

PermaLath[®] 1000

Glass fiber reinforcing lath

COLOR

Grey

PACKAGING

39" x 150 lineal feet roll in poly bag,
31 lbs (14 kg.) per roll.

COVERAGE

487 ft² (45 m²)

SHIPPING & HANDLING

- Protect PermaLath 1000 during transportation and installation to avoid physical damage.
- Store PermaLath 1000 in an upright position in a cool, dry place protected from exposure to moisture. Protect from extreme heat and direct sunlight.

Weight: 8.8 oz/yard (294 g/m) ±5%

DESCRIPTION

Open weave, three-dimensional, self-furred, nominal 1/4" (6.3mm) thick glass fiber reinforcing lath designed for use with StuccoBase by Master Builders Solutions Wall Systems, other cementitious exterior wall coatings complying with ICC-ES AC-11 or with field mix exterior cement plaster conforming to ASTM C926 in "scratch and brown" applications. Listed in CCR 0249. Complies with the performance requirements of ASTM C1788 (per the test methods in ASTM C1764) and the installation requirements of ASTM C1787. United States. Patents 7,625,827 and 7,902,092.

USES

A component of a 1/2" to 7/8" (13mm to 22mm) thick cementitious exterior wall coating application of exterior Portland cement plaster (traditional stucco) that provides keying and continuous reinforcement for stucco used on vertical wall applications with solid backing. May also be used as a mortar base for light-weight veneer facing products such as precast stone veneer (ASTM C1780).

Note: Not for use on soffits or open framing.

ADVANTAGES

Non metallic.

Pliable, with no sharp edges making it easier and safer to handle and cut.

Non-directional and can be applied vertically or horizontally.

Wide rolls allowing for fewer overlaps giving better coverage.

Three-dimensional profile which is self-furring. Excellent mechanical key using traditional fastening procedures.

Alkali resistant giving long-term durability and performance.

Packaged in light-weight rolls to allow for faster application time resulting in labor savings.

Acceptable wall substrates include:

Poured concrete/unit masonry; ASTM C1177 type sheathings, including DensGlass[™] or DensElement exterior sheathing, eXP[™] sheathing, GlasRoc[®] sheathing, Securock[™] glass-mat sheathing, Weather Defense TM Platinum sheathing, GreenGlass[®] sheathing; PermaBase[™] cement-board and other cement-boards (ASTM C1325 Type A Exterior); Untreated Exposure I or exterior plywood sheathing (grade C-D or better), Untreated Exposure I OSB, Zip Sheathing, Fire Treated wood sheathing; Pyro-Guard[®] and Dricon[®] plywood and FlameBlock[®] OSB; gypsum sheathing (ASTM C79/ASTM C1396).

TEST	METHOD	CRITERIA	RESULTS
Softening	ASTM C338	Pass (>750F)	Pass (>750 °F)
Surface Burning	ASTM E84	Report Value	<25 Flame Spread <450 Smoke Developed
Fire Resistance Rated Assemblies	ASTM E119	No transmission of heat greater than 250°F above ambient; no passage of flame or hot gasses; no passage of water from hose stream test; for loadbearing walls – ability to withstand load under test conditions	1 Hour: 3/4" ASTM C926 stucco with PermaLath 1000 over steel framing, 5/8" Type X on both sides. 1/2" StuccoBase with PermaLath 1000 over steel framing, 5/8" Type X on both sides 1 Hour (inside only) 3/4" ASTM C926 stucco with PermaLath 1000 over 2 x 4 framing, 5/8" Type X on inside, 7/16" OSB on outside
Non-Combustible	ASTM E136 (IBC Section 7.3.5.2)	Vertical Tube Furnace at 750°C	Pass
Tensile Strength	ASTM E2098	Greater than 120 pli (21 dN/CM) retained tensile strength	Pass
Wind Load	ASTM E330	Assembly descriptions: 2x4 SPF wood studs 16" oc, 2 layers water resistive barrier, PermaLath 1000 fastened 6" oc with 1" crown x 1-1/4" long staples 6" oc vertically to studs x 16" oc horizontally, 3/4" stucco	Average ultimate pressures: Negative: 124 PSF Positive: 163 PSF (tested w/ 7/16" OSB)
Wind Load	ASTM E330	3-5/8" x 1-5/8" 20 ga steel studs 16" oc, 1 layer water resistive barrier, PermaLath 1000 fastened 6" oc vertically to studs x 16" oc horizontally with No 6, 1-1/4" bugle head screws and galvanized Lath Plates, 3/4" stucco.	Average ultimate pressures: Negative: 63 PSF Positive: 153 PSF (tested with 1/2" ext gyp sheathing)
Wind Load	ASTM E330	For use with EIFS	Negative: 300 PSF
Fastener Attachment	AC 275 Section 3.4	>85 lbs.	Pass
Attachment	AC 275 Section 3.2.3	>12 lbs. cementitious exterior wall coatings >18 lbs. stucco >48 lbs. stone veneer	Pass
Embedment	AC 275 Section 3.3	Minimum ¼" embedment	Pass
Tensile/Yield Strength	Lab test	Report value	>300 lbs/in in both directions
Miami Dade Building Code Compliance	NOA (Notice of Acceptance)	21-0517.07, 21-0517.08, 21-0517.12 & 21-0517.13 – Platinum CI Stucco Ultra systems	

APPLICATION

Apply PermaLath 1000 over substrate and properly installed, code compliant water-resistant barrier (on substrates where required by building code) with minimum 3" overlap at vertical and horizontal edges and overlap on flange of trim accessories. PermaLath 1000 can be applied horizontally or vertically and should be applied such that it is flat and free of ripples, wrinkles, etc. Apply cement plaster stucco or veneer facing within 60 days of PermaLath 1000 installation.

Washers (for use with screws, nails or pins): ULP-302 (1 3/4") or Lath Plate (1 1/4") by Wind-Lock Corp.

Fastener Spacing: 6" o.c. vertically and 16" o.c. horizontally. Maximum stud spacing 16" on center.

- **Masonry:** masonry type screw [M] or expandable masonry fastener with ULP 302 washer or Lath Plate; 1" (25 mm) minimum penetration into masonry.
- **Light Gauge Steel Framing/Furring (20 Gauge):** light metal type [LM] bugle head screws with ULP 302 washer or Lath Plate; 5/8" (16 mm) minimum penetration into framing.
- **Heavy Gauge Steel Framing (18 to 12 Gauge maximum):** metal type [S] bugle head screws with ULP 302 washer or Lath Plate or 1 1/4" (32 mm) long x 1/8" (2.5 mm) diameter VersaPin Gripshank® fasteners by Aerosmith Fastening Systems with Lath Plates; 5/8" (16 mm) minimum penetration to framing.
- **Wood Framing:** wood type [W] bugle head screws with ULP 302 washer or Lath Plate; 5/8" (16 mm) minimum penetration into framing or minimum 16 gauge wire staples with minimum 3/4" (19 mm) crown and minimum 3/4" (19 mm) penetration into framing.

NOTE: Fasteners selected by the project design team shall be adequate to resist project design loads and appropriate for the specified substrate. Additional fasteners, into the framing or sheathing, can be used to secure the PermaLath 1000 prior to application of cement plaster stucco. Fastening systems/ tools for staples are available through Senco (www.senco.com) and other manufacturers.

Install cementitious plaster stucco or veneer facing per manufacturer specifications and details.

TRIM ACCESSORIES

NOTE: Selection of the type of trim accessory materials is the responsibility of the design professional. Installation of accessories shall be in accordance with ASTM C1063.

EXPANSION AND CONTROL JOINT PLACEMENT

Expansion/control joints are needed in thick, Portland cement-based plaster products such as StuccoBase, to minimize potential cracking caused by stresses such as initial shrinkage, thermal expansion and contraction. Selection of the type of trim accessory materials and placement of control and expansion joints is the responsibility of the design professional, however guidelines for the placement of the joints are as follow:

- Control joints every 144 ft² (13.4 m²) of wall surface area with maximum uncontrolled length or width of 18 lineal feet (5.5 lineal meters) and a maximum uncontrolled length-to-width ratio of 2 1/2:1. At door and window bucks, and at large wall penetrations or openings.
- Expansion joints at dissimilar substrates. If building expansion/contraction is anticipated, a true expansion joint will be necessary.

TYPICAL USE OF TRIM ACCESSORIES

- Building corners: zinc, galvanized wire or vinyl corner bead.
- Window, door heads, jambs, A/C units, etc.: zinc, galvanized wire short flanged reinforcement or vinyl casing bead (installed over flashing at window/door heads).
- Drip or aesthetic joints, window or door bucks, and at large penetrations in the wall (A/C units, etc.): zinc, galvanized or vinyl expansion joints.
- Substrate change: zinc expansion joint or panel/expansion joint or back to back casing bead with backer rod and sealant.
- Panel or true expansion joints: zinc, galvanized or vinyl expansion joint or back-to-back casing beads with backer rod and sealant or zinc corner beads or back-to-back wire reinforcement corner bead with backer rod and sealant.

- Expansion/control joint.
- Termination at foundation: zinc, galvanized or vinyl weep screed

Trim Manufacturers: Casing beads, corner beads, expansion joints, weep screed and other trim accessories must comply with ASTM D1784 for vinyl, ASTM A653/A653M for galvanized and ASTM B69 for zinc.

TRIM JUNCTION RECOMMENDATIONS:

- When two pieces of trim abut: Set intersection of trim in a minimum 4" (100 mm) bed of low modulus trim sealant. Allow 1/8"–3/16" (3-5 mm) gap between the abutting trim pieces. Do not overlap trim. Attach the trim in accordance with manufacturer's specifications.
- When two or more pieces of trim intersect: The vertical trim piece shall be continuous with all horizontal pieces. Miter all corners at intersections of trim. Set intersection of trim in a minimum 4" (101 mm) bed of low modulus trim sealant. Allow 1/8"–3/16" (3-5 mm) gap between the intersecting trim pieces. Do not overlap the trim. Attach the trim in accordance with manufacturers' specifications.

LIMITATIONS

- Apply cement plaster stucco or veneer facing within 60 days of PermaLath 1000 installation.
- Not for use on soffits or over open framing.
- Maximum stud spacing 16" on center
- Minimum thickness of 1/2" when StuccoBase or other cementitious exterior wall coating is installed in accordance with ICC-ES AC-11.
- Maximum allowable weight of adhered veneer cladding is 24 lbs. per square foot (includes maximum 15 lbs. per square foot veneer unit weight and maximum 9 lbs. per square foot mortar scratch and bed coat)

TECHNICAL SUPPORT

Consult Master Builders Solutions Technical Services Department at **+1 (800) 589-1336** for specific recommendations concerning all other applications. Consult the Wall Systems website at **www.master-builders-solutions.com/en-us**, for additional information about products and systems and for updated literature.

HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting **www.master-builders-solutions.com/en-us**, e-mailing your request to **mbsbcst@mbcc-group.com** or calling **+1 (800) 433-9517**. Use only as directed. **IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.**

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