

INSTALLATION GUIDE - FURRINGS OF WOOD

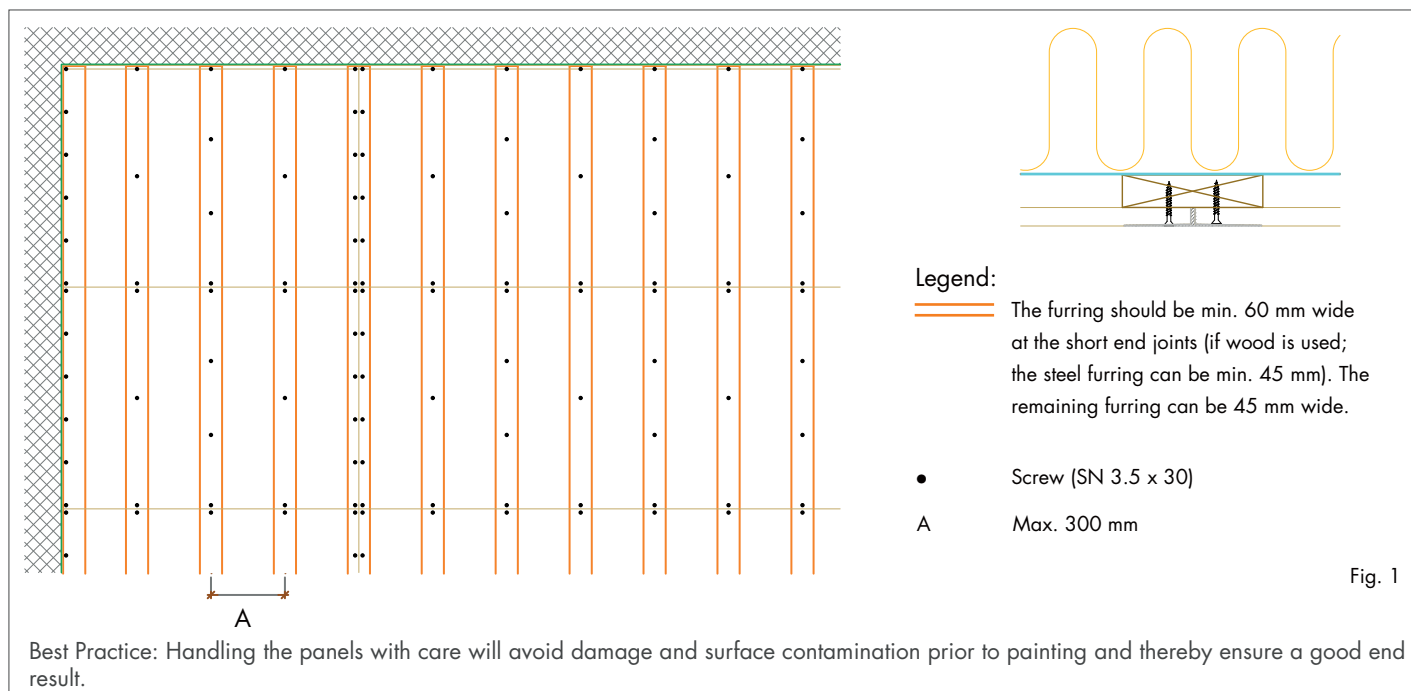
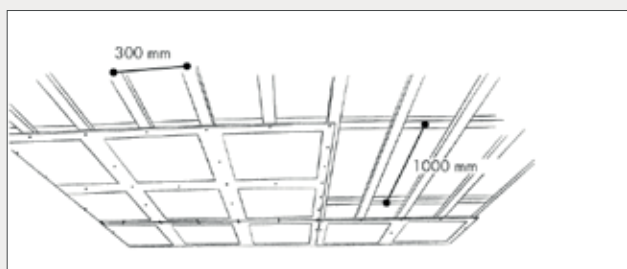
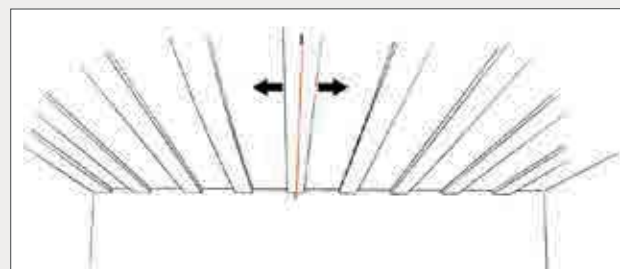


Fig. 1



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.



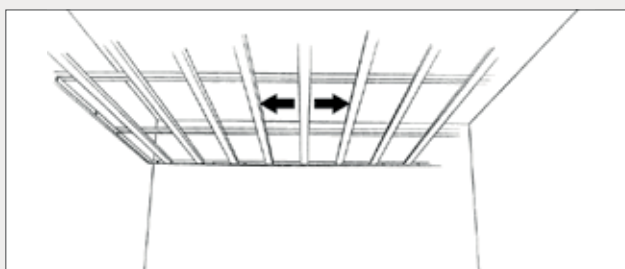
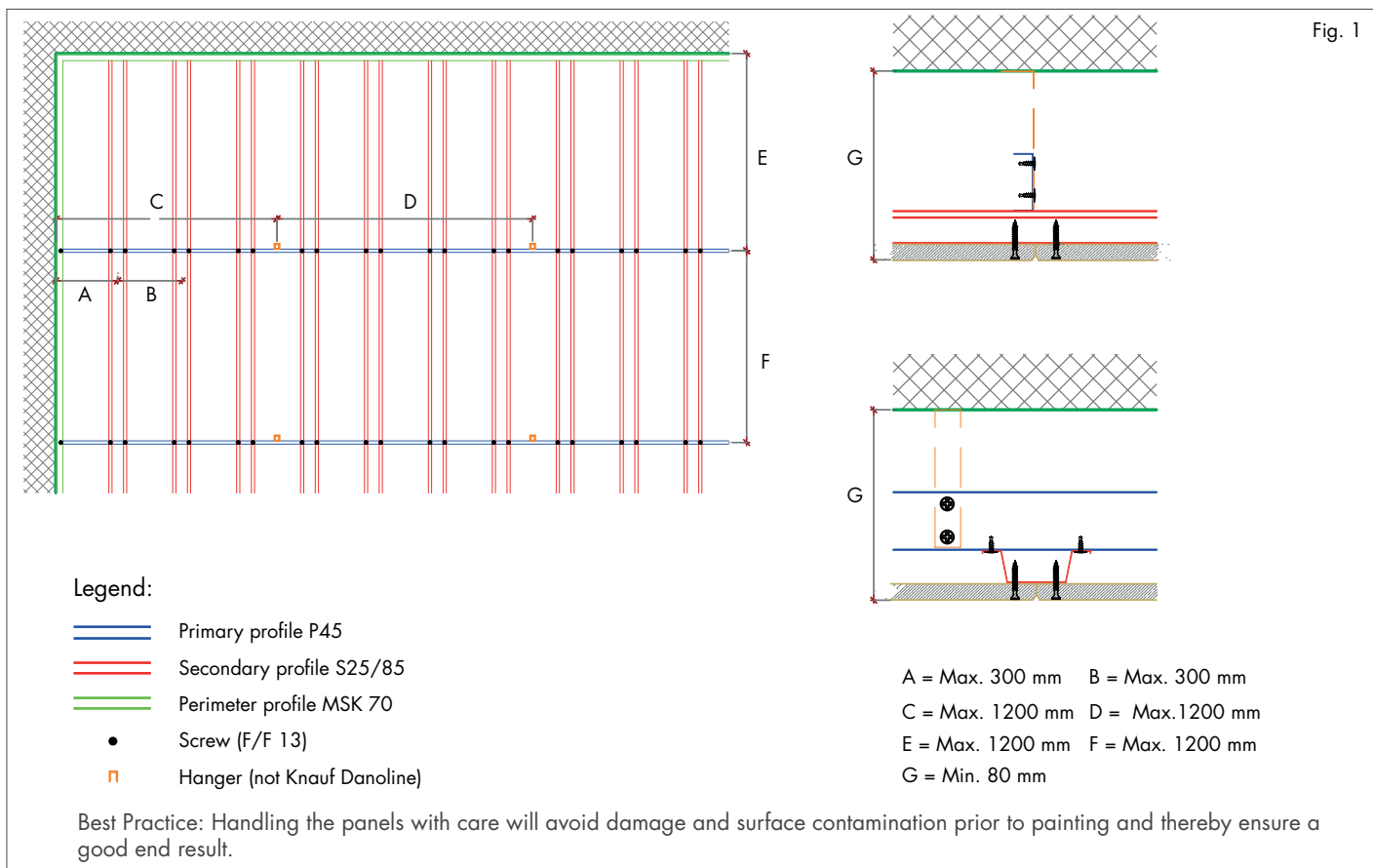
CEILING LAYOUT AND FURRING SYSTEM

- 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.

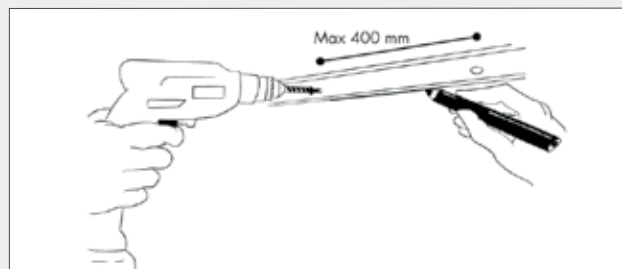
Please see page 110 for details.

INSTALLATION GUIDE - FURRINGS OF STEEL (P45-S25)



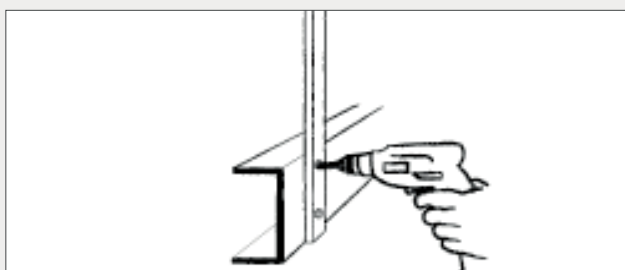
CEILING LAYOUT

- 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.



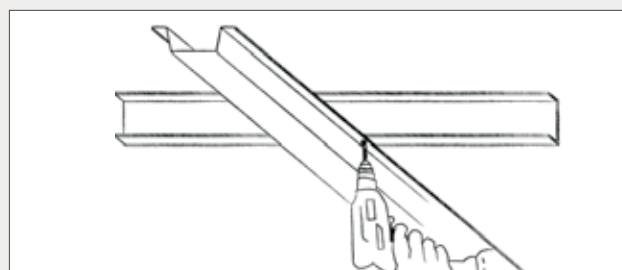
INSTALLING THE WALL PROFILE

- 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

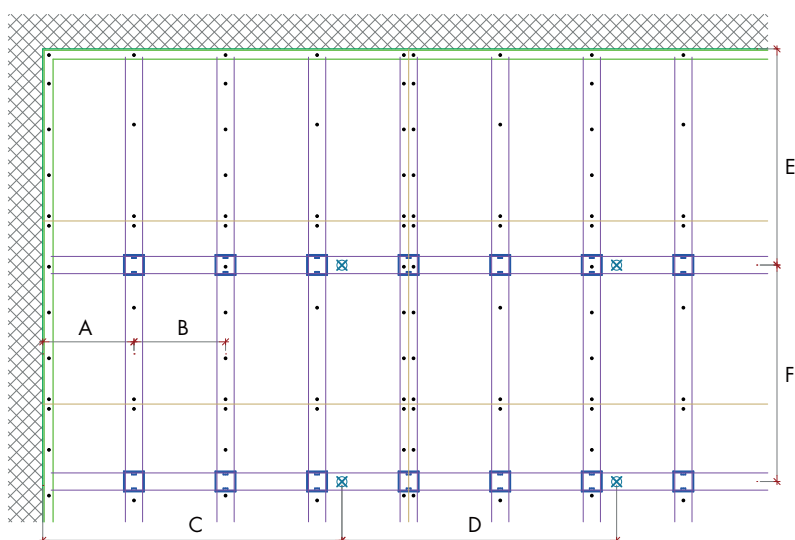
- Fix the secondary profiles to the primary profiles at every 300 mm. Use 2 screws (F/F 13) in each connection.

MOUNTING OF PANELS, FINISH ETC.

Please see page 110 for details.

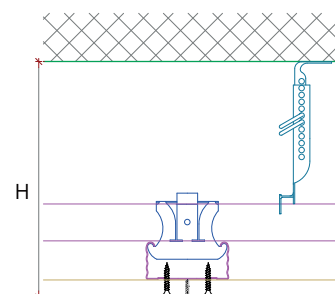
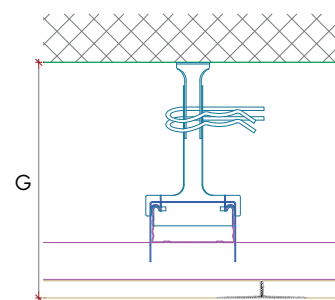
INSTALLATION GUIDE - FURRINGS OF STEEL (CD2)

Fig. 1



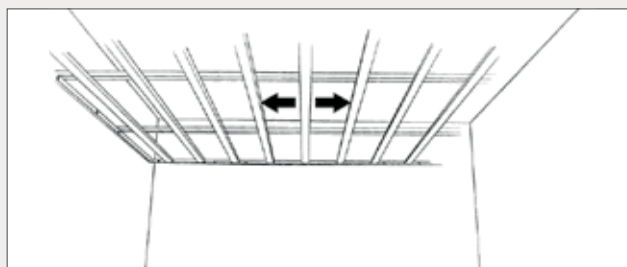
Legend:

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



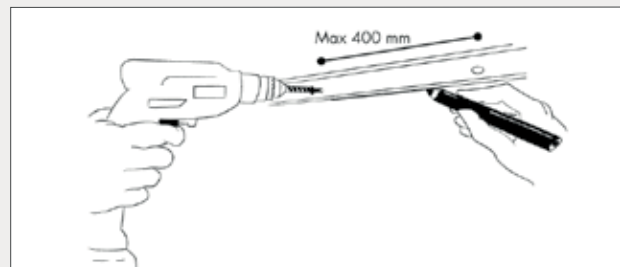
- A = Max. 300 mm B = Max. 300 mm
- C = Max. 900 mm D = Max. 900 mm
- E = Max. 900 mm F = Max. 900 mm
- G = Min. 80 mm H = Min. 80 mm

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



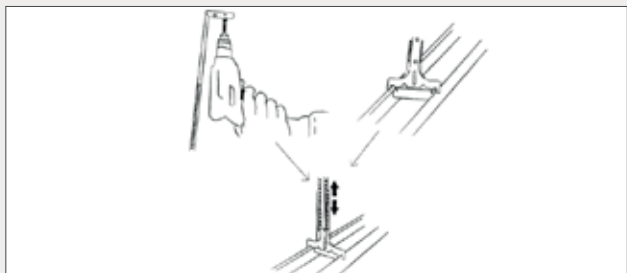
CEILING LAYOUT

- 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.



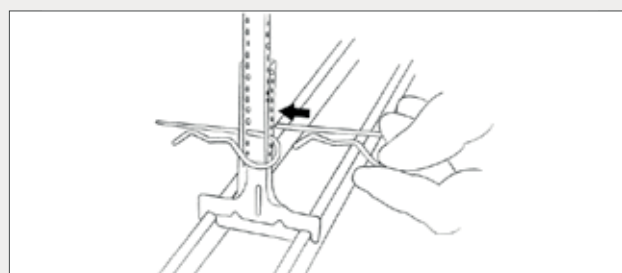
INSTALLING THE WALL PROFILE

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



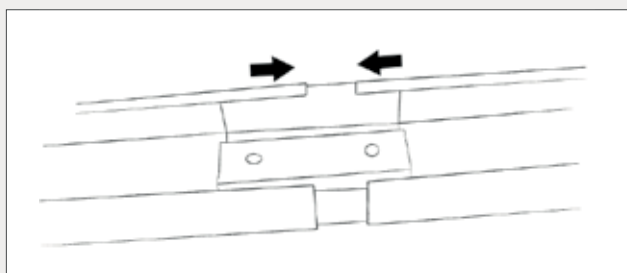
HANGERS

- 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.



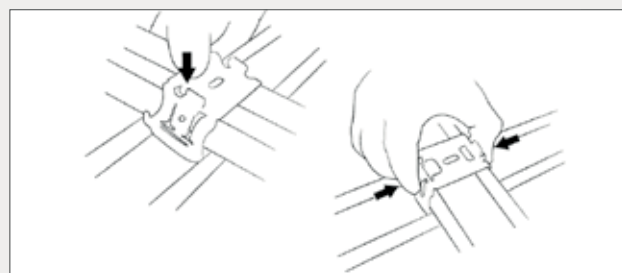
PRIMARY PROFILES

- 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.

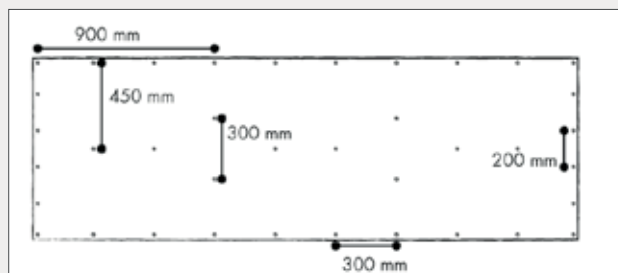
Please see page 110 for details.

INSTALLATION GUIDE - PANELS AND FILLING



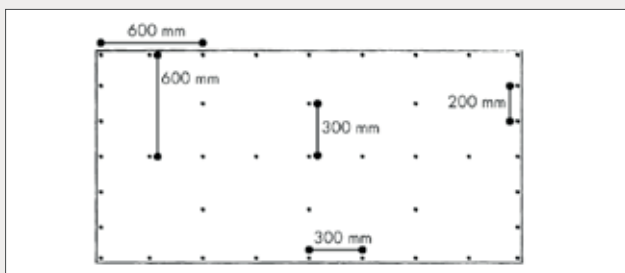
INSTALLATION

- 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.



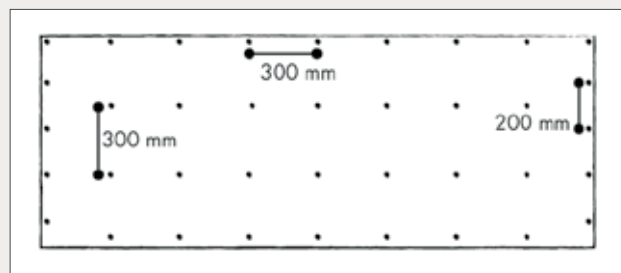
SCREW DISTANCES 900 X 2700

- Fix the panels according to the template above.



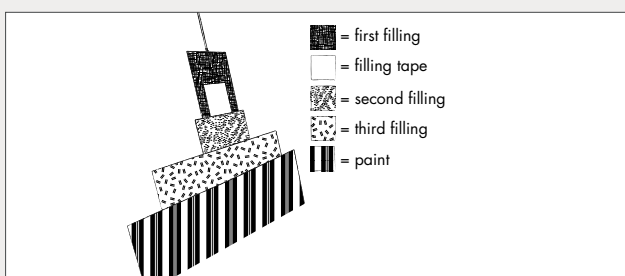
SCREW DISTANCES 1200 X 2400

- Fix the panels according to the template above.



SCREW DISTANCES 900 X 2400 (TANGENT)

- Fix the panels according to the template above.



FILLING

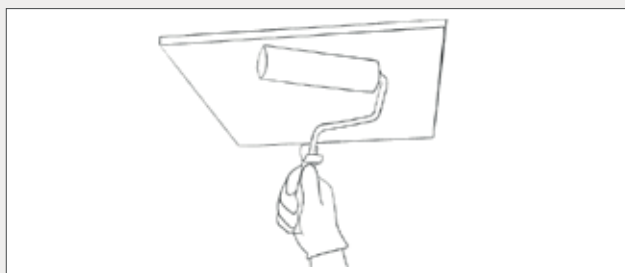
- Apply the first layer of filler (Easy Filler Light). Make sure it is pressed all the way up between the panel edges and avoid getting filler in the perforations.
- Apply filler tape to the wet filler.
- The first filling and application of filler tape can be carried out in a single, very simple operation 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

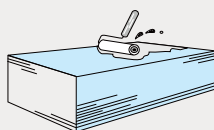
- A perforated gypsum panel will lose its acoustic function if the perforations are blocked (this applies to the front and back of the panel).
- Where applicable, a vapour barrier should therefore always be placed behind the furrings so that it does not come into contact with the back of the perforated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

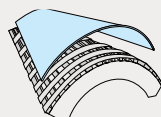
- If there is a requirement for BD30 follow the instructions for this construction.
- The furring should be dimensioned in accordance with the load in question and should be at least 45 mm in width. Where BD30 constructions are concerned 25 x 100 mm furrings should be used.

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.

