



# 121 Optimum

## Premium Basecoat & Adhesive

TEST	METHOD	CRITERIA	RESULTS
Abrasion Resistance*	ASTM D968	No cracking or loss of film integrity at 528 quarts (500 L) of sand	Pass: 1000 Liters
Accelerated Weathering*	ASTM G153 (ASTM G 23)	No deleterious effects at 2000 hours when viewed under 5x magnification	Pass: 5512 hrs
Fungus Resistance	MIL STD 810B		28 days: no growth
Freeze/Thaw Resistance*	ASTM E2485	No deleterious effects at 10 cycles when viewed under 5x magnification	Pass: 60 Cycles
Impact Strength	EIMA 101.86 / ASTM E2486	Standard Impact	Pass with Standard Mesh, Higher Impact Ranges per Mesh
Mildew Resistance	ASTM D3273	No growth supported during 28 day exposure period	Pass: 60 Cycles
Water Penetration	ASTM E 331	No water penetration beyond the plane of the Basecoat/ EPS board interface after 15 minutes at 6.24 psf (299 Pa)	Pass: 12 psf for 45 minutes
Moisture Resistance	ASTM D2247	No deleterious effects at 14 day exposure	Pass: 28 days
Salt Fog Resistance*	ASTM B117	No deleterious effects at 300 hours	Pass: 600 hrs
Surface Burning Characteristics	ASTM E84	< 25 Flame Spread < 450 Smoke Developed	Flame Spread : 5 Smoke Developed : 5
Tensile Adhesion (psi)	ASTM C297	> 15 psi or no failure of adhesive	Concrete Block: 51 psi Gypsum Sheathing: 33 psi EPS Board: 41 psi Dens-Glass® Gold: 35 psi
Water Penetration	ASTM E 331	No water penetration beyond the inner-most plane of the wall after 2 hours at 299 Pa (6.24 psf)	Pass
Water Vapor Transmission	ASTM E 96 Procedure B	Vapor Permeable	Permeable
Wind-Driven Rain	F.S. TT-C-555B		24Hrs: No penetration of water

### DESCRIPTION:

- Basecoat for Parex EIFS
- Adhesive to laminate EPS to listed substrates
- Applied without the addition of cement
- Mixed on site with water
- Best in class workability
- Extended pot life

### USES:

- EPS adhesive for the following substrates:
  - Exterior grade gypsum sheathing
  - Glass mat gypsum sheathing
  - Masonry, concrete and cement board
  - EPS
  - Parex USA WeatherSeal Spray & Roll-On and WeatherSeal Trowel-On Water Resistant Barrier Coatings
- Basecoat for Parex Nu-Tech Stucco and other architectural coatings and finishes (ACF).
- Leveler and filler for masonry, concrete and stucco surfaces. For this application only, 121 Optimum Basecoat and Adhesive can be built up to 1/4 in. (6mm) thick in a single pass.

### COMPOSITION:

- Binder base: Copolymer compatible with portland cement
- Water base: VOC compliant
- Color: Light gray

\*Tested with Parex USA Reinforcing mesh and DPR Finish Coat

**COVERAGE:**

Depending on the condition of the substrate and method of application, approximate coverages per bag are:

- As an adhesive:
  - 5/16 in. (8mm) notched trowel: 130-140 ft<sup>2</sup> (12-13 m<sup>2</sup>)
  - 5/8 in. (16mm) notched trowel: 92-100 ft<sup>2</sup> (8-9 m<sup>2</sup>)
- 1/2 in. (12.7mm) trowel: 113-120 ft<sup>2</sup> (10.5 - 11.2 m<sup>2</sup>)
- As a Basecoat to embed 355 Parex USA Standard Mesh: 75-95 ft<sup>2</sup> (7-9 m<sup>2</sup>)
- As a leveler, coverage depends upon the thickness applied.

**CONTAINER:**

50 lb (22.7kg) net weight in multiwall water resistant bags.

- Storage: Store off the ground and protect from direct sunlight and moisture.
- Shelf life: Reference Parex USA Expiration Date of Products Technical Bulletin

**WORKING TIME:**

Pot life is 1–2 hours after water has been added. Open time is affected by humidity and temperature.

**DRYING TIME:**

Full adhesive bond strength is reached after 1–4 days, depending on humidity and temperature. Dries within 24 hours under normal drying conditions [70°F (21°C), 50% RH]. Cold and/or humid weather may extend drying time.

**CLEAN-UP:**

Water soluble prior to drying. Clean tools and containers with water before polymer/cement mixture sets.

**SURFACE PREPARATION:**

- Planar irregularities are limited to 1/4 in. (6mm) or less in a 4 ft. (1.22m) radius. Surface irregularities are limited to 1/4 in. (6mm) or less for masonry and concrete and 1/8 in. (3mm) or less for sheathing.
- Irregular and uneven surface should be filled with Parex 121 Optimum Basecoat & Adhesive.
- Remove surface contaminants such as dust or dirt without damaging the substrate.
- Painted substrates must have the paint removed with methods that result in no more than 10% of the remaining surface having paint.
- For additional options for surface preparation, contact Parex USA Technical Services Department.

**MIXING:**

- Use clean equipment for mixing and preparation.
- Add cool, clean potable water to desired consistency, approximately 4-7 quarts (3.7 - 6.6L). Add half 121 Optimum Basecoat & Adhesive and mix to a homogenous consistency using a heavy-duty 1/2 in. (13mm) drill with a rust-free paddle at 400-500 rpm. Add the remaining bag of material and mix thoroughly.
- Let the mixture stand for five to ten minutes after initial mixing, then remix material.
- Small amounts of clean potable water may be added to adjust workability after the initial mixing of the material, up to 8 oz of water (0.25 L).
- Half batches may be mixed for convenience.
- Only Parex USA approved additives can be added to this product.

**APPLICATION:**

- Read the entire label before using this product.
- Adhesive Application: Apply the 121 Optimum Basecoat & Adhesive to the entire surface on one face of the insulation board, using a 5/8 in. (16 mm) notched trowel for masonry and concrete, or a 1/2-in. notched trowel for the WaterMaster System, or a 5/16 in. (8 mm) notched trowel for sheathing. The ribbons should be of uniform thickness, run vertically when positioned on the wall (parallel to the 2 ft. [61cm] board dimension) and reach the perimeter of the insulation board. To ensure high initial grab and uniform adhesive contact, apply insulation board to the wall with firm pressure to the entire surface. Apply sufficient pressure to flatten adhesive ridges. Glass mat sheathing requires extra pressure.
- Basecoat Application: Rasp EPS board after 24 hours and when adhesive has fully cured and bonded (70°F (21°C), 50% RH). Using a stainless steel trowel, apply the 121 Optimum Basecoat & Adhesive mixture to the rasped surface of the insulation board to a uniform thickness of 1/16-3/32 in. (1.5-2.4mm). Embed the Parex USA reinforcing mesh immediately in the wet 121 Optimum Basecoat & Adhesive mixture. Smooth the surface of the 121 Optimum Basecoat & Adhesive mixture with a trowel until the reinforcing mesh is

fully embedded and the Basecoat thickness is approximately 1/16 in. (1.5mm). The color of the reinforcing mesh should not be visible at the surface of the 121 Optimum Basecoat & Adhesive material. A slight pattern of the mesh is acceptable, due to shrinkage of the cementitious Basecoat upon drying.

- As a leveler or filler: Apply Parex 121 Optimum Basecoat & Adhesive and trowel to a smooth, uniform surface. Maximum thickness in a single application should be no more than 1/4 in. (6mm).
- When overlapping reinforcing mesh, special care must be taken to ensure the basecoat & mesh is flat, level and free from bumps. Basecoat should be feathered onto either side of the overlap. The mesh overlaps should be reviewed to ensure they are acceptably flat before proceeding. Refer to Technical Bulletin 61 for more information.

**LIMITATIONS:**

- Ambient and surface temperature must be 40°F (4°C) or higher during application and curing time. Provide supplemental heat and protection from precipitation as needed.
- Use only on surfaces that are sound, clean, dry, unpainted, and free from any residue which may affect the ability of the 121 Optimum Basecoat & Adhesive to bond to the surface.
- Application in direct sunlight in hot weather will significantly reduce open time for embedding Parex reinforcing mesh and smoothing the surface.
- Do not use as a leveler for EPS. Rasp EPS level.

**WARNING:**

- Read complete warning information printed on product container prior to use. For medical emergency information, call 1-800-424-9300.
- For more information on handling this product refer to its Safety Data Sheet (SDS). The most current SDS and Product Data Sheet (PDS) can be found on our website.
- This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about the guidelines for the proper use and application of the covered product(s) under normal environmental and working conditions. Because each project is different, Parex USA, Inc. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

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