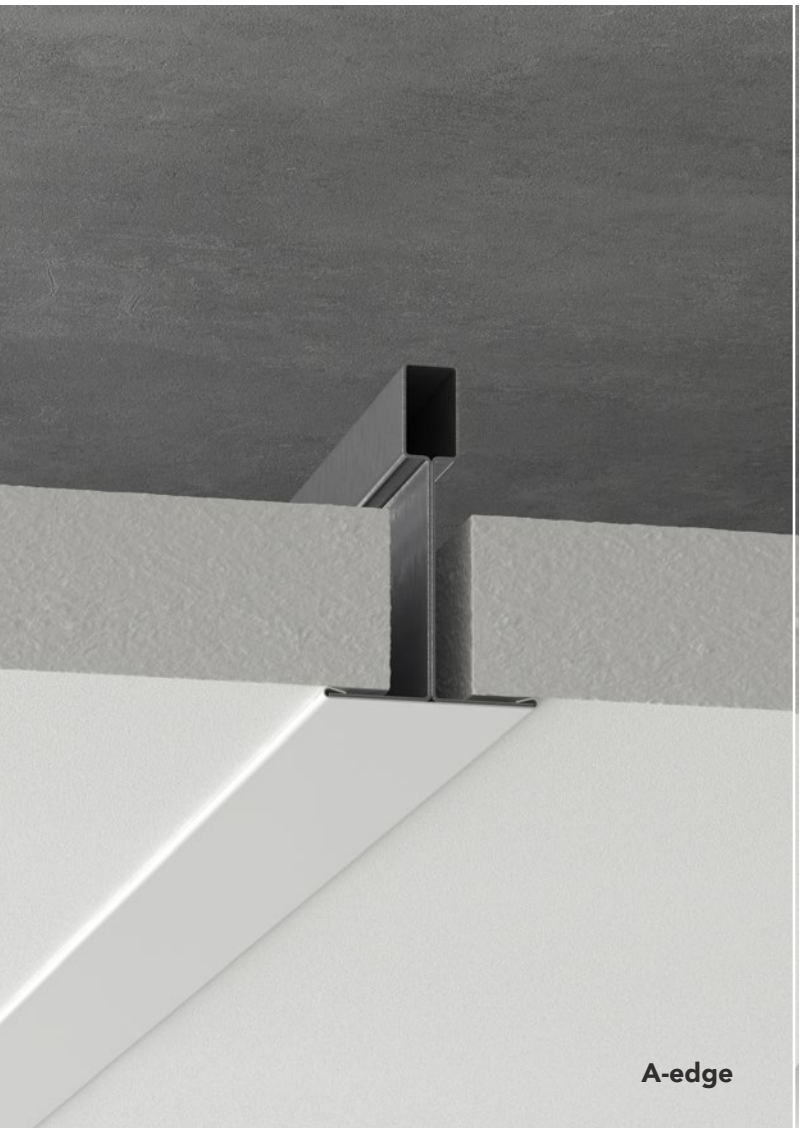
Rockfon

INSTALLATION GUIDE

Rockfon® System CleanSpace T24 A, E™ (ECR)



A-edge

E-edge

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 CleanSpace® comprises five types of tiles Essential, Pro, Pure, Air and Block, that have specific features, developed for particular room types in various segments. Rockfon CleanSpace products are the best solution for toilets, shower areas, locker rooms, kitchens, fitness centres and spa's. But will also be perfect for industrial environments s.a. food- & beverage industry, electronic industry, pharma industry and data centers.

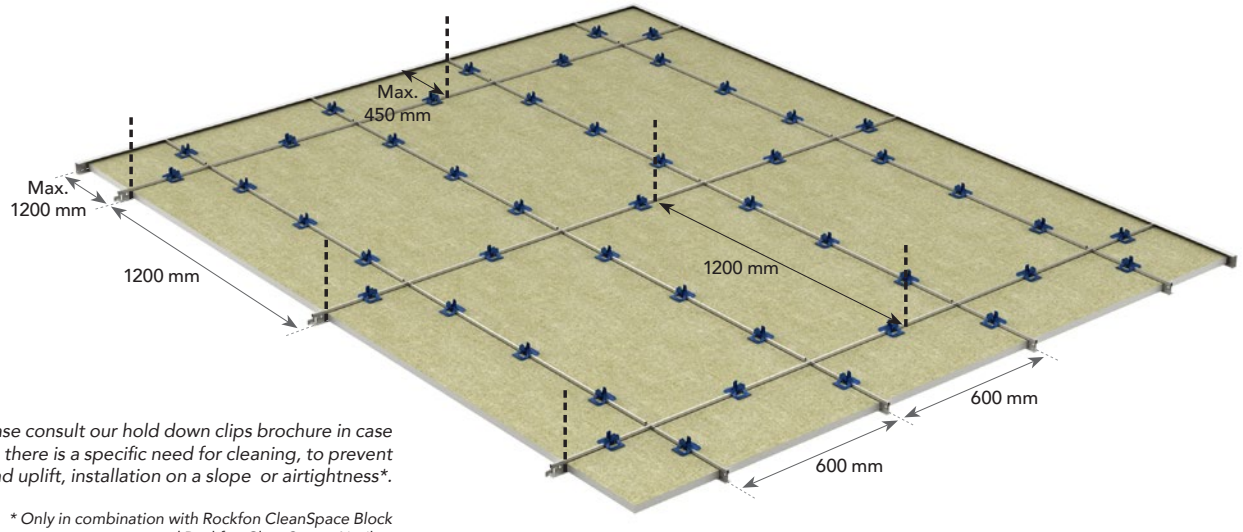
These room types are different in usage and have very specific requirements to the modular ceiling. In both functionality as well as maintenance. Solutions to your needs can be found in the Rockfon CleanSpace range.

The installation system for installing the CleanSpace products is **Rockfon® System CleanSpace T24 A, E™ (ECR)**.

The tiles can be used to create a fully exposed or semi-concealed grid ceiling solutions by combining the enhanced corrosion resistant Chicago Metallic T24 Click D2890 ECR Class D with the Rockfon CleanSpace Pro, Pure, Air and Block tiles or the standard Chicago Metallic T24 Click 2890 with Rockfon CleanSpace Essential tiles.

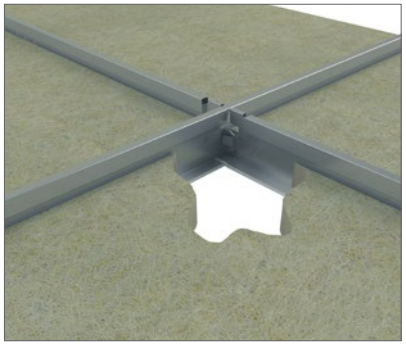
The Chicago Metallic T24 Click D2890 ECR class D grid components are made of prepainted galvanized steel Z 275 meeting the highest Class D corrosion resistance requirements of EN13964 (see below). The system accessories are produced with the same level of corrosion resistance protection.

Both grid systems have main runners and cross tees with a uniform height of 38 mm, ensuring stability and easier integration of services. The system provides a full demountability of all mounted tiles.

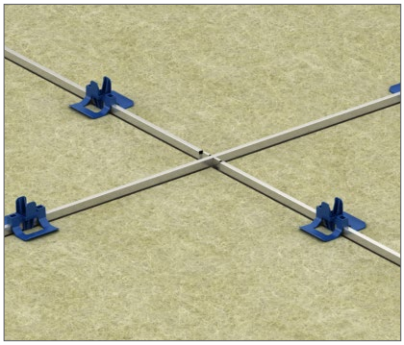


Please consult our hold down clips brochure in case there is a specific need for cleaning, to prevent wind uplift, installation on a slope or airtightness.*

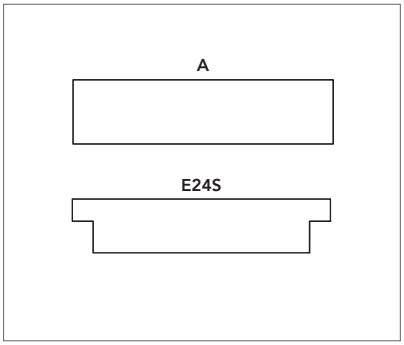
** Only in combination with Rockfon CleanSpace Block and Rockfon CleanSpace Air tiles.*



Click system providing easy and fast mounting and demounting.



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



A and E edges ensuring fast mounting and full demountability.

Installation

Depending on the environmental and application needs 5 different system can be chosen:

1 Rockfon® CleanSpace™ Essential....4

2 Rockfon® CleanSpace™ Pro....6

3 Rockfon® CleanSpace™ Pure....8

4 Rockfon® CleanSpace™ Air....10

5 Rockfon® CleanSpace™ Block....12

System components and consumption guide

1. Rockfon® CleanSpace™ Essential

Rockfon CleanSpace is a range of five products (Essential, Pro, Pure, Air and Block) that have specific features, developed for particular room types in various segments.

Rockfon CleanSpace Essential is the best solution for toilets, wet rooms (showers), washing facilities, locker rooms, fitness center and restaurant/canteens. These room types have very specific requirements to the modular ceiling in terms of maintenance, which Rockfon CleanSpace Essential accomodates.

Tile		Chicago Metallic T24 Click 2890			Wall angles		Accessories		
		1	2	3	4	5	6	7	8
-		Main runner T24 Click 3600	Cross tee T24 Click 600	Cross tee T24 Click 1200	W Shadow moulding wall angle	Perimeter wall angle trim	Hanger	Hold down clip	Wall spring Fixt
Dimensions (mm)	Consumption/m²								
600 x 600	2,78 pcs/m²	0,83 lm/m²	0,83 lm/m²	1,67 lm/m²	1)	1)	0,70 pcs/m²	1)	1)
1200 x 600	1,39 pcs/m²	0,83 lm/m²	-	1,67 lm/m²	1)	1)	0,70 pcs/m²	1)	1)

1) Consumption depends on room size.

Tiles - A edge

Chicago Metallic T24 Click 2890

1. Main runner T24 Click 3600

2. Cross tee T24 Click 600

3. Cross tee T24 Click 1200

Wall angles

4. W Shadow moulding wall angle

5. Perimeter wall angle trim

Accessories

6. Hanger

7. Hold down clip

8. Wall Spring Fixt

Performance

1. Rockfon® CleanSpace™ Essential

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

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 – it is the weight of the tile plus any additional items.

Corrosion resistance

Class B (EN13964)

Demountability

Tiles mounted in Rockfon System CleanSpace T24 A, E (ECR) 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.

Hygiene

Stone wool provides no sustenance to microorganisms.

Clean Room

ISO Class 4
Cut edges should be painted with Rockfon Edge paint after cutting.

Surface durability

Enhanced durability and dirt resistance.

Cleaning

- Vacuum
- Damp cloth

- Chemical resistance: Tested according to ISO 2812-3:2019 and classified in accordance with EN 12720. Rating on a scale from 1 to 5, where 5 is the best.

We obtained 5 for the following detergents and disinfectants (monthly disinfection):
– Active chlorine 2,6%
– Hydrogen peroxide 5%
– Ethanol 70%

System components and consumption guide

2. Rockfon® CleanSpace™ Pro

Rockfon CleanSpace is a range of five products (Essential, Pro, Pure, Air and Block) that have specific features, developed for particular room types in various segments.

Rockfon CleanSpace Pro is the best solution for industrial application s.a. food- & beverage industry, kitchens, electronic industry, pharma industry, data centers and SPAs/swimming pool.

These room types have very specific requirements to the modular ceiling in terms of application and maintenance, which Rockfon CleanSpace Pro accomodates.

Rockfon CleanSpace Pro is tested on various cleaning methods.

** see page 21 for more info.*

Tile		Chicago Metallic T24 Click D2890 ECR Class D			Wall angles		Accessories	
		1	2	3	5a	5b	6	7
-		Main runner T24 Click ECR Class D 3600	Cross tee T24 Click ECR Class D 600	Cross tee T24 Click ECR Class D 1200	Perimeter wall angle trim ECR Class D	Perimeter wall channel ECR Class D	ECR Hanger	Hold down clip
Dimensions (mm)	**Consumption/m²**							
600 x 600	2,78 pcs/m²	0,83 lm/m²	0,83 lm/m²	1,67 lm/m²	1)	1)	0,70 pcs/m²	1)
1200 x 600	1,39 pcs/m²	0,83 lm/m²	-	1,67 lm/m²	1)	1)	0,70 pcs/m²	1)

1) Consumption depends on room size.

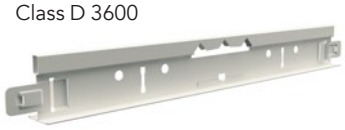
Tiles - A, E edge

A edge

E edge

Chicago Metallic T24 Click D2890 ECR Class D

1. Main runner T24 Click ECR Class D 3600



2. Cross tee T24 Click ECR Class D 600

3. Cross tee T24 Click ECR Class D 1200

Wall angles

5a. Perimeter wall angle trim ECR Class D

5b. Perimeter wall channel ECR Class D

Accessories

6a. ECR Hanger

6b. ECR Hanger

7. Hold down clip

Performance

2. Rockfon® CleanSpace™ Pro

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

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 – it is the weight of the tile plus any additional items.

Corrosion resistance

Class D (EN13964)

Demountability

Tiles mounted in Rockfon System CleanSpace T24 A, E (ECR) 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.

Hygiene

Stone wool provides no sustenance to microorganisms Microbiological class M1 fulfilling the requirements of Zone 4 (very high risk) defined by NF S 90-351:2013.

Tested with:
– *Methicillin Resistant Staphylococcus Aureus (MRSA)*
– *Candida Albicans*
– *Aspergillus Brasiliensis*
– *E.Coli*
– *Bacillus cereus*

M1 (zone 4) for the 5 tested pathogens. The particle elimination kinetics class is conform to $CP_{(0,5)}5$ according to the norm NF S 90-351:2013.

Clean Room

ISO Class 4
Cut edges should be painted with Rockfon Edge paint after cutting.

Surface durability

Enhanced durability and dirt resistance.

Cleaning

- Vacuum
- Damp cloth
- Steam cleaning (twice a year). Use only soft equipment directly on the tile surface: cloth or sponge. Avoid scraping or stiff brush rubbing.
- Low pressure foam cleaning (twelve times a year)
- High pressure cleaning (only applicable for A-edge installation). Max. 80 bar, min. 1 meter distance, water spread at 30° angle, max. water flow XXL/sec. The tiles should be clipped into the grid.

- Chemical resistance: Tested according to ISO 2812-3:2019 and classified in accordance with EN 12720. Rating on a scale from 1 to 5, where 5 is the best.

We obtained 5 for the following detergents and disinfectants (monthly disinfection):
– Active chlorine 2,6%
– Quaternary ammonium 0,25%
– Hydrogen peroxide 5%
– Ethanol 70%
– Isopropanol 70%

System components and consumption guide

3. Rockfon® CleanSpace™ Pure

Rockfon CleanSpace is a range of five products (Essential, Pro, Pure, Air and Block) that have specific features, developed for particular room types in various segments.

Rockfon CleanSpace Pure combines aesthetic and functionality and is the best solution for Catering, cafeteria, kitchens, laboratories, retail outlets, schools and kindergartens.

These room types have very specific requirements to the modular ceiling in terms of application and maintenance, which Rockfon CleanSpace Pure accomodates.

Rockfon CleanSpace Pure is tested on and can withstand various cleaning methods s.a. UVC light cleaning*, Ozone cleaning* and vapour peroxide cleaning.

** see page 21 for more info.*

Tile		Chicago Metallic T24 Click D2890 ECR Class D			Wall angles		Accessories	
		1	2	3	5a	5b	6	7
-		Main runner T24 Click ECR Class D 3600	Cross tee T24 Click ECR Class D 600	Cross tee T24 Click ECR Class D 1200	Perimeter wall angle trim ECR Class D	Perimeter wall channel ECR Class D	ECR Hanger	Hold down clip
Dimensions (mm)	**Consumption/m²**							
600 x 600	2,78 pcs/m²	0,83 lm/m²	0,83 lm/m²	1,67 lm/m²	1)	1)	0,70 pcs/m²	1)
1200 x 600	1,39 pcs/m²	0,83 lm/m²	-	1,67 lm/m²	1)	1)	0,70 pcs/m²	1)

1) Consumption depends on room size.

Tiles - A, E edge

A edge

E edge

Chicago Metallic T24 Click D2890 ECR Class D

1. Main runner T24 Click ECR Class D 3600

2. Cross tee T24 Click ECR Class D 600

3. Cross tee T24 Click ECR Class D 1200

Wall angles

5a. Perimeter wall angle trim ECR Class D

5b. Perimeter wall channel ECR Class D

Accessories

6a. ECR Hanger

6b. ECR Hanger

7. Hold down clip

Performance

3. Rockfon® CleanSpace™ Pure

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

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 – it is the weight of the tile plus any additional items.

Corrosion resistance

Class D (EN13964)

Demountability

Tiles mounted in Rockfon System CleanSpace T24 A, E (ECR) 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.

Hygiene

Stone wool provides no sustenance to microorganisms Microbiological class M1 fulfilling the requirements of Zone 4 (very high risk) defined by NF S 90-351:2013.

Tested with:
- *Methicillin Resistant Staphylococcus Aureus (MRSA)*
- *Candida Albicans*
- *Aspergillus Brasiliensis*
- *E.Coli*
- *Bacillus cereus*

M1 (zone 4) for the 5 tested pathogens. The particle elimination kinetics class is conform to $CP_{(0,5)}5$ according to the norm NF S 90-351:2013.

Clean Room

ISO Class 3
Cut edges should be painted with Rockfon Edge paint after cutting.

Surface durability

Enhanced durability and dirt resistance.

Cleaning

- Vacuum
- Damp cloth
- High pressure cleaning (only applicable for A-edge installation). Max. 80 bar, min. 1 meter distance, water spread at 30° angle, max. water flow XXL/sec. The tiles should be clipped into the grid.
- Chemical resistance: Tested according to ISO 2812-3:2019 and classified in accordance with EN 12720. Rating on a scale from 1 to 5, where 5 is the best.

We obtained 5 for the following detergents and disinfectants (monthly disinfection):
– Active chlorine 2,6%
– Quaternary ammonium 0,25%
– Hydrogen peroxide 5%
– Ethanol 70%
– Isopropanol 70%

Disinfection

- Resistant to using Hydrogen Peroxide Vapor disinfection with impact on aeration time.
- Can withstand and will not be affected by UVC and Ozone disinfection

System components and consumption guide

4. Rockfon® CleanSpace™ Air

Rockfon CleanSpace is a range of five products (Essential, Pro, Pure, Air & Block) that have specific features, developed for particular room types in various segments.

Rockfon CleanSpace Air is the best solution for room types where controlled air pressure is required, preventing exchange of air and possibly contamination between rooms.

A high-quality, smooth white acoustic ceiling tile that is designed for cleanrooms and air tight environments. It allows for rigorous cleaning requirements due to its enhanced durability and chemical resistance.

Rockfon CleanSpace Air installation with clips and sealing tape is recommended to secure the optimal performance.

The product is long-lasting, withstands numerous cleaning methods and is ISO class 3 certified.

Tile		Chicago Metallic T24 Click D2890 ECR Class D			Wall angles		Accessories	
		1	2	3	5a	5b	6	7
-		Main runner T24 Click ECR Class D 3600	Cross tee T24 Click ECR Class D 600	Cross tee T24 Click ECR Class D 1200	Perimeter wall angle trim ECR Class D	Perimeter wall channel ECR Class D	ECR Hanger	Hold down clip
Dimensions (mm)		**Consumption/m²**						
600 x 600	2,78 pcs/m²	0,83 lm/m²	0,83 lm/m²	1,67 lm/m²	1)	1)	0,70 pcs/m²	1)
1200 x 600	1,39 pcs/m²	0,83 lm/m²	-	1,67 lm/m²	1)	1)	0,70 pcs/m²	1)

1) Consumption depends on room size.

Tiles - A edge

Chicago Metallic T24 Click D2890 ECR Class D

1. Main runner T24 Click ECR Class D 3600

2. Cross tee T24 Click ECR Class D 600

3. Cross tee T24 Click ECR Class D 1200

Wall angles

5a. Perimeter wall angle trim ECR Class D

5b. Perimeter wall channel ECR Class D

Accessories

6a. ECR Hanger

6b. ECR Hanger

7. Hold down clip

8. Neoprene foam tape

Performance

4. Rockfon® CleanSpace™ Air

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

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 – it is the weight of the tile plus any additional items.

Corrosion resistance

Class D (EN13964)

Air pressure

This solution is perfect for rooms where differential pressure is a needed requirement to stop infections from spreading outside the room. When used in combination with a HDC 2 (25 mm tile), 8 clips per 600 x 600mm tile, the high-performance membrane with sealed edges, and a closed neoprene foam tape (mandatory for 25 mm tile) you get an air leakage rate of less than 0.5 m³/h/ m²/Pa under a pressure range of 5 to 40 Pa. The performance in areas where there are stringent air pressure requirements can always be improved by using a closed cell neoprene foam tape against the grid system. For more information, please contact customer service.

Demountability

Tiles mounted in Rockfon System CleanSpace T24 A, E (ECR) 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.

Hygiene

Microbiological class M1 fulfilling the requirements of Zone 4 (very high risk) defined by NF S 90-351:2013.

Tested with:
- *Methicillin Resistant Staphylococcus Aureus (MRSA)*
- *Candida Albicans*
- *Aspergillus Brasiliensis*
- *E.Coli*
- *Bacillus cereus*

M1 (zone 4) for the 5 tested pathogens. The particle elimination kinetics class is conform to $CP_{(0,5)}5$ according to the norm NF S 90-351:2013.

Clean Room

ISO Class 3

Surface durability

Enhanced durability and dirt resistance.

Cleaning

- Vacuum
- Damp cloth
- Steam cleaning (twice a year). Use only soft equipment directly on the tile surface: cloth or sponge. Avoid scraping or stiff brush rubbing.
- Chemical resistance:
  Tested in accordance with ISO 28123:2019 and classified according to EN 12720. On a scale of 1 to 5 where 5 is best, this product has a score of 5 for the following cleaning and disinfecting agents (2 x weekly):
  – Active chlorine 2,6%
  – Quaternary ammonium 0,25%
  – Hydrogen peroxide 5%
  – Ethanol 70%
  – Isopropanol 70%

System components and consumption guide

5. Rockfon® CleanSpace™ Block

Rockfon CleanSpace is a range of five products (Essential, Pro, Pure, Air and Block) that have specific features, developed for particular room types in various segments.

Rockfon CleanSpace Block is the best solution for room types where stringent cleaning with strong detergents is required.

Room types where this solution is applicable are cleanrooms and laboratories in for instance pharma-, food and beverage or chemical industry. Either installed inside a modular ceiling or as a wall application, Rockfon CleanSpace Block installation is recommended with a enhanced corrosion resistance grid.

Rockfon CleanSpace Block is carefully tested on various cleaning methods s.a. high pressure cleaning, foam cleaning, UVC light cleaning*, Ozone cleaning* and vapour peroxide cleaning.

** see page 21 for more info.*

Tile		Chicago Metallic T24 Click D2890 ECR Class D			Wall angles		Accessories	
		1	2	3	5a	5b	6	7
-		Main runner T24 Click ECR Class D 3600	Cross tee T24 Click ECR Class D 600	Cross tee T24 Click ECR Class D 1200	Perimeter wall angle trim ECR Class D	Perimeter wall channel ECR Class D	ECR Hanger	Hold down clip
Dimensions (mm)		**Consumption/m²**						
600 x 600	2,78 pcs/m²	0,83 lm/m²	0,83 lm/m²	1,67 lm/m²	1)	1)	0,70 pcs/m²	1)
1200 x 600	1,39 pcs/m²	0,83 lm/m²	-	1,67 lm/m²	1)	1)	0,70 pcs/m²	1)

1) Consumption depends on room size.

Tiles - A edge

Chicago Metallic T24 Click D2890 ECR Class D

1. Main runner T24 Click ECR Class D 3600

2. Cross tee T24 Click ECR Class D 600

3. Cross tee T24 Click ECR Class D 1200

Wall angles

5a. Perimeter wall angle trim ECR Class D

5b. Perimeter wall channel ECR Class D

Accessories

6a. ECR Hanger

6b. ECR Hanger

7. Hold down clip

8. Neoprene foam tape

Performance

5. Rockfon® CleanSpace™ Block

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

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 – it is the weight of the tile plus any additional items.

Corrosion resistance

Class D (EN13964)

Air pressure

This solution is perfect for rooms where differential pressure is a needed requirement to stop infections from spreading outside the room. When used in combination with a HDC 2 (25 mm tile), 8 clips per 600 x 600mm tile, the high-performance membrane with sealed edges, and a closed neoprene foam tape (mandatory for 25 mm tile) you get an air leakage rate of less than 0.5 m³/h/ m²/Pa under a pressure range of 5 to 40 Pa. The performance in areas where there are stringent air pressure requirements can always be improved by using a closed cell neoprene foam tape against the grid system. For more information, please contact customer service.

Demountability

Tiles mounted in Rockfon System CleanSpace T24 A, E (ECR) 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.

Hygiene

Microbiological class M1 fulfilling the requirements of Zone 4 (very high risk) defined by NF S 90-351:2013.

Tested with:
- *Methicillin Resistant Staphylococcus Aureus (MRSA)*
- *Candida Albicans*
- *Aspergillus Brasiliensis*
- *E.Coli*
- *Bacillus cereus*

M1 (zone 4) for the 5 tested pathogens. The particle elimination kinetics class is conform to $CP_{(0,5)}5$ according to the norm NF S 90-351:2013.

Clean Room

ISO Class 2

Surface durability

Enhanced durability and dirt resistance.

Cleaning

- Vacuum
- Damp cloth
- Steam cleaning (twice a year)
- Low pressure foam cleaning (twelve times a year)
- High pressure cleaning (only applicable for A-edge installation). Max. 80 bar, min. 1 meter distance, water spread at 30° angle, max. water flow XXL/ sec. The tiles should be clipped into the grid.

- Chemical resistance: Tested according to ISO 2812-1 ("Determination of resistance to liquids - Part 1: Immersion in liquids other than water") and classification in accordance with VDI 2083 Part 17.

Results are classified as 'Excellent' with the following detergents and disinfectants (daily disinfection):
– Formalin (37%)
– Ammonia (25%)
– Hydrogen peroxide (30%)
– Sulphuric acid (5%)
– Phosphoric acid (30%)
– Peracetic acid (15%)
– Hydrochloric acid (5%)
– Isopropanol (100%)
– Sodium hydroxide (5%)
– Sodium hypochlorite (15%)

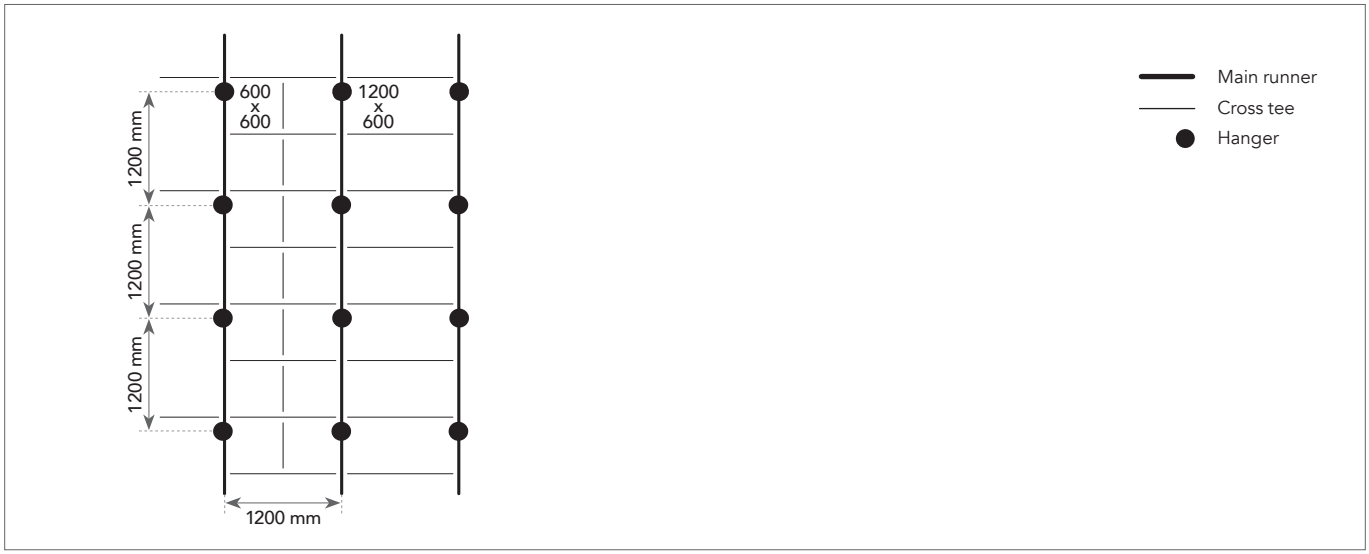
Disinfection

- Resistant to using Hydrogen Peroxide Vapor disinfection without impact on aeration time.
- Can withstand and will not be affected by UVC and Ozone disinfection.

Grid Installation

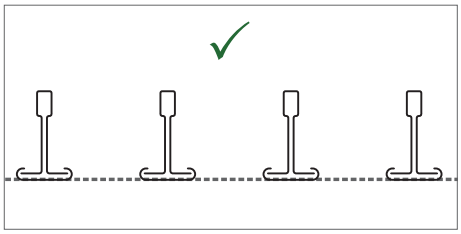
Grid layout and hanger location

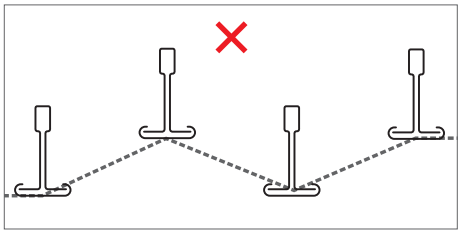
Rockfon CleanSpace edge tiles can be installed in Rockfon System CleanSpace T24 A, E (ECR). Some layout options are shown below depending on the size of the tile.



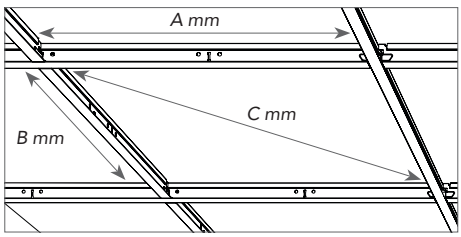
Installation requirements

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 on the table to the right.



Dimensions (A x B)	Diagonal (C)	Tolerance
mm		
600 x 600	815	+/- 1,0
1200 x 600	1310	

Compatible Tiles Overview

All Rockfon A and E edge tiles available in dimensions mentioned in the "System load bearing capacity" tables on pages 5, 7, 9, 11 and 13 can be installed in Rockfon System CleanSpace T24 A, E (ECR).

-			Dimensions (mm)	
Tiles	Edge	Thickness (mm)	600 x 600	1200 x 600
Rockfon® CleanSpace™ Essential	A	12	•	•
		20	•	•
Rockfon® CleanSpace™ Pro	A	20	•	•
		40	•	•
	E	20	•	•
Rockfon® CleanSpace™ Pure	A	20	•	•
		40	•	•
	E	20	•	•
	X*	22	•	•
Rockfon® CleanSpace™ Air	A	25	•	
Rockfon® CleanSpace™ Block	A	25	•	•

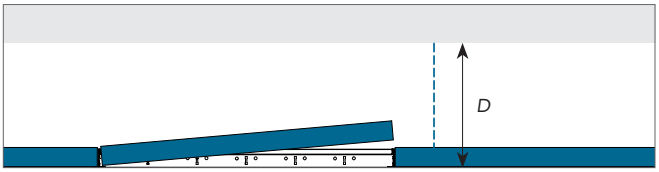
** For X-edge installation, please have a look at the Rockfon® System T24 X™.*

Minimum installation depth (mm)

Tiles mounted in Rockfon System CleanSpace T24 A, E (ECR) give full demountability.

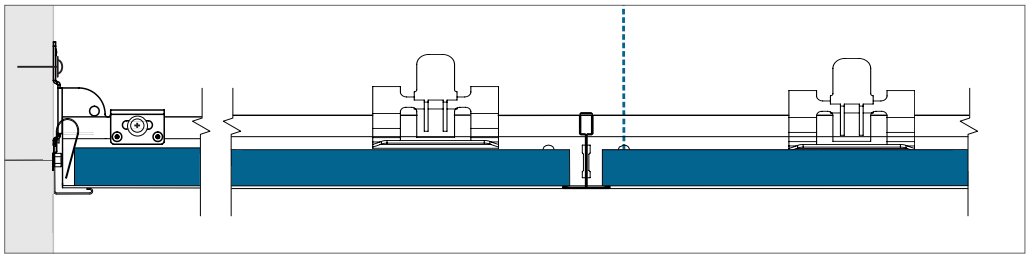
The installation depth is defined as the distance from the visible side of the tile to the underside of the substrate, where the hangers are fixed. D is the minimum installation depth for easy tile installation and demountability.

Tile thickness	Dimensions	D
	mm	
12-20-25	600 x 600 1200 x 600	100-150
40	600 x 600 1200 x 600	200

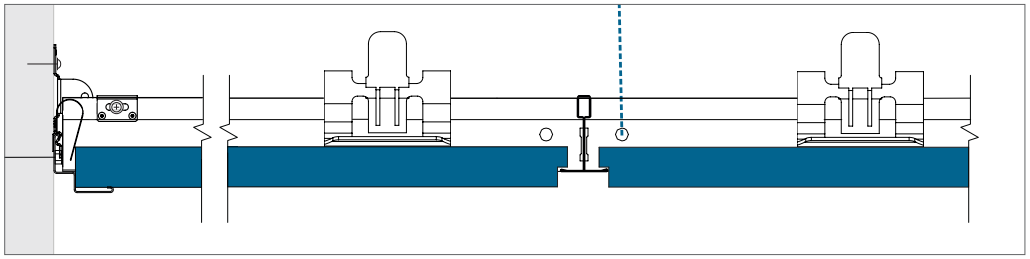


Perimeter Finish Options

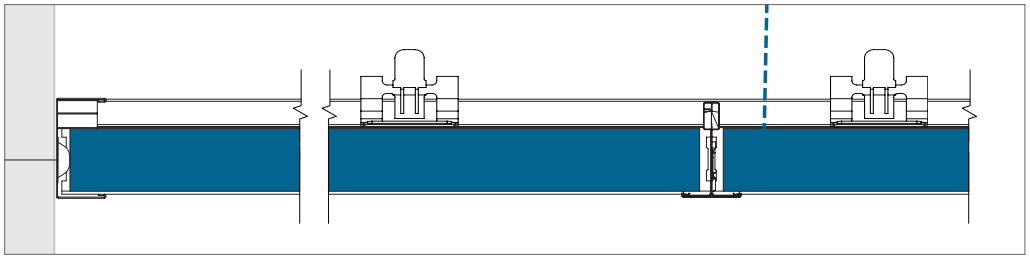
Below are examples of perimeter finishing. Further details can be found on **cee.rockfon.international**



A-edge - Perimeter finish with wall angle trim and wall spring fixt.
Wall spring fixt and the wall and bridging bracket are mandatory when cleaning and/or pressure control are required.
Wall spring fixt and the wall and bridging bracket are not ECR.



E-edge - Perimeter finish with wall angle trim and wall spring fixt.
Wall spring fixt and the wall and bridging bracket are mandatory when cleaning and/or pressure control are required.
Wall spring fixt and the wall and bridging bracket are not ECR.



Perimeter finish with wall channel and edge spring.

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 installed to bear load, 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 and where necessary the use of additional hangers to counteract potential ceiling deflection. For more information on the load bearing capacities of this Rockfon System CleanSpace T24 A, E (ECR) please refer to the table below.

Note: Service integrations were not tested on air tightness.

Planning

A thorough planning and installation scheduling of the project/site 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 avoided, which reduces project costs.

Overview load bearing capacity of tile

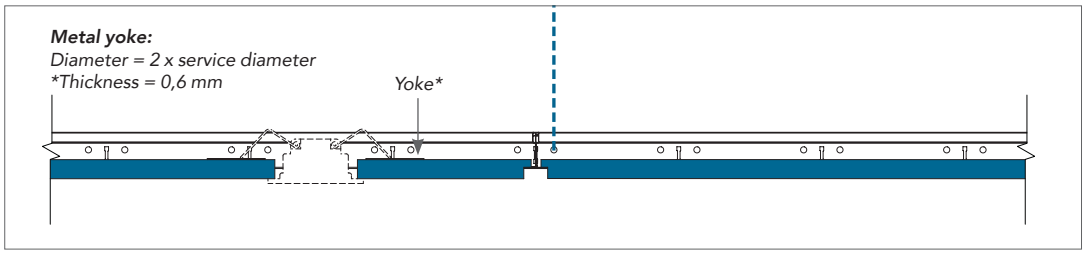
-	Weight of installations		
-	< 0,25 kg/pcs	0,25 ≥ 3,0 kg/pcs	> 3,0 kg/pcs
Small service integration; Spot- or downlight, speaker, ventilation etc.	Drawing A	Drawing B	Suspend separately
Large service integration; Downlight, speaker, ventilation, etc.	Drawing A	Drawing B	Suspend separately
Modular lighting- or ventilation fixture	Drawing C; System load bearing capacity (if evenly distributed over grid in kg/m^2)		

When installing services in Rockfon System CleanSpace T24 A, E (ECR) 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 different services integrated in Rockfon System CleanSpace T24 A, E (ECR). Special solutions with integrated services are, if available, shown on page 22 of this document; 'Tools'.

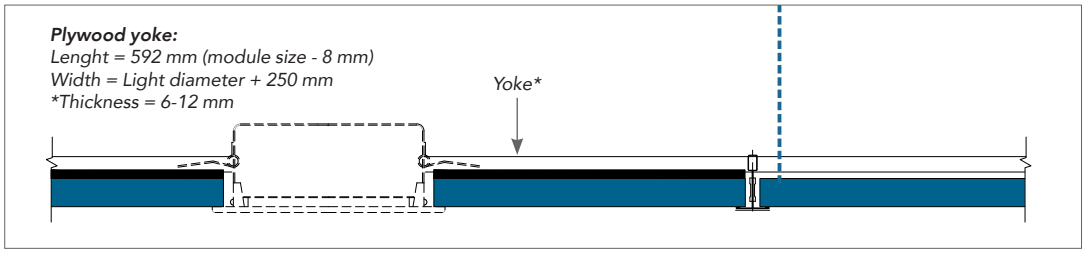
Drawing A

The integration of a spotlight, smoke detector, speaker, etc. (weighing < 0,25 kg/pcs).
Rockfon recommends installing spotlights and downlights centralized in the tile.



Drawing B

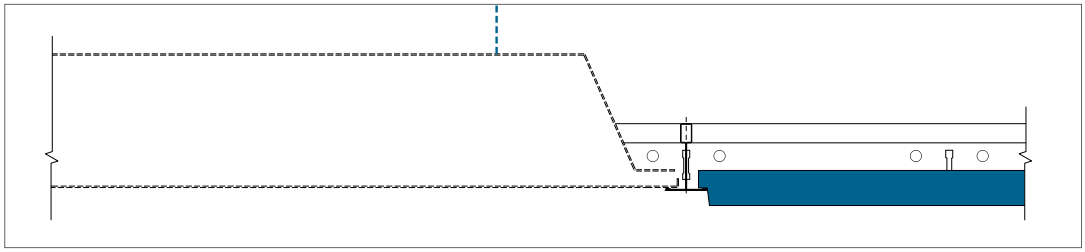
The integration of a downlight, spotlight, smoke detector, loud speaker, etc. (weighing 0,25 ≥ 3,0 kg/pcs).
Usage of an appropriate yoke to spread the load to the grid (as shown in the detail) or usage of support arms to spread the load to the grid system is strongly recommended. The use of additional hangers to avoid excess deflection and a centralized 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.*

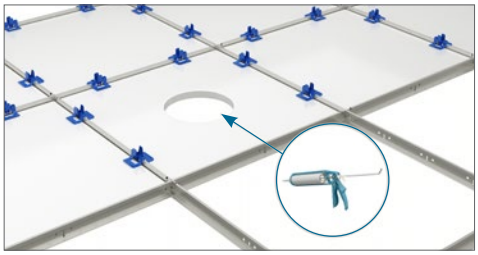
Drawing C

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 T rotation.



Drawing D

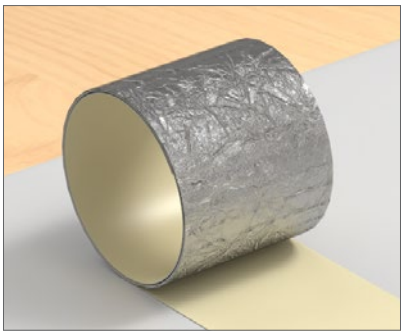
To reach the airtightness values of Rockfon CleanSpace Block ceiling installations all cut outs need to be closed with an airtight sealant between the tile and the integrated services.



Specific Solutions

CleanSpace Block Sealing tape

To seal custom-cut tiles, we provide an aluminum foil adhesive tape. It has good adhesion on the tile and eliminates fibre emission and dust which is essential in healthcare environments where particle emissions must be avoided. It is quick and easy to use. The sealing tape is air-tight as well as abrasion and humidity resistant. It is 75 mm wide and supplied in 50 m rolls.

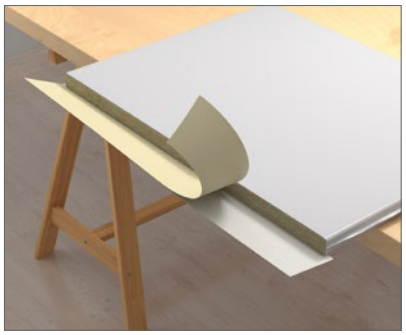


1. Cut on the needed dimension.

2. Measure edge + 10 mm and peel.

3. Align 5 mm overlap on front and press.

4. Flip tile to the back.



5. Peel.

Note: *For Rockfon CleanSpace Block custom-cut tiles on the perimeter we advice the use of silicone sealant.*

6. Fold up and press.

7. Form-fold corners.

Wall application

Rockfon CleanSpace Block panels can be applied as a wall solution by using the Rockfon CleanSpace wall bracket.

This solution is highly suitable for daily intensive cleaning in high demanding environment.

A min. distance between the tile of 36 mm is needed to install the brackets.

1. Install the bracket against the wall.

Consumption guide ECR wall bracket for 25 mm tiles for wall applications
Consumption
2 pcs/tile for 600 x 600 tiles
2 pcs/tile for 1200 x 600 tiles, installed vertical
4 pcs/tile for 1200 x 600 tiles, installed Horizontal

2. Install the tile between the upper and lower bracket (can be slided in).

3. Panels can be installed vertically or (as shown on the first picture) horizontal.

Air sealed inspection hatch

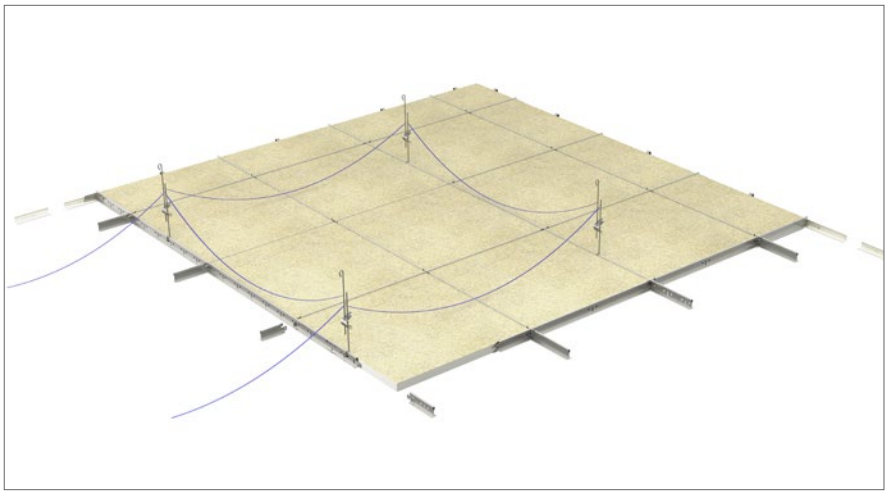
Rockfon has developed an air sealed inspection hatch, in which the Rockfon ceiling tile (Rockfon CleanSpace Block and Rockfon CleanSpace Air) is glued in the hatch for a uniform ceiling surface and better acoustics.

The hatch is made of galvanised steel powder coated white. It is fitted with 2 budget locks as a standard and is suitable for exposed grid, lay-in ceilings. It is available in 600 x 600 mm dimension. A polyester gasket seal ensures air-tightness between the hatch´s frame and door. The frame of the hatch sits behind the T grid. Although it is fairly light (5,25 kg including tile), additional hangers on the grid may be necessary to improve stability. If damaged, the ceiling panel can easily be replaced with a new panel by demounting the locks.

For further information, please contact Rockfon.

Earthed Ceiling system

In case of very specific circumstances (which would be taken into account by the electrical designer), the conductive parts of a suspended ceiling the suspended ceiling grid can be earthed or equipotentiality bonded.



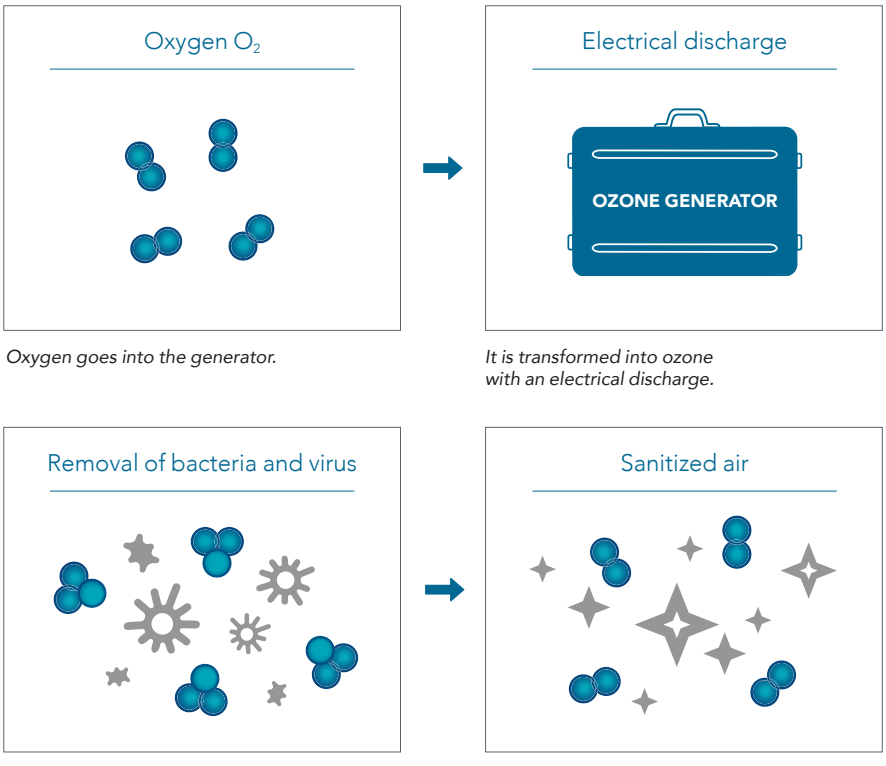
UVC Cleaning

Cleaning with UV light is called Ultraviolet germicidal irradiation (UVGI). It is an effective sanitation method which has been used in a wide range of settings for decades.

Short wavelength ultraviolet light, when passed over a surface, works by killing or inactivating micro-organism. The technique is effective on a variety of bacteria and viruses that cause illness or disease in humans, including coronaviruses and MRSA.

Ozone Cleaning

Ozone cleaning is when ozone (air) is liquidized/vaporized and used to clean surfaces.



Oxygen goes into the generator.

It is transformed into ozone with an electrical discharge.

Now it's ready for action.

It removes bacteria and viruses thanks to it's oxidative properties.

All air in the room becomes healthy and clean.

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.

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 1200 mm centers 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 14). 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

It is recommended to use clean nitrile or PU coated gloves when mounting Rockfon tiles in order to avoid finger prints and pollution of the surface.

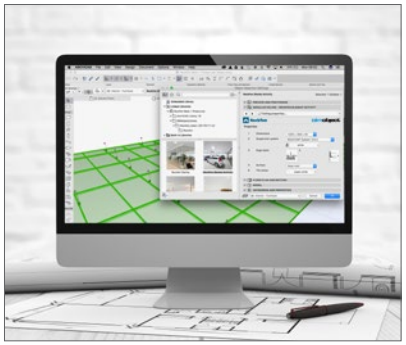
For an optimised work environment, we recommend installers always observe common work practices and follow the installation advise as shown on our packaging.

Cutting is made easily with a sharp knife. All off-cuts and holes must be treated according to local Building Regulations.
Cut edges should be painted with Rockfon Edge paint after cutting.

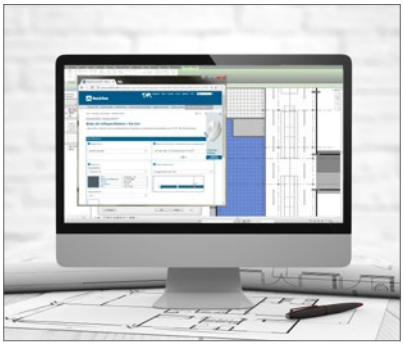
Note! Certain smooth matt surfaces are directional. To ensure consistency of the finished ceiling, it is important that all tiles are mounted in one direction indicated by the arrow printed on the back of each tile.

Tools

Rockfon has developed specific tools that are available on **cee.rockfon.international**.



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



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Sounds Beautiful

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