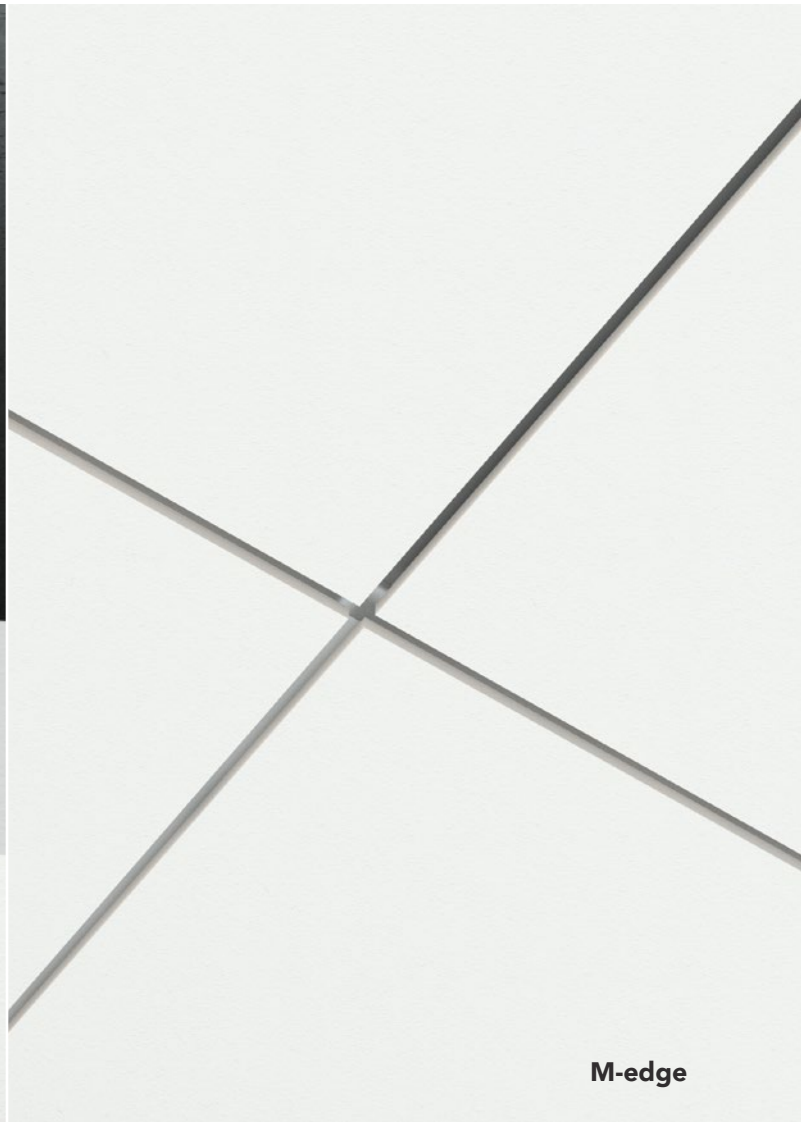
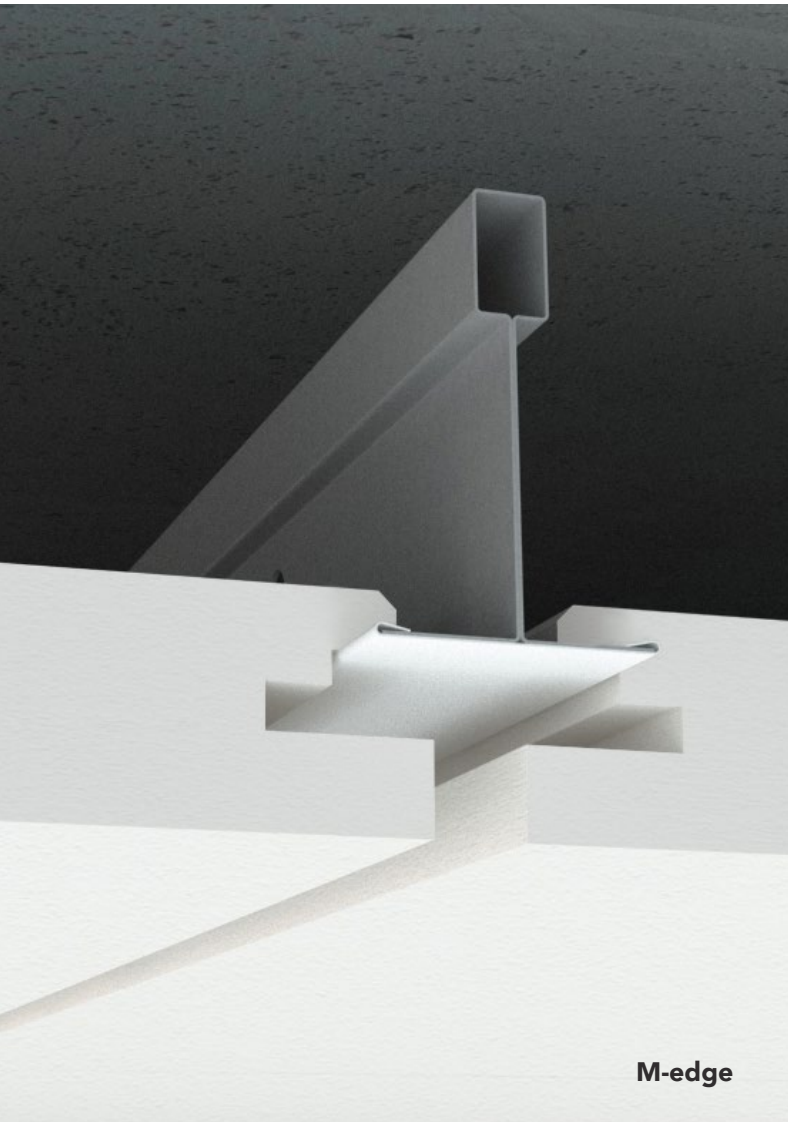


INSTALLATION GUIDE

Rockfon® System T24 M™



Semi-concealed ceiling system
Aesthetic

- Elegant floating ceiling created by an 8 mm gap between the tiles
- Every single tile is demountable for quick and easy access to services
- Provides a beautiful shadow effect on the finished ceiling

Sounds Beautiful

Description

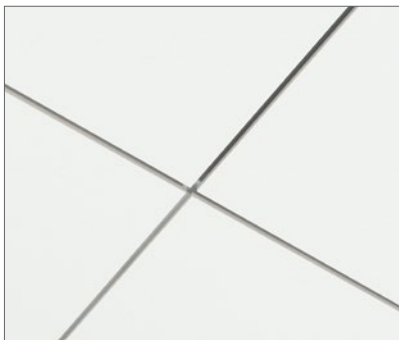
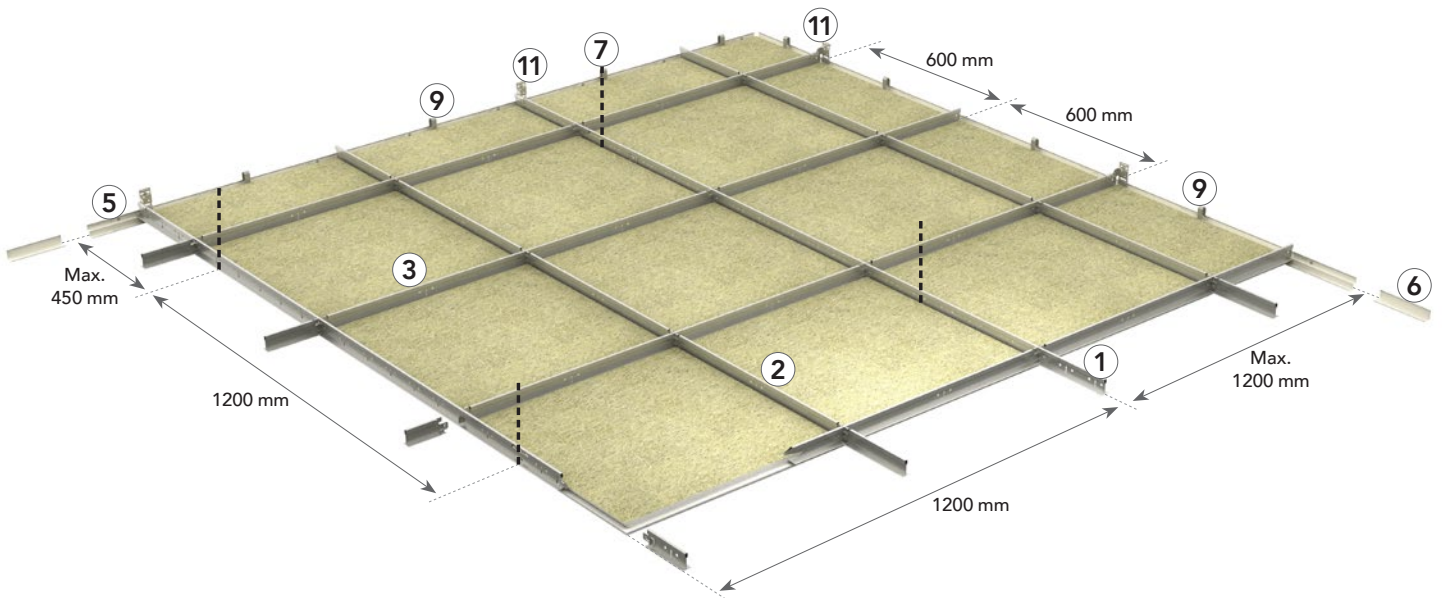
Rockfon System T24 M is a semi-concealed system used for the installation of Rockfon M-edge tiles.

In the finished ceiling, the grid is deeply recessed and the intricate edge detail provides an attractive unique shadow effect.

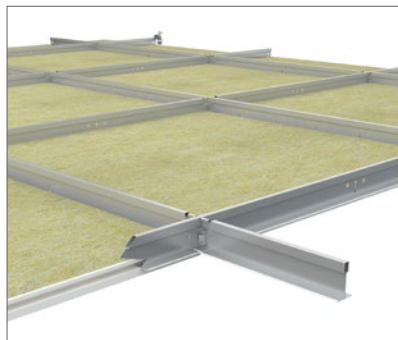
To further enhance this effect, contrasting grid colours can be used.

The system is either fixed directly to the soffit or suspended at the desired height. The key feature of this ceiling is the 8 mm recess between the tiles which provide a shadow and semi-conceals the grid to create a floating appearance.

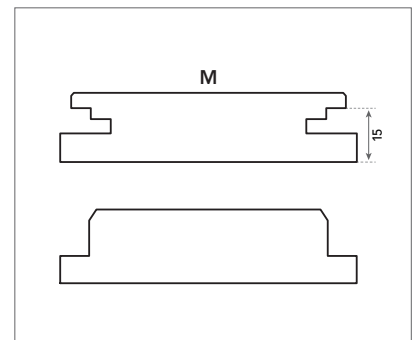
The Rockfon M-edge tiles are installed in the strong and stable Chicago Metallic T24 Click 2890 grid which can be easily installed and demounted. The main runners should be positioned at 1200 mm centres.



The 8 mm recess between the tiles provide a shadow and semi-conceals the grid to create a floating appearance.



Click system providing quick and easy installation and demounting.



Rockfon System T24 M can be fixed directly or suspended to the desired height and is demountable.

System components and consumption guide

Tile	Chicago Metallic T24 Click 2890			Wall angles		Accessories					
	1	2	3	5	6	7	8	9	10	11	
-	Main runner T24 Click/Hook 3600/3750	Cross tee T24 Click 600	Cross tee T24 Click 1200	W 15 x 12 Shadow moulding wall angle	Perimeter wall angle trim	Rigid angle hanger	Direct fixing bracket	Wall spring fixt	Spline	Wall & bridging bracket	
Dimensions (mm)	Consumption/m ²										
600 x 600	2.78 pcs/m ²	0.83 lm/m ²	0.83 lm/m ²	1.67 lm/m ²	1)	1)	0.70 pcs/m ²	0.70 pcs/m ²	2)	-	1)
1200 x 600	1.39 pcs/m ²	0.83 lm/m ²	-	1.67 lm/m ²	1)	1)	0.70 pcs/m ²	0.70 pcs/m ²	2)	-	1)

1) Consumption depends on room size.

2) Wall spring fixt is used to block the tile against the wall. When wall spring fixt is used, make sure there is enough space between the tile and the wall to insert the spring. Use one spring per tile.

Tile - M 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



Wall angles

5. W 15 x 12 Shadow moulding wall angle



6. Perimeter wall angle trim



Accessories

7. Rigid angle hanger



8. Direct fixing bracket



9. Wall spring fixt



10. Spline



10. 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	9.9	16.5
1200	1200 x 600	10.9	17.9

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 T24 M 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.



Impact resistance

Class 3A, tested in accordance with EN13964-Annex D. Impact resistance classifications confirm the system's capability to withstand incidental or occasional impact. (See Specific Solutions).

Compatible Tiles Overview

All Rockfon M edge tiles available in dimensions mentioned in the "System load bearing capacity":

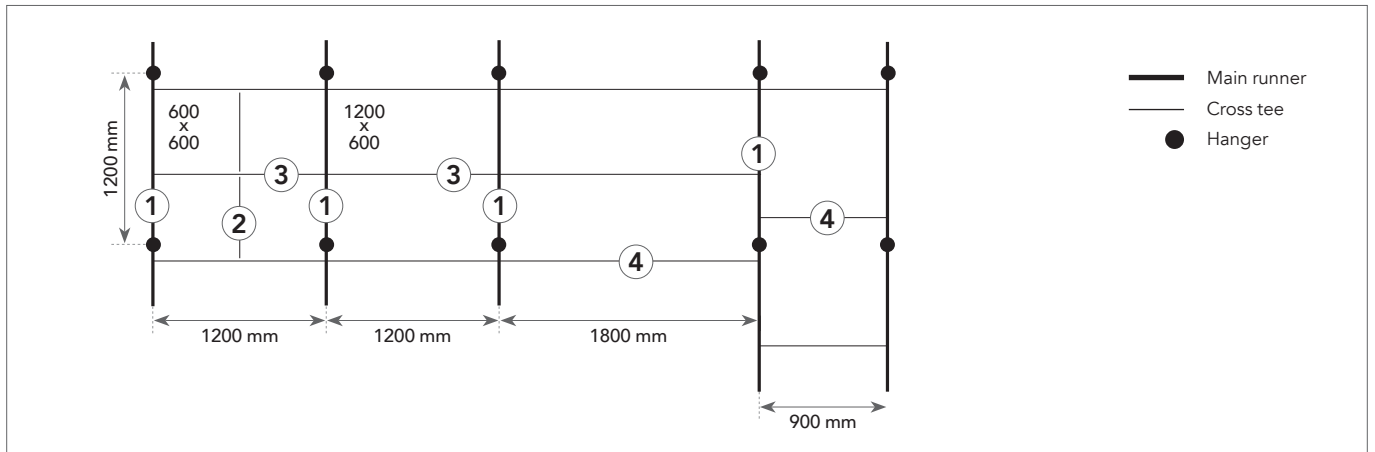
		Dimensions (mm)	
Tiles	Thickness (mm)	600 x 600	1200 x 600
Rockfon Blanka®	20	•	•

Other dimensions can be installed in Rockfon System T24 M. Please contact Rockfon.

Grid Installation

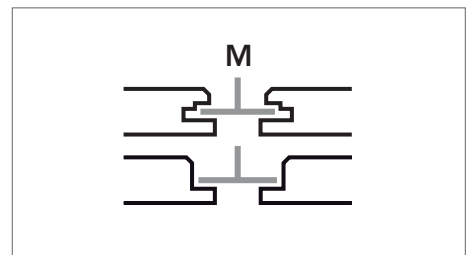
Grid layout and hanger location

Rockfon M-edge tiles can be installed in Rockfon System T24 M Click. Some layout options are shown below depending on the size of the tile.



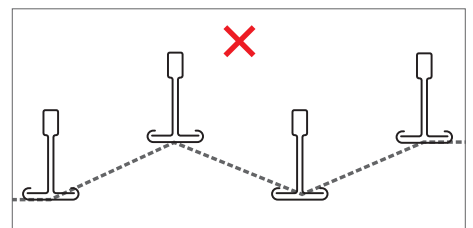
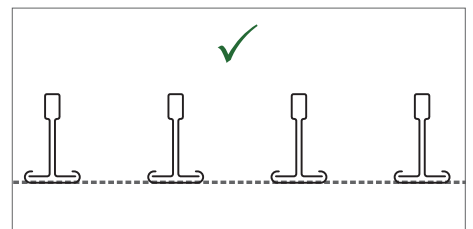
Edge orientation

Rockfon M-edge tiles have 2 edges on adjacent sides. In case of a rectangular tile (1200 x 600) the edge supported by the grid is situated on the long side.

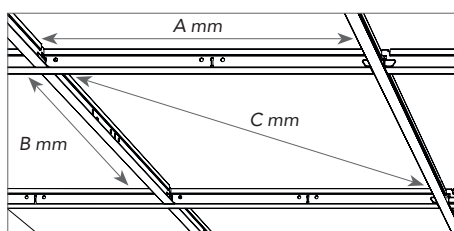


Installation requirements

During and after the grid installation, it is important to check that the T profiles are perfectly aligned horizontally. A maximum level difference of +/- 1 mm is recommended between the profiles. This tolerance is valid for all directions.

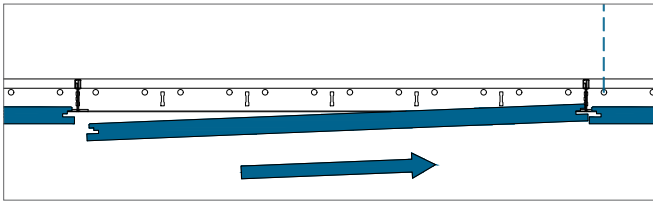


It is also important to check the squareness of the angles between the main runners and cross tees. This can be done easily by comparing the measurements of the two diagonals. See recommended tolerances on the drawing below.

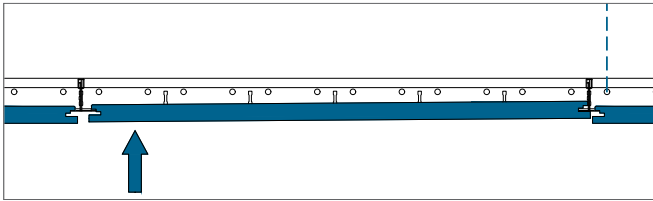


Dimensions (A x B)	Diagonal (C)	Tolerance
mm		
600 x 600	814.6	+/- 0.5
1200 x 600	1309.5	

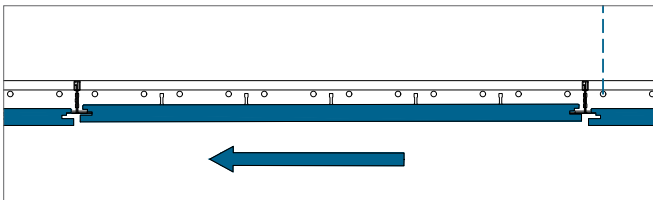
Tile Installation



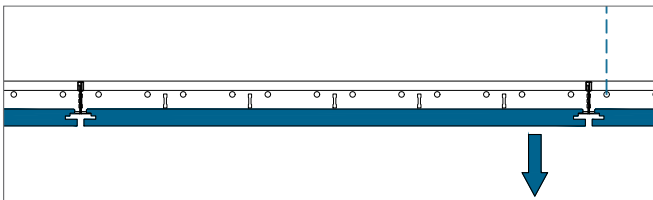
Insert the M1-edge tile onto the grid until it can go no further.



Lift up the other side of the M1-edge tile until it is at the level of the grid table.



Push the M1-edge tile to the left.



Centralise it into position

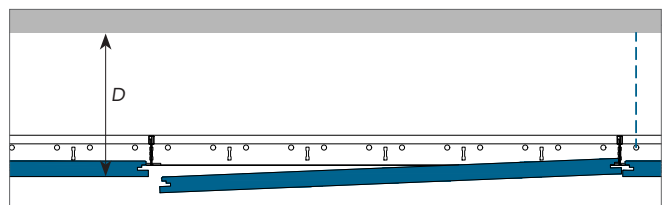
Minimum installation depth (mm)

Tiles installed in Rockfon System T24 M are fully demountable.

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

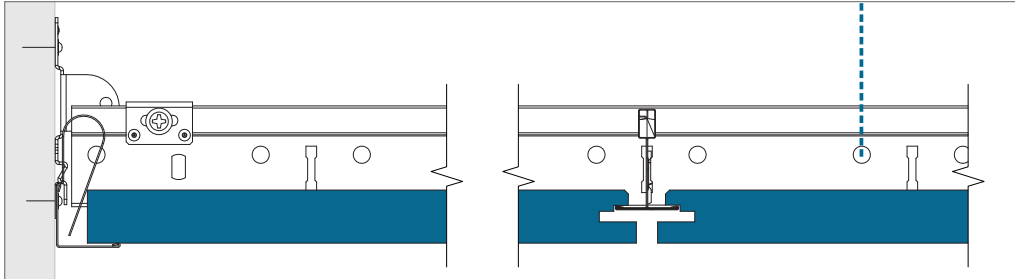
Minimum ceiling installation depth when using direct hangers is 64 mm.

Tile thickness	Dimensions	D
	mm	
20	600 x 600	96
	1200 x 600	

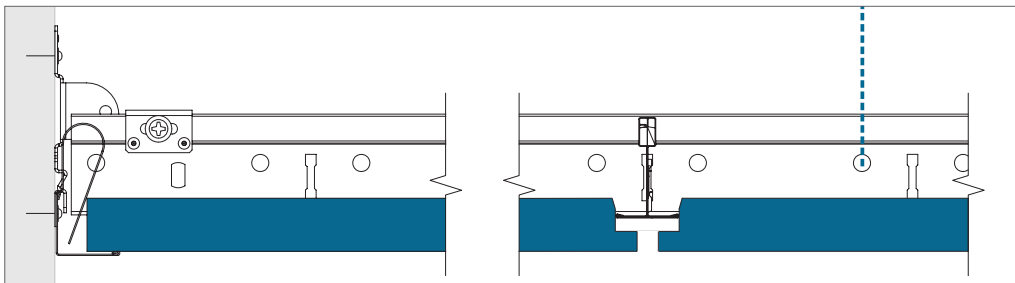


Perimeter Finish Options

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

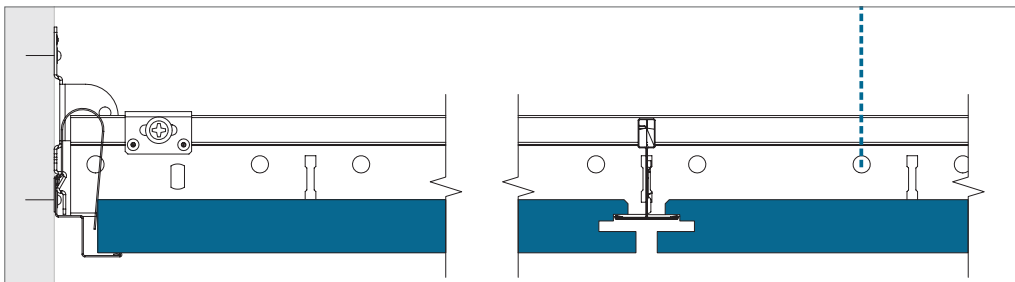


View on main runner.

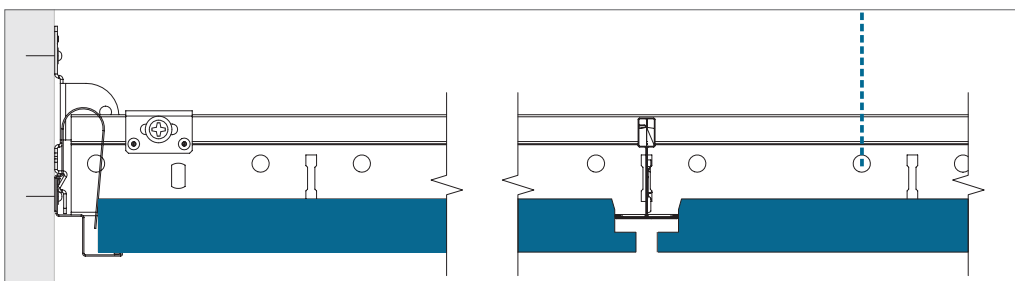


View on cross tee.

Perimeter finish with wall angle trim.



View on main runner.



View on cross tee.

Perimeter finish with W shadow moulding wall angle.

Service integration

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

When the system is load bearing we recommend using a yoke or extra support arms that spread the weight of the service installation. The size of the yoke should not be bigger than the module size 600 x 600 mm and the use of extra hangers to overcome deflection in the ceiling system is strongly recommended. When using support

arms to spread the weight of the installation, we recommend spanning a maximum 600 mm and the use of extra hangers to reduce deflection in the ceiling system.

When integrating (recessed) modular luminaires please take note of the tile design and its relationship to the grid. Because of the suspension grid design, a special type of luminaire should be chosen in order to create an aesthetically pleasing and well levelled ceiling surface.

Planning

A thorough planning of the project will result in less re-work and less ceiling tile damages. Rockfon recommends discussing the project 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 avoided, which reduces costs on the project.

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 independently
Big service integration; Downlight, speaker, ventilation, etc.	Drawing A	Drawing B	Suspend independently
Modular lighting- or ventilation fixture	Drawing C; System load bearing capacity (if evenly distributed over grid in kg/m²)		

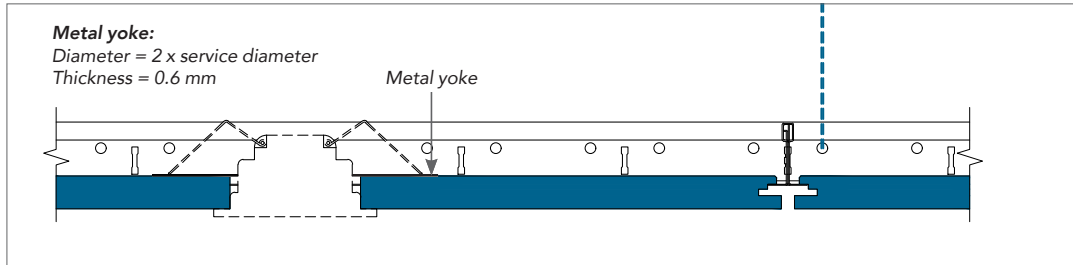
When installing services in Rockfon System T24 M you should always follow local building regulations if more strict than the load bearing capacity constraints Rockfon recommends in the above table.

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

Drawing A

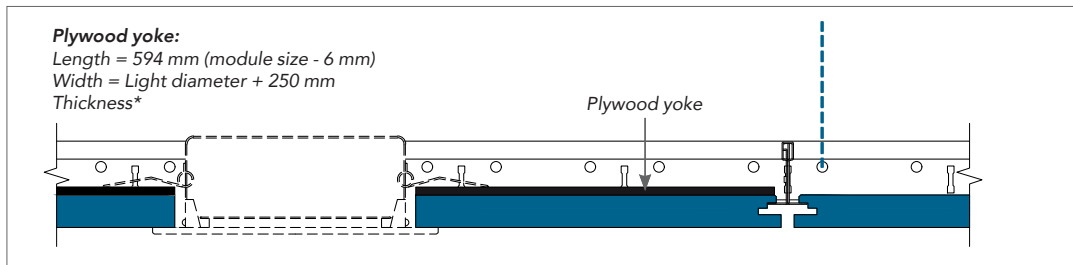
The integration of a spotlight, smoke detector, speaker, etc. (weighing < 0.25 kg/pcs).

Rockfon recommends installing spots and downlights centralised in the tile.



Drawing B

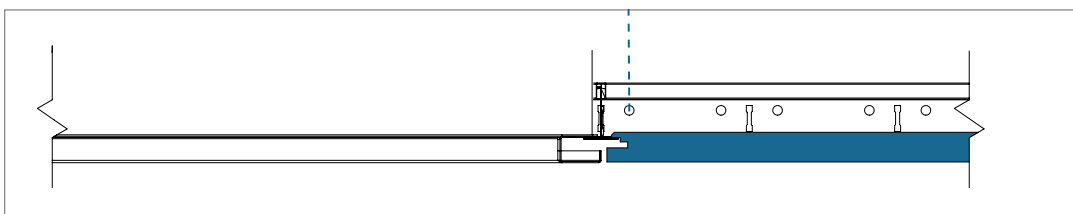
The integration of a downlight, spotlight, smoke detector, loud speaker, etc. (weighing $0.25 \geq 3.0$ kg/pcs). Use of a plywood yoke to spread the load on the back of the tile (as shown in the detail) or use of support arms to spread the load to the grid system is strongly recommended. The use of extra hangers to reduce 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 lighting fixture or air vent (evenly distributed over grid), weighing max. the system loading capacity. It is strongly recommended to suspend the service integrated surface independently with extra hangers.

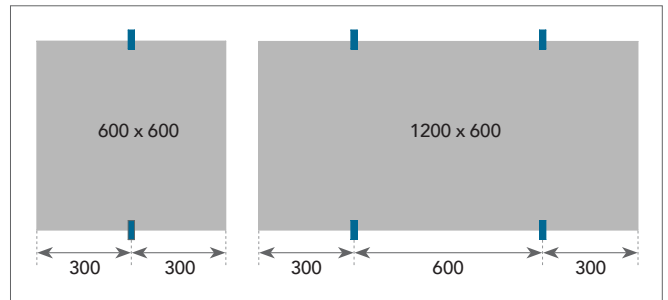


Specific Solutions

Enhanced impact resistance

For areas where impact resistance or inaccessibility to the ceiling void is required (e.g. classrooms, corridors), Rockfon M edge tiles can be locked onto the grid by means of specially designed fastening clips. They are easily installed by inserting them between the flange of the grid and the M1 edge of the tile and locking them with a screw driver.

Fastening clips must be installed as indicated below to fulfil the impact resistance Class 3A (EN13964-Annex D):



Locking clip.



Installation of locking clip with screwdriver.



Installed locking clip.

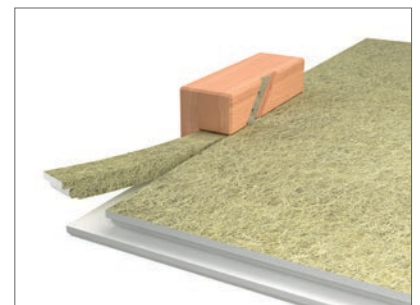
DLC Clip

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 get around obstacles and services such as light fixtures, ventilation ducts and pipes when these interrupt the primary grid layer.



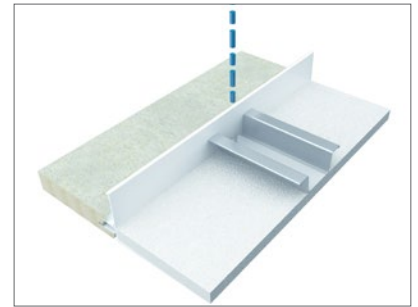
X-edge knife

Installing the perimeter tiles can be a hassle, due to cross tees and perimeter trim sitting too close to each other. This specially developed X-edge knife gives you an extra 25 mm installation space. By cutting of (a piece of) the backside of the tile, you will be able to slide the tile over your cross tees, install it and slide it back on to your perimeter trim.



Transition profile

Bridging differences and removing the need for makeshift configurations; our wide assortment of Chicago Metallic® ALU Transitions create a seamless exchange between modular and monolithic ceilings. Available in standard white it matches perfectly with our Chicago Metallic grid assortment. Our ALU transitions are designed to accommodate various edge types, materials, thicknesses and transitional preferences. The ALU transitions are perfectly adapted for Rockfon M edges as well as Rockfon® Mono® Acoustic.



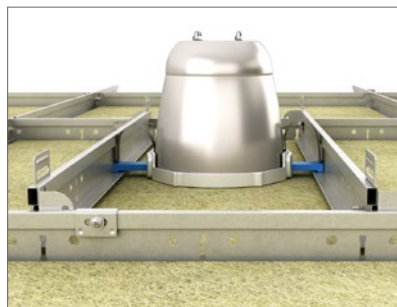
Bridging (Eliminate deflection)

Perfectly optimised for our Rockfon Systems, the bridging bracket feature provides a way of securing your T profiles across a variety of panel thicknesses ranging anywhere 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 tool and can be used for service integrations with different dimensions without the need for a yoke.



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 your service integration 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 the vertical surfaces at the required level, using the appropriate fixings every 300-450 mm. Ensure that butt joints between adjoining lengths of trim are neat and that the trim is free from kinks and that it 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.

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 for 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 if greater load bearing capacity is required).

Main runners should be positioned at 1200 mm centres for 600 x 600 mm and 1200 x 600 mm module sizes.

For proper grid installation, ensure 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 nail 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. Cutting is made easy with a sharp knife.

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

All offcuts and holes must be treated according to local Building Regulations.

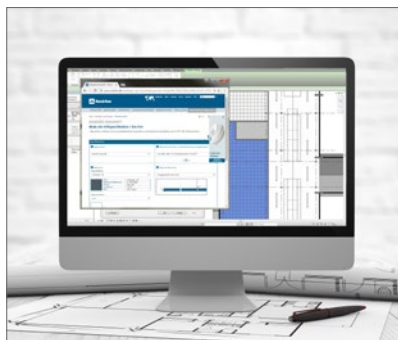
Note! Certain smooth matt surfaces are directional. To ensure consistency of the finished ceiling, it is important that all tiles are installed in one direction, as indicated by the arrow printed on the back of each tile.

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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Sounds Beautiful

