

TD.806 – TECHNICAL DATA: JFS-450H™ High Performance Adhesive/Sealant

Revised: 3/16/2023 Version: 1.4

Product Description:

JFS-450H™ is a one component, high modulus, mildew resistant multipurpose silyl-terminated polyether (hybrid) elastomeric sealant and adhesive. When fully cured, this unique VOC compliant formula offers UV stability and a strong bond to concrete and many other common substrates. This product is specifically formulated to offer all weather performance to meet today’s Green Building Standards. Designed to be used in expansion and isolation joints.

Key Features:

- Excellent adhesion
- Mildew resistant
- Flexible & durable
- Will not shrink or crack
- VOC compliant
- Contains no solvents or isocyanates
- Color stability and UV resistant (ASTM G26)
- Non-yellowing
- Non-corrosive
- Resistant to most chemicals

Physical Properties (@77°F / 24°C, 50% R.H.)		
Property		Test Standard
Cure system	Hybrid, Moisture Cure	
Movement capability, %	±25%	ASTM C719
Modulus	High	ASTM D412
Physical properties (cured)	Rubber	
Specific gravity	1.66	
Extrusion rate, g/min. 1/8" orifice @ 50 psi	320	ASTM C1183 Modified
Temperature range		
Permanent	-75°F to 220°F / -59°C to 104°C	
Intermittent	250°F / 121° C	
Accelerated weathering (2,000 hrs.)	UV-A, No Change	QUV Weatherometer
Skin over time (min)	20	MNA Method
Tack free time (min)	40	ASTM C679
Cure rate	24 hours per 1/8" / 3mm	MNA Method
Tensile strength (psi)	225	ASTM D412
Elongation %	450-500	ASTM D412
Durometer Shore A	46	ASTM C661
Volatile organic content	18 g/L	
Color	Grey	

Application:

- Mechanically prepare surface to remove dirt, grease, or other contaminants from surface to be sealed or bonded. Substrate must be dry.
- Cut nozzle at angle to desired bead size and puncture inner seal.
- Push sealant ahead for uniform bead. Section thickness should be limited to 1" (25mm) or less.
- Tool sealant to desired thickness immediately before skin forms.
- Skin time approximately 20 minutes. Tack free approximately 40 minutes.
- Normal curing 24 hours per 1/8" (3mm) thickness (before opening to traffic)
- Length of time for full cure depends upon thickness of application and other factors including temperature and humidity.
- Shelf Life: 1 year in original unopened containers.