

DID YOU KNOW THAT ...

0.13% of seawater content
is gypsum and that there are
large quantities of desiccated
natural gypsum around the
Mediterranean?

DESIGNPANEL

WALL LINING

Wall lining with a unified expression without visible joints. Suitable for flat surfaces and for curving on site or from the factory.

Designpanel
Tectopanel
Contrapanel
Solopanel
Stratopanel
Kinopanel
Amfipanel
Adit

DESIGNPANEL

WALL LINING

SIZES

Dimension: Available with:
 900 x 2700 x 12.5 mm* Globe, Quadril, Micro
 1200 x 2400 x 12.5 mm Globe, Quadril, Micro
 900 x 2400 x 12.5 mm Tangent

SURFACE

Untreated

DANISH INDOOR CLIMATE LABELLING (DIM)

Indoor value: 10 days
 Particle emission: low (< 0.75 mg)

CLEANING

Dust is removed using a dry duster or vacuum cleaner. Removal of marks depends on the paint used on site, although a damp cloth using normal cleaning practices and neutral cleaning solutions is normally suitable for minor marks. In the case of stubborn marks or if in doubt refer to the paint manufacturer's recommendations.

AMBIENT CONDITIONS

The product is designed to perform under normal conditions of use. Tested at 90% RH and 30°C. The product can withstand ambient temperatures of up to 50°C.

LIGHT REFLECTION

Depends on the paint used on site.

FIRE CLASS

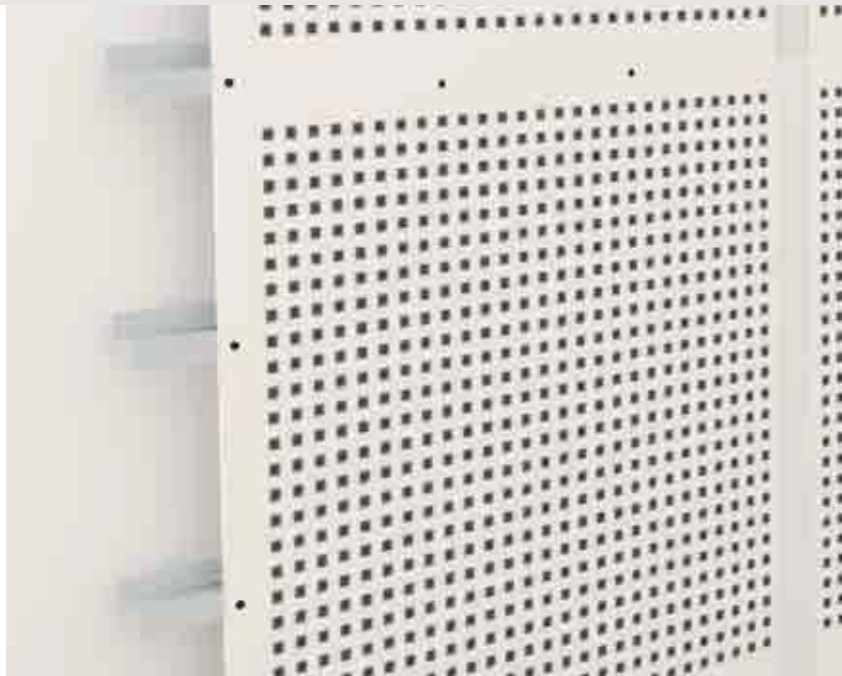
A2-s1,d0

FIRE RATING

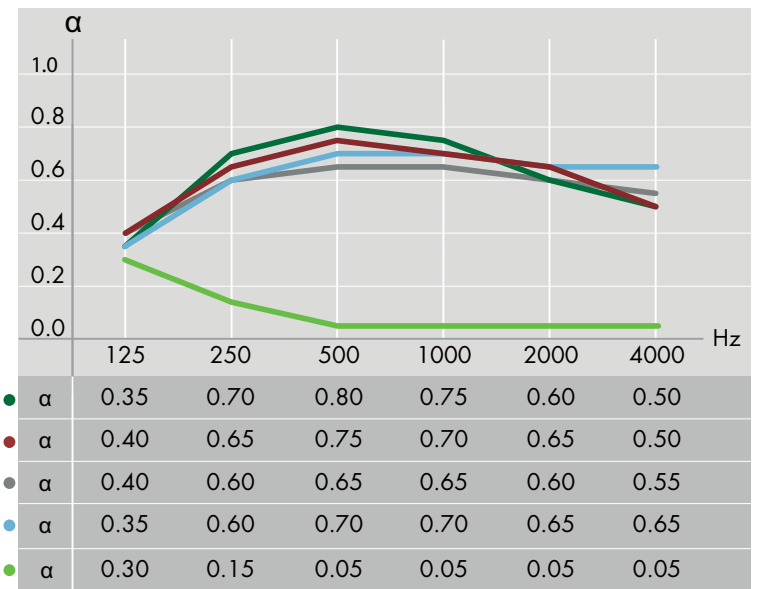
Class 1; K₁ 10, A2-s1,d0; BD 30

ROBUSTNESS

Made of robust, glass fibre reinforced material with excellent pressure resistance. Under normal conditions of use, the product properties are preserved and there is no decomposition of material over time.



ACOUSTICS



- G1F, 65 mm installation depth, 50 mm mineral wool aw: 0.65, NRC: 0.70
- Q1F, 65 mm installation depth, 50 mm mineral wool aw: 0.65, NRC: 0.70
- M1F, 65 mm installation depth, 50 mm mineral wool aw: 0.65, NRC: 0.65
- T3L1, 65 mm installation depth, 50 mm mineral wool aw: 0.70, NRC: 0.65
- Regula, 65 mm installation depth, 50 mm mineral wool aw: 0.10, NRC: 0.05

For acoustic data on alternative constructions please see "Absorption Data" at knaufdanoline.com

Perforation	Tile weight*	Transportation weight*	*(kg/m ²)
Globe	8.9	9.0	
Quadril	8.8	8.9	
Micro	8.9	8.9	
Tangent	8.8	8.9	
Regula	9.6	9.7	



CERTIFICATES

- Declaration of Conformity (EN 14190)
- Danish Indoor Climate Labelling

PERFORATION

Also available as Regula.

Other perforation patterns are available to order.



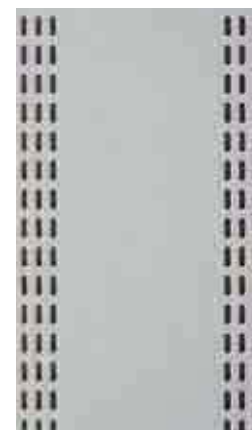
Globe, $\varnothing 6$ mm,
15 mm c/c
Perforation: 5.3 - 9.8%



Quadril, 12 x 12 mm,
30 mm c/c
Perforation: 7.8 - 13%



Micro, 3 x 3 mm,
8.3 mm c/c
Perforation: 7.1 - 9.8%



Tangent, 4 x 14 mm,
10/20 mm c/c
Perforation: 13.3 - 15.0 -
15.8%

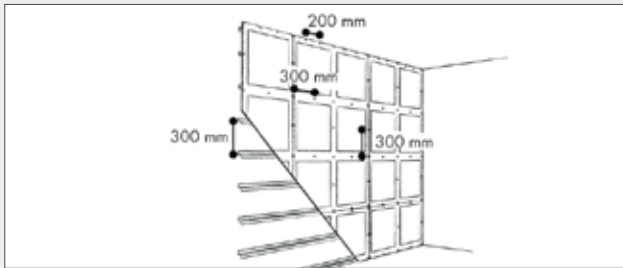
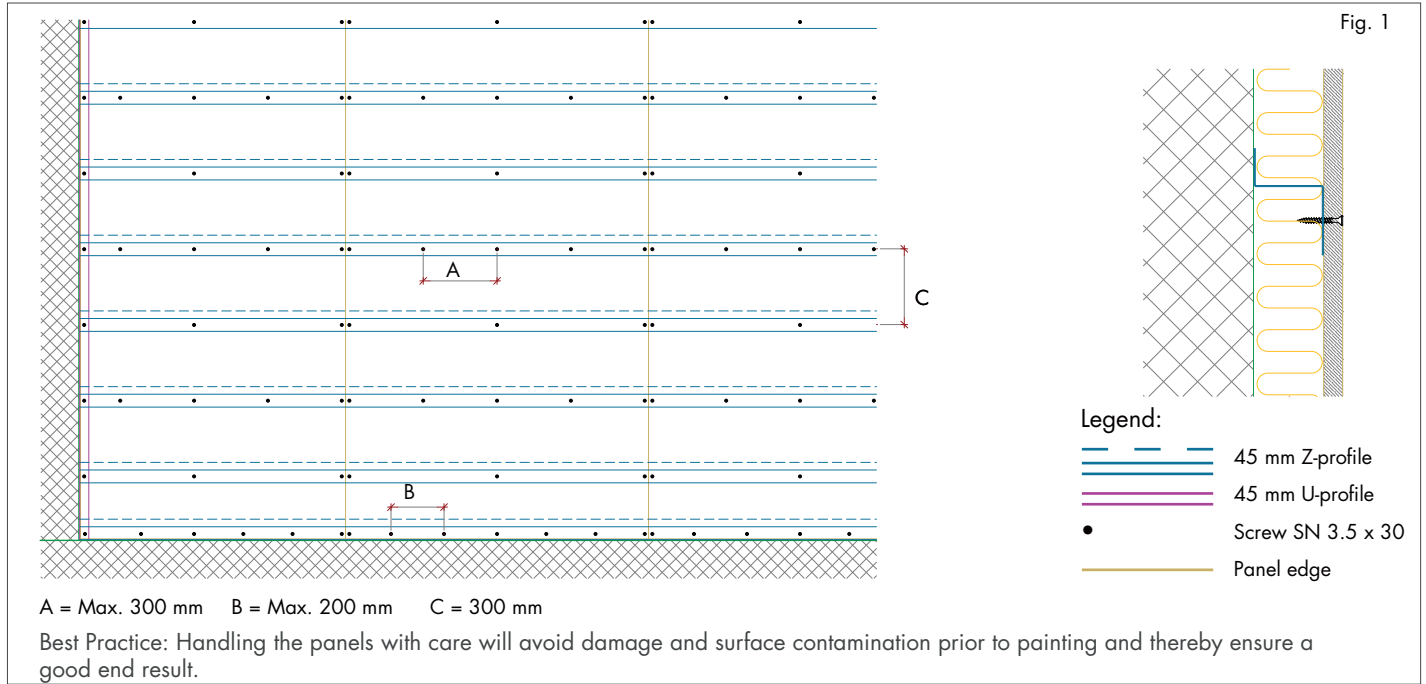
EDGES



Edge B1

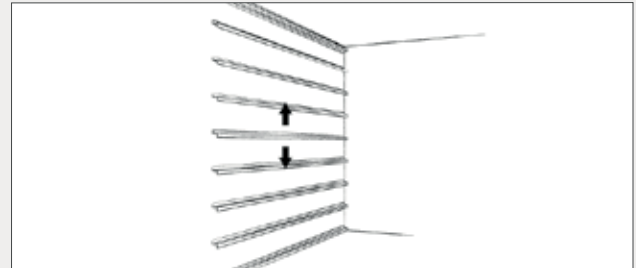
Edge B1 (EN 520)
4 tapered edges
No visible joints

INSTALLATION GUIDE



FURRING

- Depending on current fire regulations Designpanel can be installed on wood or steel furrings.
- Furrings can be vertical or horizontal but should in general be at right angles to the direction of the panels to ensure that the end edges of the panels are properly supported.
- Furrings should be at least 45 mm in width.
- Also see the section "Acoustics" on next page.



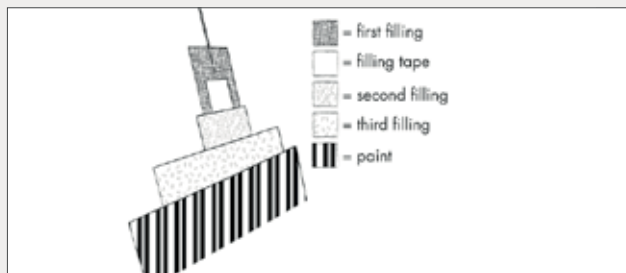
LAYOUT

- Perforated wall panels are normally installed on the upper section of a wall in accordance with acoustic requirements and the shape of the room in question.
- However, perforated panels can also be used to cover an entire wall, depending on the degree of physical impact.
- Follow any available drawings or divide the surface of the wall so that the perforated modules are positioned symmetrically in the room.
- Expansion joints should be established on extensive wall surfaces at intervals of max. 15 metres. See detailed drawings on knaufdanoline.com.



INSTALLATION

- Install the first row of panels with the help of string.
- See distances in figure 1.
- The panels are supplied undersized and must be installed at distances of up to 4 mm from each other to ensure that it is possible to insert filler all the way up between the edges of the panels.
- The perforated fields must be flush in their own rows and at right angles to the adjacent fields.
- Cut the elements to size from the front with a fine-toothed saw.



FILLING

- Apply the first layer of filler (Easy Filler Light). Make sure it is pressed all the way up between the panel edges and avoid getting filler in the perforations.
- Apply filler tape to the wet filler.
- The first filling and application of filler tape can be carried out in a single, very simple operation by using a Mini Bazooka.
- Allow the filler to dry. Make sure that the filler is completely dry before sanding. Sand with fine sandpaper. Be careful not to damage the cardboard surface.
- Apply the second layer of filler (Easy Filler Light).
- Allow the filler to dry. Make sure that the filler is completely dry before sanding. Sand with fine sandpaper. Be careful not to damage the cardboard surface.
- Apply the third layer of filler (Easy Filler Light). Make sure that the filler is completely dry before sanding. Sand with fine sandpaper until the joint is completely smooth. Be careful not to damage the cardboard surface.



FILLING SCREW HOLES

- Check that the screws have been countersunk.
- Apply the first layer of filler (Easy Filler Light).
- Allow the filler to dry.
- Sand with fine sandpaper.
- Apply the second layer of filler (Knauf Uniflott Finish), overfill slightly.
- Allow the filler to dry.
- Sand with fine sandpaper until the surface is completely smooth. Be careful not to damage the cardboard surface.



PAINTING

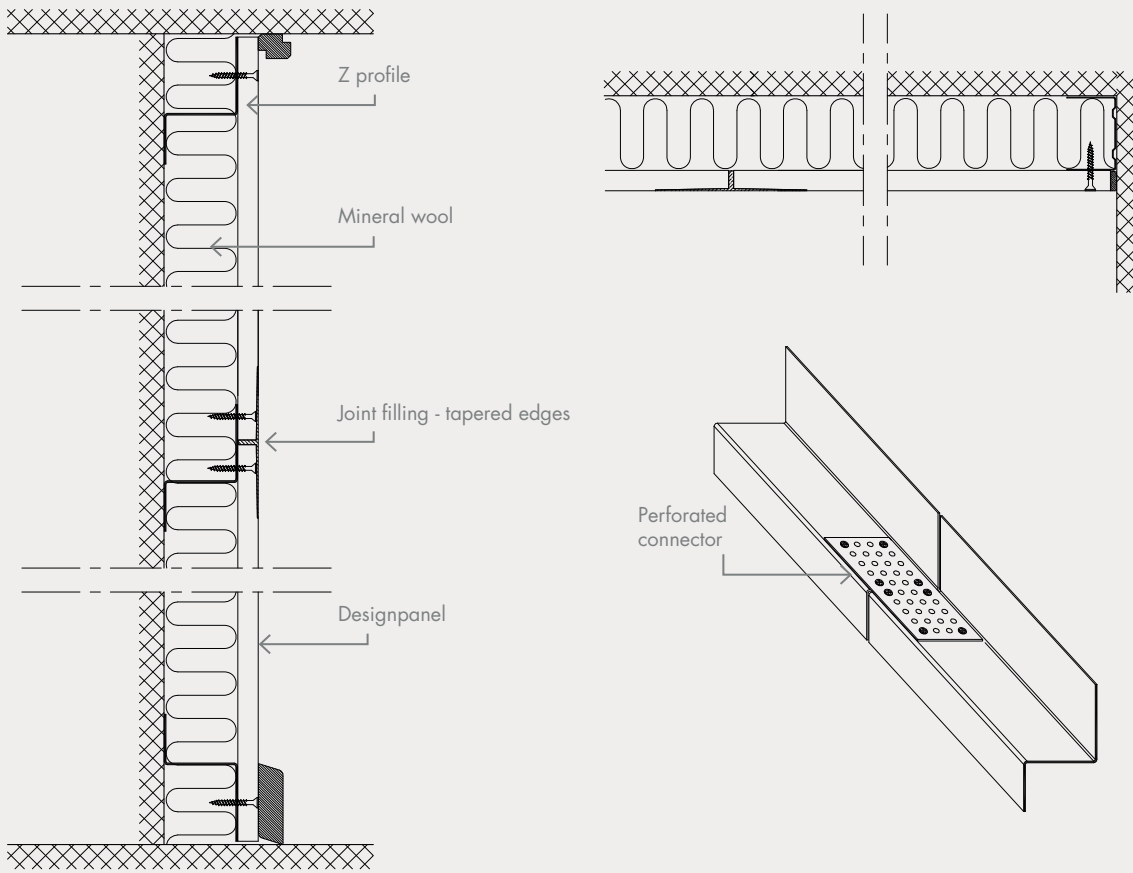
- Make sure that the filler is completely dry and the surface is free from dust.
- Priming should be carried out in accordance with the paint manufacturer's instructions.
- Apply the paint with a roller so that the acoustic felt on the perforated panels is not sealed. Use a fine mohair roller.
- Make sure that the paint is not too thick and avoid applying too much paint at a time.
- Spraying cannot be recommended as this could influence the acoustic properties of the panels.

ACOUSTICS

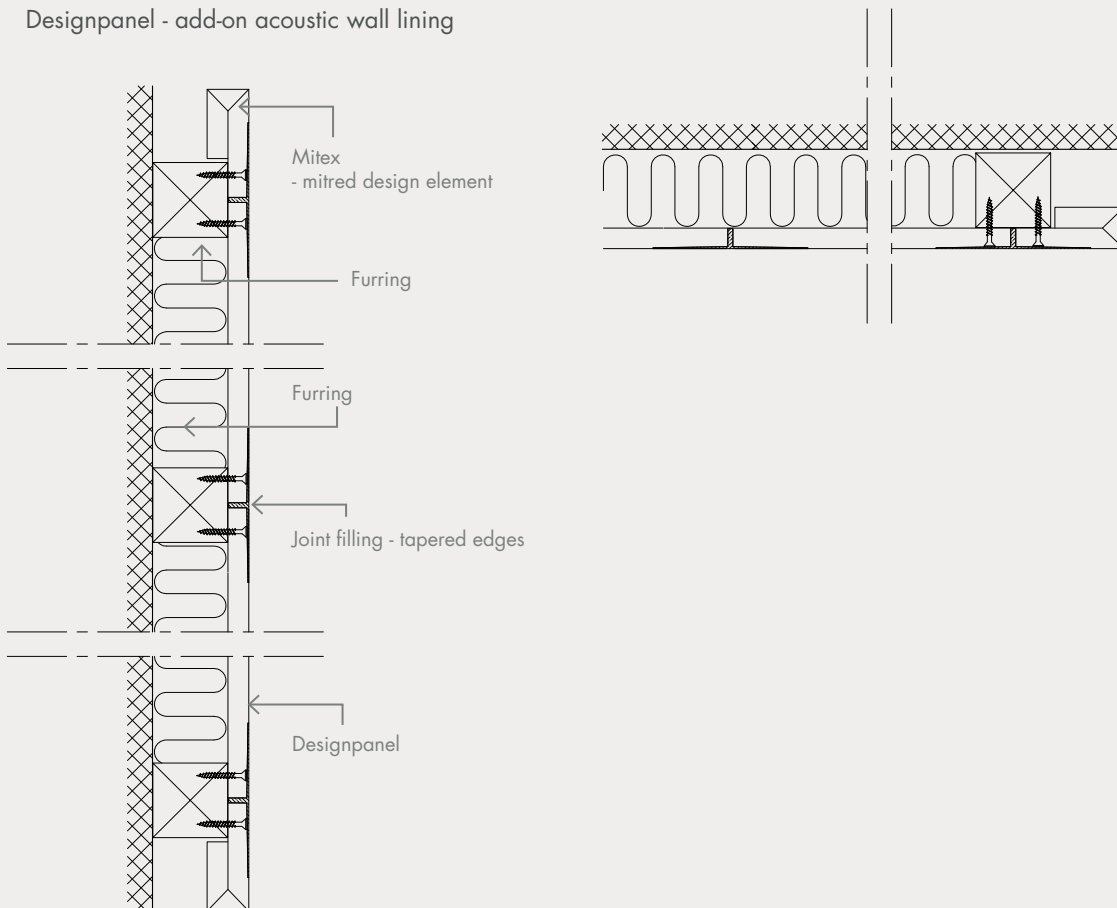
- A perforated gypsum panel will lose its acoustic function if the perforations are blocked (this applies to the front and back of the panel).
- Where applicable, a vapour barrier should therefore always be placed behind the furrings so that it does not come into contact with the back of the perforated panel.
- When installing Designpanel on a fixed surface we recommend filling the cavity between the back of the panel and the furring with mineral wool. This is primarily to ensure low frequency sound absorption.

DETAILS

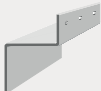





Designpanel - integrated acoustic wall



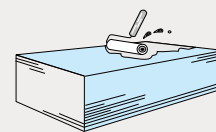
Designpanel - add-on acoustic wall lining



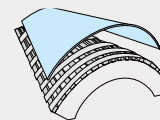
ACCESSORIES

PRODUCT NAME		SAP. NO.	W x L x H (mm)
Z-profile		14380	30 x 45 x 45 x 2300
Screws SN 3.5		9275	3.5 x 30 mm
Easy Filler		14140	10 L
		235309	15 L
Uniflott Finish		129801	8 kg
Filler tape		314828	75 m
Filling knife		73962	-

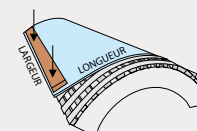
CURVED PANELS



Apply water on the front face and leave for 30 minutes. If necessary the panel can be covered in plastic to assist the panel in absorbing the water.



Lay the panel over a template. Secure the panel on one side of the template.



Press the panel against the template using a batten, moving it every 100 mm. Secure the panel on the other side of the template. Drying time: 1½ - 2 hours.

UPKEEP & MAINTENANCE

Best Practice: Use of clean cotton gloves when handling painted and foil-covered product elements will ensure a good result and a ceiling without fingermarks.

PRODUCT CATEGORY	DEMOUNTABLE T-GRID CEILINGS	
Products	Visona, Contur, Belgravia, Linear, Markant, Plaza	Danotile, Medley
Surface	White painted	Foil finish
Upkeep	Designed for use under normal conditions, i.e. up to 70% RH and 25°C, e.g. in offices, institutions and similar premises. Belgravia, Markant, Plaza and Danotile 600x600 have also been tested at 90% RH at 30°C and can be used under more extreme conditions such as kitchens, laboratories and rooms with frequent and major changes in the temperature and air humidity. Special purpose, anticorrosion treated suspension systems should be used in areas of very high humidity.	
Cleaning	Dust is removed using a dry duster or vacuum cleaner. Marks can be removed with a damp cloth using normal cleaning practices and neutral cleaning solutions. Stubborn marks and minor damages should be wiped clean prior to repainting. LINEAR: To ensure good alignment it is important that the tiles are installed in the same orientation. This is also important for maintenance when vacuuming or painting. Always ensure that when applying upward (painting) / downward (vacuuming) pressure, that the tiles are pushed / pulled in the same direction moving away from the grooved edge.	Dust is removed using a dry duster or vacuum cleaner. Marks can be removed with a damp cloth using a mild detergent if necessary. Stronger cleaning agents may be used where necessary to remove stubborn marks or where cleaning regimes require it. The product can also stand rigorous cleaning with concentrated disinfectants and detergents with high and low pH values (13.0 - 2.5).
Repair	Stubborn marks and visible damages and scratches on the surface can be repaired. Damages and scratches can be filled and finished with sandpaper prior to repainting. When painting use Knauf Danoline repair paint or similar (closest RAL colour 9003) and apply by paint roller. Spray painting is not recommended on perforated products, as there is a risk of the spray paint being applied to the acoustic felt backing thereby altering the acoustic properties.	Damages and scratches are difficult to repair and therefore it is recommended to replace damaged tiles with new.
Lamp suspension	<p>DANOTILE: For sizes up to 625x625 and min. thickness 9mm, units of up to 3kg can be installed directly into the panel without reinforcement. For larger module sizes and all sizes in 6mm thickness, a reinforcement panel of sufficient strength can be installed behind the element. The reinforcement panel must extend all the way into the main runners, so that the weight is transferred to them. The total weight should not be greater than 3kg for each m² of ceiling. Where loads are greater than 3kg/m², additional hangers must be used. Units over 3kg, should be installed independently, so that they do not place any load on the ceiling.</p> <p>BELGRAVIA, MARKANT, PLAZA, MEDLEY: For sizes up to 625x625 not in Tangent perforation, units of up to 3kg can be installed directly into the panel without reinforcement. For larger module sizes and all sizes with Tangent perforation a reinforcement panel of sufficient strength can be installed behind the element. The reinforcement panel must extend all the way into the main runners, so that the weight is transferred to them. The total weight should not be greater than 3kg for each m² of ceiling. Where loads are greater than 3kg/m², additional hangers must be used Units over 3kg, should be installed independently, so that they do not place any load on the ceiling.</p> <p>VISONA, CONTUR, LINEAR: With smaller units (of up to 3kg) a reinforcement panel of sufficient strength can be installed behind the element. The reinforcement panel must extend all the way into the main runners, so that the weight is transferred to them. The total weight should not be greater than 3kg for each m² of ceiling. Where loads are greater than 3kg/m², additional hangers must be used Units over 3kg, should be installed independently, so that they do not place any load on the ceiling.</p>	

PRODUCT CATEGORY	SELF-SUPPORTING CEILINGS	
Products	Corridor 400, Corridor Swing	Corridor F30
Surface	White painted	Foil finish
Upkeep	Designed for use under normal conditions, i.e. up to 70% RH and 25°C, e.g. in offices, institutions and similar premises. Corridor 400 and Corridor F30 have also been tested at 90% RH at 30°C and can be used under more extreme conditions such as kitchens, laboratories and rooms with frequent and major changes in the temperature and air humidity.	
Cleaning	Dust is removed using a dry duster or vacuum cleaner. Marks can be removed with a damp cloth using normal cleaning practices and neutral cleaning solutions. Stubborn marks and minor damages should be wiped clean prior to repainting.	Dust is removed using a dry duster or vacuum cleaner. Marks can be removed with a damp cloth using a mild detergent if necessary. On non-perforated tiles stronger cleaning agents may be used where necessary to remove stubborn marks or where cleaning regimes require it.
Repair	More visible damages and scratches on the surface can be repaired using filler and finishing with sandpaper prior to repainting. When painting use Knauf Danoline repair paint or similar (as NCS 0700 or closest RAL colour 9003) and apply by paint roller. Spray painting is not recommended on perforated products, as there is a great risk of the spray paint being applied to the acoustic felt backing thereby altering the acoustic properties.	Damages and scratches are difficult to repair and therefore it is recommended to replace damaged tiles with new.
Lamp suspension	<p>CORRIDOR 400: Units weighing up to 3kg can be installed directly into the panel without reinforcement. N.B. The maximum cut-out, when installing in the centre of the panel is Ø265mm / 265x265mm. Units over 3kg, should be supported independently, so that they do not place any load on the ceiling.</p> <p>CORRIDOR SWING: The ceiling tile may not bear additional weight from other installations.</p>	Objects up to a maximum of 17kg can be suspended using appropriate fixings.

UPKEEP & MAINTENANCE

Best Practice: Use of clean cotton gloves when handling painted and foil-covered product elements will ensure a good result and a ceiling without fingermarks. Handling the untreated panels with care will avoid damage and surface contamination prior to painting and thereby ensure a good end result.

PRODUCT CATEGORY	NON-DEMOUNTABLE CEILING AND WALL LININGS			
Products	Danopanel	Designpanel, Tectopanel, Solopanel, Stratopanel	Contrapanel, Adit	Kinopanel, Amfipanel
Surface	White painted	Untreated	Foil finish	Black painted
Upkeep	<p>Designed for use under normal conditions, i.e. up to 70% RH and 25°C, e.g. in offices, institutions and similar premises.</p> <p>DESIGNPANEL, TECTOPANEL: The panels have also been tested at 90% RH at 30°C and can be used under more extreme conditions such as kitchens, laboratories and rooms with frequent and major changes in the temperature and air humidity. In areas of high humidity consideration should be given to anticorrosion suspension systems and durable/washable surface finishes.</p>		<p>CONTRAPANEL: Designed for use in sports halls and similar areas where conditions do not normally exceed 70% RH and 25°C.</p> <p>ADIT: The panels are custom made and designed for use under normal conditions, i.e. 70% and 25°C, e.g. in offices, institutions and similar premises unless otherwise advised.</p> <p>Adit and Contrapanel have also been tested at 90% RH at 30°C and can be used under more extreme conditions with frequent and major changes in temperature and air humidity.</p>	<p>Designed for use in cinemas, theatres, studios and similar premises under normal conditions, i.e. up to 70% RH and 25°C.</p>
Cleaning	<p>Dust is removed using a dry duster or vacuum cleaner. Removal of marks depends on the paint used on site, although a damp cloth using normal cleaning practices and neutral cleaning solutions is normally suitable for minor marks. In the case of stubborn marks or if in doubt refer to the paint manufacturer's recommendations.</p> <p>CONTRAPANEL: Dust is removed using a dry duster or vacuum cleaner. Marks can be removed with a damp cloth using normal cleaning practices and neutral cleaning solutions. On non-perforated tiles stronger cleaning agents may be used where necessary to remove stubborn marks or where cleaning regimes require it.</p>			
Repair	<p>More visible damages and scratches on the surface can be repaired using filler and finishing with sandpaper prior to repainting. When painting use Knauf Danoline repair paint or similar (closest RAL colour 9003) and apply by paint roller. Spray painting is not recommended on perforated products, as there is a risk of the spray paint being applied to the acoustic felt backing thereby altering the acoustic properties.</p>	<p>Use a paint roller to apply paint. Use the same paint as the original surface finish chosen. Spray painting is not recommended on perforated products, as there is a great risk of the spray paint being applied to the acoustic felt backing thereby altering the acoustic properties.</p>	<p>Damages and scratches are difficult to repair and therefore it is recommended to replace damaged panels with new.</p>	<p>When painting use Knauf Danoline repair paint or similar (as NCS S9000-N) and apply by paint roller. Spray painting is not recommended on perforated products, as there is a risk of the spray paint being applied to the acoustic felt backing thereby altering the acoustic properties.</p>
Lamp suspension	<p>The tile may not bear additional weight from other installations. Light objects up to a maximum of 3 kg/m² may be installed where they can be suspended from the furring system which must be able to bear the full weight.</p>	<p>Light objects up to a maximum of 3 kg can be suspended using appropriate fixings. Items over 3 kg must be suspended from the furring system which must be able to bear the full weight.</p>	<p>CONTRAPANEL: Light objects up to a maximum of 3 kg can be suspended using appropriate fixings. Items over 3 kg must be suspended from the furring system which must be able to bear the full weight.</p> <p>ADIT: The panel may not bear additional weight from other installations.</p>	<p>The panel may not bear additional weight from other installations.</p>

PRODUCT CATEGORY	DESIGN ELEMENTS	
Products	Curvex	Mitex
Surface	Untreated	Untreated
Upkeep	<p>Designed for creating organic wall and ceiling shapes e.g. in offices, institutions and similar premises under normal conditions, i.e. up to 70% RH and 25°C.</p>	<p>Designed for creating clean-cut edges wall and ceiling shapes e.g. in offices, institutions and similar premises under normal conditions, i.e. up to 70% RH and 25°C.</p>
Cleaning	Dependent on the chosen surface finish.	
Repair	Dependent on the chosen surface finish.	
Lamp suspension	The panels are custom made and may not bear additional weight from other installations unless otherwise advised.	