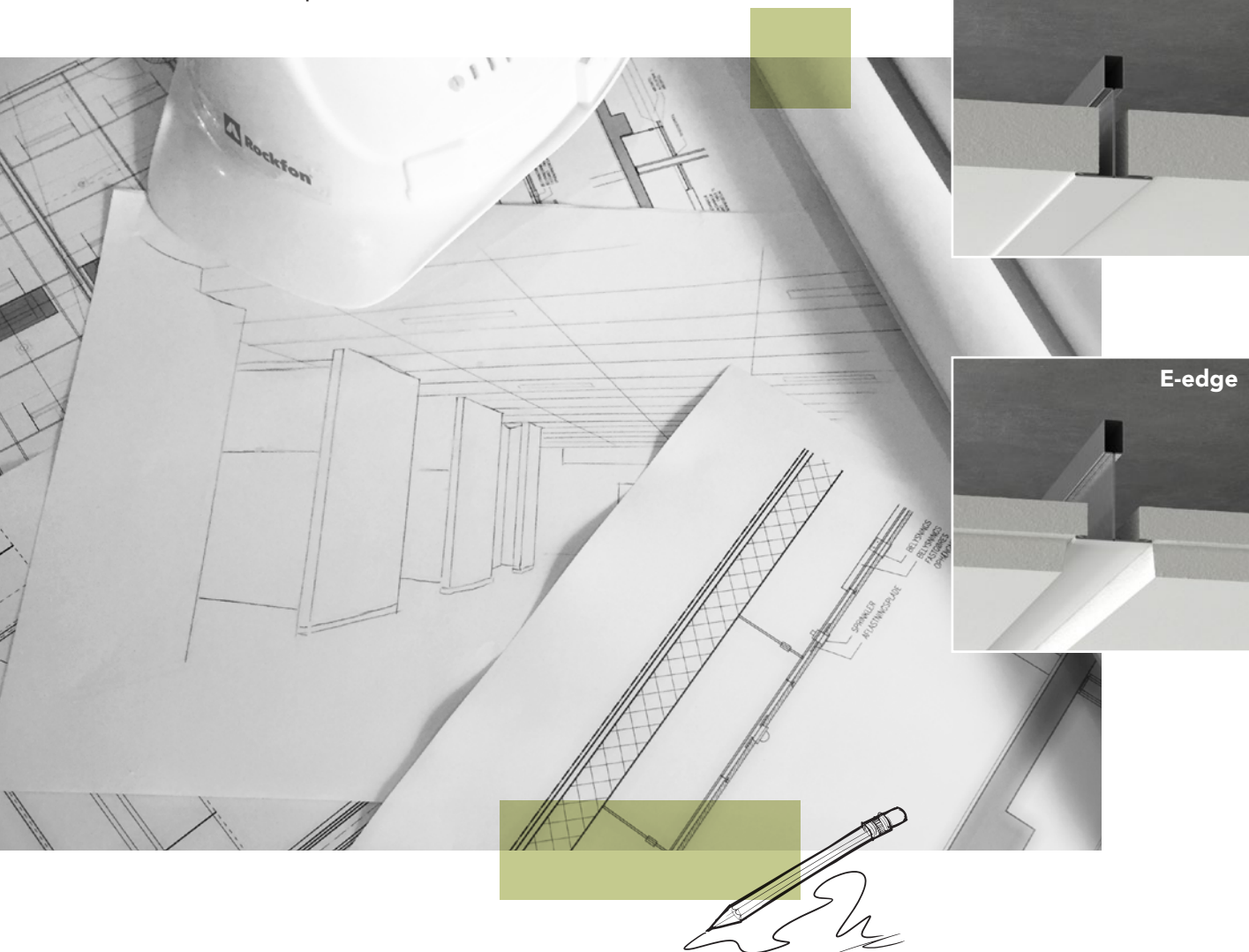


Rockfon® System XL T24 A, E™

System Description



Visible/Semi-concealed ceiling system Standard

- Ceiling system with a 24 mm wide visible grid with A edge tiles or semi-concealed E edge tiles
- Typically at least 20 % quicker and easier to install
- 1800 mm cross tees resulting in 33 % less suspension points when compared to other systems
- Every tile is demountable and fewer hangers allow easy access to ceiling voids

Description

Rockfon System XL T24 A, E is used to create a semi-concealed (E edge) or visible (A edge) grid ceiling system. It combines the **Chicago Metallic T24 Click 2890** grid and **A or E edge Rockfon tiles**.

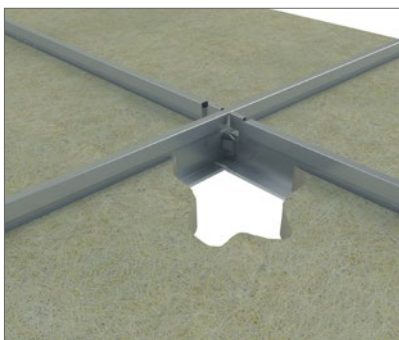
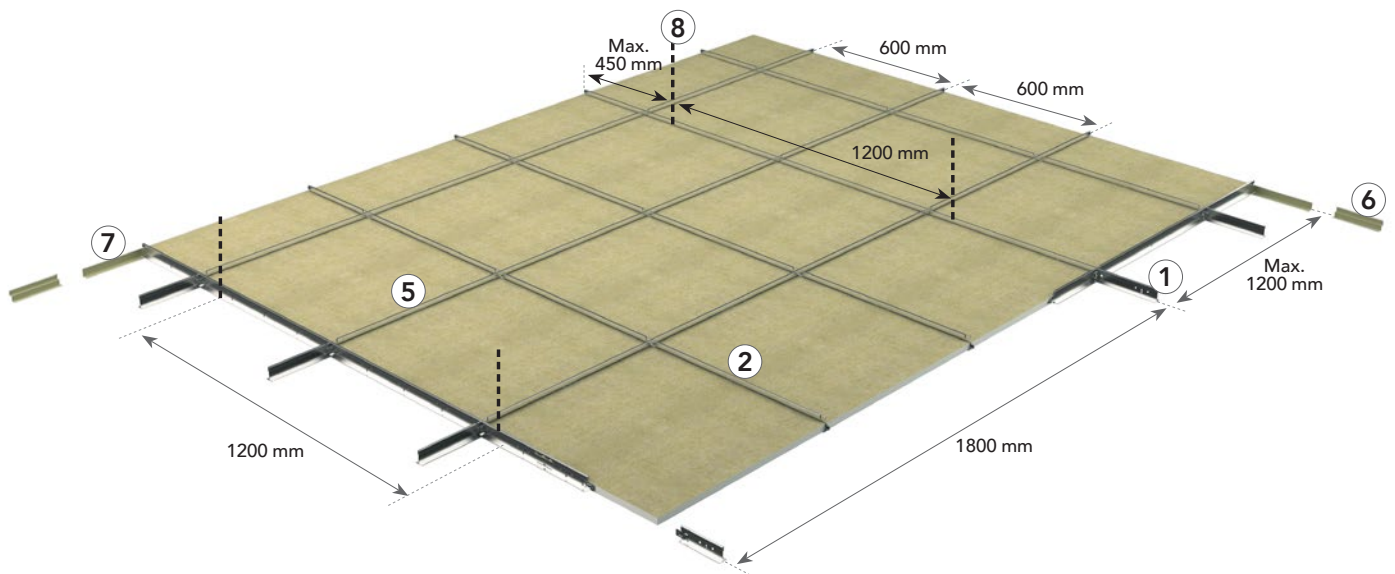
Main runners in Rockfon System XL T24 A, E are installed at 1800 mm centres which provides a quick, easy and cost effective installation.

With Rockfon System XL T24 A, E, 33 % less hangers are needed for installation and 33 % of levelling work is eliminated compared to a traditional T24 visible/semi-concealed grid ceiling system.

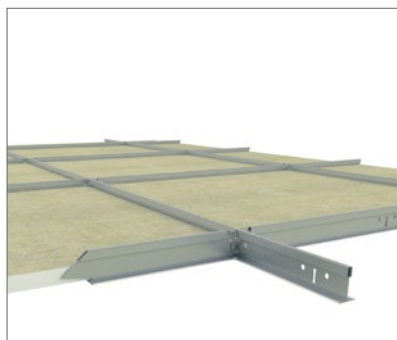
The system can be installed either directly to the soffit or suspended at a suitable height. Main runners and cross tees have a visible width of 24 mm. All components are made from galvanised steel with a smooth, white surface.

Rockfon System XL T24 A, E is characterised by its quick and easy installation due to its limited number of components. It provides easy access to service installations in the ceiling void due to the small number of hangers required.

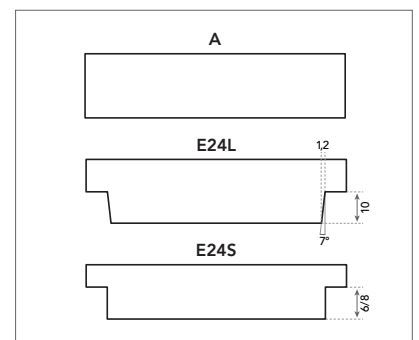
The grid system can be combined in many different ways to suit a wide range of tile and plank dimensions. Main runners and cross tees have an equal height of 38 mm giving higher stability and easy integration of services.



Click system providing quick and easy installation and demounting.



38 mm full height main runners and cross tees for stability and easy service integration.



A and E edges ensuring quick installation and full demountability.

System components and consumption guide

Tile	Chicago Metallic T24 Click 2890					Wall angles		Accessories			
	1	2	3	4	6	7	8	9	10	11	
A, E edge	Main runner T24 Click/Hook 3600	Cross tee T24 Click 600	Cross tee T24 Click 1200	Cross tee T24 Click 1800	W Shadow moulding wall angle	Perimeter wall angle trim	Wire suspension hanger	Direct fixing bracket	Wall spring fixt	Wall & bridging bracket	
Dimension (mm)	Consumption/m ²										
600 x 600	2.78 pcs/m ²	0.55 lm/m ²	1.11 lm/m ²	-	1.67 lm/m ²	1)	1)	0.46 pcs/m ²	0.46 pcs/m ²	1)	1)
1200 x 600	1.39 pcs/m ²	0.55 lm/m ²	-	1.11 lm/m ²	0.83 lm/m ²	1)	1)	0.46 pcs/m ²	0.46 pcs/m ²	1)	1)
1800 x 600	0.93 pcs/m ²	0.55 lm/m ²	-	-	1.67 lm/m ²	1)	1)	0.46 pcs/m ²	0.46 pcs/m ²	1)	1)

1) Consumption depends on room size.

Tiles - A and E Edge



Chicago Metallic T24 Click 2890

1. Main runner T24 Click/Hook 3600



2. Cross tee T24 Click 600



3. Cross tee T24 Click 1200



4. Cross tee T24 Click 1800



Wall angles

6. W Shadow moulding wall angle



7. Perimeter wall angle trim



Accessories

8. Wire suspension hanger and Rigid angle hanger



9. Direct fixing bracket



10. Wall spring fixt



11. Wall & bridging bracket



Performance



System load bearing capacity

		Max. Load (kg/m ²)	
Hanger distance (mm)	Dimensions (mm)	Max. 2.5 mm deflection	Max. 4.0 mm deflection
1200	600 x 600	2.8	5.2
1200	1200 x 600	-	2.5
1200	1800 x 600	3.3	5.7

For 1800 x 600 mm tile, the use of stabilising profiles is recommended in case extra load is applied on the system.

The system's load capacity is determined from a max. deflection of the individual components corresponding to 1/500 of the span or the cumulative deflection of all structural components which does not exceed 2.5 or 4 mm. The load bearing capacity is given as regularly distributed load in kg / m², the weight of the tile is not included.



Corrosion resistance

Class B (EN13964)



Demountability

Tiles mounted in Rockfon System XL T24 A, E are fully demountable.



Fire resistance

Some Rockfon ceiling systems have been tested and classified in accordance with European norm EN 13501-2 and/or national norms. Please contact Rockfon.

Compatible Tiles Overview

All Rockfon A and E edge tiles available in dimensions mentioned in the "System load bearing capacity" table above can be installed in Rockfon System XL T24 A, E.

		Dimensions (mm)		
Tiles	Thickness (mm)	600 x 600	1200 x 600	1800 x 600
Rockfon Blanka A	20	**		**
Rockfon Blanka E	20	*		
Rockfon Korál A	15	**	*	
Rockfon Korál A	20			**
Rockfon Korál E	15	**	*	
Rockfon Tropic A	15	**	*	
Rockfon Tropic E	15	**	*	

* Max. deflection of grid system: 4.0 mm.

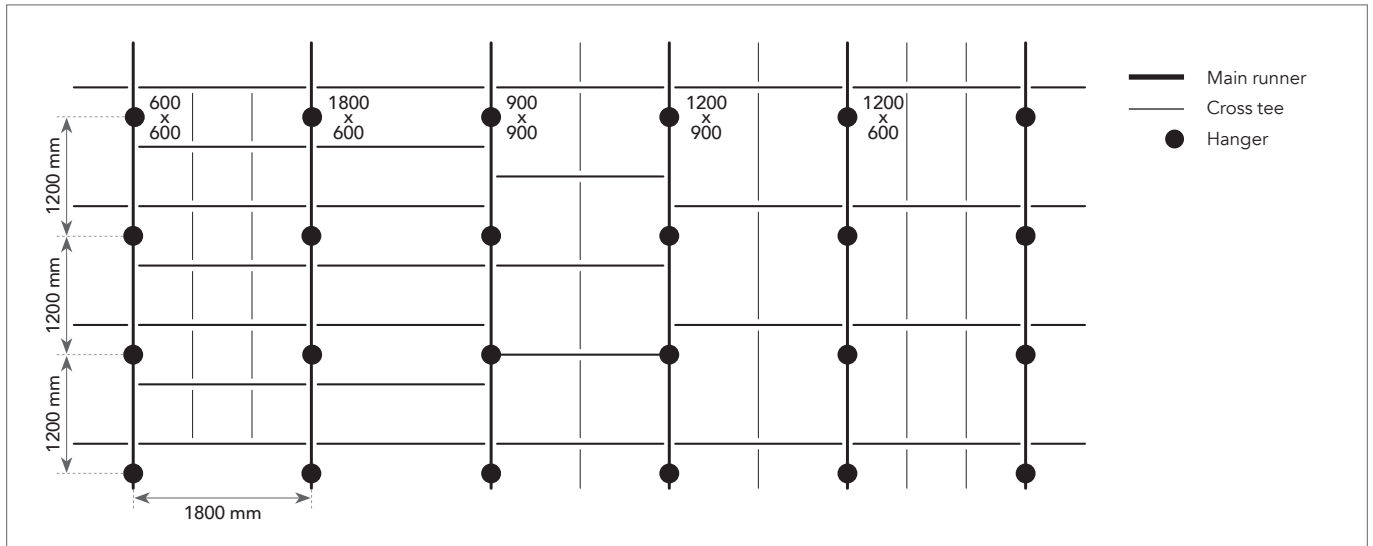
** Max. deflection of grid system: 2.5 mm.

Other dimensions can be installed in Rockfon System XL T24 A, E. Please contact Rockfon.

Grid Installation

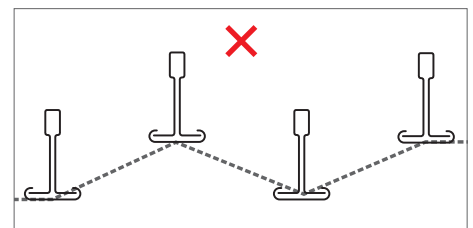
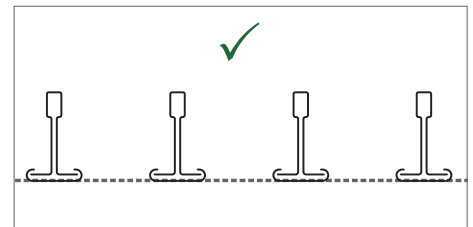
Grid layout and hanger location

Rockfon A and E edge tiles can be installed in Rockfon System XL T24 A, E. Some layout options are shown below depending on the size of the tile.



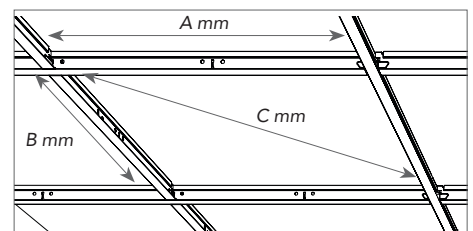
Installation requirements

During and after grid installation, it is important to check that T profiles are perfectly aligned horizontally. A maximum level difference of ± 1 mm is recommended between profiles and should not be added. This tolerance is valid for all directions.



It is also important to check the squareness of the angles between the main runners and cross tees. This can be easily done by comparing the measurements of the two diagonals. See recommended tolerances in the table below.

Dimensions (A x B)	Diagonal (C)	Tolerance
mm		
600 x 600	814.6	$\pm 1,0$
900 x 600	1048.4	
1800 x 600	1980.3	

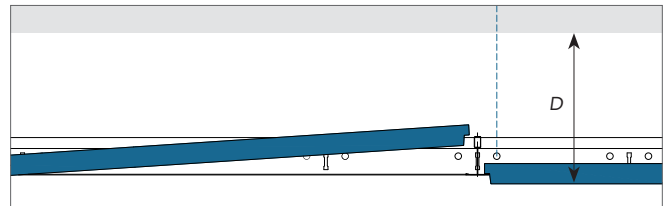


Minimum installation depth (mm)

Tiles installed in Rockfon System XL T24 A, E are fully demountable.

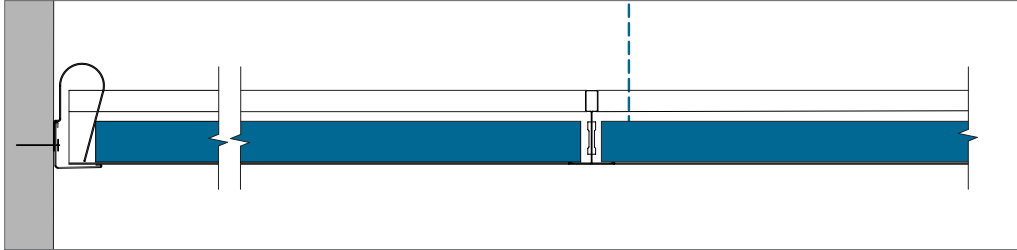
The installation depth is defined as the distance from the under side of the tile to the underside of the substrate, where the hangers are fixed. D is the minimum installation depth for easy tile installation and demountability.

Tile thickness	Dimensions	D
mm		
15	600 x 600	100
20-25	600 x 600, 1200 x 600, 1800 x 600	
30		

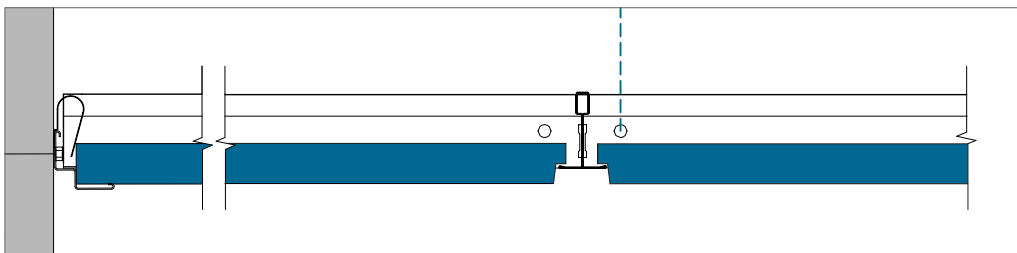


Perimeter Finish Options

Below are examples of perimeter finishing. Further details can be found on www.rockfon.co.uk



A-edge - Perimeter finish with wall angle trim.



E-edge - Perimeter finish with shadow wall angle trim.

Service integration

Rockfon ceiling tiles are easy to cut and therefore it is very easy to integrate services in Rockfon tiles. The cut-outs can be made with a simple utility knife.

When the ceiling system is load bearing, Rockfon recommends using support arms or a yoke that transfers the weight of the service to the grid. The size of the yoke should not be bigger than module

600 x 600 mm and the use of additional hangers to overcome deflection in the ceiling system is strongly recommended. When using support arms to spread the weight of the installation, Rockfon recommends spanning a maximum of 600 mm. For more information on the load bearing capacities of this Rockfon System XL T24 A, E please refer to the table below.



System load bearing capacity

		Max. Load (kg/m ²)	
Hanger distance (mm)	Dimensions (mm)	Max. 2.5 mm deflection	Max. 4.0 mm deflection
1200	600 x 600	2.8	5.2
	1200 x 600	-	2.5
	1800 x 600	3.3	5.7

The system's load capacity is determined from a max. deflection of the individual components corresponding to 1/500 of the span or the cumulative deflection of all structural components which does not exceed 2.5 or 4.0 mm. The loading capacity is given as regularly distributed load in kg / m², the weight of the tile is not included.

Planning

A thorough project plan will result in less re-work and less ceiling tile damage. Rockfon recommends discussing the installation planning thoroughly and well in advance with other installers that have to work in or near the suspended ceiling. By doing so damaged ceiling tiles and dirty spots on the finished ceiling surface can be reduced, which reduces project costs.

Overview load bearing capacity

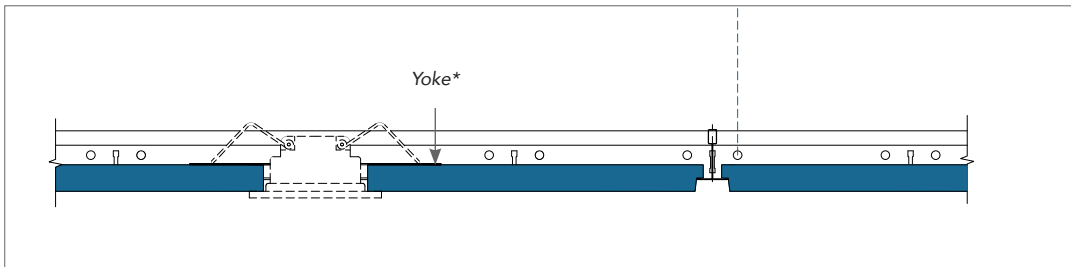
	Weight of installations		
	< 0.25 kg/pcs	0.25 ≥ 3.0 kg/pcs	> 3.0 kg/pcs
Small service integration; Spot- or downlight, speaker, ventilation etc.	Drawing A	Drawing B	Suspend separately
Large service integration; Downlight, speaker, ventilation, etc.	Drawing A	Drawing B	Suspend separately
Modular lighting- or ventilation fixture	Drawing C; System load bearing capacity (if evenly distributed over grid in kg/m ²)		

When installing services in Rockfon System XL T24 A, E you should always follow local building regulations if more strict than the load bearing capacity constraints Rockfon recommends in the above table.

Contact your local Rockfon technical service for more information on suitable lighting fixtures, accessories and the availability of CAD drawings of the different services integrated in Rockfon System XL T24 A, E. Special solutions with integrated services are, if available, shown on page 11 of this document in the Tools section.

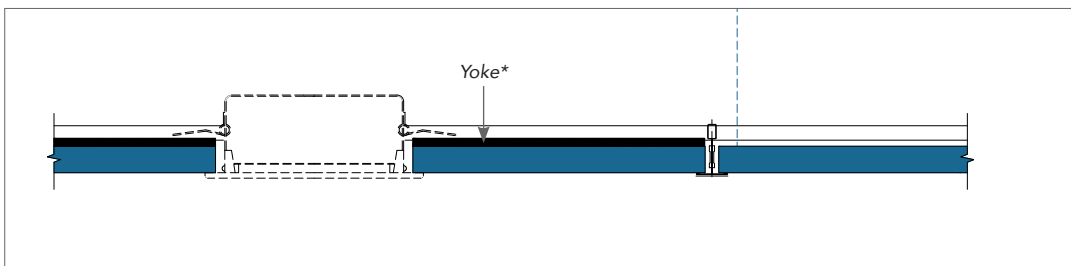
Drawing A

The integration of a spotlight, smoke detector, speaker, etc. (weighing < 0.25kg/pcs).
Rockfon recommends installing spotlights and downlights centralised in the tile.



Drawing B

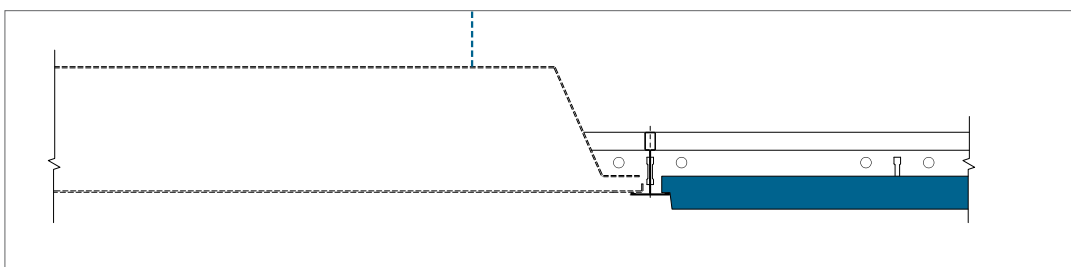
The integration of a downlight, spotlight, smoke detector, loud speaker, etc. (weighing $0.25 \geq 3.0$ kg/pcs).
Use of an appropriate yoke to spread the load to the grid (as shown in the detail) or use of support arms to spread the load to the grid system is strongly recommended. The use of additional hangers to avoid excess deflection and a centralised installation of the lighting in the tile is strongly recommended.



**The thickness of the plywood or metal yoke needs to be adapted in function of the weight, size and position of your service integration (e.g. downlight or speaker). The Plywood or metal yoke itself may not deflect after installing your service integration.*

Drawing C

The integration of a modular luminaire or air vent (evenly distributed over grid), weighing max. the system loading capacity. If the load capacity of the system is likely to be exceeded it is strongly recommended to suspend the service independently. Alternatively use services equipped with supporting arms on minimum two opposite sides to transfer the weight of the service to the top of the bulb of the grid. This is safer and reduces the likelihood of cross tee rotation.

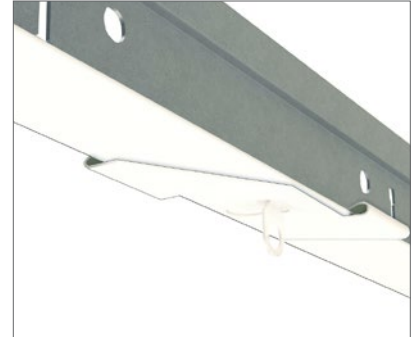


Specific Solutions

Suspension clip

This clip can be twist fixed on the bottom of the T24 profile and gives the possibility to suspend signs or advertisements underneath the clip.

The clip is in the same colour (white) as the grid.



DLC clip as a bridge for suspension main runner

A DLC clip can be used to connect profiles to one another without the use of cross tees to create multi-layer grid constructions. This is particularly useful to work around obstacles and services such as light fixtures, ventilation ducts and pipes when these interrupt the primary grid layer.

For corridors or large tile dimensions, using a multi-layer grid layout will save on the amount of hangers and will lead to a neat and tidy installation.



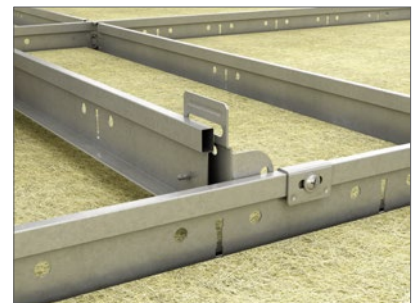
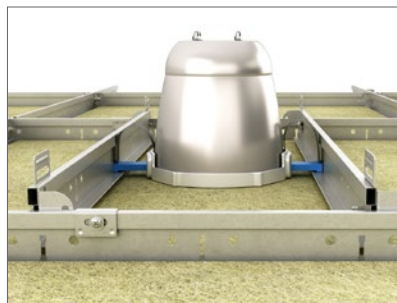
Bridging (Eliminate deflection)

Perfectly optimised for our Rockfon suspension grids, the bridging bracket enables you to secure your T profiles across a variety of tile thicknesses ranging from 0 mm (only relevant for our Chicago Metallic™ T24 Click 2890 or Chicago Metallic T24 Click 2790) to 20 mm.

Easy to install, the bracket is a versatile, non-combustible component that can be used for service integration with different dimensions without the need for a using a yoke or patress.



To install the Bridging function of the bracket, simply screw fasten the Wall & Bridging Bracket for T profiles to your main runners and cross tees, transferring the weight of the service to the grid. This ensures that no load rests on the tile, eliminating concerns of deflection.



General installation recommendations

Junction between ceiling and wall or other vertical surface

The perimeter trim should be fastened to vertical surfaces at the required level using appropriate fixings at every 300-450 mm centres. Ensure that butt joints between adjoining lengths of trim are neat and that the trim is free from kinks and remains true and level. For the best aesthetics, use as long a length of trim as possible. The minimum recommended cut length is 300 mm.

Perimeter trims

Timber trims, timber shadow battens and metal. Shadow mouldings should not be used with fire resisting/protecting ceilings.

Junction between ceiling and curved vertical surface

The use of a preformed curved perimeter trim is the most appropriate method. Rockfon can provide details of curved perimeter trims on request.

Corners

Perimeter trims should be neatly mitred at all corner joints. Overlap mitres are acceptable on metal trims on internal corner joints unless specified otherwise.

Suspension grid

Unless specified otherwise, the ceiling should be set out symmetrically and where possible, perimeter tiles should be greater than 200 mm in width. The hangers should be fastened with appropriate top fixings and to the main runners at 1200 mm centres (or less with greater load).

Main runners should be positioned at 1800 mm centres at all times. The centre distance of the cross tees depends on the module size of the tiles.

For proper grid installation, make sure the T profiles are perfectly aligned horizontally and diagonals of modules are equal (see requirements and tolerances on page 5). Main runner joints should be staggered and there should be a hanger positioned within 150 mm of the fire expansion element/cut-out and within 450 mm of the end of the main runner where it terminates at a perimeter.

Additional hangers may be necessary to support the weight of ceiling services. When using direct hangers, a fixing pin should be used to lock the hanger on to the bulb of the main runner.

Tiles

We recommend the use of clean nitrile or PU coated gloves when installing Rockfon tiles in order to avoid fingerprint marking on the surface.

For an optimum work environment, we recommend installers always observe common work practices and follow the installation advice as shown on our packaging.

Cutting is made easily with a sharp knife. All off-cuts and holes must be treated according to local Building Regulations. Installation of 1800 x 600 mm tiles is recommended to be carried out by two persons.

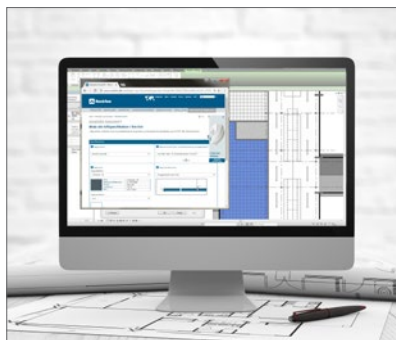
Note! Certain smooth matt surfaces are directional. To ensure consistency of the finished ceiling, it is important that all tiles are installed in one direction indicated by the arrow printed on the back of each tile.

Tools

Rockfon has developed specific tools that are available on www.rockfon.co.uk



Visit our online CAD Library or BIM portal to assist you in your project design.





Generate specification texts for our products



Explore our vast library of reference projects

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