

GI-GRID CEILING SYSTEM

INTRODUCTION:

The cleanroom ceiling structure connected with the GI-Grid ceiling tee and the AL connector. The ceiling panels will be clamped down among the suspended profiles.

Filter boxes or HEPA module are built into the ceiling panel. For the standard sizes, no reinforcements from the top are necessary. The ceiling openings are covered with a special steel profile fitting the HEPA module.

The ceiling panel is install in caulking type, no ceiling tee profile appear on the ceiling panel. Flush and smooth surface after installation. Suitable for pharmaceutical clean room.

GI-Grid Ceiling System is design to meet your most demanding criteria as:

1. Cost effective & value engineering
2. Superior appearance
3. Fast, flexible and easy installation
4. Fast delivery and competitive cost
5. Fire rated
6. Suitable for cleanroom 100 to 100K
7. For wall insulation purpose

Ceiling Tee: GI-Grid ceiling tee
Material is AL Alloy (6065-T5)

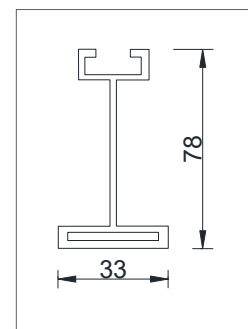
Panel Type: 50mm thick
Panel edge sealed by 0.8mm GI sheet made framework

Applications: Electronics and Pharmaceutical Cleanroom

Facings: 0.5mm PE Roll Coated steel skin, with or without Static Dissipative Surface Treatment
Conductivity: $R=10^6\Omega-10^9\Omega$
Or 0.5mm PE Roll Coated, non-conductivity surface
The surfaces are protected with a film foil (0.04mm) for the prevention of scratches during transport and installation damages.

Color: Grey White (Close to RAL 9016)

Figure 1:
GI Grid Ceiling Grid



- Core:** Aluminum Honeycomb, Rockwool, Paper Honeycomb
- Adhesive:** Rebon YB2002 (resin) mixed with YB8001 (Hardener) Epoxy Paste Adhesive
Mixing Ratio, YB2002:YB8001=4:1
- Panel Dimension:** Thickness of the panel is 50mm.
Width of the panel is 1187 mm

Table 1: Honeycomb Aluminum Panel Specification

Description	Honeycomb Aluminum Panel
Non-Combustible	Class B1
Thermal Conductivity	<0.044 W/mk
Resists Temperatures	>100°C
Water Absorption	Moderate
Compression Resistance	>100kPa
Aluminum Core Thickness	0.06mm
Aluminum Honeycomb Diameter	D=17mm
Compressive Strength	>200 kPa
Flammable Gas Toxicity	Moderate

Table 2: Rockwool Panel Specification

Description	Rockwool Panel
Fire Rating	>1 hour
Thermal Conductivity	<0.044 W/mk
Resists Temperatures	>1000°C
Water Absorption	Moderate
Compression Resistance	>40 Kpa
Noise Absorbing, at 125 Hz	0.07
Density, kg/m ³	100 kg/m ³ ~120 kg/m ³
Compressive Strength	150 kPa
Flammable Gas Toxicity	Moderate
Core Intenerate Temperature	>150°C

The horizontal joint between the panels will be connect with aluminum special design I-Grid ceiling tee and the vertical connect by AL connector (Refer to detail drawing).

Figure 2: GI-GRID Ceiling Structure

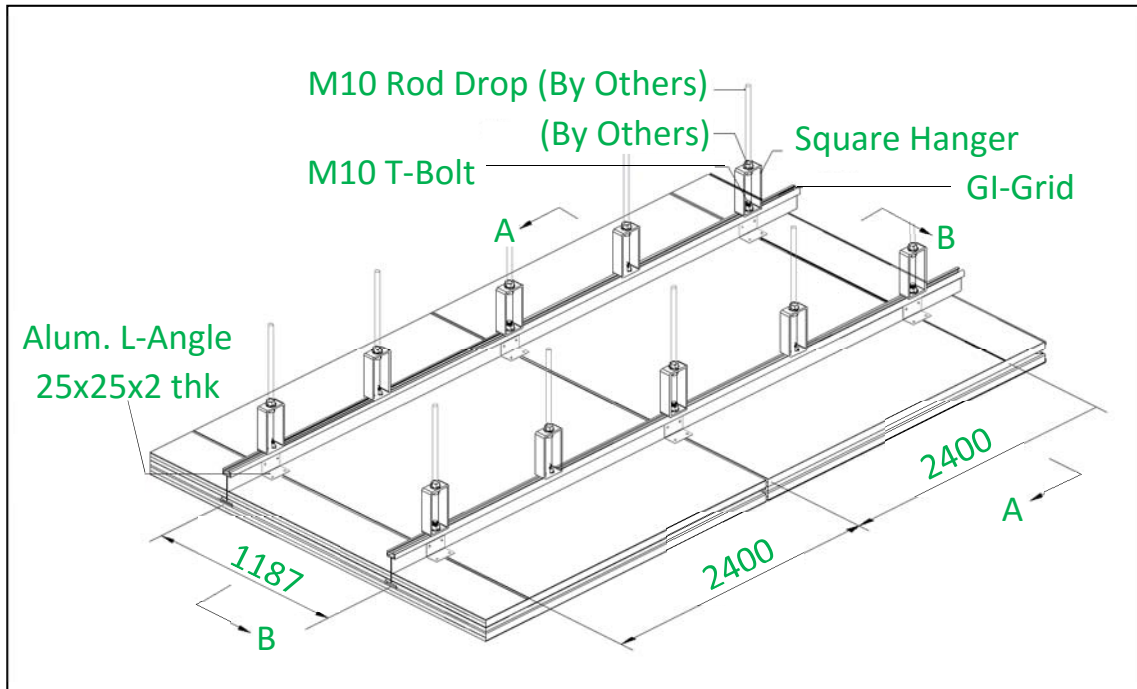


Figure 3: GI-GRID Ceiling

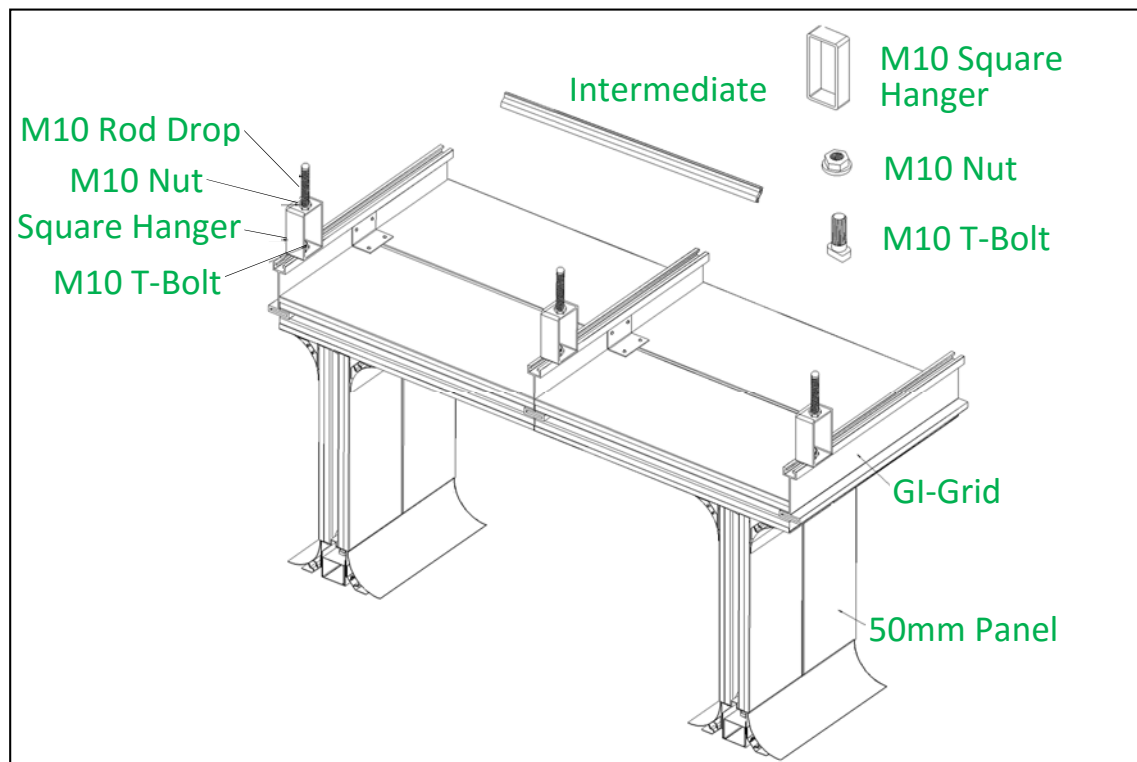


Figure 4: GI-GRID System Cross Section Drawing

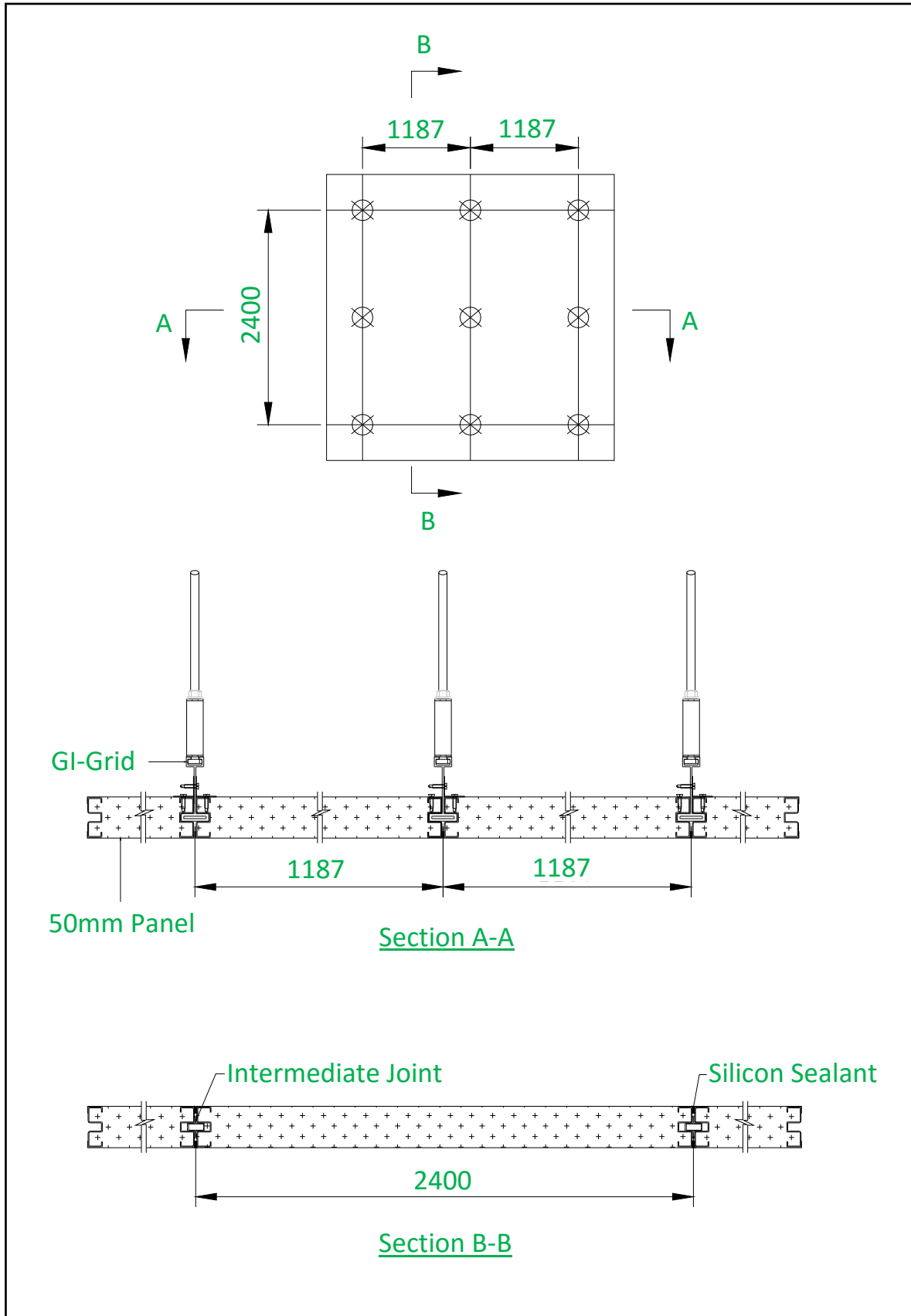


Figure 5: GI-Grid System Simulation Appearance

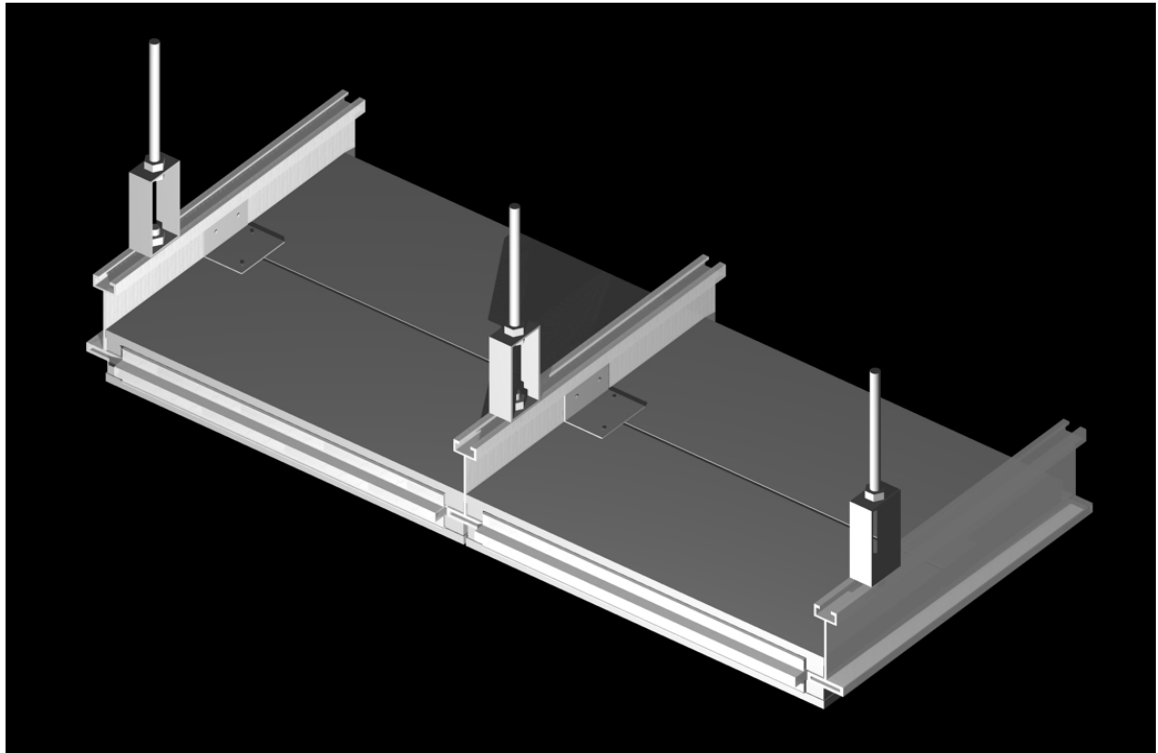


Figure 6: GI-Grid System Simulation Appearance

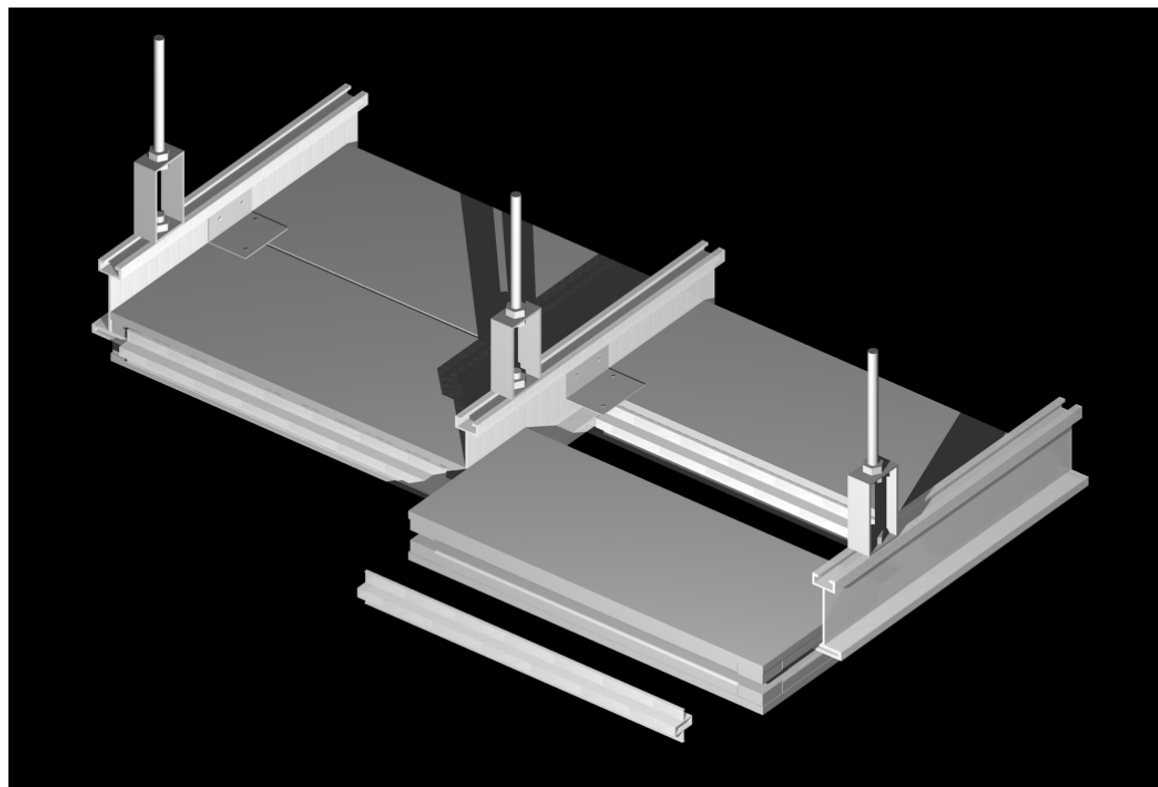


Figure 7: GI-Grid System Appearance

