Code Compliance Research Report
CCRR-0249

Issue Date: 06-27-2016
Revision Date: 06-23-2025
Renewal Date: 06-30-2026

DIVISION: 09 00 00 – FINISHES
Section: 09 22 36 –Lath

REPORT HOLDER:

Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
(800) 589-1336
https://usa.sika.com

ADDITIONAL LISTEE:

Saint-Gobain Adfors America, Inc.
1795 Baseline Road
Grand Island, New York 14072
(716) 775-3900
www.adfors.com/us/

REPORT SUBJECT:

Sika Corporation:
SikaWall-9000 PermaLath® 1000 Glass Fiber Lath

Saint-Gobain ADFORS America, Inc.:
FibaLath™ Glass Fiber Lath

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes (see Table 1):

- 2024, 2021, 2018 *International Building Code®* (IBC)
- 2024, 2021, 2018 *International Residential Code®* (IRC)
- 2023, 2020 *Florida Building Code* excluding High Velocity Hurricane Zones (see Section 8)

Note: 2023 Florida Building Code Sections are the same as the 2021 International Building Code.

1.2 The PermaLath® 1000 and FibaLath™ Glass Fiber Laths have been evaluated for the following properties (see Table 1):

- Wind resistance
- Durability
- Fire resistance
- Non-combustibility
- Use in Types I, II, III, IV and V Construction

1.3 The PermaLath® 1000 and FibaLath™ Glass Fiber Laths have been evaluated for the following uses:

- Reinforcement for exterior cement plaster
- Sika Corporation StuccoBase cementitious wall covering
- Exterior cement plaster supporting precast stone veneer

2.0 STATEMENT OF COMPLIANCE

The PermaLath® 1000 and FibaLath™ Glass Fiber Laths comply with the Codes listed in Section 1.1, for the properties stated in Section 1.2 and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 5.0.

2.1 2024 IBC and IRC Evaluation Reports: The Intertek CCRR is an *Evaluation Report* for approval of an alternate material, design, or method of construction in accordance with Section 104.2.3.6.1 of the 2024 IBC and Section R104.2.2.6.1 of the 2024 IRC.

3.0 DESCRIPTION

3.1 Glass Fiber Lath:

PermaLath® 1000 and FibaLath™ are open-weave, three dimensional laths, formed from glass fibers. The lath has a nominal thickness of 1/4 inch, weighs 8.8 oz/yard^2 and is supplied in 39-inch-wide by 150-foot-long rolls.

3.2 Exterior Wall Coverings:

This report recognizes use of PermaLath® 1000 and FibaLath™ with the following exterior wall coverings:

- Sika Corporation StuccoBase cementitious wall covering recognized in CCRR-0230;
- Exterior cement plaster supporting precast stone veneer recognized in a current research or evaluation report as

- complying with ICC-ES AC51; and Exterior cement plaster (stucco) conforming to ASTM C926.

3.3 Substrates:

Substrates must be:

- Minimum 7/16-inch-thick, Exposure 1, oriented strand board (OSB) complying with U.S. DOC PS-2;
- Minimum 7/16-inch-thick, Exterior or Exposure 1 plywood complying with U.S. DOC PS-1 or PS-2; or
- Minimum 1/2-inch-thick water-resistant core gypsum sheathing board complying with ASTM C1396 or ASTM C1177.

4.0 INSTALLATION

4.1 General:

The PermaLath® 1000 and FibaLath™ Glass Fiber Laths must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation.

The lath must be attached as described in Tables 2 and 3.

Exterior cement plaster must be proportioned, mixed, and installed in accordance with ASTM C926, and must have a minimum thickness of 3/4 inch.

Sika Corporation StuccoBase exterior wall covering must be installed in accordance with the applicable evaluation report and as follows:

- The coating must have a minimum thickness of 1/2 inch.
- Installation is limited to the assemblies described in this report.

Precast stone veneer must be recognized in a current evaluation report as complying with ICC-ES AC51, where the PermaLath® 1000 or FibaLath™ is permitted in lieu of metal lath.

4.2 Resistance to Windloads:

The maximum allowable positive and negative wind loads on exterior wall systems incorporating PermaLath® 1000 or FibaLath™ glass fiber laths are noted in Table 2.

4.3 One-hour Fire-resistance-rated Wall Assemblies:

Fire-resistance-rated wall assemblies incorporating PermaLath® 1000 or FibaLath™ laths must conform with the assemblies described in Tables 3 and 4.

4.4 Exterior Walls in Types I, II, III and IV Construction:

4.4.1 Assemblies Without Foam Plastic Insulation: PermaLath® 1000 or FibaLath™ embedded into exterior cement plaster complying with the code, Sika Corporation StuccoBase cementitious exterior wall coating cementitious exterior wall coating are considered noncombustible in accordance with Section 703.3 of the IBC.

4.4.2 Assemblies incorporating foam plastic insulation must be as described in Table 5.

5.0 CONDITIONS OF USE

5.1 Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

5.2 Design loads for the exterior wall covering systems described in this report must be determined in accordance with the applicable code and must not exceed the allowable wind loads described in Table 2 of this report. The framing and sheathing must be designed and installed in accordance with the applicable code.

5.3 Use in one-hour fire-resistance-rated wall assemblies must be as described in Section 4.3 and Tables 3 and 4.

5.4 Use on exterior walls of Type I, II, III or IV construction must be as described in Section 4.4 and Table 5.

5.5 When used as a component of a precast stone veneer system, use of the PermaLath® 1000 or FibaLath™ glass fiber lath must be acceptable to the manufacturer of the precast stone veneer system.

5.6 The lath is manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

6.0 SUPPORTING EVIDENCE

6.1 Reports of tests in accordance with ASTM E119, ASTM E136, NFPA 268, NFPA 285.

6.2 Data in accordance with the ICC-ES AC275, *Acceptance Criteria for Glass Fiber Lath Used in Cementitious Exterior Wall Coatings or Exterior Cement Plaster (Stucco)*, dated April 2011, editorially revised August 2013.

6.3 Third-party engineering analysis of ASTM E119 and NFPA 285 assemblies.

6.4 Documentation of an Intertek approved quality control system for the manufacturing of products recognized in this report.

7.0 IDENTIFICATION

Each roll of PermaLath® 1000 and FibaLath™ is identified by a label bearing the company name, roll dimensions, the Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0249).

CODE COMPLIANCE
Intertek
CCRR-0249

8.0 FLORIDA BUILDING CODE

PermaLath® 1000 and Saint-Gobain FibaLath™ glass fiber laths, described in Sections 2.0 through 6.0 of this Research Report, comply with the 2023 and 2020 *Florida Building Code – Building* and *Florida Building Code – Residential*, subject to the following condition:

- Use of PermaLath® 1000 or FibaLath™ glass fiber lath for compliance with the High-Velocity Hurricane Zone provisions of the Florida Building Code has not been evaluated and is outside the scope of this Research Report.

Intertek is an approved evaluation entity and quality assurance entity pursuant to Florida Statute 553.842 – *Product Evaluation and Approval*

9.0 CODE COMPLIANCE RESEARCH REPORT USE

9.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

9.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

9.3 Reference to the https://bpdirectory.intertek.com is recommended to ascertain the current version and status of this report.

TABLE 1 – PROPERTIES EVALUATED

PROPERTY	2024 IBC	2023 FBC - BUILDING	2024 IRC	2023 FBC - RESIDENTIAL
Wind resistance	104.2.3, 1609	104.11, 1609	R301.2.1	R302.1.2.1
Durability	104.2.3	104.11	104.2.2	104.11
Fire resistance	703.2	703.2	R302	R302
Noncombustibility	703.3	703.3	Not applicable	Not applicable
Use on walls in Types I, II, III and IV Construction	2603.5	2603.5	Not applicable	Not applicable

TABLE 2 – ALLOWABLE WIND LOADS

FRAMING	SHEATHING[1]	LATH ATTACHMENT	EXTERIOR WALL COVERING	ALLOWABLE WIND LOADS (psf)	
				Positive	Negative
2 x 4 wood studs, min. 0.42 specific gravity, max. 16“o.c.	Min. 7/16 in. OSB or 7/16 in. plywood	3/4 in. crown x 1-1/4 in., No. 16 ga. staples, spaced at 6 in. o.c., fastened into framing	Exterior cement plaster complying with ASTM C926 – 3/4 in. thick	54	41
			StuccoBase – 1/2 in. thick	23	30
			Precast stone veneer[2]	Per the research report on the stone veneer	
No. 20 gage steel, max. 16 in. o.c.	Min. 1/2 in. gypsum sheathing	#6 x 1-1/4 in. Type S, 0.32-in-dia. head screws, OR 1-/14 in. by 0.10-in. dia. VersaPIN Gripshank fasteners, With 1-1/4 in. Wind-Lock Lath Plates (legless), spaced 6 in. o.c., fastened into framing	Exterior cement plaster complying with ASTM C926 – 3/4 in. thick	51	21
			StuccoBase – 1/2 in. thick	23	21
			Precast stone veneer[2]	Per the research report on the stone veneer	

[1]Sheathing must comply with, and be installed in accordance with, the code.
[2]Precast stone veneer must comply with ICC-ES AC51

TABLE 3 – ONE-HOUR FIRE-RESISTANCE-RATED ASSEMBLIES WITHOUT FOAM PLASTIC INSULATION

ASSEMBLY	INTERIOR	FRAMING	SHEATHING	LATH ATTACHMENT	COATING
Nonload Bearing	Min. 5/8 in. Type X gypsum sheathing installed vertically with #6 x 1 in., screws spaced 8 in. o.c. on perimeter and 12 in. o.c. on intermediate studs, joints must be backed by framing, joints and nail heads must be treated per ASTM C840 or GA216	Min. No. 20 gage steel, max. 16 in. o.c.	Min. 5/8 in. Type X gypsum sheathing installed horizontally with #6 x 1-1/4 in. screws spaced 8 in. o.c.; weather-resistive barrier applied over sheathing	PermaLath® 1000 or FibaLath™ attached per Table 2	StuccoBase – 1/2 in.
Nonload Bearing	Min. 5/8 in. Type X gypsum sheathing installed vertically with #6 x 1 in., screws spaced 8 in. o.c. on perimeter and 12 in. o.c. on intermediate studs, joints must be backed by framing, joints and nail heads must be treated per ASTM C840 or GA216	Min. No. 20 gage steel, max. 16 in. o.c.	Min. 5/8 in. Type X gypsum sheathing installed horizontally with #6 x 1-1/4 in. screws spaced 8 in. o.c.; weather-resistive barrier applied over sheathing	PermaLath® 1000 or FibaLath™ attached per Table 2	ASTM C926 – 3/4 in.
Limited Load Bearing[1, 2]	Min. 5/8 in. Type X gypsum sheathing installed vertically with 1-7/8 in., 0.0975 in. dia., cuphead drywall nails, spaced 8 in. o.c., joints must be backed; joints and nail heads must be treated per ASTM C840 or GA216	Min. 2 x 4 wood, max. 16 in. o.c., R-11 kraft-faced fiberglass in stud cavities	Min. 7/16 in. OSB installed horizontally with 6d sinker nails spaced at 8 in. o.c.; two layers of water-resistive barrier applied over sheathing per IBC Section 2510.6 or IRC Section R703.6	PermaLath® 1000 or FibaLath™ attached per Table 2	ASTM C926 – 3/4 in.

[1]Axial Design: Axial loads applied to the wall assembly shall be limited to the lesser of the following:

a. 1,100 pounds per stud

b. A maximum of 47.5% of the load calculated in accordance with Sections 3.6 and 3.7 of the ANSI/AWC NDS

c. Design stress of 0.78 F'_c calculated in accordance with Sections 3.6 and 3.7 of the NDS

d. Design stress of 0.78 F'_c calculated at a maximum l_e/d of 33 calculated in accordance with Sections 3.6 and 3.7 of the NDS

[2] Exterior walls shall have a minimum fire separation distance of 5 feet (1524 mm) in accordance with IBC Section 705.5

TABLE 4 – ONE-HOUR NONLOAD-BEARING FIRE-RESISTANCE-RATED ASSEMBLIES INCORPORATING FOAM PLASTIC INSULATION

WALL COMPONENT	MATERIALS
Interior gypsum board	Minimum 5/8-inch-thick Type X gypsum board complying with ASTM C1396, installed vertically and attached to framing using minimum #6 by 1-1/4-inch self-tapping drywall screws at 8 in. o.c. on top and bottom tracks and 12 in. o.c. on each stud. All joints and fasteners require a Level 2 finish
Steel framing	Minimum 3-5/8-inch-deep, minimum No. 20 gage steel studs spaced a maximum of 24 in. o.c.
Wall cavity insulation – use 1, 2 or 3	1 – none 2 – fiberglass batt insulation (faced or unfaced) 3 – mineral wool insulation (faced or unfaced)
Exterior sheathing	Minimum 5/8-inch-thick Type X gypsum board complying with ASTM C1396 of ASTM C1177, installed vertically and attached to framing with No. 6 by 1-1/4-inch self-tapping screws spaced 8 in. o.c. around the perimeter and in the field.
Water-resistive barrier – use 1, 2, 3, 4 or 5	1 – one layer of No. 15 felt complying with ASTM D226, Type I 2 – Sikagard AWB 660, Senershield-R, Finestop-RA, Sikagard AWB 660 I, Senershield-VB or Finestop-VB 4 – Grade D building paper recognized in a current evaluation report 5 – Tyvek Commercial Wrap (ICC-ES ESR-2375)
Continuous insulation – use 1 or 2	1 – expanded polystyrene (EPS) foam plastic insulation complying with ASTM C578, Type II, max. 2-1/2 inches thick 2 – BASF Neopor EPS insulation, recognized in ICC-ES ESR-3463, max 2-1/2 inches thick Insulation installed in running bond pattern and attached to framing with two #8 by 4-inch ITX Buildex screws and 1-1/4-inch diameter Wind-Lock Lath-Plate Fasteners (legless) (Part no. SP114WLF) (or equivalent) spaced 7 in. o.c.
Lath	PermaLath® 1000 or FibaLath™ glass fiber lath installed horizontally over insulation with minimum 3-inch overlaps at horizontal edges and attached to framing with #8 by 4-inch ITW Buildex screws and 1-1/4 in. Wind-Lock Lath-Plates (legless) (Part No. SP114WLF) (or equivalent), spaced 7 in. o.c.
Exterior wall covering	Minimum 1/2-inch-thick StuccoBase
Finish	Any acrylic or cement-based finish or coating material applied over the stucco surface per manufacturer's instructions

TABLE 5A – EXTERIOR WALLS IN TYPES I, II, III AND IV CONSTRUCTION

WALL COMPONENT	MATERIALS
Base wall system – use 1, 2 or 3	1 – concrete wall 2 – concrete masonry wall 3 – one layer of 1/2-inch thick regular or Type X gypsum board on interior, installed horizontally or vertically over minimum 3-5/8 inch, No. 20 gage steel framing spaced a maximum of 16 inches on center with lateral bracing every 4 feet vertically; gypsum board attached to framing with #6 by 1-1/4 self-drilling bugle-head screws spaced 8 in. o.c. on the perimeter and 12 in. o.c. in the field; joints and fasteners must have a Level 2 finish; framing for openings must be minimum No. 20 gage steel
Floorline firestopping	Min. 4 pcf mineral wool (e.g. Thermafiber) in each stud cavity at each floorline; attached with Z-clips or equivalent
Cavity insulation – use 1 or 2	1- none 2 – any noncombustible insulation (faced or unfaced)
Exterior sheathing	1/2- or 5/8-inch-thick exterior gypsum sheathing complying with ASTM C1396 or ASTM C1177; sheathing attached to framing with #6 by 1-14 self-drilling screws spaced at 8 in. o.c.
Air or water-resistive barrier applied over exterior sheathing	Any barrier described in Table 5B
Exterior insulation – use 1, 2, 3, 4, 5 or 6	1 – EPS, ASTM C578, Type II, max 2.5 inches (see note 1) 2 – EPS, ASTM C578, Type XI, max. 4.7 inches (see note 1) 3 – EPS, ASTM C578, Type IX, max. 1.8 inches (see note 1) 4 – BASF Neopor EPS, ASTM C578 Type II, max. 2.4 inches (see note 1) 5 – XPS, ASTM C578 Type X or Type IV (see notes 1 and 2) 6 – Polyisocyanurate, ASTM C1289 (see notes 1 and 2)
Lath	PermaLath® 1000 or FibaLath™ glass fiber lath applied horizontally with 3-inch overlaps at seams; attached to framing with #8 by 4-inch ITW Buildex screws and 1-1/4 in. Wind-Lock Lath-Plates (legless) (Part No. SP114WLF) (or equivalent), spaced 7 in. o.c.
Exterior wall covering – use 1 or 2	1 – StuccoBase, min. 1/2 inch thick 2 – Stucco complying with ASTM C926, min. 3/4 inch thick
Finish – use 1 or 2	1 – Any Sika Corporation finish coating 2 – Any cementitious finish coating
Flashing of window, door and other exterior wall penetrations (optional)	Window, door and penetrations may be flashed with acrylic, asphalt or butyl-based flashing tape, max. 12 inches wide
Accessories – use 1 or 2 (see Figure 1)	1 – Galvanized steel, minimum 0.0172 inch thick 2 – PVC extrusions

Note 1 – Foam plastic insulation must be recognized in a current research report and must have a flame-spread index and smoke-developed index of 25 or less and 450 or less, respectively.

Note 2 – The potential heat of the foam plastic insulation at the maximum installed thickness must not exceed 4999 Btu/ft^2, as determined in accordance with NFPA 259.

TABLE 5B – AIR AND WATER-RESISTIVE BARRIERS FOR USE IN ASSEMBLIES DESCRIBED IN TABLE 5A

Water-resistive Barrier – Over Sheathing
No. 15 Asphalt felt – ASTM D226, Type 1 – one layer
Sikagard AWB 660 I
Senershield-VB
Finestop-VB
Sikagard AWB 660
Senershield-R
Finestop-RA
Tyvek® StuccoWrap® - DuPont
WeatherMate™ or WeatherMate™Plus – Dow Chemical
CertaWrap™ - CertainTeed

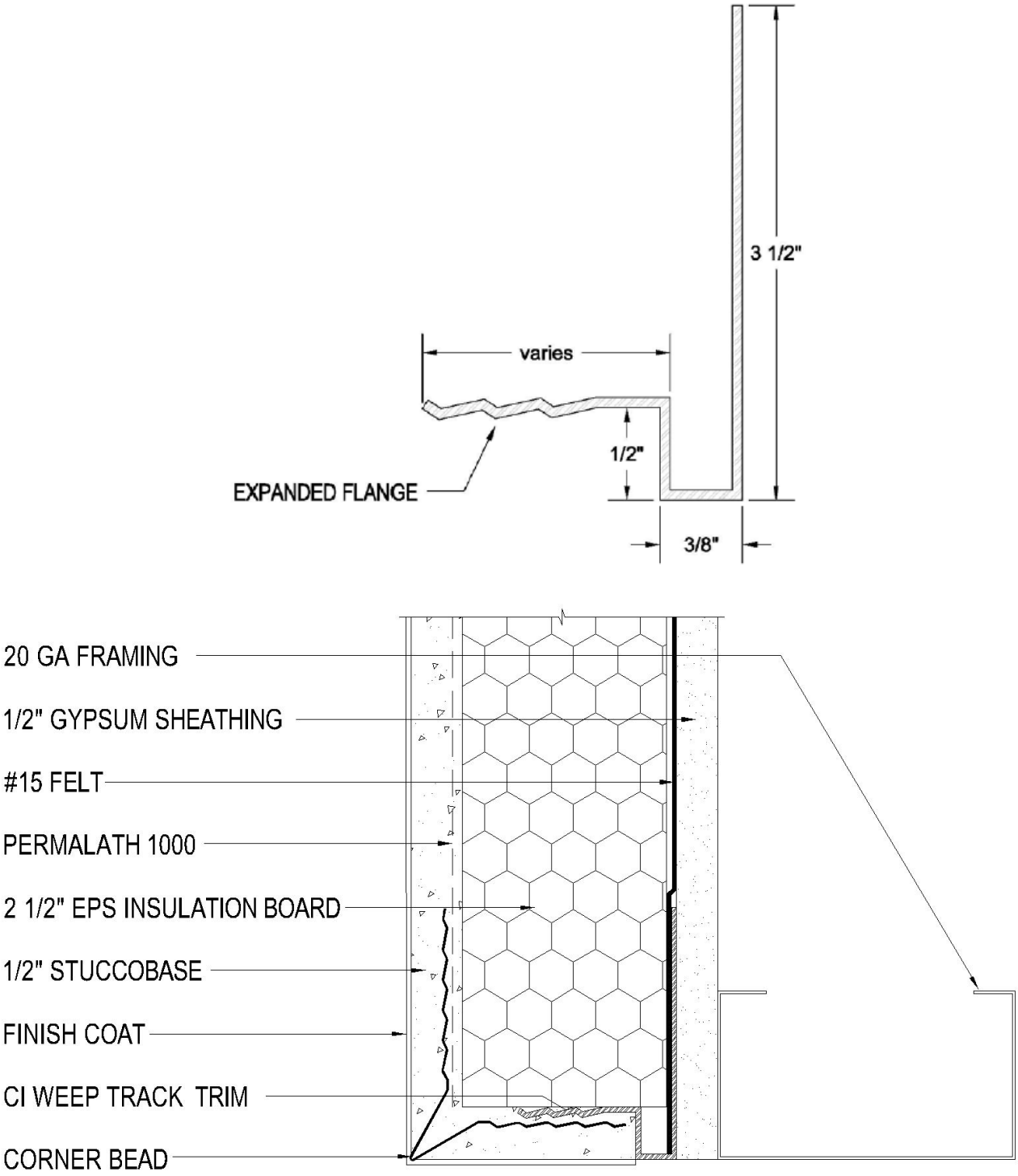

Figure 1 – Typical opening detail for NFPA 285 assembly (See Table 5)