Urochem

SEALING OF EXPANSION/CONSTRUCTION JOINTS WITH POLYSULPHIDE, POLYURETHANE AND HYBRID JOINT SEALANTS

SURFACE PREPARATION

Cement-based substrates must be fully cured prior to coating application. All surfaces must be sand blasted or mechanically dry ground, to remove all surface laitance and other contaminants, followed by blowing out with clean, dry compressed air. All surfaces must be completely dry.

JOINT DESIGN

Joints shall be accurately formed and prepared to provide the correct slot sealing dimensions. Minimum width of any joint must be 6mm. The width of joint to be sealed should be four times that of calculated movement. For joints up to 12mm in width the sealant depth must equal the joint width; for joints 12mm to 24mm wide the depth must be 12mm and finally for joints greater than 24mm in width, the sealant depth must be half the width. The joint faces must be parallel. (Refer to individual product datasheets for joint design) In trafficked areas the sealing slots shall be so constructed that at no time during the design operating cycle of the joint will the sealant protrude above the surface of the joint. (The sealant should be recessed 5mm to 8mm below the pavement surface dependent on the time of year and temperature prevailing at time of sealing).

PROTECTION OF ADJACENT SURFACES

Masking tape applied to areas adjacent to joint will protect them from smearing and enable the joints to be finished to a neat line. The tape should be applied after joint preparation but prior to priming or sealing. The tape to be removed from the joint edges once the tooling operations have been completed for the joint

BONDING/PRIMING

Porous surfaces must be fully primed by brush application to concrete, stone, brickwork, timber, and unglazed edges of ceramic tiles. Brush well into the faces of the joint, to ensure complete coverage. Avoid over priming resulting in excess primer in the base of the joint or application beyond faces. The primer film should be allowed to lose its solvent before sealant is applied. (Refer to primer data sheet). If, however, the primer is allowed to dry longer than 6 hours, the surface must be re-ground and re-primed. Non-porous surfaces must be primed with a one-pack material which is brushed onto the surface in the normal way. (Refer to individual product datasheets for primer requirements)

INSTALLATION OF BACKING MATERIAL

Closed cell polyethylene backing cord should be compressed into the joint to approximately 70% of its original size. Where hydrostatic pressures are present, compression should be to approximately 40% of its original size. For most effective results, closed cell polyethylene backing cord must be inserted into the joint to a depth that will accommodate the depth of sealant specified. Bond breakers are not required as elastomeric sealants will not bond to closed cell polyethylene backing cord.

Urochem
Manufacturers of joint sealants & construction chemicals

Urochem Trading (Pty) Ltd
Unit XP2, AEL Industrial complex, Cnr Ecqip and Weighbridge
Modderfontein, Gauteng; 1645

(+27) 11 608 2073 • www.urochem.co.za

Urochem

SEALING OF EXPANSION/CONSTRUCTION JOINTS WITH POLYSULPHIDE, POLYURETHANE AND HYBRID JOINT SEALANTS

MIXING

For two component sealants add the entire contents of the activator container to the base material container and mix thoroughly using a suitable paddle stirrer attached to a variable speed drilling machine (Refer to individual product datasheets for both mechanical and hand mixing requirements) until an even colour, free from streaks, is obtained. Periodically scrape the sides and base of the container with a spatula or small trowel to ensure complete blending of components.

NOTE: If the material is not mixed thoroughly, its performance will be impaired.

TWO COMPONENT SEALANT INSTALLATION

Application to primed surfaces can be by hand or pressure operated gun or by trowel or by pouring, according to the cross-section of the joint to be filled. For ease of application the use of a follower plate to extract the sealant from the tin is recommended. It is essential to ensure complete contact between the sealant and the joint surfaces. Tooling of sealant is necessary for complete air-free filling of voids and to assist the wetting out of the sealant to the joint faces. The surfaces of the joint should be smoothed with a clean putty knife or spatula. A minimum of lubricant such as diluted detergent solution applied to the tooling device may be used to assist the process. Any masking tape should be removed immediately after tooling and before the sealant has been able to skin over.

SINGLE COMPONENT SEALANT INSTALLATION

Application to primed surfaces can be by hand or pressure operated gun. It is essential to ensure complete contact between the sealant and the joint surfaces. Tooling of non-self-levelling sealants is necessary for complete air-free filling of voids and to assist the wetting out of the sealant to the joint faces. The surfaces of the joint should be smoothed with a clean putty knife or spatula. A minimum of lubricant such as diluted detergent solution may be applied to the tooling device to assist the process. Any masking tape should be removed immediately after tooling and before the sealant has been able to skin over.

PAINTING OF SEALANT

It is important to remember that most sealants can be overpainted, however, the coating will crack as there is no coating that will be able to accommodate the same movement as the sealant. It is always recommended that a compatibility test be done prior to application or painting.

Please note that we do have a standard range of colours in all our single component sealants, and we are also able to colour match any of our two-part sealants to any RAL colour – (T's & C's apply)

Urochem Trading (Pty) Ltd
Unit XP2, AEL Industrial complex, Cnr Ecqip and Weighbridge
Modderfontein, Gauteng; 1645

(+27) 11 608 2073 • www.urochem.co.za