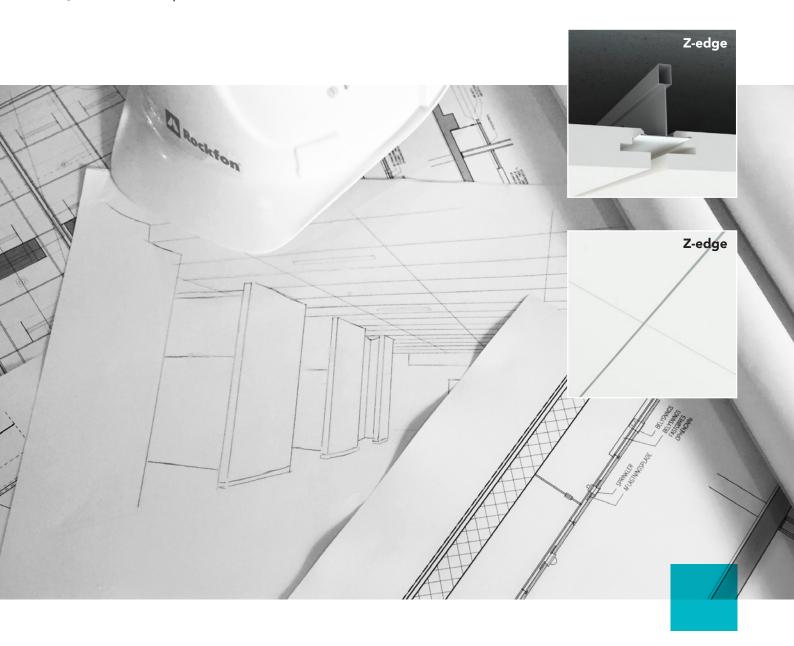


Rockfon® System T24 Z™

System Description



Concealed ceiling system Linear look

- Elegant linear look to accentuate the directional geometry of a room
- Mounted in a standard T24 full height grid for easy installation
- Suitable in areas with limited space for installing a suspended ceiling
- Increased durability with locking clips

Description

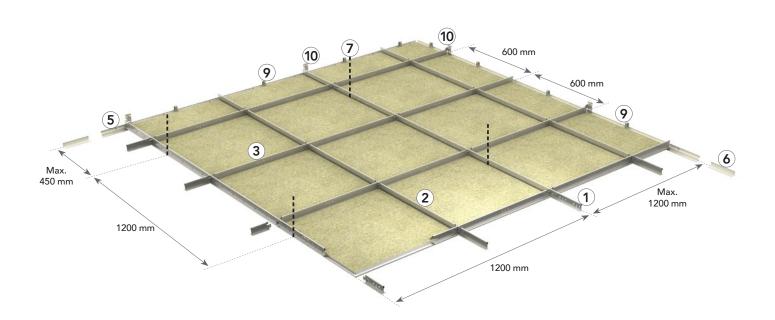
Rockfon System T24 Z is used to create a concealed ceiling system with a unique and elegant linear look, highlighting the directional geometry of the room, where it is installed.

It combines the Chicago Metallic T24 Click 2890 grid and Z edge Rockfon tiles. The grid is deeply recessed in one direction, creating a sharp and straight line (8 mm) and concealed in the other direction resulting in a continuous expression in the other direction.

The system can be installed either directly to the soffit due to its very low mounting depth requirements or suspended at a suitable height.

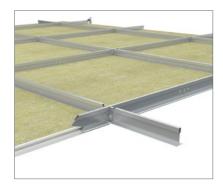
Main runners and cross tees have a width of 24 mm and are made from galvanised steel with a smooth, white or black surface. Rockfon System T24 Z allows easy integration of services. Each tile in Rockfon System T24 Z is demountable.

In areas where impact resistance or prevention of access to the ceiling void are required (e.g. classrooms, corridors), Z edge Rockfon tiles can be locked onto the grid by means of specially designed fastening clips, ensuring an easy and durable solution. The impact resistance of Rockfon System T24 Z has been tested in accordance with EN13964-Annex D and meets impact class 3A requirements. See the "Performance" and "Specific solutions" sections for more details.

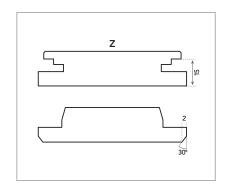




Sharp and straight line created by deeply recessed grid in one direction and a continuous expression in the other direction.



38 mm full height main runners and cross tees for stability and easy service integration. Click system providing quick and easy installation and demounting.



Z edge detail: Z1 edge creates a straight line along one direction, while Z2 provides a concealed grid.

System components and consumption guide

Tile		Chicago Metallic T24 Click 2890		Wall angles		Accessories					
		1	2	3	4	5	6	7	8	9	10
	-	Main runner T24 Click/Hook 3600	Cross tee T24 Click 600	Cross tee T24 Click 1200	Cross tee T24 Click 1800	W 10 x 15 Shadow moulding wall angle	Perimeter wall angle trim	Rigid angle hanger	Direct fixing bracket	Wall spring fixt	Wall & bridging bracket
Dimension (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)
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	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 for 600 mm and 2 wall springs for 1200/1800mm.



Performance



System load bearing capacity

		Max. Load (kg/m²)		
Hanger distance (mm)	A/A distance main runners (mm)	Dimensions (mm)	Max. 2.5 mm deflection	Max. 4.0 mm deflection
1200	1200	600 x 600	9.9	16.5
1200	1200	1200 x 600	10.9	17.9
1200	1800	1800 x 600	3.3	5.7

For 1800×600 mm tile, the use of stabilising profiles is recommended in case extra load is applied on the system. Contact Rockfon for more info. 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 / m^2 , the weight of the tile is not included.



Corrosion resistance

Class B (EN13964)



Demountability

Tiles mounted in Rockfon System T24 Z 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

The impact resistance of Rockfon System T24 Z combined with locking clips has been tested by an accredited laboratory according to EN13964 – Annex D and approved as Class 3A. Contact Rockfon for more information. See Page 10 for installation guidelines.

Compatible Tiles Overview

Rockfon System T24 Z is available with the following Rockfon tiles:

		Dimensions (mm)				
Tiles	Thickness (mm)	600 x 600	1200 x 600	1800 x 600		
Rockfon Blanka [™]	20	•	•	•		

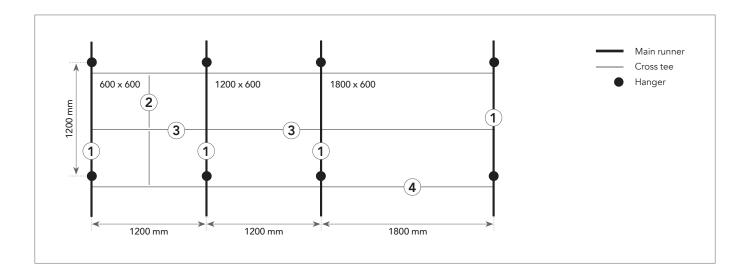
Other dimensions can be installed in Rockfon System T24 Z. Please contact Rockfon.

Grid Installation

Grid layout and hanger location

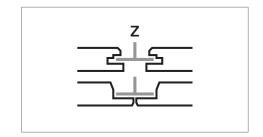
Rockfon Z-edge tiles can be installed in Rockfon System T24 Z.

Some layout options are shown below depending on the size of the tile.



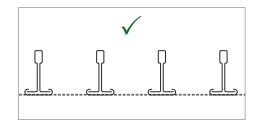
Edge orientation

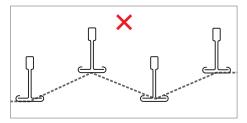
Rockfon Z-edge tiles have 2 adjacent edges: a supporting and non-supporting edge. For rectangular tiles (1200 \times 600 or 1800 \times 600), the edge supported by the grid is situated on the long side.



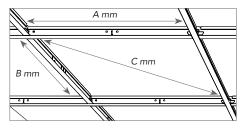
Installation requirements

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.



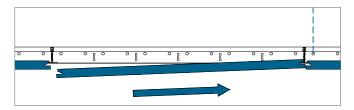


It is also important to check the squareness of the angles between the main runners and cross tees. This can be done easily by comparing the measurements of the two diagonals. See recommended tolerances on the drawing below.

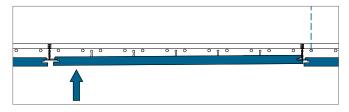


Dimensions (A x B)	Diagonal (C)	Tolerance			
mm					
600 x 600	814.6	. / 0.5			
1200 x 600	1309.5	+/- 0.5			

Tile Installation



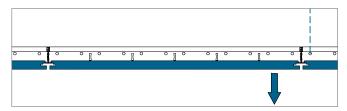
Slide the Z1 edge of the tile into the T profile.



Lift the upper side of the opposite Z1 edge of the tile above the T profile.



Slide the tile back.



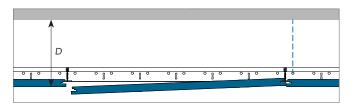
Drop the tile carefully into position.

Minimum installation depth (mm)

Tiles installed in Rockfon System T24 Z are demountable. The tiles do not have to be lifted above the grid during installation or any subsequent tile removal for access to services.

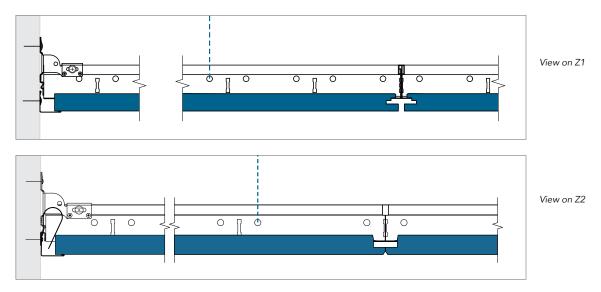
The installation depth is defined as the distance from the underside of the tile to the underside of the substrate, where the hangers are fixed. D represents the minimum installation depth that allows for easy tile installation and demounting. Minimum ceiling installation depth when using direct hangers is 96 mm.

Tile thickness	Tile thickness Dimensions	
	mm	
20	600 x 600 1200 x 600 1800 x 600	96

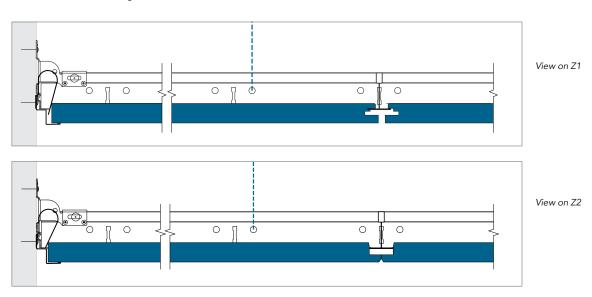


Perimeter Finish Options

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



Perimeter finish with wall angle trim.



 $Perimeter\ finish\ with\ W\ shadow\ moulding\ wall\ angle.$

Service integration

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

When the system is load bearing, Rockfon recommends 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 600×600 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 overcome deflection in the ceiling system.

When installing a modular lighting fixture in Rockfon System T24 Z, please be aware of the special edge design and module size of this solution. Because of the suspension grid design, a special type of luminaire should be chosen in order to create an aesthetically pleasing and level ceiling surface.

Planning

A comprehensive project plan will result in less re-work and less ceiling tile damage. Rockfon recommends discussing the installation 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 dirt marks on the finished ceiling surface can be reduced, which reduces costs on site.

Overview load bearing capacity

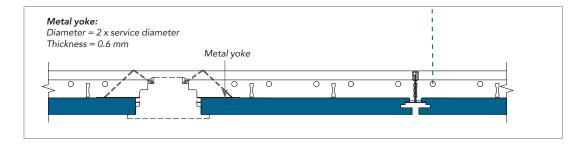
	Weight of installations				
-	< 0.25 kg/pcs	0.25 ≥ 3.0 kg/pcs	> 3.0 kg/pcs		
Small service integration; Spot- or downlight, speaker, ventilation etc.	Drawing A	Drawing B	Suspend separately		
Big service integration; Downlight, speaker, ventilation, etc.	Drawing A	Drawing B	Suspend separately		
Modular lighting- or ventilation fixture	System load b	Drawing C; earing capacity (if evenly distributed ove	er grid in kg/m²)		

When installing services in Rockfon System T24 Z you should always follow local building regulations if more strict than the load bearing capacity guidelines Rockfon recommends in the above table and in the table on page 4.

Contact your local Rockfon technical service for more information on suitable lighting fixtures, accessories and the availability of CAD drawings for the different services integrated in Rockfon System T24 Z. Special solutions with integrated services are, if available, shown on page 12 of this document in the Tools section.

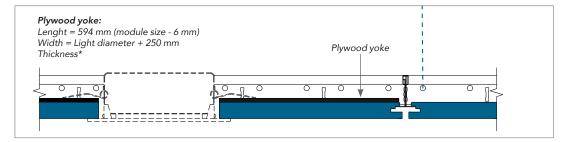
Drawing A

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

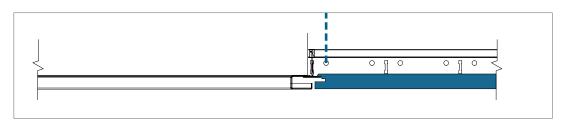
The integration of a downlight, spotlight, smoke detector, loud speaker, etc. (weighing $0.25 \ge 3.0$ kg/pcs). Use of a plywood yoke to spread the load on the back of the tile (as shown in the detail) or use of support arms to spread the load to the grid system is strongly recommended. The use of additional 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.



Specific Solutions

Enhanced impact resistant tile locking

Whilst the Z-edge ceiling has a degree of impact resistance, the use of locking clips (as shown below) will enhance the level of impact resistance.







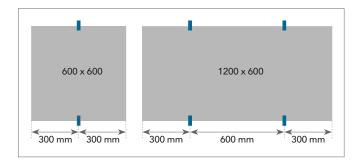
Locking clip.

Installing locking clip with screwdriver.

Installed locking clip.

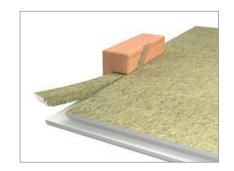
For areas where impact resistance or reduced access to the ceiling void is required (e.g. classrooms, corridors), Rockfon Z edge tiles can be locked onto the grid by means of specially designed fastening clips. They are easily installed by inserting them between the flange of the grid and the Z1 edge 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):



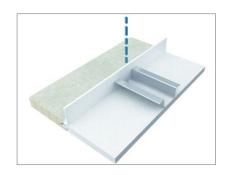
X-edge knife

Installing the perimeter tiles can be a hassle, due to the close proximity of the cross tees and perimeter trim. This specially developed X-edge knife gives you an extra 25 mm installation space. By cutting a piece from the back 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 Z edges as well as Rockfon® Mono® Acoustic.



Bridging (Eliminate deflection)

Perfectly optimised for our Rockfon Systems, the bridging bracket allows you to secure 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 system should be built from the centre of the room outwards. The hangers should be fastened to the main runner at every 1200 mm centres, or less with a greater load. For an optimal finish, we recommend that the perimeter tile has a width greater than 200 mm.

Main runners should be positioned at 1200 mm centres for 600×600 mm and 1200×600 mm module sizes. For 1800×600 mm module size, main runners are installed at 1800 mm centres.

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

The installation of 1800×600 mm tiles is recommended to be carried out by two people.

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 ${\bf www.rockfon.co.uk}$



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

