

POWERLON® UV 145FR



UV RESISTANT BREATHABLE FACADE MEMBRANE

	
Industrial Textiles & Plastics Ltd. Stillington Road, Easingwold, York YO61 3FA, UK	
UV 145FR WMNS 2540K UV Resistant Façade Membrane	
Colour	Black
Weight	145gsm
Tensile Strength	MD 220N/50mm XD 200N/50mm
Nail Tear Resistance	MD 75N XD 75N
Water Vapour Resistance	sd ≤ 0.12m
Water Tightness	W2
Flame Retardant	EN ISO 11925-2 Class B-s3, d0

Powerlon UV Adhesives and Accessories	
Powerlon UV N55 Glue WZAS 045KG	4.5kg/5.0 litre tin 50mm wide strips, usage approx. 110g per LM Vertical glue strips: 80cm apart. Horizontal glue strips: max. 125 cm apart
Powerlon UV Cartridge Sealant 1 WZAS 310ML	310ml 0-12mm wide strips, usage approx. 8LM per cartridge
Powerlon UV Nailing Pads WZAP 0400K	400/reel, black Self-adhesive. 1 nail pad per nail/screw puncture
Powerlon UV Electric Cable Patch WZAP CABLE	10/bag, black Self-adhesive. 1 patch per external cable
Powerlon UV Corner Piece WZAP CORN	4/bag, brown 1 piece per corner

DIMENSIONS

Roll Size	Roll Weight
2.5 x 40m	15.4kg

APPLICATION

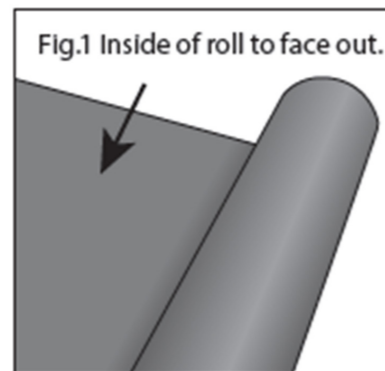
For use with partially open ventilated rainscreens and façades in wall applications.

IMPORTANT: maximum gap size is 15mm; overall exposure not to exceed 10% of the surface area

INSTALLATION

1. WORKING WITH THE MEMBRANE

- Always work with clean hands or wear gloves and use clean tools.
- Materials can be cut using a sharp knife. Always overlap the cut edge.
- Ensure that the membrane is not creased or folded. In case of a corner, loosely install the membrane around the corner or make a well-sealed butt joint. Do not crease the material.
- Unroll the membrane so the inside of the roll (coated side) faces out once installed.



- Pull the membrane tight and always fasten loose ends, overlaps and edges mechanically with staples or adhesive as recommended.
- Vertical overlaps should be a minimum of 50mm; horizontal overlaps should be a minimum of 50mm and need to cover any staples where used.
- Do not glue the membrane to non-rigid surfaces (e.g. insulation) behind the membrane.

2. BONDING TO DIFFERENT SURFACES

- Before beginning any installation, practising the gluing process is highly recommended.
- Make sure that the surfaces are clean and free from dust and grease.
- Staples can be used as long as they are covered by a second layer of the membrane (e.g. where there is an overlap).
- Only use Powerlon UV adhesives as follows:
 - Powerlon N55 Glue: *for bonding to concrete, wood or metal panels.*
 - This product also works as a primer. Always pre-treat heavily absorbent base surfaces (such as wood and wooden window frames) with a layer of Powerlon N55 Glue as a primer before bonding and allow this to dry.
 - Apply the glue onto the primed area and then press the membrane firmly into place while the glue is still wet.

• Overlaps: use masking tape to avoid glue migrating to the front side of the membrane. Place the masking tape 50mm in from the edge of the first roll to stop glue going onto the visible front side of the membrane. Glue the overlap and install the next layer of membrane onto the overlap.

(ii) Powerlon UV Cartridge Sealant: *for bonding Powerlon UV 145FR*

- Powerlon UV Cartridge Sealant glue can only be used when Powerlon UV 145 FR membrane is mechanically fixed or is held in place as Powerlon UV Cartridge Sealant is a slow drying product.
- In case of absorbent surfaces it is recommended to prime the surface with Powerlon UV N55 Glue first. Apply with a 2"/50mm brush and allow to dry.
- Apply Powerlon UV Cartridge Sealant on the back side on the overlap strip of the membrane. Press the membrane firmly into place while the glue is still wet.
- Overlaps: use a masking tape to ensure that glue does not go onto the front side of the membrane. Place the masking tape 50mm in from the edge of the first roll to stop glue going onto the visible front side of the membrane. Glue the overlap and install the next layer of membrane onto the overlap.

3. WORKING WITH THE ADHESIVE

- Only apply adhesives at an ambient temperature of 5°C or higher.
- Surfaces must be clean, dry and free from any contaminants.
- Tins should be shaken well and the adhesive then poured into the plastic container provided.
- The adhesives will not work when dry. Apply the adhesive and push down firmly while wet.
- Use the appropriate adhesive and apply to the rear surface (rough side) to secure the joints and overlaps.
- Apply adhesive in continuous lines between 1.5 - 3.0 cm wide to the rough rear surface at the back of the overlapping membrane. Spread the glue with a 2"/50mm brush and press the overlapping membranes together.
- For overlaps, usage is approx. 40g per linear metre (one tin approx 110LM).
- Caution:**
 - Excessively applied adhesive cannot be removed; apply the adhesive carefully since the membrane will stain. This is particularly important at joints.
 - Use masking tape to cover joints and to prevent any excess glue from staining the membrane
 - To prevent masking tape adhesive from migrating into the membrane, install the masking tape immediately before and remove immediately after gluing.

4. REPAIRS

- Cover any damaged areas with a circular piece of Powerlon UV 145FR.
- The circle must be at least 25mm larger than the damaged area.
- Apply while the glue to the back side and apply while the glue is still wet.

5. PROTRUSIONS

In case of protrusions, connections to windows, etc. the correct Powerlon UV accessories have to be used in combination with the correct Powerlon UV adhesives to validate the warranty.

6. MECHANICAL FIXING

Powerlon UV 145FR can be fixed mechanically as long as each protrusion is well

sealed with either a surrounding patch of the membrane at least 25mm wider than the protrusion itself or by using self-adhesive Powerlon UV Nail Pads, 1 per nail/screw per bracket. Place the pad on a diamond angle to allow for water passage.

7. IMPORTANT CONSIDERATIONS

- Installation of Powerlon UV 145FR requires the relevant Powerlon UV accessories, glues and primers to be used in order to validate the warranty. Failure to do so removes all manufacturers' liability and invalidates the product warranty. Contact us for further information.
- A continuous supporting structure must be provided for applications for all glued Powerlon UV 145FR installations, especially for details such as windows, corners, perforations, penetrations, etc.
- Always tension the membrane by fixing mechanically.
- Slight colour variations of Powerlon UV 145 FR may occur between different production batches. Therefore, it is recommended to use the same batch material for the installation.
- Always install the membrane in the same direction — all horizontal or all vertical — to avoid visible colour variation.
- If there is any risk of short term exposure to high temperature, always ensure that there is sufficient ventilation behind the membrane. The membrane is damaged at temperatures of 70°C or more.
- If the design provides for a ventilated void behind the membrane, ensure that the fixing battens behind the membrane are installed vertically and in line with the measurements of the membrane to 80 centimetre centres for gluing. This will also ensure that the overlaps are exactly positioned above the battens.

8. FURTHER INFORMATION

- Proprietary accessories including detailing pieces, adhesives and tapes should be used for correct installation. Technical and installation advice is based on practical experience. We reserve the right to make changes to recommendations based on individual requirements.
- Conditions:** failing to adhere to installation guidelines and the use of non-proprietary accessories may void any guarantees or warranties.
- 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.

STORAGE & HANDLING

Always store membrane rolls horizontally. Handle the material with care and ensure that the membrane is not creased or folded.

Tins and cartridges should be stored upright in a cool, dry, sheltered store and protected from UV exposure.

IMPORTANT

Register your warranty with ITP prior to installation.

Installation instructions provided here and by the Powerlon UV technical team must be complied with to validate any warranty.

Powerlon UV proprietary adhesives, tapes and accessories must be used to validate any warranty.

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