



DESIGNPANEL

NON-DEMOUNTABLE CEILING

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

Designpanel
Tectopanel
Contrapanel
Danopanel
Solopanel
Stratopanel

DID YOU KNOW THAT ...

gypsum was used by the ancient Egyptians as jointing material in monuments built over 4000 years ago?

DESIGNPANEL

NON-DEMOUNTABLE CEILING

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.

LOAD-BEARING CAPACITY

2 / A / No load	900 x 2700	G1F, Q1F, Q2F M1F, M2F
2 / B / 30N	1200 x 2400	G2F, Q2F Q4F, M2F
1 / A / No load	900 x 2400	T3L1, T3L2 T3L4

FIRE CLASS

A2-s1,d0

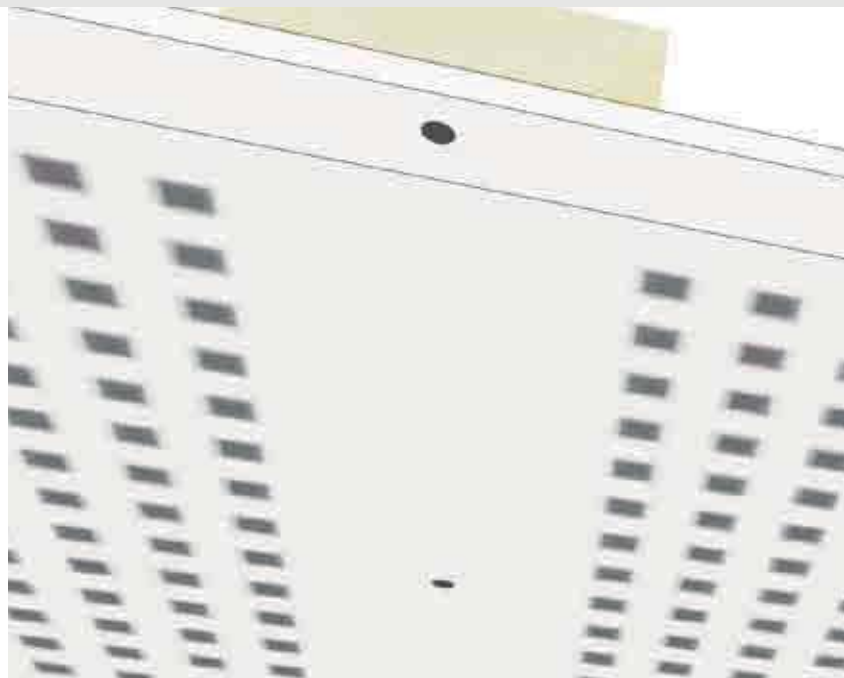
FIRE RATING

Class 1; K₁ 10, A2-s1,d0. Can be used in a BD 30 construction.

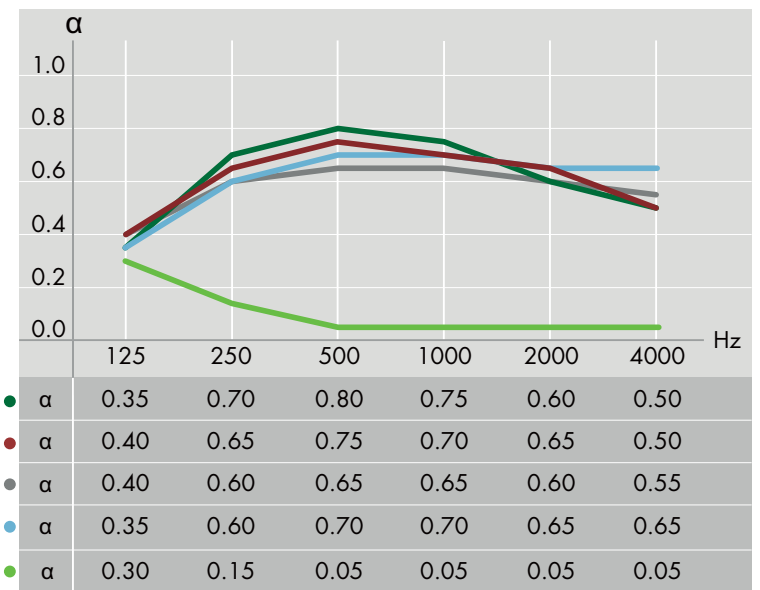
ROBUSTNESS

Made of robust, glass fibre reinforced material with excellent pressure resistance and can therefore be used on walls as well as ceilings. Under normal conditions of use, the product properties are preserved and there is no decomposition of material over time.

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	

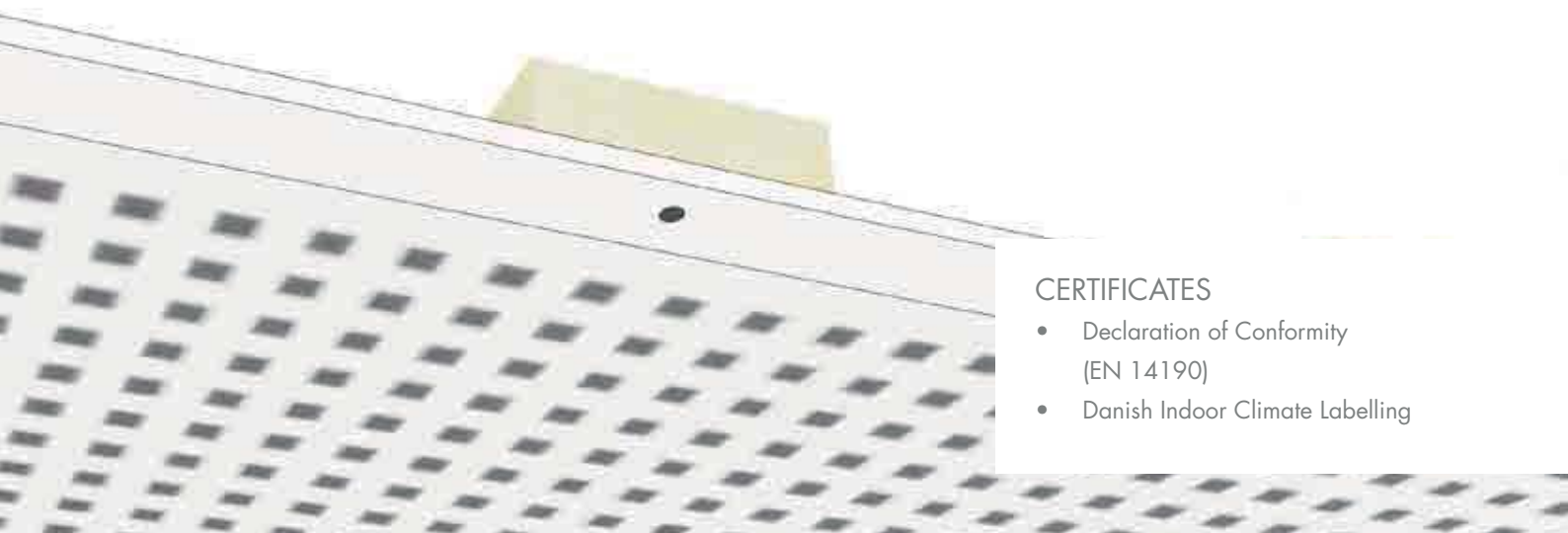


ACOUSTICS



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

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



CERTIFICATES

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

PERFORATION

Also available as Regula.

Other perforation patterns are available to order.



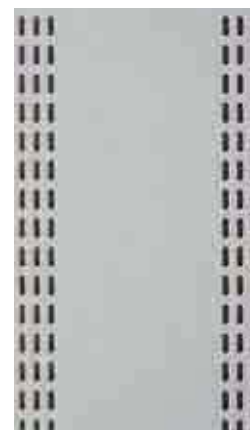
Globe, Ø6 mm,
15 mm c/c
Perforation: 5.3 - 9.8%



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
Perforation: 13.3 - 15.0 -
15.8%

EDGES



Edge B1

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

INSTALLATION GUIDE - FURRINGS OF WOOD

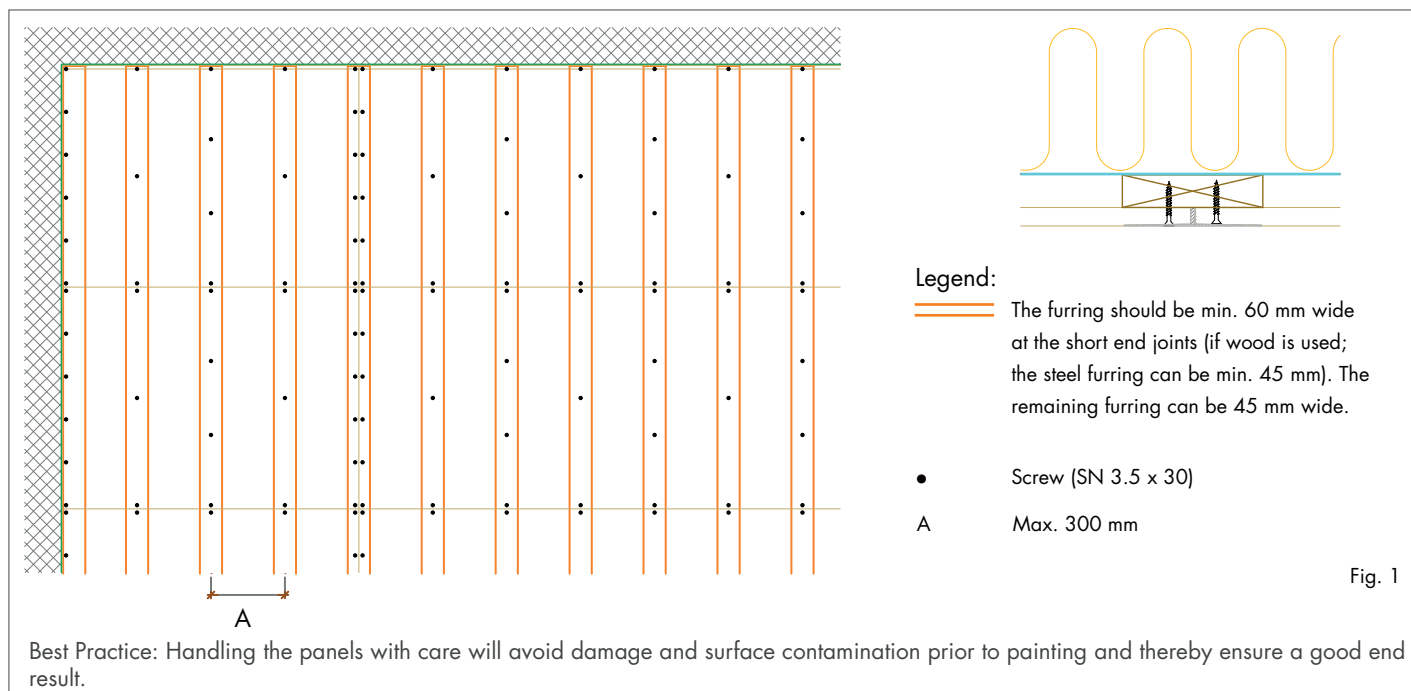
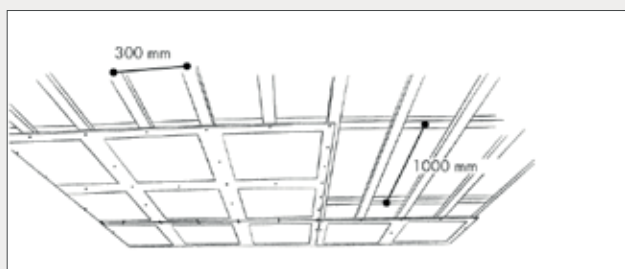
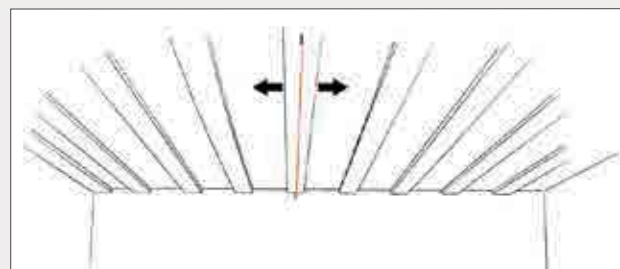


Fig. 1



FURRING

- Furrings can be of wood or steel profiles; CD2 system can also be used as substrate - for more details please see page 108.
- Also see the sections "Fire" and "Acoustics" on page 110.



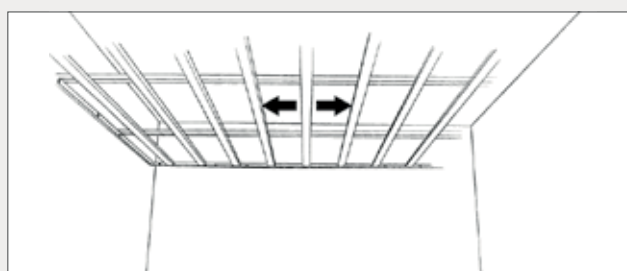
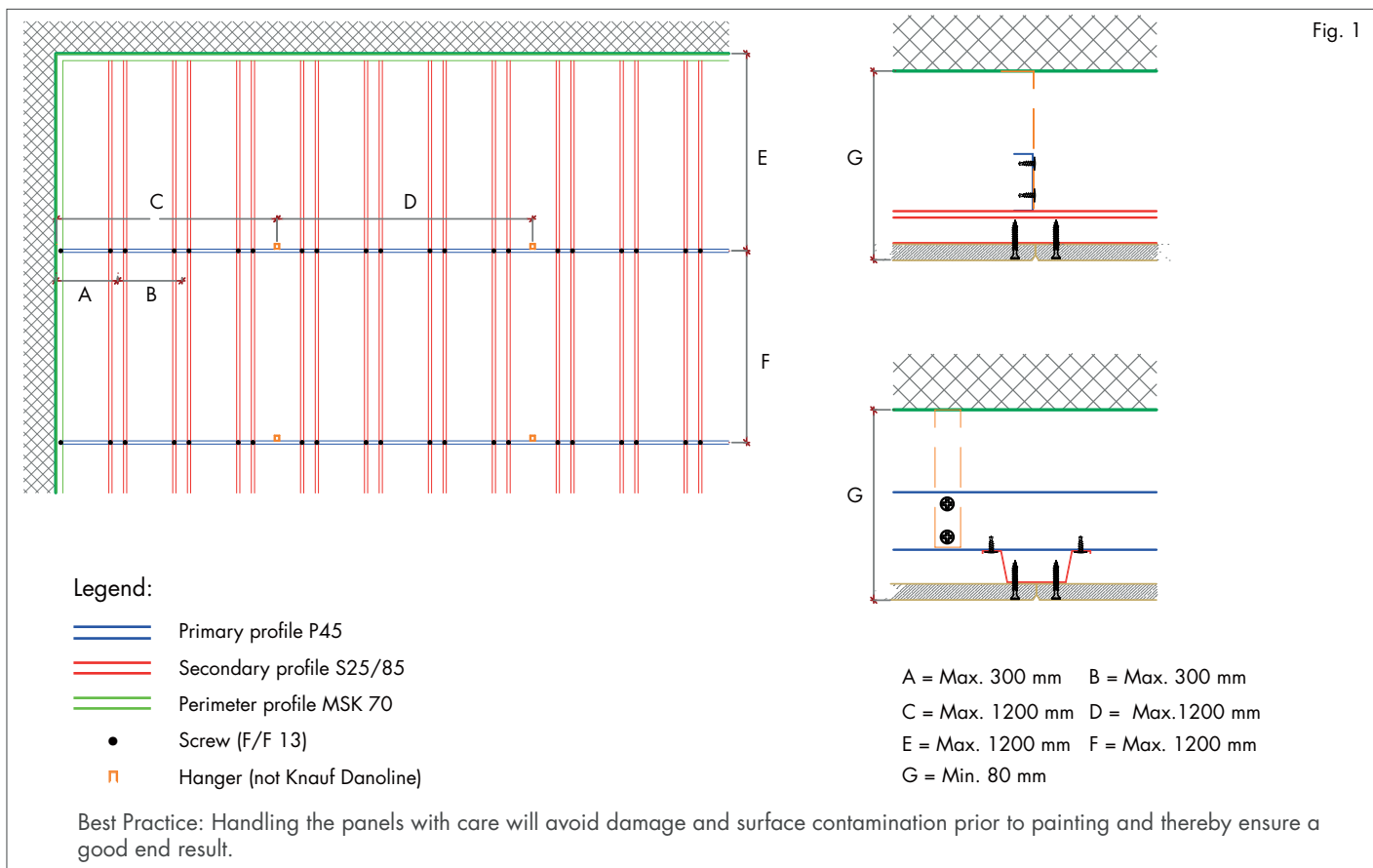
CEILING LAYOUT AND FURRING SYSTEM

- Divide the ceiling surface from the centre of the room or in accordance with the existing ceiling plans.
- Please note that expansion joints must be established on extensive ceiling surfaces at max.intervals of 15 metres in both directions. See detailed drawings on knaufdanoline.com
- As a rule, the furring must be at right angles to the longitudinal direction of the elements at centres of 300 mm to ensure that the panels are properly supported.
- Also see the sections "Fire" and "Acoustics" on page 111.

MOUNTING OF PANELS, FINISH ETC.

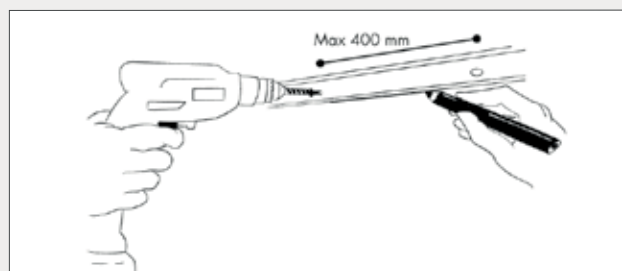
Please see page 110 for details.

INSTALLATION GUIDE - FURRINGS OF STEEL (P45-S25)



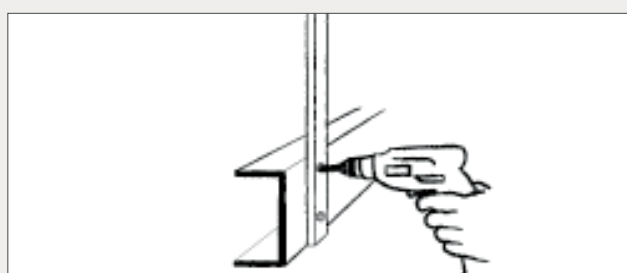
CEILING LAYOUT

- Divide the ceiling surface from the centre of the room or in accordance with the existing ceiling plans.
- Please note that expansion joints must be established on extensive ceiling surfaces at max.intervals of 15 metres in both directions.
- Where conditions indicate an increased risk of movement in a building, this must be taken into account by reducing the distance between expansion joints.



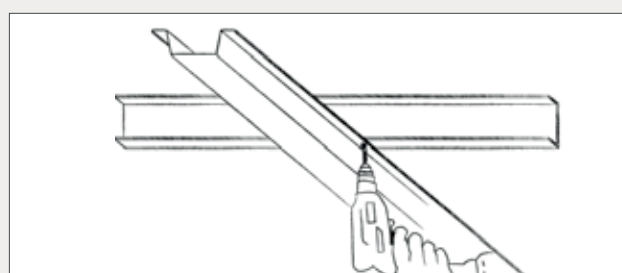
INSTALLING THE WALL PROFILE

- Mark out.
- Install the wall profile MSK70. Choose the method of fixing in accordance with the substrate.



PRIMARY PROFILES/HANGERS

- Install primary profiles every 1200 mm centres (max).
- Using rigid or strap hangers. Connect hangers to primary profile with 2 screws (F/F 13).



SECONDARY PROFILES

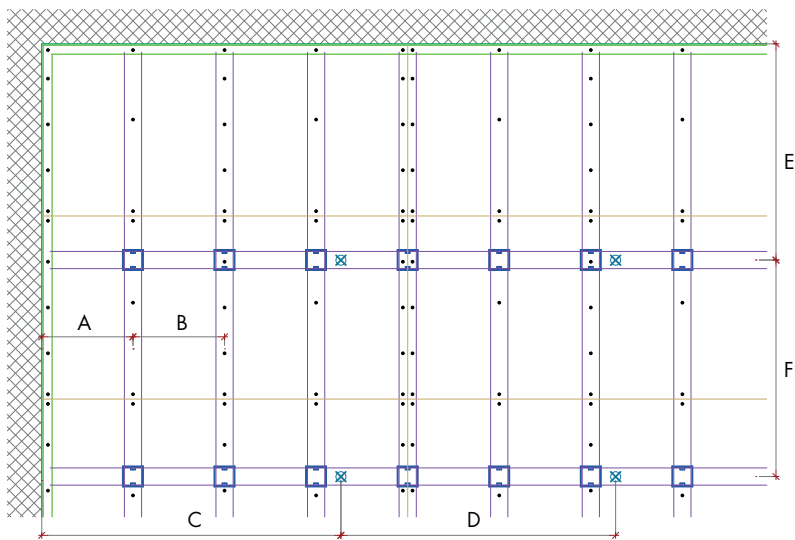
- Fix the secondary profiles to the primary profiles at every 300 mm. Use 2 screws (F/F 13) in each connection.

MOUNTING OF PANELS, FINISH ETC.

Please see page 110 for details.

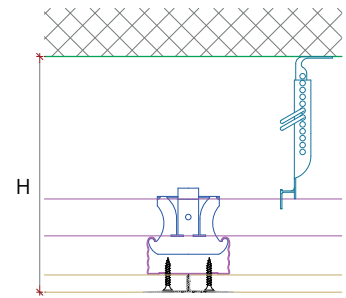
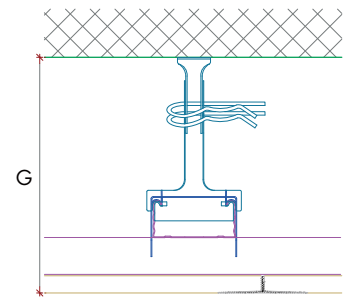
INSTALLATION GUIDE - FURRINGS OF STEEL (CD2)

Fig. 1



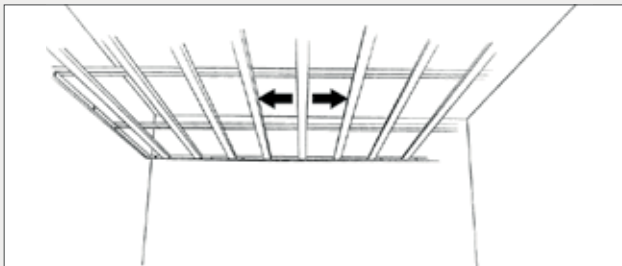
Legend:

- Wall profile UD 28/27
- CD profile 60/27
- Cross fitting
- Nonius hanger (type depending on installation depth)
- Panel edge
- Screw SN 3.5 x 30



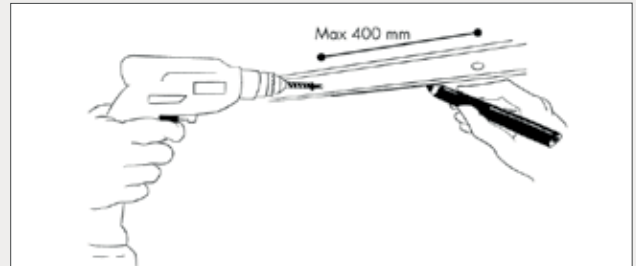
- A = Max. 300 mm B = Max. 300 mm
- C = Max. 900 mm D = Max. 900 mm
- E = Max. 900 mm F = Max. 900 mm
- G = Min. 80 mm H = Min. 80 mm

Best Practice: Handling the panels with care will avoid damage and surface contamination prior to painting and thereby ensure a good end result.



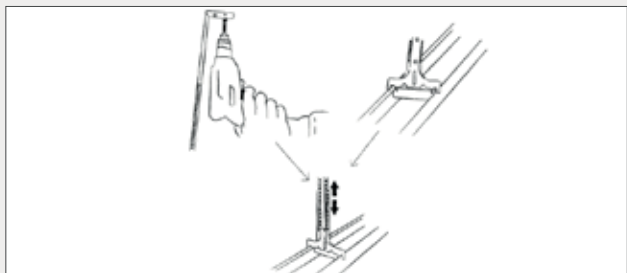
CEILING LAYOUT

- Divide the ceiling surface from the centre of the room or in accordance with the existing ceiling plans.
- Please note that expansion joints must be established on extensive ceiling surfaces at max.intervals of 15 metres in both directions. See detailed drawings on knaufdhanoline.com.
- Where conditions indicate an increased risk of movement in a building, this must be taken into account by reducing the distance between expansion joints.



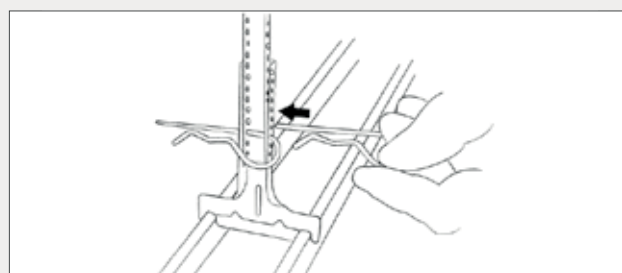
INSTALLING THE WALL PROFILE

- Mark out.
- Install the wall profile UD 28/27. Choose the method of fixing in accordance with the substrate.



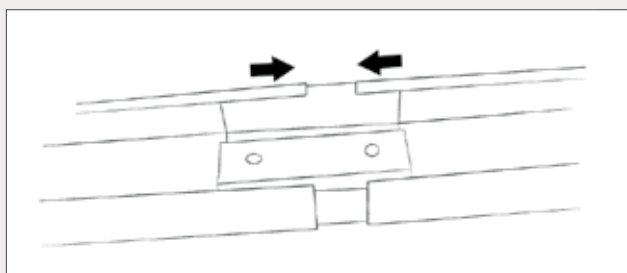
HANGERS

- Secure the upper part to the construction above it at 900 mm c/c. Choose the fixings in accordance with the substrate.
- Secure the lower part to the primary profile.



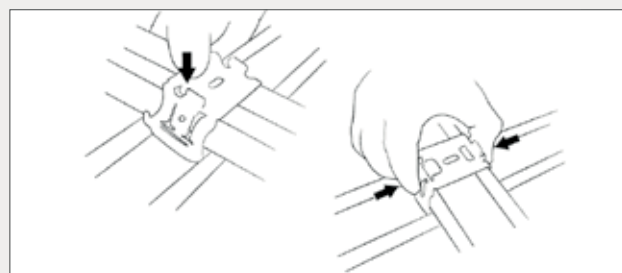
PRIMARY PROFILES

- Connect the two parts of the hangers with two split pins, one immediately above the other.



JOINING CD-PROFILES

- Join the CD profiles with the help of length connectors.



SECONDARY PROFILES

- Place a cross fitting on the primary profile.
- Press the underlying secondary profile into it.
- Adjust the locations of the secondary profiles and lock the cross fitting.
- See distances in figure 1.

MOUNTING OF PANELS, FINISH ETC.

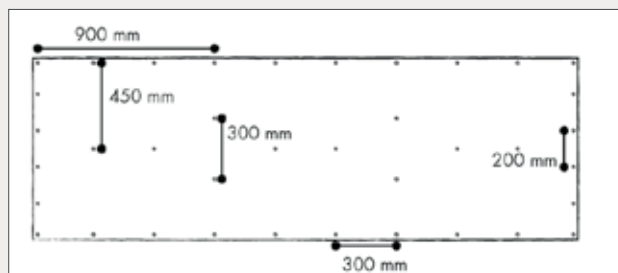
Please see page 110 for details.

INSTALLATION GUIDE - PANELS AND FILLING



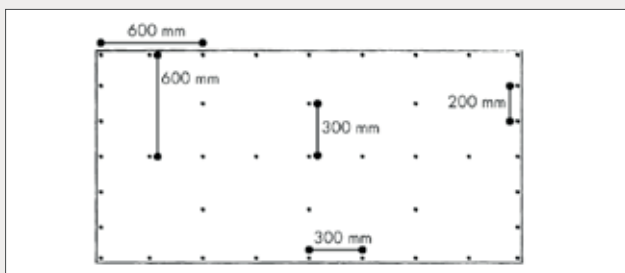
INSTALLATION

- Install the first row of panels with the help of string.
- See distances in figure 1 page 106 -108 all according to furing.
- 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 lined up in both directions.
- Cut the elements to size from the front with a fine-toothed saw.



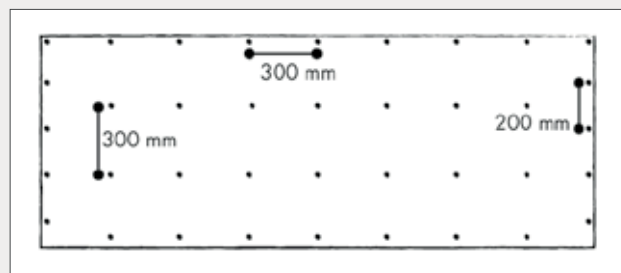
SCREW DISTANCES 900 X 2700

- Fix the panels according to the template above.



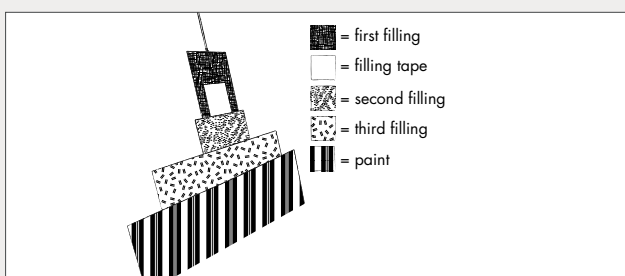
SCREW DISTANCES 1200 X 2400

- Fix the panels according to the template above.



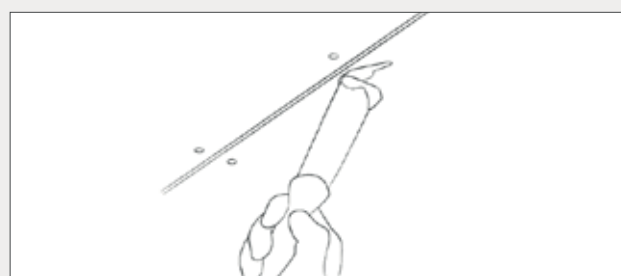
SCREW DISTANCES 900 X 2400 (TANGENT)

- Fix the panels according to the template above.



FILLING

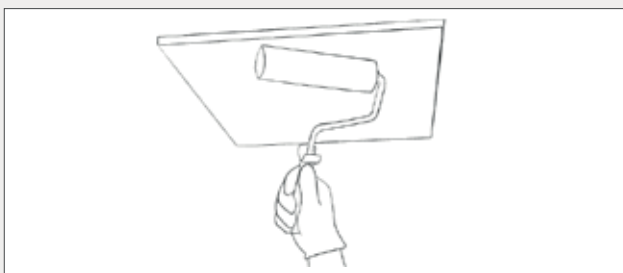
- Apply the first layer of filler (Easy Filler Light). Make sure it is pressed all the way up between the panel edges and avoid getting filler in the perforations.
- Apply filler tape to the wet filler.
- The first filling and application of filler tape can be carried out in a single, very simple operation 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 filler (Knauf Uniflott Finish or Easy Filler). Overfill slightly.
- We recommend the use of Knauf Danogips „Acoustic filling knife for holes“ in order to avoid filler getting into the perforation holes.

INSTALLATION GUIDE - PAINTING



PAINTING

- Make sure that the filler is completely dry and the surface is smooth and 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

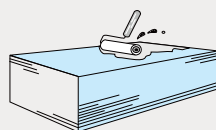
- A perforated gypsum panel will lose its acoustic function if the perforations are blocked (this applies to the front and back of the panel).
- Where applicable, a vapour barrier should therefore always be placed behind the furrings so that it does not come into contact with the back of the perforated 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.

FIRE

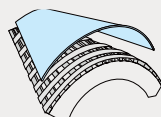
- If there is a requirement for BD30 follow the instructions for this construction.
- The furring should be dimensioned in accordance with the load in question and should be at least 45 mm in width. Where BD30 constructions are concerned 25 x 100 mm furrings should be used.

CURVED PANELS

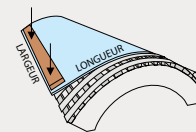
Apply water on the front face and leave for 30 minutes. If necessary the panel can be covered in plastic to assist the panel in absorbing the water.



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

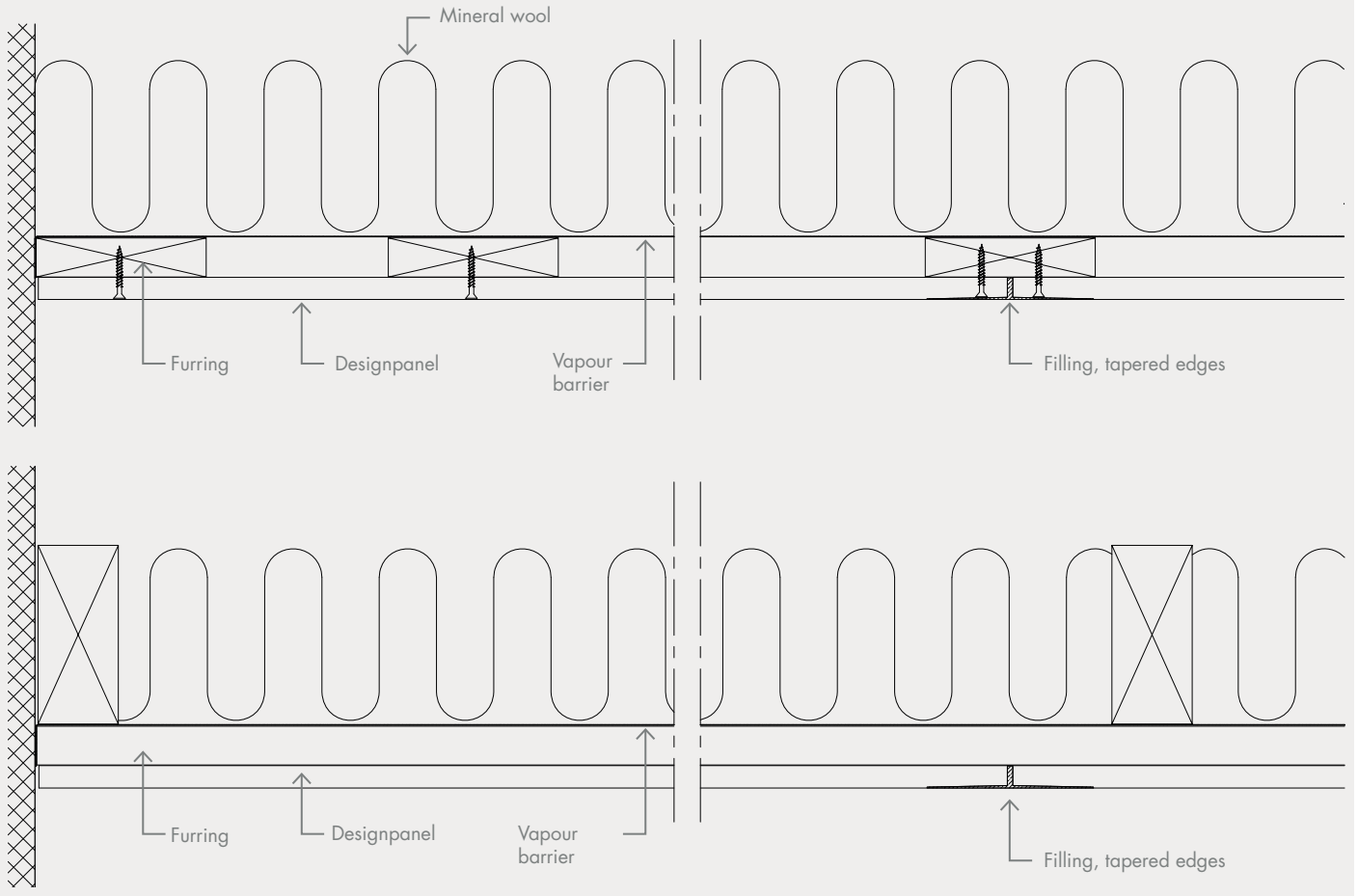


Press the panel against the template using a batten, moving it every 100 mm. Secure the panel on the other side of the template. Drying time: 1 ½ - 2 hours.

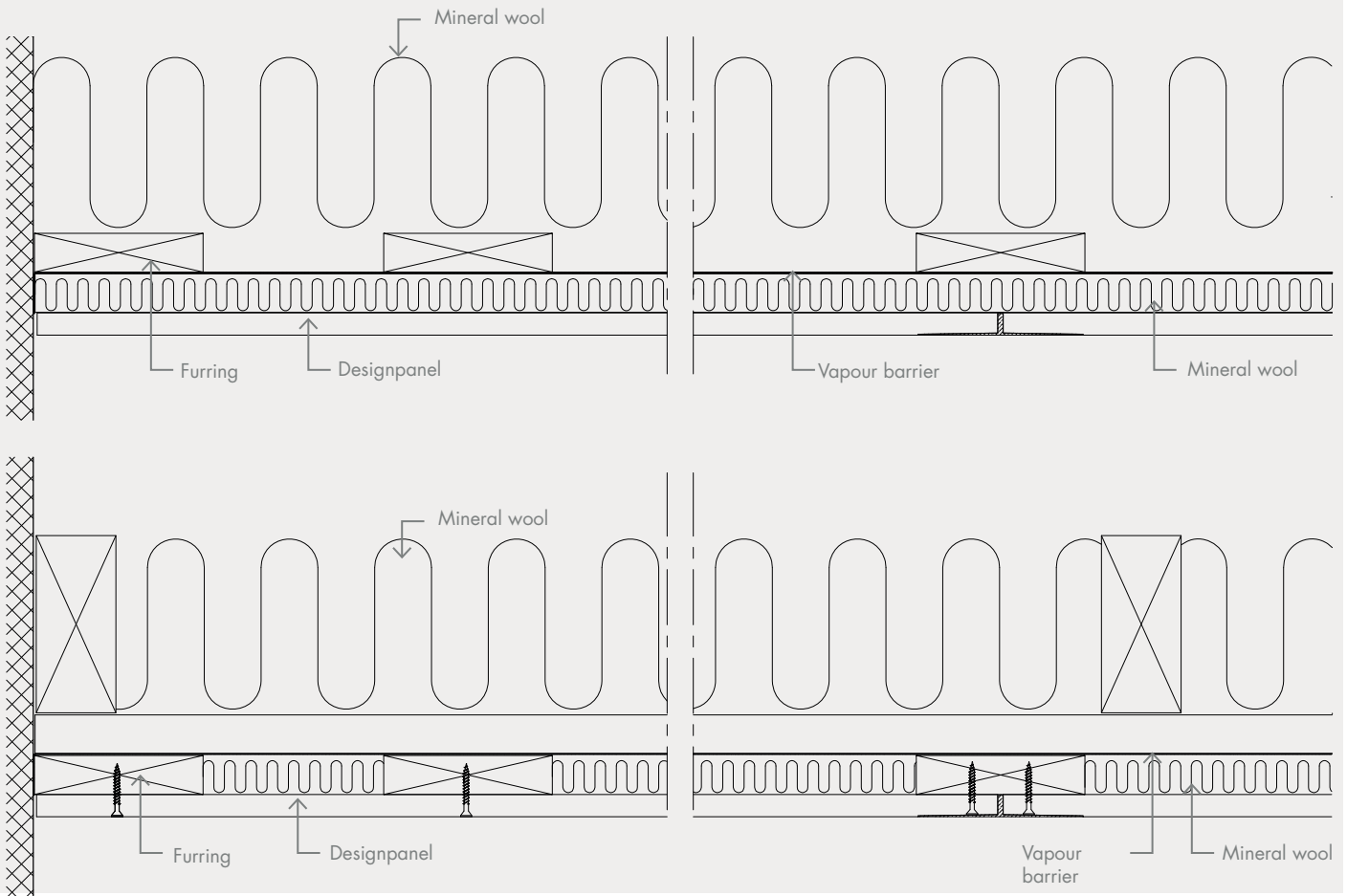


DETAILS

Designpanel with 1 layer furring



Designpanel with cross-furring



ACCESSORIES

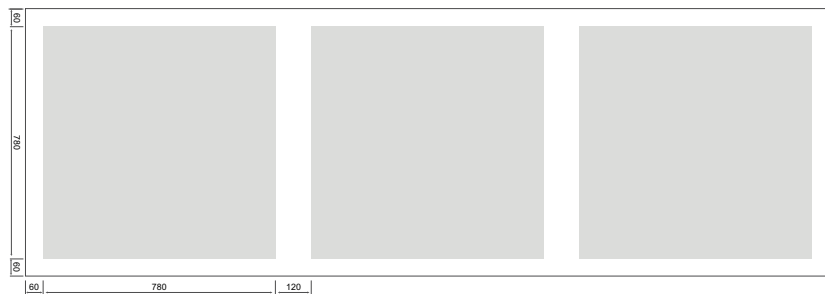
PRODUCT NAME		SAP NO.	W x L x H (mm)	Consumption per. m ²
Primary / secondary CD 60/27-profile		2648	60 x 4000 x 27	4.6 m
Wall angle UD 28/27		2649	28 x 3000 x 27	1.0*
Length connector CD 60/27		4281	59 x 80 x 28	1.1 pcs.
Cross-fitting		4284	-	3.3 pcs.
Split pin for hanger		8513	-	2.6 pcs.
Nonius hanger lower		8510	-	1.3 pcs.
Nonius hanger upper 85mm		8511	125 - 185	1.3 pcs.
Nonius hanger upper 135mm		8512	135 - 235	
Nonius hanger upper 235mm		9201	235 - 340	
Nonius hanger upper 340mm		9202	340 - 440	
Nonius hanger upper 440mm		9203	440 - 540	
Nonius hanger upper 540mm		9204	540 - 640	
Nonius hanger upper 640mm		9205	640 - 740	
Nonius hanger upper 740mm		9206	740 - 840	
Nonius hanger upper 840mm		9207	840 - 940	
Nonius hanger upper 940mm		9208	940 - 1040	
MSK 70 Perimeter profile		11722 11723	2500 3600	1.0 m*
P45 Primary profile		2901	3600	0.85 m
S25/85 Secondary profile		2902	3800	3.6 m
F/F13 Screw		2017	13	8 pcs.
Screw SN3.5x30		9275	3,5 x 30	20 pcs.
Joint Filler - Easy Filler Light		235309	-	0.35 kg
Uniflott Finish		129801	8 kg	≤ 0.1 kg
Filling tape		314828	-	1.5 m
Mini Bazooka		14870	-	-
Filling knife		73962	-	-

*Depending on room size.

PATTERNS DESIGNPANEL 900 X 2700

Following perforation patterns are available for Designpanel Globe, Quadril og Micro 900 x 2700 mm.

G1F, Q1F, M1F



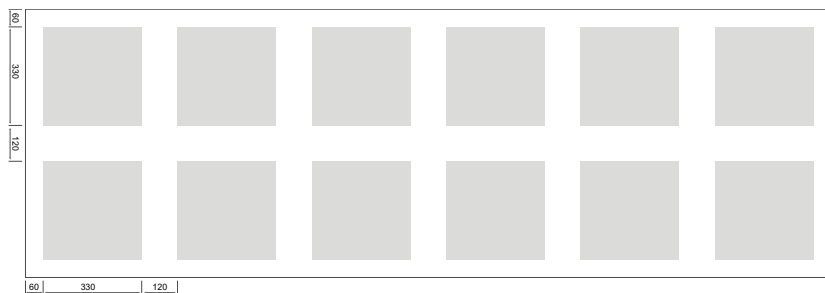
Perforation percentage

G1F 9.8%

Q1F 13%

M1F 9.8%

G2F*, Q2F, M2F



Perforation percentage

G2F 7.4%

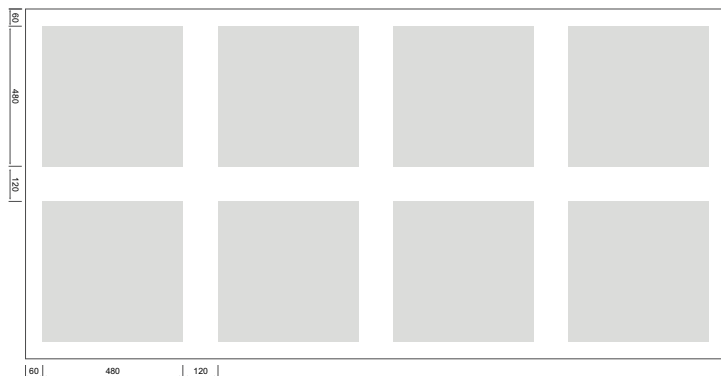
Q2F 10.2%

M2F 7.1%

PATTERNS DESIGNPANEL 1200 X 2400

Following perforation patterns are available for Designpanel Globe, Quadril og Micro 1200 x 2400 mm.

G2F, Q2F & M2F



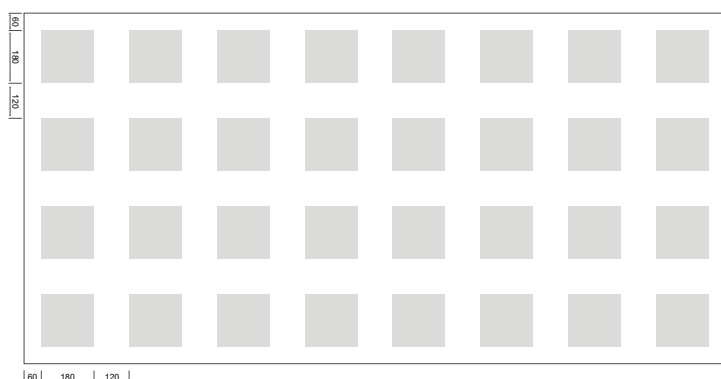
Perforation percentage

G2F 8.6%

Q2F 11.6%

M2F 8.4%

G4F* & Q4F



Perforation percentage

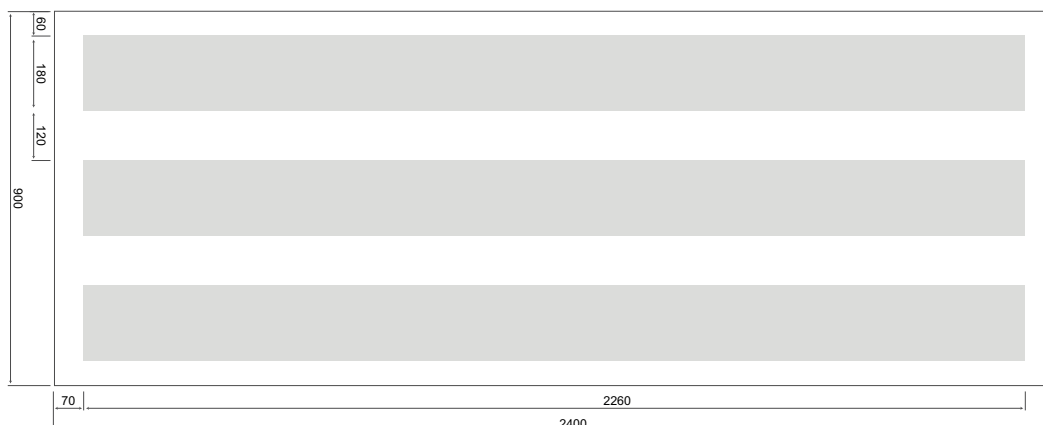
G4F 5.3%

Q4F 7.8%

PATTERNS DESIGNPANEL 900 X 2400

Following perforation patterns are available for Designpanel Tangent 900 x 2400 mm.

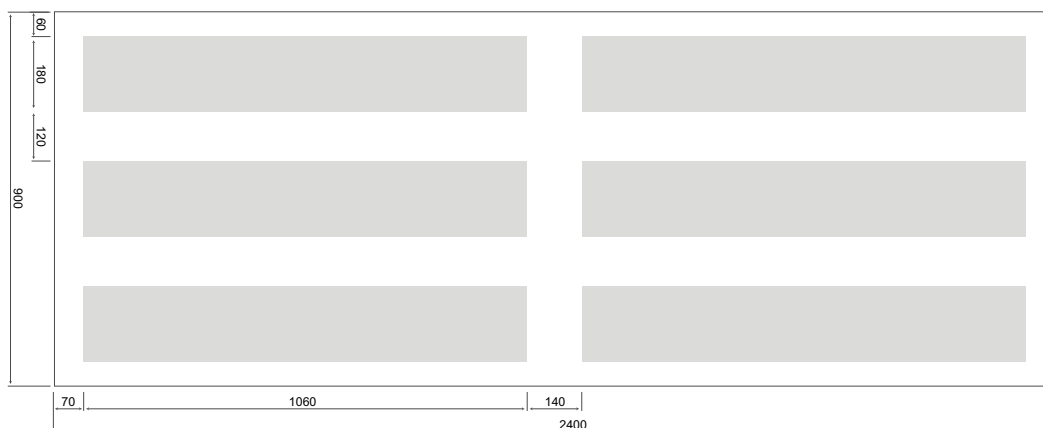
T3L1



Perforation percentage

T3L1 15.8%

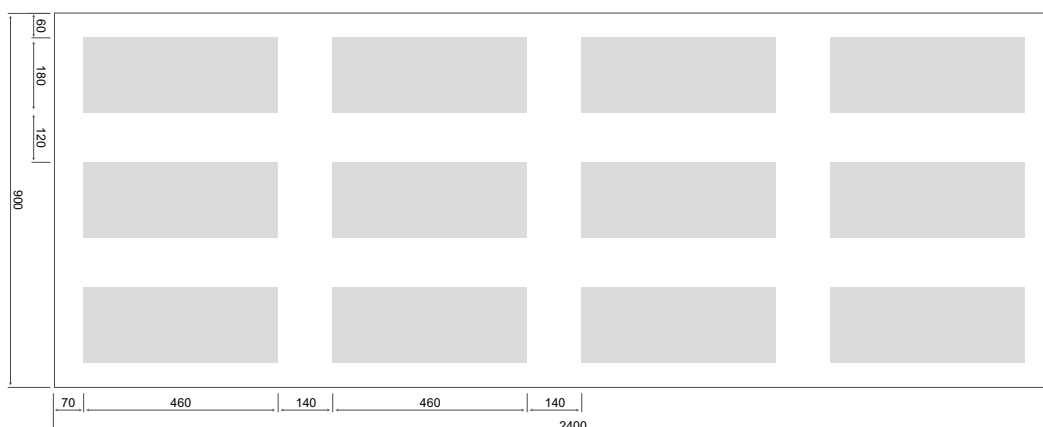
T3L2



Perforation percentage

T3L2 15.0%

T3L4



Perforation percentage

T3L4 13.3%

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.	