Pre-cast concrete plank separating floor

PCT solution to Robust Detail: E-FC-12

Screed laid on CELLECTA RUBBERfon® Impact 3 resilient layer

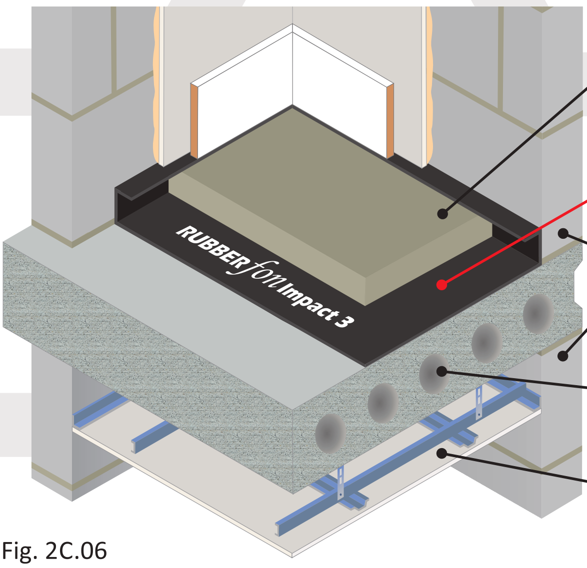

Fig. 2C.06

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

2 part resilient layer system
1. CELLECTA **RUBBERfon® Impact 3**
2. CELLECTA **HG-tape** high grab tape

External flanking walls
- 100mm (min) aggregate concrete block 1350-1600kg/m^3 or 1850-2300kg/m^3
- 100mm (min) aircrete block 450-800kg/m^3

Structural floor
- 150mm (min) pre-cast concrete floor plank
- 300kg/m^2 (min) mass per unit area

Ceiling
- See Table 2C.06b for ceiling treatment options

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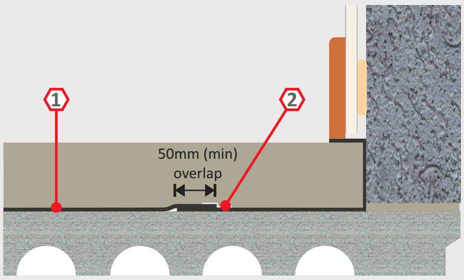
Table 2C.06a

Installation Options

Resilient layer laid under screed

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

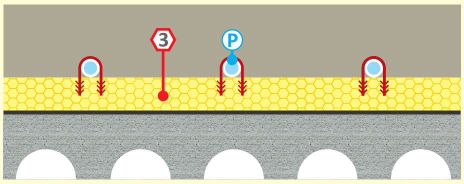
2 **CELLECTA HG-tape**
High grab jointing tape
Dimensions: 50mm x 50m



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

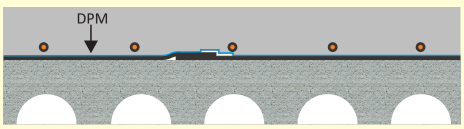
P UFH water pipe (by others)



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

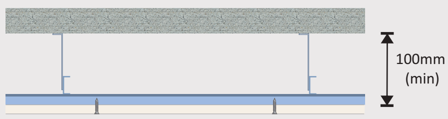
Table 2C.06b

Ceiling Treatment Options

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

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

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



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

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve required acoustic performance values.
RUBBERfon 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