TECHNICAL DATA SHEET

Air-Bloc 21 FR

Fire Resistive Air & Vapour Barrier and Insulation Adhesive

Physical Properties

-Colour	Cream
-Solids by Weight	72%
-Weight	1.2 kg/l (approx.)
-Coverage	3 L/m^2
-Drying Time	@50% R.H. 20°C (68°F)
Initial Set	4 Hours
Set Through	48 Hours
-Service Temp (glue line)	-40°C to 60°C
-Application Temp	-12°C to 40°C
-Flammability	
Wet	Flammable
Dry	Fire Resistive
-Flame Spread (ASTM E84)	Applied at above stated coverage on glass reinforced cement board. Flame Spread Index: 44 Smoke Developed: 19
-Aging (Long Term Flexibility) (CGSB 71-GP-24M)	No fracturing
-Chemical Resistance	Resists salt solution, mild acids and alkalis. Non-resistant to oils, grease or solvents.
-Watertightness (CAN/CGSB-37.58-M86)	Pass
-Water Vapour Permeance (ASTM E96)	3.2 mm (1/8") wet film 1.7 ng/Pa.m^2.s (0.03 perms)
-Air Permeability (Applied at 3 l/m^2 to a concrete block wall. Tested at 21°C.)	

Pressure (Pa)	Air Leakage (L/s.m^2)
75	0.002

-Resistance to Gust Wind Load	Resists a suction pressure of 3000 Pa maintained for 5 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.

Description

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

Features

- Fire resistive dry
- Smooth spreading
- Can be applied at temperatures down to minus 12°C
- Seals around projections such as brick ties
- Cures to a flexible film
- Adheres to most types of rigid insulation

Uses

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

Packaging

Air-Bloc 21 FR is packaged in 18.93L pails.

Limitations

The components used in **Air-Bloc 21 FR** do not attack polystyrene insulation at ambient temperatures below 40°C. Polystyrene insulation may be affected by solvent system in uncured **Air-Bloc 21 FR** if temperatures are in excess of 40°C (104°F) at time of application. 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. Insulation must be installed into wet film immediately or blistering of membrane may occur.

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 FR** 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 FR** and reinforced with a strip of 50 mm wide glass fibre tape such as **Bakor 990-06 Yellow Jacket** 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 FR** 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 21 FR** Guide Specification for detailed application information.

Apply by flat trowel a continuous unbroken film of **Air-Bloc 21 FR** at a wet thickness of 3 mm to the surface. Immediately press insulation firmly into 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 dependent upon temperature and porosity of the surface and insulation being bonded.

Clean Up

Use mineral spirits or citrus cleaners.

Caution

Contains extremely flammable solvents. Take suitable fire precautions. 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.

Air-Bloc 21 FR will remain flammable after application until it cures fully to a fire resistive film. The time for full cure will depend on temperature and humidity conditions and will be at least 1 month. <>