



THE STRESS FREE BONDING



## TECHNICAL DATA SHEET

# ESSRBOND HY PU25

CGSEAL/TDS/180, Date : JUN - 2022

(One Component Polyurethane Sealant )

### DESCRIPTION

ESSRBOND HY PU25 is a Low Modulus, Hybrid Polyurethane, flexible joint sealant that is free of Isocyanates and other hazardous raw materials and omits low odour. It has been formulated to offer outstanding adhesion to most common building and automotive materials; such as Aluminium, timber, concrete, fibreglass and be used in most sealing and joint filling applications. It displays high joint movement capability with no sagging or slump characteristics to provide a high quality & efficient joint finish.

ESSRBOND HY PU25 is designed to comply with requirements of ASTM C920, Type S, Grade NS, Class 25, Use NT, M, G, A and O

### FEATURES

- ◆ Solvent & Isocyanate Free
- ◆ Low VOC
- ◆ Low Odour & Non Corrosive
- ◆ Joint Movement +/- 25%
- ◆ Non Slump
- ◆ Up to 40mm wide joints
- ◆ Paintable

### TECHNICAL PROPERTIES

PROPERTIES	RESULT	TEST METHOD
Color	Grey, Black, White Other color on request	Visual
Chemical Base	Hybrid Technology Polyurethane	-
Appearance	Non-Sag Smooth Thixotropic paste	Visual
Cure System	Moisture Curing	-
Skin Over Time	25 - 40 min	-
Tack Free Time	15 - 30 min	-
Density	1.3 to 1.4 g/ml	ASTM D 1475
Shore A Hardness	Approx. 25 - 35	ASTM D 2240
Tensile Strength	Approx. 0.7 Mpa .	ISO 8339
Elongation at Break	Approx 350 %	ISO 8339
Service Temperature	-30°C to 100°C	-
Application Temperature	+5°C to 40°C	-
Movement Accommodation Factor	25%	-



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### APPLICATION

- ◆ Construction Joint Sealant applications
- ◆ Perimeter seals around doors, windows and facades
- ◆ General purpose interior joint sealant applications
- ◆ Sealing and bonding metal roofing systems
- ◆ Automotive and marine applications requiring a flexible adhesion profile between substrates.

### MATERIALS

- ◆ Precast Concrete Panels
- ◆ Fibre Cement Sheet
- ◆ Block work & Bricks
- ◆ Aluminium Profiles
- ◆ Sandstone & Granite
- ◆ Fibreglass
- ◆ Plasterboard & Blue Board

### SURFACE PREPARATION

Surfaces to be bonded must be clean and dry, as well as free of wax, grease, dust and any other foreign materials so that the adhesive bond is not compromised. Metal substrates should be degreased with suitable solvent cleaner like IPA

### APPLICATION INSTRUCTION

- ◆ Ensure that all surface area clean, dry & free from all loose dirt, dust oil grease or any other containment. ESSRBOND HY PU25 adheres without primer or activator. however, for optimum adhesion and critical high performance applications. such as on multi-story buildings, highly stressed joints, weather exposure or water immersion,
- ◆ The tip of the Nozzle is cut according to the width of the surface and fixed to the Applicator. The sausage package is cut from one edge and fixed to a suitable gun.
- ◆ The cap nut is screwed to the Sausage cylinder of the gun
- ◆ The joints should be filled at one time and without gaps during the application.
- ◆ The surface of Sealant applied in the joints should be smoothed with a dampened spatula or by hand immediately before skin Formation.
- ◆ If used, the adhesive tape should be removed afterwards.
- ◆ The opened packages should be consumed as quickly as possible.
- ◆ The contaminated areas and used tools should be cleaned with white spirit or alcohol within 10 minutes. It is cleaned only mechanically after cured.



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### COVERAGE

Joint Width / Depth Ratio Should Be 2:1.

Joint Size	Joint Size
6 X 3 (mm)	33.33 (m)
10 X 5 (mm)	12 (m)
20 X 10 (mm)	3 (m)

The coverage is approximate linear meter coverage per pack size (600ml)

$$\text{Formula : } \frac{600}{(W \times D)}$$

Where W = Width (mm) D = Depth (mm) L = Length (meter)

### LIMITATION

ESSRBOND HY PU25 should not be used for:

- ◆ Areas Subject To Continuous Chlorinated Water Immersion, Such As Swimming Pools, Spa Etc.
- ◆ Constant Immersed In Salt Water.
- ◆ Pe, Pp, Teflon, Neoprene & Bituminous Surfaces.
- ◆ Glazing Applications
- ◆ Painted With Alkyd Resin Paint Because It Will
- ◆ Inhibit The Curing Of The Paint
- ◆ Used In Trafficable Joints Greater Than 10mm Width
- ◆ ESSRBOND HY PU25 may be over- painted 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.

### 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.

### STANDARD

ESSRBOND HY PU25 Manufacturer Under

- ◆ ISO 9001: 2015
- ◆ ISO 14001: 2015
- ◆ IATF 16949 : 2016



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### SHELF LIFE

12 months from date of manufacturing in unopened packaging

### STORAGE

Stored in a cool and dry place at recommend temperature between +5°C to 30°C conditions.

### PACKING

ESSRBOND HY PU25 is supplied in 600ml Al foil sausage packed in box of 20 pcs.

### NOTE

The company's products are sold subject to the Company's standard terms and conditions of sale. Products are warranted against defective materials and workmanship. The company makes every effort to ensure that all the information, recommendations or the specifications provided by it are accurate and true. However as the company has no control over the conditions of use, it cannot accept any liability, either directly or indirectly regarding the usage of its products. Product specifications are subject to change without prior intimation to users as the products are being continuously upgraded.