TECHNICAL DATA SHEET

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F38 HIGH YIELD

DESCRIPTION

OSI® F38 High Yield is a high strength polyurethane-based adhesive foam formulated for use in drywall installations. This non-sag, non-drip formulation applies quickly and easily and supports proper air sealing while providing a strong bond.

Available as:

Item #	Package	Size	Color
2971753	Metal Aerosol Canister	21.1 fl. oz. (598 mL)	Off white

FEATURES & BENEFITS

- Meets ASTM C557 and ASTM D6464
- Fast and easy application[1]
- Non-sag, non-drip formula
- Delivers higher yield vs traditional construction adhesives[2]
- High surface coverage – 1 can adheres up to 24 drywall sheets[3]
- Helps reduce the number of mechanical fasteners needed
- Supports Sound Insulation

RECOMMENDED FOR

F38 High Yield Drywall Adhesive Foam is designed primarily for bonding drywall panels to metal or wood studs. This product may also be used for laminating gypsum board to gypsum board and bonding gypsum board to OSB, extruded polystyrene, concrete, and cinderblock walls where building codes allow.

LIMITATIONS

- F38 High Yield Drywall Adhesive Foam is not a fire stopping material and SHOULD NOT be used in areas that require fireproof or fire stopping materials.
- For cold weather use, product should be stored at room temperature for at least 12 hours before application.
- Should not be used on warped boards.
- Not recommended for use in areas of high heat such as around fireplace openings.
- Does not bond polyethylene, polytetrafluoroethylene (PTFE)/Teflon® or siliconized surfaces.
- Certain materials such as rubbers and plastics may have bonding difficulties. Test before use.
- Not compatible with bitumen or asphaltic coated surfaces or products.
- Not recommended for use on flexible sheet goods.
- Despite higher UV resistance, exposed product should be covered with a protective covering or coating to prevent UV degradation.

COVERAGE

For a 21.1 fl. oz. (598 g) can, a ½" (12.7 mm) bead size will deliver approximately 408 ft (124 m) of foam adhesive

Note: Yields shown are based on theoretical calculations, for comparison purposes, and will vary depending on ambient conditions and particular application conditions and particular application

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[1] *Application time savings based on applying 40 lin. feet (12.2 m) of traditional adhesive compared to 40 lin. feet of foam adhesive*

[2] *One can of High Yield Drywall Adhesive Foam applied at 3/8" (9.5 mm) bead extrudes approximate amount to 15 – 28 oz. cartridges of traditional adhesive applied at 3/8" bead. This value is based on theoretical calculations, for comparison purposes, and will vary depending on ambient conditions and particular application conditions and particular application*

[3] *Standard sheet size 4' x 8'*

TECHNICAL DATA

Typical Uncured Physical Properties

Color:	Off white	
Appearance:	Polymer Foam	
Base:	Single component polyurethane	
VOC Content:	17.4 % by weight	CARB
	178 g/L	SCAQMD rule 1168
Shelf Life:	18 months from date of manufacture (unopened)	

Lot Code Explanation:
BEST BY MM/DD/YYYY (bottom of cannister)
MM = month, DD = day, YYYY = year
Example: BEST BY 10/31/2022 = Product performs best when used by October 31, 2022

Typical Application Properties

Application Temperature:	Ambient conditions should be between 41°F (5°C) and 95°F (35°C). Can temperature must be between 41°F (5°C) and 86°F (30°C)
Odor:	Slight ether
Open Time:	< 5 minutes*
Tack-free Time:	5 – 7 minutes*
Cure Time:	Approximately 2 hours*
Clean Up:	Clean up uncured foam residue with acetone. Scrape away cured sealant using a sharp-edged tool. Follow solvent manufacturer's precautions for using solvents.

*****_At 73°F (23°C) and 50% relative humidity. Time is dependent upon temperature, humidity, and depth of sealant applied._

Typical Cured Performance Properties

Color:	Off white	Service Temperature:	-40°F (-40°C) to 180°F (82°C)
Cured Form:	Flexible solid	Sandable:	Yes
Water Resistance:	Yes	Shear Strength	55 – 65 kPa
Paintable:	Yes		

DIRECTIONS

Tools Typically Required:
OSI Foam Gun and OSI Foam Clean

Safety Precautions:
Always wear eye protection, gloves and proper work clothes when using F38 High Yield Drywall Adhesive Foam. Cured foam adhesive is difficult to remove from skin, clothing, and other substrates. When transporting cans by passenger car, leave the container wrapped in a cloth in the trunk, never in the passenger compartment. Maximum temperature should never exceed 120°F (49°C).

Surface Preparation:
Ensure all surfaces are clean, dry, and free from dirt, dust, oil, grease, and other contaminants likely to impair adhesion. Cover surfaces not intended to be foamed.

General Preparation:
The temperature of the working area should be between 41°F (5°C) and 95°F (35°C). The temperature of the product should be between 41°F (5°C) and 86°F (30°C). When working in cold conditions, can should be stored at room temperature for at least 12 hours before use. Shake can vigorously before use for 30 seconds (15-20 times minimum) and intermittently during use.

Gun Application:
To become familiar with product, first test on an experimental surface. Remove plastic cap from the can and screw applicator onto coupling unit until it will go no further. Do not over tighten. Shake can well before use. Adjust bead size with gun regulator screw. With valve end of can down, squeeze trigger to dispense foam adhesive. Dispense the foam sparingly as the extruded bead will expand slightly and when compressed between bonding surfaces will cover the area completely. Adjust the amount of adhesive according to specific application.

Note: The recommended working position of the can is upside-down to guarantee maximal output.

DIRECTIONS

SPECIAL NOTE: It is the responsibility of the installer to know and follow all Federal and State Building Codes including but not limited to local codes when using this product.

Wood & Metal Studs:

Apply a continuous 3/8" (9.5 mm) bead of adhesive to all framing members starting 3 to 4 inches from the top and ending 3 to 4 inches from the bottom of where each panel is positioned on the stud. Apply two ¼" parallel beads of adhesive on framing members where joints abut. Position gypsum board within a maximum of 3 minutes after application and ensure the entire surface of board is pressed firmly to the stud. 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 not required for wall construction unless walls show evidence of warping. For shear wall construction, field fasteners are required.

Laminating Gypsum Board to Gypsum Board:

Apply a ¼" (6mm) to 3/8" (9.5 mm) zigzag bead of adhesive 30 cm (12") O.C. to the base ply or fixed structure. Position and firmly press panels to the bonding surface. Realignment is possible within 2-5 minutes of application and apply pressure to ensure good contact. 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-201) for multi-ply construction. Furring strips are required for single-ply applications to concrete walls, concrete should be cured at least 28 days and free of any release agents prior to using adhesive. Permanent mechanical fasteners are required the same as for applications to wood or metal studs. Field fasteners are recommended.

Note: If idle for more than 10 minutes, shake can 15-20 times before applying foam. If not in use for more than 30 minutes, close gun regulator screw completely to secure trigger.

Changing Foam Cans:

1. It is not recommended to remove the can from the applicator gun before it is totally empty. When replacing the can shake the new can vigorously. Unscrew the empty can and replace it immediately to ensure there is no air left in the gun. If you do not want to replace the can, remove foam adhesive can and clean gun applicator immediately. Hardened foam can only be removed mechanically.
2. Conventional PU insulating foams such as OSI QUAD Foam or other competitors' products should not be dispensed from the same applicator gun as the OSI F38 Drywall Foam Adhesive.

Clean-up:

Clean tools and uncured foam adhesive residue immediately with OSI Foam Cleaner or acetone. Cured foam adhesive must be carefully cut away with a sharp-edged tool.

STORAGE & DISPOSAL

Product must be stored vertically with valve directed upwards, not horizontally on its side.

Note: When storing gun applicators with foam adhesive cans attached, be sure to store the tool with the can valve pointing downwards. Storing the can upright may cause propellant to leak from the applicator and become inoperative.

Store in a cool, dry place. For maximum performance and shelf life, store between 41°F (5°C) and 77°F (25°C). The product can be stored for a maximum of 1 week at -4°F (-20°C). Do not store below -4°F (-20°C); below this temperature product valve may spontaneously open, resulting in leakage.

Containers are under pressure. Do not expose to open flame or temperatures above 120°F (49°C). Do not store under direct sunlight. Excessive heat can cause bursting and premature aging of components resulting in shorter shelf life. When containers are empty, vent off any excess pressure. DO NOT discard empty can in garbage compactor. DO NOT incinerate. DO NOT puncture, cut, or weld container.

Recommended method of disposal for unused product: Vent off excess pressure and dispose of in appropriate waste receptacle. Dispose of according to local and federal governmental regulations.

LABEL PRECAUTIONS

DANGER! EXTREMELY FLAMMABLE. VAPOR MAY CAUSE FLASH FIRE. VAPOR AND SPRAY MIST HARMFUL. OVEREXPOSURE MAY CAUSE LUNG DAMAGE. MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTION. CONTENTS UNDER PRESSURE. CONTAINER MAY EXPLODE IF HEATED. Do not smoke. Do not puncture. Do not burn. Do not get in eyes or on skin or clothing. Do not breathe fumes. Do not swallow. Use only in a well-ventilated area. Keep away from flames, such as a pilot light, and any object that sparks, such as an electric motor. Store away from heat. Do not use if you have chronic lung or breathing problems or if you have ever had a reaction to isocyanates. Wear appropriate respiratory protection for prolonged use. If you have breathing problems during use, leave the area for fresh air. If problems develop or linger, call a physician. **KEEP OUT OF REACH OF CHILDREN.**

FIRST AID TREATMENT: Contains polyurethane prepolymer, methylenediphenyldiisocyanate, dimethylether and hydrocarbon propellant mixture. If swallowed, call Poison Control Center or doctor immediately. Do not induce vomiting. If breathed in, immediately remove the affected person to fresh air. If in eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention. If on skin, immediately wipe off and wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention.

WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov.

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

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. Henkel recommends purchasers/users should test the products to determine acceptable quality and suitability for the intended use. All adhesive/sealant applications should be tested under simulated or actual end use conditions to ensure the adhesive/sealant meets or exceeds all required project specifications. Since assembly conditions may be critical to adhesive/sealant performance, it is also recommended that testing be performed on specimens assembled under simulated or actual production conditions. 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.

LIMITED WARRANTY

This product is warranted by Henkel Corporation 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. For warranty assistance, contact Henkel at 1.800.624.7767 M-F 9:00 am to 4:00 pm ET.

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