

DESCRIPTION

Johns Manville's XSPECT® ISOfoam APF board consists of a uniform closed-cell polyisocyanurate foam core bonded on each side with a foil facer. Polyiso provides one of the highest R-values per inch of any rigid insulation (R-6.0 at 1 inch). R means resistant to heat flow. JM XSPECT ISOfoam APF is produced with an EPA-compliant hydrocarbon-based blowing agent that has zero Ozone Depletion Potential (ODP) and virtually no Global Warming Potential (GWP); it also meets both CFC- and HCFC-free specification requirements. Polyiso has been cited by the EPA for its responsible impact on the environment.

XSPECT® ISOfoam APF is lightweight and can be easily cut with a utility knife or saw to score and break. When properly installed, JM XSPECT ISOfoam APF functions as a moisture-resistive vapor barrier. Please see the product [data sheet](#) on JM.com for more information.

BEFORE YOU BEGIN:

Consult your local building department for code requirements. All work activities should be conducted in accordance with all applicable federal, state and local laws and codes.

INSTALLATION:

- 1 To insure the proper installation of the insulation board, be sure that adequate clearance is provided to accommodate the full thickness of the specified insulation.
- 2 Before applying XSPECT® ISOfoam APF, the ductwork shall be clean, dry and tightly sealed at all joints and seams.
- 3 Secure flat XSPECT boards using mechanical fasteners as needed, starting no more than 3" (75 mm) from each butt joint. For ductwork 24" (610 mm) or wider, install mechanical fasteners on the underside, spaced approximately 18" (460 mm) on center. Stick or welded pins may be used to attach the flat boards to the duct. After installing speed clips, trim protruding pin ends flush.
Stick or weld pins are not recommended for use on XSPECT Tapered boards where cups and clips not sitting flush with the board surface would impede cladding aesthetics and functionality.
Fastening alternatives before applying cladding include MS adhesives and polyurethane adhesives. Always follow the manufacturer's instructions for the specific adhesive. Foil tape may be used to hold the XSPECT boards in place while the liquid adhesive cures. Under certain conditions, wires and bands may also be used.
For rooftop ducts that have joints or flanges ensure that the insulation thickness is sufficient enough to protrude past the height of the joint. When insulating, measure the height and position of the joint and groove the insulation out to fit snugly around the joint and ensure the insulation sits flush to the surface of the duct.
- 4 Adjacent insulation pieces shall be snugly butted. Any voids or cracks in the insulation should be filled to create a continuous and consistent insulation system. For double layer systems, stagger seams and joints to prevent thermal shorts within the insulation system.
- 5 It is recommended for ductwork over 32" wide that the top surface of the duct work use JM XSPECT Tapered Boards to allow for moisture to naturally run off the duct system and prevent pooling. If snow is a concern position the slope of the tapered board to face the south for maximum sun exposure and snow melt run-off.
- 6 The polyiso board insulation may be used to seal the system as a second vapor retarder system. Use a UL 181A compliant tape or vapor retardant mastic to close all board seams and penetrations to create the additional vapor retarder closure. Corner bead covers may be added to enhance the finished appearance and durability.
- 7 Cover insulation with a metal jacket cladding system or weather barrier cladding with a self-stick closure system. For metal cladding systems, follow common industry accepted practices like those described in the MICA Insulation Standards. For weather barrier cladding with self-stick closure systems, see the manufacturer's installation instructions for proper application procedures.

