

Grid Ceiling System





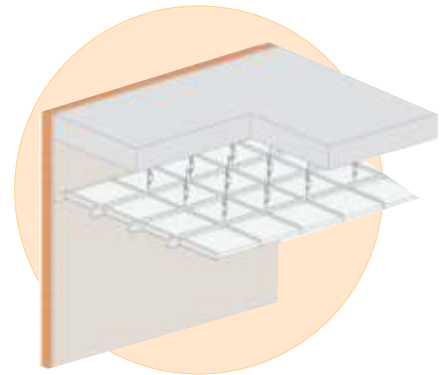
Grid Ceiling System

The GRID ceiling system is a lightweight lay-in grid ceiling system available in concealed or exposed grid options. The ceiling comprises a Gyproc® metal framework formed from Main T section with Cross T section slotted in-between to form the grid. The grid is hung from the structural soffit using a connecting clip with a wall angle fixed to the perimeter. Casoprano, Gyprex, Gyptone, Celotex or Certainteed tiles are laid on to the grid to complete the ceiling. A wide range of decorative effects are possible by selecting the desired tile/board edge profile and finish. Pre-finish options include smooth, textured, patterned or perforated effects. The ceiling cavity can be used to route ducting and other services and can accommodate light fittings. The ceiling provides substantiated sound attenuation and sound absorption performances.

Grid Ceiling System

Grid ceiling system: Featuring grid ceiling panels (2 X 2 or 4 X 2) + Gyproc® T Grid

- Concealed or exposed grid options
- Attractive pre-finished white surface
- Provides sound attenuation and absorption
- Electrical and other services accommodated in plenum
- Wide range of ceiling panels giving smooth, textured, patterned or perforated effects
- Different edge types available in both panels & grid
- Ceiling Panel
 - › Gypsum range – Square edge › Mineral fibre range – Square & Reveal (Tegular) edge
- Grid
 - › Square - 24mm › Reveal - 24mm › Narrow Reveal - 14mm, Bolt Slot - 15mm



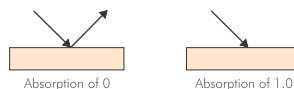
Though there are many factors that go into the selection of a ceiling panel, the key parameters that are critical in the selection process are as follows :

Key Selection Parameters

Acoustic Performance

The term good acoustics can be applied in a numbers of different ways, with different meanings. Generally it means a balanced united action between reverberation time, background noise and sound insulation. In a room with good acoustics the required sound is emphasized, while unwanted sound are eliminated or reduced sufficiently so as not to cause a disturbance.

The ability of ceilings to reduce sound is measured by coefficient known as Noise Reduction Coefficient (NRC). The NRC is a single-number index for rating how absorptive a particular material is. It is simply the average of the mid-frequency sound absorption coefficients (250,500,1000 and 2000 Hz rounded to the nearest 5%). A NRC of 0.55 means that 55% of the sound is absorbed. The balance 45% sound is reflected.



Light Efficiency

Lighting can make a huge contribution to the overall look and feel of a room. A key factor is how the ceiling reflects and diffuses the light. To create a pleasant interior the ceiling should be the lightest surface in the room—a white ceiling will reflect more light than a darker one. The lighting itself should not cause glare or surface reflection. This can be avoided by the installation of indirect lighting. When a ceiling gives good light reflectance and light diffusion, the need for installed lighting is reduced. This results in improved energy efficiency and better working environment.

Moisture Resistance

Ceilings have to be designed to withstand high humidity. The relative air humidity varies depending on the time of the year temperature and climatic zone. Relative humidity RH, expressed in % is the ratio of the actual amount of moisture in the air to the maximum amount of moisture the air can hold at a given temperature. A RH of 100% means the air can hold no more water, i.e. condensation forms, and a RH of 0% indicates there is no moisture in the air. The level of relative humidity in our environments should not increase more than 70-80%. At levels higher than this it becomes uncomfortable for people.

Temperature, Absolute Humidity and Relative Humidity : There is a physical relationship between absolute humidity, temperature and relative humidity. The warmer the air, the more water vapour it can hold . In other words - a certain absolute humidity means lower relative humidity at a high temperature than at a low.

Apart from the above parameters there are some other factors such as fire safety, cleanability, accessibility, load bearing capacity, installation and environment friendliness that are important for ceilings selection.

Installation overview

Step I



Wall angle fixed to the perimeter of the wall at the ceiling level

Step V



Completed framework with "T" section, ready for laying ceiling panels.

Step II



Rawl Plug with soffit cleat is fixed into the soffit

Step VI



Ceiling panels are laid on the grid.

Step III



Main "T" sections are suspended from the soffit cleat with the help of level clips

Step VII



Finished grid ceiling.

Step IV



Cross "T" sections are locked with the main "T" sections