

TRAPEZOIDAL ACOUSTIC ROOF INFILLS

COMMERCIAL

Data Sheet 1022 v1.0.0

Description:

CCL Acoustic Infills consist of rigid slabs of non-combustible mineral wool that have been factory cut to suit the upper profile of structural metal roof decks.

Purpose:

CCL Acoustic Infills are designed to prevent reverberation and improve the acoustic environment in buildings with large areas of hard internal surfaces such as leisure centres, school sports halls and swimming pools.

Benefits:

- Supplied to suit any profiled roofing sheet
- Simple to install
- Excellent acoustic absorption
- Water repellent
- Maintenance free

SPECIFICATION

Dimensions:

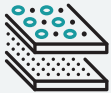


CCL Acoustic Infills are normally supplied 1200mm long and are factory cut to fit the relevant roof profile. Shorter lengths are available upon request.

The product can be supplied un-faced although where it is used with perforated metal decks, it is normally faced on the lower three sides with black or white glass tissue.

Alternatively, it can be faced on all four sides to further decrease the risk of fibre migration.

Density:



CCL Acoustic Infills are available in the following grades;

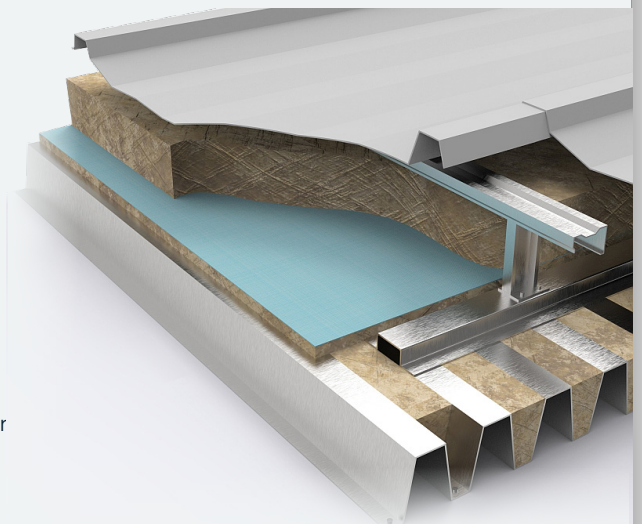
- 45kg density mineral wool core
- 60kg density mineral wool core
- 100kg density mineral wool core

Standards & Performance:



The mineral wool slabs used in the production of CCL Acoustic Infills achieves a fire classification of Euroclass A1 as defined in BS EN 13501 - 1.

The use of CCL Acoustic Infills can contribute towards the satisfaction of a requirement for a ceiling with Class C acoustic absorption. See Approved Document E and Buildir Bulletin 93 (The Acoustic Design of Schools) for guidance.



HANDLING & INSTALLATION



CCL Acoustic Infills are normally supplied on polythene wrapped pallets. Protective weather hoods are included where requested.

The infills are installed directly into the upper trough of the profiled roofing sheet. All joints should be tightly butted and, where necessary, lengths can be trimmed using a sharp knife or a finely serrated saw.





Concept Trapezoidal Acoustic Infills - White/Black Tissue Faced

| Profile | Profile Dimensions | No. Per Pallet |
|---------|---------------------------------|----------------|
| D32 | 32mm x (24mm x 72mm) x 1.2mtr | 1430 |
| TR35 | 35mm x (34mm x 89mm) x 1.2mtr | 1300 |
| D35 | 35mm x (34mm x 75mm) x 1.2mtr | 1300 |
| D46 | 46mm x (67mm x 120mm) x 1.2mtr | 600 |
| D60 | 60mm x (64mm x 110mm) x 1.2mtr | 480 |
| D100 | 100mm x (63mm x 124mm) x 1.2mtr | 240 |
| D135 | 135mm x (43mm x 165mm) x 1.2mtr | 150 |
| D137 | 137mm x (43mm x 166mm) x 1.2mtr | 150 |
| D153 | 153mm x (40mm x 161mm) x 1.2mtr | 156 |
| D159 | 159mm x (38mm x 142mm) x 1.2mtr | 156 |
| D200 | 200mm x (75mm x 170mm) x 1.2mtr | 100 |

Density Range

| 45kg/m3 | 60kg/m3 | 100kg/m3 |
|---------|---------|----------|
| ✗ | ✗ | ✓ |
| ✗ | ✗ | ✓ |
| ✗ | ✗ | ✓ |
| ✗ | ✓ | ✓ |
| ✓ | ✓ | ✓ |
| ✓ | ✓ | ✓ |
| ✓ | ✓ | ✓ |
| ✓ | ✓ | ✓ |
| ✓ | ✓ | ✓ |
| ✓ | ✓ | ✓ |

ACOUSTIC ABSORPTION



Acoustic Absorption co-efficients - S = Solid Backing - C = Cavity

| Thickness | 125Hz | 250Hz | 500Hz | 1000Hz | 2000Hz | 4000H | NRC |
|-----------------|-------|-------|-------|--------|--------|-------|------|
| 45kg/m3 | | | | | | | |
| 25S | 0.05 | 0.25 | 0.55 | 0.75 | 0.9 | 1.00 | 0.61 |
| 40S | 0.14 | 0.40 | 0.87 | 1.00 | 1.00 | 1.00 | 0.82 |
| 50S | 0.25 | 0.65 | 1.05 | 1.10 | 1.05 | 0.95 | 0.96 |
| 75S | 0.50 | 1.05 | 1.20 | 1.15 | 1.10 | 0.95 | 1.13 |
| 100S | 0.80 | 1.15 | 1.20 | 1.15 | 1.15 | 1.00 | 1.16 |
| 50C | 0.45 | 0.95 | 0.80 | 0.95 | 0.95 | 1.00 | 0.91 |
| 60Kg/m3 | | | | | | | |
| 25S | 0.10 | 0.20 | 0.65 | 0.85 | 1.00 | 0.90 | 0.68 |
| 40S | 0.13 | 0.49 | 0.95 | 1.00 | 1.00 | 1.00 | 0.86 |
| 50S | 0.25 | 0.65 | 1.05 | 1.10 | 1.10 | 0.95 | 0.98 |
| 75S | 0.55 | 1.10 | 1.20 | 1.15 | 1.15 | 1.05 | 1.15 |
| 50C | 0.45 | 0.90 | 0.80 | 0.90 | 0.95 | 0.95 | 0.89 |
| 100Kg/m3 | | | | | | | |
| 25S | 0.05 | 0.30 | 0.70 | 0.95 | 1.05 | 1.00 | 0.75 |
| 40S | 0.12 | 0.44 | 0.88 | 1.00 | 1.00 | 1.00 | 0.83 |
| 50S | 0.35 | 0.85 | 1.10 | 1.10 | 1.15 | 1.10 | 1.05 |
| 75S | 0.44 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 50C | 0.65 | 0.95 | 0.80 | 0.90 | 0.95 | 1.00 | 0.90 |



CONCEPT CONVERSIONS LTD
Fire, Acoustic & Thermal Insulation

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