

TECHNICAL DATA SHEET



HEAVY DUTY DRYWALL ADHESIVE



Description: OSI F38 Heavy Duty Drywall Adhesive is a solvent-based low-VOC formula specifically designed for adhering drywall to structurally sound surfaces in residential applications. This "no sag" drywall adhesive is formulated for bonding gypsum board to wood or metal studs, laminating gypsum board to gypsum board and bonding gypsum board to concrete or block walls. OSI F38 Heavy Duty provides sufficient open time for the positioning of gypsum panels and will allow up to 50% reduction in the use of mechanical fasteners generally required in applications without adhesives. Meets ASTM C557 standards. OSI F38 Heavy Duty is a solvent-based adhesive that can be sold in all 50 states.

Available As:

Item #	Size	Color
1630096	28 fl oz (828 ml)	Tan

Features & Benefits:

- High Bond Strength
- High Initial Grab Reduces Nailing up to 50%
- Bridges Minor Gaps in Framing
- Reduces Sound Transmission
- "No Sag" Formula

Recommended For:

OSI F38 Heavy Duty is best suited for bonding gypsum board to wood or metal studs, laminating gypsum board to gypsum board and bonding gypsum board to concrete or block walls. It is widely used in new construction of single-family and multi-family homes, manufactured housing, commercial construction and all remodeling, remedial and renovation projects where drywall or gypsum products are installed. OSI F38 Heavy Duty is designed to make installations quick, easy and less costly. When applied as directed, the adhesive combined with the approved mechanical fasteners is the preferred method for permanent, safe installations.

For Best Results:

Do not use on unlined expanded or extruded polystyrene foam, polystyrene or ABS plastic panels

- Not recommended for applications requiring temperature resistance greater than 150°F (66°C)
- Adhesive needs to be fully cured prior to applying joint compound and finishing the wall board
- Jobsite conditions should be maintained at or above 55°F (13°C) to minimize the effect of temperature, humidity, ventilation, and free moisture throughout the installation and finishing process

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	Color:	Light Tan		
Physical Properties:	Appearance:	Thick paste		
	Base:	Synthetic rubber and resins Formaldehyde free		
	Odor:	Sweet, aromatic		
	Specific Gravity:	1.44		
	Viscosity:	210,000 cps		
	Flashpoint:	1.4°F (-17°C)		
	% Solids by Weight:	80%		
	VOC Content:	0.3% by weight	CARB	
		5.2 g/l	SCAQMD rule 1168	
	Shelf Life:	18 months from date of manufacture (unopened)	1	
	Lot Code Explanation:	YYDDD		
		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, 2	2014	
Typical Application	Application Temperature:	Apply between 55°F (13°C) and 100°F (38°C)		
Properties:		For best results, use at 70°F (21°C)		
	Open/Repositioning Time:	15 minutes*	*At 78°F and 50% relative humidity	
	Cure Time:	2 to 7 days*	mperature, humidity, porosity of substrate and amount of adhesive	
		*Time is dependent on temperature, humidity, po applied		
	Extrusion Force:	Approx. 60 lbs	At 73°F	
	Vertical Sag:	0.125 inches	ASTM C639	
Typical Cured	Color:	Light Tan		
Performance Properties:	Cured Form:	Non-flammable solid		
	Service Temperature:	-20°F (-29°C) to 150°F (66°C)		
	Water Resistant:	Yes		
	ASTM C 557 Results:		ASTM C557	
	24 Hour Shear 14 Day Shear Cyclic Exposure Shear 24 Hour Tensile 14 Day Tensile	71.3 psi 70.8 psi 62.7 psi 35.1 psi 34.7 psi		
	Specifications:	Meets or exceeds the following specifications: • ASTM C557		



Directions:

Tools Typically Required:

Utility knife, caulking gun or trowel, tool to puncture cartridge seal, hammer, nails or screws. For best application results, OSI® recommends the use of a high quality caulking gun such as the Albion® B12 Cartridge Gun.

Safety Precautions:

Interior applications require ventilation to the outside during application and cure. Wear gloves and wash hands after use.

Preparation:

The temperature of the adhesive, the surfaces and the working area must be between 0°F (-18°C) and 100°F (38°C). For smooth, fast, easy application during cold weather, store adhesive at room temperature $(70^{\circ} \pm 5^{\circ}F)$ 24 hours prior to use. All surfaces must be clean and free of dust, dirt, oil, mud, ice, snow, standing water and other foreign substances prior to application. To obtain maximum adhesion, surfaces should be flat and close fitting to provide adequate contact. Release agents must be removed from poured concrete. Newly poured concrete must be allowed to cure 28 days prior to adhesive application. Painted surfaces must be well cured and free of loose paint. Cut nozzle to desired bead size and puncture inner seal. Proper adhesive application is obtained by double cutting the spout on each cartridge, producing 45 degree angles opposite each other.

General Application Guidelines:

Pre-cut and fit materials before applying adhesive. Apply no more adhesive than can be used in 10 minutes. If work is delayed, remove excess adhesive and begin again. Use temporary bracing or blocking until adhesive sets. Adequate ventilation must be provided when used in all interior applications.

Applications:

Wood & Metal Studs:

Apply a continuous 1/4" to 3/8" bead of adhesive to all framing members starting 4 to 6 inches from the top and ending 4 to 6 inches from the bottom of where each panel is positioned on the stud. Apply two 1/4" parallel beads of adhesive on framing members where joints abut. Position gypsum board and ensure entire surface of board is pressed firmly to the stud. Adhesive shrinkage during cure will pull board closer to the stud and assure a tight fit. For best results, boards should not be finished until adhesive has fully cured. Use flat panels only. Do not use warped panels unless they have been pre-bowed. Follow the fastening schedule for Adhesive Nail-on Attachment in the Gypsum Association Manual (GA-216) or Table No. 47-G of the Uniform Building Code. Perimeter fasten 16" O.C. for walls and ceilings and 24" O.C. in the field of ceiling applications. Field fasteners are required for wall construction unless walls show evidence of warping. For shear wall construction, field fasteners are required.

Laminating Gypsum Board:

Apply a continuous 1/4" to 3/8" zigzag bead of adhesive 12" O.C. to the base ply or fixed structure. Position and firmly press panels to the bonding surface, ensuring entire surface of panel is pressed firmly to the surface. Follow recommended fastening schedules in Table No. 47-H of the Uniform Building Code for two-ply construction or refer to the Gypsum Association Manual (GA-216) for multi-ply construction. For single-ply application to concrete walls, concrete should be cured at least 28 days and free of any release agents prior to using the adhesive. Permanent mechanical fasteners are required the same as for applications to wood or metal studs. Field fasteners are recommended.

Fire-Resistive Construction:

OSI F38 Drywall & Panel Adhesive is not a fire-rated adhesive. However, this adhesive may be used in fire-rated assemblies providing the framing, fastener size, type and spacing follow that of the system tested. No deviation is permitted whether or not adhesive is used.

Clean-up:

Clean tools and uncured adhesive residue immediately with mineral spirits or paint thinner in a well-ventilated area to the outdoors. Cured adhesive may be carefully cut away with a sharp-edged tool.

Storage & Disposal: NOT DAMAGED BY FREEZING. Store away from heat, flame and spark in a cool, well-ventilated place at room temperature (70° ± 5°F). In cold weather, product should be kept at room temperature for at least 24 hours prior to use to improve extrusion. Use an approved hazardous waste facility for disposal.

Label Precautions: DANGER! EXTREMELY FLAMMABLE. VAPORS MAY CAUSE FLASH FIRE. HARMFUL IF INHALED OR SWALLOWED. MAY CAUSE EYE, SKIN AND RESPIRATORY IRRITATION.

DANGER! Contains acetone and methyl acetate. **EXTREMELY FLAMMABLE.** Vapors may ignite explosively. Do not use or store near heat, sparks or open flame. Do not smoke when using this product. Extinguish all flames and pilot lights and turn off all sources of ignition, including stoves, heaters and electric motors during use and until all vapors are gone. 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 take internally. **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.**



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