Understanding & Using Evaluation Service Reports

1 hour, Topic 1

Enforcement & Administration

Dottie M. Mazzarella

Vice President, Government Relations

International Code Council

Course Information

This course has been approved by the Department of State for In-Service Training credit as follows:

- 1 hour(s), Topic 1 – Enforcement & Administration

Course number: T02-07-3202

What is ICC-ES?

- International Code Council subsidiary
- Evaluates products using codes and standards for the built environment
- Accredited by:
    - ANSI National Accreditation Board (ANAB) to ISO/IEC 17065
    - Standards Council of Canada (SCC)
    - American Association for Laboratory Accreditation (A2LA)
    - EMA to conduct Plumbing Product listing to the Mexican NOMs
    - JASANZ accreditation
    - SASO notified body status
    - CC Evaluation Service and ICC NTA Receive Approval to Issue UAE Certificates of Compliance for the Civil Defense Authority
- Expert in developing and interpreting ICC-ES Acceptance Criteria (ACs) for innovative products
- Technical staff are licensed engineers in Civil, Structural, Mechanical and other fields with decades of experience

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO/IEC 17065
PRODUCT CERTIFICATION BODY

Standards Council of Canada
Conseil canadien des normes

A2LA
ACCREDITED
CERTIFICATE #5530.02

ema
ORGANISMO DE CERTIFICACIÓN
ACREDITADO 125/17

JASANZ

ICC-ES Programs

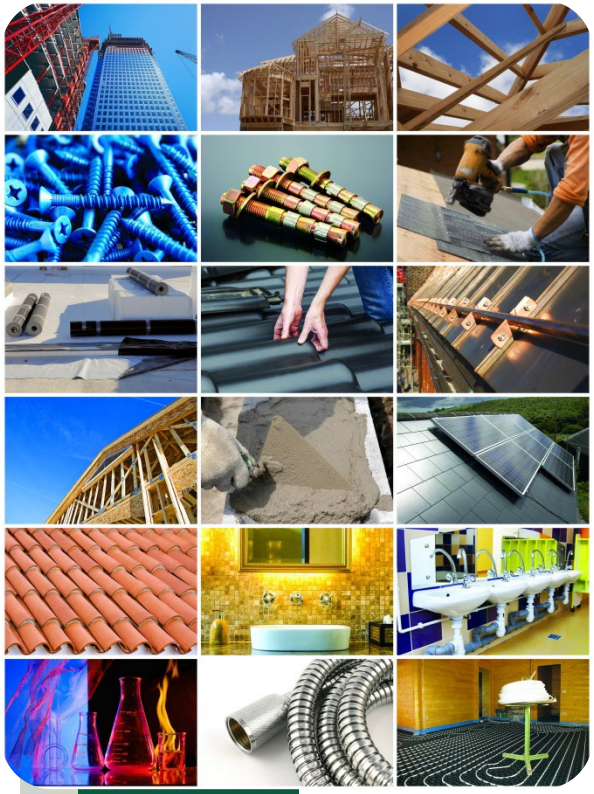
- **Traditional Building Product Evaluation Program (ESR):** Allowing innovation through the issuance of Evaluation Reports (ESRs) as evidence that building products, components, methods, and materials meet code requirements
- **Product Listing to Standards Referenced in the Codes (ESL)**
- **Solar Thermal Ratings and Listings (SRCC)**
- **Small Wind Ratings (SWCC)**
- **In-House Testing (NTA)**

ICC-ES Programs

- **Plumbing, Mechanical and Gas (PMG) Listings:** Demonstrating conformance to the standards referenced in the I-Codes® as well as the UPC, UMC and National Plumbing Code of Canada, Kitchen Cabinet KCMA A161.1
- **Environmental Programs:** Provide manufacturers with independent and comprehensive verification and/or certification that their products meet specific sustainability (green) targets (e.g., WaterSense, Energy STAR, formaldehyde emissions)
- **Marketing Claim Verification**
- **Food Safety Certification (SQFI)**

ICC NTA provides testing and inspection services including fire testing, structural, floor assembly, and water resistance testing as well as offsite construction services. NTA joined the ICC family of solutions in 2019. ISO/IEC 17020 and 17025 accredited.

What is Product Certification?



- **Review of products** against a standard, a criteria, or a code to ensure continuous compliance of products
- **Certification steps** include review of products, periodic inspection of plants (by an ISO/IEC 17020 accredited inspection agency), periodic review of submitted information against new or revised standards
    - **Inspection of the manufacturing plants** ensures that the product that was once deemed as compliant continues to comply

Product Evaluation Process

Initial contact and estimation of capabilities and cost

Manufacturer submits an application along with supporting documentation

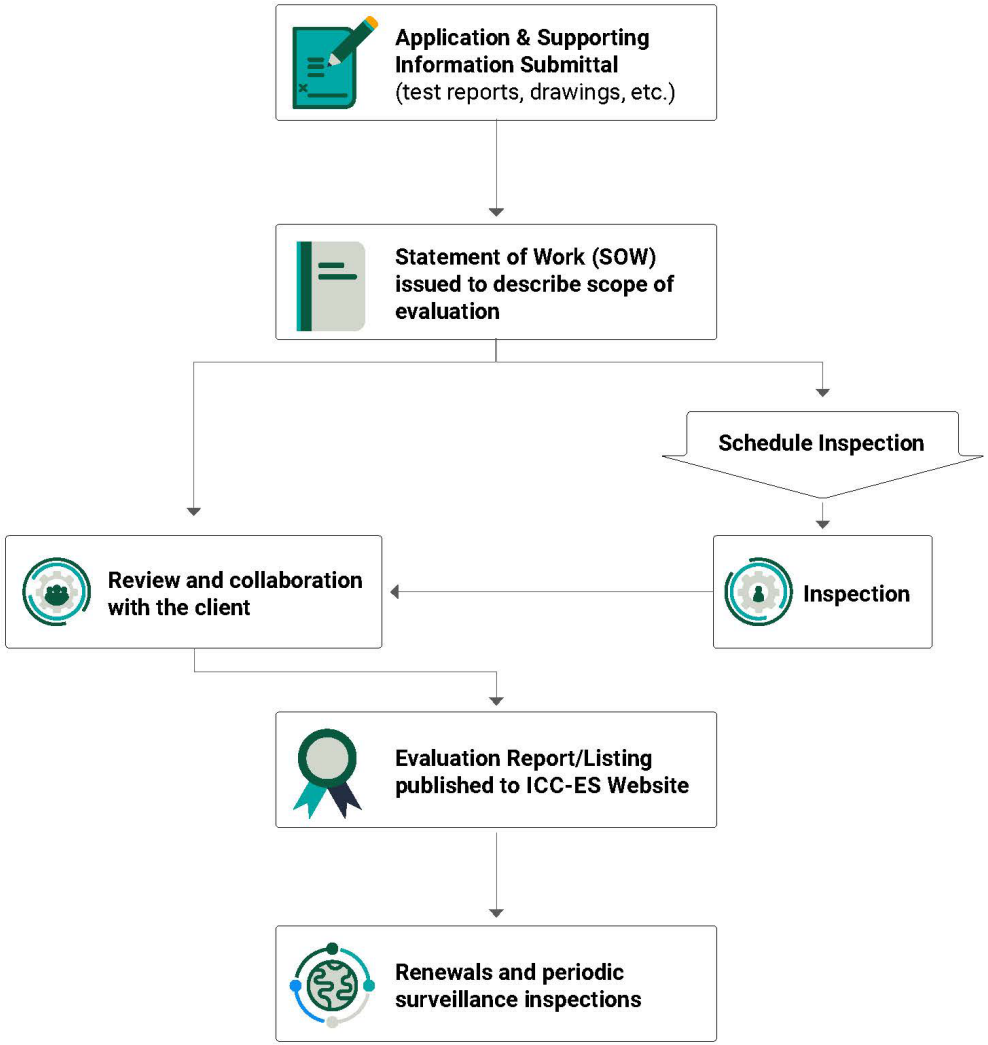
Products tested at an accredited testing laboratory

Initial inspection of manufacturing process

Successful evaluation and issuance of an ICC-ES report

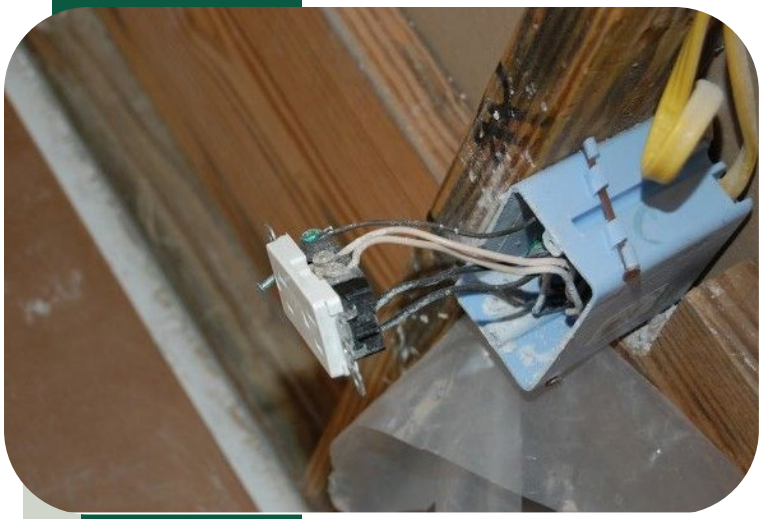
Continuous Compliance: Inspections to verify products are manufactured consistent with originally certified product

ICC EVALUATION SERVICE®



ICC EVALUATION SERVICE®

Benefits of Product Certification



Consumers have been demanding safer products (worldwide)

Critical to ensure safe water for residents around the world

Characteristics such as quality, safety, economy, reliability, compatibility, efficiency and effectiveness can be examined through conformity assessment

It assures the products deliver on their promise

Allows a better ability for the population to be protected

Investors can be assured their investments is as secure as it can be

Users can be assured that the products are safe for usage and can perform as expected

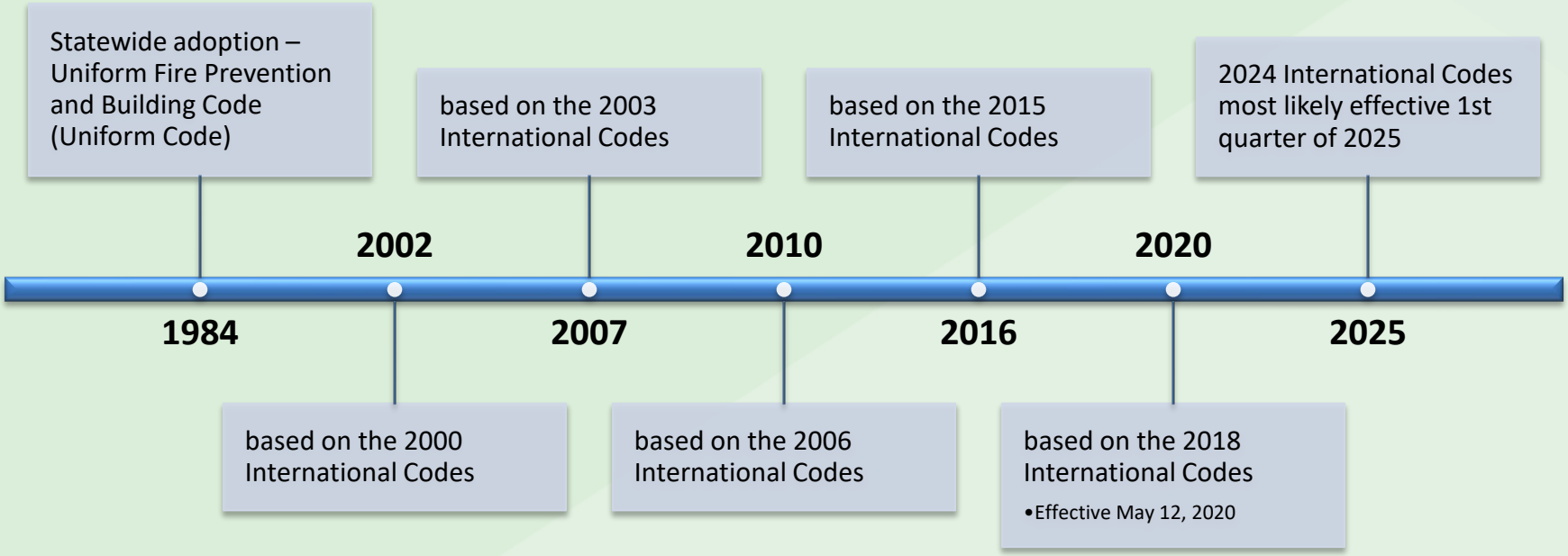
ICC-ES Listing Marks

- Inspectors should look for listing marks, such as ICC-ES marks, prior to approving installation where the code or other criteria requires conformity to a standard.
- The ICC-ES mark means that the product has undergone a rigorous evaluation
- ICC-ES has a new mark of conformity!

ICC ES | ICC ES PMG | ICC ES LISTED | ICC ES MX PMG | ICC ES Complies to UPC PMG | ICC ES SAVE

→ ICC ES

NY Adoption of the I-Codes



2020 New York State Uniform Code

[NY]104.3 Alternative materials, equipment, appliances, designs, and methods of construction.

The provisions of this code are not intended to prevent the installation of any materials, equipment, or appliances not specifically prescribed by this code, or to prohibit any designs or methods of construction not specifically prescribed by this code, provided that such alternative materials, equipment, appliances, designs, or methods of construction: (1) are not specifically prohibited by any provision of this code, by any other provision of the Uniform Code, or by the Energy Code, and (2) shall have been approved, in writing, by the building official. Alternative materials, equipment, appliances, designs, or methods of construction may be approved only when the building official shall have determined, in writing, that such alternative is:

1.Satisfactory and complies with the intent of the provisions and requirements of the Uniform Code.

2.Not less than the equivalent of that prescribed in the Uniform Code in quality, strength, effectiveness, fire resistance, durability, and safety.

Nothing in this Section 104.3 shall be construed as permitting any building official or any authority having jurisdiction to waive, vary, modify or otherwise alter any provision or requirement of this code or any other provision or requirement of the Uniform Code. Provisions or requirements of the Uniform Code may be varied or modified only pursuant to procedures established Part 1205 or by such other regulations as may hereafter be promulgated by the Secretary of State pursuant to Section 381(1)(f) of the Executive Law.

2020 New York State Uniform Code

As per the 12/2/2020 Code Outreach Program Notice

Section 104.3 does NOT allow

"any building official or any authority having jurisdiction to waive, vary, modify or otherwise alter any provision or requirement of this code or any other provision or requirement of the Uniform Code (as indicted in the code section).

Applicants may apply for a variance; variances are only authorized pursuant 19NYCRR 1205 (further info found in Code Outreach Program notice titled, "Appeals and Variances.".

Alternate Materials, Designs & Methods of Construction Code Outreach Program Notice 12/2/20

Updated Referenced Standards

Permit applicants are always allowed to design buildings that not only meet but exceed the requirements of the Uniform Code. If a permit applicant wishes to utilize an updated version or edition of a Uniform Code's referenced standard, applicants need to compare all applicable provisions of that updated standard to the provisions in the current Uniform Code and its incorporated version or edition of the reference standard. The comparison can then be used to justify that the provisions of the updated reference standard meet or exceed those of the Uniform Code. Section 1203.3(a)(2) of 19 NYCRR indicates that local code enforcement programs require that building permit applications, "request sufficient information to permit a determination that the intended work accords with the requirements of the Uniform Code." **This allows the AHJ to request the information they deem reasonably necessary to make a determination**.

If updated referenced standards provide for alternative materials, equipment, appliances, designs, or methods of construction not specifically prescribed or prohibited by the Uniform Code, then permit applicants can request the approval from the building official for such alternative in accordance with Section 104.3.

QUESTIONS?

What's in an ICC-ES Evaluation Report

ICC-ES Evaluation Reports from ICC Evaluation Service® are the most preferred resource used by code officials to verify that new and innovative building products comply with code requirements. The ICC-ES Evaluation Reports provide information about what code requirements or acceptance criteria were used to evaluate the product, how the product should be installed to meet the requirements, how to identify the product, and much more. ICC-ES Evaluation Reports are divided into eleven major areas.

1. **CSI Division Number**—ICC-ES Evaluation Reports, and the building products represented in them, are organized according to the Construction Specifications Institute's (CSI) Masterformat system.
2. **Report Holder**—The name and address of the company or organization that has applied for the ICC-ES Evaluation Report.
3. **Evaluation Subject**—The specific product(s) covered by the report.
4. **Evaluation Scope**—The code(s) that were used to evaluate the product.
5. **Properties Evaluated**—A brief description of the properties the product was evaluated against such as fire resistance and wind resistance. This section also shows if the product can be used for structural purposes.
6. **Uses**—Identifies the scope of the ICC-ES Evaluation Report and relates the product evaluated to code provisions.
7. **Description**—Provides a general description of the product and its features, such as length, thickness, etc.
8. **Installation**—Identifies general and often specific requirements to help the inspector ensure the product is installed properly according to the code requirements or acceptance criteria.
9. **Conditions of Use**—Statement that the product, as described in the ICC-ES Evaluation Report, complies with or is a suitable alternative to the requirements of the applicable code and a list of conditions under which the report is issued.
10. **Evidence Submitted**—Data (i.e. test reports, calculations, installation instructions) that was used in evaluating the product.
11. **Identification**—Information that can be used to identify the product, including the manufacturer's name, product code, ICC-ES Evaluation Report number, etc.

ES ICC EVALUATION SERVICE

ICC-ES Evaluation Report **ESR-4802**

Reissued March 1, 2016

This report is subject to renewal February 1, 2017.

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1 **DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION**
Section: 07 30 05—Roofing Felt and Underlayment

2 **REPORT HOLDER:**

ACME UNDERLAYMENTS UNLIMITED
52380 FLOWER STREET
CHICO, MONTANA 43820
(808) 664-1512
www.underlaymentsunlimited.com

3 **EVALUATION SUBJECT:**

UU 100 UNDERLAYMENT FOR ASPHALT SHINGLE ROOF COVERINGS IN SEVERE CLIMATE AREAS

4 **1.0 EVALUATION SCOPE**

Compliance with the following codes:

- 2012 and 2009 *International Building Code®* (IBC)
- 2012 and 2009 *International Residential Code®* (IRC)

5 **Properties evaluated:**

Ice barrier

6 **2.0 USES**

UU 100 is a self-adhering, rubberized asphalt membrane, complying with ASTM D1970, that is used over plywood substrates as ice barriers as specified in Chapter 15 of the IBC and Chapter 9 of the IRC.

7 **3.0 DESCRIPTION**

The UU 100 has a granule surfacing. The membrane has a silicone-treated release paper on the back that is removed prior to attachment to plywood sheathing. The membrane is a minimum of 0.040 inch (1.02 mm) thick and is supplied in rolls 36 inches(914 mm) wide and 66.7 feet (20.3 m) long.

8 **4.0 INSTALLATION**

Installation of the UU 100 membrane must comply with this report and the manufacturer's published installation instructions. The manufacturer's published installation instructions and this report must be available at the jobsite at all times during the installation.

Prior to application of the membrane, the deck surface must be free of frost, dust and dirt, loose nails and other protrusions. Damaged sheathing must be replaced. Installation is limited to plywood substrates. The membrane is designed for applications when the ambient air temperature is above 40°F (4.4°C).

Vertical ends and horizontal edges must be overlapped a minimum, respectively, of 6 inches (152 mm) and 3 1/2 inches (89 mm). Horizontal edge overlaps must run with the flow of water in a shingling effect. A minimum of two layers of the membrane must be applied, starting at the lower edge (eave) of the roof, and extend a minimum of 24 inches (610 mm) inside the exterior wall line of the building. Final coverage width must comply with the code.

Installation of the roof covering can proceed immediately following application of the membrane. The membrane must be covered by an approved roof covering as soon as possible. For reroofing applications, the same procedures apply after removal of the old roof covering and roofing felts to expose the plywood roof deck.

9 **5.0 CONDITIONS OF USE**

The UU 100 membrane described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

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

5.2 Installation is limited to use on plywood substrates on structures located in areas where nonclassified roof coverings are permitted.

5.3 Installation is limited to use with roof coverings that are mechanically fastened through the underlayment to the sheathing or rafters.

5.4 Installation is limited to roofs with ventilated attic spaces, in accordance with the requirements of the applicable code.

10 **6.0 EVIDENCE SUBMITTED**

6.1 Data in accordance with the ICC-ES Acceptance Criteria for Self-adhered Roof Underlayment for Use as an Ice Barrier in Severe Climate Areas (AC48), dated February 2012.

6.2 Reports of testing in accordance with ASTM D1970.

11 **7.0 IDENTIFICATION**

The membrane is identified by labels on the rolls or packaging, displaying the Acme Underlayments Unlimited's name and address, the product name, the evaluation report number ESR-4802.

ICC-ES Evaluation Reports are not to be construed or representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.

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View current ICC-ES Evaluation Reports online: www.icc-es.org/Evaluation_Reports

ESRs: What to Look For

Before approving products for installation, look for:

ICC-ES Evaluation Report — ESR-2733

Reissued September 2017

This report is subject to renewal November 2018.

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

REPORT HOLDER:

HUANGHUA ZHONGLIAN HARDWARE PRODUCTS CO., LTD.
BALIZHUANG INDUSTRY AREA
HUANGHUA CITY, HEBEI PROVINCE 061109
CHINA
86-317 565 2267
www.zlhardware.com

ADDITIONAL LISTEES:

FIBRESTAR INC.
5545 CAROT COURT
YORBA LINDA, CALIFORNIA 92887
(909) 896-9008

OMEGA PRODUCTS INTERNATIONAL, INC.
1681 CALIFORNIA AVENUE
CORONA, CALIFORNIA 92881
(951) 737-7447

EVALUATION SUBJECT:

WOVEN WIRE LATH: 1 1/2-INCH X 17 GAGE; AND 1-INCH X 20 GAGE

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2009 and 2006 *International Building Code*® (IBC)
- 2009 and 2006 *International Residential Code*® (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)†

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Property evaluated:

Physical properties

2.0 USES

The 1 1/2-inch × 17 Gage Self-Furred and Non-Furred Woven Wire Lath is used as reinforcement of cementitious interior or exterior plaster complying with IBC Section 2507.2 or IRC Section R703.6.1.

The 1-inch × 20 Gage Self-Furred Woven Wire Lath is used as reinforcement of exterior coatings recognized in a current ICC-ES evaluation report.

All of the products labeled with the company name of Fibrestar Inc. are trade-named as PREMIER LINE.

3.0 DESCRIPTION

3.1 1 1/2-inch x 17 Gage Self-Furred and Non-Furred Woven Wire Lath:

The woven wire lath is manufactured from No. 17 gage [0.051 inch (1.3 mm) coated thickness] steel wire having a minimum Class 1 galvanized coating in accordance with ASTM A641. The woven wire lath has nominally 1 1/2-inch (38 mm) hexagonal-shaped openings, has a minimum weight of 1.40 lb/yd² (0.760 kg/m²), and is supplied in rolls 36 inches (914 mm) wide and 150 feet (46 m) long. The 1 1/2-inch × 17 gage lath is available non-furred or with minimum furring of 1/4 inch (6 mm). The woven wire lath complies with ASTM C1032.

These products are also sold as Omega Wire 1 1/2 inch x 17 Gage Woven Wire lath and Omega Wire 1 1/2 inch x 17 Gage Non-Furred Woven Wire Lath.

3.2 1-inch × 20 gage Self-Furred Woven Wire Lath:

The 1-inch × 20 gage self-furred woven wire lath is manufactured from No. 20 gage [0.035 inch (0.89 mm) coated diameter] steel wire having a minimum Class 1 galvanized coating in accordance with ASTM A641. The woven wire lath has nominally 1-inch (25.4 mm) hexagonal-shaped openings, and has a minimum weight of 0.86 lb/yd² (0.47 kg/m²). The woven wire lath is supplied in rolls 36 inches (915 mm) wide and 150 feet (46 m) long and has minimum furring of 1/8 inch (3.2 mm). The galvanized 1-inch × 20 gage lath complies with ASTM C1032.

This product is also sold as Omega Wire 1-inch mesh x 20G.

4.0 INSTALLATION

4.1 No. 17 Gage Woven Wire Lath Products:

4.1.1 General: The No. 17 gage woven wire lath products must be installed in accordance with IBC Sections 2510.3 and 2511.1.1, or Section R703.6 of the IRC. The long dimension must be perpendicular to supports except at gable walls on exterior insulations, where the lath may be installed with the long dimension parallel to the roof slope. The lath must be furred a minimum of 1/4 inch (6.4 mm) from the framing members or solid substrate.

4.1.2 Fire-resistance-rated Construction: When the woven wire lath is installed in accordance with Section 4.1 of this report and IBC Section 720, the fire-resistance rating is as noted in IBC Table 720.1(2).

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other ... not specifically addressed, ... as an endorsement of the subject of the report or a recommendation for its use. There is ... to any finding or other matter in this report, or as to any product covered by the report.

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- A valid evaluation report by a qualified evaluation service provider (such as ICC-ES) with applicable accreditations and similar processes as ICC-ES
- Verify the report relates to the product and use of such product and installation conditions
- Check the product report number, listing number, or mark of conformity
- Valid evaluation reports and listings maybe found on ICC-ES online directory on our website at **www.icc-es.org.**

Basis for Evaluation Report

ICC EVALUATION SERVICE®

Compliance with International Codes
Compliance to State/Regional Codes

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ICC-ES Evaluation Report
ESR-3403

Reissued November 2021
Revised January 2022
This report is subject to renewal November 2022.

DIVISION: 03 00 00—CONCRETE
Section: 03 01 00—Maintenance of Concrete
Section 03 01 30—Maintenance of Cast-in-Place Concrete

DIVISION: 04 00 00—MASONRY
Section 04 01 00—Maintenance of Masonry
Section 04 01 20—Maintenance of Unit Masonry

REPORT HOLDER:

SIMPSON STRONG-TIE COMPANY, INC.

EVALUATION SUBJECT:

SIMPSON STRONG-TIE COMPOSITE STRENGTHENING SYSTEMS (CSSs)

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018, 2015, 2012, and 2009 *International Building Code®* (IBC)
- 2021, 2018, 2015, 2012, and 2009 *International Residential Code®* (IRC)

For evaluation for compliance with codes adopted by the Los Angeles Department of Building and Safety (LADBS), see ESR-3403 LABC and LARC Supplement.

Properties evaluated:

- Structural
- Durability
- Interior finish
- Toxicity
- Fire resistance

2.0 USES

The Simpson Strong-Tie Composite Strengthening Systems (CSSs) are used to strengthen normalweight reinforced concrete and masonry structural elements as alternatives to those systems described in the IBC. For structures regulated under the IRC, the Simpson Strong-Tie Composite Strengthening Systems (CSSs) may be used where an engineering design is submitted in accordance with Section R301.1.3 and where approved by the code official in accordance with Section R104.11. The CSS-CUCF and CSS-CUGF systems are also used as an interior finish.

3.0 DESCRIPTION

3.1 General:

The Composite Strengthening Systems (CSSs) are externally bonded fiber-reinforced polymer (FRP) systems applied to concrete and masonry structural elements. CSSs consist of carbon fabrics or glass fabrics combined with epoxy resin to create the FRP composite systems, or a carbon fiber precured laminate applied with an epoxy paste.

3.2 Materials:

3.2.1 General: All material must conform to the approved specifications outlined in the Simpson Strong-Tie CSS Quality Control Manual, dated June 18, 2015, Revision 1.

3.2.2 CSS Fabrics: The CSS fabrics are composed of carbon or glass fibers. CSS-CUCF11 and CSS-CUCF22 unidirectional carbon fabrics come in either 12-inch x 300-foot (305 mm x 91.4 m) or 24-inch x 150-foot (610 mm x 45.7 m) rolls. CSS-CUCF44 and CSS-CUCF44F unidirectional carbon fabrics come in either 12-inch x 150-foot (305 mm x 45.7 m) or 24-inch x 75-foot (610 mm x 22.9 m) rolls. CSS-CUGF27 unidirectional glass fabric comes in 25-inch or 50-inch x 150-foot (635 mm or 1,270 mm x 100 m) rolls. CSS-CBGF424 bidirectional glass fabric comes in 25-inch or 50-inch x 302-foot (635 mm or 1,270 mm x 92 m) rolls. Material properties vary with fiber type designation.

3.2.3 Epoxy Saturants:

3.2.3.1 CSS-ES Epoxy Saturant: The CSS-ES epoxy saturant and primer is a two-component, ambient cure, epoxy resin system used to prime substrates and saturate CSS fabrics. It is available in 3 gallon (11.4 L) kits. Component A is packaged with 2 gallons (7.6 L) in a 5-gallon (18.9 L) bucket to allow enough room for mixing full kits of epoxy. Component B is packaged in 1-gallon (3.8 L) containers. Mixing ratio by volume is two-to-one for components A and B, respectively; by weight the ratio is 100 Part A to 38.8 Part B.

3.2.3.2 CSS-ESLPL Epoxy Saturant: The CSS-ESLPL is a two-component, long pot-life epoxy resin system used

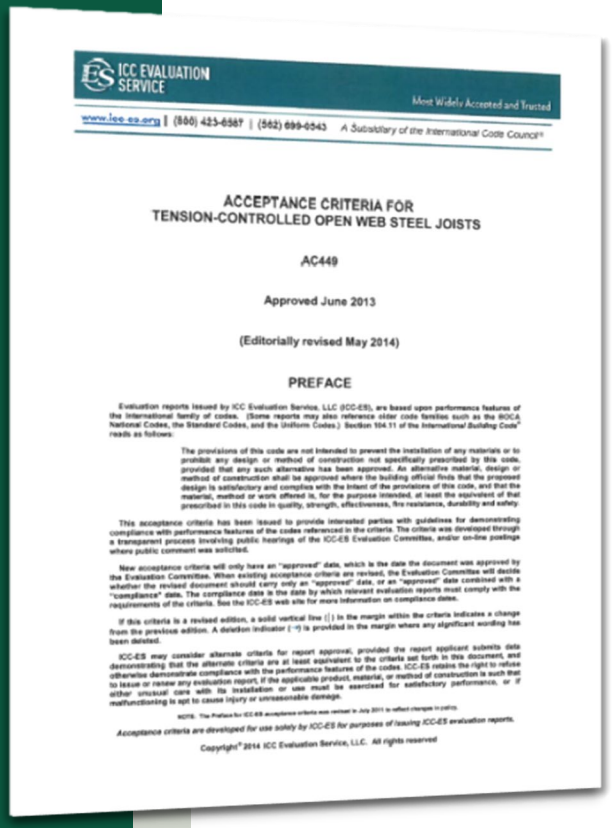
Code Provisions

- This is the basis for evaluation

Acceptance Criteria

- For innovative products not specifically referenced in the code, existing or new Acceptance Criteria developed by ICC-ES are used as the basis for evaluation

What is Acceptance Criteria?



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Most Widely Accepted and Trusted

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ACCEPTANCE CRITERIA FOR TENSION-CONTROLLED OPEN WEB STEEL JOISTS

AC449

Approved June 2013

(Editorially revised May 2014)

PREFACE

Evaluation reports issued by ICC Evaluation Service, LLC (ICC-ES), are based upon performance features of the International family of codes. (Some reports may also reference older code families such as the BOCA National Codes, the Standard Codes, and the Uniform Codes.) Section 104.11 of the *International Building Code*® reads as follows:

> The provisions of this code are not intended to prevent the installation of any materials or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

This acceptance criteria has been issued to provide interested parties with guidelines for demonstrating compliance with performance features of the codes referenced in the criteria. The criteria was developed through a transparent process involving public hearings of the ICC-ES Evaluation Committee, and/or on-line postings where public comment was solicited.

New acceptance criteria will only have an "approved" date, which is the date the document was approved by the Evaluation Committee. When existing acceptance criteria are revised, the Evaluation Committee will decide whether the revised document should carry only an "approved" date, or an "approved" date combined with a "compliance" date. The compliance date is the date by which relevant evaluation reports must comply with the requirements of the criteria. See the ICC-ES web site for more information on compliance dates.

If this criteria is a revised edition, a solid vertical line (|) in the margin within the criteria indicates a change from the previous edition. A deletion indicator (⁻¹) is provided in the margin where any significant wording has been deleted.

ICC-ES may consider alternate criteria for report approval, provided the report applicant submits data demonstrating that the alternate criteria are at least equivalent to the criteria set forth in this document, and otherwise demonstrate compliance with the performance features of the codes. ICC-ES retains the right to refuse to issue or renew any evaluation report, if the applicable product, material, or method of construction is such that either unusual care with its installation or use must be exercised for satisfactory performance, or if malfunctioning is apt to cause injury or unreasonable damage.

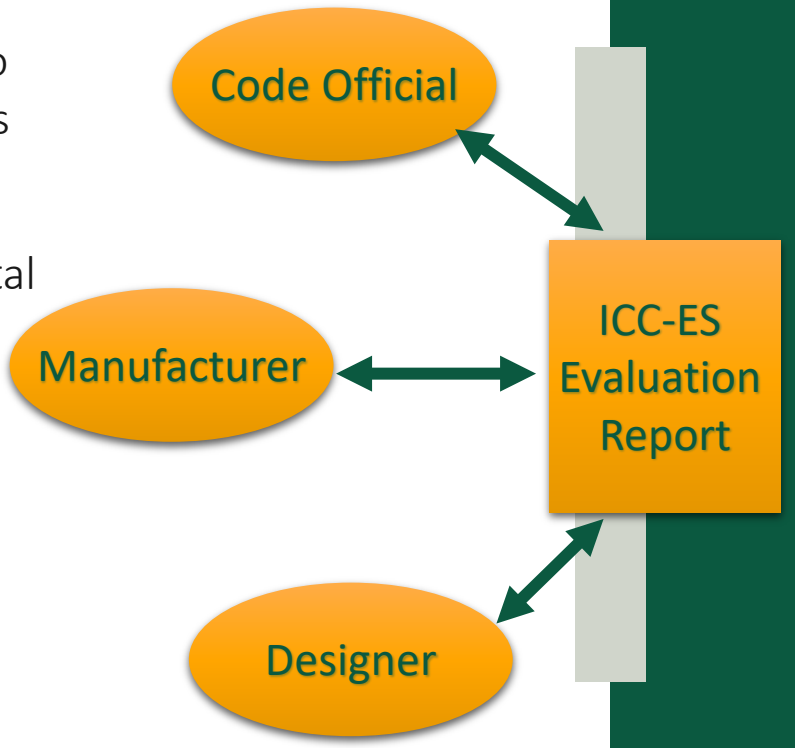
NOTE: The Preface for ICC-ES acceptance criteria was revised in July 2011 to reflect changes in policy.

Acceptance criteria are developed for use solely by ICC-ES for purposes of issuing ICC-ES evaluation reports.

- Developed by ICC-ES technical staff to address products or applications not defined or contained in codes
- New criteria and changes to criteria are vetted in a public input process and are approved by an Evaluation Panel made up of code officials

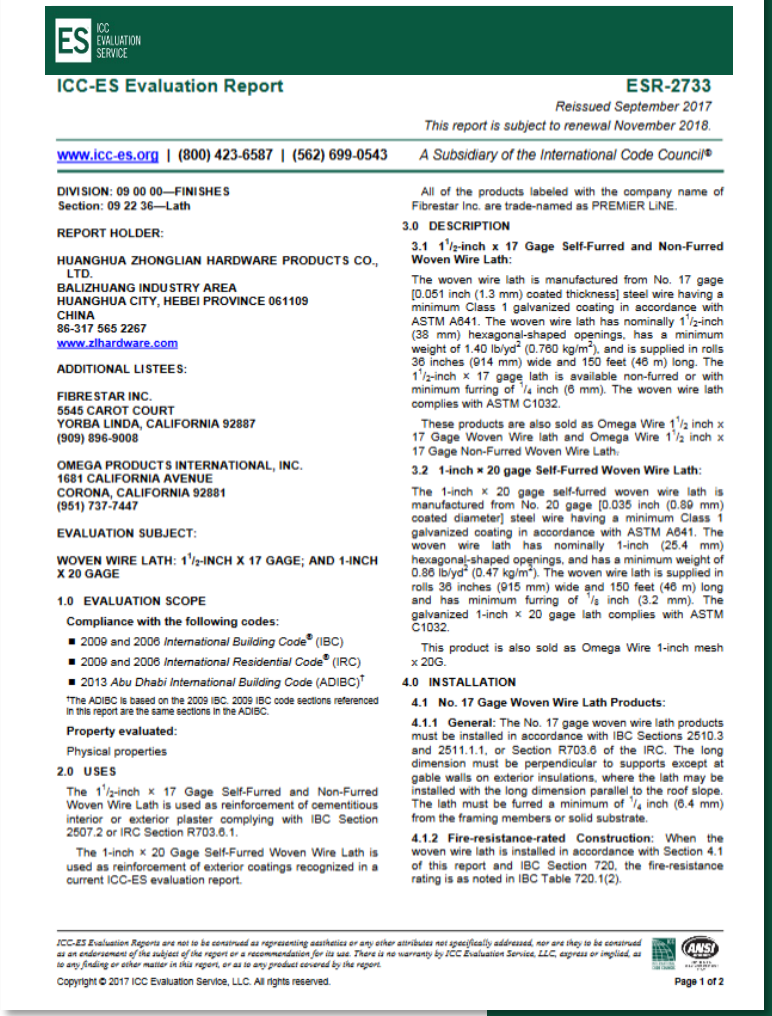
Benefits of having an ICC-ES Evaluation Report (ESR)

- Evidence a code official can evaluate to determine whether a product complies with codes and standards
- Avoids otherwise required departmental time/resources to ensure compliance
- Reduce health and safety risks and associated departmental liability
- Speeds permitting review
- ESRs are freely accessible for building departments



Benefits of an ICC-ES Evaluation Report to the Manufacturer

- Evidence to prove product complies with code and standards
- Key to entering U.S. marketplace for domestic and foreign manufacturers
- ICC-ES brand backing the code compliance of the product
- Reduces regulatory barriers and allows new and innovative products to be used in construction projects
- Competitive advantage



ICC EVALUATION SERVICE

ICC-ES Evaluation Report **ESR-2733**

Reissued September 2017

This report is subject to renewal November 2018.

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

REPORT HOLDER:

HUANGHUA ZHONGLIAN HARDWARE PRODUCTS CO., LTD.
BALIZHUANG INDUSTRY AREA
HUANGHUA CITY, HEBEI PROVINCE 061109
CHINA
86-317 565 2267
www.zlhardware.com

ADDITIONAL LISTEES:

FIBRESTAR INC.
5545 CAROT COURT
YORBA LINDA, CALIFORNIA 92887
(909) 896-9008

OMEGA PRODUCTS INTERNATIONAL, INC.
1681 CALIFORNIA AVENUE
CORONA, CALIFORNIA 92881
(951) 737-7447

EVALUATION SUBJECT:

WOVEN WIRE LATH: 1 1/2-INCH X 17 GAGE; AND 1-INCH X 20 GAGE

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2009 and 2006 *International Building Code*® (IBC)
- 2009 and 2006 *International Residential Code*® (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)†

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Property evaluated:

Physical properties

2.0 USES

The 1 1/2-inch × 17 Gage Self-Furred and Non-Furred Woven Wire Lath is used as reinforcement of cementitious interior or exterior plaster complying with IBC Section 2507.2 or IRC Section R703.6.1.

The 1-inch × 20 Gage Self-Furred Woven Wire Lath is used as reinforcement of exterior coatings recognized in a current ICC-ES evaluation report.

All of the products labeled with the company name of Fibrestar Inc. are trade-named as PREMIER LINE.

3.0 DESCRIPTION

3.1 1 1/2-inch x 17 Gage Self-Furred and Non-Furred Woven Wire Lath:

The woven wire lath is manufactured from No. 17 gage [0.051 inch (1.3 mm) coated thickness] steel wire having a minimum Class 1 galvanized coating in accordance with ASTM A641. The woven wire lath has nominally 1 1/2-inch (38 mm) hexagonal-shaped openings, has a minimum weight of 1.40 lb/yd^2 (0.760 kg/m^2), and is supplied in rolls 36 inches (914 mm) wide and 150 feet (46 m) long. The 1 1/2-inch × 17 gage lath is available non-furred or with minimum furring of 1/4 inch (6 mm). The woven wire lath complies with ASTM C1032.

These products are also sold as Omega Wire 1 1/2 inch x 17 Gage Woven Wire lath and Omega Wire 1 1/2 inch x 17 Gage Non-Furred Woven Wire Lath.

3.2 1-inch × 20 gage Self-Furred Woven Wire Lath:

The 1-inch × 20 gage self-furred woven wire lath is manufactured from No. 20 gage [0.035 inch (0.89 mm) coated diameter] steel wire having a minimum Class 1 galvanized coating in accordance with ASTM A641. The woven wire lath has nominally 1-inch (25.4 mm) hexagonal-shaped openings, and has a minimum weight of 0.86 lb/yd^2 (0.47 kg/m^2). The woven wire lath is supplied in rolls 36 inches (915 mm) wide and 150 feet (46 m) long and has minimum furring of 1/8 inch (3.2 mm). The galvanized 1-inch × 20 gage lath complies with ASTM C1032.

This product is also sold as Omega Wire 1-inch mesh x 20G.

4.0 INSTALLATION

4.1 No. 17 Gage Woven Wire Lath Products:

4.1.1 General: The No. 17 gage woven wire lath products must be installed in accordance with IBC Sections 2510.3 and 2511.1.1, or Section R703.6 of the IRC. The long dimension must be perpendicular to supports except at gable walls on exterior insulations, where the lath may be installed with the long dimension parallel to the roof slope. The lath must be furred a minimum of 1/4 inch (6.4 mm) from the framing members or solid substrate.

4.1.2 Fire-resistance-rated Construction: When the woven wire lath is installed in accordance with Section 4.1 of this report and IBC Section 720, the fire-resistance rating is as noted in IBC Table 720.1(2).

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.

QUESTIONS?

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Thank you!

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