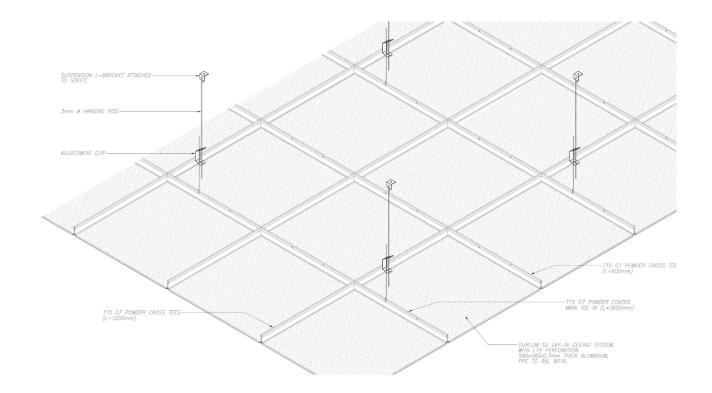




Tegular lay-in ceiling system

Ceiling solutions suitable for the following applications: schools and universities, offices, shopping centres and etc.



1.1) Introduction

durlum S2 Tegular Lay-in ceiling system is particularly suitable for the following applications: schools and universities, offices, shopping centres and etc. The system is primarily a suspended ceilings of Tegular lay-in metal tiles supported by an unconcealed suspension system in which ceiling and lighting are ideally matched to each other.

The square tiles are supported by a **T-grids**, **cross connected** and distanced by cross-section T-profiles. The tiles are laid-in the T-grids. The system is fully demountable without special tools to give access to the space above.

2.1) Panels description

durlum S2 Tegular Lay-in ceiling are laid in form-fitting and tensionfree in a special substructure. Demounting without tools as well as free access to the ceiling space is ensured.

Preision engineered to the highest quality and therefore tolerances and quality requirements according to TAIM, DIN EN 13964 and durlum Standards.

2.2) Panels details 2.2.1Material:

-Optionally galvanized steel, aluminium, stainless steel.

2.2.2Thickness:

-0.7mm thick aluminum or other thickness according to strength requirements.

2.2.3 Surface finish:

-Powder coated white RAL 9010 or RAL9016 with gloss level to be 20-25% measured at 60 degree. Or optional colour RAL specified by architect or designer. Stainless steel brushed, mirror polished, coil anodized, coil coated in advanced polymer system or polyvinylidene difluoride (PVDF) available upon request.

2.2.4 Coating thickness:

Coating thickness: Approx. 70µm and minimum 60 microns thickness.

2.2.5 Perforations:

Metal ceilings are perforated due to technical and architectural reasons. durlum metal ceilings can be perforated with different perforation, ranging from round to square. Special perforations optional.

2.2.6 Sound absorption:

The perforated metal ceilings can be provided with bonded durlum acoustic fleece. There are other materials for acoustic absorption available, such as mineral wool or foamed material.

2.2.7 Dimensions:

-Panel shall be in the following sizes or other size optional:

Module 600mm:

plate dimensions 575x575mm for **T24** profile or 585x585mm for **T15** profile;

Module 600x1200mm:

plate dimensions 575x1175mm for **T24** profile or 585x1185mm for **T15** profile;

Module 300x1200mm:

plate dimensions 275x 1175mm for T24 profile or 285x1185mm for T15 profile

2.2.8 Panel edge:

-The ceiling tiles / planks shall have square edges on 4 sides with 8mm/ 15mm drop, lay onto main tee profiles at 1200mm c.c.

-The distance from the face of panels to the underside of the flanges shall be 8mm/ 15mm for square edge.



2.2.9 Technical standards:

-Panels fulfill the requests of DINstandards;especially DIN 18168 and DIN EN 13964.

-durlum Metal Ceiling Panels and Suspension system to be used as a proprietary system from a single source manufacturer shall produce in accordance to metal ceiling industry standard **TAIM** [Technical Association of Industrial Metal Ceiling Manufacturers] and **durlum standards.**

-The manufacturing is quality controlled according to **ISO 9001:2000 and approved by TÜV**.

-Metal ceiling panels are tested for Fire Propagation and Spread of Flame under BS476 Part 6 and 7. The best classification achieved by both parts combined will mean the material has a "Class 'O' fire protection surface.

-Durlum Metal Ceiling are tested under Warrington Fire Research Centre Test Certificate No:57175 & 57175 for GMS material and Test Certificate No: 117203 & 117202 for aluminium.

3.1 Suspension system

durlum System S2 substructure consisting of galvanised, white painted **T24 carrier profiles**. The profiles are manufactured in a roll form process of band coated material. To form a grid, the carrier profiles are provided with punchings in the vertical web of the corresponding 600mm, 600x1200mm or 300x1200mm modules in which the lateral running carrying rail which is provided on the ends with special pins is positively latch.

A main tee profiles in size of 15 or 24mm (W) x 32mm (H) x 3600mm (L) G.I. white powder coated is installed perpendicularly to 600mm/1200mm cross tee profiles at maximum centers of 1200mm, and suspended with G.I hanger rod and expansion bolts through hanging brackets at 1200mm c.o.c.

Table to show information for 600mm module

Item	Model name	Descriptions	Span distance	Qty per sq.m.
1		Suspension L-bracket attached to sofit		0.83piece
2		G.I. Hanger rod in 3mm diameter	1200mm	0.83piece
3		Adjustment clip		0.83piece
4	F-025	Aluminium perimeter wall angle,25x25mm		According to site situation
5	S3-F	durlum lay-in panel with upstand 8mm / 16mm		According to module
6	T24 Main Tee	T24 Main Tee, 15 or 24mm (W) x 32mm (H) x 3600mm (L) @1200mm coc	1200mm	0.83LM
7	T24 Cross Tee	T24 Cross Tee, 15 or 24mm (W) x 25mm (H) x 1200mm (L) @600mm coc	600mm	0.83LM
8	T24 Cross Tee	T24 Cross Tee, 15 or 24mm (W) x 25mm (H) x 600mm (L) @1200mm coc	1200mm	0.83LM

It is only permissible to use structure components that have been approved by the manufacturer of the metal panels.

3.2 Components

3.2.1 Components & usage

Please refer to the table in this page

Position and hanger distance to be set out in accordance with the following standards: **DIN18168 and DIN EN 13964**

3.2.2 ceiling headroom

The minimum ceiling headroom required for this system is 150mm from finish ceiling level.

4.1 Lighting integration/ Services integration

durlum ceiling system are able to be integrate with standard modular luminaires and ventilation grilles. The panels can be supplied with precut apertures at the factory as an option to accommodate luminaires, sprinklers, smoke detectors, surveillance system, broadcasting devices, air grilles and other building services.

Luminaires available from Durlum able to fit this ceiling system is recess flush mounted type: Albatross 255 & Sonet.

4.2 Wall trims

durlum **F025** aluminium L-Angles without shadow gap in section size 25/25mm, optionally durlum **F2025** aluminium Stepped-Angles with shadow gap in section size 25/20/20/25mm available.

All mitres shall be properly cut to form a butt joint. Both metal ceiling panel and suspension grid shall be cut on site to suit the perimeter of building.

Material thickness: 1.5mm

Surface finish: white powder coated similar to RAL 9016 or optional colour RAL

4.3 Special items

Column rings and other such special items shall be supplied by Durlum Asia Limited.

4.4 Access to Plenum

The panels are designed to be detachable without tool for easy access to plenum by lifting out and removing the panels.

5.1 Maintenance & Warranty

Durlum Metal Ceiling Panels and Suspension to be used as a proprietary system from a single source manufacturer shall produce in accordance to metal ceiling industry standard **TAIM** (Technical Working Group of Industrial Metal Ceiling Manufacturers), **DIN EN 13964** and **durlum Standards**.

Standard Warranty Period is 5 years.

