

# **METTEC GUN GRADE 105**

#### 2 COMPONENT GUN GRADE POLYSULPHIDE JOINT SEALANT

### DESCRIPTION

**METTEC GUN GRADE 105** is a non – sagging, 2 component, chemical resistant, elastomeric, polysulphide joint sealant. **METTEC GUN GRADE 105** is specifically designed to be used as a watertight seal for moderate movement and control joints. It is based on polysulphide polymer. After curing, it forms a tough, flexible and non – staining rubber like seal. It has excellent adhesion to concrete, stone, metal and resistant to many chemicals, shrinkage, aging, thermal stress and effects of outdoor exposure. **METTEC GUN GRADE 105** is suitable for use in both vertical and horizontal applications.

## **CHARACTERISTICS**

- □ High resilient with excellent recovery characteristics
- □ Provides permanent and uniform watertight seal
- □ Non staining
- Excellent resistance to fatigue and stays flexible throughout its service life won't become brittle, caulk or crack due to UV exposure.
- □ Prevents uncontrolled cracking by allowing expansion and contraction during temperature changes.
- □ Excellent adhesion to most common building substrates.
- Good resistance to ageing, retains joints soundness once cured.
- □ Resistance against mild chemicals, hydrocarbon fuels and sea waters.
- □ Non toxic once cured. Can be used in potable water reservoirs and swimming pools.

#### **STANDARDS**

**METTEC GUN GRADE 105** complies with the requirement of BS EN ISO 11600: 2003 (formerly BS 4254), BS6920 test on suitability with potable water. Manufactured under ISO 9001 & ISO 14001

### **TECHNICAL PROPERTIES;**

PROPERTIES	RESULT	TEST METHOD
Full Cure Standard Condition	7 days	-
Color	Grey	-
Chemical Resistance Solvent & Veg Oil	Ph 2.5 to 11.5 Hydrocarbon Fuel	ASTM D 543
Density (g/cc)	1.6 ± 0.05	ASTM D 792
Shrinkage	Negligible	ASTM C 531
Pot Life	Passed > 120 min	BS 4254
Shore 'A' Hardness	10 – 20	ASTM D 2240
Tack Free Time	5 hours	-
Elongation	Passed > 300	ASTM D 412
Cracking & Chalking After Heat Ageing 70°C	No Deterioration	TT – S – 0027E
Water Potability	Passes	BS 6920
Initial Cure @ Standard Condition	24 hours	-
Application Temperature	+5°C to +40°C	-
Service Temperature	-20°C to + 80°C	-
Movement Accommodation Factor (MAF)	25%	-

# **METTEC SYSTEME SDN BHD**

Lot 684 – A, Jalan 2C, Kampung Baru Subang, 40150 Shah Alam, Selangor, MALAYSIA Tel: +6011 3605 1024 I E – Mail: <u>enquiry@metticsysteme.com</u> Website: <u>www.mettecsysteme.com</u> **MALAYSIA I INDIA I BANGLADESH I SRI LANKA** 



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### **APPLICATION INSTRUCTION**

#### JOINT PREPARATION

The joint edges must be clean, dry and free from oil, loose particles, cement and other contaminants which may affect the adhesion.

## PRIMING

Primer shall be applied to a clean and dry surface prior to the installation of backer rod or bond breaking ape. Apply **METTEC PP 110** porous primer on surface. The primer shall be applied by a brush in a thin coat. For obtaining a clean and neat finish, masking tape shall be applied on both the edges of the joints before applying the primer.

#### **BACK – UP MATERIAL**

The backer rod provides resistance to sealant tooling pressure and help to attain proper wetting of substrate when the sealant is being tooled. The diameter of the backer rod shall be at least 20% larger but not greater than 33% of the joint width. **CAUTION:** Do not damage or poke holes in the backer rod during or after installation, since this may cause air bubbles in the sealant and effect its performance.

#### **MIXING AND APPLICATION**

**METTEC CUN GRADE 105** is available in a ready to mix container with all the components packed in a single tin. The material shall be mixed thoroughly with a slow speed drill (300rpm – 400rpm) fitted with a flat blade paddle for 2 - 3 minutes till a uniform colour and consistency is achieved.

Do not part mix. Load the sealant immediately into the barrel gun by a heavy duty follower plate. Remove the cap and nozzle from the gun and ensure that the plunger is pushed all the way forward. On vertical joints, sealant extrusion shall start from the bottom of the joint and continued to the top. For deep vertical joints, the sealant shall be filled in 2 to 3 application in order to avoid air entrapment and sagging. Once the sealant has been installed, a suitable rounded tool soaked in a soapy water solution can be used to achieve a smooth hour glass profile.

### **JOINT DESIGN**

The width of the joint should be a minimum of 4 times the anticipated movement. Joints with cyclic movement should have a width to depth ration of 2:1 for butt joints and 1:1 for floor, static and lap joints. The joint width and depth should be maintained as recommended.

#### **Joint Width**

- □ 6mm (minimum)
- □ 30mm (maximum)

#### Joint Depth

- □ 6mm
- 20mm for trafficked floor joints and areas exposed to hydrostatic pressure checked prior to painting

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## LIMITATION

#### METTEC GUN GRADE 105 is not recommended for:

- Joints greater than 30mm width
- Overheads joints
- Movement joints having MAF >25%
- Damp and contaminated surface
- □ Asphalt pavement
- Over painting (paint compatibility with sealant shall be checked prior to painting)

### **HEALTH AND SAFETY**

Keep out of reach from children. Before handling read both the product and material safety data sheet for detailed use and health information

### **STORAGE**

Store in a cool and dry place. Away from direct sunlight and moisture. Storage temperature to be below 35°C

### SHELF LIFE

12 months from the date of manufacturing in unopened condition.

## PACKING

METTEC GUN GRADE 105: 1kg, 4kg & 32kg

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