



TECHNICAL DATA SHEET



SF450

Description: OSI SF450 20°F – 120°F Subfloor Construction Adhesive is a high performance and environmentally friendly latex-based construction adhesive which provides a powerful, permanent bond and is formulated for interior or exterior subfloor construction. Cold weather formula allows easier extrusion and excellent adhesion in cold weather conditions. This adhesive offers fast set, superior strength development and bonds dry, wet, frozen and treated lumber to most building materials. Low VOC formulation meets stringent State and Federal VOC regulations.

Available As:

Item #	Size	Color
2146715	28 fl oz (828 ml)	Tan

Features & Benefits:

- Bonds to Wet, Frozen & Treated Lumber
- Weather Resistant
- Guns easily from 20°F to 120°F
- Bridges Minor Gaps in Framing
- Easy to Use
- Strong Adhesion to Most Building Materials

Recommended For:

OSI SF450 20°F – 120°F Subfloor Construction Adhesive is primarily used for glued floor projects involving subfloor, tongue-and-groove flooring, glued floor systems, and standard wood deck construction. Offers excellent adhesion for all types of wood to wood assemblies, concrete and masonry.

For Best Results:

- Do not use on expanded or extruded polystyrene foam
- Do not use outdoors if rain is expected within 24 hours or if extended freezing temperatures are expected
- Not suitable for permanent water immersion
- Test adhesion to treated wood before using in application. Treatments vary widely and can adversely impact performance.

Coverage:

For a 28 fl. oz. (828 mL) cartridge:

- A 1/4" (6 mm) bead extrudes approximately 86 ft. (26 m)
- A 3/8" (9.5 mm) bead extrudes approximately 38 ft. (12 m)



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Typical Uncured Physical Properties:

Color:	Tan	
Appearance:	Paste	
Base:	Latex	
Odor:	Acrylic	
Specific Gravity:	1.367	
pH	8.5	
Viscosity:	190,000 to 300,000 cps	
Flashpoint:	129.2°F (54°C)	
VOC Content:	0.1% by weight	CARB
	49 g/l	SCAQMD rule 1168
Shelf Life:	18 months from date of manufacture (unopened)	
Lot Code Explanation:	YYDDD	
Stamped on plastic nozzle	YY = Last two digits of year of manufacture DDD = Day of manufacture based on 365 days in a year Example: 14061 = 61 st day of 2014 = March 2, 2014	

Typical Application Properties:

Application Temperature:	Apply and cure between 20°F (-7°C) and 120°F (49°C) For best results, store adhesive at room temperature 24 hours before use	
Open Time:	60 minutes*	At 78°F and 50% relative humidity
Repositioning Time:	30 minutes*	At 78°F and 50% relative humidity
Cure Time:	2 to 7 days*	
	*Time is dependent on temperature, humidity, porosity of substrate and amount of adhesive applied	

Typical Cured Performance Properties:

Color:	Tan	
Cured Form:	Non-flammable solid	
Service Temperature:	-20°F (-29°C) to 150°F (66°C)	
Water Resistant:	Yes. Do not use outdoors if rain is expected within 24 hours	
Shear Strength :	ASTM D3498	
Wet Lumber:	195 psi	
Frozen Lumber:	125 psi	
Dry Lumber:	221 psi	
Gap Filling:	228 psi	
Moisture Resistance:	100 psi no delamination	
Specifications:	<ul style="list-style-type: none"> • ASTM D3498 • APA AFG-01 • Meets performance requirements of HUD UM No.60a • 71.26 – M88 – CAN/CGSB 	



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Directions:

Tools Typically Required:

Utility knife, caulking gun and tool to puncture inside seal of cartridge. For best application results, OSI® recommends the use of a high quality caulking gun such as the Albion® B12 and B12Q Cartridge Guns.

Safety Precautions:

Wear gloves. Wash hands after use.

Preparation:

The temperature of the adhesive, surfaces and the working area must be between 20°F (-7°C) and 120°F (49°C). For smooth, fast, easy application during cold weather, store adhesive at room temperature (70° ± 5°F) 24 hours prior to use. Ensure surfaces to be bonded are clean, structurally sound and free of standing water, snow, ice, dust, grease, oil or other contaminants. To increase adhesion, sand glossy surfaces to a dull finish. Pre-fit all materials prior to applying product. Cut off tip of cartridge at 45° angle to desired bead size. The recommended bead size is 3/8" (9.5 mm). Puncture seal inside of nozzle.

Application:

General Construction Use:

Pre-cut and fit materials before applying adhesive. Apply adhesive to one of the surfaces to be bonded. Use enough adhesive to ensure proper contact between surfaces. Press materials firmly together within 60 minutes of adhesive application. If work is delayed, remove excess adhesive and begin again. Materials can be repositioned for up to 30 minutes after joining. After use, wipe off nozzle top and recap immediately.

Sub-Floor and Decking:

Apply continuous beads (1/4" to 3/8") of adhesive to all floor joists. For tongue and groove panels, apply 1/4" beads to groove avoiding excess "squeeze out". Position panels allowing 1/8" gap for expansion at butt joints and nail within 60 minutes of adhesive application. Use proper nailing method as designated by APA Adhesive Nail-On Schedule.

Clean-up:

Clean tools and uncured adhesive residue immediately with warm water and soap. Cured adhesive may be carefully cut away with a sharp-edged tool.

Storage & Disposal:

KEEP FROM FREEZING. For best results, store at 70° ± 5°F in a cool, dry place. Take unwanted product to an approved household hazardous waste transfer facility. Hardened material may be disposed of with trash.

Label Precautions:

WARNING! COMBUSTIBLE. MAY BE HARMFUL IF INHALED. MAY CAUSE EYE, SKIN AND RESPIRATORY IRRITATION.

WARNING! Contains acetone, urea, ethanol and crystalline silica. Do not use or store near heat, sparks or open flame. Do not smoke when using this product. Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation. Use in a well-ventilated area. Avoid breathing vapors. Avoid contact with eyes and skin. Prolonged or repeated exposure may affect the nervous system causing dizziness, headache or nausea. If you experience eye watering, headache or dizziness, leave the area to obtain fresh air. Do not swallow. **FIRST AID:** If swallowed do not induce vomiting, call a physician or Poison Control center immediately. For eye contact flush with water for 15 minutes, call a physician. For skin contact wash thoroughly with soap and water. If overcome by vapors, get fresh air. **KEEP OUT OF THE REACH OF CHILDREN.**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain, nervous system, liver and kidney damage or may cause cardiac arrhythmia. INTENTIONAL MISUSE BY DELIBERATELY INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

Refer to the Safety Data Sheet (SDS) for further information.

Limited Warranty:

This product is warranted to be free from defects in materials when used as directed. Henkel's sole obligation shall be, at its option, to replace or refund the purchase price of product proven to be defective. Henkel makes no other warranty, express or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE and will not be liable for consequential or incidental damages. This limited warranty gives you specific legal rights, which vary from state to state. Henkel may be contacted at 1.800.624.7767 M-F 9:00 am to 4:00 pm ET for warranty assistance.

Disclaimer:

The information and recommendations contained herein are based on our research and are believed to be accurate, but no warranty, express or implied, is made or should be inferred. Purchasers should test the products to determine acceptable quality and suitability for their own intended use. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.



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OSI Tougher than the Elements. For Professional Use Only. The Battle will be Fierce.

OSI works side by side with residential builders, contractors and remodeling professionals who use our products everyday on their jobsites. OSI combines this deep understanding with the sophisticated global innovation and manufacturing excellence of Henkel to make the world's best professional-grade caulks, sealants and adhesives.

1-800-624-7767 – Mon-Fri - 9:00a – 4:00p ET

www.ositough.com



OSI Brand is part of the Henkel family of brands. Founded in 1876, Henkel is a global leader in the consumer and industrial businesses. Henkel operates worldwide with leading brands and technologies in three business areas: Laundry & Home Care, Beauty Care and Adhesive Technologies.

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