



T-grid ceiling system

The TRE and TREF ceiling systems are general-purpose efficient solutions for single-skin grid panel ceilings and ceilings suitable for limited walking on, and also for double-skin grid panel ceilings suitable for walking on. This ceiling system is based on experience gained from many years of development and satisfies all the requirements for clean rooms, for electronics rooms to sterile rooms. Thanks to the logical standardisation of the components, the ceiling elements are available ex stock on very short lead times.

Flexible adaptation

Grid panel ceilings are suitable for various different clean room concepts and for installations of any size. Standardised grid sizes permit quick and reliable planning, and adaptation to room sizes without difficulty. The use of high-quality aluminium support grid with steel brackets permits a construction of high stability at an attractive cost-benefit ratio.

Very simple installation

The standardised T-grid profiles can be assembled quickly and easily into a stable grid, using ordinary tools. After this the functional elements such as ceiling panels, return air grilles, filter fan modules and lights are inserted, forming an air-tight seal. Air outlets are incorporated into the relevant ceiling panels. For inspection purposes the ceiling panels can be removed from the clean side at any time, and then refitted

Insertion installation

The ceiling panels and functional elements are inserted into the support grid and secured with spring clips. The support grid and ceiling panels are sealed with a special seal. The ceiling system is very well suited to the installation of full area filter fan modules.

Flush insertion installation

Special ceiling panels permit flush installation. If the clean room must be sealed to GMP, the working joints defined as 3 mm wide are sealed.



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The T-grid ceiling system with flexible room division



The T-grid ceiling system in combination with glass wall system





Technical data

Standard grid panel sizes

1200 x 600 or 1200 x 1200 mm T-profiles, (similar to) RAL 9002 powder-coated aluminium. Other sizes are available on request.

Version unsuitable for walking on

Ceiling panels of galvanised sheet metal, visible face pre-painted RAL 9010, rear face with protective paint, thickness 1 mm, weight of the ceiling: $12\ kg/m^2$

Walk-on version

Double-skin composite ceiling elements consisting of 2 x 1 mm thick galvanised sheet metal, visible face pre-painted (similar to) RAL 9010, glued to a PP Honey Comp core.

Wall conection

Wall connection profiles of aluminium, (similar to) RAL 9002 powder-coated; suspended by M6 galvanised threaded rod.

Flush installation

The ceiling system is available as a flush system where GMP requires it and also as a non-flush system.

Lighting

- 2x36 Watt/TC-L, electronic ballast
- 3x36 Watt/TC-L, electronic ballast
- 2x55 Watt/TC-L, electronic ballast
- 3x55 Watt/TC-L, electronic ballast

The lights are either inserted directly in the ceiling grid panels or if desired incorporated within the ceiling panels. Optionally the lighting system is available with LED lighting.

Dimensions

For 600x600 mm grid; reflector with 4 mm safety glass cover, sandblasted; head reflector characteristic A50; Wieland plug system with 5 m connection cable

Options

- Dimmable electronic ballast
- Emergency lighting powered by battery
- Emergency lighting powered by an external uninterruptible power supply
- Electronic ballast with switched actuators

Pressure-tight: -150 Pa bis +150 Pa





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