

Separating floor - Steel-concrete composite

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

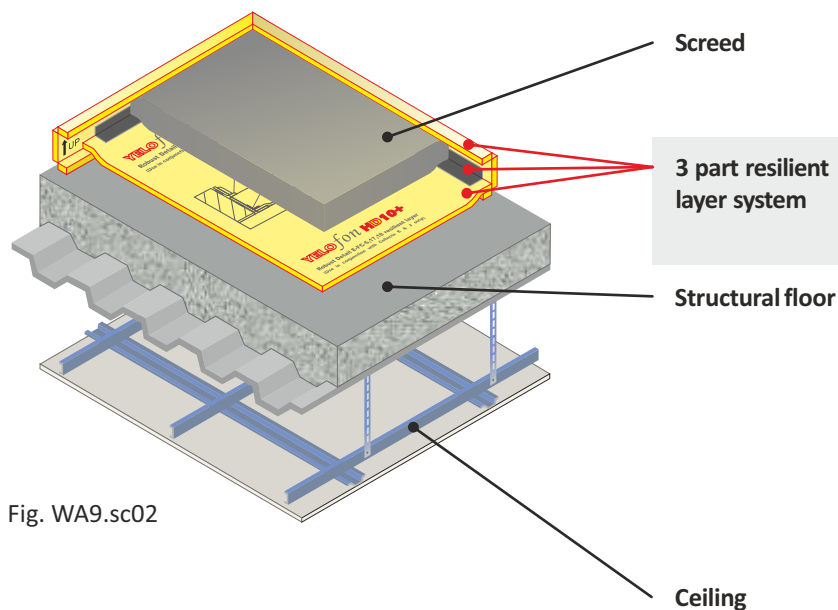


Fig. WA9.sc02

- 65mm (min) sand cement screed
- 40mm proprietary screed, nominal 80kg/m² mass per unit area

1. **CELLECTA YELOfon HD10+**
2. **E-strip** perimeter edge strip
3. **J-strip** acoustic joining tape

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)

See Table WA9.sc02b for ceiling treatment

Table WA9.sc02a

Installation Options

Resilient layer under screed

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

YELOfon® J-strip
Ultra high grab acoustic joining tape
Dimensions: 2.5mm x 75mm x 40m

YELOfon® E-strip
Self adhesive perimeter edge strip
Dimensions: 7mm x 200mm x 33m

Underfloor heating system within screed (with thermal insulation)

XFLOOR 250/300
250/300kPa high performance extruded polystyrene
Dimensions: 25-160mm x 600mm x 2500mm

Ensure fixing used to secure the UFH do NOT penetrate the HD10+

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 joints and lapping up around the perimeter by 150mm.

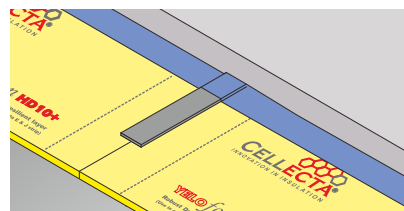
Table WA9.sc02b

Ceiling Treatment Options

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

300mm (min)

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 YELOfon E-Strip perimeter edge strip.

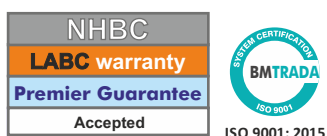


Acoustic Performance

Airborne:	54dB D_{nT,w} + C_{tr}	Building Regulations
Impact:	49dB 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

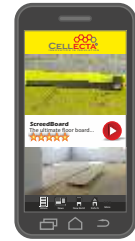


Environmental Credentials



Design & installation details - **YELOfon 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



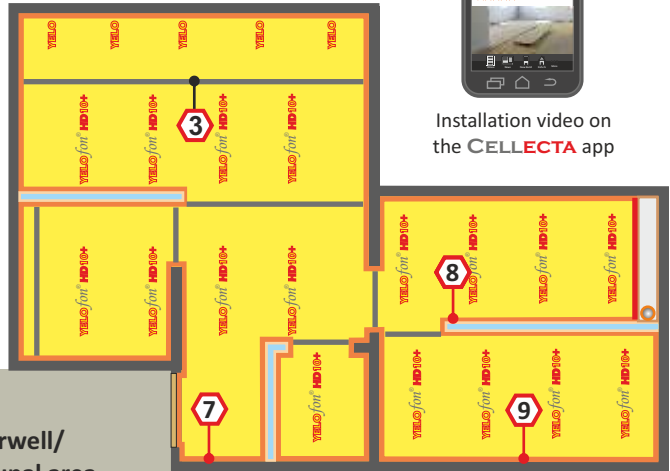
Installation video on the **CELLECTA** app

Partitions installed off the floor screed



E-strip MUST be fixed around floor perimeter, including around all blockwork walls that are built off the structural slab

Partitions installed before the floor finish is laid



E-strip MUST be fixed around floor perimeter, including around all partition walls that are built off the structural slab

1 Perimeter detail



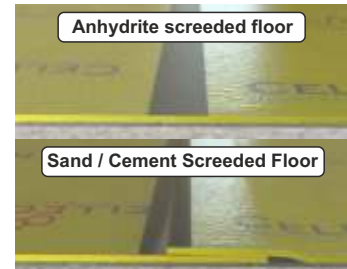
Around the whole floor perimeter stick the **E-strip** to the wall, folding up the bottom flap and overlap with the **HD10+** (by at least 40mm). Seal all joints with **J-strip**.

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 joint and seal joint with **J-strip** and cover **HD10+** with 500g 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** MUST be isolated from the screed by wrapped them in **E-strip** and sealing the joints with **J-strip**.

5 Services



Services should be secured to the structural slab with straps and covered with **HD10+**. Alternatively, they can be laid over the **HD10+** and held in position with **J-strip** until the screed is applied. Services that penetrate the resilient layer MUST be isolated from the surrounding structure by wrapping them in **E-strip**, and sealing all joints with **J-strip**.

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



Should partitions be built off the sub-floor, stick the **E-strip** to the partition, folding up its bottom flap. Overlap the **HD10+** and seal all joints and gaps with **J-strip**.

9 Wall treatments



Fold down the upper section of the **E-strip** and tape in position. Ensure **ALL** wall treatments including plaster, plasterboards, plaster adhesive and skirting boards are completely isolated from the screed.