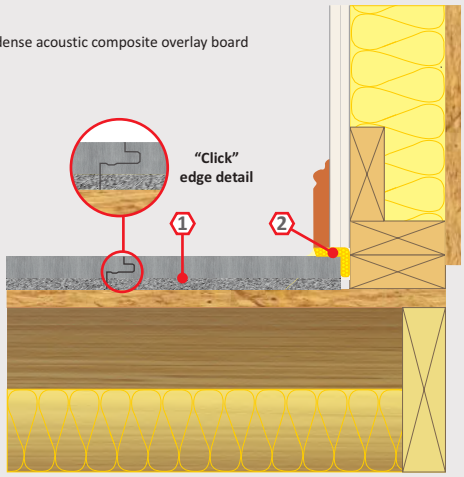
Installation Details

Resilient overlay platform floor system

① **ScreedBoard® 28** Ultra high performance, dense acoustic composite overlay board
28mm x 600mm x 1200mm
Weight: 26kg/m² / 18.72kg/board

Ⓐ **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

② **YELO*fon*® FS50**
Preformed flanking strip:
6mm x 50mm x 30mm x 2m



Additional items required:
CELLECTA ScreedBoard® fixing tools
Sound absorbing quilt laid between joists:
○ 50mm CELLECTA **FIBRE*fon*® Micro 50** non-itch polyester wool
● 100mm (min) Mineral wool 10-33kg/m³

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values.
Wall treatments MUST be isolated from the floating floor with **YELO*fon* FS50** flanking strip.
Services must not puncture primary ceiling lining (except cables, which should be sealed with flexible sealant).

Table 2T.06b

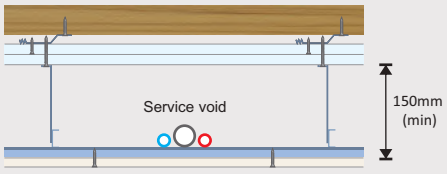
Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m²) fixed with 32mm screws and 12.5mm (nominal 10kg/m²) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Plus sacrificial ceiling
Metal ceiling system with a 150mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.



CT3 30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres.

Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Acoustic Performance

Airborne:	51dB $D_{nT,w} + C_{tr}$	Building Regs
Impact:	55dB $L_{nT,w}$	+ 5dB

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

RD Proprietary Treatment

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

CLASS B*fl*,S1
BS EN13501-1
2017

Environmental Credentials

GWP <5

100% Recyclable Gypsum

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

Solid timber joist separating floor

Acoustic Treatment + UFH

CELLECTA Mojave® acoustic / UFH floating floor system laid on timber sub-deck
Use with timber frame walls only

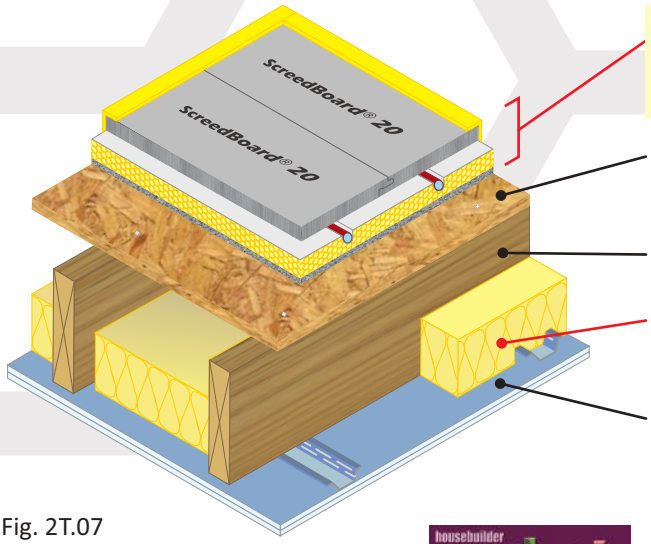


Fig. 2T.07

Acoustic + UFH treatment	**CELLECTA Mojave® S2/8** acoustic treatment incorporating underfloor heating (see Table 2T.07a for full details)
Floor decking	11mm (min) thick wood based board, density 600kg/m³ (min)
Joists	220mm (min) solid timber joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m3)
Ceiling	See Table 2T.07b for ceiling treatment options featuring 30mm deep CELLECTA **HP30** resilient bars

housebuilder product awards 2020 winner — Best Services Product

FASTRACKCAD ARCHITECTURAL CAD DATABASES

Available on bimstore.co

NBS Plus

Table 2T.07a

Installation Details

Resilient overlay platform floor system incorporating underfloor heating

CELLECTA Mojave® S1/8

Dry laid acoustic treatment incorporating underfloor heating system

1 ScreedBoard® 20
High conductivity overlay board
Dimensions: 20mm x 600mm x 1200mm
Weight: 25kg/m² / 18.00kg/board
Thermal resistance: 0.05m²K/W

A CELLECTA Pro Adhesive
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

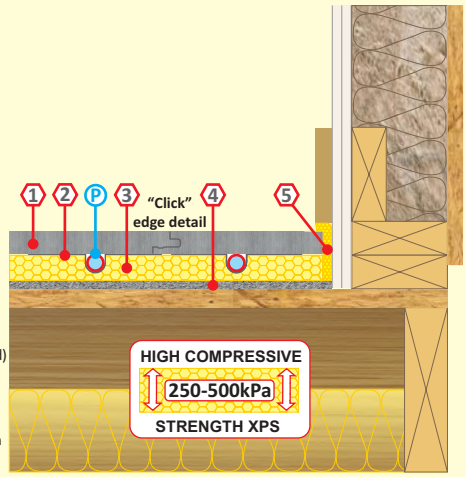
2 ULTRAplate
Aluminium heat diffuser plate (to suit pipe installed)
Dimensions: 130mm x 1000mm

3 XFLO® 250, 300, 500 (kPa)
High compressive strength routed XPS insulation
Dimensions: 15-75mm x 600mm x 2500mm
Pipe centre: 150, 200, 300mm
Pipe bore size (OD): 10 - 20mm
(manufactured to suit)

4 FIBRE*fon*® 8
High performance resilient layer
Dimensions: 8mm x 600mm x 1200mm
Weight: 1kg/m² / 0.72kg/board

5 YELO*fon*® ES5/100
Perimeter edge strip
Dimensions: 5mm x 100mm x 50m

Ⓟ UFH water pipe (by others)



Screedboard 20 is **5x more thermally conductive** than an 18mm chipboard + 19mm plasterboard plank combination, enabling the underfloor heating system to be more responsive and the heat source to run more efficiently at a lower temperature.

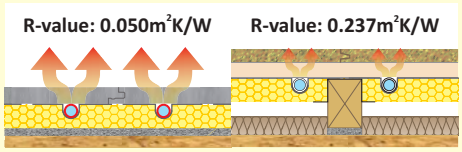


Table 2T.07b

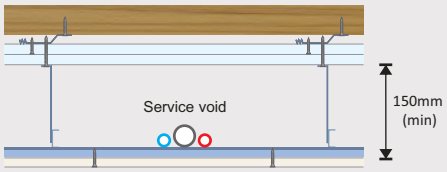
Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m²) fixed with 32mm screws and 12.5mm (nominal 10kg/m²) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Plus sacrificial ceiling
Metal ceiling system with a 150mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.



CT3 30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres.

Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Acoustic Performance

Airborne:	**52dB $D_{nT,w} + C_{tr}$**	**Building Regs**
Impact:	**55dB $L_{nT,w}$**	**+ 5dB**

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

RD Proprietary Treatment

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

CLASS B*fl*,S1 BS EN13501-1 2017

Environmental Credentials

GWP <5

100% Recyclable Gypsum

Metal web joist separating floor

Robust Detail E-FT-3

CELLECTA DECK*fon*® Batten 70 acoustic treatment laid on timber sub-deck
Use with timber frame walls only

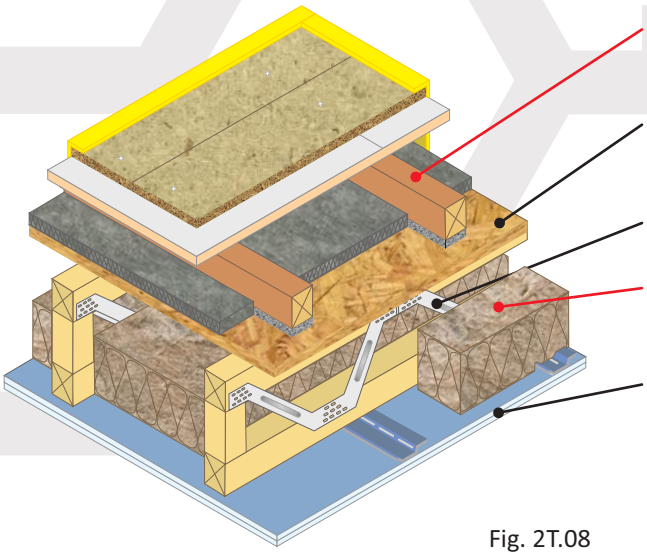


Fig. 2T.08

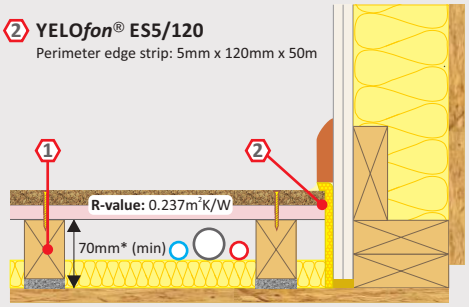
Floating floor treatment	**FFT1 - CELLECTA DECK*fon*® Batten 70** (See Table 2T.08a & b for full details)
Floor decking	18mm (min) thick wood based board, density 600kg/m³ (min)
Joists	253mm (min) metal web joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m³)
Ceiling	See Table 2T.08c for ceiling treatment options

Alternative Robust Detail: E-FT-6
Refer to page 7 on how to change a registered Robust Detail

Tables 2T.08a & b

FFT1 Resilient composite deep batten system

1. **DECK*fon*® Batten 70**
   Deep acoustic batten: 75mm x 45mm x 2400mm
   *Height indicated when floor is loaded to 25kg/m²
2. **YELO*fon*® ES5/120**
   Perimeter edge strip: 5mm x 120mm x 50m



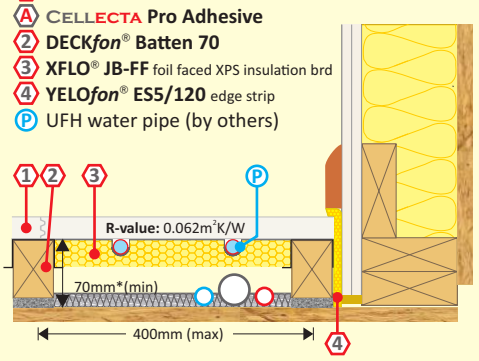
Airborne	55dB $D_{nT,w}+C_{tr}$ *rd* ΔR_w = 19dB
Impact	54dB $L_{nT,w}$ *rd* ΔL_w = 16dB
Building Regs	≥+5dB

BBA VERIFIED RD DATA

Additional components required to complete treatment:
18mm (min) tongue & groove flooring board
Gypsum-based board nominal 13.5kg/m²
Sound absorbing quilt laid between batten:
○ 15mm CELLECTA FIBRE*fon* Micro 15 non-itch polyester quilt
● 25mm (min) 10-33kg/m³ or 13mm (min) 33-36kg/m³ mineral wool

FFT1 Resilient composite deep batten system incorporating UFH

1. **HiDECK® Structural 25**[1]
   A. **CELLECTA Pro Adhesive**
2. **DECK*fon*® Batten 70**
3. **XFLO® JB-FF** foil faced XPS insulation brd
4. **YELO*fon*® ES5/120** edge strip
   P. UFH water pipe (by others)



Airborne	54dB $D_{nT,w}+C_{tr}$ *rd* ΔR_w = 18dB
Impact	54dB $L_{nT,w}$ *rd* ΔL_w = 16dB
Building Regs	≥+5dB

(1) CLASS A1

Additional component required to complete treatment:
Sound absorbing quilt laid between battens:
○ 15mm CELLECTA FIBRE*fon* Micro 15 non-itch polyester quilt
● 25mm (min) 10 - 33kg/m³ or 13mm (min) 33 - 36kg/m³ mineral wool

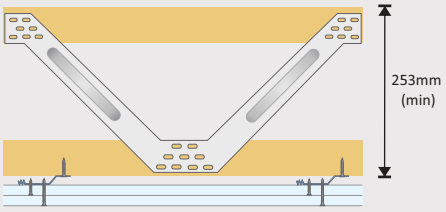
Table 2T.08c

Ceiling Treatment

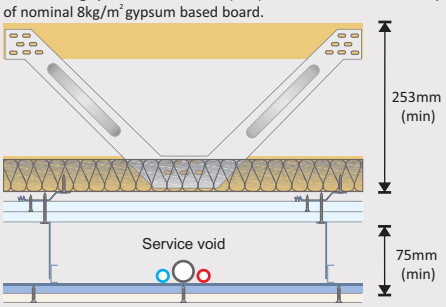
Ceiling boards must not penetrate or touch joists
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m²) fixed with 32mm screws and 12.5mm (nominal 10kg/m²) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.



Sacrificial ceiling (optional)
Metal ceiling system with a 75mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.



Sound absorbing quilt fitted between joists
○ 50mm CELLECTA FIBRE*fon* MICRO 50
● 100mm (min) mineral wool quilt -10-33kg/m³

Acoustic Performance

rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013. Airborne performance tested in accordance with BS EN ISO 10140-2 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-1: 2013 as detailed in Appendix C of the Robust Details hand book (minimum value required *rd* ΔR_w + C_{tr}= 13dB *rd* ΔL_w = 15dB).
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

RD Compliant Treatment · GWP <5 · 100% Recycled Foam · zero ODP · FSC C102871

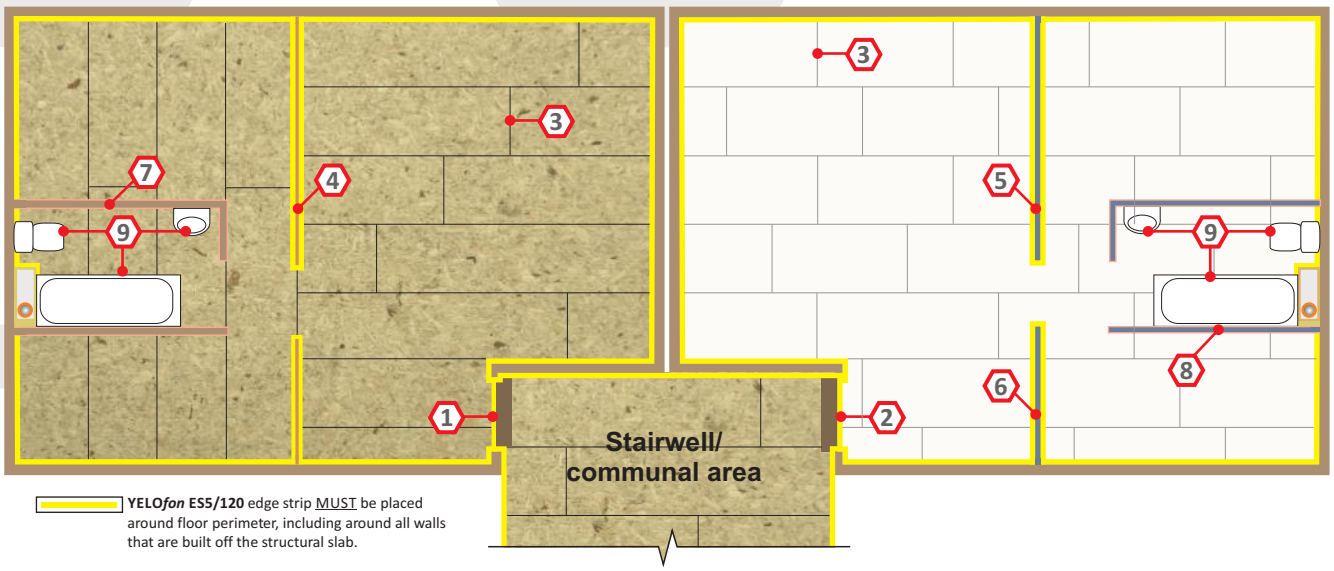
01634 29-66-77 · cellecta.co.uk · technical@cellecta.co.uk

Batten system floating floor treatment design & installation details (FFT1)

The acoustic performance of the floor will be compromised if the floating floor treatment is not completely isolated from the structural slab, soil pipes, door frames, the surrounding walls and their treatments. To address this risk, each potential problem area needs to be detailed accordingly.

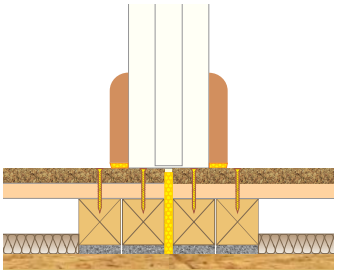
Chipboard + plasterboard plank covered floor

CELLECTA HIDECK® Structural covered floor



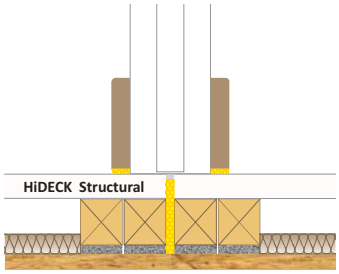
YELO*fon* ES5/120 edge strip MUST be placed around floor perimeter, including around all walls that are built off the structural slab.

1 Door threshold - Chipboard + Plasterboard plank



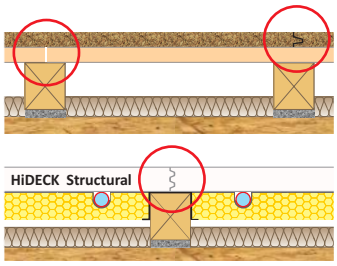
Double up battens each side of the door threshold to provide additional support.
Refer to Part B and Section 2 for fire safety regulations

2 Door threshold - HiDECK Structural



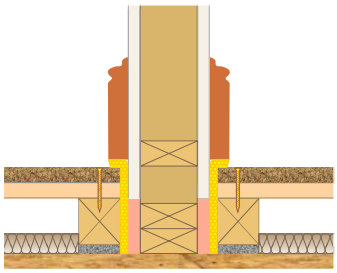
Leave a 5mm (min) gap between the habitable area treatment and the communal area treatment.

3 Joining floorboards



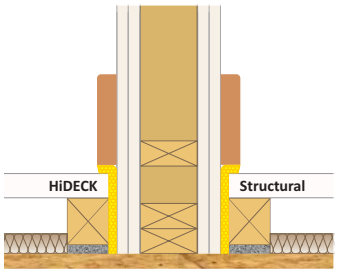
All floorboards must be laid in a staggered formation, with end joints meeting on a **DECK*fon* Batten** and be bonded together with appropriate adhesive.

4 Load-bearing timber stud partition built off the structural floor



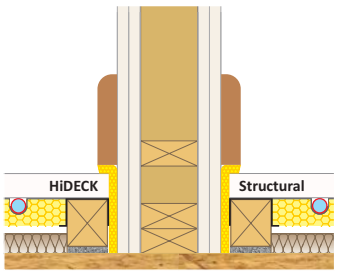
Lightweight internal walls built off the structural floor must be isolated from the floating floor treatment with **YELO*fon* ES5/120** edge strip.

5 Load-bearing timber stud partition built off the structural floor

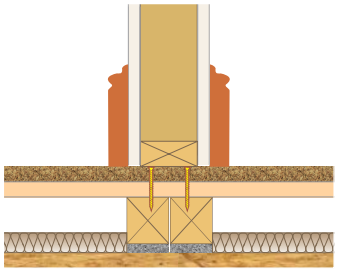


Where required, lightweight internal walls must meet Building Regulation Requirement E2.

6 Floor treatment + UFH - timber stud partition built off structural floor

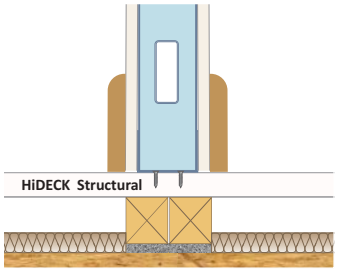


7 Timber stud partition built off FFT1



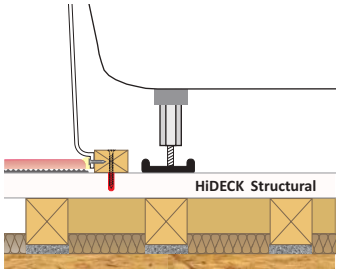
Double up battens under internal non-load bearing walls.

8 Metal frame partition built off FFT1



Double up battens under internal non-load bearing walls.

9 Bath surrounds and sanitary ware



Under sanitary ware areas, battens should be laid in a 300mm x 300mm grid formation.

Metal web joist separating floor

Robust Detail E-FT-6

CELLECTA ScreedBoard® 28 laid on timber sub-floor
Use with timber frame walls only

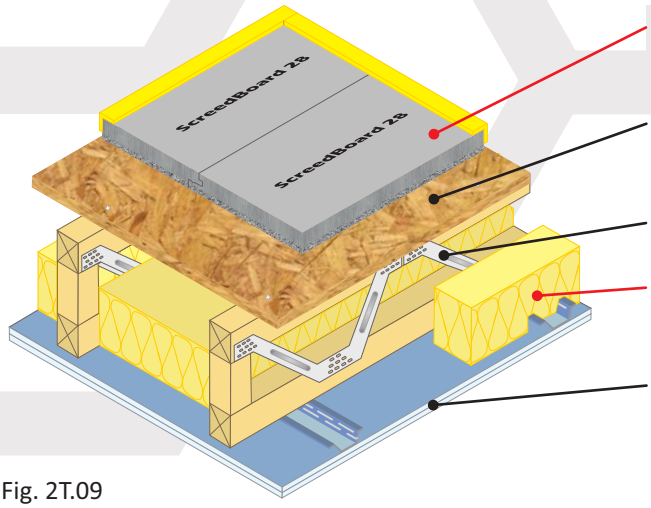


Fig. 2T.09

Floating floor treatment	**CELLECTA ScreedBoard® 28** (See Table 2T.09a for full details)
Floor decking	15mm[(1)] (min) thick wood based board, density 600kg/m³ (min)
Joists	253mm (min) metal web joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m³)
Ceiling	See Table 2T.09b for ceiling treatment options

Table 2T.09a

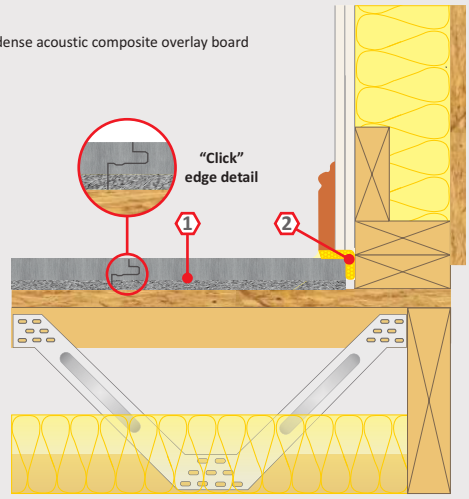
Installation Details

Resilient overlay platform floor system

① **ScreedBoard® 28** Ultra high performance, dense acoustic composite overlay board
28mm x 600mm x 1200mm
Weight: 26kg/m² / 18.72kg/board

Ⓐ **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

② **YELO*fon*® FS50**
Preformed flanking strip:
6mm x 50mm x 30mm x 2m



Additional items required:
CELLECTA ScreedBoard® fixing tools
Sound absorbing quilt laid between joists:
○ 50mm CELLECTA FIBRE*fon*® Micro 50 non-itch polyester wool
● 100mm (min) Mineral wool 10-33kg/m³

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values.
Wall treatments MUST be isolated from the floating floor with YELO*fon* FS50 flanking strip.
Services must not puncture primary ceiling lining (except cables, which should be sealed with flexible sealant).

Table 2T.09b

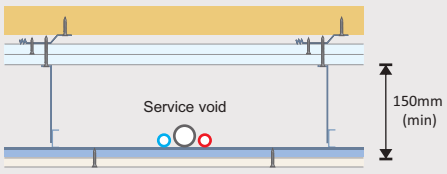
Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m²) fixed with 32mm screws and 12.5mm (nominal 10kg/m²) fixed with 42mm screws, with all joints staggered.

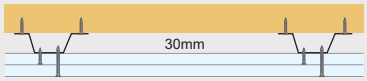
CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Plus sacrificial ceiling
Metal ceiling system with a 150mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.



CT3 - 30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres.

Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.



Additional items required:
CELLECTA ScreedBoard fixing tools

Acoustic Performance

Airborne:	53dB $D_{nT,w} + C_{tr}$	Building Regs
Impact:	55dB $L_{nT,w}$	+ 5dB

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

RD Proprietary Treatment

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

CLASS B*fl*,S1 BS EN13501-1 2017

Environmental Credentials

GWP <5

100% Recyclable Gypsum

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

Metal web joist separating floor

Robust Detail E-FT-6 + UFH

CELLECTA Mojave® acoustic / UFH floating floor system laid on timber sub-deck
Use with timber frame walls only

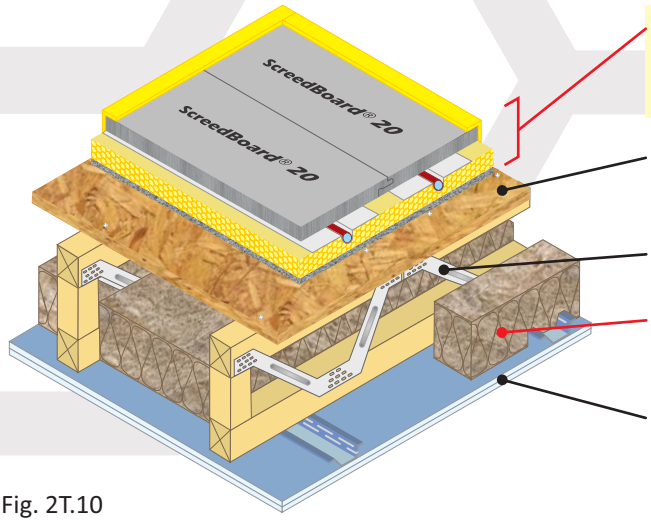


Fig. 2T.10

Acoustic + UFH treatment	**CELLECTA Mojave® S1/8** acoustic treatment incorporating underfloor heating (see Table 2T.10a for full details)
Floor decking	15mm[(1)] (min) thick wood based board, density 600kg/m³ (min)
Joists	253mm[(1)] (min) metal web joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m³)
Ceiling	See Table 2T.10b for ceiling treatment options featuring 30mm deep CELLECTA **HP30** resilient bars

[(1)]18mm (min) required for Robust Detail applications

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FASTRACKCAD ARCHITECTURAL CAD DATABASES

Available on bimstore.co

NBSPlus

Table 2T.10a

Installation Details

Resilient overlay platform floor system incorporating underfloor heating

CELLECTA Mojave® S1/8
Dry laid acoustic treatment incorporating underfloor heating system

① **ScreedBoard® 20**
High conductivity overlay board
Dimensions: 20mm x 600mm x 1200mm
Weight: 25kg/m² / 18.00kg/board
Thermal resistance: 0.05m²K/W

Ⓐ **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

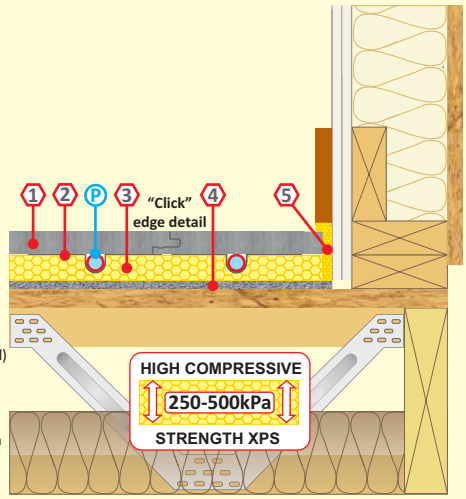
② **ULTRAplate**
Aluminium heat diffuser plate (to suit pipe installed)
Dimensions: 130mm x 1000mm

③ **XFLO® 250, 300, 500 (kPa)**
High compressive strength routed XPS insulation
Dimensions: 15-75mm x 600mm x 2500mm
Pipe centre: 150, 200, 300mm
Pipe bore size (OD): 10 - 20mm
(manufactured to suit)

④ **FIBRE*fon*® 8**
High performance resilient layer
Dimensions: 8mm x 600mm x 1200mm
Weight: 1kg/m² / 0.72kg/board

⑤ **YELO*fon*® ES5/100**
Perimeter edge strip
Dimensions: 5mm x 100mm x 50m

Ⓟ UFH water pipe (by others)



Screedboard 20 is **5x more thermally conductive** than an 18mm chipboard + 19mm plasterboard plank combination, enabling the underfloor heating system to be more responsive and the heat source to run more efficiently at a lower temperature.

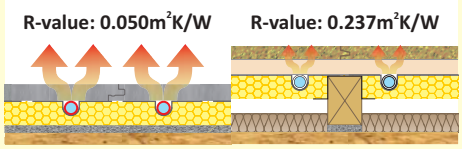


Table 2T.10b

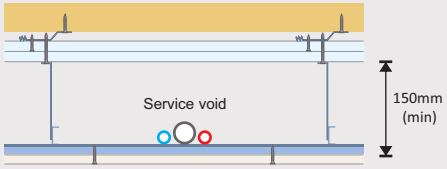
Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m²) fixed with 32mm screws and 12.5mm (nominal 10kg/m²) fixed with 42mm screws, with all joints staggered.

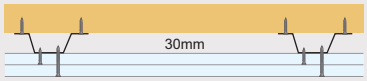
CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Plus sacrificial ceiling
Metal ceiling system with a 150mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.



CT3 - 30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres.

Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.



Additional items required:
CELLECTA **ScreedBoard fixing tools**

Acoustic Performance

Airborne:	54dB $D_{nT,w} + C_{tr}$	Building Regs
Impact:	55dB $L_{nT,w}$	+ 5dB

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

CLASS B*fl*,S1 BS EN13501-1 2017

Environmental Credentials

GWP <5

100% Recyclable Gypsum

zero ODP

Cross laminate timber (CLT) separating floor

CELLECTA ScreedBoard® 28 treatment laid on cross laminate timber floor planks

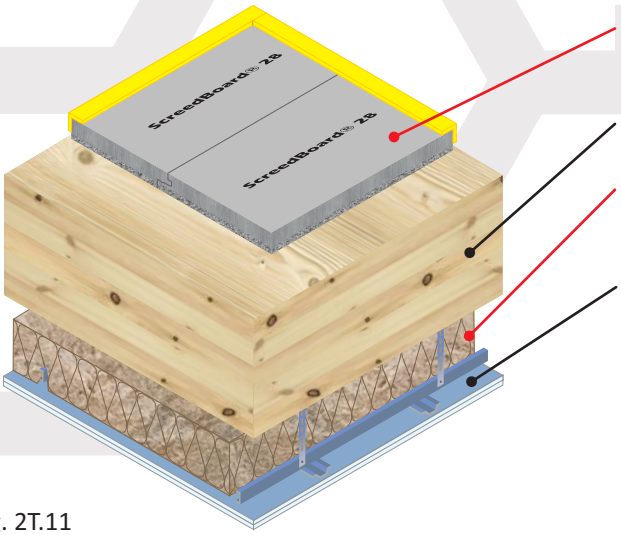


Fig. 2T.11

Floating floor treatment	**CELLECTA ScreedBoard® 28** (See Table 2T.11a for full details)
Floor planks	200mm (min) CLT floor planks
Absorbing material	○ 50mm **CELLECTA FIBRE*fon*® Micro 50** ● 100mm (min) quilt insulation (10-36kg/m³)
Ceiling	See Table 2T.11b for ceiling treatment options

Table 2T.11a

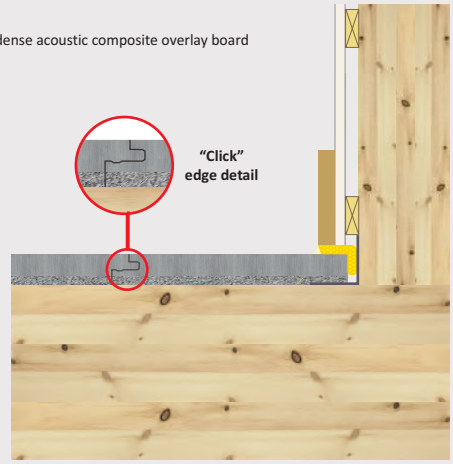
Installation Details

Resilient overlay platform floor system

① **ScreedBoard® 28** Ultra high performance, dense acoustic composite overlay board
28mm x 600mm x 1200mm
Weight: 26kg/m² / 18.72kg/board

Ⓐ **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

② **YELO*fon*® FS50**
Preformed flanking strip:
6mm x 50mm x 30mm x 2m



Additional items required:
CELLECTA ScreedBoard fixing tools

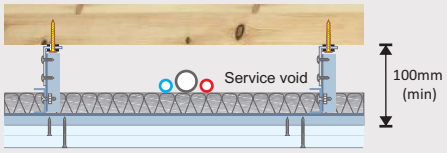
Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values.
Wall treatments MUST be isolated from the floating floor with **YELO*fon* FS50** flanking strip.
Services must not puncture primary ceiling lining (except cables, which should be sealed with flexible sealant).

Table 2T.11b

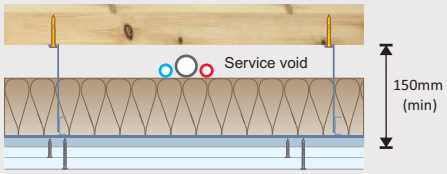
Ceiling Treatment Options

CELLECTA Ultra Ceiling: Metal frame ceiling system incorporating CELLECTA AH50 acoustic hangers - unique rubber isolated hanger fixed to MF ceiling strap/profile with suitable fixings. 100mm void (min)

Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.



Any metal frame ceiling system - 150mm void (min)
Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.



Sound absorbing quilt fitted in ceiling void
○ 50mm **CELLECTA FIBRE*fon* Micro 50**
● 100mm (min) mineral wool quilt 10-35kg/m³

Acoustic Performance

Airborne:	**50dB $D_{nT,w} + C_{tr}$**	**Building Regs**
Impact:	**54dB $L_{nT,w}$**	**+ 5dB**

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

CLASS B*fl*,S1 BS EN13501-1 2017

Environmental Credentials

GWP <5

100% Recyclable Foam

zero ODP

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Cross laminate timber (CLT) separating floor — Acoustic Treatment + UFH

CELLECTA Mojave® acoustic/UFH floating floor system laid on cross laminate timber floor planks

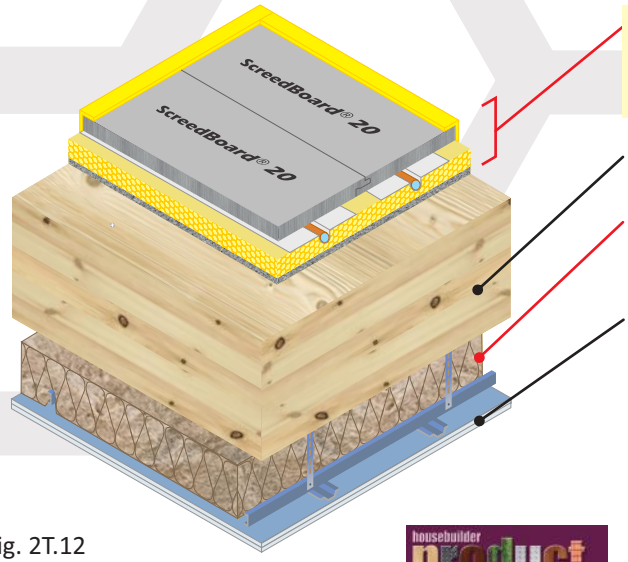

Fig. 2T.12

Acoustic + UFH treatment	**CELLECTA Mojave® S1/8** acoustic treatment incorporating underfloor heating (see Table 2T.12a for full details)
Floor planks	200mm (min) CLT floor planks
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m³)
Ceiling	See Table 2T.12b for ceiling treatment options

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NBS Plus

Table 2T.12a

Installation Details

Resilient overlay platform floor system incorporating underfloor heating

CELLECTA Mojave® S1/8
Dry laid acoustic treatment incorporating underfloor heating system

1 ScreedBoard® 20
High conductivity overlay board
Dimensions: 20mm x 600mm x 1200mm
Weight: 25kg/m² / 18.00kg/board
Thermal resistance: 0.05m²K/W

A CELLECTA Pro Adhesive
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

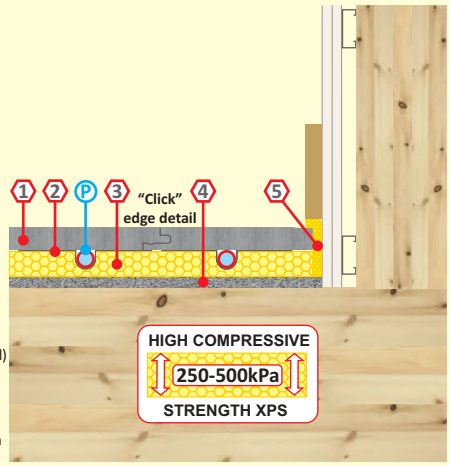
2 ULTRAplate
Aluminium heat diffuser plate (to suit pipe installed)
Dimensions: 130mm x 1000mm

3 XFLO® 250, 300, 500 (kPa)
High compressive strength routed XPS insulation
Dimensions: 15-75mm x 600mm x 2500mm
Pipe centre: 150, 200, 300mm
Pipe bore size (OD): 10 - 20mm
(manufactured to suit)

4 FIBRE*fon*® 8
High performance resilient layer
Dimensions: 8mm x 600mm x 1200mm
Weight: 1kg/m² / 0.72kg/board

5 YELO*fon*® ES5/100
Perimeter edge strip
Dimensions: 5mm x 100mm x 50m

P UFH water pipe (by others)



Screedboard 20 is **5x more thermally conductive** than an 18mm chipboard + 19mm plasterboard plank combination, enabling the underfloor heating system to be more responsive and the heat source to run more efficiently at a lower temperature.

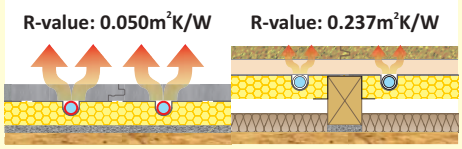
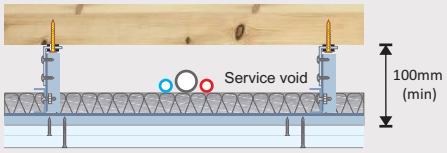


Table 2T.12b

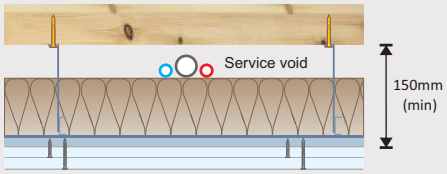
Ceiling Treatment Options

CELLECTA Ultra Ceiling: Metal frame ceiling system incorporating CELLECTA AH50 acoustic hangers - unique rubber isolated hanger fixed to MF ceiling strap/profile with suitable fixings. 100mm void (min)

Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.



Any metal frame ceiling system - 150mm void (min)
Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.



Sound absorbing quilt fitted in ceiling void
○ 50mm CELLECTA FIBRE*fon* Micro 50
● 100mm (min) mineral wool quilt 10-35kg/m³

Acoustic Performance

Airborne:	50dB $D_{nT,w} + C_{tr}$	Building Regs
Impact:	54dB $L_{nT,w}$	+ 5dB

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

CLASS B*fl*,S1 BS EN13501-1 2017

Environmental Credentials

GWP <5

100% Recyclable Gypsum

Timber Separating Floors - Refurb and Conversion

Introduction

Existing timber floors typically have a low mass and sometimes unknown construction details, making them inherently difficult to achieve the prescribed acoustic values without addressing a number of areas. The floor's mass can be increased by the introduction of additional plasterboard layers. CELLECTA **FIBRE*fon*® Micro 50** or mineral wool placed in the ceiling void will defuse airborne sound. Resilient bars will de-couple the ceiling, and one of CELLECTA's acoustic treatments can reduce the impact sound at source.

Each one of CELLECTA's treatments comprises a tongue & groove floorboard, at least one high performance resilient layer and an acoustic flanking strip that, when installed correctly, will comply with the required acoustic standards.

Key Benefits of CELLECTA Acoustic Floor Treatments

- Provide outstanding acoustic performance
- Cost effective constructions
- Proven solutions
- **Environmentally friendly - 100% recyclable**

Historical Buildings

With some historical buildings undergoing a material change of use, it may not be practical to achieve the prescribed sound values. In these cases, Building Control bodies should be satisfied that everything reasonable has been done to improve the sound performance of the structure. Pre-completion tests are normally required and the results submitted accordingly.

Acoustic treatment position		Ceiling treatment		Acoustic treatment selector		
Laid direct on floor joists	Floating on timber sub-deck	Retained	Replaced	CELLECTA acoustic solution	Treatment thickness	Page No.
⬡		⬡	⬡	DECK*fon*® Quattro 39	39mm	71
⬡			⬡	DECK*fon*® 37T	37mm	72
	⬡	⬡		DECK*fon*® ULTRAmat 15	15mm	73
	⬡	⬡		DECK*fon*® 17T	17mm	74
	⬡	⬡		DECK*fon*® 26T	26mm	74
	⬡	⬡		ScreedBoard® 28	28mm	74
	⬡		⬡	DECK*fon*® 30T	30mm	75
	⬡		⬡	DECK*fon*® 26T	26mm	75
	⬡		⬡	DECK*fon*® 17T	17mm	75
	⬡		⬡	ScreedBoard® 28	28mm	76
				Acoustic + UFH treatment selector		
	⬡		⬡	Mojave® S1-8 Dry laid *System*	≥43mm	77

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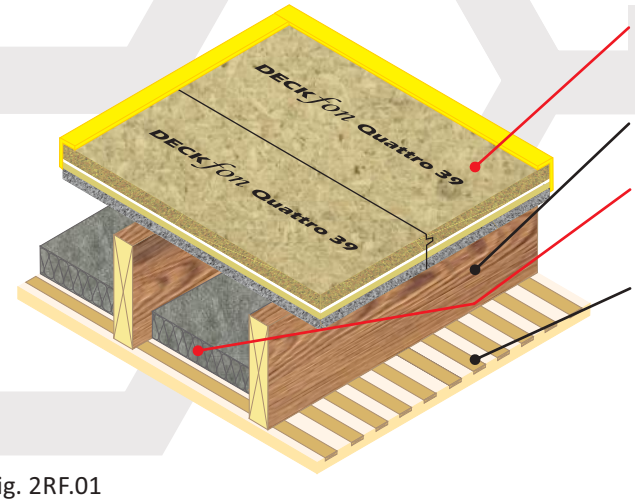
Refurbishment and conversion timber separating floor

CELLECTA DECK*fon*® Quattro 39 acoustic treatment laid directly on existing timber joists
Existing ceiling retained or up-graded



Floating floor treatment	CELLECTA DECK*fon*® Quattro 39 (See Table 2RF.01a for full details)
Floor joist	200mm (min) solid timber joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) mineral wool (45kg/m³)
Ceiling	See Table 2RF.01b for ceiling treatment

Fig. 2RF.01

Table 2RF.01a

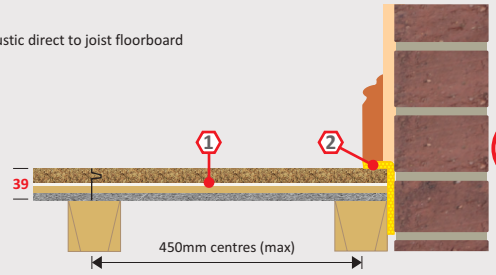
Installation Details

Structural composite treatment laid directly on floor joists - Ceiling retained

① **DECK*fon*® Quattro 39** Composite acoustic direct to joist floorboard
39mm x 600mm x 2400mm
Weight: 20.95kg/m² / 30.17kg/board

Ⓐ **CELLECTA *fon* Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

② **YELO*fon*® ES5/120**
Perimeter edge strip: 5mm x 120mm x 50m



Additional item required
○ 50mm CELLECTA **FIBRE*fon* Micro 50** non-itch polyester quilt
● 100mm (min) mineral wool 45kg/m³

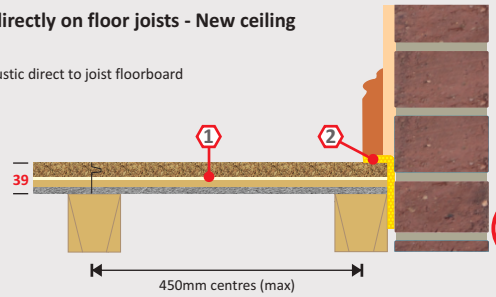
Airborne	Impact
49dB $R_w + C_{tr}$	58dB $L_{n,w}$

Structural composite treatment laid directly on floor joists - New ceiling

① **DECK*fon*® Quattro 39** Composite acoustic direct to joist floorboard
39mm x 600mm x 2400mm
Weight: 20.95kg/m² / 30.17kg/board

Ⓐ **CELLECTA *fon* Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

② **YELO*fon*® ES5/120**
Perimeter edge strip: 5mm x 120mm x 50m



Additional item required:
○ 50mm CELLECTA **FIBRE*fon* Micro 50** non-itch polyester quilt
● 100mm (min) mineral wool 45kg/m³

Airborne	Impact
54dB $R_w + C_{tr}$	48dB $L_{n,w}$

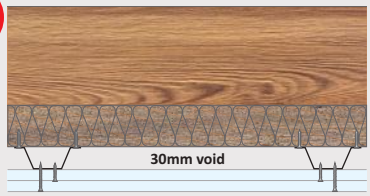
Table 2RF.01b

Ceiling Treatment Options

Ceiling treatment
Lath and plaster or plasterboard ceiling with minimum mass of 16kg/m², fixed directly to floor joists.

Ceiling boards must not penetrate or touch joists
● 16mm (min) metal resilient bars mounted at right angles to the joists at 400mm (max) centres.
○ 30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres, as shown.

Ceiling treatment
Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.



HP30 resilient bars set at 600mm (max) centres

Acoustic Performance

Performance values quoted were achieved using 50mm x 235mm solid timber joists installed at Sound Research laboratories, Sudbury. Tested in accordance with Approved Document E: Annex B: Procedures for sound insulation testing.
Airborne results tested in accordance with BS EN ISO 140-3:1995
Impact results tested in accordance with BS EN ISO 140-6: 1998

Third Party Accreditation and Approvals

SRL Performance Tested
bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Fleece
zero ODP

Refurbishment and conversion timber separating floor

CELLECTA DECK*fon*® 37T acoustic treatment laid directly on existing timber joists
New ceiling on resilient bars

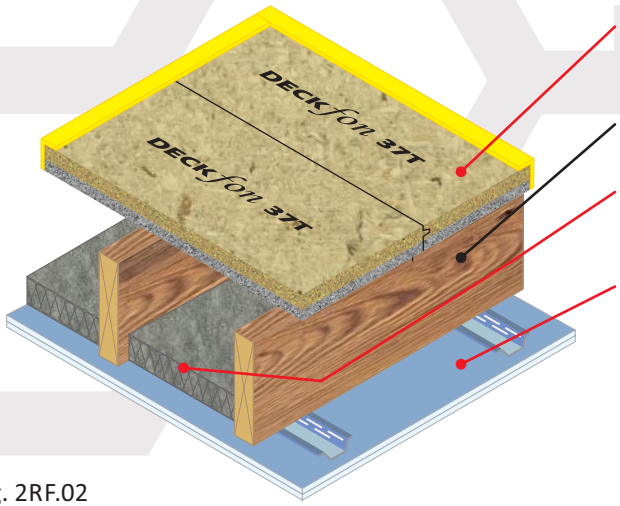


Fig. 2RF.02

Floating floor treatment	CELLECTA DECK*fon*® 37T (See Table 2RF.02a for full details)
Floor joist	200mm (min) solid timber joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) mineral wool (45kg/m³)
Ceiling	See Table 2RF.02b for ceiling treatment

Table 2RF.02a

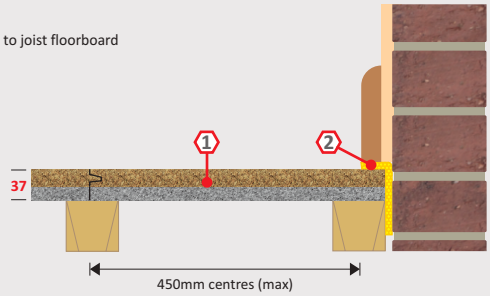
Installation Details

Structural composite treatment laid directly on floor joists

① **DECK*fon*® 37T** Composite acoustic direct to joist floorboard
37mm x 600mm x 2400mm
Weight: 16.70kg/m² / 24.05kg/board

Ⓐ **CELLECTA *fon* Adhesive**
Acoustic board joint adhesive
Bottle size: 1L / 33m² coverage

② **YELO*fon*® ES5/100**
Perimeter edge strip: 5mm x 100mm x 50m



Additional item required:
○ 50mm CELLECTA **FIBRE*fon* Micro 50** non-itch polyester quilt
● 100mm (min) mineral wool 45kg/m³

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values. The floor treatment must not be mechanically fixed to the floor joists or surrounding structures. Wall treatments MUST be isolated from the floating floor with **YELO*fon* ES5/100** flanking strip. Services should not come into direct contact with the floor.

Table 2RF.02b

Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists
● 16mm (min) metal resilient bars mounted at right angles to the joists at 400mm (max) centres.
○ 30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres.

Ceiling treatment
Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Standard resilient bars set at 450mm (max) centres

HP30 resilient bars set at 600mm (max) centres

+ 3 dB $R_w + C_{tr}$ (1)
+ 2 dB $L_{n,w}$ (1)

(1) Typical dB improvement of **HP30** over 16mm resilient bars.

Acoustic Performance

Airborne: 51dB $R_w + C_{tr}$
Impact: 55dB $L_{n,w}$

Performance values quoted were achieved using 50mm x 235mm solid timber joists and 16mm resilient bars installed at Sound Research laboratories, Sudbury. Tested in accordance with Approved Document E: Annex B: Procedures for sound insulation testing.
Airborne results tested in accordance with BS EN ISO 140-3:1995
Impact results tested in accordance with BS EN ISO 140-6: 1998

Third Party Accreditation and Approvals

SRL Performance Tested
bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Foam
zero ODP

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

Refurbishment and conversion timber separating floor

CELLECTA DECK*fon*® ULTRAmat 15 acoustic mat laid on timber sub-floor
Existing timber decking, floor joists and ceiling retained or replaced

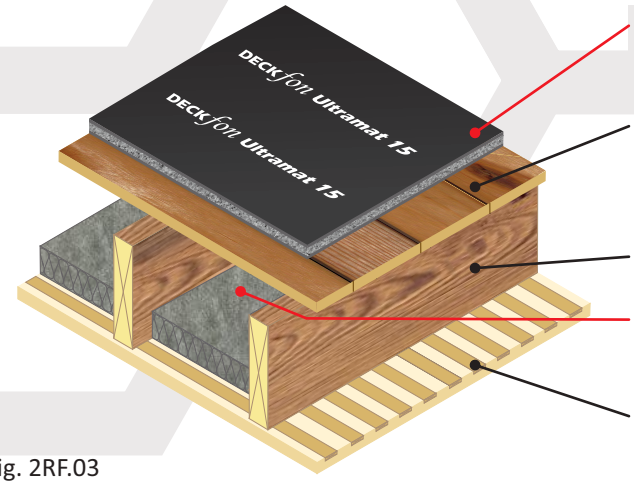


Fig. 2RF.03

Floating floor treatment	**CELLECTA DECK*fon*® ULTRAmat 15** (See Table 2RF.03a for full details)
Floor decking	15mm thick (min) wood based board, density 600kg/m³ (min) or existing floor boards (with all gaps sealed with suitable flexible mastic)
Floor joist	200mm (min) solid timber joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) mineral wool (45kg/m³)
Ceiling	See Table 2RF.03b for ceiling treatment

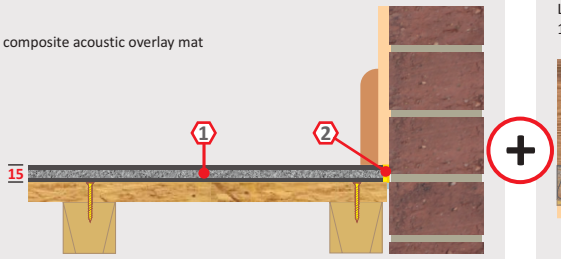
Table 2RF.03a

Installation Details

Structural composite treatment laid directly on floor joists - Ceiling retained

① **DECK*fon*® ULTRAmat 15** High density composite acoustic overlay mat
Dimensions: 15mm x 1200mm x 1200mm
Weight: 15kg/m² / 21.6kg/mat

② **YELO*fon*® ES5/15**
Perimeter edge strip: 5mm x 15mm x 50m



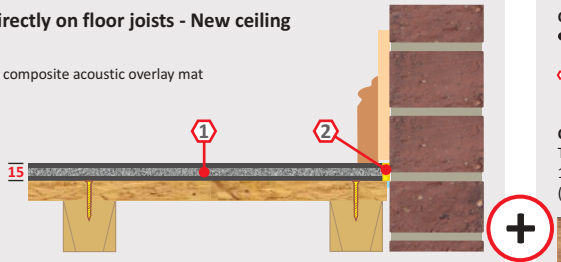
Additional item required:
○ 50mm CELLECTA **FIBRE*fon* Micro 50** non-itch polyester quilt
● 100mm (min) mineral wool 45kg/m³

Airborne	Impact
45dB $R_w + C_{tr}$	59dB $L_{n,w}$

Structural composite treatment laid directly on floor joists - New ceiling

① **DECK*fon*® ULTRAmat 15** High density composite acoustic overlay mat
Dimensions: 15mm x 1200mm x 1200mm
Weight: 15kg/m² / 21.6kg/mat

② **YELO*fon*® ES5/15**
Perimeter edge strip: 5mm x 15mm x 50m



Additional item required:
○ 50mm CELLECTA **FIBRE*fon* Micro 50** non-itch polyester quilt
● 100mm (min) mineral wool 45kg/m³

Airborne	Impact
51dB $R_w + C_{tr}$	55dB $L_{n,w}$

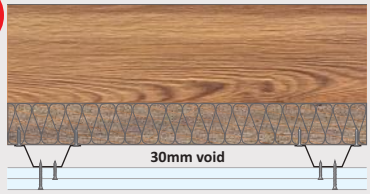
Table 2RF.03b

Ceiling Treatment Options

Ceiling treatment
Lath and plaster or plasterboard ceiling with minimum mass of 16kg/m², fixed directly to floor joists.

Ceiling boards must not penetrate or touch joists
● 16mm (min) metal resilient bars mounted at right angles to the joists at 400mm (max) centres.
○ 30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres, as shown.

Ceiling treatment
Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.



HP30 resilient bars set at 600mm (max) centres

Acoustic Performance

Performance values quoted were achieved using 50mm x 235mm solid timber joists and 16mm resilient bars installed at Sound Research laboratories, Sudbury. Tested in accordance with Approved Document E: Annex B: Procedures for sound insulation testing. Airborne results tested in accordance with BS EN ISO 140-3:1995 Impact results tested in accordance with BS EN ISO 140-6: 1998

Third Party Accreditation and Approvals

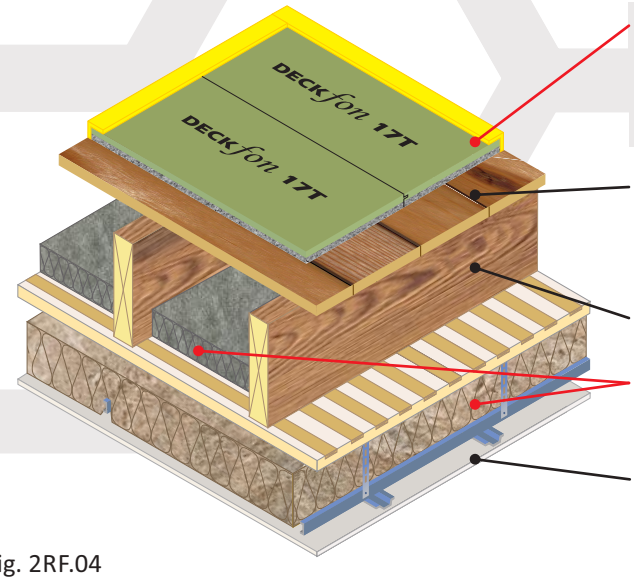
SRL Performance Tested
bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Foam
zero ODP

Refurbishment and conversion timber separating floor

CELLECTA acoustic treatment laid on timber sub-floor
Existing timber joists
Metal frame secondary ceiling hung off primary ceiling



Floating floor treatment options	**CELLECTA DECK*fon*® 17T** **CELLECTA DECK*fon*® 26T** **CELLECTA ScreedBoard® 28** (See Table 2RF.04a for full details)
Floor decking	15mm thick (min) wood based board, density 600kg/m³ (min) or existing floor boards (with all gaps sealed with suitable flexible mastic)
Floor joist	Solid timber joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) mineral wool (10kg/m³)
Ceiling	See Table 2RF.04b for ceiling treatment

Fig. 2RF.04

FASTRACKCAD ARCHITECTURAL CAD DATABASES

NBSPlus

Table 2RF.04a

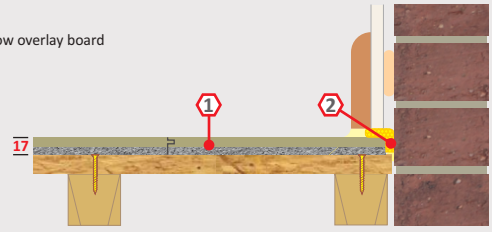
Installation Details

Resilient shallow overlay platform floor system

① **DECK*fon*® 17T** Composite acoustic shallow overlay board
17mm x 600mm x 2400mm
Weight: 7.25kg/m² / 10.44kg/board

Ⓐ **CELLECTA *fon* Adhesive**
Acoustic board joint adhesive
Bottle size: 1L / 33m² coverage

② **YELO*fon*® FS15**
Preformed flanking strip:
6mm x 15mm x 30mm x 2m



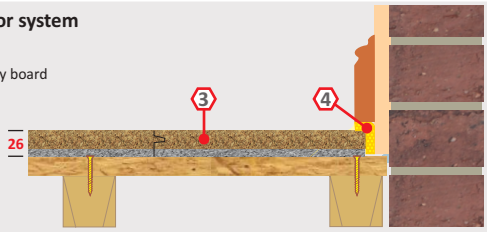
Airborne	Impact
51dB $R_w + C_{tr}$	55dB $L_{n,w}$

Resilient shallow overlay platform floor system

③ **DECK*fon*® 26T** Composite acoustic overlay board
26mm x 600mm x 2400mm
Weight: 13.80kg/m² / 19.87kg/board

Ⓐ **CELLECTA *fon* Adhesive**
Acoustic board joint adhesive
Bottle size: 1L / 33m² coverage

④ **YELO*fon*® FS30**
Preformed flanking strip:
6mm x 30mm x 30mm x 2m



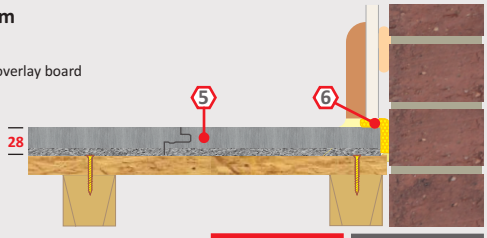
Airborne	Impact
52dB $R_w + C_{tr}$	56dB $L_{n,w}$

Resilient overlay platform floor system

⑤ **ScreedBoard® 28** High density acoustic overlay board
Dimensions: 28mm x 600mm x 1200mm
Weight: 26kg/m² / 18.72kg/board

Ⓐ **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m2 coverage

⑥ **YELO*fon*® FS50**
Preformed flanking strip:
6mm x 50mm x 30mm x 2m



Airborne	Impact
52dB $R_w + C_{tr}$	55dB $L_{n,w}$

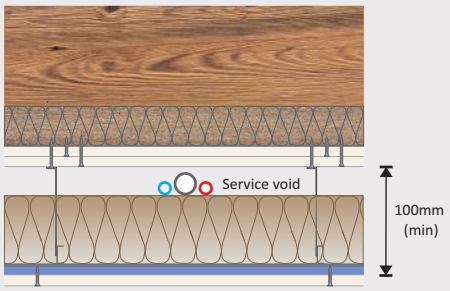
Table 2RF.04b

Ceiling Treatment Options

Primary ceiling fixed directly to joists with metal frame ceiling system, providing 100mm (min) ceiling void fixed to underside

Primary ceiling
- Retained lath and plaster ceiling with minimum mass of 16kg/m²
- Gypsum-based boarded ceiling with a nominal weight of 16kg/m² fixed directly to the joists

Sacrificial ceiling
Metal frame (MF) ceiling system with 100mm (min) void fixed to underside of primary ceiling, 50mm **FIBRE*fon* Micro 50** or 100mm mineral wool (10kg/m³) fitted between grid and one layer of 8kg/m² gypsum-based board



Additional item required:
- ○ 50mm CELLECTA **FIBRE*fon* Micro 50** non-itch polyester quilt
- ● 100mm (min) mineral wool 45kg/m³

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values. Wall treatments must be isolated from the floating floor with **YELO*fon* FS** flanking strip. Ensure services do not come into contact with the floor treatment. Once laid, **17T** boards should be covered with the final floor finish as soon as possible to eliminate the risk of mechanical damage to the edge detail.
Part B/Section 2 of Building Regulations/Standards must be adhered to ensure the ceilings fire performance meets legislative requirements.

Acoustic Performance

Performance values quoted were achieved using 50 x 235mm solid timber joists installed at Sound Research laboratories, Sudbury. Tested in accordance with Approved Document E: Annex B: Procedures for sound insulation testing.
Airborne results tested in accordance with BS EN ISO 140-3:1995
Impact results tested in accordance with BS EN ISO 140-6: 1998

Third Party Accreditation and Approvals

SRL Performance Tested

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Foam

zero ODP

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

Refurbishment/conversion timber separating floor

CELLECTA acoustic treatment laid on timber sub-floor
Existing timber joists
Ceiling on resilient bars

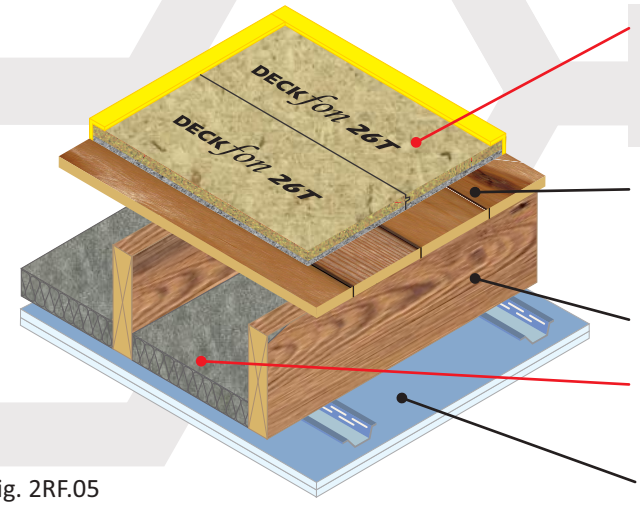


Fig. 2RF.05

Floating floor treatment options	**CELLECTA DECKfon® 17T** **CELLECTA DECKfon® 26T** **CELLECTA DECKfon® 30T** (See Table 2RF.05a for full details)
Floor decking	15mm thick (min) wood based board, density 600kg/m³ (min) or existing floor boards, with all gaps sealed with suitable flexible mastic
Floor joist	200mm (min) solid timber joists
Absorbing material	○ 50mm CELLECTA FIBREfon® Micro 50 ● 100mm (min) mineral wool (45kg/m³)
Ceiling	See Table 2RF.05b for ceiling treatment

Table 2RF.05a

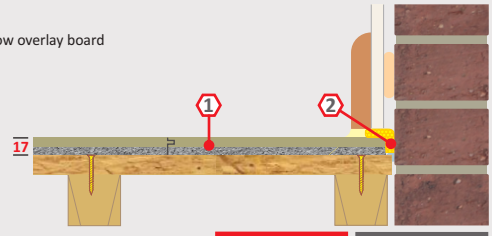
Installation Details

Resilient shallow overlay platform floor system

① **DECKfon® 17T** Composite acoustic shallow overlay board
17mm x 600mm x 2400mm
Weight: 7.25kg/m² / 10.44kg/board

Ⓐ **CELLECTA fon Adhesive**
Acoustic board joint adhesive
Bottle size: 1L / 33m² coverage

② **YELOfon® FS15**
Preformed flanking strip:
6mm x 15mm x 30mm x 2m



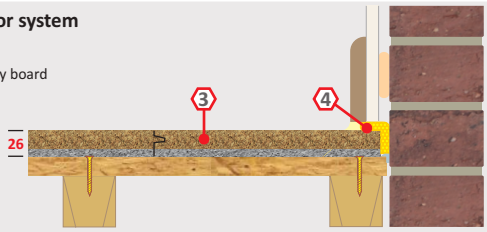
Airborne	Impact
50dB $R_w + C_{tr}$	56dB $L_{n,w}$

Resilient shallow overlay platform floor system

③ **DECKfon® 26T** Composite acoustic overlay board
26mm x 600mm x 2400mm
Weight: 13.80kg/m² / 19.87kg/board

Ⓐ **CELLECTA fon Adhesive**
Acoustic board joint adhesive
Bottle size: 1L / 33m² coverage

④ **YELOfon® FS30**
Preformed flanking strip:
6mm x 30mm x 30mm x 2m



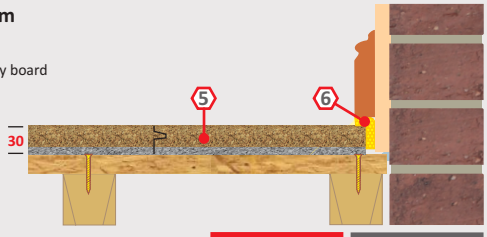
Airborne	Impact
51dB $R_w + C_{tr}$	57dB $L_{n,w}$

Resilient overlay platform floor system

⑤ **DECKfon® 30T** Composite acoustic overlay board
26mm x 600mm x 2400mm
Weight: 16.00kg/m² / 23.04kg/board

Ⓐ **CELLECTA fon Adhesive**
Acoustic board joint adhesive
Bottle size: 1L / 33m2 coverage

⑥ **YELOfon® FS30**
Preformed flanking strip:
6mm x 30mm x 30mm x 2m



Airborne	Impact
51dB $R_w + C_{tr}$	56dB $L_{n,w}$

Table 2RF.05b

Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists
- ● 16mm (min) metal resilient bars mounted at right angles to the joists at 400mm (max) centres.
- ○ 30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres.

Ceiling treatment
Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Standard resilient bars set at 450mm (max) centres

HP30 resilient bars set at 600mm (max) centres

+ 3	dB $R_w + C_{tr}$ (1)
+ 2	dB $L_{n,w}$ (1)

(1) Typical dB improvement of **HP30** over 16mm resilient bars.

Acoustic Performance

Performance values quoted were achieved using 50 x 235mm solid timber joists installed at Sound Research laboratories, Sudbury. Tested in accordance with Approved Document E: Annex B: Procedures for sound insulation testing.
Airborne results tested in accordance with BS EN ISO 140-3:1995
Impact results tested in accordance with BS EN ISO 140-6: 1998

Third Party Accreditation and Approvals

SRL Performance Tested

bmtrada 2015

Environmental Credentials

GWP <5

100% Recycled Foam

zero ODP

Refurbishment/conversion timber separating floor

CELLECTA ScreedBoard® 28 laid on timber sub-floor
Existing timber joists
New ceiling fixed to resilient bars

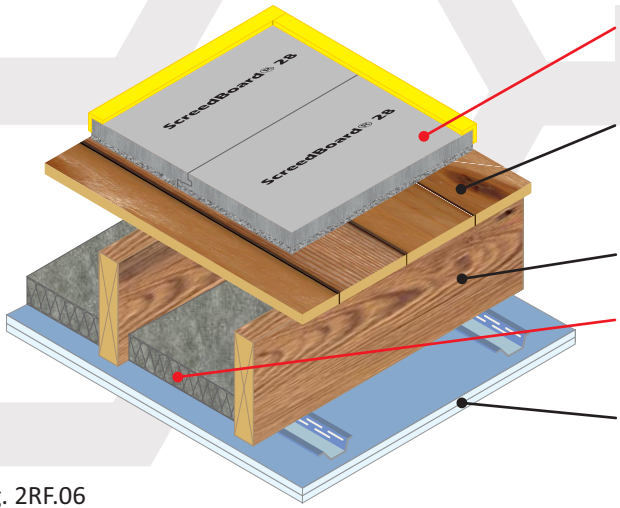


Fig. 2RF.06

Floating floor treatment	**CELLECTA ScreedBoard® 28** (See Table 2RF.06a for full details)
Floor decking	15mm thick (min) wood based board, density 600kg/m³ (min) or existing floor boards (with all gaps sealed with suitable flexible mastic)
Joists	200mm (min) solid timber joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) mineral wool (45kg/m³)
Ceiling	See Table 2RF.06b for ceiling treatment

Table 2RF.06a

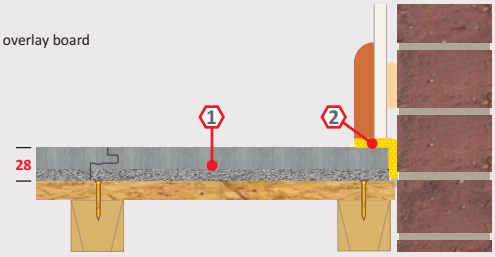
Installation Details

Resilient overlay platform floor system

① **ScreedBoard® 28** High density acoustic overlay board
Dimensions: 28mm x 600mm x 1200mm
Weight: 26kg/m² / 18.72kg/board

Ⓐ **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

② **YELO*fon*® FS50**
Preformed flanking strip:
6mm x 50mm x 30mm x 2m



Additional Products for this application
○ 50mm CELLECTA FIBRE*fon* Micro 50 non-itch polyester quilt
● 100mm (min) mineral wool 45kg/m³

Install **RUBBER*fon*® TSS** (Threshold Support Strip) at door thresholds or where square edge boards meet, reducing excessive flex, whilst maintaining acoustic performance.
Composition: 100% recycled re-bonded rubber
Size: 8mm x 75mm x 1000mm

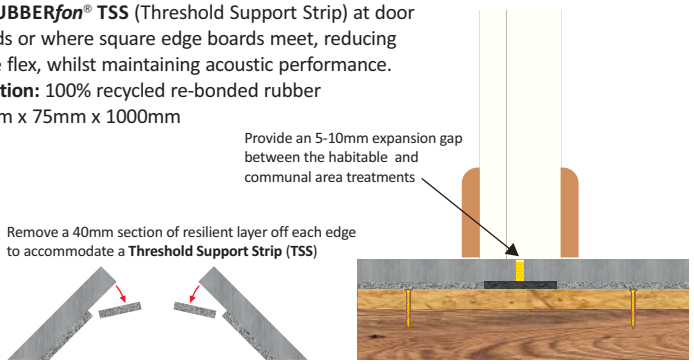


Table 2RF.06b

Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists
● 16mm (min) metal resilient bars mounted at right angles to the joists at 400mm (max) centres.
○ 30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres.

Ceiling treatment
Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Standard resilient bars set at 450mm (max) centres

HP30 resilient bars set at 600mm (max) centres

+ 3	**dB $R_w + C_{tr}$** (1)
+ 2	**dB $L_{n,w}$** (1)

(1) Typical dB improvement of **HP30** over 16mm resilient bars.

Acoustic Performance

Airborne:	**52dB $R_w + C_{tr}$**
Impact:	**54dB $L_{n,w}$**

Performance values quoted were achieved using 50 x 235mm solid timber and 16mm resilient bar at Sound Research laboratories, Sudbury in accordance with Approved Document E: Annex B: Procedures for sound insulation testing.
Airborne results tested in accordance with BS EN ISO 140-3:1995
Impact results tested in accordance with BS EN ISO 140-6: 1998

Third Party Accreditation and Approvals

CLASS B*fl*,S1
BS EN13501-1

SRL Performance Tested

bmtrada 2015

Environmental Credentials

GWP <5

100% Recycled Gypsum

zero ODP

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

Refurbishment/conversion timber separating floor

CELLECTA Mojave® dry laid resilient system incorporating underfloor heating
Existing timber joists
New ceiling fixed to resilient bars

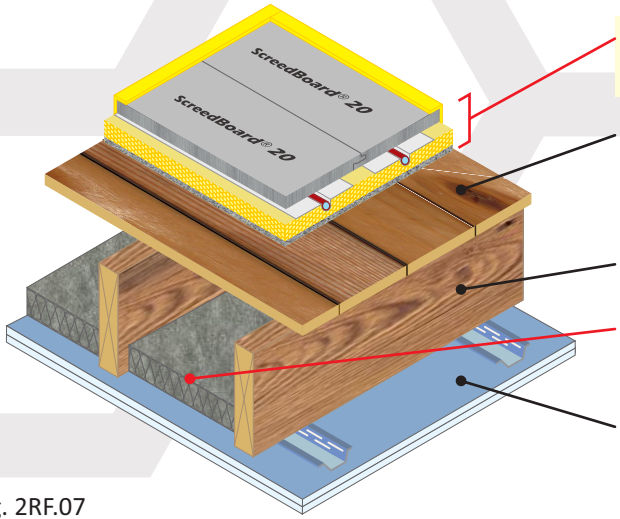


Fig. 2RF.07

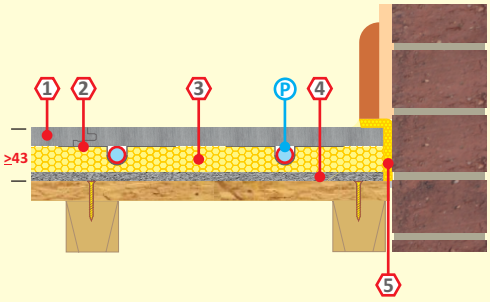
Floating floor treatment +UFH	**CELLECTA Mojave® S1-8** platform floor system incorporating underfloor heating
Floor decking	15mm thick (min) wood based board, density 600kg/m³ (min) or existing floor boards (with all gaps sealed with suitable flexible mastic)
Joists	200mm (min) solid timber joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) mineral wool (45kg/m³)
Ceiling	See Table 2RF.07b for ceiling treatment

Table 2RF.07a

Installation Details

Resilient overlay platform floor system incorporating underfloor heating

CELLECTA Mojave® S1-8
Dry laid acoustic treatment incorporating underfloor heating system



① **ScreedBoard® 20**
High conductivity overlay board:
20mm x 600mm x 1200mm
Weight: 25kg/m² / 18.00kg/board
Thermal resistance: 0.05m2K/W

Ⓐ **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

② **ULTRAplate**
Aluminium heat diffuser plate (to suit pipe installed):
130mm x 1000mm

HIGH COMPRESSIVE STRENGTH XPS 250-500kPa

③ **XFLO® 250, 300, 500**
High compressive strength routed XPS insulation board:
15-75mm x 600mm x 1250/2500mm
Compressive strengths available: 250, 300, 500kPa
Pipe centre: 150, 200, 300mm
Pipe bore size (OD): 10 - 20mm (manufactured to suit)

④ **FIBRE*fon*® 8**
High performance resilient layer:
8mm x 600mm x 1200mm
Weight: 1.00kg/m² / 0.72kg/board

⑤ **YELO*fon*® ES5/120**
Perimeter edge strip:
5mm x 120mm x 50m

Ⓟ UFH water pipe (by others)

Table 2RF.07b

Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists
- ● 16mm (min) metal resilient bars mounted at right angles to the joists at 400mm (max) centres.
- ○ 30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres.

Ceiling treatment
Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Standard resilient bars set at 450mm (max) centres

HP30 resilient bars set at 600mm (max) centres

+ 3	dB $R_w + C_{tr}$ (1)
+ 2	dB $L_{n,w}$ (1)

(1) Typical dB improvement of **HP30** over 16mm resilient bars.

Acoustic Performance

Airborne:	**52dB $R_w + C_{tr}$**
Impact:	**54dB $L_{n,w}$**

Performance values quoted were achieved using 50 x 235mm solid timber and 16mm resilient bar at Sound Research laboratories, Sudbury in accordance with Approved Document E: Annex B: Procedures for sound insulation testing.
Airborne results tested in accordance with BS EN ISO 140-3:1995
Impact results tested in accordance with BS EN ISO 140-6: 1998

Third Party Accreditation and Approvals

CLASS B*fl*,S1
BS EN13501-1

SRL Performance Tested

bmtrada 2015

Environmental Credentials

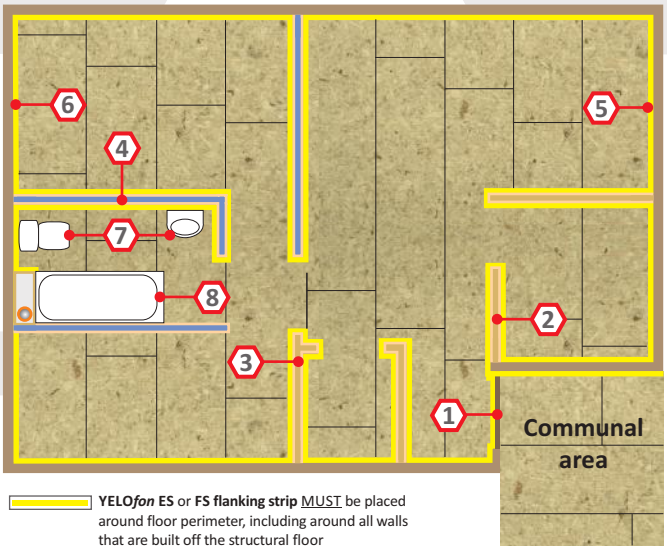
GWP <5

100% Recycled Gypsum

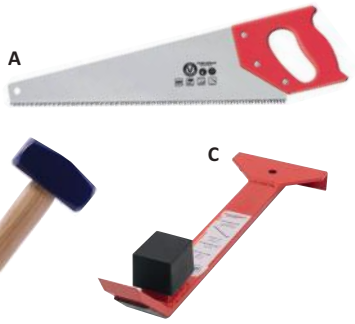
zero ODP

Floating floor treatment design & installation details: Refurbishment applications

The acoustic performance of the floor structure will be compromised if the acoustic treatment is not completely isolated from the timber joists, sub-floor, services, door frames, surrounding walls and their treatments. To address this risk, each potential problem area needs to be detailed accordingly.



YELO*fon* ES or **FS flanking strip** MUST be placed around floor perimeter, including around all walls that are built off the structural floor

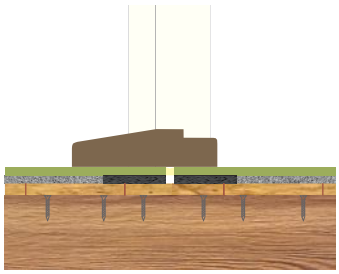


Fixing tools & adhesive required

A. Hand or skill saw
B. Club hammer
C. Pull bar
D. CELLECTA ***fon*** **Adhesive** (1Ltr)
+ Packing shims (not shown)

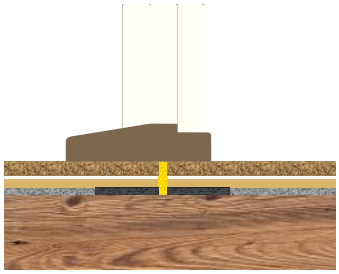
Installation video on the CELLECTA app

1a Door thresholds (17T, 26T, 30T & SB28)



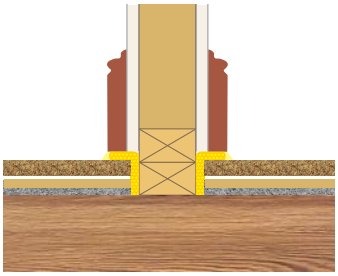
Support the edge of the treatment with a **RUBBER*fon* Threshold Support Strip** (**TSS**), maintaining a 5-10mm expansion gap between the habitable area and the communal area treatments.

1b Door thresholds (Q39)



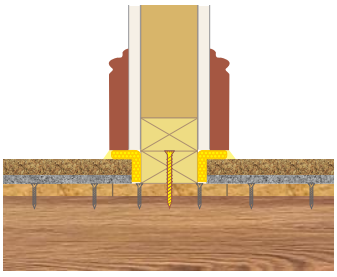
Support the edge of the treatment with strips of 75mm wide **RUBBER*fon* TSS** (Threshold Support Strips), whilst providing a 5-10mm expansion gap between the habitable area and the communal area

2 Lightweight partitions built off the floor joists



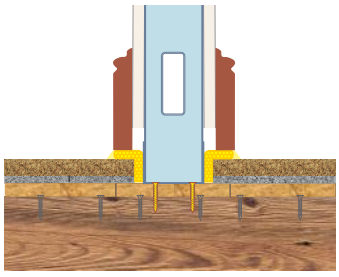
Lightweight internal walls built off the floor joists MUST be isolated from the acoustic treatment with **YELO*fon* ES5/120** edge strip.

3 Timber stud partition built off timber sub-deck



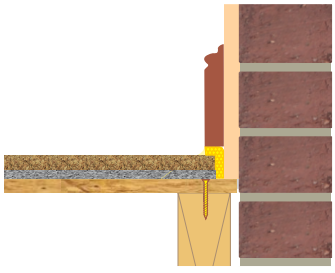
Timber internal walls built off the structural floor deck and MUST be isolated from the acoustic floor treatment with **YELO*fon* ES** or **FS strip**.

4 Metal frame partition built off timber sub-deck



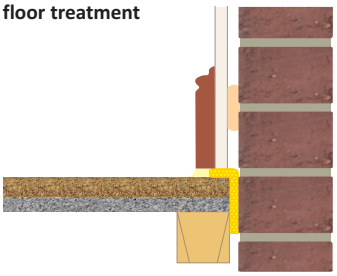
Metal frame internal walls should be built off the structural floor deck and MUST be isolated from the acoustic floor treatment with **YELO*fon* ES** or **FS strip**.

5 Wall treatment installed before the floor treatment



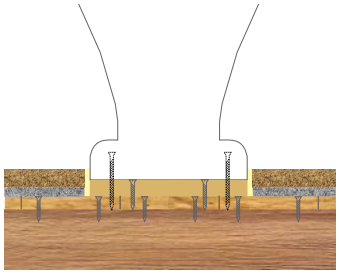
Wall treatments MUST be isolated from the acoustic floor treatment with **YELO*fon* ES** or **FS strip**, and all gaps sealed with a suitable mastic.

6 Wall treatment installed after the floor treatment



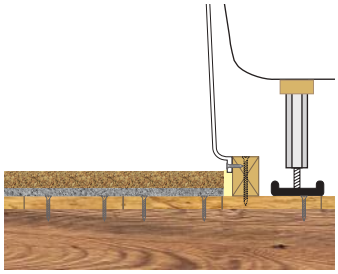
Wall treatments MUST be isolated from the acoustic floor treatment with **YELO*fon* ES** or **FS strip**, and all gaps sealed with a suitable mastic.

7 Sanitary ware



Sanitary ware should be built off a structural floor and MUST be isolated from the acoustic floor treatment and any floor finished. Any gaps should be sealed with a suitable mastic.

8 Bath and shower trays

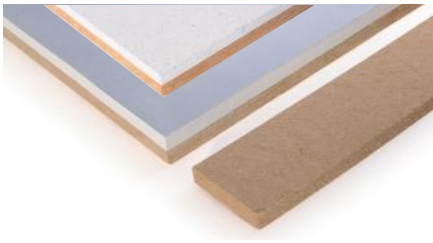


Baths and shower trays should be built off a structural floor and MUST be isolated from the acoustic floor treatment and any floor finished. Any gaps should be sealed with a suitable mastic.

Walls - Separating and Partition

Introduction

To improve the acoustic efficiency of an existing or new build masonry, timber stud or metal frame wall, CELLECTA has developed two highly effective acoustic wall lining treatments: **HiGYP® 30TM** with **FIBRE*fon*® Baffle Strips** and **HiGYP® 28**. **HiGYP®** boards have a higher density than traditional gypsum wall boards, this combined with the absorbing properties of the **FIBRE*fon*®** layer, produces treatments that deliver outstanding levels of sound absorbency for both separating and partition walls.



Key Benefits of CELLECTA Acoustic Wall Treatments

- Excellent acoustic performance
- Thin solutions
- Unique patented treatment option
- Quick and easy to install
- **Environmentally friendly**

Product Selector - Acoustic Wall Lining

Build type		Type of wall			Type of structural floor				CELLECTA acoustic treatment	Page No.
New build	Refurb / conversion	Masonry	Timber frame	Metal frame	I-joists	Solid joists	Metal web	Concrete		
⬡		⬡			⬡		⬡		**HiGYP® 30TM** (acoustic wall lining) + **FIBRE*fon*® Baffle Strips** (isolation strips)	80
	⬡	⬡				⬡		⬡	**HiGYP® 28** (acoustic wall lining) + **FIBRE*fon*® 15** (sound absorbing quilts)	82
	⬡		⬡			⬡		⬡	**HiGYP® 28** (acoustic wall lining) + **FIBRE*fon* 15** & **50** (sound absorbing quilts)	83
	⬡			⬡		⬡		⬡	**HiGYP® 28** (acoustic wall lining) + **FIBRE*fon*® 15** & **50** (sound absorbing quilts)	84

New build masonry flanking walls with timber separating floor

CELLECTA HiGYP® 30TM composite acoustic wall lining system
CELLECTA ScreedBoard® 28 laid on timber sub-floor
Suitable for aircrete and aggregate block flanking cavity walls

Patented Treatment

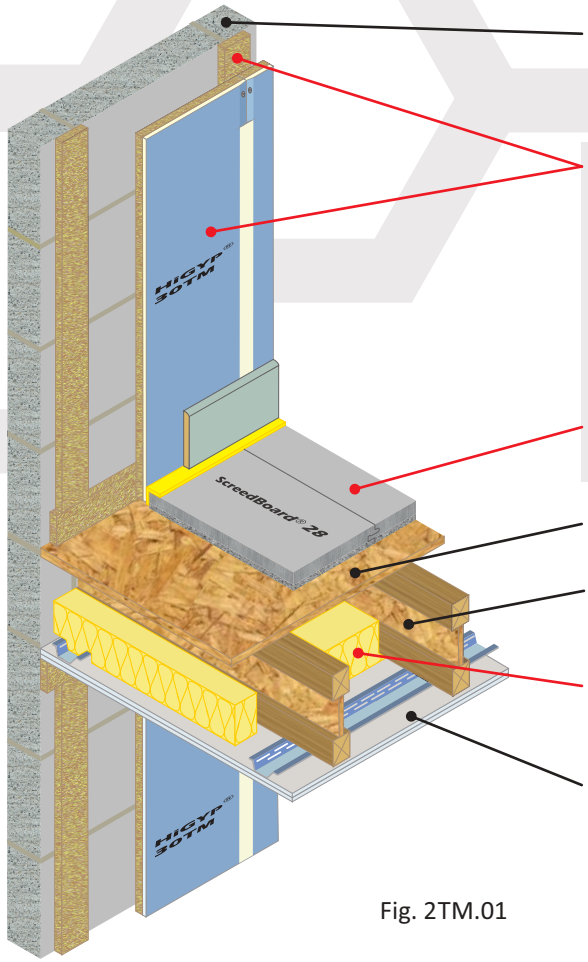


Fig. 2TM.01

Masonry wall (Inside skin)	● 100mm (min) aircrete block (600 - 800kg/m³) ● 100mm (min) aggregate block (1350 - 2300kg/m³)
Wall treatment	CELLECTA **HiGYP® 30TM** wall lining fixed through the **Baffle Strips**, to the wall with CELLECTA **AF100** fixings CELLECTA **FIBREfon® Baffle Strips** fixed horizontally at the head and base of the wall, and vertically at 600mm (max) centres
Floating floor treatment	CELLECTA **ScreedBoard® 28**[(1)] See Table 2TM.01a for full details
Floor decking	15mm thick (min) OSB
Floor joists	● 235mm (min) timber I-joists ● 253mm (min) metal web joists
Absorbing material	○ 50mm CELLECTA **FIBREfon® Micro 50** ● 100mm (min) mineral wool (10-36kg/m³)
Ceiling	See Table 2TM.01b for ceiling treatment

Table 2TM.01a

Installation Details

Acoustic wall lining system

① **HiGYP® 30TM**
High performance composite acoustic wall lining
Dimensions: 30mm x 1200mm x 2400mm
Weight: 15.90kg/m² / 45.79kg/sheet

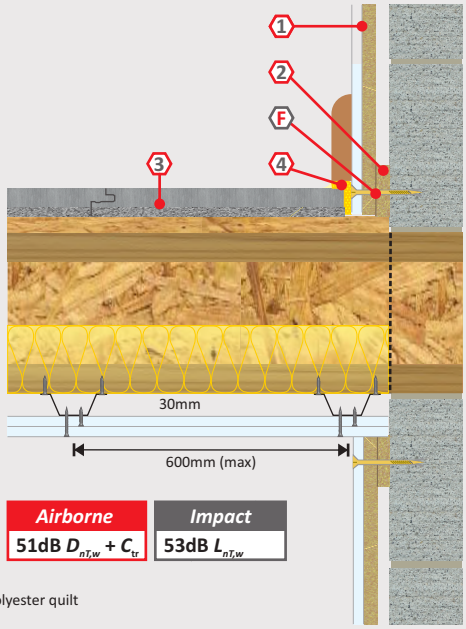
② **FIBREfon® Baffle Strip**
High performance sound absorption strip
Dimensions: 15mm x 75mm x 1200mm

Ⓕ **CELLECTA AF100 Fixing**
Length: 100mm long
Drill diameter required: 8mm

Resilient overlay platform floor

③ **ScreedBoard® 28**
High density acoustic overlay board (26kg/m²)
Dimensions: 28mm x 600mm x 1200mm

④ **YELOfon® FS50**
Preformed flanking strip:
6mm x 50mm x 30mm x 2m



Airborne	Impact
51dB $D_{nT,w} + C_{tr}$	53dB $L_{nT,w}$

Additional items required to complete treatment
CELLECTA **Pro Adhesive** ScreedBoard joint adhesive
○ 50mm CELLECTA **FIBREfon Micro 50** non-itch polyester quilt
● 100mm (min) mineral wool 45kg/m³

Table 2TM.01b

Ceiling Options

Ceiling boards must not penetrate or touch joists
30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres.

Ceiling treatment
CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m²) fixed with 32mm screws and 12.5mm (nominal 10kg/m²) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Sacrificial ceiling (optional):
Metal ceiling system with a 150mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values. Wall treatments MUST be isolated from the floating floor with **YELOfon FS50** strip. Ensure services do not come into direct contact with the floor treatment.

Acoustic Performance

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Approvals and Certification

CRD Candidate Treatment No.181 & 182

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recycled[(1)] Gypsum

zero ODP

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New build masonry separating wall with timber separating floor

CELLECTA HiGYP® 30TM composite acoustic wall lining system
CELLECTA ScreedBoard® 28 laid on timber sub-floor
Suitable for aircrete and aggregate block separating cavity walls

Patented Treatment

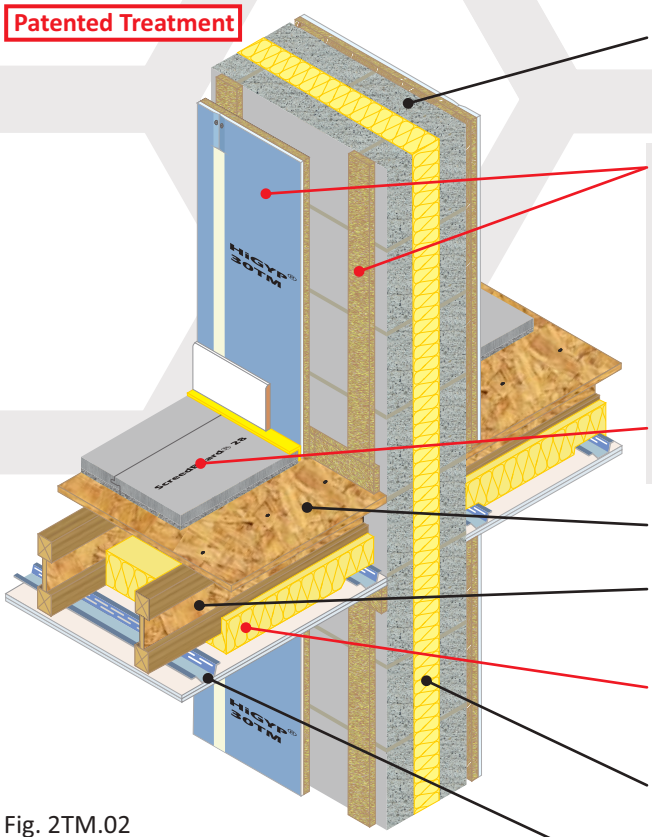


Fig. 2TM.02

Masonry separating wall	● 100mm (min) aircrete block (600 - 800kg/m³) ● 100mm (min) aggregate block (1350 - 2300kg/m³)
Wall treatment	**CELLECTA HiGYP® 30TM** wall lining fixed through the **Baffle Strips**, to the wall with **CELLECTA AF100** fixings **CELLECTA FIBREfon® Baffle Strips** fixed horizontally at the head and base of the wall, and vertically at 600mm (max) centres
Floating floor treatment	**CELLECTA ScreedBoard® 28**(1) See Table 2TM.02a for full details
Floor decking	15mm thick (min) OSB
Floor joists	● 235mm (min) timber I-joists ● 253mm (min) metal web joists
Absorbing material	○ 50mm **CELLECTA FIBREfon® Micro 50** ● 100mm (min) mineral wool (10-36kg/m³)
Cavity insulation	75mm (min) full fill mineral wool to address thermal bypass effect (10-36kg/m³)
Ceiling	See Table 2TM.02b for ceiling treatment

Table 2TM.02a

Installation Details

Acoustic wall lining system

① **HiGYP® 30TM**
High performance composite acoustic wall lining
Dimensions: 30mm x 1200mm x 2400mm
Weight: 15.90kg/m² / 45.79kg/sheet

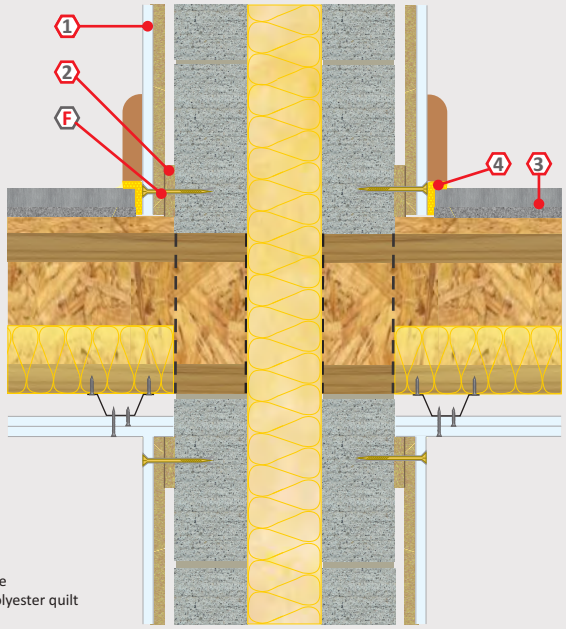
② **FIBREfon® Baffle Strip**
High performance sound absorption strip
Dimensions: 15mm x 75mm x 1200mm

Ⓕ **CELLECTA AF100 Fixing**
Length: 100mm long
Drill diameter required: 8mm

Resilient overlay platform floor

③ **ScreedBoard® 28**
High density acoustic overlay board (26kg/m²)
Dimensions: 28mm x 600mm x 1200mm

④ **YELOfon® FS50**
Preformed flanking strip:
6mm x 50mm x 30mm x 2m



Additional items required to complete treatment
CELLECTA Pro Adhesive - ScreedBoard joint adhesive
○ 50mm **CELLECTA FIBREfon Micro 50** non-itch polyester quilt
● 100mm (min) mineral wool 45kg/m³

Table 2TM.02b

Ceiling Options

Ceiling boards must not penetrate or touch joists
30mm **CELLECTA HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres.

Ceiling treatment
CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m²) fixed with 32mm screws and 12.5mm (nominal 10kg/m²) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Sacrificial ceiling (optional):
Metal ceiling system with a 150mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.

Separating wall

Airborne
52dB $D_{nT,w} + C_{tr}$

Separating floor

Airborne	*Impact*
51dB $D_{nT,w} + C_{tr}$	53dB $L_{nT,w}$

Acoustic Performance

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Approvals and Certification

CRD Candidate Treatment No.181 & 182

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recycled(1) Gypsum

zero ODP

Solid masonry wall

CELLECTA HiGYP® 28 composite acoustic wall lining
Suitable for new and existing solid aircrete and aggregate block walls

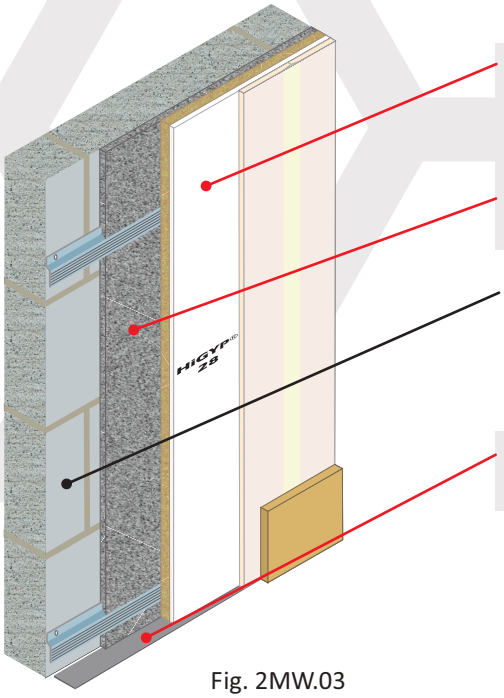


Fig. 2MW.03

Wall treatment	**CELLECTA HiGYP® 28** fixed to 16mm resilient bars set at 600mm (max) centres (See Table 2MW.01 for options)
Sound absorbing material	15mm **CELLECTA FIBREfon® Micro 15** quilt fitted between resilient bars
Masonry wall	• 100mm (min) aircrete block (600kg/m^3) • 100mm (min) aggregate block (1350 - 2300kg/m^3), open-faced side sealed with a 13mm parge coat (min 10kg/m^2)
Perimeter flanking strip	5mm **CELLECTA C-strip** self-adhesive acoustic foam strip

Table 2MW.01

Installation Options

1. **HiGYP® 28** High performance, acoustic lining board
   Dimensions: 28mm x 1200mm x 2400mm
   Weight: 18.84kg/m² / 54.26kg/sheet
2. **FIBREfon® Micro 15** Non-itch sound deadening quilt
   Dimensions: 15mm x 600mm x 1200mm
3. **CELLECTA C-strip** Perimeter flanking strip
   Dimensions: 5mm x 75mm x 10m

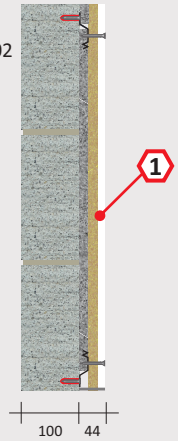
Solid masonry wall
(without any wall treatment)

Fig. 2MW.01

Airborne
40dB R_w
37dB $R_w + C_{tr}$

One face lined (opt.1)
HiGYP 28 fixed to resilient bars at 600mm centres.
Cavity filled with **FIBREfon Micro 15**.

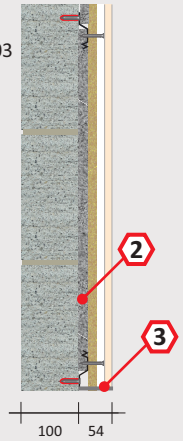
Fig. 2MW.02



Airborne
55dB R_w
48dB $R_w + C_{tr}$
Δ +11dB(1)

One face lined (opt.2)
HiGYP 28 fixed to resilient bars at 600mm centres, covered with 9.7mm plasterboard, taped and jointed or skimmed. Cavity filled with **FIBREfon Micro 15**.

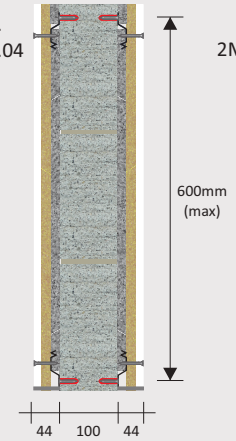
Fig. 2MW.03



Airborne
57dB R_w
50dB $R_w + C_{tr}$
Δ +13dB(1)

Both faces lined
HiGYP 28 fixed to resilient bars set at 600mm centres on both sides of the wall. Cavities filled with **FIBREfon Micro 15**.

Fig. 2MW.04



Airborne
59dB R_w
51dB $R_w + C_{tr}$
Δ +14dB(1)

Independent wall lining
HiGYP 28 fixed to 48mm metal frame, set 15mm off existing wall. Cavity filled with **FIBREfon Micro15**.

Fig. 2MW.05

Airborne
58dB R_w
53dB $R_w + C_{tr}$
Δ +16dB(1)

Acoustic Performance

Acoustic data quoted was achieved at Sound Research Laboratories, Sudbury, UKAS ref. 0444.
Airborne results tested in accordance with BS EN ISO 140-3: 1995 and rated in accordance with BS ISO 717-1: 1997.
(1) dB ($R_w + C_{tr}$) improvement over masonry base wall
R_w value suitable for partition wall applications
$R_w + C_{tr}$ value suitable for separating wall applications

Note. Professional advice should be sort to ensure the overall wall construction complies with current fire regulations.

Third Party Accreditation and Approvals

SRL Performance Tested
bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Quilt
zero ODP

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Timber stud walls

CELLECTA HiGYP® 28 composite acoustic wall lining
Suitable for new and existing timber stud walls
Acoustic treatment indirectly fixed to timber studs

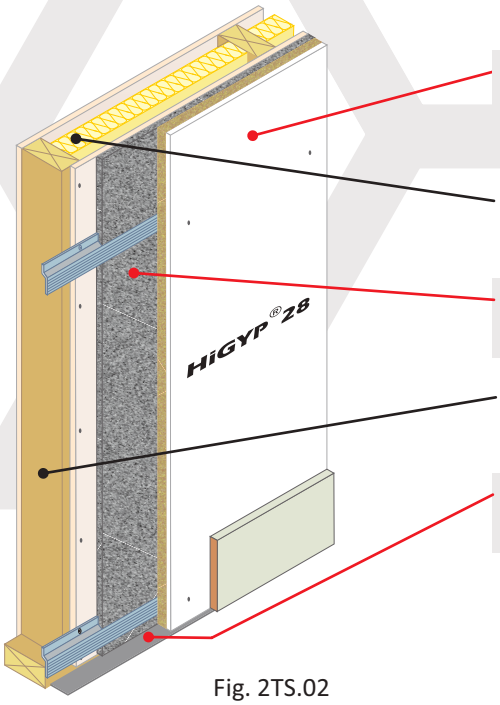


Fig. 2TS.02

Wall treatment	CELLECTA **HiGYP® 28** fixed to 16mm resilient bars set at 600mm (max) centres (See Table 2TS.01 for options)
Sound absorbing material	25mm (min) - 50mm (max) mineral wool (10 - 45kg/m^3) between studs
Sound absorbing material	15mm CELLECTA **FIBREfon® Micro 15** fitted between resilient bars
Timber stud wall	89mm (min) x 38mm timber stud wall, set at 600mm (max) centres
Perimeter flanking strip	5mm CELLECTA **C-strip** self-adhesive acoustic foam strip

Table 2TS.01

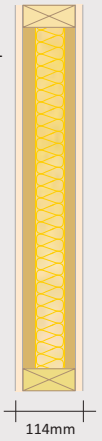
Installation Options

1. **HiGYP® 28** High performance, acoustic lining board
   Dimensions: 28mm x 1200mm x 2400mm
   Weight: 18.84kg/m² / 54.26kg/sheet
2. **FIBREfon® Micro 15** Non-itch sound deadening quilt
   Dimensions: 15mm x 600mm x 1200mm
3. **CELLECTA C-strip** Perimeter flanking strip
   Dimensions: 5mm x 75mm x 10m

Timber stud wall

89mm x 38mm timber studs at 600mm centres 25-50mm mineral wool fitted in between studs. 12.5mm plasterboard (8kg/m^2) fixed to both sides.

Fig. 2TS.01

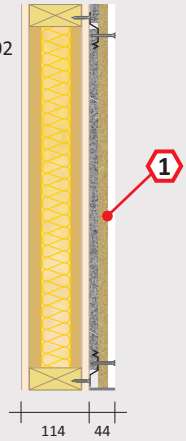


Airborne
40dB R_w
35dB $R_w + C_{tr}$

One face lined (opt.1)

HiGYP 28 fixed to resilient bars set at 600mm (max) centres fixed to one face of the existing timber stud wall. Cavity filled with **FIBREfon Micro 15**.

Fig. 2TS.02

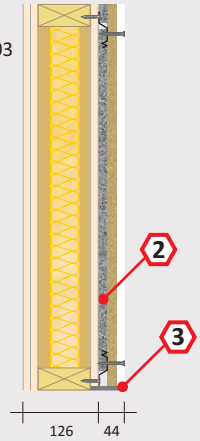


Airborne
54dB R_w
45dB $R_w + C_{tr}$
Δ +14dB[1]

One face lined (opt.2)

HiGYP 28 fixed to resilient bars set at 600mm (max) centres fixed to one face of the existing timber stud wall. Cavity filled with **FIBREfon Micro 15**. + Additional 12.5mm platerboard on one face.

Fig. 2TS.03



Airborne
56dB R_w
49dB $R_w + C_{tr}$
Δ +16dB[1]

Lined both sides

HiGYP 28 fixed to resilient bars set at 600mm (max) centres on both sides of the timber stud. **FIBREfon Micro 50** fitted between studs.

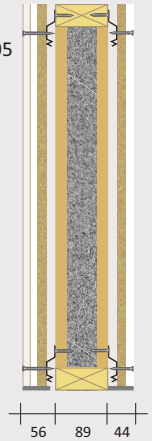
Fig. 2TS.04

Airborne
58dB R_w
49dB $R_w + C_{tr}$
Δ +18dB[1]

Lined both sides

HiGYP 28 fixed to resilient bars set at 600mm (max) centres on both sides of the timber stud. **FIBREfon Micro 50** fitted between studs. + Additional 12.5mm plasterboard to one face.

Fig. 2TS.05



Airborne
60dB R_w
52dB $R_w + C_{tr}$
Δ +20dB[1]

Acoustic Performance

Acoustic data quoted was achieved at Sound Research Laboratories, Sudbury, UKAS ref. 0444.
Airborne results tested in accordance with BS EN ISO 140-3: 1995 and rated in accordance with BS ISO 717-1: 1997.
[1] dB (R_w) improvement over timber stud base wall
R_w value suitable for partition wall applications
$R_w + C_{tr}$ value suitable for separating wall applications

Note. Professional advice should be sort to ensure the overall wall construction complies with current fire regulations.

Third Party Accreditation and Approvals

SRL Performance Tested
bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Quilt
zero ODP

Metal frame walls

CELLECTA HiGYP® 28 composite acoustic wall lining
Suitable for new and existing metal frame walls

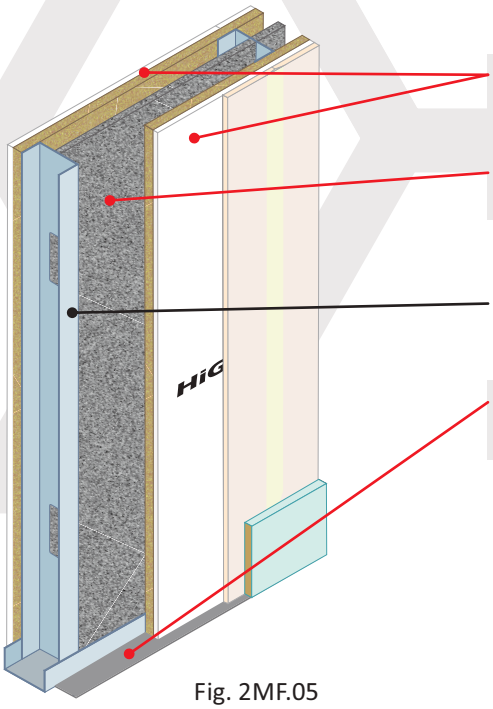


Fig. 2MF.05

Wall treatment	CELLECTA **HiGYP® 28** (See Table 2MF.01 for options)
Sound absorbing material	○ 15mm CELLECTA **FIBRE*fon*® Micro 15** non-itch acoustic roll ● 25mm mineral wool acoustic partition roll
Metal frame wall	70mm (min) metal frame wall. C-channel set at 400/600mm centres
Perimeter flanking strip	5mm CELLECTA **C-strip** self-adhesive acoustic foam strip

FASTRACKCAD ARCHITECTURAL CAD DATABASES

Available on bimstore.co

NBSPlus

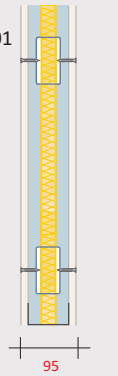
Table 2MF.01

Installation Options

1. **HiGYP® 28** High performance, acoustic lining board
   Dimensions: 28mm x 1200mm x 2400mm
   Weight: 18.84kg/m² / 54.26kg/sheet
2. **FIBRE*fon*® Micro 15** Non-itch sound deadening quilt
   Dimensions: 15mm x 600mm x 1200mm
3. **CELLECTA C-strip**
   Self-adhesive perimeter flanking strip
   Dimensions: 5mm x 75mm x 10m

Metal frame wall
(without any wall treatment)

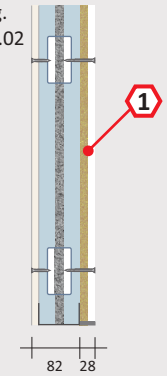
Fig. 2MF.01



Airborne
43dB R_w
34dB $R_w + C_{tr}$

Single face lined
HiGYP 28 fixed to one side of the metal frame.
FIBRE*fon* Micro 15 or 25mm mineral wool (APR) fitted in between C-studs, 12.5mm plasterboard (8kg/m²) fixed to second side.

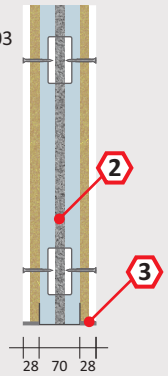
Fig. 2MF.02



Airborne
48dB R_w
40dB $R_w + C_{tr}$
Δ +5dB[1]

Double face lined
HiGYP 28 fixed to both sides of the metal frame.
FIBRE*fon* Micro 15 or 25mm mineral wool (APR) fitted in between C-studs.

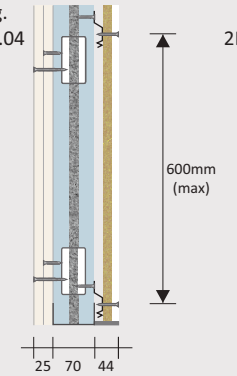
Fig. 2MF.03



Airborne
53dB R_w
44dB $R_w + C_{tr}$
Δ +10dB[1]

Single face lined and double plasterboard
HiGYP 28 fixed to resilient bars set at 600mm (max) centres
FIBRE*fon* Micro 15 or 25mm mineral wool (APR) fitted in between C-studs. Two layers of 12.5mm plasterboard (8kg/m²) fixed to second side.

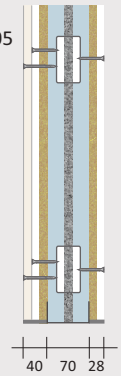
Fig. 2MF.04



Airborne
54dB R_w
45dB $R_w + C_{tr}$
Δ +11dB[1]

Double face lined + extra plasterboard
HiGYP 28 fixed to both sides of the metal frame.
FIBRE*fon* Micro 15 or 25mm mineral wool (APR) fitted in between C-studs. + Additional layer of 12.5mm gypsum-based board (8kg/m²) fixed to second face.

Fig. 2MF.05



Airborne
55dB R_w
46dB $R_w + C_{tr}$
Δ +12dB[1]

Acoustic Performance

Acoustic data quoted was achieved at Sound Research Laboratories, Sudbury, UKAS ref. 0444.
Airborne results tested in accordance with BS EN ISO 140-3: 1995 and rated in accordance with BS ISO 717-1: 1997.
[1] dB (R_w) improvement over metal frame base wall
R_w value suitable for partition wall applications
$R_w + C_{tr}$ value suitable for separating wall applications

Note. Professional advice should be sort to ensure the overall wall construction complies with current fire regulations.

Third Party Accreditation and Approvals

SRL Performance Tested

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Quilt

zero ODP

01634 29-66-77 cellecta.co.uk technical@cellecta.co.uk

Project
New hotel and apartments, apartments, Bournemouth

Type of Construction
Profiled steel/concrete composite deck

Project Size 14000m²

Product Installed
ScreedBoard® 20 **YELO*fon*® FS50**
FIBRE*fon*® 8
ScreedBoard® 28
FIBRE*fon*® 28C

Project
St Matthew's Primary and Nursery School, Plymouth

Type of Construction
Light gauge steel frame

Project Size
1850m²

Products Installed
Mojave® S1-8 UFH *System:*
(**ScreedBoard 20** + **XFLO 70mm** + **FIBRE*fon* 8** + **YELO*fon* ES5/120**)

Project
St Michaels Catholic School, Aylesbury

Type of Construction
In-situ concrete frame

Project Size
4500m²

Product Installed
Mojave® S1-10 UFH *System:*
(**ScreedBoard 20** + **XFLO 25mm** + **FIBREfon 10** + **YELO*fon* ES5/100**)

Project
New Village hotel, Portsmouth

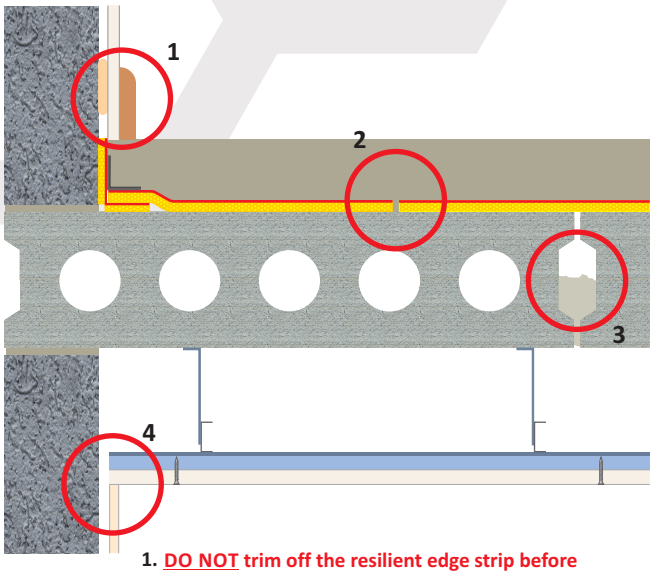
Type of Construction
Profiled steel/concrete composite deck

Project Size
900m²

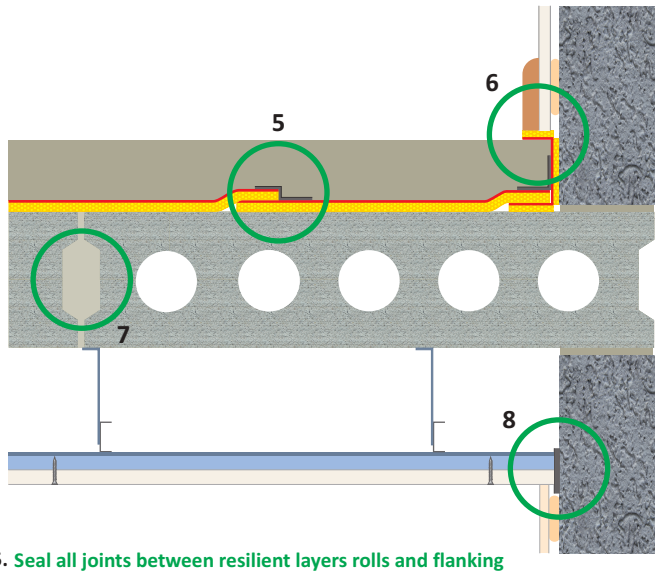
Product Installed
ScreedBoard® 30 composite acoustic overlay board
YELO*fon*® FS50

Eliminating Acoustic Flanking

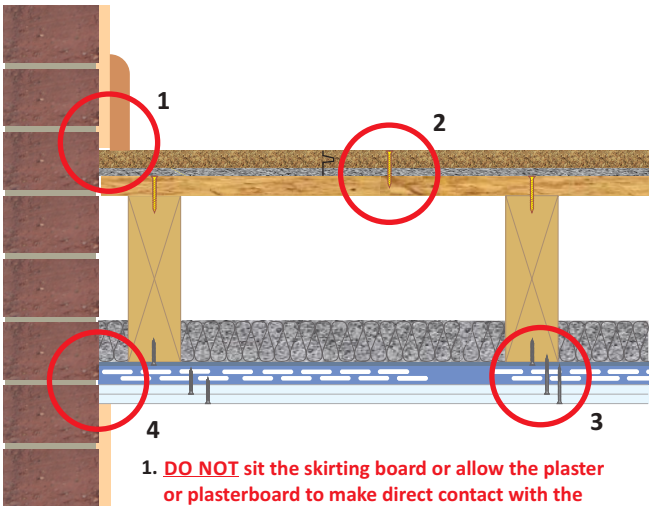
The acoustic efficiency of the floor and ceiling will be adversely affected should acoustic bridging between the floating layer/ceiling boarding and the surrounding structures occur (known as flanking transmission). All floor/ceiling finishes must be isolated from the surrounding walls (including plaster finish and skirting boards), door linings, services and other structural elements.
To address acoustic flanking, CELLECTA offers an extensive range of flexible extruded polyethylene acoustic flanking strips and tapes to suit each specific treatment.



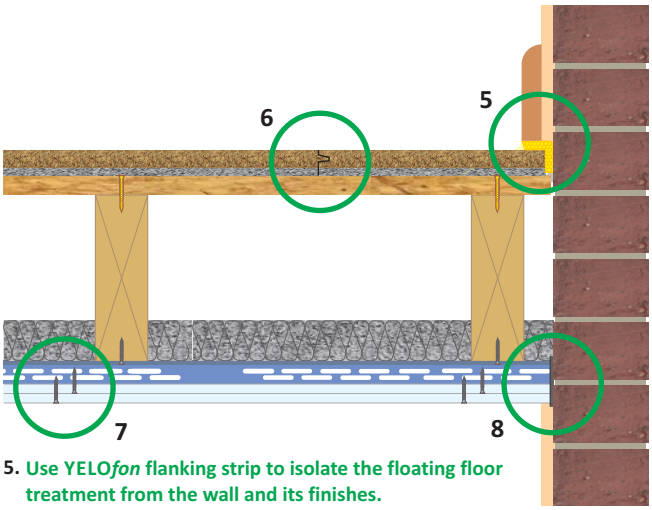
1. DO NOT trim off the resilient edge strip before installing the plaster, plasterboard and skirting board
2. DO NOT leave gaps in the resilient layer
3. DO NOT leave voids in the concrete floor
4. DO NOT leave any air gaps that would allow sound to travel down the wall



5. Seal all joints between resilient layers rolls and flanking strip with proprietary jointing tape to stop acoustic bridging
6. Use proprietary perimeter edge strip to isolate the wall treatment from the screed
7. Fill all voids in between or through the concrete floor with mortar
8. Apply a continuous horizontal ribbon of plaster adhesive at the head of the plasterboard, and isolate the ceiling treatment from the wall treatment with C-strip



1. DO NOT sit the skirting board or allow the plaster or plasterboard to make direct contact with the floating floor treatment.
2. DO NOT secure the floating floor treatment to the sub-floor or floor joists.
3. DO NOT screw the ceiling plasterboards to the floor joists
4. DO NOT butt the ceiling boards up to the wall



5. Use YELO*fon* flanking strip to isolate the floating floor treatment from the wall and its finishes.
6. Ensure the acoustic floor treatment is free floating and not fixed to the sub-structure or floor joists.
7. Use the correct length screws to ensure they do not make contact with the floor joists or retained ceiling
8. Apply a continuous horizontal ribbon of plaster adhesive at the head of the plasterboard, and isolate the ceiling treatment from the wall treatment with C-strip

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YELOfon® Perimeter Edge Strips

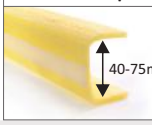
5mm thick, non-cross-linked, closed-cell polyethylene foam rolls

Product reference	Dimensions
ES5/15	5mm x **15mm** x 50m
ES5/60	5mm x **60mm** x 50m
ES5/100	5mm x **100mm** x 50m
ES5/120	5mm x **120mm** x 50m
ES5/150	5mm x **150mm** x 50m

10mm thick, non-cross-linked, closed-cell polyethylene foam rolls

Product reference	Dimensions
ES10/100	10mm x **100mm** x 50m
ES10/120	10mm x **120mm** x 50m
ES10/150	10mm x **150mm** x 50m

7mm thick, non-cross-linked, closed-cell polyethylene foam, with *Surebond* facing, folding flaps and self adhesive backing and jointing tape for **HD10+** rolls

Product reference	Dimensions
HD10+ Combi pack + 1 rolls **E-strip** 2 rolls **J-strip**	**E-strip:** 7mm x 200mm x 33.33m **J-strip:** 2.5mm x 75mm x 40m
	

6mm thick, non-cross linked, closed-cell polyethylene, "L" profiled perimeter flanking strips

Product reference	Dimensions
FS15	**15mm** x 30mm x 6mm x 2m
FS30	**30mm** x 30mm x 6mm x 2m
FS50	**50mm** x 30mm x 6mm x 2m

Environmental Credentials

GWP <5 | 100% Recyclable Foam | zero ODP

RUBBERfon® Edge Strip

5mm thick, non-cross-linked, closed-cell polyethylene foam rolls, slit, with self adhesive strip.

Product reference	Dimensions
RUBBER*fon* EDGE	5mm x 200mm x 50m
HG-tape High grab jointing tape	50mm x 50m

CELLECTA Self Adhesive Foam Tapes

2.5mm thick, closed cell polyethylene, self-adhesive acoustic foam jointing tape for **HD10+** rolls

Product reference	Dimensions
J-strip	2.5mm x 75mm x 40m

5mm thick, self-adhesive, cross-linked, closed-cell polyethylene foam, ceiling perimeter acoustic edge strip

Product reference	Dimensions
C-strip	5mm x 75mm x 40m

RUBBERfon® Threshold Support Strip

8mm thick recycled rubber strips used to provide additional support to floor treatment at a door threshold and where butt edge boards meet, reducing excessive flex, whilst maintaining acoustic performance

Product reference	Dimensions
TSS	**8mm** x 75mm x 1000mm
Compatible acoustic treatments	**DECK*fon* 17T** **DECK*fon* 26T** **DECK*fon* 30T** **DECK*fon* Q39** **ScreedBoard 28**

Environmental Credentials

GWP <5 | 100% Recycled Rubber | zero ODP

Ceiling Treatments

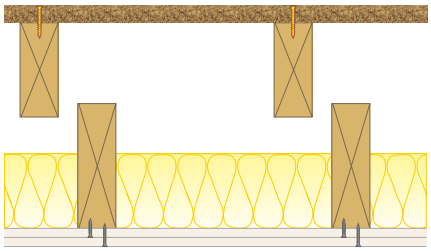
Introduction

The resistance to airborne sound depends mainly on the mass per unit area of the structural floor and partly on the ceiling's construction. It is therefore important to choose a ceiling treatment that complements the performance of the chosen structural floor, to produce an overall structure that exceeds the required dB values.
De-coupling the ceiling from the structural floor is an effective way of reducing the contact path that impact sound can follow. Adding mass in the way of plasterboard to the floor structure and filling the ceiling void with a sound absorbing quilt will also improve the acoustic performance of the structure.

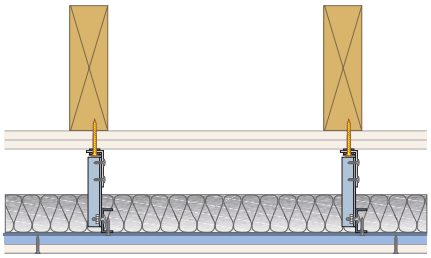
Listed below are three types of ceiling treatments available in order of performance.

Ceiling Treatment A: Independent ceiling

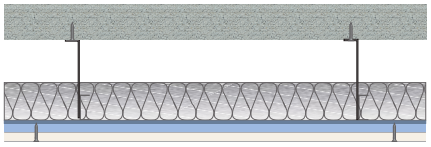
1) Independent joists
Cavity filled with 50mm CELLECTA **FIBRE*fon*® Micro 50** or 100mm mineral wool (10-45kg/m^3).



2) Proprietary metal frame suspended ceiling system[(1)] hung off CELLECTA **HP30** acoustic hangers.
Cavity filled with 50mm CELLECTA **FIBRE*fon*® Micro 50** or 100mm mineral wool (10-45kg/m^3).



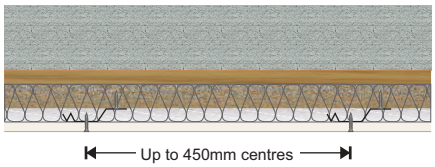
3) Proprietary metal frame suspended ceiling system[(1)]
Cavity filled with 50mm CELLECTA **FIBRE*fon*® Micro 50** or 100mm mineral wool (10-45kg/m^3).



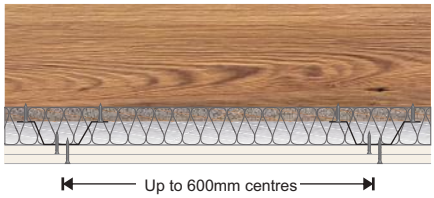
Notes
[(1)] The use of a better performing ceiling is permitted provided there is no significant flanking transmission.
Professional advice should be sort to ensure the overall floor construction complies with current fire regulations.

Ceiling Treatment B: Plasterboard on proprietary resilient bars with absorbing material

1) Proprietary resilient bars or CELLECTA **HP30** resilient bars fixed to timber battens.
Cavity filled with 50mm CELLECTA **FIBRE*fon*® Micro 50** or 100mm mineral wool (10-45kg/m^3).



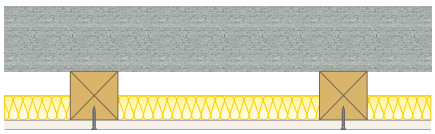
2) CELLECTA **HP30** resilient bars fixed to timber joists
Cavity filled with 50mm CELLECTA **FIBRE*fon*® Micro 50** or 100mm mineral wool (10-45kg/m^3).



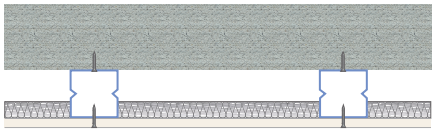
3) Proprietary metal frame suspended ceiling system[(1)]

Ceiling Treatment C: Plasterboard on timber battens or proprietary resilient channels with absorbing material.
Cavity filled with 15mm CELLECTA **FIBRE*fon*® Micro 15** or 25mm mineral wool (10-45kg/m^3).

1. Timber battens



2. Proprietary resilient channels



Further guidance is given in Approved Document E of the Building Regulations, Section 5 of the Scottish Building Standards and the Robust Details handbook.
The manufacturer of the proposed ceiling system should also be consulted.

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CELLECTA HP30

High Performance Resilient Bars

Product Information

CELLECTA **HP30** deep resilient bars virtually decouple the ceiling from the floor joists, and deliver superior acoustic performance over standard resilient bars. The bar's double fixing flanges allows high mass plasterboards to be installed, often eliminating the need for a secondary ceiling treatment.

Product Benefits

- Superior acoustic performance and hanging capabilities than standard resilient bars
- RD proprietary component for **E-FS-3, E-FT-5 & E-FT-6**
- Reduces risk of screws causing acoustic bridging
- Can be installed at 600mm centres

Technical Data

		HP30	*Standard resilient bar*
Product description	-	High performance double flange resilient bar	Single flange resilient bar
Depth	mm	**30**	**16, 17**
Length	mm	3000	3000
Number of fixing flanges	-	2	1
Max hanging weight: (joists at 450mm centres)	kg/m²	**59** @450mm centres **48** @600mm centres	**50** @450mm centres Not permissible @ 600mm Ø
Joists at 600mm centres	kg/m²	**48** @450mm centres **36** @600mm centres	**40** @450mm centres Not permissible @ 600mm Ø
Associated flanking strip required	-	CELLECTA **C-strip**	

Third Party Accreditation and Approvals

RD Proprietary Component

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

SRL Performance Tested

CELLECTA AH50

High Performance Acoustic Ceiling Hangers

Product Information

CELLECTA **AH50** acoustic hangers are manufactured from high gauge galvanised steel and incorporate a resilient rubber grommet and integral washer. They can be used in conjunction with an MF ceiling system or fixed to timber joist to increase the acoustic performance of a suspended ceiling.

Product Benefits

- Outstanding acoustic performance
- One size suits all applications
- Made from high gauge galvanised steel
- Robust Detail compliant component
- Quick and easy to install

Technical Data

		AH50
Product description	-	Acoustic hanger with integral rubber grommet and washer
Length	mm	**50**
Number of fixing holes	-	4
Quantity per box	-	100
Weight	g/each	40
Associated ceiling flanking strip	-	CELLECTA **C-strip**

Third Party Accreditation and Approvals

RD Compliant Component

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

DECK*fon*® Batten 45 & 70

Resilient Composite Acoustic Battens

Product Information

DECK*fon*® acoustic battens consist of a layer of recycled, low resonance, open-cell, flexible polyurethane foam bonded to a FSC® certified timber batten.
The battens have been rigorously tested, and are **Robust Detail** compliant for steel, concrete & timber separating floor applications.

Product Benefits

- Outstanding acoustic performance **Robust Detail FFT1** & **3** compliant
- Suitable for all types of separating floors
- Two heights available: 45 & 70mm*
- FSC® certified timber batten

Technical Data

		DECK*fon*®	
		Batten 45	**Batten 70**
Product description	-	Resilient composite shallow batten	Resilient composite deep batten
Design height* (when loaded to 25kg/m²)	mm	**45**	**70**
Pre-loaded height	mm	50	75
Batten dimensions	mm	45 (wide) x 2400 (long)	45 (wide) x 2400 (long)
Resilient layer	-	10mm open-cell polyurethane foam	10mm open-cell polyurethane foam
Weight	kg/lm kg/length	0.80 1.92	1.57 3.77
Associated flanking strip required	-	**YELO*fon* ES5/100**	**YELO*fon* ES5/120**

Third Party Accreditation and Approvals

RD Compliant Treatment — NHBC LABC warranty Premier Guarantee Accepted — bmtrada 2015 — SRL Performance Tested

Environmental Credentials

GWP <5 — 100% Recycled Foam — "Look for FSC Certified Products" FSC www.fsc.org FSC® C102871 The mark of responsible forestry

RUBBER*fon*® Cradles & Batten

Acoustic Floor Levelling System

Product Information

RUBBER*fon*® **Robust Detail FFT2** compliant acoustic **Cradles** utilise incremental high impact polypropylene plastic packers and elevation blocks to quickly and easily level an uneven structural floor. Softwood battens are then incorporated to support the floor decking board. The system also allows easy integration of an UFH system.

Product Benefits

- Outstanding acoustic performance
- **Robust Detail FFT2** compliant
- Levels all types of separating floors
- Three levelling packer: 2, 3, 5mm
- Two elevation blocks: 15 & 30mm

Technical Data

		RUBBER*fon*®	
		Cradles	**Timber Batten 40 & 65***
Product description	-	High impact polypropylene acoustic levelling cradle	Kiln dried, regularised, planed softwood
Dimensions	mm	10 x 100 x 100	40 x 45 x 2400 65 x 45 x 2400
Cradle height (when loaded to 25kg/m²)	mm	10	*Other sizes available upon request
Resilient pad composition	mm	Recycled re-bonded rubber crumb	
Associated flanking strip required	-	**YELO*fon* ES5/100**	

Levelling packers (recycled polypropylene)	2, 3, 5mm
Elevation blocks (recycled polypropylene)	15, 30mm

Third Party Accreditation and Approvals

RD Compliant Component — NHBC LABC warranty Premier Guarantee Accepted — bmtrada 2015 — SRL Performance Tested

Environmental Credentials

GWP <5 — 100% Recycled Polypro — "Look for FSC Certified Products" FSC www.fsc.org FSC® C102871 The mark of responsible forestry

FIBREfon® 12C, 21C & 28C

Composite Acoustic Overlay Floorboards for Concrete Floor Applications

Product Information

FIBRE*fon*® shallow platform floating floor treatments are **Robust Detail FFT 5** compliant, with their acoustic performance third party tested. All three treatments combine a tongue and groove timber floorboard with a high compressive strength resilient layer.

Product Benefits

- Excellent acoustic performance - **RD FFT 5** compliant
- Three thickness' available: 12, 21 & 28mm
- Moisture resistant T & G floorboard
- High compressive strength resilient layer
- Quick and easy to install

Technical Data

		FIBRE*fon*®		
		12C	**21C**	**28C**
Product description	-	Composite acoustic overlay floorboard	Composite acoustic overlay floorboard	Composite acoustic overlay floorboard
Overall thickness	mm	**12**	**21**	**28**
Type of facing board	-	9mm MR MDF	18mm P5 Chipboard	18mm P5 Chipboard
Resilient layer	-	3mm fleece	3mm fleece	10mm woodfibre
Board dimensions	mm	600 x 2400	600 x 2400	600 x 2400
Weight	kg/m² kg/board	6.95 10.00	13.50 19.44	15.20 21.89
Associated flanking strip required	-	YELO*fon* ES5/60	YELO*fon* FS30	YELO*fon* FS30

Third Party Accreditation and Approvals

RD Compliant Treatment

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

SRL Performance Tested

Environmental Credentials

GWP <5

100% Recyclable

zero ODP

FIBREfon® Micro 15 & 50

High Performance Non-Itch Sound Absorbing Quilts

Product Information

FIBRE*fon*® Micro 15 & **50** quilts are made from unique non-itch polyester micro fibres, which provide outstanding sound absorbency, resulting in only half the thickness of quilt being required compared to traditional mineral wool. Ideal for between joists, ceiling cavities & partition void applications.

Product Benefits

- Outstanding sound absorbency
- Half the thickness required compared to mineral wool
- Available in two thickness': 15mm and 50mm
- Suitable for ceiling and partition voids
- Robust Detail proprietary components

itch free

Technical Data

		FIBRE*fon*®	
		Micro 15	**Micro 50**
Product description	-	Non-itch, sound absorption quilt	Non-itch, sound absorption quilt
Thickness	mm	**15**	**50**
Composition	mm	>70% recycled polyester fibres	>70% recycled polyester fibres
Dimensions	-	600mm x 1200mm	3/400mm x 7.20m 2/600mm x 7.20m
Coverage (per pack/roll)	m²	18.00	8.64
Weight	kg/pack /roll	5.40 (pack)	5.18 (roll)

Third Party Accreditation and Approvals

RD Proprietary Component

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

SRL Performance Tested

Environmental Credentials

GWP <5

100% Recyclable

zero ODP

ScreedBoard® 20

High Density Overlay Board for Acoustic and Underfloor Heating Applications

Product Information

ScreedBoard® 20 is the ideal overlay floorboard for acoustic applications incorporating underfloor heating due to its rapid conduction properties, enabling the system to run more efficiently, saving on running costs and improving reaction times.

Product Benefits

- Looks and feels like screed
- Highly conductive - Perfect for UFH applications
- Suitable for all types of steel, concrete and timber floors
- Robust Detail proprietary treatment: **E-FS-3**, **E-FT-5**, **E-FT-6** and **FFT4** compliant
- Directly accepts tiles

Technical Data

		ScreedBoard® 20
Product description	-	High conductivity, inter-locking overlay floorboard
Thickness	mm	**20**
Composition	-	100% recycled high density gypsum & cellulose
Thermal resistance	m^2K/W	0.05
Edge profile	-	Interlocking tongue & groove
Board dimensions	mm	600 x 1200
Weight	kg/m^2 kg/board	25.00 18.00
Associated flanking strip options	-	**YELO*fon* FS15, 30, 50** **YELO*fon* ES5/120**

CLASS A1
BS EN13501-1

Third Party Accreditation and Approvals

RD Proprietary Component

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

SRL Performance Tested

Environmental Credentials

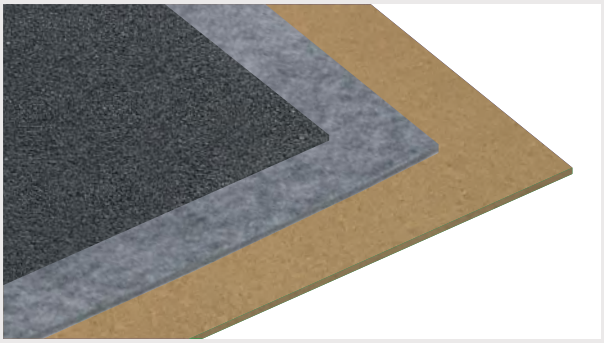
GWP <5

100% Recycled Gypsum

zero ODP

Mojave® Resilient Layers

High Performance Resilient Layers for Acoustic and UFH Applications



Product Information

To ensure a **Mojave®** underfloor heating system complies with acoustic performance standards CELLECTA offers three resilient layers:
RUBBER*fon*® 3 - Low profile, high load applications
FIBRE*fon*® 8*- Timber and metal joist floor applications
FIBRE*fon*® 10 - High load concrete floor applications

Product Benefits

- Excellent acoustic performance
- All three thickness' are Robust Detail **FFT4** compliant
- **FIBRE*fon*® 8*** proprietary resilient layer for **E-FS-3**, **E-FT-5** & **E-FT-6**

Technical Data

		RUBBER*fon*®	FIBRE*fon*®	
		3	8*	10
Product description	-	Resilient layer for concrete floor applications	Ultimate acoustic performance resilient layer	Resilient layer for concrete floor applications
Thickness	mm	**3**	**8**	**10**
Composition	-	100% Recycled rebonded rubber	70% Recycled polyester fleece	Woodfibre board
Board/roll dimensions	m	1 x 15	0.60 x 1.20	0.60 x 1.20
Weight	kg/m^2 kg/unit	2.25 33.75 (roll)	1.00 0.72 (board)	2.20 1.58 (board)
Floor type suitability	-	Concrete floors	Timber/metal joist floors	Concrete floors
Robust Detail compliance	-	**FFT4** (E-FS-1, E-FC-1 & E-FC-2)	**FFT4** (E-FS-1, E-FC-1 & E-FC-2) **E-FS-3** **E-FT-5** **E-FT-6**	**FFT4** (E-FS-1, E-FC-1 & E-FC-2)

Third Party Accreditation and Approvals

RD Proprietary* Treatment

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

SRL Performance Tested

Environmental Credentials

GWP <5

100% Recyclable Layers

zero ODP

ScreedBoard® 28

The Ultimate Acoustic Overlay Board for All Types of Separating Floors

Product Information

ScreedBoard® 28 is an award winning composite acoustic overlay treatment, featuring interlocking edges for installation convenience. Its high density and unique resilient layer provides unrivalled acoustic performance, typically 5dB better than legislative requirements.

Product Benefits

- Unrivalled performance - Robust Detail proprietary treatment: **E-FS-3**, **E-FT-5**, **E-FT-6** and **FFT4** compliant
- Suitable for all types of steel, concrete and timber floors
- Looks and feels like screed
- Directly accepts all types of floor covering, inc. floor tile

Technical Data

		ScreedBoard® 28
Product description	-	High density composite acoustic overlay floorboard
Thickness	mm	**28**
Facing Board	-	20mm **ScreedBoard 20** (interlocking, HD gypsum)
Resilient layer	-	8mm **FIBRE*fon* 8** acoustic fleece
Edge profile	-	Interlocking tongue & groove
Board dimensions	mm	600 x 1200
Weight	kg/m² kg/board	26.00 18.72
Associated flanking strip options	-	**YELO*fon* FS15, 30, 50**

CLASS B*fl*,S1 BS EN13501-1

Third Party Accreditation and Approvals

RD Proprietary Treatment · NHBC LABC warranty Premier Guarantee Accepted · bmtrada 2015 · SRL Performance Tested

Environmental Credentials

GWP <5 · 100% Recycled Gypsum · zero ODP

ScreedBoard® 30

The Ultimate Acoustic Overlay Board for Concrete Separating Floors

Product Information

ScreedBoard® 30 composite acoustic overlay treatment is designed specifically for concrete separating floors. The board's high density and superior compressive strength resilient layer provides outstanding acoustic performance and is an ideal base to accept a multitude of floor finishes.

Product Benefits

- Looks and feels like screed
- Compatible with all types of concrete floors
- Robust Detail **FFT4** compliant acoustic treatment
- Interlocking edge detail
- Accepts all types of floor coverings, inc. brittle finishes

Technical Data

		ScreedBoard® 30
Product description	-	Composite acoustic overlay floorboard
Thickness	mm	**30**
Facing board	-	20mm **ScreedBoard 20** (interlocking, HD gypsum)
Resilient layer	-	10mm **FIBRE*fon* 10** high load acoustic board
Edge profile	-	Interlocking tongue & groove
Board dimensions	mm	600 x 1200
Weight	kg/m² kg/board	27.20 19.58
Associated flanking strip options	-	**YELO*fon* FS15, 30, 50**

CLASS B*fl*,S1 BS EN13501-1

Third Party Accreditation and Approvals

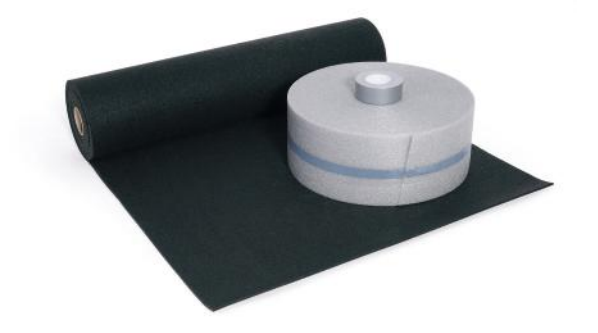
RD Compliant Treatment · NHBC LABC warranty Premier Guarantee Accepted · bmtrada 2015 · SRL Performance Tested

Environmental Credentials

GWP <5 · 100% Recycled Gypsum · zero ODP

RUBBERfon® Impact

High Density Under Screed Resilient Layers



Product Information

CELLECTA's **RUBBER*fon*® Impact** range of resilient layers are made from 100% recycled rubber to produce an isolation layer that provides an effective barrier to impact sound transmission through concrete separating floors, ensuring compliance with legislative requirements.

Product Benefits

- High impact sound reduction
- Robust Detail treatment **E-FC-18*** & **19***
- Available in 5 thickness': 3, 4, 5, 6* & 8mm
- Suitable for all types of concrete floors
- Made from high compressive strength recycled rubber

Technical Data

		RUBBER*fon*® Impact				
		3	**4**	**5**	**6***	**8**
Product description	-	High density re-bonded rubber crumb resilient layer				
Thickness	mm	**3**	**4**	**5**	**6**	**8**
Roll dimensions	m	1 x 15	1 x 12	1 x 10	1 x 8	1 x 6
Coverage	m²	15	12	10	8	6
Density	m³	750	750	750	750	750
Weight	kg/m² kg/roll	2.25 33.75	3.00 36	3.75 37.5	4.50 36.00	6.00 36.00
Associated flanking strip required	-	Not req'd	**RUBBER*fon* Edge** 5mm x 200mm x 50m			

Third Party Accreditation and Approvals

RD Proprietary* Treatment

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recycled Rubber

zero ODP

RUBBERfon® ULTRAtop 3 & 5

Acoustic Coverings for Concrete Floors

Product Information

RUBBER*fon*® ULTRAtop cork/rubber composite acoustic floor covering is the ideal barrier to address impact sound transmission on floors where either a LVT, vinyl, wooden flooring or tiling are to be applied directly on the acoustic treatment.

Product Benefits

- Excellent impact sound reduction
- Available in two thickness': 3** & 5*mm
- Robust Detail **E-FC-8*** & **18*** compliant
- Made from high compressive strength recycled rubber
- Compatible with all types of floor finish, inc ceramic tiles

Technical Data

		RUBBER*fon*® ULTRAtop	
		3**	**5***
Product description	-	High density re-bonded rubber & cork crumb resilient floor covering	
Overall thickness	mm	**3**	**5**
Roll dimensions	m	1 x 15	1 x 10
Coverage	m²	15	10
Density	m³	750	750
Weight	kg/m² kg/roll	2.25 33.75	3.75 37.50
Adhesive required to bond to floor structure	-	CELLECTA **HB724** adhesive	CELLECTA **HB724** adhesive

Third Party Accreditation and Approvals

CRD Candidate** Treatment No.284

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

SRL Performance Tested

Environmental Credentials

GWP <5

100% Recycled Rubber

zero ODP

**Pre-completion testing require prior to full Robust Detail status being awarded.

YELOfon® HD5

High Density, Closed-cell Polyethylene Foam

Product Information

YELO*fon*® HD5 is a lightweight, easy to install, non-cross-linked polyethylene foam, specifically designed to reduce impact noise through concrete floors with a floating screed. The product is Robust Detail **E-FC-8** compliant when used in conjunction with **XFLOOR 250** and **DECK*fon*® ULTRAlay 5**.

Product Benefits

- High impact sound deadening properties
- Only 5mm thick
- Easy to cut to size and install
- Ideal for floors incorporating an underfloor heating system

Technical Data

		YELO*fon*® HD5
Product description	-	Closed-cell, non-cross-linked resilient layer
Thickness	mm	**5**
Roll dimensions	m	1.5 x 75
Coverage	m²	112.5
Weight	kg/roll	16.88
Thermal conductivity	W/mK	0.045
Long term water absorption	%	<5 (after 28 days)

Third Party Accreditation and Approvals

RD Compliant Treatment

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Foam

zero ODP

YELOfon® HD10+ System

UK's No.1 High Performance Under Screed Resilient Layer

Over 12,500,000m² successfully installed

Product Information

YELO*fon*® HD10+ is an acclaimed resilient layer system that carries 3 proprietary Robust Details: **E-FC-5**, **17** & **18**. The *System* is lightweight, easy to install and delivers unrivalled acoustic performance when used to isolate a floating screed from a structural concrete floor.

Product Benefits

- Superior impact sound deadening properties
- Suitable for all types of concrete floors and screeds
- Supplied as a kit with 1 x E-strip and 2 x J-strips included
- Lightweight, easy to handle and install rolls
- Works in conjunction with underfloor heating

		YELO*fon*® HD10+ *System*		
		HD10+	**E-strip**	**J-strip**
Product description	-	*Surebond* faced resilient layer	Perimeter edge strip	Acoustic jointing tape
Thickness	mm	**10**	**7**	**2.5**
Roll dimensions	-	1.5m x 33.33m	200mm x 33.33m	75mm x 40m
Coverage	m²	50	N/A	N/A
Weight	kg/roll	18.0	1.75	0.54
Thermal conductivity	W/mK	0.045	0.045	0.037
Long term water absorption	%	<5 (after 28 days)	<5 (after 28 days)	<5 (after 28 days)

Third Party Accreditation and Approvals

RD Proprietary Treatment

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Foam

zero ODP

DECK*fon*® ULTRAlay 5

High Density Acoustic Floor Covering

Product Information

DECK*fon*® ULTRAlay 5 is high density acoustic floor covering, supplied in easy to handle rolls. When fully bonded to a concrete floor **ULTRAlay 5** will provide unrivalled impact sound reduction, ensuring compliance with legislative requirements.

Product Benefits

- Ultimate impact sound reduction
- Only 5mm thick
- **Robust Detail E-FC-8** compliant treatment
- Made from 100% recycled, recycled open-cell PU foam
- Quick and easy to lay. Cuts with a sharp knife

Technical Data

		DECK*fon*® ULTRAlay 5
Product description	-	High density acoustic floor covering
Thickness'	mm	5
Roll dimensions	m	1.2 x 10
Composition	-	Recycled open-cell polyurethane foam
Weight	kg/m² kg/roll	1.25 15.00
Associated flanking strip required	-	Not required
Associated flanking strip required	-	CELLECTA HB724 adhesive

Third Party Accreditation and Approvals

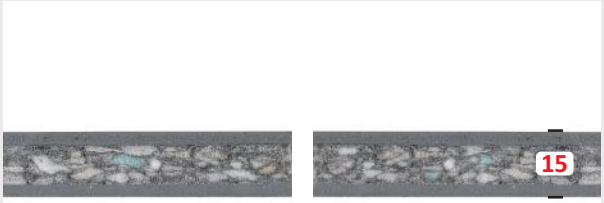
RD Compliant Treatment; NHBC LABC warranty Premier Guarantee Accepted; bmtrada 2015; SRL Performance Tested

Environmental Credentials

GWP <5; 100% Recycled Foam; zero ODP

DECK*fon*® ULTRAmat 15

High Density Composite Acoustic Overlay Mat



Product Information

DECK*fon*® ULTRAmat 15 high performance, three layer composite mat that will improve both the impact and airborne performance of a floor where there is limited room height available. Once laid, the mat can be covered with carpet or suitable wooden flooring.

Product Benefits

- High acoustic performance
- Only 15mm thick
- Suitable for all floor types
- High density: 15.8kg/m²
- Quick and easy to lay. Cuts with a sharp knife

Technical Data

		DECK*fon*® ULTRAmat 15
Product description	-	Composite high density acoustic mat
Thickness'	mm	15
Mat dimensions	mm	1200 x 1200
Facing (top on bottom)	-	3mm recycled PVC with density fillers
Resilient core	-	9mm flexible open-cell PU foam
Weight	kg/m² kg/mat	15.80 22.75
Associated flanking strip required	-	YELO*fon* ES5/15

Third Party Accreditation and Approvals

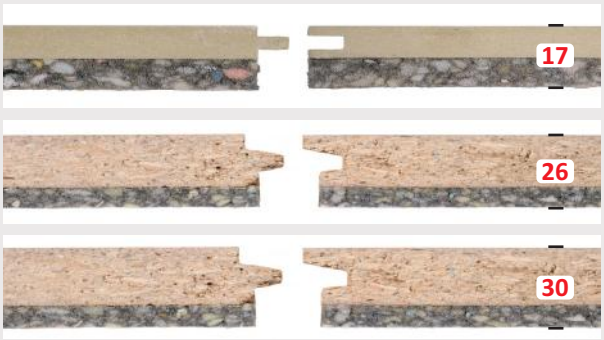
SRL Performance Tested; bmtrada 2015; PCT Treatment

Environmental Credentials

GWP <5; 100% Recycled Foam; zero ODP

DECK*fon*® 17T, 26T & 30T

Composite Acoustic Overlay Floorboards for Refurb and Conversion Appications



Product Information

DECK*fon*® composite overlays are the ideal acoustic treatment to improve the performance of an existing structural timber decked floor. All three treatments combine a tongue and groove timber floorboard with a low resonance, flexible resilient foam.

Product Benefits

- Excellent acoustic performance
- Three thickness' available: 17, 26 & 30mm
- Moisture resistant T & G floorboard
- Recycled resilient layer
- Quick and easy to install

Technical Data

		DECK*fon*®		
		17T	26T	30T
Product description	-	Acoustic overlay floorboard	Acoustic overlay floorboard	Acoustic overlay floorboard
Overall thickness	mm	17	26	30
Type of facing board	-	9mm MR MDF	18mm P5 Chipboard	22mm P5 Chipboard
Resilient layer	-	8mm open-cell PU foam	8mm open-cell PU foam	8mm open-cell PU foam
Board dimensions	mm	600 x 2400	600 x 2400	600 x 2400
Weight	kg/m² kg/board	7.25 10.44	13.80 19.87	16.00 23.04
Associated flanking strip required	-	YELO*fon* ES5/60	YELO*fon* FS30	YELO*fon* FS30

Third Party Accreditation and Approvals

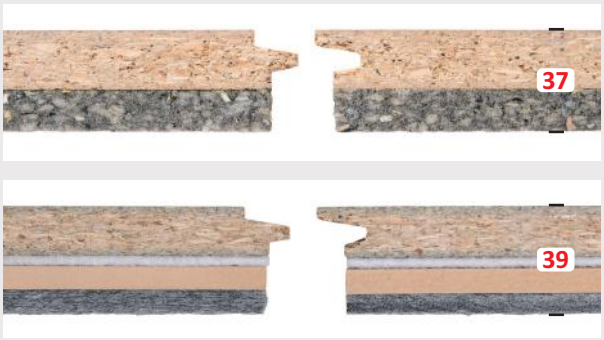
SRL Performance Tested · bmtrada 2015 · PCT Treatments

Environmental Credentials

GWP <5 · 100% Recycled Foam · zero ODP

DECK*fon*® 37T & Quattro 39

Direct to Joist Structural Deck Acoustic Floorboards



Product Information

CELLECTA **DECK*fon*®** structural acoustic composite floorboards are designed to be laid directly on the floor joists to provide outstanding sound proofing.
37T is designed for timber floors where a new ceiling is to be installed.
Quattro 39 is for floors where the existing ceiling is retained.

Product Benefits

- Excellent acoustic performance
- Two types available: **37T** (37mm) and **Q39** (39mm)
- Incorporate moisture resistant structural floorboard
- Recycled resilient layer
- Quick and easy to install

Technical Data

		DECK*fon*®	
		37T	Quattro 39
Product description	-	Direct to joist, two layer composite acoustic structural floorboard	Direct to joist, four layer composite acoustic structural floorboard
Overall thickness	mm	37	39
Type of facing board	-	22mm P5 chipboard	18mm P5 chipboard
Resilient layer(s)	-	15mm open-cell PU foam*	3mm fleece & 8mm fleece
Board dimensions	mm	600 x 2400	600 x 2400
Weight	kg/m² kg/board	16.70 24.05	20.95 30.17
Associated flanking strip required	-	YELO*fon* ES5/100	YELO*fon* ES5/100

Third Party Accreditation and Approvals

SRL Performance Tested · bmtrada 2015 · PCT Treatment

Environmental Credentials

GWP <5 · 100% Recycled foam · zero ODP

HiGYP® 28

High Performance Acoustic Composite Wall Boards

Product Information

Installing CELLECTA's **HiGYP® 28** high density composite wall boards will dramatically reduce airborne sound transmission through all types of existing and new build timber stud, metal frame and masonry walls.

Product Benefits

- Excellent acoustic performance
- Only 28mm thick
- High density gypsum facing
- Impact resistant
- Easy to cut to size and install

Technical Data

		HiGYP® 28
Product description	-	Acoustic composite wall lining board with high density facing
Overall thickness'	mm	**28**
Type of facing board	-	12.5mm thick high density gypsum
Absorbing layer	-	15mm thick LD woodfibre board
Board dimensions	mm	1200 x 2400
Weight	kg/m² kg/sheet	18.84 54.21
Associated flanking strip required	-	CELLECTA **C-strip**

Third Party Accreditation and Approvals

SRL Performance Tested

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

PCT Treatment

Environmental Credentials

GWP <5

100% Recyclable Woodfibre

zero ODP

HiGYP® 30TM & FIBREfon® Baffle Strips

High Performance Acoustic Composite Wall Boards & Acoustic Baffle Strips

Product Information

CELLECTA's **HiGYP® 30TM** acoustic wall lining treatment dramatically reduces airborne sound transmission through and down all types of masonry walls, with timber joist separating floors, by isolating the lining boards from the structural wall with patented acoustic **FIBREfon® Baffle Strips**.

Product Benefits

- Outstanding acoustic performance
- Overall thickness only 45mm (30mm + 15mm)
- Suitable for masonry walls with timber separating floors
- Provides 15mm cavity to run services within
- Patented system

Technical Data

		HiGYP® 30TM	FIBREfon® Baffle Strips
Product description	-	Acoustic composite wall lining board with high density facing	Sound absorbing, void forming baffles
Overall thickness'	mm	**30**	**15**
Type of facing board	mm	15mm thick high density gypsum	N/A
Resilient layer	mm	15mm thick LD woodfibre board	15mm thick LD woodfibre board
Dimensions	-	1200 x 2400	75 x 1200 (8 strips/30TM board)
Weight	kg/m² kg/unit	15.90 45.79	- 0.297
Associated flanking strip required	-	CELLECTA **C-strip**	N/A

Third Party Accreditation and Approvals

CRD Candidate Treatment No.181/182

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

Environmental Credentials

GWP <5

100% Recyclable Woodfibre

zero ODP

Note. Pre-completion testing required prior to full Robust Detail status being awarded.

HiDECK® Structural 25, 28 & 30

High Conductivity Structural Floorboard

Product Information

CELLECTA's **HiDECK® Structural** is a highly conductive structural floorboard ideal for acoustic batten & cradle and batten applications incorporating an underfloor heating system. The board's rapid heat transfer characteristics enables an UFH system to operate more efficiently, providing long term running cost savings.

Product Benefits

- Outstanding acoustic and fire performance
- Robust Detail proprietary floorboard for **FFT1**, **2** & **3**
- Low thermal resistance - Perfect for UFH applications
- Suitable for steel, concrete and timber floors
- Directly accepts all types of floor covering, inc. tiles

Technical Data

		HiDECK® Structural		
		25	28	30
Product description	-	Tongue and groove, high density gypsum, low thermal resistance structural floorboard		
Thickness'	mm	**25**	**28**	**30**
Thermal resistance	m^2K/W	0.0625	0.070	0.075
Bearing spacing (45mm wide)	mm	400 (max) centers	400 (max) centers	400 (max) centers
Board dimensions	mm	600 x 1200	600 x 1200	600 x 1200
Weight	kg/m^2 kg/board	31.25 22.50	35.00 25.20	37.50 27.00
Associated flanking strip required	-	**YELO*fon* ES5/120**	**YELO*fon* ES5/120**	**YELO*fon* ES5/120**

Third Party Accreditation and Approvals

RD Proprietary Component · NHBC LABC warranty Premier Guarantee Accepted · bmtrada 2015 · SRL Performance Tested

Environmental Credentials

GWP <5 · 100% Recycled Gypsum · zero ODP · CLASS A1

HEXATHERM® XFLOOR

High Compressive Strength, Closed-Cell Extruded Polystyrene Floorboard

Product Information

CELLECTA's **XFLOOR** insulation boards are up to 7x stronger that traditional soft expanded polystyrene (EPS) and typically 2 to 4 times stronger than PIR or Phenolic boards. Their long term resistance to compression makes them ideal for a multitude of residential, commercial, educational and healthcare underfloor heating applications.

Product Benefits

- Superior compressive strength 250 - 500kPa
- Excellent life-long thermal performance
- Closed cell structure
- Very low water absorption
- 100% Recyclable

Technical Data

		XFLOOR		
		250	300	500
Product description	-	Closed-cell XPS board	Closed-cell XPS board	Closed-cell XPS board
Strength at 10% compression	kPa	250	300	500
Thermal conductivity	W/mK	0.033	0.033 ≤80mm 0.034 >81mm	0.035
Temperature range	°C	-50/+75	-50/+75	-50/+75
Board size	mm	600 x 2500	600 x 2500	600 x 1250
Thickness' (other sizes manufactured to order)	mm	**20, 25, 30, 35**	**40, 50, 60, 75, 80, 90, 100, 120, 140, 160**	**50, 60, 75, 80, 100, 120 140, 160**

Third Party Accreditation and Approvals

RD Proprietary Component · NHBC LABC warranty Premier Guarantee Accepted · bmtrada 2015 · Building Insulation Products 0107

Environmental Credentials

GWP <5 · 100% Recyclable XPS · zero ODP

ISO 14001: 2004 BUREAU VERITAS Certification BE 009119-1

XFLO®

High Compressive Strength Underfloor Heating Floorboard

Product Information

XFLO® boards are made from high compressive strength extruded polystyrene able to withstand the rigours of the installation process as well as the long term loads imposed in residential and commercial applications. The boards are manufactured to suit the pipe diameter and spacing required to achieve the desired thermal output.

Product Benefits

- High resistance to compression - 250, 300 & 500kPa
- Manufactured to suit pipe and output requirements
- Works in conjunction with acoustic treatments

Technical Data

		XFLO®		
		250	300	500
Product description	-	High compressive strength underfloor heating board		Ultra strength UFH board
Strength at 10% compression	kPa	250	300	500
Thermal conductivity	W/mK	0.033	0.033	**0.035**
Temperature range	°C	-50/+75	-50/+75	-50/+75
Route sizes available (to suit pipe diameter)	mm	10, 12, 14, 15, 16, 18, 20	10, 12, 14, 15, 16, 18, 20	10, 12, 14, 15, 16, 18, 20
Pipe centres	mm	150, 200, 300	150, 200, 300	150, 200, 300
Board size	mm	600 x 2500	600 x 2500	600 x 1250
Thickness' (other sizes manufactured to order)	mm	**20, 25, 30, 35**	**40, 50, 60, 75**	**50, 60, 75**

Third Party Accreditation and Approvals

RD Proprietary Component

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

Building Insulation Products 0107 bmtrada

Environmental Credentials

GWP <5

100% Recyclable Foam

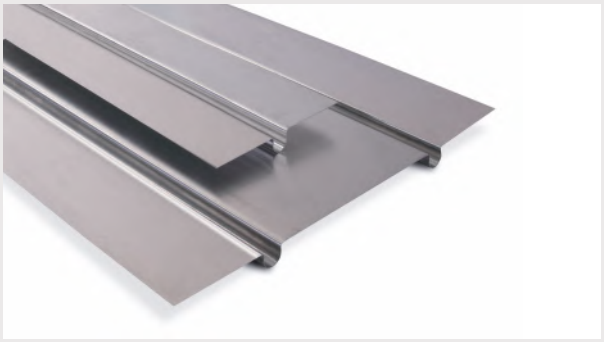
zero ODP

ISO 14001: 2004 BUREAU VERITAS Certification

BE 009119-1

ULTRAplate

Aluminium Heat Diffusion Plates



Product Information

CELLECTA's **ULTRAplates** are made from highly conductive aluminium. Plates are manufactured to suit the specific application, diameter of pipe and spacing required. When inserted into an **XFLO®** insulation board they provide outstanding homogenous transfer heat performance though to the floor's surface.

Product Benefits

- Highly conductive, increases the UFH's efficiency
- Made from high quality aluminum plate
- Manufactured to suit pipe diameter used
- Quick and easy to install
- 1, 2, 3 impressions

Technical Data

		ULTRAplate		
		1i	2i	3i
Product description	-	Aluminum heat diffusion plate		
Number of pipe impressions	-	1	2	3
Pipe diameters	mm	10, 12, 14, 15, 16, 20	10, 12, 14, 15, 16, 20	10, 12, 14, 15, 16, 20
Aluminium thickness	mm	0.05	0.05	0.05
Plate length	mm	1000	1000	1000
Standard plate width (other widths available subject to minimum quantities)	mm	130	390	390

Third Party Accreditation and Approvals

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

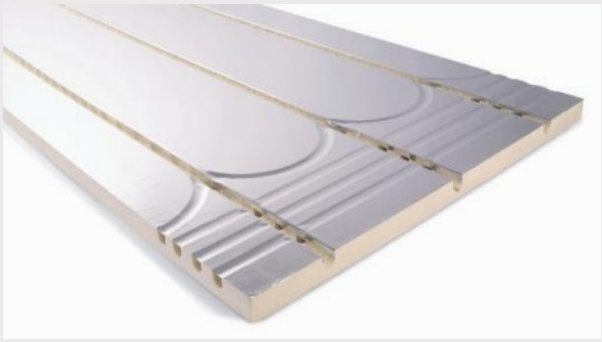
Performance Tested

Environmental Credentials

100% Recyclable

XFLO® FF

Foil Faced High Compressive Strength Underfloor Heating Floorboard



Product Information

XFLO® FF under floor heating insulation boards have a high compressive strength and aluminium foil facing for added thermal diffusion. The boards are manufactured to suit the pipe diameter and spacing required and once covered with **ScreedBoard® 20** provide a responsive heating solution for domestic and commercial applications.

Product Benefits

- High resistance to compression - 250, 300 & 500kPa
- Aluminum foil facing for improved heat diffusion
- Manufactured to suit pipe and output requirements

Technical Data

		XFLO® FF		
		250	300	500
Product description	-	Foil faced, high strength underfloor heating board		Ultra strength foil faced brd
Strength at 10% compression	kPa	250	300	500
Thermal conductivity	W/mK	0.033	0.033	0.035
Temperature range	°C	-50/+75	-50/+75	-50/+75
Route sizes available (to suit pipe diameter)	mm	10, 12, 14, 15, 16, 18, 20	10, 12, 14, 15, 16, 18, 20	10, 12, 14, 15, 16, 18, 20
Pipe centres	mm	150, 200, 300	150, 200, 300	150, 200, 300
Board size	mm	600 x 2500	600 x 2500	600 x 1250
Thickness' (other sizes manufactured to order)	mm	**20, 25, 30, 35**	**40, 50, 60, 75**	**50, 60, 75**

Third Party Accreditation and Approvals

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

ISO 14001: 2004 BUREAU VERITAS Certification BE 009119-1

Environmental Credentials

GWP <5

100% Recyclable Foam

zero ODP

XFLO® Micro

Low Profile, High Compressive Strength UFH Floorboards

Product Information

XFLO® Micro low profile under floor heating insulation boards have an ultra high compressive strength ideal for domestic and commercial flooring applications. Once covered with **ScreedBoard®** or a floor decking, they provide an effective solution to limited height underfloor heating projects.

Product Benefits

- Low profile, as thin as 15mm
- Ultra high compressive strength - 500kPa
- Manufactured to suit pipe and centres required
- Easy to cut to size and install
- Works in conjunction with acoustic treatments

Technical Data

		XFLO® Micro
Product description	-	Low profile, ultra high compressive strength, underfloor heating board
Strength at 10% compression	kPa	500
Thermal conductivity	W/mK	0.035
Temperature range	°C	-50/+75
Route sizes available (to suit pipe diameter)	mm	10, 12, 15, 16
Pipe centres	mm	150
Board size	mm	600 x 1200
Thickness'	mm	**15, 18, 20, 25**

Third Party Accreditation and Approvals

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

ISO 14001: 2004 BUREAU VERITAS Certification BE 009119-1

Environmental Credentials

GWP <5

100% Recyclable Foam

zero ODP

XFLO® Micro FF

Low Profile, High Compressive Strength UFH Floorboards with Conductive Facing

Product Information

XFLO® Micro FF low profile routed under floor heating insulation boards have an ultra high compressive strength and aluminium foil facing for added thermal diffusion. Once covered with **ScreedBoard®** or a floor decking, they provide an effective solution to limited height underfloor heating application.

Product Benefits

- Low profile, as thin as 15mm
- Aluminum foil facing for improved heat diffusion
- Ultra high compressive strength - 500kPa
- Manufactured to suit pipe and centres required
- Easy to cut to size and install

Technical Data

		XFLO® Micro FF
Product description	-	Aluminum foil faced, low profile, ultra high compressive strength UFH board
Strength at 10% compression	kPa	500
Thermal conductivity	W/mK	0.035
Temperature range	°C	-50/+75
Route sizes available (to suit pipe diameter)	mm	10, 12, 15, 16
Pipe centres	mm	150
Board size	mm	600 x 1200
Thickness'	mm	**15**, **18**, **20**, **25**

Third Party Accreditation and Approvals

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

ISO 14001: 2004 BUREAU VERITAS Certification BE 009119-1

Environmental Credentials

GWP <5 | 100% Recyclable Foam | zero ODP

XFLO® Micro TB

Low Profile, High Compressive Strength UFH Floorboards with Tiling Membrane

Product Information

XFLO® Micro TB boards are a patent pending, low profile, routed under floor heating insulation board with a unique facing membrane, that enables floor tiles to be directly adhered. The board's ultra high compressive strength enables it to withstand the rigours of both domestic and commercial applications.

Product Benefits

- Low profile, as thin as 15mm
- Ultra high compressive strength - 500kPa
- Manufactured to suit pipe and centres required
- Able to directly accept floor tiles
- Patent pending

Technical Data

		XFLO® Micro TB
Product description	-	Tile membrane faced, low profile, ultra high compressive strength UFH board
Strength at 10% compression	kPa	500
Thermal conductivity	W/mK	0.035
Temperature range	°C	-50/+75
Route sizes available (to suit pipe diameter)	mm	10, 12, 15, 16
Pipe centres	mm	150
Board size	mm	600 x 1200
Thickness'	mm	**15**, **18**, **20**, **25**

Third Party Accreditation and Approvals

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

ISO 14001: 2004 BUREAU VERITAS Certification BE 009119-1

Environmental Credentials

GWP <5 | 100% Recyclable Foam | zero ODP

XFLO® JB & JB-FF

Between Battens and Joists Underfloor Heating Floorboards

Product Information

XFLO® JB are designed to be installed between either timber floor joists or acoustic timber battens systems. **XFLO® JB-FF boards** have an aluminium foil facing for added thermal diffusion. Both boards are manufactured to suit the pipe diameter and spacing required to achieve the desired thermal output.

Product Benefits

- Fit between timber joists or battens
- Manufactured to suit pipe and spacing required
- Works in conjunction with CELLECTA's **Cradle** and **Batten** acoustic floor levelling system

Technical Information

		XFLO® Micro	
		JB	JB-FF
Product description	-	Between joist /batten UFH board	Foil faced between joist/batten UFH brd
Strength at 10% compression	kPa	250/300	250/300
Thermal conductivity	W/mK	0.033	0.033
Temperature range	°C	-50/+75	-50/+75
Route sizes available (to suit pipe diameter)	mm	10, 12, 15, 16, 18, 20	10, 12, 15, 16, 18, 20
Pipe centres	mm	150, 200	150, 200
Board sizes	mm	300 x 1250 350 x 1200	300 x 1250 340 x 1200
Thickness' (other sizes manufactured to order)	mm	**30, 40, 50**	**30, 40, 50**

Third Party Accreditation and Approvals

NHBC LABC warranty Premier Guarantee Accepted

bmtrada 2015

ISO 14001: 2004 BUREAU VERITAS Certification BE 009119-1

Environmental Credentials

GWP <5

100% Recyclable Foam

zero ODP

Mojave® System Combinations

S1-3

Layer	Product
1	ScreedBoard 20
2	ULTRAplate
3	XFLO, 250, 300, 500
4	RUBBER*fon* 3
Edge strip	YELO*fon* ES5/120
Robust Detail Compliance	
Steel floors	E-FS-1: FFT4
Concrete floors	E-FC-1 & 2: FFT4
Timber floors	PCT required

S1-8

Layer	Product
1	ScreedBoard 20
2	ULTRAplate
3	XFLO, 250, 300, 500
4	FIBRE*fon* 8
Edge strip	YELO*fon* ES5/120
Robust Detail Compliance	
Steel floors	E-FS-1: FFT4 E-FS-3
Concrete floors	E-FC-1 & 2: FFT4
Timber floors	E-FT-5 E-FT-6

S1-10

Layer	Product
1	ScreedBoard 20
2	ULTRAplate
3	XFLO, 250, 300, 500
4	FIBRE*fon* 10
Edge strip	YELO*fon* ES5/120
Robust Detail Compliance	
Steel floors	E-FS-1: FFT4
Concrete floors	E-FC-1 & 2: FFT4
Timber floors	PCT required

S2-3

Layer	Product
1	ScreedBoard 20
3	XFLO FF, 250, 300, 500
4	RUBBER*fon* 3
Edge strip	YELO*fon* ES5/120
Robust Detail Compliance	
Steel floors	E-FS-1: FFT4 E-FS-3
Concrete floors	E-FC-1 & 2: FFT4
Timber floors	E-FT-5 E-FT-6

S2-8

Layer	Product
1	ScreedBoard 20
3	XFLO FF, 250, 300, 500
4	RUBBER*fon* 3
Edge strip	YELO*fon* ES5/120
Robust Detail Compliance	
Steel floors	E-FS-1: FFT4 E-FS-3
Concrete floors	E-FC-1 & 2: FFT4
Timber floors	E-FT-5 E-FT-6

S2-10

Layer	Product
1	ScreedBoard 20
3	XFLO FF, 250, 300, 500
4	FIBRE*fon 8*
Edge strip	YELO*fon* ES5/120
Robust Detail Compliance	
Steel floors	E-FS-1: FFT4 E-FS-3
Concrete floors	E-FC-1 & 2: FFT4
Timber floors	E-FT-5 E-FT-6

Gobi® System Combinations

	C2-25	C2-28	C2-30
Layer	Product	Product	Product
1	HiDECK Structural 25	HiDECK Structural 28	HiDECK Structural 30
2	XFLO JB-FF	XFLO JB-FF	XFLO JB-FF
3	Timber batten	Timber batten	Timber batten
4	DECK*fon* Cradle	DECK*fon* Cradle	DECK*fon* Cradle
Edge strip	YELO*fon* ES5/120	YELO*fon* ES5/120	YELO*fon* ES5/120
Robust Detail Compliance			
Steel floors	E-FS-1: FFT2		
Concrete floors	E-FC-1 & E-FC-2: FFT2		
Timber floors	E-FT-1, & E-FT-2: FFT2		

Floor Finish Compatibility

CELLECTA's acoustic treatments can be covered with a multitude of commonly installed floor finishes, including carpet, tiles, luxury vinyl tiles (LVT), vinyl rolls and both engineered and solid wood flooring.

Acoustic Applications

	Floor finish								
CELLECTA acoustic treatment	Carpet	Carpet Tiles(1)	Ceramic Tiles(2)	Porcelaine Tiles(2)	Stone Tiles(3)	LVT(4)	Vinyl(4)	Engineered Wood(5)	Solid Wood(5)
ScreedBoard® 28	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡
ScreedBoard® 30	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡
DECK*fon*® 17T, 26T, 30T, 37T, Quattro 39	⬡	⬡				⬡	⬡	⬡	⬡
FIBRE*fon*® 12C, 21C, 28C	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡
DECK*fon*® ULTRAmat 15	⬡							⬡	⬡
DECK*fon*® ULTRAlay 5	⬡	⬡						⬡	⬡
RUBBER*fon*® ULTRAtop 3, 5	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡

Acoustic + UFH Applications

	Floor finish								
CELLECTA Acoustic + UFH treatment	Carpet	Carpet Tiles(1)	Ceramic Tiles(2)	Porcelaine Tiles(2)	Stone Tiles(3)	LVT(4)	Vinyl(4)	Engineered Wood(5)	Solid Wood(5)
Gobi® C1-25, 28, 30 & C2-25, 28, 30	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡
Mojave® S1-3 & S2-3	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡
Mojave® S1-8 & S2-8	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡
Mojave® S1-10 & S2-10	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡	⬡
DECK*fon*® Batten 70 + XFLO JB + HiDECK® Structural 25, 28, 30	⬡	⬡						⬡	⬡

Notes. Compatibility of floor finishes is provided as a guide. However, the floor covering manufacturer recommendations and relevant British Standards must be followed at all times.
(1) Further preparative measures maybe required when gluing carpet tiles.
(2) Use appropriate board primer and tile adhesive recommended by the tile manufacture/supplier.
(3) Use appropriate board primer, tile adhesive and decoupling mat recommended by the tile manufacture/supplier.
(4) Contact manufacturer for suitability and installation advice.
(5) Check with the manufacturer to see if proposed flooring is suitable for UFH applications.

⬡ Suitable

⬡ Contact CELLECTA for further advice

Installation Guides

To unsure CELLECTA's range of thermal insulation, acoustic treatments and underfloor heating systems are installed correctly, an extensive library of installation guides are available upon request.

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Adhesives & Floor Primer

CELLECTA PRO Adhesive: Multi purpose, moisture curing polyurethane (MCPU) joint adhesive

Bottle size	1kg
Typical coverage	33m²
Curing time	24 hours
Application	Bonding **HiDECK**, **ScreedBoard** & timber treatments T & G edges

CELLECTA *fon* Adhesive: Modified yellow PVA

Bottle size	1kg
Typical coverage	33m²
Curing time	24 hours
Application	Bonding timber treatments T&G edges

CELLECTA HB724 Adhesive: Water based dispersion adhesive for bonding treatments to concrete/screeded floors

Tub size	14kg
Typical coverage	≤46m²
Curing time	1 hour high grab 24 hours full bond
Application	Bonding floor coverings to base floors

CELLECTA MP60 Primer: Multi-purpose dispersion primer for preparation of surface prior to fixing floor tiles

Bottle size	5kg
Typical coverage	60m²
Curing time	24 hours
Application	Sealing high density gypsum boards

	Suitable Adhesive		
Acoustic treatment	**PRO**	***fon***	**HB724**
ScreedBoard® 20, 28, 30 boards	⬡		
HiDECK® 25, 28, 30 Structural boards	⬡		
DECK*fon*® 17T, 26T, 30T, 37T & Quattro 39 boards		⬡	
FIBRE*fon*® 12C, 21C & 28C boards		⬡	
XFLO® Micro, Micro FF & TB boards			⬡
DECK*fon*® ULTRAlay 5			⬡
RUBBER*fon*® ULTRAtop 3 & 5			⬡

Levelling Compounds

CELLECTA RL24 Rapid Drying Levelling Screed

Composition: Fibre reinforced levelling compound

Bag size	20kg
Typical coverage	4m² @ 3mm
Drying time	Foot traffic 2 hours @ 3mm
Installation of floor finish	≤3mm - 24 hours >3mm - 24 hrs/mm

CELLECTA FC180 Feathering Coat

Composition: Calcium sulphate repair compound

Bag size	20kg
Typical coverage	13m² @ 1mm
Drying time	45min @ 3mm
Installation of floor finish	2 hours @ 3mm

Fixings and Washers

CELLECTA AF100 Acoustic Wall Lining Fixings

Length Drill size	100mm 8mm
Quantity per box	100
Application	Securing acoustic wall lining insulation boards

CELLECTA FW35 Perforated Counter Sunk Washers

Diameter	35mm
Quantity per box	100
Application	Helping secure insulation boards and treatments

Fixing tools

ScreedBoard® Fixing Batten

Application	Fitting **ScreedBoard 20** **ScreedBoard 28** **ScreedBoard 30**

Floor Board Pull Bar

Application	Fitting **ScreedBoards** **HiDECK Structural** Timber treatments

Building Regulations

Legislation

HM Building Regulations - Approved Document E: Resistance to the passage of sound, 2010 edition

HM Building Regulations - Approved Document L1A & L1B: Conservation of Fuel and Power in Dwellings

HM Building Regulations - Approved Document L2A & L2B: Conservation of Fuel and Power in Buildings Other Than Dwellings

Scottish Building Standards - Section 5: Noise

Scottish Building Standards.- Section 6: Energy

Welsh Government Building Regulations - Approved Document E: Resistance to the passage of sound, 2010 edition

Welsh Government Building Regulations - Approved Document L1A & L1B: Conservation of Fuel and Power in Dwellings

Welsh Government Building Regulations - Approved Document L2A & L2B: Conservation of Fuel and Power in Buildings Other Than Dwellings

BS EN ISO 13370: 2017 - Thermal performance of buildings: heat transfer via the ground: Calculation Methods

EN 12667: 2001 - Thermal performance of building materials and products. Determination of thermal resistance by means of guarded hot plate and heat flow meter methods. separating floor

BS EN ISO 717-1: 2013 - Acoustics. Rating of sound in buildings and of building elements

BS EN 13164:2012+A1: 2015 - Thermal insulation products for buildings. Factory made extruded polystyrene foam (XPS) product specification

BS EN 826:2013 - Thermal insulating products for building applications: Determination of compression behaviour

BS EN 12087:2013 - Thermal insulating products for building applications. Determination of long-term water absorption by immersion

BS EN 12088:2013 - Thermal insulating products for building applications. Determination of long-term water absorption by diffusion

BS EN ISO 11925-2:2010 - Reaction to fire tests. Ignitability of products subjected to direct impingement of flame. Single-flame source test

BS EN 13501-1:2007+A1:2018 - Fire classification of construction products and building elements. Classification using test data from reaction to fire tests

Glossary

Impact sound
Sound resulting from direct impact on a building element such as from foot traffic

Airborne sound
Sound propagating through the air, often linked to noise sources such as music centres, televisions and speech

Flanking transmission
Sound transmitted between rooms via flanking elements instead of directly through separating elements or along any path other than the direct path

Resilient layer
A layer that isolates a floating layer from a base floor and surrounding walls

$D_{nT,w} + C_{tr}$
Weighted standardised level difference which characterises the airborne sound insulation between two rooms using spectrum adaptation term (N°.2) from BS EN ISO 717-1: 2013

C_{tr}
Spectrum adaptation term (N°.2) from EN ISO 717-1: 2013 to take into account of a specific spectrum (which are predominantly low frequency based)

R_w
A single-number quality (weighted) which characterises the airborne sound insulation of a building element from measurements undertaken in a laboratory in accordance with BS EN ISO 717-1: 2013

$L_{nT,w}$
Weighted standardised impact sound pressure level. A single-number quantity (weighted) to characterise the impact sound insulation of floors.
Refer to BS EN ISO 140-7 1998

***rd* ΔL_w**
This is specific to Robust Details and is the measured improvement of impact sound, resulting from the installation of a floating floor treatment on a test floor in a UKAS accredited acoustic laboratory

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Further Information

CELLECTA and The Environment

CELLECTA operates a progressive, sustainable environmental policy, with all our insulation products manufactured under **ISO 9001** & many under **14001** management controls. We use materials that, where possible are made from recycled materials and are recyclable.

Architectural Drawings

Architects and designers can quickly and easily insert CELLECTA insulation products into their drawings by either downloading the specific detail from CELLECTA's web site or contacting CELLECTA's technical team who will email the relevant **FASTRACKCAD** or **BIMstore** file.

Specification Clauses

Architects, designers and specifiers can quickly and easily insert CELLECTA insulation products into their specification document, by either downloading the specific NBS clause from CELLECTA's website, contacting the technical team on 01634 29-66-77 or email technical@cellecta.co.uk, who will email the relevant clause.

Installation Instructions

For detailed installation instructions and advice contact CELLECTA's technical team on 01634 29-66-77 or email technical@cellecta.co.uk

Fire Classification

Where possible CELLECTA's insulation boards contain fire retardant additives to inhibit accidental ignition. However, plastic foams and wood are combustible and may burn rapidly if exposed to intense fire.

HEXATHERM® - Euroclass **E***

ScreedBoard® 20, **HiDECK® Structural 25**, **28**, **30** - Euroclass **A1*** (non-combustable)

ScreedBoard® 28 & **30** - Euroclass **B*fl*,S1*** (limited combustibility)

*When tested in accordance with BS EN 13501-1: 2007 +A1: 2009

CE Marking

CE
EN 13164: 2012
+A1: 2015

HEXATHERM insulation boards are manufactured in accordance with European CE legislation

There is no CE marking requirements for acoustic treatments.

Product Packaging

CELLECTA acoustic products are packed or palletised in such a way that they arrive on site in pristine condition.

On-site Handling & Storage

CELLECTA polyethylene and XPS can be stored outside, but should be protected from long-term exposure to direct sunlight, otherwise surface degradation may occur. Acoustic battens and boards must be stored on level ground, in a dry environment, undercover and not stored outside.

Health and Safety

Copies of safety data sheets for all CELLECTA products are available upon request.

Notes

CELLECTA reserves the right to amend product specifications without prior notice. Colours shown are for illustration purposes. Product technical data stated is typical. The information included in this technical manual is based on CELLECTA's experience and is believed to be reliable. Decibel values quoted and applications illustrated are typical and should not be taken as a basis for design.

CELLECTA, as the manufacturer, has no control over the installation of its products. The purchaser should evaluate the product's suitability and is responsible for adhering to any laws or regulations in this respect, making the purchaser also liable for observing any third party rights.

100% Recyclable Paper

The paper used to produce this technical manual was produced in a mill that is both FSC and PEFC chain of custody certified, with all wood raw material originating from sustainable and controlled sources. Pulp was bleached without the use of elemental chlorine. Please recycle responsibly.

CELLECTA®
INNOVATION IN INSULATION

CELLECTA's extensive range of high performance underfloor heating, thermal and acoustic insulation products are supported by a technical advice line, staffed by experienced consultants who can provide a number of useful services including:

- U-value, condensation risk or imposed load calculations
- Advice on the most suitable products to use
- Issue detailed fixing instructions
- Arrange site surveys
- Technical specifications

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01634 22-66-30

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Other products available from CELLECTA:

HEXATHERM®
High Compressive Strength Thermal Insulation

TETRIS®
Thermal Block Flooring System

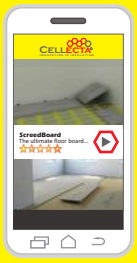
UNICLOSER X
Insulated Cavity Closer Solutions

RIBA NETWORK · CPD PROVIDERS

FASTRACK CAD
ARCHITECTURAL CAD DATABASES

Available on bimstore.co

NBS Plus



CELLECTA
Installation App