



ICC-ES Evaluation Report ESR-3575

Reissued August 2023

This report is subject to renewal August 2025.

**DIVISION: 07 00 00—THERMAL AND MOISTURE
PROTECTION**
Section: 07 65 00—Flexible Flashing

REPORT HOLDER:

ROOF TECH, INC.

EVALUATION SUBJECT:

**RT [E] MOUNT, RT [E] MOUNT AIR, RT APEX, RT MINI
AND RT MINI II SOLAR PV MOUNTING SYSTEMS**

1.0 EVALUATION SCOPE

Compliance with the following code:

- 2021, 2018, 2015, 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2021, 2018, 2015, 2012, 2009 and 2006 *International Residential Code*® (IRC)

Properties evaluated:

- Durability
- Water resistance

2.0 USES

The RT [E] Mount, RT [E] Mount Air, RT Apex, RT Mini and RT Mini II Solar PV mounting systems are used as flashing at roof penetrations which result during installation of the bracket to the roof structure of roofs covered with asphalt shingles, metal roof panels or SBS, EPDM and TPO single-ply roofing membranes.

3.0 DESCRIPTION

3.1 RT [E] Mount and RT [E] Mount Air:

The RT [E] Mount Solar PV mounting system is composed of metal bracket, wood screws and the RT Butyl Tape used to seal penetrations created during installation. The RT [E] Mount brackets are made from aluminum and come in two types, [E] Mount and [E] Mount Air. Both brackets are similar except that the [E] Mount Air has a taller profile. The wood screws are made from stainless steel having a hex-head, and installed with a stainless steel washer and a rubber washer. The RT Butyl Tape is butyl-based rubber and has a nominal thickness of 0.118 inch (3.0 mm). See Figure 1 for a

description of the RT [E] Mount bracket system components.

3.2 RT Apex, RT Mini and RT Mini II:

The RT Apex, RT Mini and RT Mini II Solar PV mounting systems are composed of metal bracket, wood screws and the RT Butyl Tape used to seal penetrations created during installation. The RT Apex, RT Mini and RT Mini II brackets are made from aluminum. The wood screws are made from stainless steel having a hex-head and installed with a stainless steel washer and a rubber washer. The RT Butyl Tape is butyl-based rubber and has a nominal thickness of 0.118 inch (3.0 mm). See Figures 2 and 3 for description of the mounting bracket system components.

4.0 INSTALLATION

Installation of the RT [E] Mount, RT [E] Mount Air, RT Apex, RT Mini and RT Mini II Solar PV mounting systems must comply with this report and the manufacturer's published installation instructions. The manufacturer's published installation instructions must be available at the jobsite at all times during installation.

The mounting bracket must be installed over the roof covering at the determined location. The RT Butyl Tape is placed beneath the bracket and over the roof covering. Wood screws are then used to fasten the bracket to the roof. Roofing sealant must be applied as recommended by Roof Tech, Inc. installation instructions. The RT [E] Mount, RT [E] Mount Air, RT Apex, RT Mini and RT Mini II Solar PV mounting systems have been evaluated to be installed on roofs covered with:

- A. Asphalt shingles with a minimum slope of 2:12 (17 percent) and maximum slope of 21:12 (175 percent).
- B. Metal roof panels with a minimum slope of 1/4:12 (2 percent) and maximum slope of 12:12 (100 percent).
- C. SBS, EPDM and TPO single-ply roofing membranes with a minimum slope of 1/4:12 (2 percent) and maximum slope of 3:12 (25 percent).

5.0 CONDITIONS OF USE

The RT [E] Mount, RT [E] Mount Air, RT Apex, RT Mini and RT Mini II Solar PV mounting systems described in this report comply with, or are suitable alternatives to what is

specified in, the code indicated in Section 1.0 of this report, subject to the following conditions:

- 5.1 The RT [E] Mount, RT [E] Mount Air, RT Apex, RT Mini and RT Mini II Solar PV mounting systems must be installed in accordance with this report and the manufacturer's published installation instructions. In the event of a conflict between this report and the manufacturer's published installation instructions, this report governs.
- 5.2 The structural capacity of the RT [E] Mount, RT [E] Mount Air, RT Apex, RT Mini and RT Mini II Solar PV mounting brackets and their connection to the roof is outside the scope of this report and must be determined by a registered design professional to the satisfaction of the code official.
- 5.3 The RT [E] Mount, RT [E] Mount Air, RT Apex, RT Mini and RT Mini II Solar PV mounting systems are manufactured under a quality control program with inspection by ICC-ES.

6.0 EVIDENCE SUBMITTED

- 6.1 Report of tests for rain test data in accordance with Section 4.1 of the ICC-ES Acceptance Criteria for Roof Flashing for Pipe Penetrations (AC286), dated October 2012 (editorially revised September 2021).
- 6.2 Report of tests in accordance with ASTM D1970 Sections 7.5 Thermal Stability; Section 7.9 Capability to Seal around Nail.

- 6.3 Report of tests for thermal cycling in accordance with Section 4.5.4 of the ICC-ES Acceptance Criteria for Membrane Roof-covering Systems (AC75), dated July 2010 (editorially revised April 2021).

- 6.4 Quality documentation in accordance with the ICC-ES Acceptance Criteria for Quality Documentation (AC10) dated November 2021.

- 6.5 Report holder's published installation instructions.

7.0 IDENTIFICATION

- 7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-3575) along with the name, registered trademark, or registered logo of the report holder must be included in the product label.

- 7.2 In addition, the RT [E] Mount, RT [E] Mount Air, RT Apex, RT Mini and RT Mini II Solar PV mounting systems are identified with a label bearing the report holder's name (Roof Tech, Inc.), the product name or designation, and the evaluation report number (ESR-3575).

- 7.3 The report holder's contact information is the following:

ROOF TECH, INC.
10620 TREENA STREET, SUITE 230
SAN DIEGO, CALIFORNIA 92131
(858) 935-6064
www.roof-tech.us

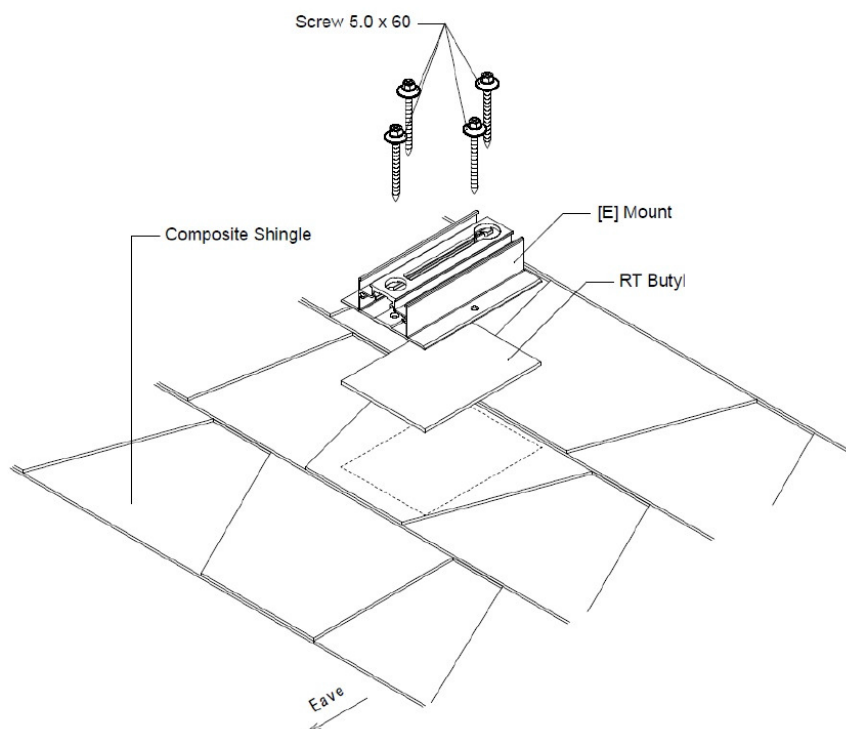


FIGURE 1—[E] MOUNT SOLAR PV MOUNTING BRACKET ASSEMBLY

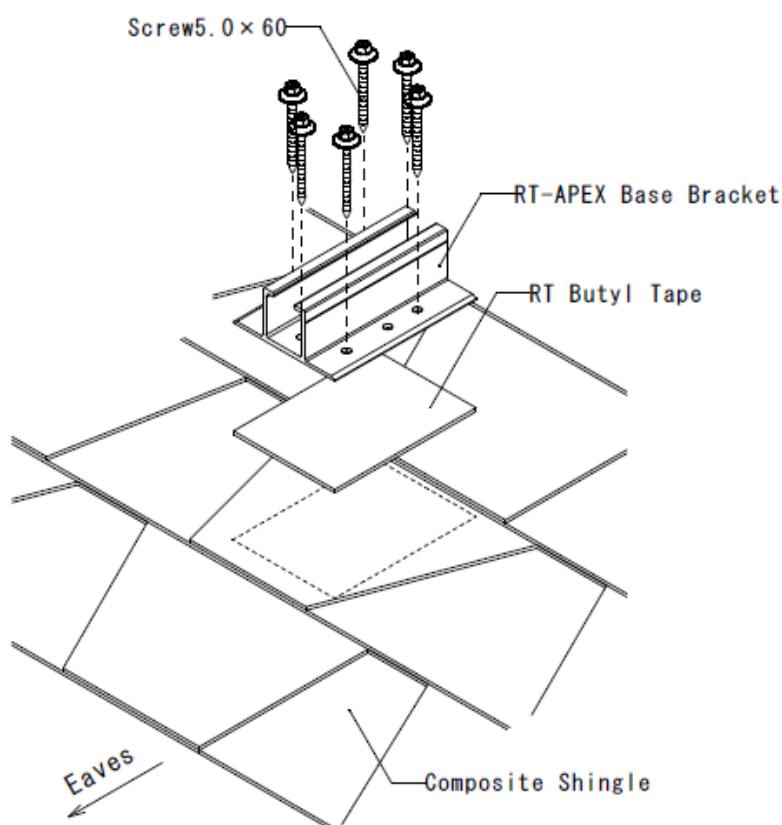


FIGURE 2—RT APEX SOLAR PV MOUNTING BRACKET ASSEMBLY

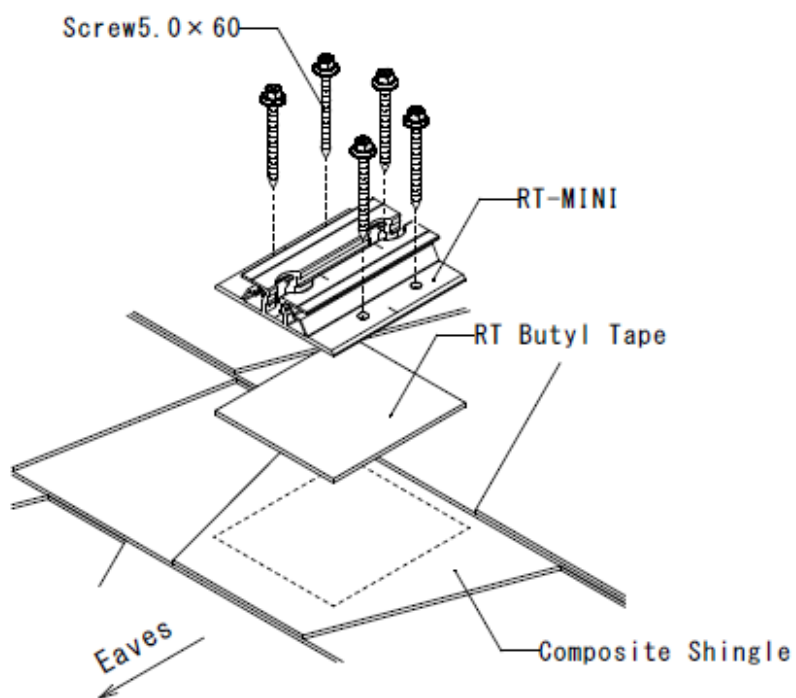


FIGURE 3—RT MINI AND RT MINI II SOLAR PV MOUNTING BRACKET ASSEMBLY

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EVALUATION SUBJECT:

RT [E] MOUNT, RT [E] MOUNT AIR, RT APEX, RT MINI AND RT MINI II SOLAR PV MOUNTING SYSTEMS

1.0 REPORT PURPOSE AND SCOPE**Purpose:**

The purpose of this evaluation report supplement is to indicate that RT [E] Mount, RT [E] Mount Air, RT Apex, RT Mini and RT Mini II Solar PV Mounting Systems, described in ICC-ES evaluation report ESR-3575, have also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2019 *California Building Code* (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

- 2019 *California Residential Code* (CRC)

2.0 CONCLUSIONS**2.1 CBC:**

The RT [E] Mount, RT [E] Mount Air, RT Apex, RT Mini and RT Mini II Solar PV Mounting Systems, described in Sections 2.0 through 7.0 of the evaluation report ESR-3575, comply with CBC Chapter 15, provided the design and installation are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report.

2.1.1 OSHPD:

The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

2.2 CRC:

The RT [E] Mount, RT [E] Mount Air, RT Apex, RT Mini RT Mini II Solar PV Mounting Systems, described in Sections 2.0 through 7.0 of the evaluation report ESR-3575, complies with CRC Chapter 9, provided the design and installation are in accordance with the 2018 *International Residential Code*® (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued August 2023.

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1.0 REPORT PURPOSE AND SCOPE**Purpose:**

The purpose of this evaluation report supplement is to indicate that RT Apex, RT Mini and RT Mini II Solar PV Mounting Systems, described in ICC-ES evaluation report ESR-3575, have also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2020 Florida Building Code—Building
- 2020 Florida Building Code—Residential

2.0 CONCLUSIONS

The RT Apex, RT Mini and RT Mini II Solar PV Mounting Systems, described in Sections 2.0 through 7.0 of ICC-ES evaluation report ESR-3575, comply with the *Florida Building Code—Building* and *Florida Building Code—Residential*. The design requirements must be determined in accordance with the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-3575 for the 2018 *International Building Code*® meet the requirements of the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable, with the following condition:

- Equipment or structures attached to the RT Apex, RT Mini and RT Mini II Solar PV Mounting Systems are outside the scope of this supplement.

Use of the RT Apex, RT Mini and RT Mini II Solar PV Mounting Systems for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* and *Florida Building Code—Residential* has not been evaluated, and is outside the scope of this supplemental report.

For products falling under Florida Rule 61G20-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

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