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DAVIS WIRE ALL-PURPOSE™ BUILDING PAPER AND DAVIS WIRE 60-MINUTE BUILDING PAPER WATER RESISTIVE BARRIERS, 1½ INCH X 17 GAGE PRE-FURRED® STUCCO NETTING, 1½ INCH X 17 GAGE DEEP FURR STUCCO NETTING, 1½ INCH X 17 GAGE NON-FURRED STUCCO NETTING, 1½ INCH X 17 GAGE PRE-FURRED® SELF-FURRED PAPERBACK (SFPB) STUCCO NETTING, 1½ INCH X 17 GAGE PRE-FURRED® SELF-FURRED PAPERBACK (SFPB) STARTER ROLL STUCCO NETTING, 1-INCH X 20 GAGE SELF-FURRED STUCCO NETTING AND BEST CORNER® REINFORCEMENT

CSI Sections:
07 25 00 Weather Barriers
09 22 36.23 Metal Lath

1.0 RECOGNITION

The Davis Wire All Purpose™ Building Paper and 60-minute Building Paper Water Resistive Barriers (WRB's) recognized in this report were evaluated for use as water resistive barriers. The Stucco Netting and Best Corner® Reinforcement products recognized in this report are for use as metal lath. The durability and weather resistance properties of the Building Paper, Stucco Netting, and Corner Reinforcement were evaluated for compliance with the following codes:

- 2015, 2012, 2009, and 2006 International Building Code® (IBC)
- 2015, 2012, 2009, and 2006 International Residential Code® (IRC)

2.0 LIMITATIONS

Use of the Davis Wire Corp. products recognized in this report is subject to the following limitations:

2.1 The Davis Wire Corporation All Purpose™ Building Paper, 60-minute Building Paper Water Resistant Barrier, Stucco Netting and Best Corner® Reinforcement shall be manufactured, identified, and installed in accordance with this report and the IBC or IRC. In the event of a conflict, the more restrictive requirement governs.

2.2 The use of Davis Wire All Purpose™ Building Paper and 60-minute Building Paper Water Resistant Barrier recognized in this report is limited to use in Types V-A and V-B construction under the IBC and all buildings within the scope of the IRC.

2.3 Seismic and wind loading for the fire-resistance rated construction noted in Section 3.3.1 of this report has not been reviewed and is beyond the scope of this report.

2.4 Walls using Davis Wire Stucco Netting and Best Corner® Reinforcement products shall be braced in accordance with IBC Sections 2308.9.3 or 2308.12 or IRC Sections R602.10 and R602.11.

3.0 PRODUCT USE

3.1 General

3.1.1 Davis Wire All-Purpose™ Building Paper and 60-Minute Building Paper: The Davis Wire All-Purpose™ Building Paper and 60-Minute Building Paper are used as water-resistive barriers (WRB) on the exterior side of exterior walls in Types V-A and V-B construction in the IBC and buildings and structures built to the IRC. The Davis Wire building papers are an alternative to the water-resistive barriers specified in IBC Section 1404.2 and IRC Section R703.2, and are equivalent to Grade D paper as described in 2012, 2009 and 2006 IBC Section 2510.6 and 2015 IRC Section R703.7.3 (2012, 2009 and 2006 IRC Section R703.6.3). Additionally, the Davis Wire All-Purpose Building Paper is equivalent to a Type I WRB and the 60-minute Building Paper is equivalent to a Type II WRB in ASTM E2556, as noted in Section 2510.6 of the 2015 IBC.

3.1.2 Plaster Reinforcement: The 1½-inch X 17 gage laths are used as reinforcement of exterior plaster (stucco) complying with Section 2512 of the IBC and Section R703.6 of the IRC.

The 1-inch X 20 Gage Self-Furred Woven Wire lath is used as reinforcement of cementitious exterior coatings where No. 20 gage lath is specified in an evaluation report on cementitious exterior coatings.

The Best Corner® Reinforcement products are used as corner reinforcement of exterior plaster complying with IBC Sections 2511.1 and 2507 or IRC Sections R702.2 and R703.6.1, and as corner reinforcement in cementitious exterior wall coatings recognized in an evaluation report.

3.2 Installation: Installation of the products referenced in this report shall be in accordance with the manufacturer's installation instructions and this report. In the event of a conflict, the more restrictive governs.

3.2.1 Davis Wire All-Purpose™ Building Paper and 60-Minute Building Paper: Davis Wire All-Purpose™ Building Paper and 60-Minute Building Paper are installed in accordance with Section 1404.2 of the IBC or Section R703.2 of the IRC, as applicable, on the exterior side of exterior wall framing, sheathing or insulation, with the printed side of the building paper facing outward.

The WRBs are installed after wall framing is completed and before windows and doors are installed. The roll is started approximately 24 inches (610 mm) horizontally from the starting corner and positioned at the base of the wall and shall lap the nailing flange of weep screed or sill plate and foundation to the lowest point of exterior wall covering. The roll is fastened with corrosion-resistant staples with a minimum 1-inch (25.4 mm) crown, corrosion-resistant nails having a minimum $^{3}/_{8}$-inch diameter (9.5 mm) heads, or corrosion-resistant nails having 1-inch diameter (25.4 mm) plastic washer heads spaced at a maximum of 6 inches (152 mm) on center. The WRB shall then be unrolled around the building and fastened with nails or staples spaced at a maximum of 12 inches (305 mm) on center. The WRBs shall be installed with a minimum of 2-inch (51 mm) horizontal edge overlap and a minimum 6-inch (152 mm) vertical edge overlap. The WRBs are installed "weather-board" or "shingle" fashion, with upper courses lapping over lower courses.

When the WRB is installed over wood-based sheathing in exterior plaster applications, two layers of either product shall be applied over the sheathing in accordance with Section 2510.6 of the IBC or Section R703.7.3 of the 2015 IRC (2012, 2009 and 2006 IRC Section R703.6.3). One layer of the Davis Wire 60-Minute building paper may be installed over wood-based sheathing in exterior plaster applications when the WRB is separated from the stucco by an intervening, non-water absorbing layer or drainage space as noted in the exception to IBC Section 2510.6 or 2015 IRC Section R703.7.3 (2012, 2009 and 2006 IRC Section R703.6.3). For cementitious exterior coatings or Exterior Insulated Finish Systems (EIFS), application shall be in accordance with the manufacturer's accredited evaluation report.

3.2.2 Davis Wire 1-inch X 20 gage Self Furred Woven Wire Lath: The lath shall be installed in accordance with the requirements noted in a current approved evaluation report on the cementitious exterior coating. The lath shall be furred to a depth required by the evaluation report on the cementitious exterior wall coating.

3.2.3 Davis Wire 1½-inch X 17 gage Pre-furred®, Deep Furr and Non-Furr Woven Wire Laths: Installation of these products shall be accordance to ASTM C1063 and in accordance with IBC Sections 2510.3 or IRC Section R703.6. These products are installed with the long dimension perpendicular to supports, except at gable walls on exterior installations where the lath may be installed with the long dimension parallel to the roof slope. The lath products shall be furred $^{1}/_{4}$-inch (6.4 mm) from the framing members or solid substrates. The lath shall be lapped a minimum of one mesh [$1^{1}/_{2}$ inches (38 mm)] at sides and ends.

3.2.4 Davis Wire 1½-inch X 17 gage SFPB and Starter: Installation of the Davis Wire 1½-inch 17 gage Pre-furred® SFPB and Starter Pre-furred® SFPB are the same as described in Section 3.2.3 except for the lap. The WRB layer of the SFPB netting shall be folded up to form a 3-inch (76 mm) lap at horizontal joints. The minimum lap for paper-to-paper shall be 2 inches (51 mm) and the minimum lap for the wire-to-wire lap shall be a minimum of $1^{1}/_{2}$ inches (38 mm). For vertical laps, paper and wire shall lap paper-to-paper 2-inches (51 mm) and wire-to-wire 2 inches (51 mm). In accordance with IBC Section 2510.6, when use is as reinforcement for exterior plaster (stucco) over wood-based sheathing, one additional layer of a Type I WRB (2015 IBC) or Grade D WRB (2012, 2009 and 2006) shall be installed over the solid substrates prior to installation of the Davis Wire 1½-inch X 17 gage SFPB and Starter SFPB. The lath shall be furred ¼-inch (6.4 mm) from the framing members or solid substrates. Starter rolls are installed only on the first course where the WRB extends to cover the nailing flange of the weep screed.

3.2.5 Davis Wire Best Corner® Reinforcement: In accordance with Section 2510.3 of the IBC and Section R703.7 of the 2015 IRC (Section R703.6 of the 2012, 2009 and 2006 IRC), the Best Corner® Reinforcement shall be installed to the minimum requirements of ASTM C1063. The corner reinforcement shall be attached with appropriate fasteners spaced not over 18-inches (457 mm) on center. The finish coat is applied so that the corner wire is covered with a minimum of $^{1}/_{8}$-inch (3.2 mm) of the plaster.

3.3 Design

3.3.1 Two-hour Fire-resistance-rated Wood-framed Bearing Partition: Wood studs spaced 16 inches (406 mm) on center shall be faced on each side with minimum $^3/_8$-inch (9.5 mm) Type X gypsum lath and minimum 1-inch (25 mm) perlite gypsum or vermiculite gypsum plaster. The plaster shall be reinforced with the Davis Wire $1^1/_2$-inch 17 gage Pre-Furred® and Deep Furr Woven Wire Laths described in Section 4.1.2. The woven wire lath shall be applied over the gypsum lath with minimum No. 16 gage [0.062-inch (1.65 mm)] galvanized wire staples having 1¼-inch (31.7 mm) outside diameter legs and ¾-inch (19.1 mm) outside diameter crown width, with a maximum spacing of 6-inches (152 mm) on center. For studs with a slenderness ration, l_e/d, greater than 33, the design stress shall be reduced to 78 percent of allowable F'_c. For studs with a slenderness ratio l_e/d not exceeding 33, the design stress shall be reduced to 78 percent of the adjusted stress F'_c calculated for studs having a slenderness ration l_e/d of 33.

3.3.2 Shear Wall Construction: For use in shear walls, the 1½-inch X 17 gage Pre-furred®, Deep Furr and Non-Furr Woven Wire laths shall be installed with code complying $^7/_8$-inch thick (22 mm) Portland Cement plaster, applied to vertical wood framing, installed in accordance with Section 3.2.3 of this report and either Section 2306.3 of the 2015 and 2012 IBC, Section 2306.7 of the 2009 IBC or Section 2306.4.5 of the 2006 IBC, as applicable.

4.0 PRODUCT DESCRIPTIONS

4.1 Building Paper

4.1.1 Davis Wire All Purpose™ Building Paper: Davis Wire All Purpose Building Paper is asphalt-saturated kraft, Type I/Grade D breather type sheathing papers manufactured to meet or exceed IBC Section 1404.1 and IRC Section R703 requirements. Davis Wire All Purpose Building Paper is designed for installation beneath exterior stucco systems as well as other types of approved exterior wall claddings. Davis Wire All Purpose Building Paper is provided in 40-inch (1016 mm) wide rolls.

4.1.2 Davis Wire All Purpose™ 60-Minute Building Paper: Davis Wire All Purpose™ 60-Minute Building Paper is asphalt-saturated kraft, Type II/Grade D breather type sheathing papers manufactured to meet or exceed IBC Section 1404.1 and IRC Section R703 requirements. The papers are designed for installation beneath exterior stucco systems, as well as other types of approved exterior wall claddings. Installations over wood-based sheathing with stucco requires two layers of Grade D building paper. The Davis Wire All Purpose 60-Minute Building Paper is provided in 40-inch (1016 mm) wide rolls.

4.2 Stucco Netting

4.2.1 1-inch x 20 Gage Self Furred Woven Wire Lath: The 1- inch x 20 Gage Self Furred Woven Wire Lath is a No. 20-gage woven wire lath with a galvanized coating. The lath complies with ASTM C1032 and is formed from 0.035-inch (0.89 mm) coated thickness steel wire having a Class I galvanized coating complying with ASTM A641. The lath has 1-inch (25.4 mm) nominal hexagonal-shaped openings, weighs a minimum of 0.86 lb/yd^2 (0.466 kg/m^2) and is supplied in rolls that are 36 inches (915 mm) wide and 150 feet (45,720 mm) long. $^1/_8$-inch (3.2 mm) furring crimps are located every 3 inches (76 mm) on center horizontally and 6 inches (152 mm) on center vertically.

4.2.2 $1^1/_2$ -inch 17 gage Prefurred® Self-Furred, Deep Furr and Non-Furred Woven Wire Lath: The laths comply with ASTM C1032 and are formed from 0.054-inch (1.33 mm) thick coated steel wire having a Class I galvanized coating complying with ASTM A641. Pre-Furred® Self-Furred Lath is manufactured with a factory fabricated ¼-inch crimp, and Deep Furr Lath is manufactured with a factory fabricated $^3/_8$-inch furring crimp. The furring crimps are placed 3 inches on center horizontally and 6 inches on center vertically. The lath has nominal 1½-inch (38 mm) hexagonal-shaped openings, weighs a minimum of 1.40 lb/yd^2 (0.76 kg/m^2) and is supplied in rolls 37½ inches (952 mm) wide and 150 feet (45,720 mm) long.

4.2.3 1½-inch 17 gage SFPB and Starter SFPB: The lath is paperbacked woven-wire lath made from the 1½-inch X 17 gage Pre-furred® Self Furred Woven Wire Lath described in Section 4.2.2 and a water resistive barrier. The water-resistive barriers are described in Section 4.1 of this report. The water-resistive barrier is attached to the lath with a minimum of five 0.032-inch (0.74 mm) galvanized line wires spaced 6 inches (152 mm) on center. The line wires are woven through wet-strength suction face paper at 6-inch (152 mm) intervals and are attached by twisting to the lath. The water-resistive barrier is cut back 1½ inches (38 mm) on one edge of the SFPB lath to ensure proper wire to wire laps and is folded back to provide a 3-inch (76 mm) lap of the water-resistive barrier when extended. The water-resistive barrier is aligned flush on one edge of the Starter SFPB lath to ensure proper coverage over weep screeds and is folded back to provide a 3-inch (76 mm) lap of the water resistive barrier when extended. The 1½-inch SFPB and Starter SFPB are supplied in rolls 37½ inches (952 mm) wide and 100 feet (30,480 mm) ling and in sheets 37½ inches (952 mm) wide and 100 inches (2540 mm) long.

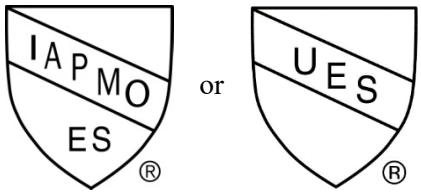
4.2.4 Davis Wire *Best Corner*® Reinforcement: Best Corner® is a welded-wire exterior corner reinforcement for plaster. It is manufactured with minimum 0.051-inch (1.26 mm) coated thickness steel wire having a Class I galvanized coating complying with ASTM A641. Five convoluted and

six longitudinal wires are electrically welded together to form a right-angled section with 2¼-inch (57 mm) legs. Best Corner® is available in the following styles:

1. Best Corner regular for straight corners, available in 8-, 9-, and 10-foot (2438, 2743 and 3048 mm) lengths.
2. Best Arch Corner for forming arches, available in 8-, 9-, and 10-foot (2438, 2743 and 3048 mm) lengths.
3. Best Short-flange Corner with one leg 1½-inches (38 mm) long for special uses, available in 10-foot (3048 mm) lengths.
4. Best Bull-nose Corner with the nose rounded to a $^{7}/_{16}$- to $^{7}/_{8}$-inch (11.1 to 22 mm) radius, available in 10-foot (3048 mm) lengths.
5. Best One-coat Corner with straight rigid corner for use in cementitious exterior wall coating systems, available in 8-, 9-, and 10-foot (2438, 2743 and 3048 mm) lengths.

5.0 IDENTIFICATION

Packages of Davis Wire Corporation building paper and stucco netting are labeled or die-stamped with the name and/or trademark, model name, and the evaluation report number (ER-446). Either IAPMO Uniform ES Mark of Conformity may also be used as shown below:



IAPMO UES ER-446

6.0 SUBSTANTIATING DATA

Data in accordance with the ICC-ES Acceptance Criteria for Water Resistive Barriers (AC38), dated January 2013 (editorially revised April 2015) and ICC-ES Acceptance Criteria for Metal Plaster Bases (Lath) (AC191), dated March 2016; manufacturer's descriptive literature and installation instructions. Test results are from laboratories in compliance with ISO/IEC 17025.

7.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research carried out by IAPMO Uniform Evaluation Service on Davis Wire Corporation All Purpose Building Paper, 60-minute Building Paper Water Resistant Barriers and Gage Pre-Furred Stucco Netting to assess conformance to the codes and standards shown in Section 1.0 of this report and serves as documentation of the product's certification.

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