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STRUCTALATH III NO. 17 SFCR, STRUCTALATH NO. 17 SFCR TWIN TRAC 2.5, STRUCTA MEGA LATH, STRUCTA MEGA POWER TIE LATH, V-TRUSS WALLS AND CEILINGS LATH, STRUCTALATH III 316 SFCR

CSI Section:
09 22 36.23 Metal Lath

1.0 RECOGNITION

Structa Wire ULC Lath products recognized in this report have been evaluated for use as lath for cement plaster. The physical properties of the Structa Wire ULC Lath products were evaluated for compliance with the following codes:

- 2020 and 2017 Florida Building Code (FBC–Building) including HVHZ – attached Supplement
- 2020 and 2017 Florida Residential Code (FBC–Residential) including HVHZ – attached Supplement

2.0 LIMITATIONS

Use of Structa Wire ULC Lath products described in this report is subject to the following limitations:

2.1 Installation shall comply with this report, the manufacturer’s published installation instructions and the applicable code. Where conflicts occur, this report governs.

2.2 Walls shall be braced in accordance with 2018 and 2015 IBC Section 2308.6 (2012 and 2009 IBC Section 2308.9.3 or 2308.12) or IRC Section R602.10 and R602.12.

2.3 The Structa Wire ULC Lath products recognized in this report are produced manufactured by Structa Wire ULC in Vancouver, British Columbia, Canada.

3.0 PRODUCT USE

Structa Wire ULC products are alternatives to laths complying with IBC Section 2510 and 2018 and 2015 IRC Section 703.7.1 (2012 and 2009 IRC Section 703.6.1) and act as reinforcement of exterior plaster complying with IBC Sections 2507 and 2512, or 2018 and 2015 IRC Section 703.7 (2012 and 2009 IRC Section R703.6).

3.1 Installation

3.3.1 Installation General: The laths shall be installed in accordance with IBC Section 2510, and either Section 2511 or 2512; 2018 and 2015 IRC Section R703.7 (2012 and 2009 IRC Section R703.6); ASTM C1063; or an evaluation report on exterior cementitious wall coating systems issued by an approved and accredited evaluation report service. The long dimension of the lath shall be perpendicular to supports, except that at gable walls on exterior installations, the lath may be installed with the long dimension parallel to the roof slope.

3.3.2 StructaLath III No. 17 SFCR: The lath shall be applied to vertical surfaces having wood or metal supports or to horizontal wood, metal or concrete supports. The maximum support spacing shall be 16 inches (406 mm) center to center. Fastener type shall comply with ASTM C1861 and fastener spacing shall comply with ASTM C1063 or 2018 and 2015 IRC Section R703.7.1 (2012 and 2009 IRC Section R703.6.1) as applicable for welded wire lath, except that the fasteners shall attach the lath to the framing supports either at the furring crimps on the vertical cross wires, at the intersection of the longitudinal wire and cross wire, or the lath may be installed by placing a nail or screw fastener between the two Twin Trac longitudinal wires, or a staple over any longitudinal wire. The lath shall be lapped a minimum of one mesh at sides. Ends shall be lapped a minimum of one mesh and shall occur over supports. Additional installation requirements as set forth in an evaluation report on exterior cementitious wall coating systems shall apply as applicable.

3.3.3 StructaLath No. 17 SFCR Twin Trac 2.5: The lath shall be applied to vertical surfaces having wood or metal supports or to horizontal wood, metal or concrete supports. For use as an alternative to the 2.5 lb/yd² (1.4 kg/m²) expanded sheet metal lath, the maximum support spacing shall comply with Table 1 of ASTM C1063 for 2.5 lbs/yd² (1.4 kg/m²) diamond mesh metal lath. The fastener type shall comply with ASTM C1861 and fastener spacing shall comply with ASTM C1063 or 2018 and 2015 IRC Section R703.7.1 (2012 and 2009 IRC Section R703.6.1) as applicable for expanded sheet metal lath, except that the fasteners shall attach the lath to the framing supports either at the furring crimps on the vertical cross wires, or at the intersection of the longitudinal wire and cross wire; or the lath may be installed by placing a nail or screw fastener between the two Twin Trac longitudinal wires, or a staple over any longitudinal wire.
For use as an alternative to the 1.14 lb/yd² (0.618 kg/m²) welded wire lath, the maximum support spacing shall comply with Table 1 of ASTM C1063 for 1.14 lb/yd² (0.618 kg/m²) welded wire lath. The fastener type shall comply with ASTM C1861 and fastener spacing shall comply with ASTM C1063 or 2018 and 2015 IRC Section R703.7.1 (2012 and 2009 IRC Section R703.6.1), as applicable, for welded wire lath, except that the fasteners shall attach the lathe to the framing supports either between the primary and secondary longitudinal wires or at the intersection of the longitudinal wire and cross wire; or the lathe may be installed by placing a nail or screw fastener between the two Twin Trac longitudinal wires, or a staple over any longitudinal wire.

3.3.4 V-Truss Walls and Ceilings Lathe: The lathe shall be applied to vertical surfaces having wood or metal supports or to horizontal wood, metal, or concrete supports. For use as an alternative to the ¾-inch (9.6 mm), 3.4 lb/yd² (1.8 kg/m²) rib metal lathe, the maximum support spacing shall be in accordance with Table 1 of ASTM C1063 for ¾-inch (9.6 mm), 3.4 lb/yd² (1.8 kg/m²) rib metal lathe. Fastener type shall comply with ASTM C1861 and fastener spacing shall comply with ASTM C1063 or 2018 and 2015 IRC Section R703.7.1 (2012 and 2009 IRC Section R703.6.1) as applicable for rib metal lathe, except that the fasteners may be 1 ½ inch (37.6 mm) long No. 16 gauge (0.063 inch/1.6 mm) staples or 1 ¾ inches (37.6 mm) long, No. 11 gauge (0.12 inch/3 mm) roofing nails, driven flush with plaster base and shall attach the lathe to the framing supports at every second rib, either at the furring crimps on the vertical cross wires, at the intersection of the longitudinal wire and cross wire, or the lathe may be installed by placing a nail or screw fastener between the two Twin Trac longitudinal wires, or a staple over any longitudinal wire. The lathe shall be lapped a minimum of one mesh at sides. Ends shall be lapped a minimum of one mesh and shall occur over supports. The ends of sheets shall be staggered between courses.

For use as an alternative to 1.4 lb/yd² (0.8 kg/m²) woven wire lath, the maximum support spacing shall be in accordance with Table 3 of ASTM C1063 for 1.4 lb/yd² (0.8 kg/m²) woven wire lath. Fastener type shall comply with ASTM C1861 and fastener spacing shall comply with ASTM C1063 for woven wire lath, except that the fasteners shall attach the lathe to the framing supports at every second rib, either at the furring crimps on the vertical cross wires, at the intersection of the longitudinal wire and cross wire or the lathe may be installed by placing a nail or screw fastener between the two Twin Trac longitudinal wires, or a staple over any longitudinal wire. The lathe shall be lapped a minimum of one mesh at sides. Ends shall be lapped a minimum of one mesh and shall occur over supports and shall be staggered between courses.

3.3.5 Structa Mega Lath and Structa Mega Power Tie Lathe: The lathe shall be applied to vertical surfaces having wood or metal supports or to horizontal wood, metal, or concrete supports.

For use as an alternative to the 1.95 lb/yd² (0.993 kg/m²) welded wire lath specified in ASTM C933 the maximum support spacing shall be in accordance with Table 1 of ASTM C1063 for 1.95 lb/yd² (1.1 kg/m²) welded wire lath. Fastener type shall comply with ASTM C1861 and fastener spacing shall be as specified in ASTM C1063 or 2018 and 2015 IRC Section R703.7.1 (IRC Section R703.6.1) as applicable for 1.95 lb/yd² (1.1 kg/m²) welded wire lath, except that the fasteners shall attach the lath to the framing supports either between the primary and secondary longitudinal wires or the lathe may be installed by placing a nail or screw fastener between the two Twin Trac longitudinal wires, or there shall be a staple over any longitudinal wire. The lathe shall be lapped a minimum of one mesh at sides. Ends shall be lapped a minimum of one mesh and shall occur over supports.

Structa Mega Lath and Structa Mega Power Tie Lathe may be applied to vertical surfaces having horizontal metal support members (furring). The minimum metal thickness of the supports is No. 20 gauge [0.0359 inch (0.91 mm)]. For use as an alternative to the 1.95 lb/yd² (0.993 kg/m²) welded wire lath, the maximum support spacing shall be in accordance with Table 1 of ASTM C1063 for 1.95 lb/yd² (1.1 kg/m²) welded wire lath. For use as an alternative to the 3.4 lb/yd² (1.8 kg/m²) woven wire lath, the maximum support spacing shall be in accordance with Table 1 of ASTM C1063 for 3.4 lb/yd² (1.8 kg/m²) expanded sheet metal lathe, except that the fasteners shall attach the lathe to the framing supports either between the primary and secondary longitudinal wires, or there shall be a staple over any longitudinal wire.

The lathe shall be lapped a minimum of one mesh at sides. Ends shall be lapped a minimum of one mesh and shall occur over supports.

3.3.6 StructaLath III SFCR 316: The lathe shall be applied to vertical surfaces having wood or metal supports or to
horizontal wood, metal or concrete supports. The maximum support spacing shall be 16 inches (406 mm) center to center. Fastener type shall comply with ASTM C1861 and fastener spacing shall comply with ASTM C1063 or 2018 and 2015 IRC Section R703.7.1 (2012 and 2009 IRC Section R703.6.1) as applicable for welded wire lath, except that the fasteners shall attach the lath to the framing supports either at the furring crimps on the vertical cross wires, at the intersection of the longitudinal wire and cross wire, or the lath may be installed by placing a nail or screw fastener between the two Twin Trac longitudinal wires, or a staple over any longitudinal wire. The lath shall be lapped a minimum of one mesh at sides. Ends shall be lapped a minimum of one mesh and shall occur over supports. Additional installation requirements as set forth in an evaluation report on proprietary one coat stucco systems shall apply as applicable. The total plaster thickness shall be 1/2-inch (12.7 mm) maximum.

4.0 PRODUCT DESCRIPTION

4.1. StructaLath III No. 17 SFCR: The self-furring, welded wire lath is an alternative to the 1.14 lb/yd² (0.618 kg/m²) welded wire lath specified in ASTM C933. The lath is produced from cold-rolled longitudinal wires with coated thicknesses of 0.03 inch (0.76 mm) by 0.068 inch (1.72 mm), and cross wires with a 0.047-inch (1.19 mm) coated diameter. The lath openings are formed by longitudinal and cross wires that are resistance-welded at the wire intersections and measure 1/2-inches-by-1 1/2-inches (38 mm by 38 mm). The lath has an additional six secondary cold-rolled longitudinal wires with coated thickness of 0.03 inch (0.76 mm) by 0.068 inch (1.72 mm) that are resistance welded to the cross wires. All wires have a Class 1 galvanized coating complying with ASTM A641. The lath self-furring crimps have a minimum 1/4-inch (6.4 mm) furring distance and are spaced at 3 inches (76 mm) on center. The lath is available in rolls 38½ inches (974 mm) wide and 150 feet (45,720 mm) long.

4.2. StructaLath III SFCR 316: The self-furring, welded wire lath is an alternative to the 1.14 lb/yd² (0.618 kg/m²) welded wire lath specified in ASTM C933 and is recognized for use as reinforcement in maximum 1/2-inch (12.7 mm) thick proprietary one coat stucco systems. The lath is produced from cold-rolled longitudinal wires with coated thicknesses of 0.03 inch (0.76 mm) by 0.068 inch (1.72 mm) and cross wires having a 0.047 inch (1.19 mm) coated diameter. The lath has 1/2-inch-by-1 1/2-inch (38 mm by 38 mm) openings formed by longitudinal and cross wires that are resistance welded at the wire intersections. The lath has an additional six secondary cold-rolled longitudinal wires with coated thickness of 0.03 inch (0.76 mm) by 0.068 inch (1.72 mm) that are resistance welded to the cross wires. The wire has a Class 1 galvanized coating complying with ASTM A641. The furring crimp have a minimum 3/16-inch (9.52 mm) furring distance and are spaced at 3 inches (76 mm) on center. The lath is available in rolls 38½ inches (974 mm) wide and 150 feet (45,720 mm) long.

4.3. StructaLath No. 17 SFCR Twin Trac 2.5: The self-furring welded wire lath is an alternative to the 2.5 lb/yd² (1.4 kg/m²) expanded sheet metal lath specified in ASTM C847 and an alternative to the 1.14 lb/yd² (0.618 kg/m²) welded wire lath specified in ASTM C933. The lath is produced from cold rolled rectangular longitudinal wires with a coated thickness of 0.026 inch (0.66 mm) by 0.064 inch (1.63 mm) and 0.047 inch (1.19 mm) coated diameter cross wires. The lath openings are formed by resistance welding longitudinal and cross wires at intersections that measure 1 inch by 1 1/2 inches (25.4 by 38.1 mm) except at the furring crimp where the opening dimensions are 3/4 inch by 1 1/2 inches (19.1 mm by 38.1 mm). This lath is self-furring crimp occur at each cross wire to provide a minimum 1/4 inch (6.4 mm) furring distance and are spaced at 4 and 3 inches (102 and 76 mm) on center. The nominal weight of the lath is 1.14 lb/yd² (0.62 kg/m²). The lath is available in rolls 37 inches (974 mm wide) and 150 feet (45,720 mm) long.

4.4 Structa Mega Lath: The self-furring welded wire lath is an alternative to the 3.4 lb/yd² (1.8 kg/m²) expanded sheet metal lath specified in ASTM C847 and the 1.95 lb/yd² (1.1kg/m²) welded wire lath specified in ASTM C933. The lath is produced from cold-rolled rectangular longitudinal wires with coated thickness of 0.0330 inch (0.83 mm) by 0.075 inch (1.90 mm), and 0.056 inch (1.42 mm) coated diameter round cross wires. The lath openings are formed by resistance welding longitudinal and cross wires at the intersections that measure 1/3 inch by 1 1/2 inch (17.5 by 38.1 mm) except at the furring crimp where the openings are 3/4 inch by 1 1/2 inches (19.0 by 38.1 mm). Structa Mega Lath has six additional cold-rolled rectangular longitudinal wires, resistance welded to the cross wires, and spaced 5/8 and 4 1/2 inches (146 and 114 mm) on center. The structural weight of the lath is 0.3 Structa Mega Lath. The self-furring crimp occur at each cross wire to provide a minimum 1/4 inch (6.4 mm) furring distance and are spaced at 4 and 3 inches (102 and 76 mm) on center. The lath is available in rolls 30 inches (762 mm) wide and 108 feet (32 918 mm) long.

4.5 Structa Mega Power Tie Lath: The self-furring welded wire lath is identical to the Structa Mega Lath except every third cross wire is not furled. The lath is available in sheets 30 inches (762 mm) wide and 108 feet (32 918 mm) long, or in sheets 30 inches (762 mm) wide by 97.5 inches (2475 mm) long.

4.6 V-Truss Walls and Ceilings Lath: The self-furring welded wire lath is an alternative to the 1/8-inch (9.6 mm),
3.4 lb/yd² (1.8 kg/m²) rib metal lath specified in ASTM C847 and the 1.4 lb/yd² (0.8 kg/m²) woven wire lath specified in ASTM C1032. The lath is produced from cold-rolled rectangular longitudinal wires, having coated thicknesses of 0.0335 inch (0.85 mm) by 0.064 inch (1.62 mm), and round cross wires with a 0.05 inch (1.27 mm) coated diameter. The wire has a Class 1 galvanized coating complying with ASTM A641. The lath has rectangular openings are formed by resistance welding longitudinal and cross wires at the wire intersections and measure 0.7-inch-by-1.5-inch (17.8 by 38 mm). The lath furring crimps occur at each cross wire, provide a minimum 3/8-inch (9.5 mm) furring distance, and spaced at 1.9 inches (48 mm) on center. Backing wires occur in the longitudinal direction, have a 0.050 inch (1.27 mm) coated diameter, and are resistance welded to the bottom of the furring crimps. The lath has a perforated kraft paper placed between the primary wires and the backing wires. The paper is cut back 2 inches (51 mm) on each end, and each side is wrapped and adhered around the outermost backing wire. The nominal weight of the lath is 2.2 lb/yd² (1.2 kg/m²). The lath is provided in flat sheets 28⅜ inches (721 mm) wide by 97⅓ inches (2475 mm) long.

5.0 IDENTIFICATION

5.1 StructaLath No. 17 SFCR III, StructaLath No. 17 SFCR Twin Trac 2.5, StructaLath SFCR 316 and Structa Mega Lath and Structa Mega Power Tie Lath are packaged in rolls and identified by a label bearing the name and address of Structa Wire ULC, the product name, the evaluation report number (ER-2017), and a description of the product (lath opening size, product width and roll length).

5.2 V-Truss Walls and Ceilings Lath and Structa Mega Power Tie Lath are produced in sheets and are identified by a label bearing the name and address of Structa Wire ULC, the product name, the evaluation report number (ER-2017), and a description of the product (lath opening size, product length and width).

6.0 SUBSTANTIATING DATA

Data and test reports submitted are from laboratories in compliance with ISO/IEC 17025 and in accordance with the ICC-ES Acceptance Criteria for Metal Plaster Bases (Lath) (AC191), approved March 2016 (editorially revised August 2019).

7.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research carried out by IAPMO Uniform Evaluation Service on Structa Wire ULC lath products to assess conformance to the codes shown in Section 1.0 of this report and serves as documentation of the product certification. Products are manufactured at locations noted in Section 2.3 of this report under a quality control program with periodic inspection under the supervision of IAPMO UES.

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For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org
1.0 RECOGNITION

The StructaLath self-furring, welded wire laths evaluated in IAPMO UES ER-2017 are satisfactory alternatives to the laths prescribed in the following codes and regulations:

- 2020 and 2017 Florida Building Code, Building (FBC, Building) including HVHZ.
- 2020 and 2017 Florida Building Code, Residential (FBC, Residential) including HVHZ.

2.0 LIMITATIONS

Use of Structa Wire ULC Lath products described in this report supplement is subject to the following limitations:

2.1 Verification shall be provided that a quality assurance agency audits the manufacturers quality assurance program and audits the production quality of products, in accordance with Section (5)(d) of Florida Rule 61G20-3.008. The quality assurance agency shall be approved by the Commission (or the building official when the report holder does not possess an approval by the Commission).

2.2 The scope of review includes the requirements for High-velocity Hurricane Zones (HVHZ) in the Florida Building Code, Building and the Florida Building Code, Residential.

For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org