

REC FLEX S425 HP

ONE PART, HIGH PERFORMANCE, NEUTRAL CURE STRUCTURAL SILICONE SEALANT

DESCRIPTION

REC FLEX S425 HP is a versatile, high performance silicone sealant which reacts with atmospheric moisture to produce a flexible silicone rubber, ideal for a wide variety of general purpose joint sealing glazing applications. Capable of taking extension, compression, transverse and longitudinal movements, **REC FLEX S425 HP** resists severe environmental conditions such as wind loading, wind driven rain, snow and sleet, and is impervious to acid rain, ozone, ultraviolet light and extreme temperature variations.

PRIMARY APPLICATION

The high modulus and outstanding physical properties of **REC FLEX S425 HP** allow for sealing a wide variety of demanding applications, such as:

- Curtain walling, included cap, toe, heel and air seals
- General sealing/jointing
- Silicone structural glazing in 2 sided and 4 sided systems*
- A weather seal in butt (2 sided) and stopless (4 sided) glazing systems
- Joint within curtain/window systems

*All structural glazing applications must be reviewed and approved by RECKON CHEMICALS PVT LTD. Contact Technical department of RECKON CHEMICALS PVT LTD. for more information.

FEATURES/BENEFITS

- Meets the requirements of ASTM C1184- Standard Specification for Structural Silicone Sealants.
- Exceptional weather resistance including UV and ozone exposure with an anticipated service life of 30 years.
- Movement capability of 25%.
- Good adhesion without a primer to most common substrates.
- High adhesion strength.
- Excellent gunnability and ease of application over a wide range of temperature.
- Stable curing system, which assures product reliability.
- Quick skin formation.

TECHNICAL INFORMATION

PROPERTY	TEST METHOD	TYPICAL VALUES
Skin Time	@ 23°C, 50% R.H.	8 - 10 Minutes
Tack Free Time	@ 23°C, 50% R.H.	<2 Hours
Shore A Hardness	EN ISO 868	40
Specific Gravity	EN ISO 1183-1	1.34
Cure Rate	Internal Data	7-14 Days, for a 6mm bead
Sag	Internal Data	0 mm
Tensile Strength	DIN 53 504	2 MPa
Modulus at 100% Elongation	EN ISO 8339	0.8 - 1.0 MPa
Elongation at Break	DIN 53 504	340%
	EN ISO 8339	130%
Movement Capability	ASTM D709	25%
Application Temperature	N/A	+5°C to +35°C
Service Temperature	N/A	-40°C to +150°C
*Drying times will vary depending on ambient temperature and relative humidity		

DIRECTIONS FOR USE

SURFACE PREPARATION

- Substrates for every structural silicone glazed project should be submitted for adhesion and compatibility testing by Reckon prior to commencement of glazing. The surface preparation (cleaning method and primer if required) for each structural glazing project will be recommended based on production, run sample on substrates supplied by the customer and based on laboratory testing performed by RECKON CHEMICALS PVT LTD.
- Joint interfaces must be clean, dry, and free from any foreign matter prior to sealant application. Metal, glass and other non-porous surfaces should be wiped clean with a solvent dampened clean cloth, followed immediately by a dry wipe with a clean, lint-free cloth before the solvent evaporates (i.e. 2 rag method). Preferred solvent is REC CLEANER. Follow all precautions on label during handling of solvent. A trial application of the solvent is recommended to ensure there is no adverse reaction with the substrate.

PRIMING

Some substrates with special surface characteristics, finishing, or coatings may require a primer to optimize adhesion performance.

- For structural glazing, the priming requirement will be established by Reckon during testing.
- For façade seals, Reckon recommends the following primers if a primer is necessary:
 - Non-Porous substrates i.e. metal, plastic - REC PRIMER
 - Porous substrate i.e. concrete, stone – REC PU PRIMER

METHOD OF APPLICATION

- Ensure that the backer rod is friction fitted properly or bond breaker tape has been installed and any primers required have been applied.
- Slide the sealant into the applicator gun, cut off the very end of the sealant packaging and fit the gun with the nozzle that has been cut to deliver the right bead size.
- Extrude the **REC FLEX S425 HP** sealant into the joint, ensuring that no air is trapped in the joint.
- Fill the joint completely with a proper width-to-depth ratio (2:1), and tool to ensure intimate contact of sealant with joint walls.
- Tooling the sealant is recommended immediately after the application of the sealant. Dry tooling is always preferred. For a cleaner finish, mask the sides of the joint with tape prior to filling.
- Should masking be required to prevent contamination of adjacent surfaces, it is recommended that the masking tape be removed immediately after tooling and before the sealant sets.
- All structural applications should be undertaken in strict accordance with the information contained within Reckon's Structural Glazing Manual Consult Reckon for further information.

JOINT DESIGN CONSIDERATIONS

- For structural glazing application (i.e. tensile bead), please contact Reckon for more information on prior testing that is recommended to be conducted prior to actual installation of **REC FLEX S425 HP**.
- Joint design to be in accordance with ISO 11600 and BS 6093.
 - For the purpose of joint width calculation in BS 6093 the MAF of **REC FLEX S425 HP** is 25%.
- Width to depth ratio should be 2:1 subject to a minimum depth of 10mm on porous substrates and 6 mm on non-porous substrates.
- Sealant width not be less than sealant depth.
- For fillet joints the minimum bite should be 10 mm for porous substrates and 6 mm for non-porous substrates.
- In movement joints, back fill the joint with polyethylene joint backing in order to control the depth of sealant and prevent three-sided adhesion.

CLEAN UP

Cleaning of all tools, etc. can be accomplished with REC CLEANER while the sealant is in uncured state. Immediately remove excess sealant and smears from adjacent non-porous surfaces using one of the solvents listed above. On porous surfaces; allow the unwanted sealant to develop initial cure and then remove the sealant by abrasion or other mechanical means.

LIMITATIONS

REC FLEX S425 HP is not recommended for:

- Permanent immersion.
- Use on materials where migration of constituents can take place (e.g. certain rubbers).
- On applications over tars, asphalt or materials that bleed oil, plasticizers or solvents.
- Use where abrasion or physical abuse will be encountered (e.g. traffic able joints).
- Over painting.
- In exterior below ground applications.
- In horizontal traffic joints.
- In applications in airtight enclosures as the sealant requires atmospheric moisture to cure.
- On sensitive substrates (e.g. marble, architectural stones, etc.) without prior testing for staining.
- Only black silicones are recommended for structural glazing.

PACKAGING

REC FLEX S425 HP is available in 600ml Sausages - 20 per box.

STORAGE & SHELF LIFE

12-month shelf life from manufacture date when stored in a cool, dry area. Elevated temperatures >100° F may reduce shelf life.

WARRANTY: The Reckon Chemicals (Pvt.) Ltd. (Reckon) solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Reckon, no other representations or statements made by Reckon or its representatives, in writing or orally, shall alter this warranty. Reckon MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Reckon product fails to conform with this warranty, Reckon will replace the product to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Reckon does not authorize anyone on its behalf to make any written or oral statements which in any way alter Reckon's installation information or instructions in its product literature or on its packaging labels. Any installation of Reckon products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Reckon's products for the Buyer's intended purposes.

RECKON CHEMICALS PRIVATE LIMITED
21 CCA, BLOCK B, KHAYABAN-E-AMIN, LAHORE
Toll: +92-42-35452620, +92-42-35230419
Web: www.reckonchemicals.com
Email: Info@reckonchemicals.com

