

8.0 PARGE COAT (PREPCOAT B2000)

As with all NUDURA products and accessories, the parge coat material is another of the important elements of construction that's unique to the NUDURA installation procedure. Parge coat is a term used by masons to define the thin coat of cementitious or polymeric mortar that is applied to concrete for refinement of its surface.

As is common in conventional construction methods, the purpose of parge coat is to provide smooth finish of the band of foundation wall surface that is typically exposed between the final grade of a building and its intended above grade finish material. This is especially true in more northerly climates where, because of snow and frost penetration in ground, building codes require a definite separation of the grade from the above grade installed finish, usually a minimum of 6" (152 mm).

When applied to NUDURA EPS foam, the parge coat is typically applied to lap overtop of the NUDURA Damproofing/Waterproofing membrane that is installed to approx. 6" (152 mm) below the projected finish grade level, and then extends to either the underside of a brick or stone veneer finish or laps approximately 1" (25 mm) underneath any non-brick finish applied to the above grade walls. As outlined in this section, the parge coat is typically applied in 2 coatings – each between 1/32" - 1/16" (0.8 mm - 1.6 mm) in thickness with a fiberglass mesh interlay that is applied and floated into the first coat.



FIGURE 8.01

PRODUCT DESCRIPTION

The material used for this purpose is Precoat B2000, an acrylic-modified cementitious dry mix base coat that is specifically designed for use over high-density expanded Polystyrene (EPS) insulated concrete Forms (ICF). B2000 forms a strong, yet flexible, base coat that eliminates problems normally associated with jobsite mixing of parge coatings (i.e. the addition of Portland cement). One 50 lb (22.7 kg) bag covers approximately 80 sq ft (7.5 sq m) wall area at a thickness of 1/12" (2 mm).

In addition to the Precoat B2000, a fiber mesh is also required during the installation of the parge coat. The fiber mesh comes in rolls that can cover 475 ft² (44 m²) of wall area. The purpose of the fiber mesh is to help strengthen the parge coat and ensure no shrinkage cracking will occur once the Precoat B2000 has completely cured.

PRODUCT FEATURES

- High Flexural and Bond Strength
- Water Vapour Permeable
- Excellent Freeze/Thaw Stability
- Low water Absorption
- High Workability
- Low Shrinkage



FIGURE 8.02

PARGE COAT

TECHNICAL DATA

Cohesive Strength:

- 2316 psi (15.8 MPa) after 3 days
- 3219 psi (22.6 MPa) after 7 days
- 3697 psi (25.5 MPa) after 14 days

PRECAUTIONS

Store the Prepcoat B2000 off the ground in a dry place away from direct sunlight. Make sure the EPS (expanded polystyrene) is free of dirt, frost, moisture, loose material, paint, or any other foreign matter. Make sure the surface and ambient temperatures are 41°F (5°C) or greater when applying B2000 and remain so for a minimum of 24 hours. Allow the B2000 to dry for a minimum of 24 hours before applying additional coats. Protect B2000 from winds exceeding 15mph (24 km/h), from rain, hail, snow, and all other possible damage until it has fully set and dried, and until all capping, flashing, and caulking have been completed.

8.1 MIXING INSTRUCTIONS

Gradually add one bag of B2000 to 1 imp. Gal (4.5 liters) of clean, potable water being continually mixed until a workable consistency is obtained.

1. Let the mixture stand for five minutes, then remix and use. Pot life is one hour.
2. Up to 8 oz (225 ml) of water may be added to enhance workability if mixture begins to stiffen before the hour expires.
3. Mixture may be remixed one time only. Afterward, discard any material that has begun to stiffen.

8.2 INSTALLATION INSTRUCTIONS

There are 4 key steps to ensuring the parge coat is properly installed onto NUDURA EPS. By following these installation processes, this will ensure the Prepcoat B2000 performs effectively on the EPS.

1. Rasp the NUDURA EPS foam to improve coating adhesion, and to remove waves, bumps, and UV degradation. Rasing tools commonly used for the EIFS stucco market work ideally for this purpose. Consult with your local builder supply warehouse for this type of specialty tool.
2. The contractor/installer then needs to mix and trowel or spray apply the base coat of Prepcoat B2000. As stated earlier, the B2000 should extend from 1" (25 mm) above the bottom of the exterior finish to 6" (152 mm) below grade, overtop of the NUDURA peel and stick membrane to form a drip edge that will shed any moisture to the ground. The 6" (152 mm) measurement will allow the parge coat to over lap the peel and stick membrane by 1" (25 mm). The B2000 can be trowel-applied with a stainless-steel trowel, or spray-applied through a ¼" (6 mm) orifice at 20 psi (145 kPa). When applying the Prepcoat, the single individual coats should not exceed ⅛" (3 mm) in thickness.



FIGURE 8.03



FIGURE 8.04

3. Immediately embed alkali-resistant fiberglass reinforcing mesh into the first coat. NUDURA recommends putting a double mat of fiber mesh on inside corners, outside corners, and corners of openings. These areas are susceptible to increased damage from exposure to every day events. Overlap the fiber mesh joints a minimum of 2" (50 mm). Apply additional coats of Precoat B2000 until the mesh pattern is not visible.
4. Apply the finish coat of B2000 24 hours after the base coat has been applied. Architectural designs now can be created on the finish coat to suit the requirements of the structure.

8.3 FINISHES TO PARGE INTERFACING

Should the exterior finish be directly applied acrylic stucco, the Precoat B2000 will still need to be applied to the section of wall that comes in contact with the finished grade. Most direct applied acrylic stucco manufacturer's products are not designed to resist the alkalis present in soils, and may breakdown over time. Please check with the stucco manufacturer for their recommendations for correct interface of their coatings with Precoat B2000 at grade level. If the recommendation is to use the Precoat, the same installation steps must be followed.