BB/G310321
March 2021

INSTALLATION GUIDE

CELLECTA®

Gobi®

Dry laid resilient cradle & batten levelling system incorporating UFH

- Installation guidelines
- Proven constructions
- Technical data sheets
- Top tips

Storage of Gobi®

All components of the **Gobi®** should be stored on a pallet in dry conditions on a dry, flat and level base.

If you are required to re-stack the boards or timber, we advise that they are stored on a pallet and are fully supported from the underside. Care should be taken not to damage the edges of the board whilst re-stacking.

Pallets of **HiDECK® Structural** must not be stacked on top of each other.

HiDECK® Structural, **XFLO® JB** and timber battens are supplied on pallets, wrapped in temporary protection. This covering is to offer dust protection and a temporary measure to protect the boards from the weather during the loading/unloading process, it is **not** a waterproof cover.

Gobi® is an internal product and should remain dry at all times. If the product is to be temporarily stored outside appropriate measures are required to protect the boards from moisture, such as a suitable waterproof tarpaulin or sheeting.

The stacking of the boards on their edges, should be avoided as this can lead to damage of the tongue and/or groove.

The system components must be left to acclimatise in the installation location for 48 hours prior to install.

Moisture Damage

Whilst **HiDECK® Structural** is a dimensionally stable product, even when wet, boards effected by moisture should be left to dry out completely on a level surface and be assessed for suitability before being installed.

Should the boards become saturated during storage or in-situ, we strongly advise contacting our technical department on 01634 296677 and arranging a site survey to review the products suitability.

Attention should be paid to all health & safety regulations. For Safety Data Sheets please contact the technical department.

CELLECTA is constantly reviewing all of its guidance and best practices and therefore reserve the right to alter specifications and guidance at any time and without notice.

The information contained in this document is based on CELLECTA's experience and represents best practices at the time of writing.

Pre-Installation

Before commencing installation, take time to familiarise yourself with the products and installation instructions. To complete the installation you will need the following items:

- **RUBBER*fon*® Cradles**
- 2/3/5mm **RUBBER*fon*® packers**
- **RUBBER*fon*® Elevation Blocks** (if required)
- Timber battens
- **HiDECK® Structural**
- **XFLO® JB* or JB-FF**
- **CELLECTA ULTRAplate***
- **Gobi® UFH Brackets**
- **YELO*fon*® Edge Strip**
- **Pro Adhesive**
- Laser or spirit level & Tape measure
- Hand or circular saw

Sub-Floor Preparation

Whilst it is not necessary to level a subfloor before installing the **Gobi®** system, it is important that any floor is dry and structurally sound.

Installation of RUBBER*fon*® Cradles

Starting in the far left hand corner of the room, place the first cradle 10mm away from both walls.

Install cradles around the perimeter of the floor at a **maximum** of 400mm centres, place 45mm wide timber battens into the cradle (depth to suit floor height required), ensure a cradle is installed to support the ends of the timber battens. Cradles along the timber should be placed at centres suitable for the loading of the floor (typically 600mm).

Utilsing a laser level, identify where the floor needs levelling and by how much, install the correct size depth of packer underneath the timber. **RUBBER*fon*® Packers** can be supplied in 2,3 & 5mm thickness and can be multi-stacked to achieve the required depth. Where possible, packers should run in the same direction as the batten.

If the **RUBBER*fon*®** cradle and packer is supporting multiple battens, ensure that all timber is sat on the packer.

For very uneven subfloors or to create a service void, utilise **RUBBER*fon*® Elevation Blocks** underneath the acoustic cradle to raise the floor system. These elevation blocks are designed to stack on top of each other to a **maximum** of 150mm.

For services that need to run through the floor ensure the batten is not in contact with the pipe.

Support the batten either side of the pipe with a **RUBBER*fon*® Cradle.**

Underfloor Heating Systems

When installing underfloor heating systems in between the battens, take time to familiarise yourself with the layout of the pipework and underfloor heating panels.

Install **Gobi®** underfloor heating brackets over the timber battens to support the **XFLO® JB** board. Position the brackets so that a minimum of three are supporting each **XFLO® JB** board, these are to be positioned 50mm in from each end and one in the centre to fully support the board.

If placing the battens at narrower centres than 400mm then use timber packers to raise the **XFLO® JB** to its desired location. For maximum performance the underfloor heating should be in contact with the underside of the **HiDECK® Structural**.

Install the first **XFLO®** board ensuring the returns meet the drawing provided by the underfloor heating system manufacturer.

Upon reaching the opposite corner rotate the **XFLO® JB** to utilise the return channels. Measure and cut the boards to suit using a sharp knife or fine toothed saw, leave all off cuts to one side as you may be able to utilise these later. Begin a new row, again taking care to line up the pipe channels.

Installation of RUBBER*fon*® Cradles (continued)

Continue installing the boards across the floor, ensuring the pipe channels line up and the routes are correctly positioned in accordance with the pipe layout.

TOP TIP - *Use a small off cut of pipe to ensure the pipe routes are in line.*

If using **XFLO® JB** and CELLECTA **ULTRAplate**, install these along the straight routes of the **XFLO® JB** starting 20mm away from the return, so as not to impede the return loops. Carefully press the **ULTRAplate** into the grooves, leaving a min. 5mm gap between each plate. Care should be taken to not to place to much pressure on the **Gobi® Bracket**.

Except the underfloor heating, its is important to ensure any services will not come in contact with the board once it is installed in the battens - if registering for ***Robust Detail*** the gap between the subfloor and **HiDECK® Structural** must be a minimum 50mm when the floor is loaded to 25kg/m² in accordance with the ***Robust Detail*** handbook.

It is important to carry out all required tests on the underfloor heating system, including pressure testing prior to fixing the overlay board in place.

Please contact our technical team for further advise on load capabilities, heat outputs or acoustic performance on 01634 296677.

Installation of HiDECK® Structural

Starting in the far left hand corner of the room, or the corner furthest away from the door, install the first **HiDECK® Structural** board at a 90 degree angle to the timber battens, ensuring that a gap of 6-8mm is left between the board and the wall.

TOP TIP - *Use suitable plastic packers instead of the **YELOfon® Edge Strip** to maintain the gap and avoid compression of the edge strip.*

Run a bead of CELLECTA **Pro Adhesive** along all grooves on the short edge of the installed **HiDECK® Structural** and interlock the next board, ensuring the joints are flush and the edges line up. Continue installing the boards until you get to the end of the row.

At wall abutments, measure the gap from the edge of the installed row to the wall allowing for a 6-8mm gap between the wall and the board.

Using a hand or circular saw cut the **HiDECK® Structural** to the required length. Although not hazardous, cutting of **HiDECK® Structural** can produce a fine dust, ensure a suitable face mask and dust extraction are used and cut the boards in a well ventilated area and in accordance with the product's Safety Data Sheet.

Install CELLECTA **Pro Adhesive** in to all grooves and install to complete the row, ensuring that there are no gaps between any of the boards. If the short edges of the board do not meet on a timber batten, install additional support underneath using an off cut of the batten system.

Installation of YELO*fon* Edge Strip

Remove the packing shims from around the edge of the room and install **YELO*fon*® Edging strip** around all perimeters to isolate the **HiDECK® Structural** from the wall and stop flanking transmission.

All plasterboard, as well as the skirting boards **must be** isolated from the **HiDECK® Structural** by the **YELO*fon*® Edge strip**, failure to do so may result in acoustic failure.

Any soil pipes or services that penetrate the **HiDECK® Structural** should be isolated from the board with edge strip.

Installation of YELO*fon* Edge Strip (continued)

TOP TIP - *If undertaking dry lining after the boards have been installed, care should be taken to protect the **HiDECK® Structural** from excessive point loads of further trades (ie. plasterboard trolleys). Should it be deemed necessary please seek further loading advise from a structural engineer.*

The completed floor should not be walked on for at least 24 hours to ensure that all adhesive has fully cured, under no circumstances should the underfloor heating system be used to cure the adhesive.

Partitions and thresholds

Any internal partitions built off the subfloor must be isolated from the floor treatment using the **YELO*fon*® Edge Strip**. Should lightweight, non-loadbearing partitions be build off the acoustic treatment, battens should be doubled up underneath for additional support.

At a door threshold, place one batten under the leading edge of the apartments floor deck and one under the communal areas floor deck, leaving a 5mm (min) gap between the overlay board. Ensure that any detail complies with the regulations set out in **Part B of building regulations (Fire Safety)**.

Sanitary Wear & Kitchen Units

Under high load areas, such as kitchen or bathrooms, bring the centres of the battens and/or cradles in to create a 300mm x 300mm grid. Should it be deemed necessary please seek further loading advise from a structural engineer.

Floor Finishes

Carpet

Underlays and carpet can be installed directly over the **HiDECK® Structural** without additional preparation. If bonding carpet tiles, follow the below steps to prime the floor prior to installation.

Wooden and laminate floors

Ensure any wood flooring is acclimatised to the room it will be installed in, in accordance with the manufactures guidance. Where possible wood flooring should be laid at a 90 degree angle to the **HiDECK® Structural**.

Allow suitable expansion joints around the perimeter of the room in line with the manufacturers advice.

If the flooring needs to be adhered to the **HiDECK® Structural**, the board will need priming using CELLECTA **MP60 Primer**.

Tiles

Before installing any tiles, take time to plan and review the installation guidelines from the tile manufacturer. All tiles should be installed in line with these and the relevant British Standards.

Prime and seal the floor using CELLECTA **MP60 Primer** to the clean dry surface using a long handled foam roller, do not pour directly onto the **HiDECK® Structural**. Allow to thoroughly dry (approx 2-4 hours).

Do not use in confined spaces without adequate ventilation and wear suitable clothing, gloves and face mask. For full details, see CELLECTA's Safety Data Sheets. Once dried, install the tile adhesive onto the primed **HiDECK® Structural** and install tiles in accordance with the manufacturers guidelines.

TOP TIP - *Where possible, tiles should be installed from the centre of the floor outward to ensure cuts are positioned against the perimeter of the room.*

For larger format tiles, speak to our technical team prior to commencing installation. For natural stone tiles a decoupling membrane may be required, please check with your tile manufacturer before installing.**Vinyl**
If installed correctly, **HiDECK® Structural** will give a seamless finish that can accept vinyl flooring directly. Remove any debris from the surface of the boards and scrape away any excess adhesive from the joints.

TOP TIP: *If installing any lining after the boards have been installed, care should be taken to protect the **HiDECK® Structural** from excessive point loads of further trades (ie. plasterboard trolleys). Should it be deemed necessary, **HiDECK® Structural** will give a smooth finish that can accept vinyl flooring directly. Remove any debris from the surface of the boards and scrape away any excess adhesive from the joints.*

The completed floor should not be walked on for at least 24 hours to ensure that all adhesive has fully cured, carefully check the floor should the underfloor heating system be used to cure the adhesive through the vinyl. For minor repairs mix CELLECTA **FC180** to the desired consistency with cold clean water - typically using 200ml of water to 1kg of powder. In a clean container, sprinkle in the CELLECTA **FC180** to the water whilst mixing vigorously until lumpy free. Apply as much as can be applied within 10-15 minutes. Spread the CELLECTA **FC180** mix evenly onto the areas in need of repair with a smoothing trowel. Leave for approx. 15 minutes and then re-work to smooth. Sand back any excess ridges that may show through the vinyl.

Floor Finishes (continued)

Sanding and Repairs

Painting and Wear & Kitchen Areas

Floor Finishes

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Allow suitable expansion joints around the perimeter of the room in line with the manufacturer's guidance.

If the flooring needs to be adhered to the **HiDECK® Structural**, the board will need priming using **MP60 Primer**.

Tiles

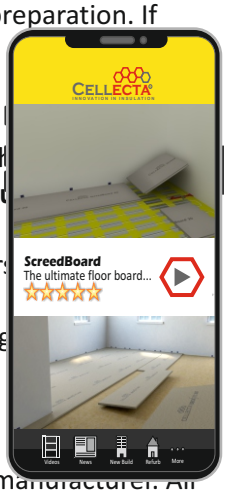
Before installing any tiles, take time to plan and review the installation guidelines from the tile manufacturer. All tiles should be installed in line with these and the relevant British Standards.

Need more installation help on site?

FREE services offered by CELLECTA:

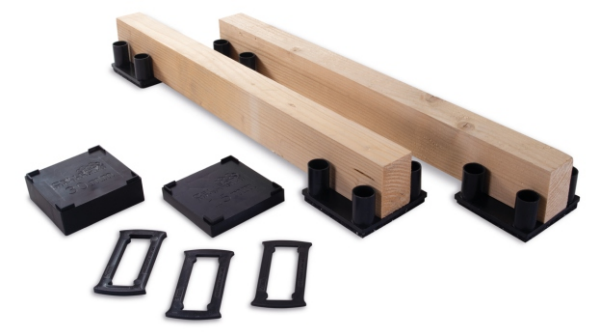
- Technical and installation advice
- Architectural drawings and NBS specs
- U-value and imposed load calculations
- Site surveys and take-off service
- Arrange acoustic testing
- Present RIBA certified CPD's

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



RUBBERfon® 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

"Look for FSC Certified Products"

GWP <5

100% Recycled Polypro

PEFC Certified

FSC

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/m² 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

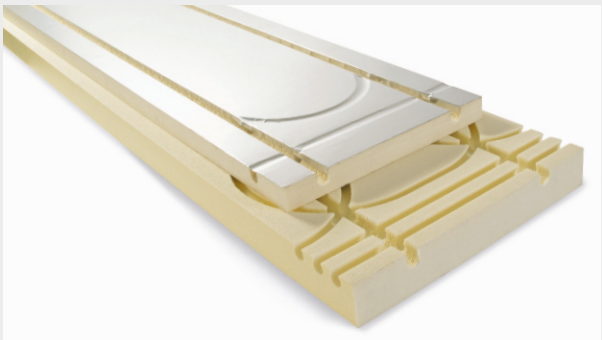
100% Recycled Gypsum

zero ODP

CLASS A1

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®	
		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

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