



Metacil

METAL
CEILING
TILES | LAY
IN

E
xcellence
xpertise
xperience
ngineering

Metacil LAY-IN

MAIN COMPONENT



Easy-to-install, downward-accessible panels are perfect for renovations

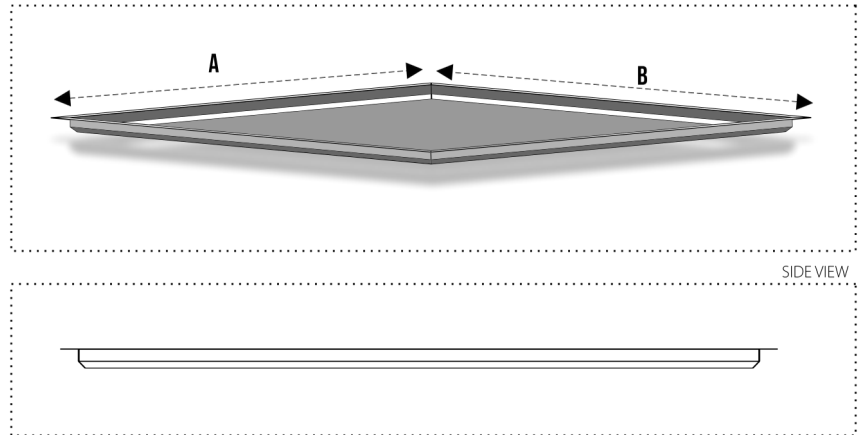


DESCRIPTION

Metacil® Metal Lay-In Tile is a type of suspended ceiling system where metal panels are laid into a visible or concealed grid framework. These tiles are made from high-quality materials such as aluminum, galvanized iron (GI), or stainless steel, with a typical thickness of around 0.5 mm. The tiles are color-coated or powder-coated for durability and aesthetic appeal.

SIZES

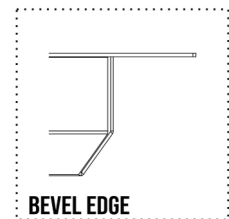
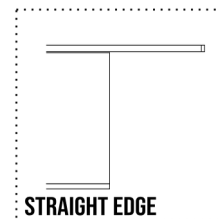
A-Length		B-Width	Unit
300	x	300	mm
600	x	600	mm
600	x	1200	mm



COATING AND PAINT OPTIONS

- Powder Coated Standard
Epoxy Polyester Powder Coating : (Minimum 60Micron)
- Powder Coated Exterior Grade
Pure Polyester powder Coating : (Minimum 60Micron)
- Powder Coated Wood Finish
Pure Polyester powder Coating : (Minimum 60Micron) + heat transfer sublimation films
- Pre-Coated PE Paint
Coating Type: PE (Polyester paint)
Top Coat: Usually 15–25 microns (µm).
Back Coat: 5–10 microns (µm).
- Pre-Coated PVDF Exterior
Coating Type: PVDF (Polyvinylidene Fluoride), a high-performance resin-based coating designed for exterior applications.
Top Coat: Typically 25–35 microns (µm).
Back Coat: Typically 5–10 microns (µm).
- Pre-Coated Wood Finish
Coating Type: PE (Polyester paint), a high-performance resin-based coating designed with wood grain.

EDGE OPTIONS



MATERIALS

- Zinc Plated Galvanized Iron 80/120 Gsm
- Aluminium Alloy As Per 3105 Series
- Stainless Steel 304 Grade

SURFACE FINISH

- PLAIN
- PERFORATED
- DECORATIVE PATTERN

STRUCTURE OPTION

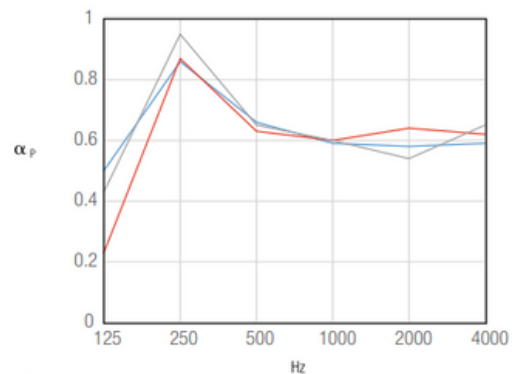
- Lay-in Ceiling Tile With Suspension Rod
 - Standard
 - Standard Elite
 - Standard Heavy
 - Standard Elite Heavy
 - Blackline Elite
 - Blackline Heavy
 - Silhouette Elite

CHARACTERSTICS

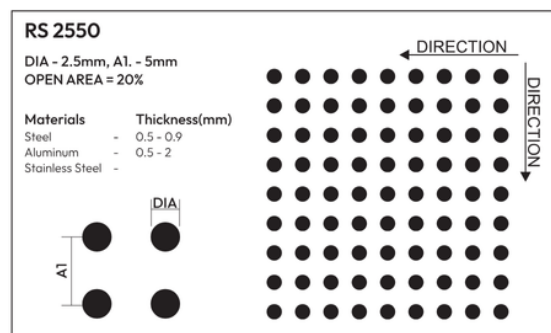
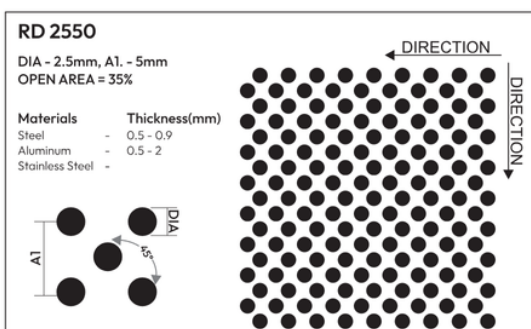
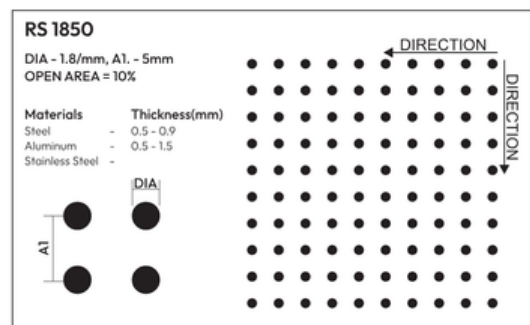
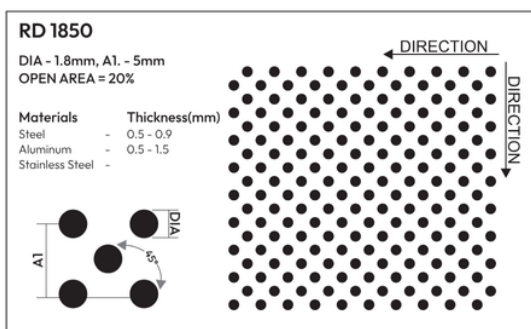
- **Durable & Long-Lasting:** Made from aluminium or galvanized steel, resistant to moisture, corrosion, and fire with minimal maintenance.
- **Aesthetic & Customizable:** Available in multiple finishes, perforation patterns, colors, and ceiling types.
- **Acoustic Performance:** Perforated panels with acoustic fleece or mineral wool backing help reduce noise and improve sound clarity.
Upto 0.75 NRC.
- **Lightweight & Easy Installation:** Modular system allows quick installation and easy access to services like HVAC, lighting, and electrical systems.
- **Hygienic & Clean Surface:** Smooth, washable, and dust-resistant surfaces make them suitable for hospitals, labs, airports, and offices.
- **Environmentally Friendly:** Fully recyclable material with eco-friendly coating systems.
- **Stable & Reliable:** Does not warp, crack, or deform under temperature or humidity changes, ensuring long-term visual and structural stability.

INSULATIONS

- Acoustical black fleeces are typically made from non-woven polyester or other sound-absorbing synthetic fibers. These materials are designed to trap and absorb sound waves, preventing them from bouncing off hard surfaces like metal.
- Rockwool for ceilings refers to the use of Rockwool (Mineral Wool) insulation material in conjunction with metal ceilings. Rockwool is a highly effective sound-absorbing and heat-insulating material, making it a popular choice for improving acoustic performance and thermal regulation in ceiling systems. When combined with ceilings, it enhances the overall functionality by providing superior noise reduction, fire resistance, and thermal insulation.



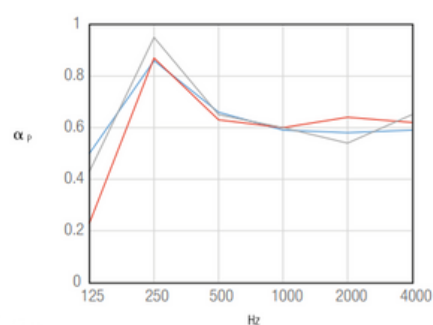
STANDARD PERFORATION OPTIONS



ACOUSTICAL PERFORMANCE

Description	NRC	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
2.5 Perforation with fleece	0.7	0.5	0.86	0.66	0.59	0.58	0.59 α
1.8 Perforation with fleece	0.7	0.43	0.95	0.65	0.6	0.54	

- Measured in accordance with ASTM C423/ISO 354.
- NRC value calculated for perforated panels with black fleece.



FIRE CLASSIFICATION

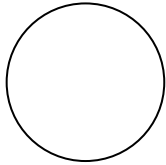
Metacil GI metal ceilings	Class 0 / Class 1, BS 476, Part 6 & 7
Metacil AL metal ceilings	Class 0 / Class 1, BS 476, Part 6 & 7

LIGHT REFLECTANCE

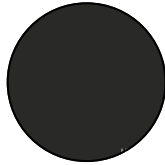
Pattern	Global White	RAL 9010
Plain (unperforated)	77%	87%
1.8 Perforation w/ black acoustic fleece	63%	71%
2.5 Perforation w/ black acoustic fleece	68%	75%

- Measured in accordance with ASTM 1477-98

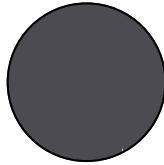
STANDARD COLOUR OPTIONS



WHITE



MATT BLACK



MATT GREY



DGT 43



DGSUN 2



DW 99444

NOTE: FOR MORE COLOUR OPTIONS KINDLY REFER TO RAL SHADE CARD

INSTALLATION

1. Planning and Layout of Ceiling Grid

The installation starts with measuring the ceiling area and marking layout lines corresponding to the standard tile size (about 600mm x 600mm). This layout ensures proper alignment and spacing for the grid system. Accurate marking of the main runner and cross tee positions is essential to achieve a level ceiling and to fit the tiles evenly.

2. Installation of Ceiling Suspension System

Next, galvanized steel hanger wires are anchored securely to the existing structural ceiling at regular intervals (usually 1200mm). The wires are cut to the desired ceiling height. These wires will suspend the grid framework and must be strong enough to bear the load of the metal tiles.

3. Main Runner Installation and Leveling

The primary framework components called main runners are hung from the suspension wires along the marked layout lines. These runners need to be perfectly level, using tools like laser levels or spirit levels. Proper leveling prevents sagging and ensures a smooth finished ceiling.

4. Cross Tee Installation and Grid Formation

Cross tees are inserted perpendicular to the main runners at regular intervals to form the grid openings. They snap into slots on the main runners creating an interlocking system that holds its shape firmly. This creates the modular grid pattern sized to house the lay-in tiles.

5. Perimeter Trim Fixing and Edge Preparation

Perimeter channels or wall angles are installed along the room's edges to support the tiles and grid ends at the walls. These trims must be aligned both horizontally and vertically with the grid for a flush and finished look along the border.

6. Final Leveling and Grid Inspection

After assembling the full grid framework, the entire ceiling grid is reviewed and adjusted for levelness and secure fitting. Any misalignment or loose components are corrected at this stage to ensure structural stability and easy tile placement.

7. Preparation for Tile Installation

Before placing tiles, the working area is cleaned of dust and debris to prevent damage or unevenness. Protective gloves are recommended to handle metal tiles safely as their edges may be sharp.

8. Placement of Metal Lay-In Tiles in Grid

The metal lay-in tiles, usually made of powder-coated aluminum or galvanized metal, are gently laid into the grid openings. They rest on flanges of the grid, fitting snugly without permanent fixing. This allows quick removal for servicing the ceiling void.

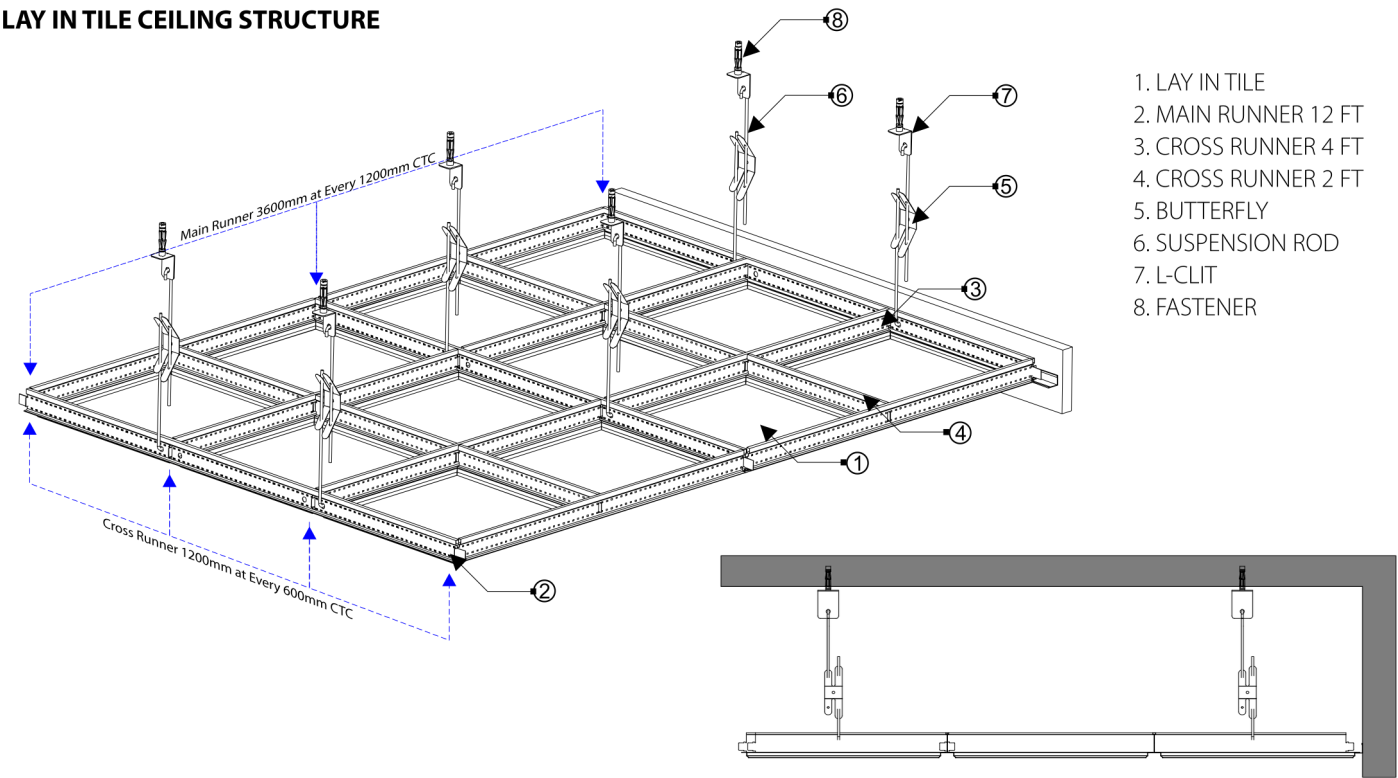
9. Cutting and Fitting Border Tiles and Accessories

Tiles at the perimeter may require cutting to fit around walls or ceiling fixtures such as lights and air vents. Tin snips or electric shears can be used for precise cutting. Border tiles are installed carefully to maintain the ceiling's uniform appearance.

10. Finishing Touches and Post-Installation Checks

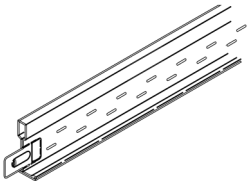
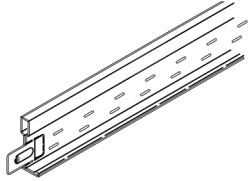
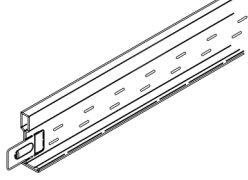

Finally, any protective film on tiles is removed, and the ceiling is inspected for uniformity and cleanliness. Lighting and HVAC fixtures are integrated as needed. The completed ceiling offers durability, fire resistance, and a modern aesthetic suited for commercial and institutional spaces.

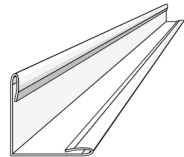
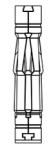
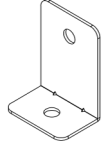
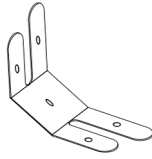
LAY IN TILE CEILING STRUCTURE



COMPONENT DETAILS

LAY-IN CEILING SYSTEM

	<p>MAIN-TEE PLAIN (STANDARD) SIZE : 15X32 DESCRIPTION : Max Len. 3000/ 3600mm THICKNESS : 0.25 MATERIAL : ALUMINUM SURFACE : PUNCHED COATING : U/C COLOR : WHITE BASE</p>
	<p>CROSS-TEE PLAIN (STANDARD) SIZE : 15X30 DESCRIPTION : Max Len. 1200mm THICKNESS : 0.25 MATERIAL : ALUMINUM SURFACE : PUNCHED COATING : U/C COLOR : WHITE BASE</p>
	<p>CROSS-TEE PLAIN (STANDARD) SIZE : 15X30 DESCRIPTION : Max Len. 600mm THICKNESS : 0.25 MATERIAL : ALUMINUM SURFACE : PUNCHED COATING : U/C COLOR : WHITE BASE</p>
	<p>SUSPENSION ROD SIZE : 6mm DESCRIPTION : NA THICKNESS : NA MATERIAL : G.I SURFACE : PLAIN COATING : NA COLOR : NA</p>

	<p>WALL ANGLE SIZE : 24 mm X 19 mm x 3 m DESCRIPTION : NA THICKNESS : 0.5 mm MATERIAL : G.I SURFACE : PLAIN COATING : POWDER COATING COLOR : WHITE</p>
	<p>FASTENER SIZE : M6/M8 DESCRIPTION : NA THICKNESS : 1.5mm MATERIAL : G.S SURFACE : ROUND COATING : C/C COLOR : NA</p>
	<p>L-CLEAT SIZE : 25 mm X 27 mm X 37mm DESCRIPTION : NA THICKNESS : 1.2 mm MATERIAL : G.I SURFACE : PLAIN COATING : U/C COLOR : NA</p>
	<p>BUTTERFLY CLIP SIZE : 118.5mm X 34mm DESCRIPTION : NA THICKNESS : 0.5 mm MATERIAL : G.I SURFACE : PLAIN COATING : POWDER COATED COLOR : WHITE/BLACK</p>

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