# **Polar Bear**

## Air & Moisture Barrier/Adhesive

#### **PRODUCT DESCRIPTION**

DuROCK **Polar Bear** is formulated with a 100% acrylic emulsion. It is a trowel-applied high performance coating formulated for use over wood substrates. It is an air/moisture barrier and adhesive for the **DuROCK PUCC System**. **Polar Bear** contains fibers that enhance the cohesive and tensile strength for added durability.

The low water absorption combined with a high flexural strength makes **Polar Bear** an ideal water penetration barrier for use on exterior wall systems; in particular plywood 12.7 mm ( $\frac{1}{2}$  inch) thick and oriented strand board (OSB), minimum 11.1 mm ( $\frac{7}{16}$  inch) thick. Check with DuROCK for use on other substrates.

As part of an air barrier system for a wall assembly, **Polar Bear** is compatible with most transition membranes comprised of bituminous SBS with fabric or cross-laminated polyethylene backing, as well as bituminous mastics and polyurethane foam sealants. Refer to DuROCK system specifications for product specific guidelines.

#### STORAGE & MIXING

Store **Polar Bear** above  $4^{\circ}$ C ( $40^{\circ}$ F) and below  $40^{\circ}$ C ( $104^{\circ}$ F), off the ground and in a dry place away from direct sunlight. Employ temporary protection measures as needed. Under no circumstances shall **Polar Bear** be permitted to freeze.

Using a stainless steel or corrosion resistant mixing blade and power drill, mix at 400 – 500 rpm, ensuring not to induce air into the product, until a uniform consistency is attained. Do not add water. Accelerators and other additives are prohibited and will void warranty. Discard material that becomes stiff or hard.

### **APPLICATION & COVERAGE**

Substrate must be clean, dry, and free of cracks or loose material. Surface and ambient temperatures must be at least 4°C (40°F) a minimum of 24 hours, and must remain so until **Polar Bear** has dried. Do not apply **Polar Bear** in direct sunlight at temperatures exceeding 30°C (86°F) and protect from winds exceeding 25 km/hr (15 mph) as well as precipitation for at least 24 hours.

Sheathing joints shall not be greater than 6.4 mm ( $^{1}$ /<sub>4</sub> inch) wide. Sheathing board joints wider than 3.2 mm ( $^{1}$ /<sub>8</sub> inch) shall be pre-treated with fibre mesh tape. Refer to system specifications for installation requirements.

Coverage at the <u>minimum required single coat thickness</u> of 1.2 mm dry (1.5 mm wet) is approximately 15 sq m (160 sq ft) per 19 L (5 gallon US) pail. When used as both the first and second coat moisture barrier, and applied at the <u>minimum</u> required thickness, the coverage is approximately 7.5 sq m (80 sq ft) per pail. When used solely as the adhesive coat over Roller Bear, Polar Bear should be applied at a wet thickness of 2.0 mm, in which case the approximate coverage is 11 sq m (120 sq ft).

#### **TECHNICAL DATA**

Air Leakage Rate < 0.02 L/(s.m²) @ 75 Pa Vapour Transmission Rate > 100 ng/(Pa.s.m²) Water Transmission Rate < 2 x 10<sup>-7</sup> kg/(m².s) Adhesive Bond Strength > 0.3 MPa

Physical Characteristics:

- Non-Sagging
- Tack-free in 3 to 5 hours
- Pot Life Approx. 1 hour
- Shelf Life Approx. 3 years
- · Cleans up with water

Refer to www.DuROCK.com for the most up-to-date version of this document.