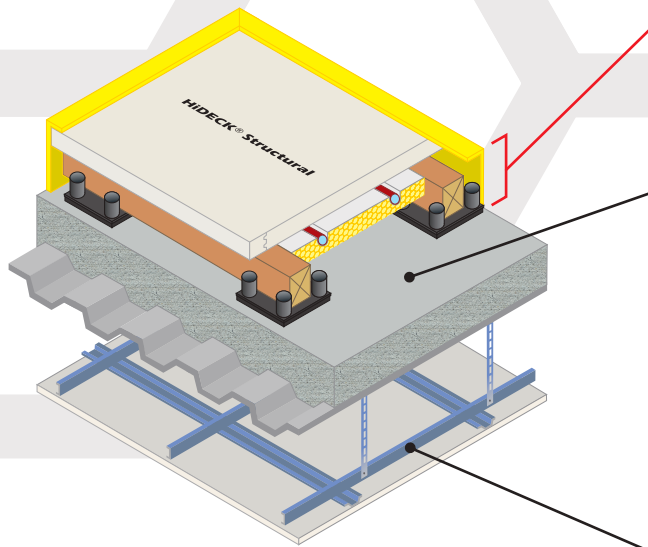


# Steel-concrete composite separating floor

# 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



**Floating floor acoustic treatment incorporating UFH options**  
**FFT2 - CELLECTA Gobi®** cradle & batten system incorporating UFH  
**FFT4 - CELLECTA Mojave®** platform floor system incorporating UFH

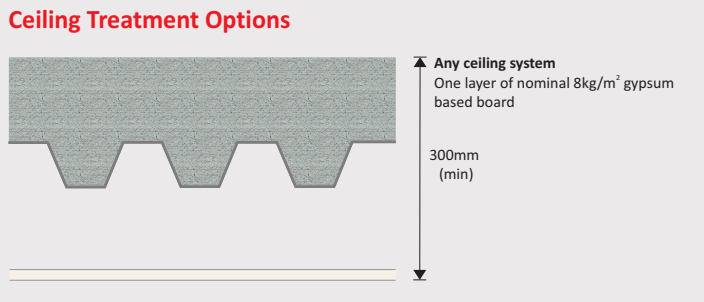
**Structural floor**  
 In-situ concrete slab supported by profiled metal decking:  
 • “Shallow” or “deep” profiled metal decking  
 • Overall distance from top surface of concrete to underside of ceiling treatment 300mm (min)  
 • Concrete thickness 80mm (min) at shallowest point and 130mm (min) at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

**Ceiling**  
 See Table 2S.02a for ceiling treatment options

Fig. 2S.02



Table 2S.02a



**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 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 **YELOfon ES** or **F5** 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  $rd \Delta L_w = 17dB$ ).  
 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

## Un-even sub-floor

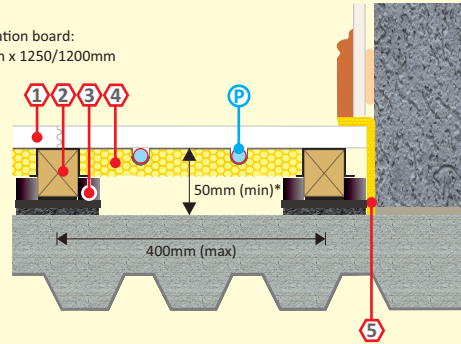
Table 2S.02b

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

#### CELLECTA Gobi® C2-25

##### Components

- ① **HiDECK® Structural 25<sup>(1)</sup>**  
High conductivity structural board:  
25mm x 600mm x 1200mm  
Weight: 31.25kg/m<sup>2</sup>  
Thermal resistance: 0.0625m<sup>2</sup>K/W
- ② **CELLECTA Pro Adhesive**  
HiDECK joint adhesive  
Bottle size: 1L / 16m<sup>2</sup> coverage
- ③ **CELLECTA softwood timber batten**  
Standard dimensions<sup>(2)</sup>: 40, 65mm x 45mm x 2400mm  
Chain of custody: PEFC & FSC
- ④ **RUBBERfon® Cradles**  
Dimensions: 10mm high x 100mm x 100mm  
Levelling packers: 2, 3, 5mm  
Stackable elevation blocks: 15, 30mm
- ⑤ **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)
- ⑥ **YELOfon® ES5/120**  
Perimeter edge strip:  
5mm x 120mm x 50m
- Ⓟ **UFH water pipe (by others)**



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

**Impact**  
44dB  $L_{nT,w}$   
 $rd \Delta L_w = 25dB$

**Building Regs**  
≥+8dB

**CLASS A1** <sup>(1)</sup>

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

## Level sub-floor (laid to SR2 standard)

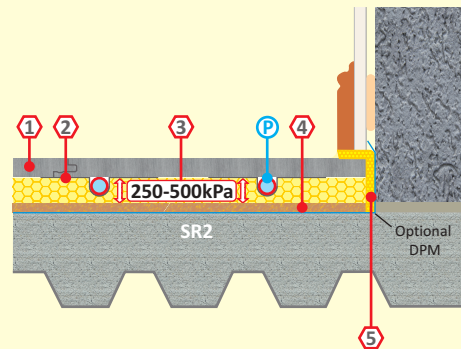
Table 2S.02c

### 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/m<sup>2</sup> / 18.00kg/board  
Thermal resistance: 0.05m<sup>2</sup>K/W
- ② **CELLECTA Pro Adhesive**  
ScreedBoard joint adhesive  
Bottle size: 1L / 33m<sup>2</sup> coverage
- ③ **ULTRApate**  
Aluminium heat diffuser plate (to suit pipe installed):  
Dimensions: 130mm x 1000mm
- ④ **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)
- ⑤ **FIBREfon® 10**  
High compressive strength resilient layer:  
Dimensions: 10mm x 600mm x 1200mm  
Weight: 2.20kg/m<sup>2</sup> / 1.58kg/board
- ⑥ **YELOfon® ES5/120**  
Perimeter edge strip:  
5mm x 120mm x 50m
- Ⓟ **UFH water pipe (by others)**



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

**Impact**  
41dB  $L_{nT,w}$   
 $rd \Delta L_w = 28dB$

**Building Regs**  
≥+8dB

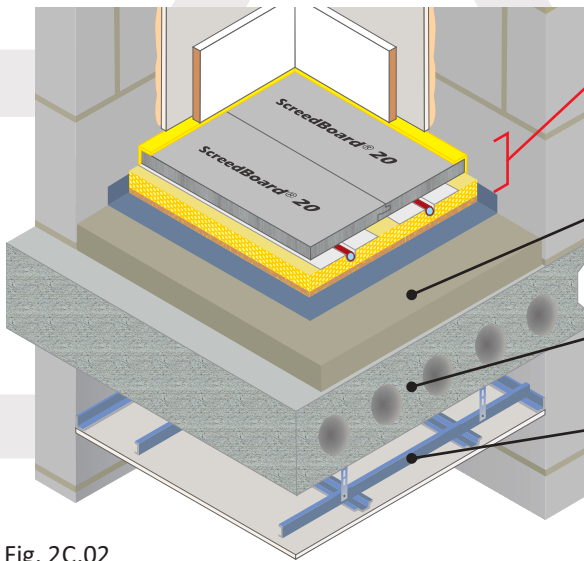
**CLASS B<sub>1</sub>, S1**  
BS EN13501-1



# 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



**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/m<sup>2</sup> (min) mass per unit area

**Structural floor**

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

**Ceiling**  
See Table 2C.02a for ceiling treatment options

Fig. 2C.02



Table 2C.02a

Ceiling Treatment Options	
<p>CT1 Metal ceiling - 100mm void</p>	<p>One layer of nominal 8kg/m<sup>2</sup> gypsum-based board</p> <p>100mm (min)</p>
<p>CT2 Timber batten &amp; counter battens</p>	<p>One layer of nominal 8kg/m<sup>2</sup> gypsum-based board</p> <p>100mm (min)</p>
<p>CT3 Metal ceiling - 75mm void</p>	<p>One layer of nominal 10kg/m<sup>2</sup> gypsum-based board</p> <p>75mm (min)</p>
<p>CT4 Timber batten &amp; metal resilient bars</p>	<p>One layer of nominal 10kg/m<sup>2</sup> gypsum-based board</p> <p>65mm (min)</p>

**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 YELOfon 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  $rd \Delta_{w} = 17dB$ ). 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

## Un-even Sub-floor

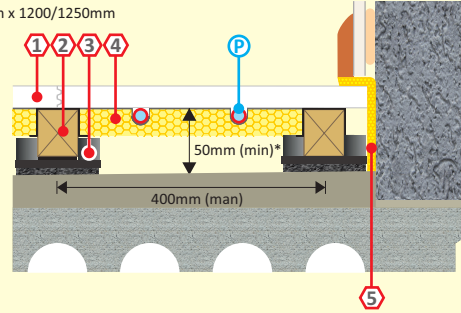
Table 2C.02b

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

#### CELLECTA Gobi® (C2-25 shown)

##### Components

- 1** HiDECK® Structural 25<sup>(1)</sup>  
High conductivity structural board:  
Dimensions: 25mm x 600mm x 1200mm  
Weight: 31.25kg/m<sup>2</sup>  
Thermal resistance: 0.0625m<sup>2</sup>K/W
- 2** CELLECTA Pro Adhesive  
HiDECK joint adhesive  
Bottle size: 1L / 16m<sup>2</sup> coverage
- 3** CELLECTA softwood timber batten<sup>(2)</sup>  
Standard dimensions: 40, 65mm x 45mm x 2400mm  
Chain of custody: PEFC & FSC
- 4** XFLO® JB-BF  
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** YELOfon® ES5/120  
Perimeter edge strip:  
5mm x 120mm x 50m
- P** UFH water pipe (by others)
- 3** RUBBERfon® Cradles  
Dimensions: 10mm high x 100mm x 100mm  
Levelling packers: 2, 3, 5mm  
Stackable elevation blocks: 15, 30mm



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

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

**Impact**  
49dB  $L_{nT,w}$   
 $rd \Delta L_w = 25dB$

**Building Regs**  
≥+8dB

**BBA VERIFIED RD DATA**

**CLASS A1**  
BS EN13501-1

## Level Sub-floor (Laid to SR2 Standard)

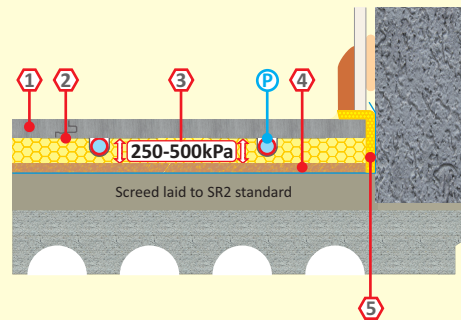
Table 2C.02c

### 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/m<sup>2</sup> / 18.00kg/board  
Thermal resistance: 0.05m<sup>2</sup>K/W
- 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** FIBREfon® 10  
High compressive strength resilient layer  
Dimensions: 10mm x 600mm x 1200mm  
Weight: 2.20kg/m<sup>2</sup> / 1.58kg/board
- 5** YELOfon® ES5/120  
Perimeter edge strip:  
5mm x 120mm x 50m
- P** UFH water pipe (by others)



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

**Impact**  
51dB  $L_{nT,w}$   
 $rd \Delta L_w = 24dB$

**Building Regs**  
≥+8dB

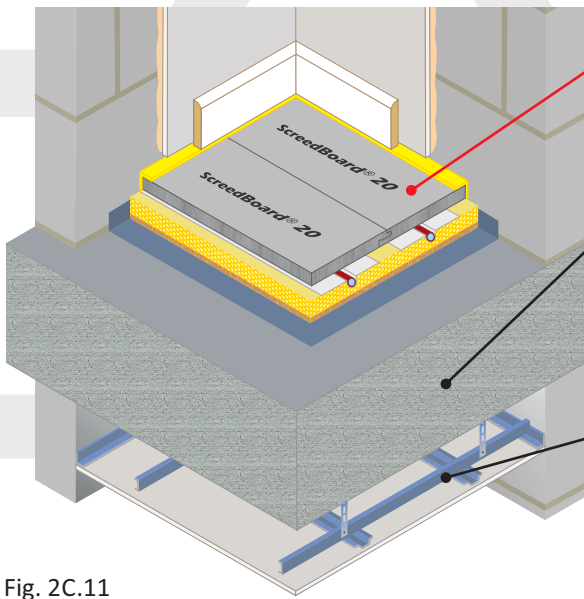
**CLASS BFL S1**  
BS EN13501-1



# In-situ concrete slab separating floor

# Robust Detail E-FC-2 + UFH

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



**Floating floor acoustic treatment options**  
 FFT2 - **CELLECTA Gobi®** cradle & batten system incorporating UFH  
 FFT4 - **CELLECTA Mojave®** platform floor system incorporating UFH

**Structural floor**

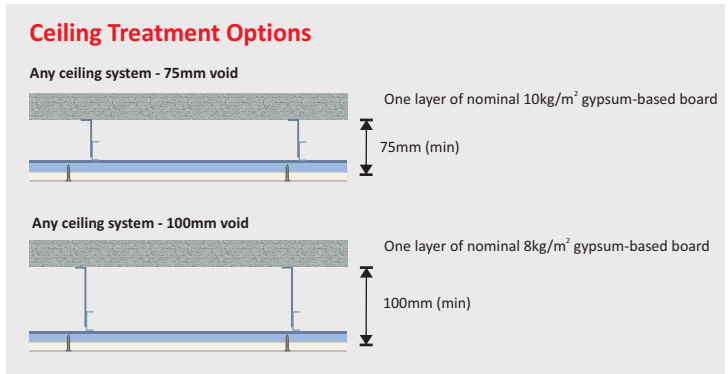
- 250mm (min) in-situ concrete slab, 2400kg/m<sup>3</sup> density without screed
- 200mm (min) in-situ concrete slab 2400kg/m<sup>3</sup> density with screed: 40mm sand & cement screed or 80kg/m<sup>2</sup> (min) proprietary screed directly applied to slab

**Ceiling** See Table 2C.11a for ceiling treatment options

Fig. 2C.11



Table 2C.11a



**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 **YELOfon** 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  $rd_{\Delta_w} = 17dB$ ).  
 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



## Un-even sub-floor

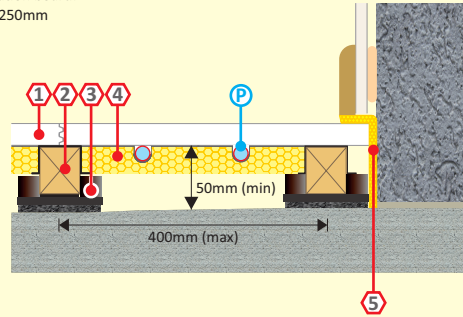
Table 2C.11b

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

#### CELLECTA Gobi® (C2-25 shown)

##### Components

- ① **HiDECK® Structural 25<sup>(1)</sup>**  
High conductivity structural board:  
**Dimensions:** 25mm x 600mm x 1200mm  
**Weight:** 31.25m<sup>2</sup>  
**Thermal resistance:** 0.0625m<sup>2</sup>K/W
- ② **CELLECTA Pro Adhesive**  
HiDECK joint adhesive  
**Bottle size:** 1L / 16m<sup>2</sup> coverage
- ③ **CELLECTA softwood timber batten<sup>(2)</sup>**  
**Standard dimensions:** 40, 65mm x 45mm x 2400mm  
**Chain of custody:** PEFC & FSC
- ④ **RUBBERfon® Cradles**  
**Dimensions:** 10mm high x 100mm x 100mm  
**Levelling packers:** 2, 3, 5mm  
**Stackable elevation blocks:** 15, 30mm
- ⑤ **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)
- ⑥ **YELOfon® ES5/120**  
Perimeter edge strip:  
5mm x 120mm x 50m
- ⑦ **UFH water pipe (by others)**



<sup>(1)</sup> 28 & 30mm available to satisfy higher non-domestic loading conditions.  
<sup>(2)</sup> Other height battens available upon request.

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

**Impact**  
**45dB  $L_{nT,w}$**   
 **$rd \Delta L_w = 25dB$**

**Building Regs**  
**≥+8dB**

**CLASS A1**  
BS EN13501-1

## Level sub-floor (Laid to SR2 standard)

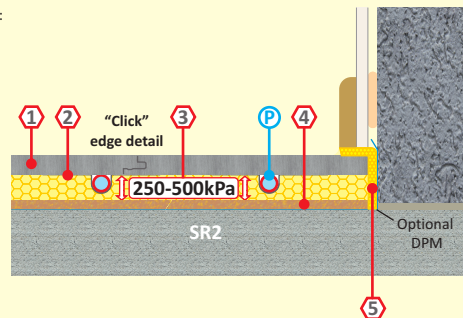
Table 2C.11c

### 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/m<sup>2</sup> / 18.00kg/board  
**Thermal resistance:** 0.05m<sup>2</sup>K/W
- ② **CELLECTA Pro Adhesive**  
ScreedBoard joint adhesive  
**Bottle size:** 1L / 33m<sup>2</sup> coverage
- ③ **ULTRApate**  
Aluminium heat diffuser plate (to suit pipe installed):  
**Dimensions:** 130mm x 1000mm
- ④ **FIBREfon® 10**  
High compressive strength resilient layer:  
10mm x 600mm x 1200mm  
**Weight:** 2.20kg/m<sup>2</sup> / 1.58kg/board
- ⑤ **YELOfon® ES5/120**  
Perimeter edge strip:  
5mm x 120mm x 50m
- ⑥ **UFH water pipe (by others)**



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

**Impact**  
**46dB  $L_{nT,w}$**   
 **$rd \Delta L_w = 24dB$**

**Building Regs**  
**≥+8dB**

**CLASS B/I, S1**  
BS EN13501-1

