

Geocel 945 High Mod Ms Polymer



Features and Benefits

- Fast cure
- Abrasion resistant including foot traffic
- Resistant to aerobic and anaerobic bacteriological attack
- Excellent application characteristics
- High strength adhesive bond
- Permanently flexible

Application

For sealing movement joints to:

- Building sub structures
- Culvert and bridge assemblies
- Concrete road soak away channels
- Concrete floor slabs (Saw cuts)
- Internal stone flooring
- Sealing of stadia terrace movement joints
- Sea defence wall movement joints
- Promenade construction and movement joints
- Geocel®945 has excellent adhesion to many EPDM membranes
- Due to the wide variety of EPDM membranes available, it is recommended to undertake compatibility and adhesion testing to ensure suitability

Ancillary Materials & Equipment

- Cox Powerflow Combi
- Cow Powerflow Cartridge
- Geocel® Universal Wipes
- Geocel® Surface Cleaner

Cleaning

- Excess sealant, tools and equipment can be cleaned using Geocel® Surface Cleaner
- Remove Geocel®945 from hands using Geocel® Universal Wipes

Painting

- Geocel®945 may be overpainted with water based paints, however due to the large number of coatings available, it is advisable to carry out a compatibility test before application
- For alkyd paints a suitable water based undercoat must be used

Packaging

- 290ml cartridges packed in boxes of 12

Priming

Geocel®945 exhibits good primer-less adhesion to most common construction substrates. However, due to the natural variability of porous materials, such concrete and natural stones, in order to confirm optimum adhesion, we recommend carrying out an adhesion test prior to commencement of any project. Priming is essential for water retaining structure applications.

Masking

Where necessary the joint edges can be masked with tape to prevent contamination of adjacent substrates and ensure a neat sealant line. The tape should be carefully removed immediately after tooling.

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Description

Geocel®945 has a movement accommodation factor (MAF) of 40%. The sealant can be applied into joints 6mm to 40mm wide and a depth of 6mm to 15mm. Generally the joint slot should be designed to ensure that the sealant width to depth ratio is between 1 1/2 :1 and 2:1.

Where joints are subjected to traffic a width to depth ratio of 1:1 should be adopted. For joints with high casting and setting out tolerances, the joint depth should be a minimum of 10mm with accurately formed joints in metal, a minimum 6mm.

To calculate the theoretical minimum joint width knowing the expected maximum working movement of the joint:

$$W = M + M$$

$$\text{MAF}/100$$

$$W = \text{Joint width}$$

$$M = \text{Expected maximum working movement of joint}$$

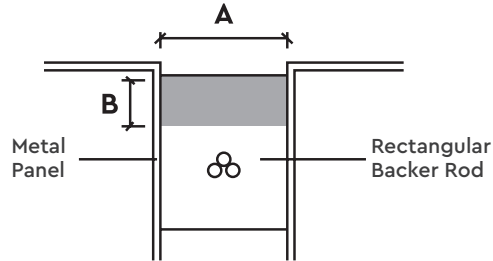
$$\text{MAF} = \text{Movement Accommodation Factor of that sealant}$$

Method of application

- The sealing slot should be accurately formed
- The slot sides should be cleaned by grit blasting, grinding, wire brushing or other means to expose a sound surface
- Care should be taken to ensure that the slot is formed to the required depth and any expansion joint filler tightly packed
- A tight fitting cord or bond breaker should be inserted at the base of the slot to ensure that the sealant only bonds to the joint sides
- For optimum adhesion, ensure that all surfaces are clean, dry, sound and free from frost
Clean all joints of release agents, water repellents, laitance, dust, dirt, old sealants or other contaminants, which could impair adhesion
- Surfaces may be damp, but have no standing water
- All surfaces should be cleaned and degreased by wiping with a suitable preparatory solvent available from Geocel®
- Cut conical tip off cartridge end, screw on nozzle cut at 45° to required size and place into a Cox Powerflow Cartridge Gun, firmly extrude into slot or against the substrate
- Place aluminium sausage into a Cox Powerflow COMBI Gun and remove clasp, cut nozzle at 45° to required size, firmly extrude into slot ensuring complete contact with joint faces

Joint Design

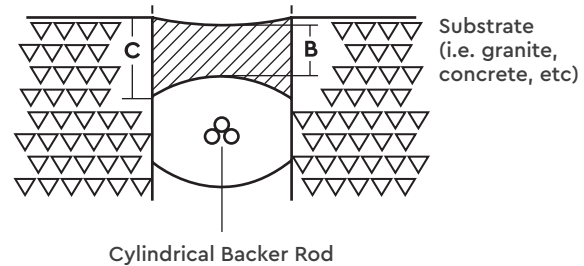
Expansion Joint



Dimension A – Joint Width

Dimension B – Sealant Depth and Bond Surface

Panel Joint



Dimension A – Joint Width

Dimension B – Sealant Depth (over backer rod)

Dimension C – Sealant Contact or Bond Surface

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Technical Data

Form	Smooth void free viscous paste
Storage Life	Stored below 25°C, in original containers, 290ml cartridges – 12 months
Solids Content	100%
Colour	Black, grey, white, concrete grey and buff
Application Temperature	5°C to 40°C
Service Temperature	-40°C to 150°C
Skin Time	30 to 60 minutes to 23°C and 50% relative humidity
Cure Time	3mm per 24 hours to 23°C and 50% relative humidity
Hardness	40 - 45 Shore A
Movement Accommodation Factor	40%
Chemical Resistant to spillage of	Dilute acids, petrol, dilute alkalis, diesel oil, mineral oils, paraffin and white spirit

Specification writers: These values are not intended for use in preparing specifications. Please contact your local Geocel® Sales Representative prior to writing specifications on this product.

Paint Type	Suitability
Water based emulsion paint	OK
Water based primer sealer-staining	OK. If over coating with other paints check suitability
Water based undercoat	OK
Water based top coat	OK
Alkyd resin based paint	Use water based undercoat first
Traditional solvent based undercoat	Use water based undercoat first
Traditional oil based paint	Use water based undercoat first
Traditional exterior gloss paint	Use water based undercoat first
Cellulose based automotive paint	OK
Polyurethane based automotive paint	OK

Width (mm)	6	8	10	12	15	18	20	25
Depth (mm)								
6	8.0	6.0	4.8	4.0	3.2	2.6	2.4	1.9
8	6.0	4.5	3.6	3.0	2.4	2.0	1.8	1.4
10	4.8	3.0	2.9	2.4	1.9	1.6	1.4	1.1
12	4.0	3.0	2.4	2.0	1.6	1.3	1.2	0.9
15	3.2	2.4	1.9	1.6	1.2	1.0	0.9	0.7
18	2.6	2.0	1.6	1.3	1.0	0.9	0.8	0.6

Metres per 290ml cartridge. The above figures do not allow for wastage or variation in joint size

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