FAQs - Others technical subject

armstrong.co.uk/commclgeu/eu1/uk/gb/FAQ_other.html

ACOUSTICAL CEILINGS & WALLS | United Kingdom

Armstrong CEILING SOLUTIONS Inspiring Great Spaces

1 - How can I purchase Armstrong tiles and grid; can I get them directly from you?

Our products are only sold through authorised distributors who have sales depots in most major towns and urban areas. A full list of these in your area may be obtained from your ITS group or via our website.

2 - What do your mineral fibre tiles consist of?

Our mineral fibre tiles are made from a combination of the following naturally occuring, processed and recycled materials in varying proportions depending upon the tile type: mineral wool, clay, perlite, cellulose and starch mixed together in a water based process before being cured by heat. They are then finished with a water based paint, or laminated scrim and paint, decorative facing. All these materials are environmentally safe and our factories comply with ISO 14001.
Note: Asbestos, in any form, is not and never has been used in the manufacture of Armstrong ceiling tiles.

3 - What is the difference between your 'soft' and 'hard' mineral fibre ceilings?

All of Armstrong mineral fibre ceilings contain mineral wool in varying proportions. 'Soft' contain a high proportion and are therefore more porous, lower in density, and will be finished with a painted laminated scrim. This results in tiles with exceptional sound absorption (up to 1.00 Alpha w) although their sound attenuation will be more moderate. In contrast 'hard' tiles will have lower proportions of mineral wool, higher proportions of clay, lower porosity and be higher in density. This still results in significant levels of sound absorption but sound attenuation can be exceptional ie up to Dncw 43 dB.

4 - What RAL colour is the white paint on Armstrong mineral fibre tiles?

Armstrong mix their own paint which is not an exact match to any RAL referenced colour although the closest comparison is RAL 9003. We recommend that if precise colour matching between our tiles and other ceiling components is an issue, finished samples of all the critical elements should be compared before final orders are placed.

5 - What is the RAL colour equivalent of Armstrong Trulok Global White Grid?

There is no direct RAL colour equivalent of Global White although the closest comparison is RAL 9003. We recommend that if precise colour matching between our grid and other ceiling components is an issue, finished samples of all the critical elements should be compared before final orders are placed.

6 - What is the actual size of your 600x600mm mineral fibre tiles?

The maximum dimensions should never be greater than 594x594mm although this would be subject to a small negative tolerance.

7 - What does a 'nominal' dimension mean?

Nominal refers to an approximate size, eg it does not take account of manufacturing tolerances. So a 15mm thick tile could be 14.6 -15.4mm actual.
Similarly a 600x600mm tile refers to the layout module which includes the grid (bulb) thickness, so the maximum tile dimension will be 594x594mm but also subject to a a small negative manufacturing tolerance.

8 - What is the U value of your ceiling tiles?

There is no such thing as the U value of an individual element, such as a suspended ceiling tile. The U value is a measure of the thermal transmittance of a complete element of structure (such as a roof construction) consisting of all its component parts. Our mainline brochure contains information on the thermal conductivity (λ) of our ceiling tiles and this can be used in the calculation of the U value of a structure by others (eg a M&E engineer).

9 - What is the advantage of air movement through a ceiling void?

It can remove moisture laden air that otherwise could condense out on cold surfaces and possible cause damage to the structure and suspended ceiling.

10 - What is Relative Humidity and why is it important?

This is a measure of the relative level of water saturation of the air (expressed on a 0-100 % scale) and is the ratio of the actual amount of water vapour in air compared with the saturation water vapour for a given temperature. Therefore %RH should always be quoted with a specific temperature.
Within buildings humidity needs to be controlled in order to provide optimum conditions for:

- Human comfort and well-being
- Specific manufacturing/servicing processes
- Electronic equipment reliability
- Maintaining building fabric and materials in good condition
- Conserving energy

11 - What is a vapour control layer?

This is a construction material (usually a thin plastic membrane or similar) that substantially reduces the water vapour transfer through any building component in which it is incorporated. They may be found (or required) in ceiling voids that have little or no thermal insulation and where there is a danger of condensation falling onto the back of the ceiling and causing pattern staining or damage.

12 - Can I use the ceiling void as a return air plenum? What's the best tile to use?

In principle the ceiling void can be used as a return air plenum provided this is acceptable to the architect and/or M&E engineer. There is no "best" tile for this as it will depend upon the permitted air leakage through the ceiling. We have air leakage data for some of our ceilings. Our low density (soft fibre) ceilings are unlikely to be suitable because of their porosity.

13 - What product do you recommend particularly for noise control in a high humidity area?

Our Ceramaguard tile is suitable for use in conditions of up to 100% RH, and in addition offers sound absorption of 0.55(MH) Alpha w. Such absorption, used in spaces where there is likely to be little or no other sound absoptive finishes, will make a substantial contribution in

controlling middle and high frequency reverberant noise levels.

14 - Should the ceiling grid be earthed or bonded?

Armstrong have commissioned an independent report that concludes that in normal circustances our ceilings do not need to be earthed or bonded.

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