

GENERATIONS OF INNOVATION

# HYBRID POLYMER ROOFING SYSTEM



#### INSTALLATION MANUAL

#### WHAT IS HPX?

TriRoof HPX is a hybrid technology with high elasticity even under changing weather variations. Even with temperature variations, it has high adhesion properties, and the liquid membrane system doesn't harden under cold weather conditions.

HPX is solvent-free and ideal for repairs and roofing applications.

- HPX is a Premium Hybrid Polymer Roofing System that repairs, restores, waterproofs and protects.
- Adheres to most substrates incl. asphalt, felt, rubber, concrete, most metals, GRP roofs and fibre cement boards e.g. Mulitpro, Aqua Panel and Fermacell
- Ideal for roofs, wet rooms and balconies/terraces as a damp proofing membrane (not suitable for heavy foot traffic)
- Can be used as a tanking system
- **Exceptionally flexible** (up to 300% its normal size)



## WHY USE THE TRIROOF HPX SYSTEM?



- One coat application for a 10 year guarantee (Second layer with CSM reinforcement is required for a 20 year guarantee)
- Solvent-free, non-flammable
- Remains breathable until cured, allowing moisture to evaporate
- Contains stain reducing properties
- Can be laid onto damp surfaces
- Tack-free time: 2-4 hrs
- Full cure time: 8-16 hrs
- Fibre-free formula
- 10 & 20 year materials guarantee available\*

#### HPX PREPARATION OF SUBSTRATES



Conduct a patch test prior to full application.

Surfaces should be clean and free from any oil, grease, debris, or other contaminants that may affect adhesion.

All surfaces should be degreased, either with acetone or detergent and washed off thoroughly.

All loose materials must be removed by brushing, scraping or highpressure water.

All repairs **MUST** be carried out before the application commences.

New concrete and mortars must be at least 28 days old. Any organic growth should be treated with a fungicidal wash.

Metal surfaces should be clean and free from rust and or flaking debris.



#### HPX APPLICATION RATES

- ▶ Felt/OSB/Concrete − 10 year guarantee -1.8kg per 1m<sup>2</sup> 1<sup>st</sup> coat
- Felt/OSB/Concrete 20 year guarantee 0.8kg first coat per 1m<sup>2</sup>, 1.8kg 2<sup>nd</sup> coat
- ▶ GRP 10 year guarantee -1.6kg per 1m<sup>2</sup>
- ▶ GRP 20 year guarantee 0.7kg 1<sup>st</sup> coat per 1m<sup>2</sup>, 1.6kg 2<sup>nd</sup> coat
- Metal 10 year guarantee -1.6kg per 1m<sup>2</sup>
- Metal 20 year guarantee 0.7kg first coat per 1m<sup>2</sup>, 1.6kg 2<sup>nd</sup> coat
- Please note, coverage may vary on heavily textured surfaces.

For all other substrates, please contact a TriRoof representative at **www.triroof.co.uk** 



#### HPX APPLICATION TOOLS



Short pile roller(s) – Short pile will aid the movement of the liquid, a squidgee, trowel or adhesive spreader, can also be used to initially move the products around the desired areas

- Paddle roller This is essential for consolidating the CSM layer if a 20 year guarantee is required
- Scraper to remove loose and stubborn debris as well as filling any imperfections prior to main application
- Acetone for cleaning, degreasing and clean up
- Rags/Cloths to wipe up spills/drips with acetone clean up
- 450g TriRoof Bandage For repairs of substrate
- TriRoof 225g Chopped Strand Matting (CSM) For reinforcement of area
- TriRoof Trims Must be used for new installations
  - HPX 20 Year Guarantee Kits available in 10 and 20 metre options.

#### ESSENTIAL FIRST STEPS FOR SUBSTRATE REPAIR



- For all splits, holes, tears etc, a bandage strip/patch must be applied prior to first layer being laid.
  - For tears in felt or membranes, stitch with felt nails prior to bandaging/patching.
- Apply a thin layer of HPX over the clean, dry surface ensuring 50mm cover either side of tear/hole.
- Apply 450g CSM bandage over the area to be repaired. Using a paddle roller, consolidate the liquid fully through the matting until no white CSM is visible.
- A second layer may be applied when touch-dry in approximately 3-4 hours. Once all layers have been applied, allow to fully cure for 8 hours.
- Using 40 grit sandpaper, lightly sand and then clean the area with acetone.
  - If just doing a patch repair, apply heavier 2<sup>nd</sup> layer over the bandage/patch at 1.8kg per sqm. If doing a complete roof recover, then follow guidelines for the 1<sup>st</sup> initial layer. (Please note, patch repairs are not covered under our guarantee.)

## APPLICATION 10 YEAR 1 COAT SYSTEM

- (1) Ensure all repairs are fixed, ensuring substrate is free from any contaminants and no standing water is present (see Page 5).
- (2) Measure the area (depending on substrate) to ensure the correct coverage is applied. Approximate coverage rates in accordance with the guidelines.
- (3) Cut the corner of the foil sealed and in a snaking motion create beads about 2 inches apart covering 1m<sup>2</sup> at a time.
- (4) Using a short piled roller or paddle roller, slowly apply the product around the area ensuring even coverage.
- (5) Immediately move on to the next  $1m^2$  area.
- (6) Ensure the application is allowed to cure for a minimum of 2-3 hours before rain to ensure resistance.
- (7) Inspect the finished surface. If pinholes are present, scuff the affected area with 80 grit sandpaper, wipe with acetone and apply a thin layer of HPX with a spreader over the affected area.

#### APPLICATION 20 YEAR 2 COAT SYSTEM

#### Requires use of TriRoof 225g CSM

- Measure the runs for the 225gm CSM, store the rolled matting in a clean dry environment, always allow for a minimum 50mm overlap ensuring the feathered edge overlaps.
- Follow steps 1-4 on page 7-1 coat system. Coverage rates as per guidelines.
- Place the matting onto the newly applied HPX and with a clean paddle roller, roll the matting into the HPX slowly and with pressure ensuring you work all the matting including edges until no white of the CSM is showing through and all matting is fully bonded to the substrate.
- Move onto the next 1m<sup>2</sup> area making sure there is a continuous flow from each section.
- A second layer may be applied when touch-dry in approximately 3-4 hours. Once all layers have been applied, allow to fully cure for 8 hours.
- Once touch dry (and not soft to the touch), lightly sand (using 40 grit sandpaper) to key the surface and remove any imperfections. Wipe down the area with an acetone dampened cloth. The surface is now ready for the final coat to be applied.

## APPLICATION 20 YEAR 2 COAT SYSTEM CONT.

- Apply the heavier second coat of HPX ensuring no pinholes are present as per recommended coverage guide.
- Make sure the whole area is evenly covered with no excessive deep areas.
- Allow to cure for 8 hours.
- Inspect the finished surface. If pinholes are present, scuff the affected area with 80 grit sandpaper, wipe with acetone and apply a thin layer of HPX with a spreader over the affected area.

#### TRIROOF HPX INSTALLATION TOP TIPS

- Felt must be washed off with a de-greasing agent (soap) and then cleaned with acetone for optimum preparation.
- All Metal-All rust must be removed and repaired with 450g bandage then cleaned off with acetone
- PVC surfaces must be sanded to give a key and then cleaned off.
- For GRP substrates, 40 grit sandpaper must be used to remove topcoat down to the base layer, (repair if needed) and wipe down with acetone.
- For the 20 year guarantee, you must allow the first consolidated layer to cure fully before applying the second coat.
- Remove all standing and excess water from the substrate prior to using HPX.
- In cold weather, the unopened bag may be brought up to room temperature by placing it in lukewarm water to ease application.
- Use HPX finishing rollers for the final coat application.
- Do use 450g bandage to fix repairs and bridge gaps of up to 5mm.
- Any opened product must be used within one hour. If planning to use it later, expel all air and clip the bag for any unused product to stop curing.
- Scatter coat slate granules, kiln-dried sand or silica over the uncured final coat to achieve an anti-slip finish.

