

Description:

Sealant is a plastomeric rubber strip which is used to joint concrete manholes and box culverts. The sealant is supplied on a roll and is tacky allowing it to be adhered to the joint. A primer is available which can be brushed on to help adhesion on dusty, wet or non-horizontal surfaces. The sealant is available in two versions, bitumen and butyl, and a range of cross sections. See the application guide for recommended section sizes for each joint.

Bitumen Sealant Strip

The main advantages of bitumen sealant are;

- › Capable of providing immediate and permanent watertight joints
- › Workable between 7 and 54 degrees C
- › Excellent chemical and mechanical adhesion to clean, dry surfaces.
- › Low water absorption
- › Resistant to age hardening
- › Good chemical resistance

Code	Cross Section (mm)	Rolls per box
SE100	12 x 60	4 x 6m
SE101	12 x 80	3 x 6m
SE102	25 x 40	4 x 4m
SE104	12 x 120	2 x 6m
SE105	20 x 25	6 x 5m
SE106	22 x 30	5 x 4.5m
SE107	12 x 120	2 x 4.2m
SE108	12 x 120	2 x 5.2m

Butyl Sealant Strip

The main advantages of butyl sealant are;

- › Capable of providing immediate and permanent watertight joints
- › Workable between -12 and 48 degrees C
- › Excellent chemical and mechanical adhesion to clean, dry surfaces.
- › Low water absorption
- › Resistant to age hardening
- › Good chemical resistance

Code	Cross Section (mm)	Rolls per box
SE201	22 x 22	8 x 4.5m
SE202	22 x 44	4 x 4.5m
SE203	32 x 38	5 x 3.35m
SE204	25 x 60	3 x 3.65m

Bitumen Primer - code SE310

The main advantages of bitumen primer are;

- › Prepares the surface for the application of primer
- › High penetration to seal porous surfaces
- › Applied cold and at temperatures down to 5 degrees C
- › Covers approximately 6-8m² per tin
- › 4 x 5 litre tins per box

- › Moisture resistant within 30 minutes of application
- › Applied by brush to dry or damp surfaces (but not wet)
- › Surfaces need to be free from oil, dust and debris before application



Performance

The main sealant performance criteria are;

- › Provides permanently flexible watertight joints
- › Self adhesive for easy installation
- › Resists a water pressure of 0.5 bar with 50% compression and 40mm contact width, approximately equivalent to 5 meters water head
- › Complies with watertightness tests as outlined in EN 1917 and BS 5911
- › Prevents concrete to concrete contact as required by BS EN1917 and BS 5911
- › Controlled flow resistance
- › Long proven track record
- › 30-day immersion testing without visible deterioration when tested in 5% caustic potash, 5% hydrochloric acid, 5% sulfuric acid and 5% saturated hydrogen sulfide.
- › One year immersion testing without visible deterioration when tested in 5% formaldehyde, 5% formic acid, 5% sulfuric acid, 5% hydrochloric acid, 5% sodium hydroxide, 5% hydrogen sulfide and 5% potassium hydroxide.

Installation

The following procedures should be followed for optimum sealant performance;

- › Clean upper and lower joint surface with a stiff bristle brush and ensure the joining surfaces are flat and level around the whole circumference
- › Remove any dirt, debris, flashing or concrete protrusions which could prevent the joint coming together or penetrate the sealant
- › See application guide or concrete manufacturer for advice on the recommended sealant cross section and where to position the sealant on the joint. Joint design varies from manufacturer to manufacturer and product to product. The information provided by Caswick is for guidance however we would also recommend consulting the manufacturer of the concrete product you have purchased
- › We recommend using primer to improve adhesion. If primer is used allow it to dry before applying sealant
- › Lay the sealant flat onto the concrete without kinking, stretching. Press gently to achieve adhesion but do not locally compress
- › Do not joint the sealant within 30cm of a corner
- › Joint the ends of the sealant by kneading into a continuous strip. Do not overlap or stretch the sealant
- › Leave protective tape in place until the next unit is ready to be placed
- › Ensure that the sealant is free of debris before jointing the next unit

