8.0 PARGE COAT

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 Dampproofing/ 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 ⅓₂" - ⅟₁₆" (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 NUBASE, an acrylic-modified cementitious dry mix base coat that is specifically designed for use over high-density expanded Polystyrene (EPS) insulated concrete Forms (ICF). NUBASE 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 ⅟₁₂" (2 mm).

In addition to the NUBASE, a fiber mesh is also required during the installation of the parge coat. The fiber mesh comes in rolls that can cover 475 ft^2 (44 m^2) 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 NUBASE 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

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 NUBASE 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 NUBASE to dry for a minimum of 24 hours before applying additional coats. Protect NUBASE 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 NUBASE 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 NUBASE performs effectively on the EPS.

1. Rasp the Nudura EPS foam to improve coating adhesion, and to remove waves, bumps, and UV degradation. Rasping 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 NUBASE 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 NUBASE 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 NUBASE, the single individual coats should not exceed ⅛" (3 mm) in thickness.
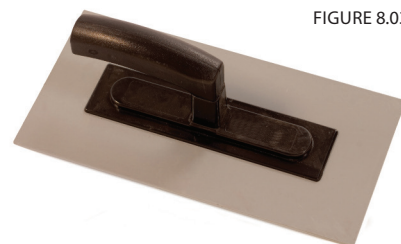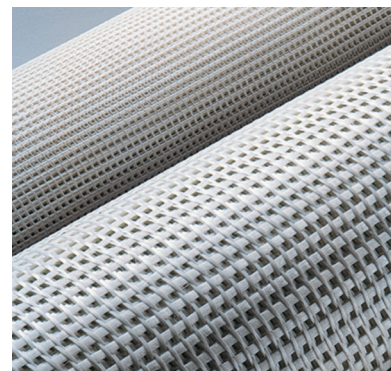
FIGURE 8.03

FIGURE 8.04

3. Immediately embed alkali-resistant fiberglass reinforcing mesh into the first coat. Tremco 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 NUBASE until the mesh pattern is not visible.

4. Apply the finish coat of NUBASE 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 NUBASE 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 NUBASE at grade level. If the recommendation is to use the NUBASE, the same installation steps must be followed.