



### PRODUCT DESCRIPTION

Duropoly c 460 Cold Polyurea is a high performance, two component, fast curing, UV stable, fully reinforced polyurea liquid waterproofing membrane with a thick and highly flexible overall finish. Duropoly c 460 Cold Polyurea liquid waterproofing provides quick and easy wet on wet application with a low application odour.

### USE

Duropoly c 460 Cold Polyurea liquid waterproofing can be specified for a variety of roofing and walkway applications over most fully supported structural deck types, insulation boards or existing roof finishes. Various sealer coat options are available to provide a strong resistance to physical damage, discolouration or excessive wear.

### APPLICATION

#### Preparation

- All substrates must be suitably clean or adequately prepared, dry and free from loose debris, laitance, oils or other surface contamination. Repairs to cracks, holes and other surface defects must be carried out prior to coating.
- In certain circumstances Duropoly c 460 Cold Polyurea liquid waterproofing requires an additional primer to enhance adhesive strength. Please consult the Langley project specific specification for further guidance.

#### Test

- Where appropriate, preliminary adhesion tests should be undertaken to ensure sufficient membrane attachment has been achieved.

#### Mixing

- Stir and homogenise both A and B parts of Duropoly c 460 Cold Polyurea liquid waterproofing separately using a mechanical mixing device at a low speed. Once individually stirred, gently pour component B into component A and stir using a mechanical mixing device at a low speed for a minimum of 2 minutes avoiding excessive air bubbles. The mixing ratio by weight should be 100 (A):6(B).
- Important note: using more component B than the specified ratio will not reduce drying times and could potentially compromise membrane performance.

#### Application – Field Area

- Duropoly c 460 Cold Polyurea liquid waterproofing is applied in two coats, wet on wet, with a reinforcing layer between each coat.
- Once both components are fully mixed, apply Paracoat Cold Polyurea liquid waterproofing at a rate of 1kg/m<sup>2</sup> per coat by brush, sheepskin roller or airless spray.
- Apply the first base coat layer of Duropoly c 460 Cold Polyurea liquid waterproofing ensuring an even distribution of the product as per the application rate highlighted above.
- Cut Duropoly c 460 Cold Polyurea Reinforcement Fleece into suitably sized pieces and embed into the wet base coat ensuring the Duropoly c 460 Cold Polyurea Reinforcement Fleece is applied without folds, creases, air pockets or prominent fibres that could compromise the appearance of the final finish.
- Apply the top coat layer of Duropoly c 460 Cold Polyurea liquid waterproofing immediately afterwards ensuring an even distribution of the product as per the application rate highlighted above.
- Overall application rate should be 2kg/m<sup>2</sup> in two separate coats.
- The wet top coat should be inspected for any wicks or loose fibres. If present, embed any wicks or loose fibres into the wet top coat using the Duropoly c 460 Embedment Roller.
- Ensure the application rate is followed stringently as over application may adversely affect curing time.
- Recommended ambient temperature application should be between 10-40°C.
- Duropoly c 460 Cold Polyurea liquid waterproofing should be applied to substrates with a minimum surface temperature of >5°C and rising.

#### Application – Upstands / Details

- Duropoly c 460 Cold Polyurea ST Detail thixotropic liquid waterproofing is applied in two coats, wet on wet, with a reinforcing layer between each coat.



- Once both components are fully mixed, apply Duropoly c 460 Cold Polyurea ST Detail thixotropic liquid waterproofing at a rate of 0.8kg/m<sup>2</sup> per coat by brush, sheepskin roller or airless spray.
- Apply the first base coat layer of Duropoly c 460 Cold Polyurea ST Detail thixotropic liquid waterproofing ensuring an even distribution of the product as per the application rate highlighted above.
- Cut Duropoly c 460 Cold Polyurea Reinforcement Fleece into suitably sized pieces and embed into the wet base coat ensuring the Duropoly c 460 Cold Polyurea Reinforcement Fleece is applied without folds, creases, air pockets or prominent fibres that could compromise the appearance of the final finish.
- Apply the top coat layer of Duropoly c 460 Cold Polyurea ST Detail thixotropic liquid waterproofing immediately afterwards ensuring an even distribution of the product as per the application rate highlighted above.
- Overall application rate should be a minimum of 1.6kg/m<sup>2</sup> in two separate coats.
- The wet top coat should be inspected for any wicks or loose fibres. If present, embed any wicks or loose fibres into the wet top coat with the Duropoly c 460 Embedment Roller.
- Ensure the application rate is followed stringently as over application may adversely affect curing time.
- Recommended ambient temperature application should be between 10-40°C.
- Duropoly c 460 Cold Polyurea ST Detail thixotropic liquid waterproofing should be applied to substrates with a minimum surface temperature of >5°C and rising.

#### PACKAGING

- Duropoly c 460 Cold Polyurea liquid waterproofing is supplied in 26.5kg kit (A & B overall) with metal containers.
- Palletised information is available upon request.

#### STORAGE

- Store in a sheltered, cool and dry environment away from any heat or ignition source.
- Store between 10°C – 30°C.
- Partly used containers should be resealed immediately and re-used as quickly as possible.
- Combined products cannot be resealed and pot life information above should be followed.

Product Properties	Component A	Component B
Chemical description	Polyisocyanurate	Prepolymer Polyamine Mixture
Physical state	Liquid	Liquid
Non-volatile content	Approx 85%	43%
Flash point	45°C	26°C
Colour	Light Grey (RAL 7001)	Translucent Brown
Density	1.3 g/cm <sup>3</sup> (20°C)	0.99 g/cm <sup>3</sup> (20°C)
Viscosity	5mPa.s (20°C)	
VOC class as per 2004/42/EC	184 g/L (15%)	572 g/L (57%)
Pot Life 5°C 23°C 35°C	180 mins 60 mins 30 mins	
Hardness (Shore)	75A (ISO 868)	
Elongation	600% (EN-ISO 527-3)	
Tensile strength	5.7 MPa (EN-ISO 527-3)	
Tear resistance	34 N/mm (ISO 34-1 method B)	
Water vapour permeability	$\mu=2000$ , 14 g/m <sup>2</sup> , (EN 1931)	
Thermal resistance	Up to 180°C	
Fire performance	Broof (t4)	
Typical system thickness	2 mm (based upon 2x 1kg coats)	
Shelf life	12 months	

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