

# CEMTEC 227 P.S.

## POLYSULFIDE SEALANT

### PRODUCT NAME

**CEMTEC 227 P.S.** is a two-part, polysulfide sealant available in self-leveling and gun grade consistencies. It is a Polysulfide Sealant based on Thiokol® which effectively seals all joints subject to structural movement as well as non-moving joints against ingress of water and dirt.

### PRODUCT DESCRIPTION

**Composition** : Thiokol® based joint sealant.

**Basic Uses** : For sealing curtain-wall panels, tilt-up panels, window glazing, flashing and metal setting. Also, for all joint seal applications where a short curing period is required, such as expansion and contraction joints in shopping centers, sidewalks or any other traffic areas. CEMTEC 227 P.S. can be used in the water tanks and in sewage treatment plants.

It will effectively prevent water from entering the sealed joints and thereby eliminate erosion of the soil underneath the slabs. Particularly areas which are watered frequently, such as swimming pool decks and around planters which must be protected. All coping joints and deck joints should be sealed. In clay soil areas, unsealed joints may cause swelling of the soil and subsequent buckling and cracking of the concrete slab.

**CEMTEC 227 P.S.** maintains a low modulus of extension even after prolonged exposure to the elements. This prevents adhesive and cohesive failures which often occur when a caulking compound hardens excessively with aging.

**Colors** : White, Grey, Black.

**Sizes** : Available in 4 liter and 1.5 gallons kits

**Standards** : Federal Specification TT-S-227 and also USASI Specification A116.1-1967 class A and B, ASTM C920, BS-4254.

### INSTALLATION

**Joint Design** : Suitable for all properly designed joints following accepted engineering practice. Joint width must be a minimum of 4 times the anticipated movement.

**Surface Preparation** : All joints must be absolutely clean. For concrete, sand-blasting is recommended. All curing compounds, old caulks, grease, waterproofing compounds, etc. must be removed. For non-porous surfaces such as glass, metal, etc. cleaning with M.E.K. or Toluene is recommended. Polyethylene rod or polyurethane foam is recommended as a joint-filler and back-up material. Fillers treated with bituminous products, grease or oil, should not be used. Where present, they must be removed or separated by vinyl tape or polyethylene film.

**Mixing: CEMTEC 227 PS** is a two part product and requires mixing. Pour all of the hardener supplied into the bulk polysulfide base and slowly mix with a low speed mechanical mixer and prop for 3-5 minutes. Make sure that the sides of the can are scraped to assure that all of the base and hardener are thoroughly mixed.

**Application** : Apply by caulking gun, hand or pour from container. Bulk sealant can be applied by pumping equipment. Press firmly into joint using a trowel or putty knife to ensure good contact.

Porous surfaces have to be primed with Cemtec Elastopoxy primer.

### AVAILABILITY

**CEMTEC 227 P.S.** is supplied through building material dealers. Major contractors are supplied directly from Construction Material Chemical Industries.

### MAINTENANCE

If **CEMTEC 227 P.S.** is damaged, and the joint has not been contaminated, it can be repaired by cutting out that part and resealing it with **CEMTEC 227 P.S.**

**TECHNICAL DATA**

| PROPERTIES                                 | TEST METHOD | RESULTS                       |
|--|-------------|-------------------------------|
| Pot life at 77°F (25°C)                    | --          | 2 hrs.                        |
| Tack Free Time at 77°F (25°C) and 50% R.H. | ASTM C-920  | 12 hrs.                       |
| Cure Time at 77°F (25°C) and 50% R.H.      | --          | 24 hrs.                       |
| Tensile Strength                           | ASTM D-412  | 80 psi                        |
| % Elongation                               | ASTM D-412  | 550%                          |
| Peel Strength on concrete                  | ASTM D-794  | 16 pli cohesive failure       |
| Hardness (Shore A)                         | ASTM D-2240 | 25 ± 5                        |
| Temperature Service Range                  | --          | -40°F - 175°F<br>-40°C - 79°C |

**WIDTH OF JOINT**

|                       |                               | 1/4"  | 3/8"  | 1/2"  | 5/8"  | 3/4"  | 7/8"  | 1" |
|-----------------------|-------------------------------|-------|-------|-------|-------|-------|-------|----|
| <b>DEPTH OF JOINT</b> | 1/4"                          | 308   | 205   | 154   | 123   | 102   | 88    | 77 |
|                       | 3/8"                          | ..... | 136   | 102   | 82    | 68    | 58    | 51 |
|                       | 1/2"                          | ..... | ..... | 77    | 61    | 51    | 44    | 38 |
|                       | 5/8"                          | ..... | ..... | ..... | 49    | 41    | 35    | 30 |
|                       | 3/4"                          | ..... | ..... | ..... | ..... | 34    | 29    | 25 |
|                       | 7/8"                          | ..... | ..... | ..... | ..... | ..... | 25    | 22 |
|                       | 1"                            | ..... | ..... | ..... | ..... | ..... | ..... | 19 |
|                       | <b>Linear Feet Per Gallon</b> |       |       |       |       |       |       |    |

**WIDTH OF JOINT**

| mm                             |    | 6     | 9     | 12    | 15    | 18    | 22    | 25  |
|--------------------------------|----|-------|-------|-------|-------|-------|-------|-----|
| <b>DEPTH OF JOINT</b>          | 6  | 28    | 19    | 14    | 11    | 9     | 8     | 7   |
|                                | 9  | ..... | 12    | 9     | 7     | 6     | 5     | 4   |
|                                | 12 | ..... | ..... | 7     | 6     | 5     | 4     | 3   |
|                                | 15 | ..... | ..... | ..... | 4.4   | 3.7   | 3     | 2.7 |
|                                | 18 | ..... | ..... | ..... | ..... | 3.1   | 2.5   | 2.2 |
|                                | 22 | ..... | ..... | ..... | ..... | ..... | 2.1   | 1.8 |
|                                | 25 | ..... | ..... | ..... | ..... | ..... | ..... | 1.6 |
| <b>Linear meters per liter</b> |    |       |       |       |       |       |       |     |

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**QUALITY STATEMENT**

CMCI manufacture its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with Quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products. CMCI also offers full technical field support to consultants, Architects, Contractors, applicators and End Users

The Technical Specification information and recommendation given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product. CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no guaranty and or responsibility is assumed on the performance of work completion executed with use of our products.