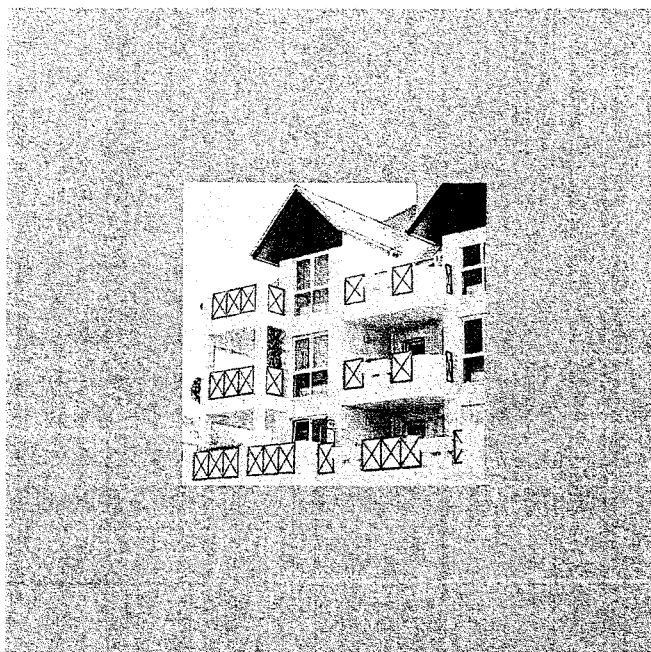


Installation guidelines for balustrade cladding and wind screens

Trespa Meteon is a flat panel based on thermosetting resins, homogenously reinforced with wood fibres and manufactured under high pressure and temperature. Using special techniques, the panels have an integrated, decorative surface with pigmented resins.

Hoechst is the only manufacturer that cures the surface of panel material for external applications using electron beams (Electron Beam Curing). That's what makes Trespa Meteon so highly weather resistant.

The resultant properties make the product particularly suitable for a wide range of exterior applications.



Sheet thickness and weight

Thickness	Weight
6 mm	8.4 kg/m ²
8 mm	11.2 kg/m ²
10 mm	14.0 kg/m ²
13 mm	18.2 kg/m ²

Sheet sizes

- 3650 x 1860 mm
- 3050 x 1530 mm
- 2550 x 1860 mm

Colours

Panels for balustrade cladding and wind screens are supplied with two decorative surfaces in more than 35 colours. Varitop is a Meteon panel with a standard white colour for one surface in combination with another Meteon colour.

Properties

- Weather-resistant
- Colourfast
- Impact resistant
- Easy to clean (even graffiti)
- Scratch resistant
- Low maintenance
- Wide range of colours
- Easy to machine
(can be undertaken on site)



All the best qualities in one panel

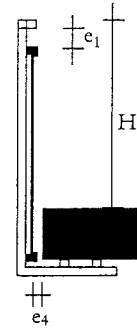
Trespa International BV has not been part of the Hoechst concern since late December 1996. References to Hoechst in this brochure have therefore not been applicable since that time; Hoechst or Hoechst companies are not to be regarded as the manufacturers of the Trespa products described therein.

General instructions

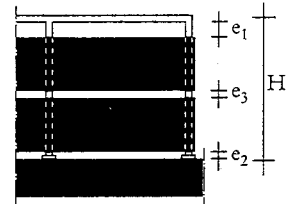
- Guarantee:** On request for a period of 10 years.
- Joints:** Minimum joint width 10 mm.
- Legal prescriptions:** The number of fixings have to be calculated according to BS 8200.
Impact performance has been tested for Trespa according to BS 6206.

Floor height	Balustradeheight (H):
0.6 m to 13 m	1.00 m
above 13 m	1.20 m

Vertical cross-section



Frontside



H = see table
 e₁ = min. 0.70 m
 e₂ = max. 0.10 m
 e₃ = max. 0.10 m
 e₄ = max. 0.05 m

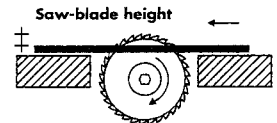
Processing

CUTTING

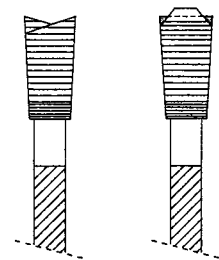
Hand circular saw:	Diameter	Teeth	Speed	Blade thickness	Saw-blade height
	150 mm	36	4,000	2.5 mm	15 mm
	200 mm	46	4,000	3.0 mm	20 mm

Stationary circular saw:	Diameter	Teeth	Speed	Blade thickness	Saw-blade height
	300 mm	72	6,000	3.4 mm	30 mm
	350 mm	84	5,000	4.0 mm	35 mm
	400 mm	96	4,000	4.8 mm	40 mm

- Feed:** 7 - 22 m/min.
- Tooth:** Hard metal wood-working tools, carbide-tipped alternate tooth or trapezoidal flat tooth.
- Jig saw:** Carbide-tipped saw; interior corners, of cut-outs should be drilled with 6 mm hole diameter.
- Entering tooth:** At the decorative side of the panel.
- Cut edges:** The best results are obtained with stationary tools; any sharp edges can be removed with sandpaper.
- Rake angle:** A rake angle of 45° gives the best cutting performance.



Alternate tooth Trapezoidal flat tooth



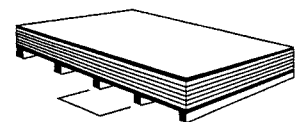
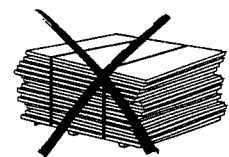
DRILLING

Carbidetipped HSS-drill, top angle 60-80°. Panels should be drilled with support sheets.

Diameter	Speed	Feed
5 mm	3,000	60-120 mm/min.
8 mm	2,000	40-80 mm/min.
10 mm	1,500	30-60 mm/min.

Transportation and storage

- During transportation, use stable flat pallets at least the same dimension as the sheets.
- When moving a sheet, lift it to prevent scratches on the panel surface.
- The sheets should be stored in an enclosed area, protected against moisture and heat, in a normal ambient temperature and humidity.
- For horizontal storage on pallets, the sheets should be supported over the entire surface with a protective layer between the pallet and the sheet and also on the uppermost sheet.
- For vertical storage the sheets should be upright on their sides and be supported over the full height.
- Stickers should be removed before installation.



max. 600 mm

Fixing with blind rivets or balcony screws

Blind rivets: Aluminium blind rivets (AlMg5)/Stainless steel for a panel thickness of minimum 6 mm.

Diameter: 5 mm.

Length: Material thicknesses + 5 mm.

Head diameter:

- 14 mm (with cap 16 mm, in Trespa Meteon colours).
- 16 mm (with coloured head, in Trespa Meteon colours).

Sliding points: Rivet head 0.3 mm free from the panel by using a special tool.

Fixed point: Fixed point in the centre of each panel, two fixed points may be made next to each other with a hole diameter of 6 mm.

Hole diameter:

	<i>in the panel</i>	<i>in the balustrade</i>
<i>Fixed point</i>	<i>5.1 mm</i>	<i>5.1 mm</i>
<i>Sliding point for rivet</i>	<i>10.0 mm</i>	<i>5.1 mm</i>
<i>Sliding point for balcony screw</i>	<i>5.1 mm</i>	<i>10.0 mm</i>

Edge clearance: Minimum 20 mm, maximum 20 x panel thickness.

Fixing with balcony screws: Stainless steel for a panel thickness of minimum 6 mm.

Diameter: 5 mm.

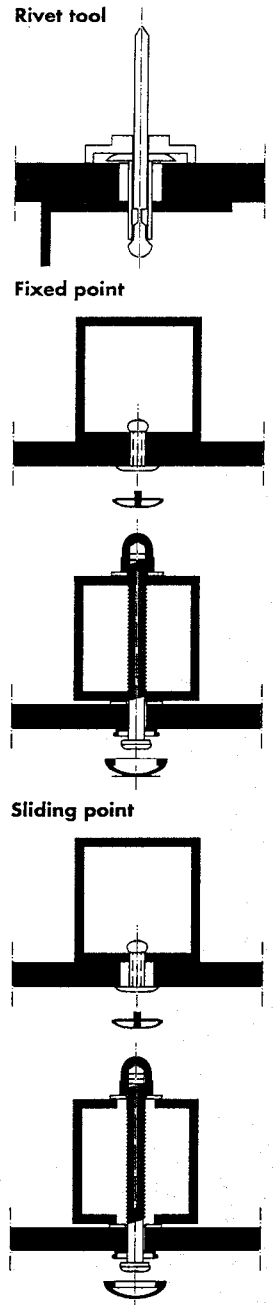
Length: Material thicknesses + 10 mm.

Head diameter: 12 mm (with cap 16 mm, in Trespa Meteon colours).

Panel length: Maximum 3050 mm.

Maximum panel span:

<i>Panel thickness (in mm)</i>	<i>two fixings in one direction</i>	<i>more than two fixings in one direction</i>
6	550	700
8	750	900
10	950	1150
13	1200	1500



Fixing with clamps

- General:**
- For a panel thickness of minimum 8 mm.
 - At clamps fixed to vertical profiles, every panel has to be secured against sliding by two pins; hole diameter = pin diameter + 5 mm.
 - Clamping Depth minimum 35 mm.
 - Distance between clamp parts has to be adapted to the panel thickness and tolerances.
 - Fixed EPDM gaskets to be used.
 - Minimum 2.5 mm/m free space between clamp and panel edge.

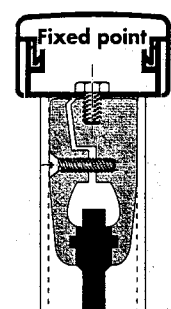
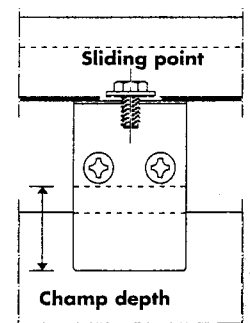
Sliding and fixed points: Fixed point: In centre of each panel.
Hole diameter = screw diameter = 5.1 mm.
Sliding points: Slotted holes in balustrade construction.

Edge clearance: Maximum 20 x panel thickness.

Maximum fixing centres:

<i>Panel thickness (in mm)</i>	<i>two fixings in one direction</i>	<i>more than two fixings in one direction</i>
8 *	600	750
10	750	900
13	950	1200

* Minimum 6 clamps per panel.



Fixing with profiles

- General:**
- For panels of minimum 6 mm.
 - Fixed at four or two panel sides.

Water drains: Water drains in lower horizontal profile, hole diameter 8 mm or slotted holes 5 x 25 mm.

Supports: Two supports per panel minimum 5 x 50 mm.

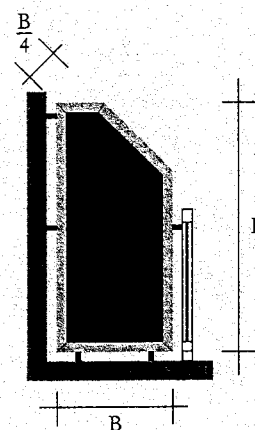
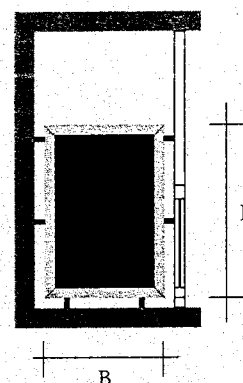
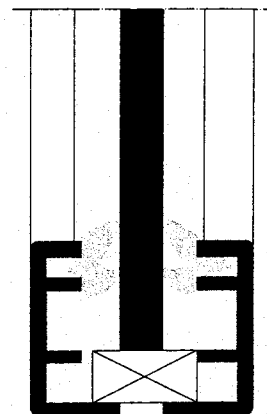
- Profiles:**
- Profile dimensions have to be adapted to the panel thickness and tolerances.
 - Fixed EPDM gaskets to be used.
 - Groove in profile 20 mm deep.
 - Panel edge minimum 6 mm free from the profiles at three sides.

Maximum panel spans (B):

Panel thickness (in mm)	$L/B \geq 2,5$	$L/B \geq 1,5$	$L/B \geq 1,0$
6 mm	550	600	750
8 mm	750	900	1050
10 mm	950	1100	1300
13 mm	1200	1450	1700

B = width (smallest panel span) in mm

L = length (largest panel span) in mm



Your Trespa distributor:

Additional information about Trespa Meteon can be obtained from:

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TF2 9TW
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