TECHNICAL DATA SHEET

Air-Bloc 21S

Spray Applied Air/Vapour Barrier and Insulation Adhesive

Physical Properties

-Colour	Cream
-Solids by Weight	65%
-Weight	1.1 kg/l (approx.)
-Coverage	2.2 to 3 l/m^2 (95 ft^2/18.93L)
-Drying Time	@50% R.H. 20°C
Initial Set	24 Hours
Set Through	7 Days
-Service Temperature (glue line)	-40°C to 60°C
-Application Temperature	-12°C to 40°C
-Flammability	
Wet	Flammable
Dry	Burns
-Aging (Long Term Flexibility) (CGSB 71-GP-24M)	No fracturing
-Elongation (ASTM D412)	1100%
-Low Temperature Flexibility (ASTM D3111)	Pass @ -15°C
-Peel Strength to Concrete (ASTM C836)	3.3 kN/m
-Watertightness (CAN/CGSB-37.58-M86)	Pass

-Water Vapour Permeance (ASTM E-96)	3.2 mm wet film 3.2 ng/Pa.m^2.s (0.055 perms)
-Air Permeability (Applied at 2.2 l/m^2 to a concrete block wall. Tested at 21°C.)	
Pressure (Pa)	Air Leakage (L/s.m2)
75	0.0012
250	0.0016
500	0.0046
-Resistance to Gust Wind Load	Resists a suction pressure of 3000 Pa maintained for 10 seconds with no increase in air leakage rate when tested at 75 Pa.
-Resistance to Sustained Wind Load	Resists a suction pressure of 1000 Pa maintained for 1 hour with no increase in air leakage rate when tested at 75 Pa.
-Chemical Resistance	Resists salt solution, mild acids and alkalis. Non-resistant to oils, grease or solvents.

Description

Air-Bloc 21S is a spray consistency solvent type, synthetic rubber based insulation adhesive formulated for ease of application to wall surfaces such as masonry, concrete, drywall and wood. Cures to a flexible film which resists air leakage. Designed to be used as a full bed adhesive in conjunction with rigid foam or semi-rigid insulation to provide an air and vapour barrier.

Features

-Fast, spray application.
-Can be applied at low temperatures.
-Seals around projections such as brick ties.
-Cures to a flexible film.
-Adheres to most types of rigid insulations.
-Backed by over a decade of air barrier technology.
-Contains no aromatic solvent such as toluene.
-Not a red label product.

Uses

To provide an air, vapour and rain barrier when used as a full bed adhesive for rigid insulation such as polystyrene, mineral wood, or polyisocyanurate applied to wall surfaces such as masonry, concrete, gypsum board and wood.

Packaging

Air-Bloc 21S is packaged in 18.93L pails or 205L drums.

Limitations

The components used in **Air-Bloc 21S** do not attack polystyrene insulation at ambient temperatures below 40°C. The adhesive must be allowed to cure fully before exposing polystyrene insulation to temperatures above 40°C. Use mechanical fasteners when installing ceiling insulation. Plaster or other wall finishes must not be applied to the insulation without providing additional support such as mechanical fasteners. Do not use as an insulation clip adhesive. Not designed to perform as a permanently exposed surface.

Surface Preparation

All surfaces must be sound, dry, clean and free of oil, grease, dirt, excess mortar or other contaminants. New concrete should be cured for a minimum of 14 days before **Air-Bloc 21** is applied. Concrete surfaces should be free of large voids and spalled areas.

Joint & Crack Treatment

Joints between panels of exterior grade gypsum, plywood and rigid insulation up to 6 mm wide shall be filled with a trowel application of **Air-Bloc 21 S** and reinforced with a strip of 50 mm wide glass fibre tape such as Bakor **Yellow Jacket 990-06** prior to application of liquid membrane. Joints between panels of exterior grade gypsum or plywood wider than 6 mm should be sealed with **Blueskin**® membrane adhered to the substrate.

Cracks in masonry and concrete up to 6 mm wide shall be filled with a trowel application of **Air-Bloc 21 S** and allowed to cure overnight prior to application of the liquid membrane to the surface, or alternatively, the cracks may be sealed with a strip of **Blueskin**® membrane applied to the substrate. Cracks wider than 6 mm should be sealed with **Blueskin**® membrane adhered to the substrate lapped a minimum of 75 mm on both sides of the crack.

Surfaces should be tied in with beams, columns, window and door frames, etc., using strips of **Blueskin**® lapped a minimum of 75 mm on both substrates. Mechanical attachment should be made to all window and door frames, or a properly designed sealant joint provided.

Application

Refer to **Air-Bloc 21S** Guide Specification for detailed application information.

Suggested spray equipment: Graco President 10:1 pump, Graco Mastic Gun 204-000 with ¼" round tip or similar equipment. Air compressor capable of delivering 50 cfm (cubic feet / minute).

Material should be conditioned at room temperature for ease of application. Apply using air spray equipment a continuous unbroken film of **Air-Bloc 21S** at a wet thickness of 2.25 mm to 3 mm to the surface. Overlap **Blueskin**® a minimum of 25 mm. Press insulation firmly in place to ensure complete contact.

Care should be exercised to ensure full contact of the adhesive around protrusions such as brick ties at the point of contact with the wall. Cure rate is dependent upon temperature and porosity of the surface and insulation being bonded.

Clean Up

Use mineral spirits or citrus cleaners.

Caution

Contains flammable solvents. Take suitable fire precaution. Do not allow smoking or welding in working area. Keep away from heat and open flame or spark. Use under well ventilated conditions. Keep containers covered when not in use. Harmful if swallowed. <>