

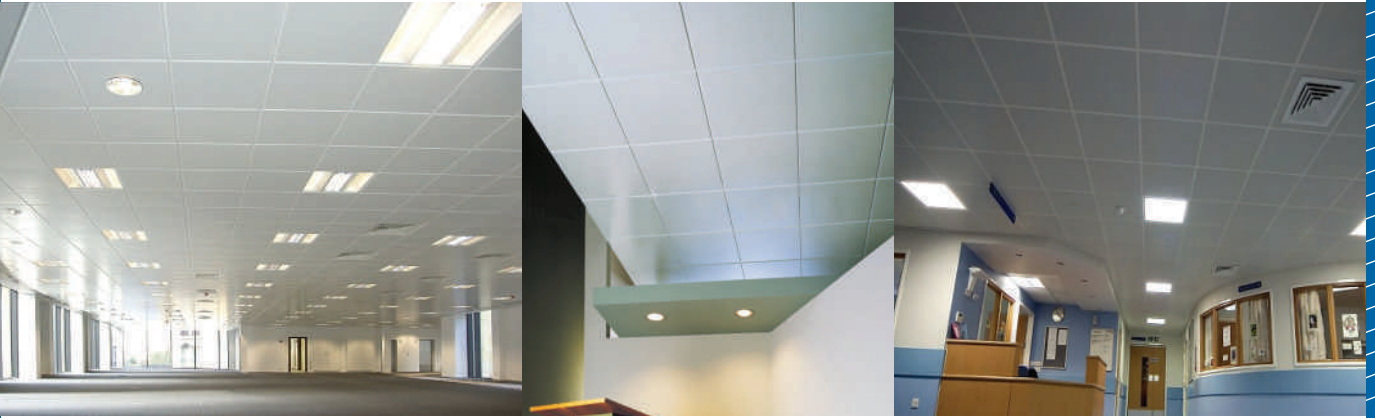
# PROLINE 600C

CLIP-IN METAL CEILING



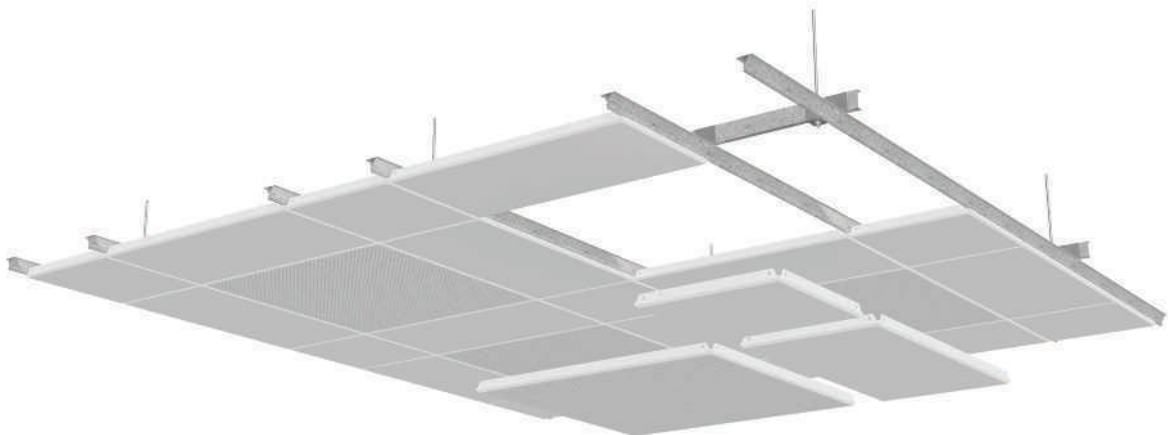
# SYSTEM DESCRIPTION

Proline 600C Clip-in System is probably the most widely used metal tile ceiling system. The tiles are fully accessible fixed on concealed adjustable suspension system. Each tile is automatically leveled in the carrier spring tee by special 'Pip & Stop' registers, which are pressed into the side flanges of the tiles during manufacturing. The Proline 600C concealed grid system can be easily installed and tiles can be removed for access to services. Modular light fittings and grilles can be integrated within the Clip-in System, and various acoustic criteria can be met with the inclusion of acoustic inlays.



# FEATURES

- Range of square and rectangular shapes
- Easy to access for maintenance purpose
- Choice of tile edge detail
- Ceiling takes up minimal void space
- Services can be easily integrated



## VISUAL CHARACTERISTICS

**DIMENSION:** 600x600mm standard and other modules can be produced upon request.

**MATERIAL:** Aluminum 0.5mm up to 1.2mm, or Galvanized Steel 0.5mm up to 1mm, or Stainless Steel (mirror or brush finish).

**SURFACE FINISH:** Pre-painted stove enameled polyester finish, or Factory applied powder-coated finish (post-coated).

**TEXTURE:** Flat smooth surface free from blemishes.

**TILE DEPTH:**  
- 25mm

### EDGE DETAIL:

- Beveled Edge
- Square Edge

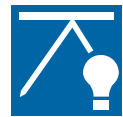


**PERFORATION OPTIONS:** Plain or Perforated (standard 1.8mm diameter holes). Any other pattern can be produced upon request.

**COLOR:** Proline standard white color. Other colors and finishes are available upon request.

## TECHNICAL CHARACTERISTICS

**LIGHT REFLECTANCE:**  
LR = 70 – 90% (ASTM E 1477)



**ACOUSTIC PROPERTY:**  
NRC = 0.7 – 0.9 (ASTM C423)  
[perforated tile with acoustic inlay]



**FIRE CLASSIFICATION:**  
Class 1 Surface Spread of Flame  
(BS 476: Part 6 and 7)



**CORROSION RESISTANCE:**  
Salt spray tested for 1000 hours  
corrosion protection  
(ASTM B 117-73)



**HUMIDITY RESISTANCE:**  
HR = 95%



**ANTI-MICROBIAL:** Hygienic coating can be provided upon request, having an excellent anti-bacterial properties (JIS Z 2801:2000)



**CLEANABILITY:** Washable by applying any household mild detergent like soap or window cleaner on the ceiling surface then wiping it with a clean soft cloth.

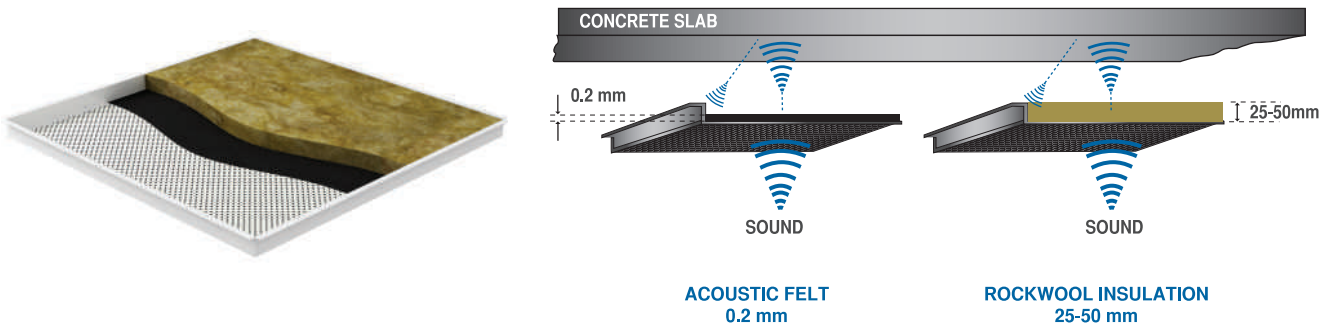


**GREEN BUILDING MATERIAL:** Fully recyclable and environmentally friendly.



# ACOUSTIC INSULATION

The Proline panels are provided with non-woven, non-flammable, acoustic black felt glued over the whole perforated area. The Acoustic Felt is a sound absorption layer of 0.2mm thick having NRC 0.7 to 0.9. Its sound absorption performance is tested in accordance with ASTM C423-90a. Additionally, Rockwool Insulation pads 25-50 mm thick and 40-110 kg/m<sup>3</sup> density can be fitted inside the Proline panels to provide high performance of acoustic insulation, thermal insulation, and fire protection.



Proline acoustic products are classified under ASTM E1264 the american standard classification for acoustical ceiling products.

## COATING

**Option (A)** Continuous coil-coating process ensuring uniform coating thickness and adhesion. Two layered polyester finish in a nominal thickness of 20 microns: front side with a full primer and finish coat, the back side with a primer coat.

**Option (B)** Electro-statically polyester powder coating from 70 to 90 microns applied after manufacturing to cover all exposed edges.

## SAFETY LOGISTICS

### 1. STORAGE

Proline standard tiles are generally packed in cartons, which must be stored no more than four cartons high. They must be stacked in a vertical way and must be kept in a dry storage area. Particular care should be taken when moving cartons by hand. Weights of cartons vary depending on the tile types and sizes, therefore some cartons may require more than one person to carry them.

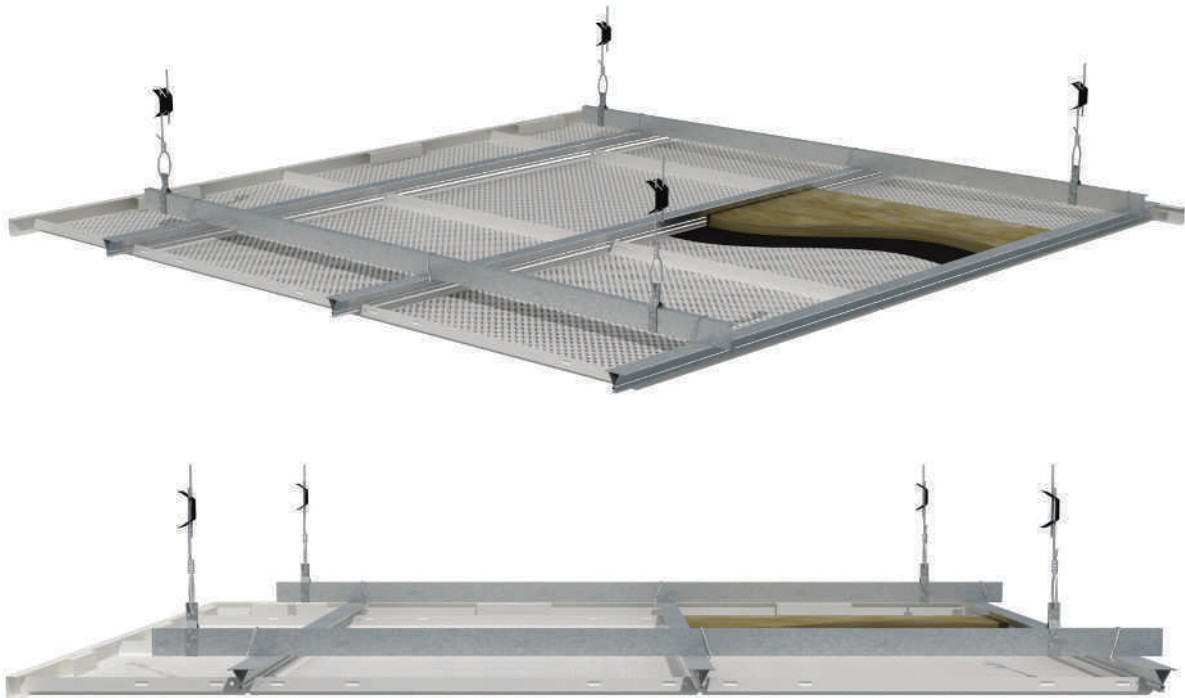
### 2. HANDLING

Immediately after installation of the ceiling, we would recommend that any dirt or finger marks be removed with a clean dry cloth. To prevent finger marks soft cotton gloves are recommended for installation of tiles. Care should be taken when handling cut tiles and sharp edges shouldn't be left at workplace.



# SUSPENSION SYSTEM

The Proline 600C Clip-in metal ceiling tiles are fixed on suspended metal suspension system with Concealed grid framework. The suspension components consist of carrier spring tees, main channels, channel brackets, wire coupling clips, double adjustment clips, and perimeter edge trims. All Proline 600C suspension components are chemically cleaned hot-dip galvanized steel complying with ASTM A653.









## CLIP-IN TILE REMOVAL

The method of extracting Proline Clip-In tiles using the 600C key tool is as follows:

- a. Establish the direction of the carrier spring tee. Where rectangular tiles are used, the carrier spring tee normally runs along the short sides of the tile. For square tiles, the carrier spring tee generally runs lengthways down the room.
- b. Insert the 600C key at a slight angle between the tile joints, approximately 50mm from the tile corner, with the hook of the key facing the tile to be removed.
- c. Push in the 600C key until it touches the top of the carrier spring tee section.
- d. Pull down the 600C key against the top of the carrier spring tee section and the tile should start to come out. Repeat the process on the parallel corner of the tile. Then the tile can be removed in a controlled manner.



1		<b>CARRIER SPRING TEE:</b> GI Steel 35mm wide x 29mm deep used as the main supporting profile for tiles.
2		<b>MAIN CHANNEL:</b> GI Steel 12x38x12mm used as stabilizing support for the security of the system.
3		<b>CHANNEL BRACKET:</b> GI Steel used to carry the main channels.
4		<b>WIRE COUPLING CLIP:</b> GI Steel used to secure the carrier spring tee to the main channel.
5		<b>DOUBLE ADJUSTMENT CLIP:</b> GI Steel used to adjust the ceiling level suspended by wire hangers @1000mm maximum centers, starting @300mm maximum from walls.
6		<b>EDGE TRIM:</b> C shaped fixed to the wall @ 400mm maximum centers, starting @150mm from the adjacent wall. Color and finish to match tile.

## INSTALLATION

1. Using a laser, or equivalent, determine ceiling level and secure perimeter edge trim to the wall at 400mm maximum centers.
2. Wire hangers with double adjustment clips to be inserted over the location of the main channels, ensuring sufficient length for fixing.
3. Secure wire hangers, at 1000mm maximum centers, to the structural soffit using fixings approved by the architect and determined by load and safety factor considerations. The first hangers are to be no more than 300mm from the wall.
4. Use channel bracket to fix the main channel to the wire hangers, taking care to maintain a perfect level. Each end of main channel runs to be folded back and secured to wall.
5. Setting out from the center of the room, secure full carrier spring tees to main channels using wire coupling clips, at centers to suit tile modules. Where possible, not less than half tiles should be used at perimeters.
6. Lengths of full carrier spring tees are to be joined using carrier splice, and allowance for expansion is to be made as necessary. Carrier splices to be made in mid of the tile, i.e. not on the tile joint lines.
7. Tiles can now be clipped into place, taking care that the pips are correctly located into the bulb of the carrier spring tee.
8. Cut perimeter tiles must be retained using wedges spaced at 300mm maximum centers.

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