

INSTALLATION GUIDE

Rockfon® System T24 A, E**Visible/Semi-concealed ceiling system
Standard**

- Ceiling system with a 24 mm wide visible grid with A edge tiles or recessed with E edge tiles
- Quick and easy installation
- Easy integration with services and fittings due to 38 mm equal height main runners and cross tees
- Every tile is demountable and fewer hangers allow easy access to the plenum

Sounds Beautiful

Description

Rockfon System T24 A, E is used – depending on the choice of tile – to create a semi concealed (E-edge) or visible (A-edge) grid ceiling system.

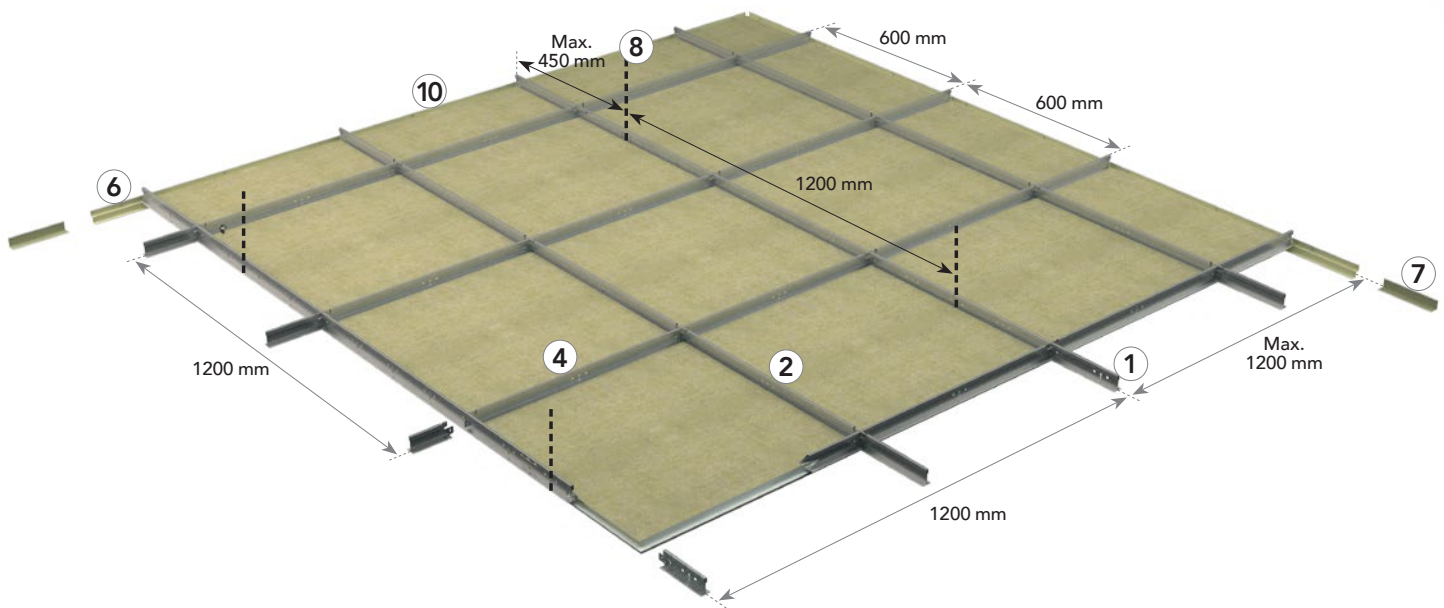
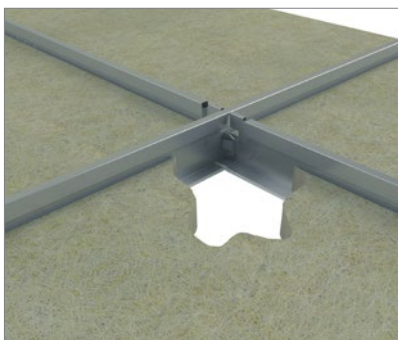
The system can be either installed as a suspended ceiling at the desired height using **Chicago Metallic T24 Click 2890** or mounted directly to the soffit using direct fixing brackets.

In Rockfon System T24 A, E the Chicago Metallic T24 Click 2890 grid benefits from a click system providing quick and easy installation and demounting.

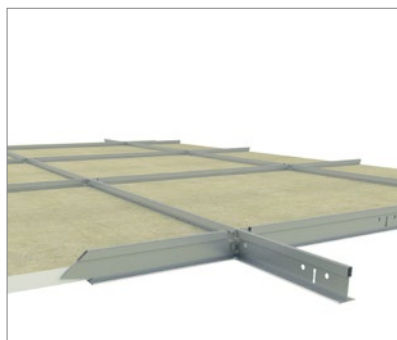
The T profiles have a width of 24 mm, and all components are made of galvanised steel with a smooth, white surface.

The system comprises main runners, cross tees, hangers and other necessary components. The main runners and cross tees have a uniform height of 38 mm, ensuring stability and easier integration of services. The system provides full demountability of all installed tiles. Rockfon A-edge and E-edge tiles are available in different module sizes (see overview on page 3).

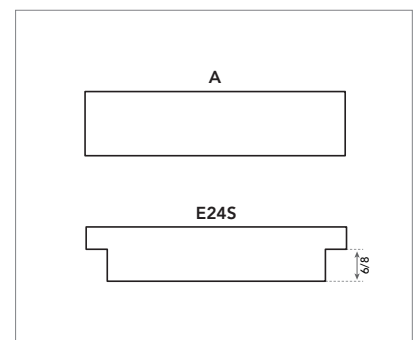
The grid layout to be used depends on the choice of the module size (see layout possibilities on page 5).



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	4	5	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 (L: 3050mm)	Perimeter wall angle trim (L: 3050mm)	Hanger	Direct fixing bracket	Wall spring fixt	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)	0.7 pcs/m ²	0.7 pcs/m ²	1)	1)
1200 x 600	1.39 pcs/m ²	0.83 lm/m ²	-	1.67 lm/m ²	-	1)	1)	0.7 pcs/m ²	0.7 pcs/m ²	1)	1)
1800 x 600	0.93 pcs/m ²	0.56 lm/m ²	-	-	1.67 lm/m ²	1)	1)	0.46 pcs/m ²	0.46 pcs/m ²	1)	1)
2100 x 600	0.79 pcs/m ²	1.67 lm/m ²	0.48 lm/m ²	-	-	1)	1)	1.39 pcs/m ²	1.39 pcs/m ²	1)	1)
2400 x 600	0.69 pcs/m ²	1.67 lm/m ²	0.42 lm/m ²	-	-	1)	1)	1.39 pcs/m ²	1.39 pcs/m ²	1)	1)
1200 x 1200	0.69 pcs/m ²	0.83 lm/m ²	-	0.83 lm/m ²	-	1)	1)	0.7 pcs/m ²	0.7 pcs/m ²	1)	1)

Tiles - A and E edge



A edge



E edge

Chicago Metallic T24 Click 2890

1. Main runner T24 Click/Hook 3600



2. Cross tee T24 Click 600



4. Cross tee T24 Click 1200



5. Cross tee T24 Click 1800



Wall angles

6. W Shadow moulding wall angle



7. Perimeter wall angle trim

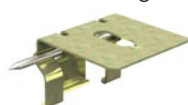


Accessories

8. Hanger



9. Direct fixing bracket



10. Wall spring fixt



11. Wall & bridging bracket



Performance



System load bearing capacity

		Max. Load (kg/m²)	
Hanger distance (mm)	Dimensions (mm)	Max. 2.5 mm deflection	Max. 4.0 mm deflection
1200	600 x 600	9.9	16.5
	1200 x 600	10.9	17.9
	1800 x 600	3,3	5,7
	2100 x 600	32.9	34,7*
	2400 x 600	31.3	34,5*
	1200 x 1200	7.2	11.7

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 mm. The load bearing capacity is given as regularly distributed load in kg/m². the weight of the tile is not included.

* Max. weight defined in function of max. allowable load of quick hangers.



Corrosion resistance

Class B (EN13964)



Demountability

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



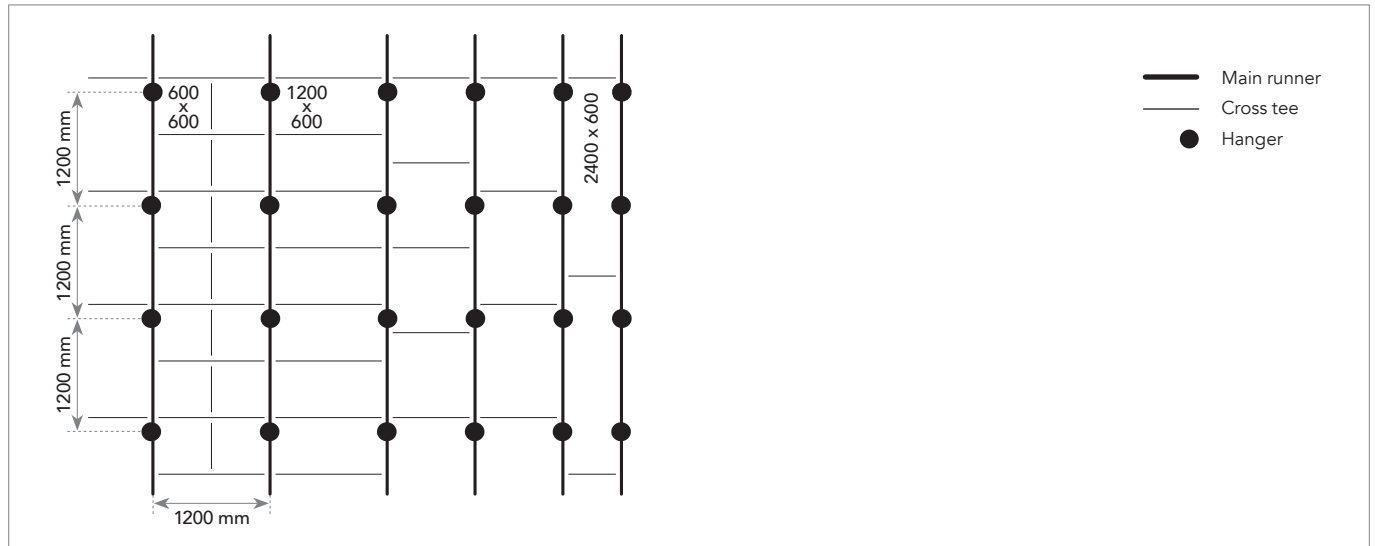
Fire resistance

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

Grid Installation

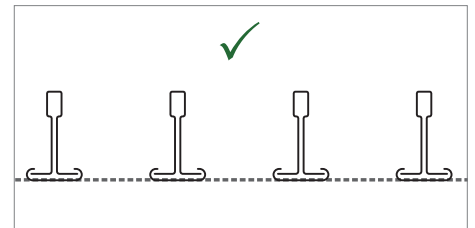
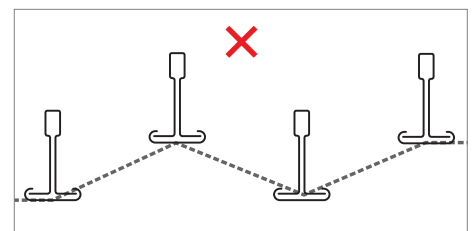
Grid layout and hanger location

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

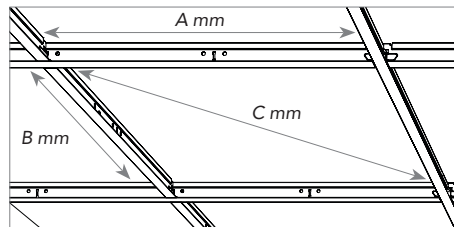


Installation requirements

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 to the right.



Dimensions (A x B)	Diagonal (C)	Tolerance
mm		
600 x 600	814.6	± 1.0
1200 x 600	1309.5	
1800 x 600	1867.1	
2100 x 600	2154.4	
2400 x 600	2444.8	
1200 x 1200	1663.1	

Compatible Tiles Overview

All Rockfon A and E edge tiles available in dimensions mentioned in the "System load bearing capacity" table on page 4 can be installed in Rockfon System T24 A, E.

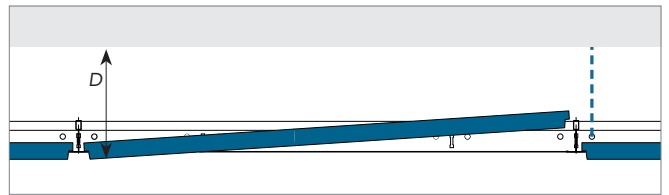
			Dimensions (mm)						
Tiles	Edge	Thickness	600 x 600	1200 x 600	1500 x 600	1800 x 600	2100 x 600	2400 x 600	1200 x 1200
Rockfon Artic+	A24	15	•	•					
	E24S8	15	•	•					
Rockfon Blanka	A24	20	•	•		•			
		25						•	
	E24S8	20	•	•		•			
		25							•
Rockfon Blanka Activity	A24	40	•	•					
	E24L10		•	•		•		•	
Rockfon Blanka Bas	A24	20	•	•					
Rockfon Color-all	A24	15	•	•					
		20			•	•	•	•	
	E24S8	20	•						
Rockfon Hygienic	A24	20	•	•					
		40	•	•					
Rockfon Hygienic Plus	A24	20	•	•					
		40	•	•					
Rockfon Industrial Black	A24	50		•					
Rockfon Industrial Opal	A24	50		•					
Rockfon Koral	A24	15	•	•					
		20	•	•					
	E24S8	15	•	•					
Rockfon Koral Tenor	A24	15	•	•					
Rockfon Ligna	A24	20	•	•					
Rockfon Logic	A24	12	•	•					
Rockfon MediCare Air	A24	25	•	•					
Rockfon MediCare Plus	A24	20	•	•		•			
		25					•	•	
	E24S8	20	•						
Rockfon MediCare Standard	A24	15	•	•					
	E24S8	15	•	•					
Rockfon Samson	A24	40	•	•		•		•	
Rockfon Scholar	A24	20	•	•		•	•	•	•
		40	•	•		•		•	
Rockfon Tropic	A24	15	•	•					
		20				•		•	
		25							•
	E24S8	15	•	•					
		20	•	•					

Minimum installation depth (mm)

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

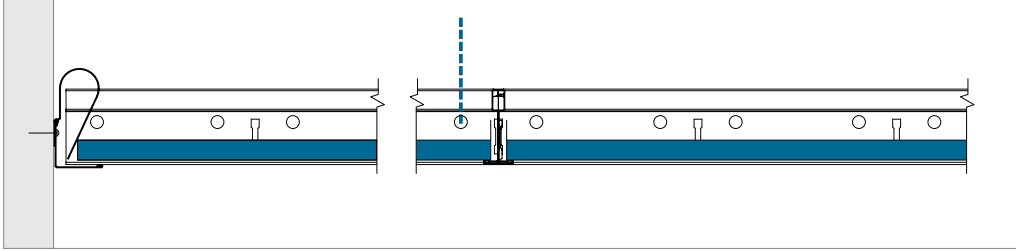
The installation depth is defined as the distance from the underside of the tile to the underside of the substrate, where the hangers are fixed. D is the minimum installation depth for easy tile installation and demounting.

Tile thickness	Dimensions	D
mm		
15-20	600 x 600, 2400 x 600, 1200 x 600, 1800 x 600, 2100 x 600, 1200 x 1200	100
40-100		200

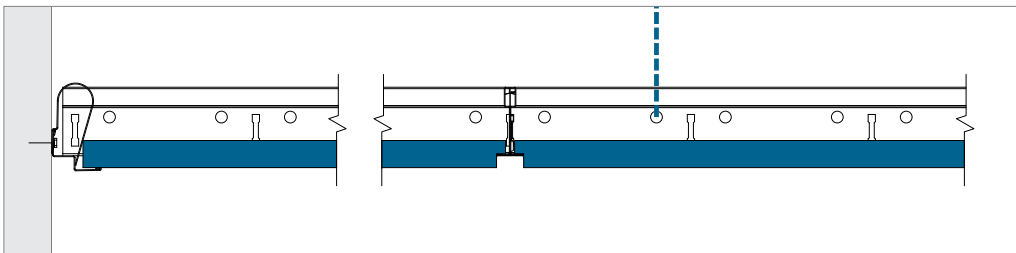


Perimeter Finish Options

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, we recommend 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, we recommend spanning a maximum of 600 mm and where necessary the use of additional hangers to reduce deflection in the ceiling system. For more information on the load bearing capacities of this Rockfon System T24 A, E please refer to the table below.



System load bearing capacity

		Max. Load (kg/m²)	
Hanger distance (mm)	Dimensions (mm)	Max. 2.5 mm deflection	Max. 4.0 mm deflection
1200	600 x 600	9.9	16.5
	1200 x 600	10.9	17.9
	1800 x 600	3,3	5,7
	2100 x 600	32.9	34,7*
	2400 x 600	31.3	34,5*
	1200 x 1200	7.2	11.7

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 mm. The load bearing capacity is given as regularly distributed load in kg/m², the weight of the tile is not included.

** Max. weight defined in function of max. allowable load of quick hangers.*

Planning

A thorough planning of the project/site will result in less re-work and less ceiling tile damage. We recommend 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 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/m²)		

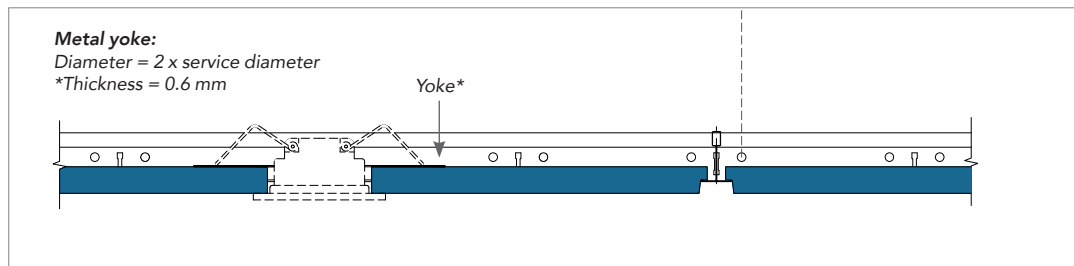
When installing services in Rockfon System T24 A, E you should always follow local building regulations if more strict than the load bearing capacity constraints Rockfon recommends in the above table.

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 T24 A, E. Special solutions with integrated services are, if available, shown on page 18 of this document; in the Tools section.

Drawing A

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

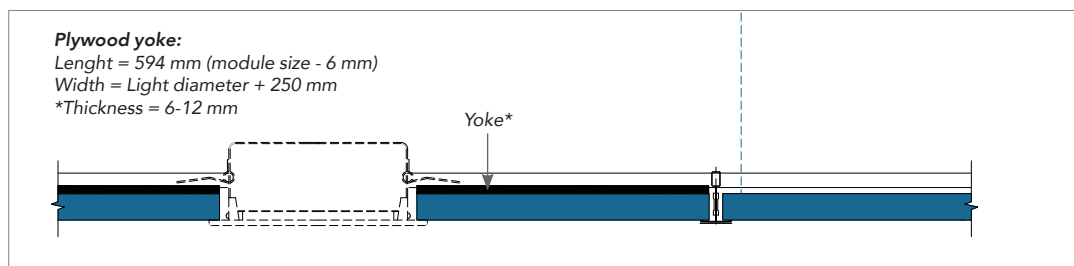
Rockfon recommends installing spotlights and downlights centralised in the tile.



Drawing B

The integration of a downlight, spotlight, smoke detector, loud speaker, etc. (weighing $0.25 \geq 3.0$ kg/pcs).

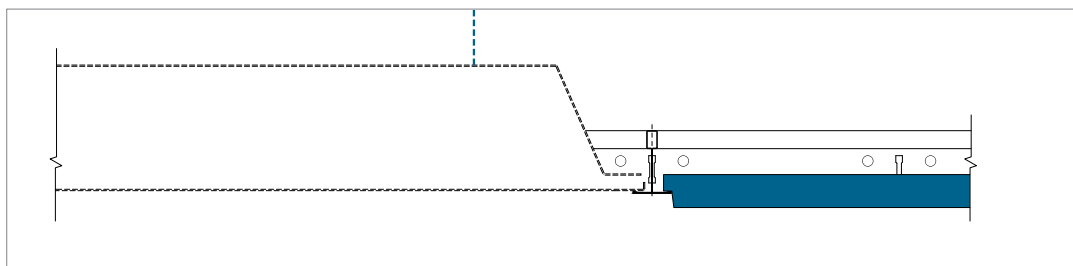
Use of a plywood yoke to spread the load on the back of the tile (as shown in the detail) or use of support arms to spread the load to the grid system is strongly recommended. The use of additional hangers to reduce deflection and a centralised installation of the lighting in the tile is strongly recommended.



*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 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 T rotation.



Specific Solutions

Suspension clip

This Clip can be twist fixed on the bottom of the T24 profile and gives the possibility to hang signs or advertisements underneath the clip. The clip is in the same color (white) as the grid.



DLC clip as a bridge for suspension main runner

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.

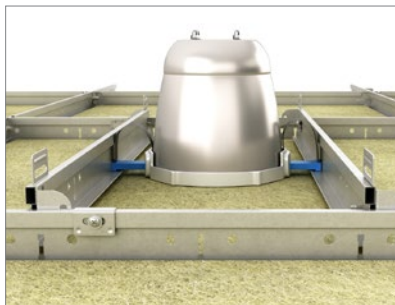
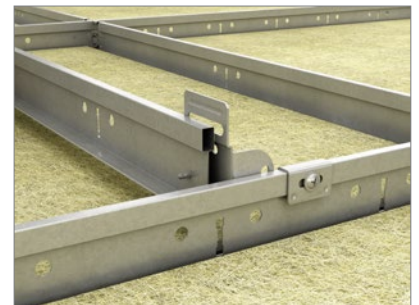
For corridors or large tile dimensions, using a multi-layer grid layout will save on the amount of hangers and will lead to a neat and fast installation.



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 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.

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 at all times. A/A 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 nail should be used to lock the hanger on to the bulb of the main runner.

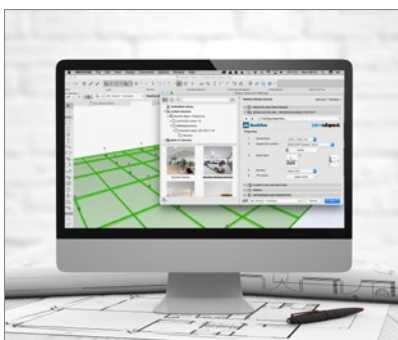
Tiles

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.

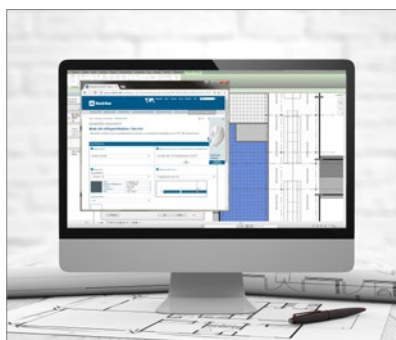
Note! Certain smooth matt surfaces are directional. To ensure consistency of the finished ceiling, it is important that all tiles are mounted in one direction indicated by the arrow printed on the back of each tile.

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 on our website.



Explore our vast library of reference projects on our website.

Sounds Beautiful

