



CLEANEO

Perforated Gypsum Board

For acoustic ceiling and wall

Build on us.

KNAUF

Cleaneo

Knauf Cleaneo is a perforated gypsum board, ideal for noise absorption treatment and is available in a number of stylish designs for creative freedom. Cleaneo is the perfect balance of function and aesthetics, allowing architects to design with flexibility and confidence, creating monolithic and seamless internal spaces.

With Air Purifying Technology improved the indoor air quality as it streams through the perforations, removing unpleasant pollutants and leaving the air cleaner. An ideal solution for large public spaces in retail centres, office complexes, hospitals, schools, showrooms, conference halls and galleries.



Design for Sound



Design to Clean



Monolithic Design



Interior Design

Edge Profiles

Knauf Cleaneo comes with UFF edge profile. The unique edge profile ensures that panels are installed straight, in alignment and the continuous perforations patterns are in perfect alignment.

- UFF edges have red and blue markings to help with Cleaneo alignment during installation.
- Cut sheets can be rotated 180° to minimise wastage at perimeters (dependent on pattern).
- Easy to install.
- Seamless joint look with Uniflott compound.

UFF Edge



Features and Benefits

- Monolithic, seamless look.
- Various perforation patterns for architectural design flexibility.
- Acoustic performance up to NRC 0.80.
- Improve indoor climate with Cleaneo air purifying technology.
- Repaintable without the loss of acoustic performance.
- No visible joints after finishing UFF edge profile with Uniflott Jointing Compound.



Air Purifying Technology

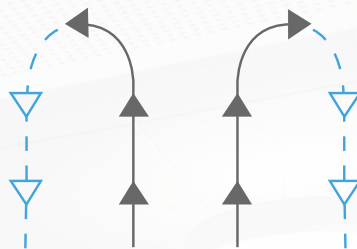
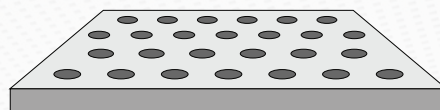
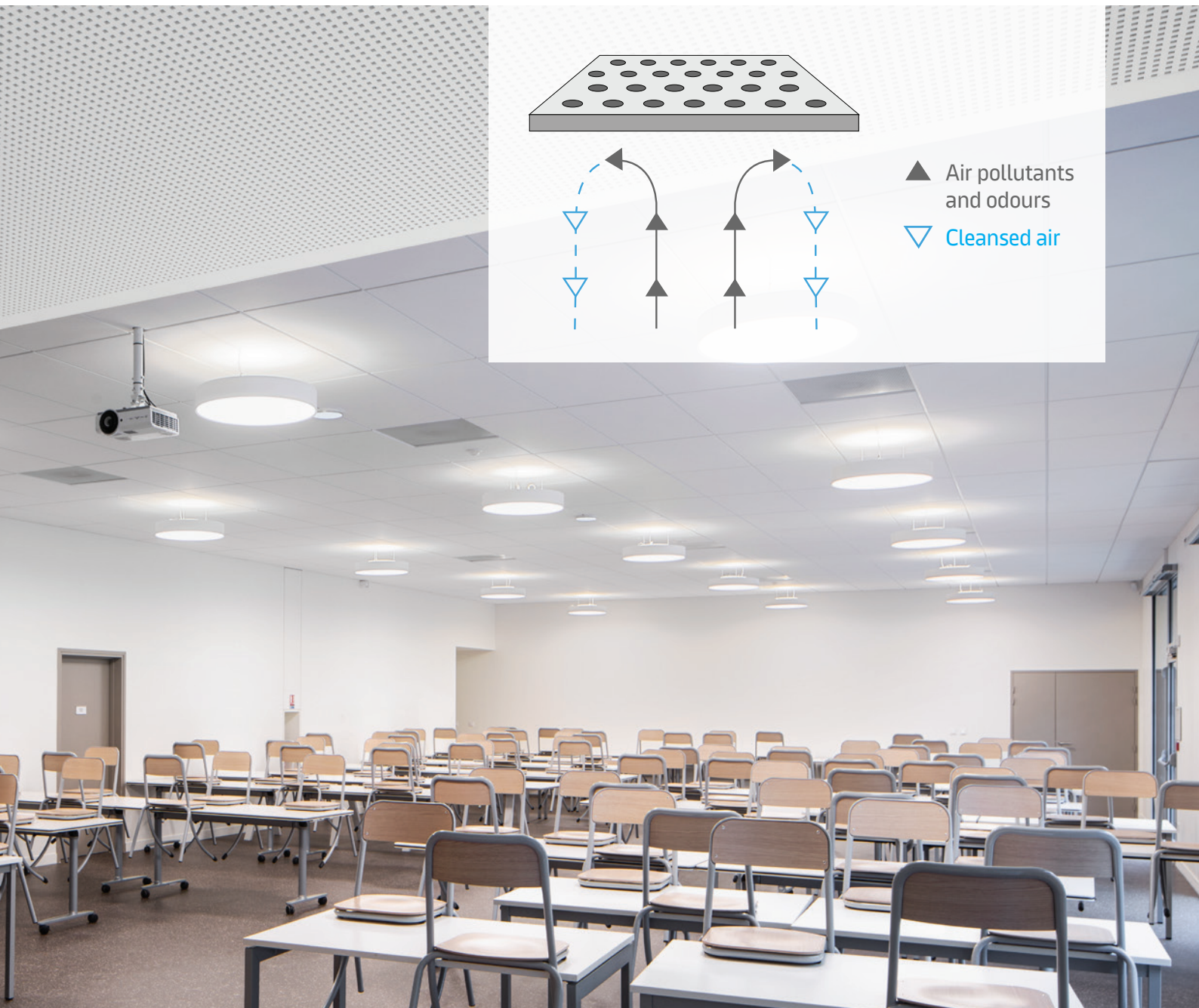
The trend of construction 'greener' buildings to enhance airtightness and conserve energy has resulted in certain air quality concerns.

Indoor air can become contaminated in many ways. Everyday substances including paints and lacquers, cleaning products, glues and solvents all create potentially harmful emissions including volatile organic compounds (VOC), which have been linked to headaches, allergies and asthma.

With the objective to ensure indoor comfort to the occupants of a building due noise and air pollution, Knauf has integrated an active air purifying technology for Cleaneo.

Independent laboratory testing at the Fraunhofer Institute for Building Physics in Germany, highlight the effectiveness of Cleaneo. Throughout all the tests, Cleaneo improved the indoor air quality by reducing the concentration of polar volatile compounds like alcohol, aldehydes, ketones and esters – all typical emissions from cleaning agents and care products.

Cleaneo continues to improve air quality long after installation. There is no special maintenance required and can be coated with a suitable painting system without any detrimental effect on its performance.



- ▲ Air pollutants and odours
- ▽ Cleansed air

Product Information

Pattern	Thickness	Width	Length	Open Area
Circular 8/18 R	12.5 mm	1188 mm	1998 mm	15.5 %
Circular 12/25 R	12.5 mm	1200 mm	2000 mm	18.1 %
Square 12/25 Q	12.5 mm	1200 mm	2000 mm	23.0 %
Alternating Circular 12/20/66 R	12.5 mm	1188 mm	1980 mm	19.6 %
Random 8/15/20 R	12.5 mm	1200 mm	2000 mm	9.9 %

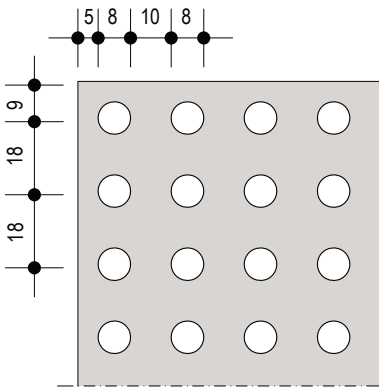
Acoustical Performance

Pattern	Insulation	Cavity Depth (mm)	NRC*
Circular 8/18 R	Nil	65	0.60
		200	0.60
		400	0.60
	Mineral Wool	65	0.65
		200	0.65
		400	0.65
Circular 12/25 R	Nil	65	0.60
		200	0.65
		400	0.60
	Mineral Wool	65	0.70
		200	0.70
		400	0.65
Square 12/25 Q	Nil	65	0.65
		200	0.70
		400	0.65
	Mineral Wool	65	0.80
		200	0.75
		400	0.75
Alternating Circular 12/20/66 R	Nil	65	0.60
		200	0.65
		400	0.60
	Mineral Wool	65	0.75
		200	0.70
		400	0.70
Random 8/15/20 R	Nil	65	0.45
		200	0.50
		400	0.45
	Mineral Wool	65	0.50
		200	0.50
		400	0.50

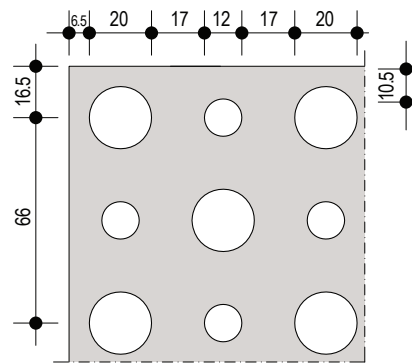
Remark * Calculated following the ASTM C423 : 1989 Standard

Pattern Preview

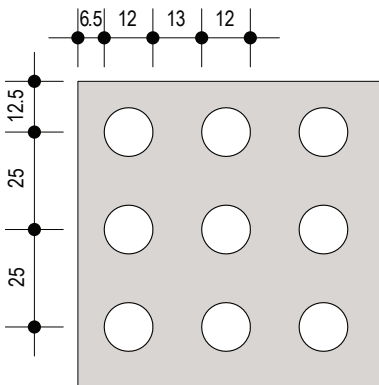
Circular 8/18 R



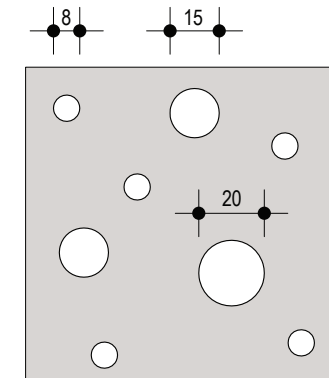
Alternating Circular 12/20/66 R



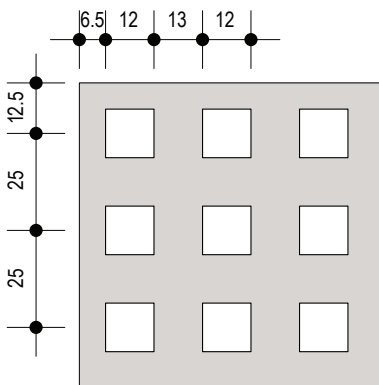
Circular 12/25 R



Random 8/15/20 R



Square 12/25 Q



Detailed Acoustic Data

Pattern (open area)	Insulation	Cavity (mm)	Absorption Coefficient (NRC)*																	NRC	
			Sound Frequency (Hz)																		
			100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000		5000
Circular 8/18 R (15.5%)	No	E65	0.12	0.12	0.18	0.25	0.31	0.41	0.48	0.61	0.64	0.71	0.74	0.73	0.69	0.65	0.61	0.55	0.61	0.70	0.60
		E200	0.36	0.47	0.50	0.52	0.57	0.66	0.67	0.69	0.70	0.65	0.58	0.59	0.58	0.55	0.56	0.58	0.64	0.75	0.60
		E400	0.44	0.52	0.63	0.66	0.62	0.65	0.60	0.57	0.62	0.62	0.59	0.60	0.59	0.57	0.56	0.58	0.62	0.72	0.60
	Yes	E65	0.23	0.34	0.45	0.45	0.56	0.62	0.67	0.75	0.75	0.77	0.73	0.70	0.69	0.62	0.59	0.59	0.64	0.74	0.65
		E200	0.40	0.55	0.59	0.57	0.66	0.72	0.69	0.70	0.69	0.66	0.66	0.65	0.62	0.61	0.59	0.61	0.64	0.79	0.65
		E400	0.46	0.53	0.61	0.66	0.59	0.63	0.59	0.61	0.67	0.68	0.68	0.67	0.63	0.62	0.58	0.60	0.66	0.76	0.65
Circular 12/25 R (18.1%)	No	E65	0.11	0.11	0.16	0.23	0.30	0.41	0.48	0.62	0.70	0.76	0.79	0.78	0.73	0.70	0.65	0.50	0.50	0.65	0.60
		E200	0.37	0.49	0.53	0.55	0.65	0.70	0.72	0.75	0.74	0.69	0.61	0.62	0.61	0.57	0.60	0.56	0.52	0.69	0.65
		E400	0.45	0.55	0.68	0.69	0.67	0.69	0.65	0.58	0.65	0.65	0.63	0.63	0.61	0.61	0.59	0.55	0.54	0.68	0.60
	Yes	E65	0.21	0.32	0.43	0.46	0.57	0.67	0.71	0.80	0.81	0.84	0.80	0.74	0.74	0.67	0.63	0.57	0.59	0.70	0.70
		E200	0.40	0.57	0.59	0.61	0.70	0.75	0.74	0.76	0.73	0.70	0.68	0.70	0.68	0.65	0.64	0.61	0.60	0.74	0.70
		E400	0.47	0.56	0.68	0.70	0.64	0.68	0.65	0.67	0.71	0.75	0.72	0.71	0.69	0.66	0.64	0.60	0.60	0.74	0.65
Alternating Circular 12/20/66 R (19.6%)	No	E65	0.10	0.10	0.15	0.22	0.28	0.39	0.48	0.62	0.70	0.77	0.85	0.78	0.62	0.60	0.57	0.50	0.55	0.65	0.60
		E200	0.38	0.49	0.55	0.57	0.67	0.74	0.76	0.80	0.80	0.74	0.64	0.59	0.52	0.50	0.53	0.54	0.58	0.70	0.65
		E400	0.46	0.59	0.71	0.73	0.67	0.72	0.67	0.61	0.68	0.70	0.66	0.62	0.53	0.52	0.54	0.54	0.58	0.68	0.60
	Yes	E65	0.20	0.30	0.42	0.45	0.58	0.67	0.74	0.84	0.87	0.91	0.89	0.82	0.65	0.60	0.57	0.57	0.63	0.71	0.75
		E200	0.40	0.58	0.60	0.63	0.72	0.79	0.77	0.80	0.78	0.75	0.74	0.74	0.63	0.57	0.58	0.60	0.64	0.76	0.70
		E400	0.48	0.59	0.70	0.73	0.65	0.72	0.68	0.68	0.75	0.81	0.79	0.75	0.63	0.59	0.58	0.59	0.65	0.75	0.70
Square 12/25 Q (23.0%)	No	E65	0.09	0.09	0.15	0.20	0.28	0.38	0.49	0.64	0.73	0.79	0.85	0.83	0.78	0.75	0.69	0.50	0.59	0.71	0.65
		E200	0.37	0.50	0.56	0.58	0.70	0.76	0.78	0.82	0.82	0.75	0.65	0.67	0.66	0.62	0.64	0.56	0.61	0.75	0.70
		E400	0.45	0.61	0.73	0.74	0.69	0.75	0.68	0.62	0.68	0.70	0.66	0.68	0.67	0.64	0.63	0.55	0.60	0.71	0.65
	Yes	E65	0.19	0.29	0.42	0.44	0.58	0.71	0.78	0.87	0.90	0.93	0.88	0.84	0.81	0.77	0.71	0.62	0.70	0.80	0.80
		E200	0.40	0.62	0.63	0.65	0.76	0.82	0.80	0.83	0.83	0.75	0.75	0.77	0.76	0.73	0.73	0.65	0.70	0.84	0.75
		E400	0.48	0.62	0.73	0.76	0.68	0.75	0.69	0.69	0.78	0.82	0.80	0.80	0.77	0.74	0.72	0.65	0.70	0.82	0.75
Random 8/15/20 R (9.9%)	No	E65	0.15	0.15	0.22	0.27	0.31	0.39	0.44	0.50	0.52	0.59	0.60	0.58	0.49	0.43	0.39	0.38	0.44	0.50	0.45
		E200	0.34	0.43	0.45	0.46	0.48	0.53	0.53	0.56	0.55	0.52	0.49	0.49	0.42	0.39	0.37	0.39	0.45	0.53	0.50
		E400	0.40	0.40	0.48	0.50	0.50	0.48	0.49	0.48	0.51	0.51	0.50	0.49	0.44	0.41	0.38	0.40	0.45	0.51	0.45
	Yes	E65	0.29	0.38	0.43	0.42	0.47	0.51	0.53	0.59	0.57	0.59	0.58	0.55	0.46	0.42	0.37	0.39	0.45	0.52	0.50
		E200	0.34	0.48	0.50	0.49	0.49	0.52	0.53	0.54	0.52	0.53	0.52	0.51	0.44	0.41	0.38	0.40	0.70	0.56	0.50
		E400	0.41	0.43	0.50	0.50	0.47	0.48	0.47	0.50	0.55	0.55	0.56	0.52	0.46	0.43	0.40	0.40	0.46	0.53	0.50

Remark * Calculated following the ASTM C423 : 1989 Standard

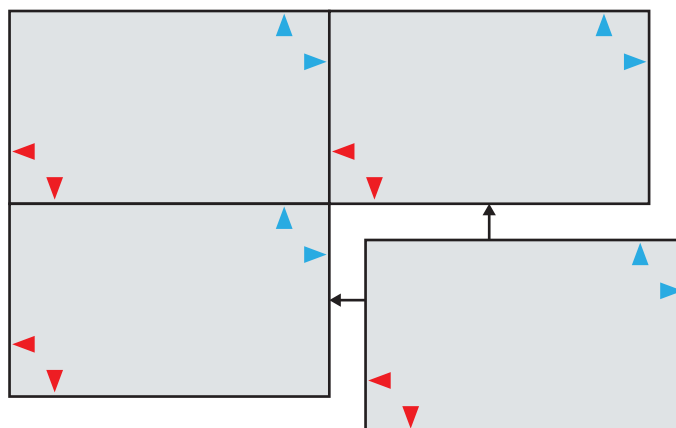
Cleaneo Spans Tables for Perforation Patterns

Perforation Patterns	Main Furring Channel Spacing KC50	Cross Furring Channel Spacing KC50	Screw spacing end of panels (short edge)	Screw spacing in the field of panels
Circular 8/18 R	1000 mm	333 mm	200 mm	300 mm
Circular 12/25 R	1000 mm	333.3 mm	200 mm	300 mm
Square 12/25 Q	1000 mm	333.3 mm	200 mm	300 mm
Alternating Circular 12/20/66 R	1000 mm	330 mm	200 mm	300 mm
Random 8/15/20 R	1000 mm	333.3 mm	200 mm	300 mm

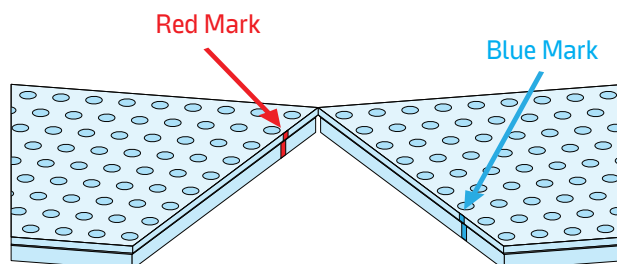
Remark * Install one additional Cross Furring Channel along the front edges for fixing the screws.

Cleaneo Installation Layout

Align UFF edges with red and blue marking during installation. Perimeter panel rotated 180° will align blue and blue UFF edges. (or red to red UFF edges).



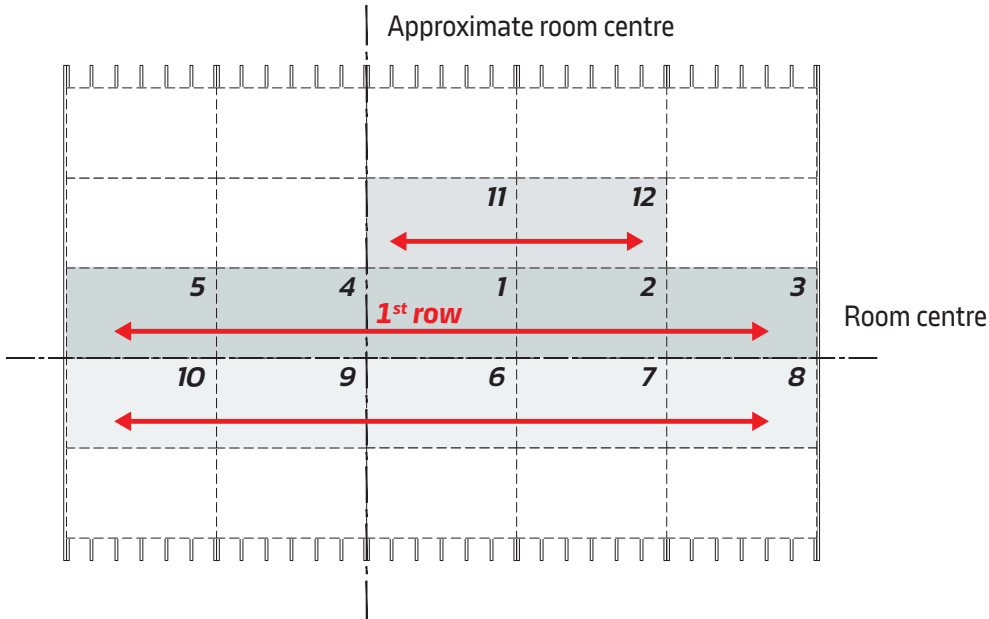
Make the red and blue mark facing each other



Board Arrangement

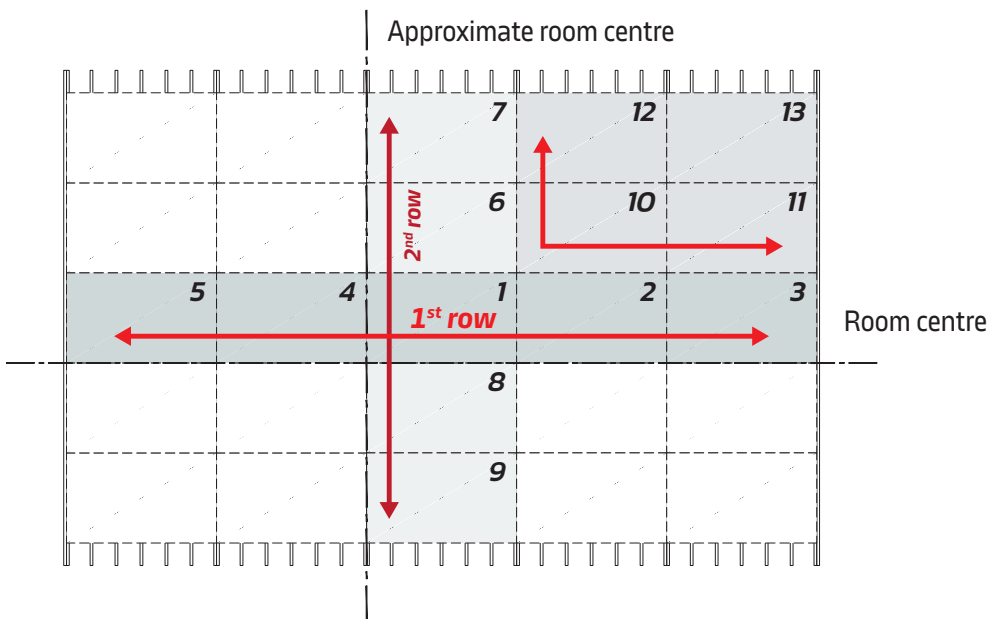
Rooms up to approx. 150 m²

1. 1st board row: Start application in the middle of the room.
2. Install the remaining board rows: parallel to 1st row.

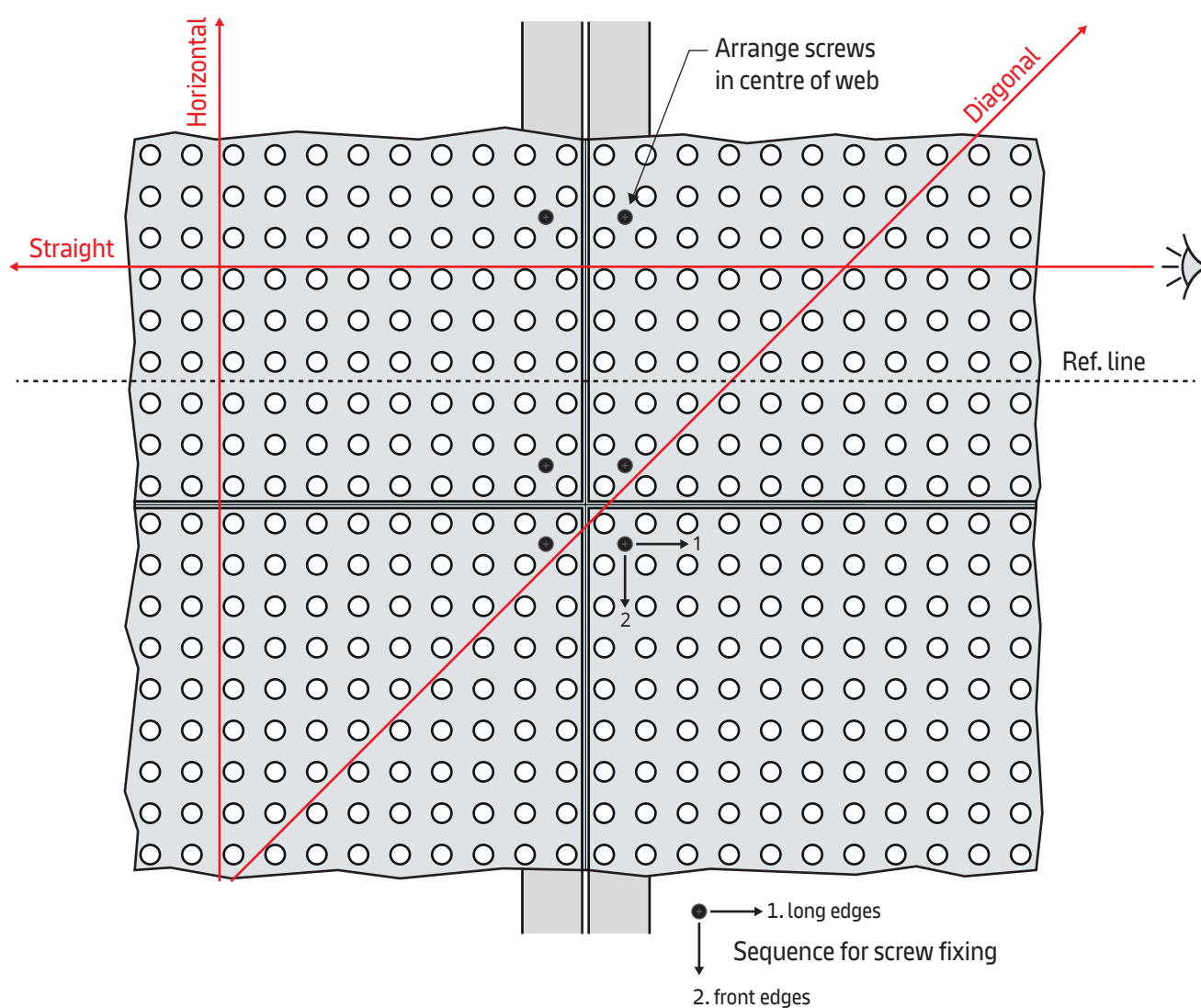


Rooms from approx. 150 m²

1. 1st board row: Start application in the middle of the room.
2. 2nd board row: transverse to 1st row – commence approx. in room centre.
3. Remaining ceiling surface: Install after application of 1st and 2nd row.

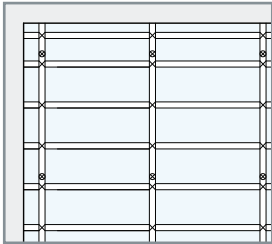


Verify the pattern to ensure it is properly aligned
(vertical, horizontal, and diagonal).

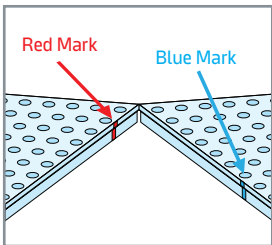


Remark * Install one additional Cross Furring Channel along the front edges for fixing the screws.

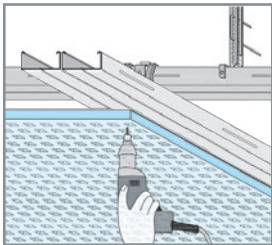
Installation



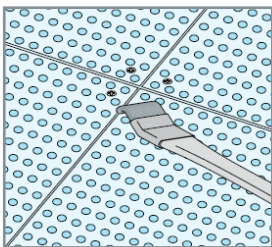
1. Install KC50 as per Spans Tables for Perforation Patterns.



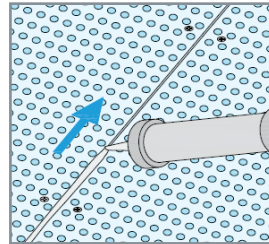
2. During installation, verify that the red and blue indicators are aligned with each other.



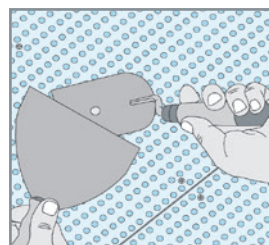
3. When install Cleaneo board, ensure alignment of the short edges coincides with the furring channel. Screw fix with 25 mm screws. Install one additional cross furring channel along the front edges for fixing the screws.



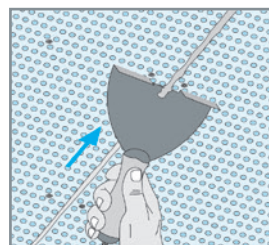
4. Ensure joints are clean of dust & prime cut joints.



6. Apply Uniflott Jointing Compound, fully fill the joint and skim over screw heads.



7. Remove any excess Uniflott Compound from the joints by using a jointing knife, being cautious not damage the paper, after it has stiffened.



8. After the joints are fully filled and set, sand them to achieve a smooth and even finish. Prepare the surface by cleaning and applying primer, followed by painting with a short-napped roller.

DO NOT spray as filled or blocked perforations will reduce the absorptive performance of Cleaneo.

Knauf Uniflott



General Information

Knauf Uniflott is a tapeless joint compound for use in jointing Cleaneo system and filling screw heads to obtain monolithic seamless finish.

- Specially formulated for Cleaneo.
- Particularly easy to fill with its creamy, pliable consistency.
- High joint strength.
- Low shrinkage.
- Very high crack resistance.

Product Information

Pack Size	Mixing ratio (Compound : Water)	Working Time	Coverage	Shelf Life
5 kg	2 : 1	45 mins.	50 m ²	9 months*

* Sealed bag



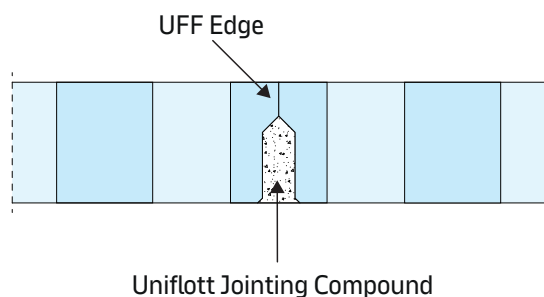
Storage

Tightly close the bag, keep in dry place with temperature below 50°C, and place it above the ground level. Do not expose to the moisture or water.

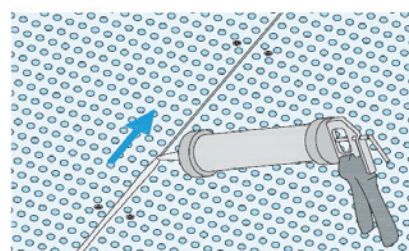
Caution

Do not apply at room or substrate temperatures below 10°C

Fill the UFF joint with Uniflott without using a jointing tape



Uniflott filling instruction





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