

# **Corroseal 25LM**

# One part polyurethane sealant

# Reference No. TDS / SFB / CSL25LM Issue Date: December 2015 Revision No. 5

#### **Product Features**

Corroseal 25LM is a low modulas, single component polyurethane, joint sealant for sealing movement & construction joints from 5 to 30 mm width in concrete, masonry, metal and many other substrates. It atmospherically cures to form a flexible elastomeric seal, accommodating continuous cyclic movement of up to 25% of the joint width as a total movement, whilst giving excellent weathering properties.

**Corroseal 25LM** is supplied in 600 ml sausages, ready for use without the need for on site mixing, giving consistent properties and performance.

**Corroseal 25LM** is generally over paintable, however it is recommended to test the paint compatibility.

Complies to BS 5212 : Part 1 and ASTM C920 type S, grade NS, class 25 NT.

Standard colours available are white, grey & beige.

# **Typical Uses**

**Corroseal 25LM** is typically used for sealing non-trafficked joints subject to high movement in building & civil engineering structures, such as precast concrete elements, building facades, high rise, dams, reservoirs, basements and bridges.

Technical Data					
Properties	Test Standards	Typical Values			
Density @ 20°C		: 1.2 gms/cm³			
Hardness shore A	ASTM C661 - 98	: approximately 20-25			
Service temperature		: - 20°C to 80°C			
Application temperature		: 5°C to 40°C			
Touch free time @ 25°C		: 2 hours			
and 55% RH					
Cure rate		: 2 - 3 mm/day			
Elongation at break	ASTM D412 - 98a	: > 250%			
Elastic recovery	ASTM D638 - 03	: > 70%			
Movement Accomodation		: ± 25%			
Factor (MAF)					
Toxicity		: no restrictions as			
		cured			
Slump (Rheological sag		: no slump / sag			
in vertical displacement)					
Staining		: no staining			
Effects of heat agening		: no cracking or			
		chalking			
Peel strength		: > 30 N			
Average plastic		: 13.95%			
deformation					

Note: All values given are subject to 5 - 10% tolerance.

# **Directions for Use**

#### Preparation

#### Concrete

Long term durability and function can only be achieved with

good preparation to give a strong adhesive & mechanical bond to the substrate.

New concrete should be fully cured with a maximum residual relative humidity (RH) of 75%.

Existing sealants should be cut out and removed prior to preparation of the joint faces.

Prepare concrete surfaces preferably by mechanical methods such as angle grinding to remove laitance, curing compounds and other loose materials to provide a mechanical key for **Corroseal 25LM**.

After preparation, small chips & arris imperfections can be repaired using **Corromortar FC** (see separate data sheet) to provide a smooth even surface. Allow **Corromortar FC** to cure for 24 hours and lightly abrade prior to priming.

Apply masking tape either side of the joint to protect surfaces from primers & excess material.

Insert Corrocell or Corrotech Backing Rod (see separate data sheets) into the prepared joint to create a slot for the sealant, with a width to depth ratio of between 2:1 & 1:1 in accordance with good joint sealant design.

#### **Priming**

Priming is not normally required however please ensure the substrate is clean, dry, sound and free from contamination.

#### **Mixing**

No mixing is required for this product.

### **Application**

Unscrew the end cap and retract the plunger of the gun, then cut off the end of the packaging and drop the sausage open end up, into the barrel gun.

Screw the end cap back on and apply the sealant by squeezing the trigger to discharge the material into the prepared joint, ensuring good contact with the joint faces.

Immediately after application, finish the sealant in the joint by tooling it to a smooth finish with a mixture of water and a high concentration of washing up liquid.

Remove the masking tape immediately after tooling.

#### Curing

Depending on the applied depth, **Corroseal 25LM** may take up to 7 - 10 days to fully cure.



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#### **Hot Weather Conditions**

For application above 40°C we recommend adopting the following guidelines:

Store material away from direct sunlight in a cool preferably air conditioned environment.

Keep equipment that will be in contact with the product cool and away from direct sunlight.

Avoid application during the hottest time of day.

## Cleaning

Clean tools and equipment immediately after use with **Corroclean**.

#### **Limitations**

The total designed movement the sealant can accommodate should not exceed 25% of the joint width.

Substrate temperatures should be above 5°C and rising.

For application in temperatures above 40°C please refer to hot weather condition recommendations.

Avoid application if the work area may be subject to the onset of rain or moving water.

All products should be used within the pot life. Materials not used within the specified time should be discarded.

If the above general application details do not meet with your requirements, please contact Corrotech for a project specific method statement.

#### **Estimating**

**Corroseal 25LM** pack size: 0.6 litre foil sausage. Coverage rate as per the following table:

Guide to approximate quantities					
Joint size in mm (WxD)	Litres per LM	LM per 0.6 litre pack			
10 x 10	0.1	6.0			
12 x 10	0.12	5.0			
15 x 10	0.15	4.0			

For approximate quantities for joint sizes other than those given, please refer to the formulas given in the sealant estimating guide in the Corrotech Construction Chemicals Product Summary Guide.	3.0	0.2	20 x 10
	2.6	0.225	15 x 15
	2.0	0.3	20 x 15
	1.6	0.375	25 x 15
	1.5	0.4	20 x 20
	1.2	0.5	25 x 20
	1.0	0.6	30 x 20

**Corromortar FC** pack size: 8 kg. Coverage rate approximately 0.2-0.5 kg per LM of joint depending on surface condition

All coverage rates given are theoretical and subject to actual site conditions. We recommend trial areas are done to establish practical consumption.

# **Health & safety**

Always use appropriate PPE including gloves, goggles and a barrier cream to avoid contact with skin and eyes.

Should contact with skin or eyes occur, wash immediately with plenty of clean water and seek medical advice.

If swallowed, seek medical attention immediately. Do not induce vomiting.

Avoid inhalation and ensure adequate ventilation or suitable respiratory equipment if working in confined spaces.

Do not expose products to fire or naked flames under any circumstances.

Always refer to the product Material Safety Data Sheet (MSDS) for full health & safety and handling recommendations.

# **Storage**

**Corroseal 25LM** has a maximum shelf life of 6 months from the date of manufacture.

To maximize shelf life always store products in their original, unopened packaging in a dry environment, away from direct sunlight with a minimum temperature of 10°C but not exceeding 35°C.

Damaged packaging, high humidity or extreme temperatures may reduce the shelf life.