Code Compliance Research Report
CCRR-0433

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Renewal Date: 10-31-2026

DIVISION: 07 00 00 – THERMAL AND MOISTURE PROTECTION
Section: 07 32 19 – Metal Roof Tiles

REPORT HOLDER:
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REPORT SUBJECT:
Tesla Metal Roof Tiles, Model Numbers SRMTT1 (full size), Partial tiles SRMTT5/6, SRMTT2/3, SRMTT1/2, SRMTT1/3

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2024, 2021 and 2018 *International Building Code®* (IBC)
- 2024, 2021 and 2018 *International Residential Code®* (IRC)
- 2023 and 2020 *Florida Building Code* (FBC)(excluding HVHZ) (see Section 9)
- 2025 and 2022 *California Building Code®* (CBC) (See Section 9)
- 2025 and 2022 *California Residential Code®* (CRC) (See Section 9)
- 2025 *California Wildland-Urban Interface Code®* (CWUIC) (See Section 9)

NOTE: This report references the most recent Code editions cited. Sections numbers in earlier versions of the Code may differ.

1.2 Tesla Metal Roof Tiles roof covering system has been evaluated for the following properties (see Table 1):

- Fire Classification
- Wind Resistance
- Wind-driven Rain
- Impact Resistance

1.3 Tesla Metal Roof Tiles roof covering system has been evaluated for the following uses (see Table 1):

- Class A, B or C Fire Classified roof covering
- Class F wind-resistant roof covering

2.0 STATEMENT OF COMPLIANCE

The Tesla Metal Roof Tiles roof covering system complies 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 6.0.

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 Tesla Metal Roof Tiles: Tesla metal tiles are non-energy producing tiles that create a metal roof covering that is intended for use on complete roof planes. The tiles are comprised of textured painted sheet metal with an integral EPS foam plastic backer. Tesla Metal Roof Tiles are metal roof panels complying with IBC Section 1507.4 and IRC Section R905.10.

3.2 Models SRMTT1 (full size), SRMTT5/6, SRMTT2/3, SRMTT1/2, SRMTT1/3: Tesla Metal Tiles model SRMTT1 are 1152.1mm long by 439.8mm wide by 43.9mm thick. The partial tile SRMTT models are of the same width and thickness as the full-size model, but with partial lengths of 5/6, 2/3, 1/2, and 1/3. The partial length tiles are provided to accommodate roof edges and obstructions. The panels have a partial foam plastic backing of expanded polystyrene having a density of 20 kg/m^3 and a flame spread index of 75 or less when tested in accordance with UL 723.

4.0 PERFORMANCE CHARACTERISTICS

Performance characteristics listed are for the Tesla Metal Roof Tiles that have been installed per manufacturer's installation instructions and per this code report.

4.1 Fire Classification: Class "A" fire classification when evaluated in accordance with UL 790.

4.2 Wind Resistance: UL 1897 wind uplift design pressure to a maximum allowable negative pressure of 52.5 psf when installed per manufacturer's instructions. Allowable pressure is based on a safety factor of 2.

4.3 Wind-driven Rain: When installed in accordance with this report, the system complies with the wind-driven rain resistance requirements of TAS 100.

4.4 Impact Resistance: Class 3 in accordance with UL 2218. Note, this information is provided for information only. The Codes do not require impact resistance for the conditions cited in this report.

5.0 INSTALLATION

5.1 General:

The Tesla Metal Roof Tiles roof covering system 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.

Flashing must comply with IBC Section 1503.2 or IRC Section R903.2 and must be installed following methods described in the Tesla Installation instructions.

5.2 Application:

Tesla Metal Roof Tiles are for steep slope roof applications with a minimum roof slope of 3:12, installed over minimum 15/32-inch-thick plywood or minimum 7/16-inch-thick OSB, complying with the applicable requirements of the Code. Plywood and OSB joints not blocked by the supporting structure must be blocked with a 1-hour fire-resistance-rated tape system complying with ASTM E814, or equivalent, and covered with either two layers of Elevate Clad-Gard SA-FR underlayment or one layer of Tesla Solar Roof Self-Adhered Roofing Underlayment (CCRR-0386).

Underlayments must be installed per IBC Section 1507.1.1 or IRC Section R905.1.1

The Tesla Metal Roof Tiles are attached to the roof deck utilizing 1/8-inch-diameter shank, 5/16-inch-diameter head by 1-1/8-inch-long ring shank roofing nails.

6.0 CONDITIONS OF USE

6.1 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.

6.2 The Tesla Roof Tiles are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

7.0 SUPPORTING EVIDENCE

7.1 Reports of tests in accordance with ASTM D3161-20, UL 790 (2022), TAS 100-23, UL 1897 (2015).

7.2 Data in accordance with the ICC-ES Acceptance Criteria AC166 Metal Roof Coverings, dated February 2021.

7.3 Intertek Listing Report Spec ID 58549 "Tesla Metal Roof Tiles", on the Intertek Directory of Building Products.

8.0 IDENTIFICATION

The Tesla Metal Roof Tiles are identified with the manufacturer's name (Tesla, Inc.), address and telephone number, the product name (Tesla Metal Roof Tiles), product model number, serial number that identifies the manufacturing location and date, the Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0433).

9.0 OTHER CODES

9.1 Florida Building Code:

9.1.1 Scope of Evaluation:

The Tesla Metal Roof Tiles roof covering system was evaluated for compliance with the 2023 and 2020 *Florida Building Code – Building* and *Florida Building Code-Residential.*

9.1.2 Conclusion:

The Tesla Metal Roof Tiles roof covering system described in sections 2.0 through 8.0 of this Research Report, complies with the 2023 and 2020 *Florida Building Code – Building* and *Florida Building Code – Residential*, excluding High-Velocity Hurricane Zones, subject to the following conditions:

- Underlayment must be installed per FBC – Building Section 1507.1.1 or FBC – Residential Section R905.1.1.

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

9.2 California Building Code:

9.2.1 Scope of Evaluation:

The Tesla Metal Roof Tiles roof covering system was evaluated for compliance with the 2025 and 2022 *California Building Code* and *California Residential Code,* including wildland-urban interface areas regulated under the 2025 *California Wildland-Urban Interface Code,* 2022 CBC Chapter 7A, and 2022 CRC Section R337.

9.2.2 Conclusion:

The Tesla Metal Roof Tiles roof covering system described in Sections 2.0 through 8.0 of this Research Report complies with the requirements of the 2025 *California Wildland-Urban Interface Code* Section 504, 2022 *California Building Code* Chapter 7A, and 2022 *California Residential Code* Section R337, subject to the following conditions:

- When installed on roofs of structures in Wildland-Urban Interface Areas, accessory items (such as trims, gutters, flashings, and vents) must comply with 2025 CWUIC Section 504, 2022 CBC Sections 705A and 706A, or 2022 CRC Section R337, as applicable.
- Installation of roofs of structures in Wildland-Urban Interface Areas must comply with 2025 CWUIC Section 504, 2022 CBC Section 705A, or 2022 CRC Section R337.5, as applicable.

10.0 CODE COMPLIANCE RESEARCH REPORT USE

10.1 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.

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

10.3 Reference to the Intertek Directory of Building Products is recommended to ascertain the current version and status of this report.

TABLE 1 – PROPERTIES EVALUATED

PROPERTY	2024 IBC SECTION[1]	2024 IRC SECTION[1]	2023 FBC - BUILDING	2023 FBC - RESIDENTIAL	2025 CBC SECTION[1]	2025 CRC SECTION[1]
Metal Roof Panels	1507.4	R905.10	1507.4	R905.10	1507.4	R905.10
Wind Loads	1504.1	R301.2.1	1504.1	R301.2.1	1504.1	R301.2.1
Fire Classification	1505.1	R902.1	1505.1	R902.1	1505.1	R902.1
Thermal barrier	2603.4.1.5	R303.5.2	2603.4.1.5	R316.5.2	2603.4.1.5	R316.5.2

[1] Section numbers may be different for earlier versions of the International, California and Florida Codes.