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TECHNICAL DATA SHEET

OSI®
Professional Grade
Adhesives & Sealants

QB-300™
Multi-Purpose Construction Adhesive

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Item #	Package	Size
827628	Paper Cartridge	28 Fl. Oz.

DESCRIPTION

OSI® QB-300™ Multi-Purpose Construction Adhesive is a premium quality, waterproof adhesive formulated using synthetic rubber and tackifying resins. It is specially designed for the bonding and installation of all types of plastic foams and polystyrene including Styrofoam® brand plastic foam and Foamular® Extruded Polystyrene Insulation. When used as directed QB-300™ will not attack polystyrene and other plastic foams.

RECOMMENDED FOR:

This product is highly recommended for use with all types of vinyl covered gypsum board due to excellent initial tack and rapid bond development. It will not cause any staining, bleeding, or blistering. QB-300™ provides excellent adhesion to a wide variety of building materials including wood, fiberboard, metals, masonry, brick, concrete, marble, cork, insulation hangers, polystyrene bath panels, fiberglass, FRP panels, glass, glazed surfaces and much more. This adhesive also exhibits good heat resistance and is recommended for use in Fire-Rated wall and partition designs. For best results one surface should be porous.

NOT RECOMMENDED FOR:

- Applications requiring temperature resistance greater than 180°F (82°C)
- Bonding two non-porous surfaces

FEATURES & BENEFITS:

Feature	Benefits
Water resistant……	Can be used for interior or exterior applications
High initial grab……	Minimizes nailing requirements
Gap filling……	Use on irregular surfaces. Bridging capabilities up to 1/4”.

COVERAGE

For a 28 fl. oz. cartridge:
A ¼” (6 mm) bead extrudes approximately 85.8 ft (26.1 m).
A 3/8” (9.5 mm) bead extrudes approximately 38.1 ft (11.6 m).

DIRECTIONS

Tools Typically Required:
Utility knife, caulking gun or trowel, long, thin tool to puncture cartridge seal, hammer, nails or screws.

Safety Precautions:
Wear gloves. Wash hands after use. Interior applications require ventilation to the outside during application and cure.

Preparation:
Apply and cure between 20°F (-7°C) to 100°F (38°C). For best performance, use at temperatures greater than 65°F (18°C). Surfaces must be clean, dry and free of frost, grease, dust, release agents and other contaminants. 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.

General Application Guidelines:
Apply no more adhesive than can be used in 25 minutes. After adhesive application, position board in place and press firmly over entire surface. Immediately pull away for approximately 2 minutes to allow the solvents to flash off. Reposition panel and press firmly into place. Use temporary bracing or blocking until adhesive sets. Adequate ventilation must be provided when used in all interior applications.

Application Methods:

1. Extruded Bead Method:
   For relatively smooth and level surfaces, apply a 3/8" round bead of adhesive the full length of a sheet of foam board 1" in from the edge. Then run an "X" bead from corner to corner through the field of the board. Alternate Method: Apply parallel beads 12 to 16" on center the full length of the foam board. For applications involving wood or metal framing members, apply a 3/8" continuous bead on each framing member. This method is easiest and most widely used in the industry.

2. Spot Method:
   This method works best for rough surfaces. Using a putty knife apply spots of adhesive to the surface of the board beginning at one corner and spacing the spots 8 to 12" on the center. Each spot of adhesive should be at least 1" across by ¾" high. Do not use this method on wood or metal studs.

3. Trowel Method:
   For greater surface contact and holding power, apply adhesive using a ¼" deep notched trowel over entire surface of the foam board or paneling, 1" in from the edges. This method is recommended for all specialty applications where almost immediate holding power is desired.

Applications:

Bonding Foam to Block or Concrete Walls and Ceilings:
Using one of the application methods mentioned above, press foam board tightly to surface within 10 minutes after adhesive has been applied. Use firm pressure over entire surface of board. Pull foam board away for approximately 2 minutes to allow solvents to flash off. Reposition foam and press firmly over entire surface to ensure proper bond. To speed up initial bonding power, repeat procedure as needed. Be sure to butt all joints tightly and plane application so that the joints of the finished material do not coincide with the foam joints. When bonding foam to ceilings, supplemental mechanical fasteners are required to hold foam in place until adhesive sets. Use at least 4 to 6 fasteners per 8 foot sheet of board. Supplemental mechanical fasteners are required when the wall or foam board exceeds 8 ft. in height for all wall applications.

Bonding Drywall, Vinyl Board or Paneling to Foam:
When bonding "pre-finished" materials to foam, it is recommended that the extruded bead method or trowel method be used. For bonding drywall to foam, use one of these two methods along with the Adhesive Nail-On Attachment Method. Press drywall firmly into place and perimeter nail 16" O.C. and 24" O.C. in the field of the board. Use permanent mechanical fasteners at least twice as long as the thickness of the foam to securely fasten drywall to the concrete or block wall.

When bonding vinyl board or paneling to foam, it is recommended that these pre-finished materials be "bowed" or pre-curved 24 hours prior to installation. Position boards within 10 minutes after adhesive application and press firmly into place. Pull board away for approximately 2 minutes to allow solvents to flash off. Reposition foam and press firmly over entire surface to ensure proper bond. Repeat as necessary. Mechanical fasteners are required at the top and bottom of the panels where moldings will be used. Temporary bracing or fasteners may be needed for at least 24 hours until the adhesive sets. Excess adhesive should be removed immediately.

Bonding Vinyl Covered Gypsum Board or Paneling to Wood or Metal Studs:
Apply a ¼" to 3/8" continuous bead of adhesive to each stud or framing member starting 3" down from the top of the stud and ending 3" from the bottom. Pre-decorated panels should be "bowed" or pre-curved prior to installation. Place panels in proper position and press firmly to framing members. Pull board away for approximately 2 minutes to allow solvents to flash off. Repeat as needed. Reposition panels and press firmly along each adhesive bead to ensure proper contact. Use mechanical fasteners at the top and bottom of each pre-decorated panel. Use of temporary bracing for at least 24 hours may be necessary until adhesive sets.

Insulated Panels for Low Temperature Structures (Includes walls, ceilings and floors):
Follow detailed installation procedures of the panel manufacturer when using adhesive. In all cases adhesive should be "flashed off" to ensure maximum grab and bonding power, especially in enclosed locations.

Tilt Wall Construction:
Using either the Spot Method or the Trowel Method, install each 2'x4' foam panel horizontally. Be sure to stagger all joints. Mechanical fasteners are required for this application and should be installed at each corner of a 2'x4' section and at least one in the field or center of each foam panel.

Clean-up:
Clean tools and uncured adhesive residue immediately with mineral spirits. Cured adhesive may be carefully cut away with a sharp-edged tool.

STORAGE AND DISPOSAL

NOT DAMAGED BY FREEZING. Store away from heat, flame and spark in a cool, well-ventilated area. Use an approved hazardous waste facility for disposal.

PRECAUTIONS

DANGER: EXTREMELY FLAMMABLE. Harmful or fatal if swallowed. Contains Hexane and other Petroleum Distillates. Prevent build-up of vapors. Vapors may cause flash fire. Use only in areas of cross-ventilation. Open all windows and doors. Keep away from heat, sparks or open flame. DO NOT smoke. Avoid prolonged breathing of vapors. Avoid skin contact. Do not take internally. **KEEP OUT OF REACH OF CHILDREN.**

Refer to the Material Safety Data Sheet (MSDS) 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. 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.

TECHNICAL DATA

Typical Uncured Physical Properties

Color:	Tan
Appearance:	Thick paste
Base:	Synthetic Rubber and resins
Specific Gravity:	1.37
% Solids:	65%
Flash Point:	0°F (-18°C)
VOC Content:	280 g/L (20% by weight)
Shelf Life:	18 months from date of manufacture (unopened)
Lot Code Explanation: (Lot code is stamped on bottom plunger of cartridge)	YYDDD YY = Last two digits of year of manufacture DDD = Day of manufacture based on 365 days in a year For example: 09061 = 61st day of 2009 = March 2, 2009

Typical Application Properties

Application Temperature:	Apply between 20°F (-7°C) and 100°F (38°C)
Open time:	30 minutes
Venting (Flashing) Time:	2 – 5 minutes
Repositioning Time:	10 – 20 minutes
Cure Time:	24 to 48 hours (Depending on atmospheric conditions.)
Odor:	Solvent (use in a well-ventilated area)

Typical Cured Performance Properties

Color:	Tan
Cured Form:	Non-Flammable, Rubbery solid
Service Temperature:	-20°C (-29°C) to 180°F (82°C)
Water Resistance:	Yes
Sandable:	No
Bridging Capabilities:	Up to ¾"
Specifications:	▪ Meets ASTM C 557 ▪ Tested in accordance with ASTM E 84 ▪ Recommended for use in Fire-Rated Systems ▪ Conforms to CGSB 71-GP-25M specifications
Shear Strength: (ASTM C 557) Plywood to Gypsum Board:	 24 hours = 28 psi 14 days = 114 psi
Tensile Strength: (ASTM C 557)	24 hours = 31 psi 14 days = 81 psi