

POWERCLAD® VENTED SHEETING

INSTALLATION INSTRUCTIONS



Industrial Textiles & Plastics Ltd.
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Vented Sheeting FR
Air Permeable Flame Retardant Sheeting

Vented Sheeting
Air Permeable Sheeting

Suitable for use on all tube & fitting and modular scaffold systems

Ideal perimeter fence cover material

WARNING

Powerclad is not a fall restraint or fall arrest system. Do not lean on or fall against sheeting or netting.

WARNING

Do not walk on Powerclad Vented Sheeting. It is not designed for walking on and is slippery when wet.

CAUTION

Elastic ties may spring back, causing eye damage or blindness. Wear eye protection when installing ties.

PRE-INSTALLATION

Prior to installation, it is essential that a thorough safety review and risk assessment of the scaffold design is undertaken to ensure that the structure will withstand the additional forces caused by sheeting the scaffold. This should be far reaching and include consequences of installing sheeting close to unusual suction forces (such as motorways, bridges, tunnels & railway tracks), to surrounding buildings and areas, the public, pedestrian and vehicular traffic, and the consequences of accidental collapse.

Qualified and trained personnel responsible for fitting and maintaining the sheeting must understand the requirements for ensuring that it is fixed so that it will perform as intended. Powerclad should only be installed in accordance with these Installation Instructions. These installation instructions are based upon currently available good practice and information and only offered as a general guide.

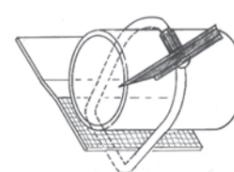
Final determination of the suitability of any information or material for the use contemplated and the manner of use is the sole responsibility of the user and the user must assume all risk and liability in connection therewith. Check the suitability and safety of the products for the use envisaged with all current and applicable national standards.

INSTALLATION

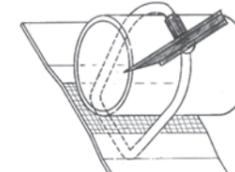
- Powerclad Vented Sheeting is normally installed horizontally or vertically on the outside of the scaffold. It is also suitable as temporary perimeter fence covers.
- Powerclad may be installed on the inside of the scaffold *only* where unusual suction forces are likely to be encountered (fast moving traffic alongside roads, motorways, bridges, tunnels & railway tracks and sites where wind may be funnelled). Sheeted scaffolds incur higher wind loading. When installed on the inside of the scaffold, sheeting is unable to detach and the scaffold needs to be designed to withstand the additional forces. Failure to strengthen the scaffold structure may lead to its collapse.
- Elasticated Toggle Ties (Powerties) manufactured by ITP are recommended for fixing Powerclad Vented Sheeting to scaffolds. Cable/ratchet ties that are compliant to BS7955 may also be used. Both can be fastened through the reinforced hems and the middle reinforcement strip of the sheet. Cable/ratchet ties may be used when the vented sheeting is installed on temporary fence panels.
- Clamp fittings and poles protruding into the Vented Sheeting should be avoided as these will chafe and eventually puncture the sheeting. Where necessary, protect sheeting from protrusions with suitable protective covers.
- For safety, never install Powerclad Vented Sheeting during windy conditions.
- SUPPORT DENSITY AND WIND CONDITIONS**
 - In windy conditions, an inadequate number of ties may result in the sheeting detaching prematurely, while too many ties may put excessive forces on the scaffold structure leading to its collapse. In high winds, the sheeting should be regarded as sacrificial in order to maintain the integrity of the scaffold structure. Sheeting begins to detach as soon as the wind forces exceed the breaking strength of the ties and/or the loops and/or the sheeting material.
 - All structures require individual design depending upon site location,

elevation and shape, the period of installation, the variability of the wind speed factors and whether the sides of the structure are sheeted or open.

- A **MINIMUM** support density of **one (1) Powertie per square metre** of sheeting is recommended. See Fig. 1.
 - It is the contractor's responsibility to ensure that for each site, an expert analysis of anticipated weather conditions is conducted and that an adequate and appropriate support density (the number of ties per square metre) is used to tie the sheeting to the scaffold structure. See Fig. 2 and chart.
- The scaffold should be designed and erected so that the tubes are aligned with the centres of the reinforced hems and the middle reinforcement strip.
 - To fasten each hem, push the Powertie toggle through the material adjacent to the hem, then pass it around the hem. The hook end of the Powertie is then passed around the scaffold tube and clipped to the shock cord. See Fig. 3
 - To secure the middle of the sheet, the Powertie toggle is pushed through the material and passed around the reinforcement strip. The hook end of the Powertie is then passed around the scaffold tube and clipped to the shock cord, securing to the scaffold. See Fig. 4



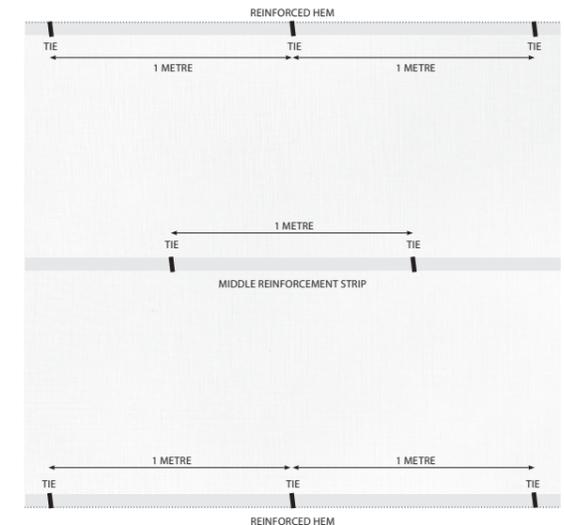
Fastening the reinforced hems to the scaffold
Fig.3



Fastening the middle reinforcement strip to the scaffold
Fig.4

- In common with good working practice, the support density should be doubled for two (2) metres from the end of each run of sheeting or at corners of structures where the sheeting should be returned around the edges of the scaffold. This provides added security where the sheeting is most vulnerable in inclement weather.
- For rapid and efficient horizontal installation and in order to achieve correct positioning and tensioning, tie the upper and central fastening points first, at predetermined and equally spaced intervals, to the top ledger and guard rail respectively. The lower band of fastening points is then tied from the lift below as the next roll is installed.
- Similarly, for vertical installations, the roll is unrolled from the top of the structure and the sheeting tied as the roll is lowered. Unrolling the entire roll before tying is not recommended since it is liable to flap. The roll should be lowered carefully and should not be allowed to drop since it may fall onto people or property.
- To minimise the risk of uplift, overlapped sheeting should be 'tiled' so that the prevailing wind passes over the overlap.
- Powerclad should be inspected at regular weekly intervals (or immediately after windy conditions) to ensure that the sheeting is securely tied. Any broken ties or torn sheeting should be replaced as further damage and tearing will result if the sheeting is allowed to flap unnecessarily.

Fig.1 Minimum Support Density for Powerties



TECHNICAL HELPLINE
01347 825 200

Fig.2 Recommended Support Density for Powerties



BUILDING HEIGHT (metres)	ZONE				
	A	B	C	D	E
10	1-1.5	1.2-1.5	1.2-2	1.5-2	1.5-2
15	1-1.5	1.2-1.5	1.2-2	1.5-2	1.5-2
20	1.2-1.5	1.2-2	1.5-2	1.5-2	1.5-3
30	1.2-2	1.2-2	1.5-2	1.5-3	2-3
40	1.2-2	1.5-2	1.5-2	2-3	2-3
50	1.2-2	1.5-2	1.5-3	2-3	2-3

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