### **Technical Bulletin**

Installation Accessories/Testing Update Published July 19, 2023

**Revised 8/9/2023** 



### **Brava Class A System with Fire Resistant Underlayment**

**Summary** 

Brava has completed and passed ASTM E108 fire testing using Class C firerated material installed over a Fire Resistant (FR) underlayment creating a Class A fire-rated roof system.

**Fire Testing** 

The American Society for Testing and Materials (ASTM) E108 test is a standard used to determine the fire resistance of roofing material, classifying them as Class A or Class C, with Class A being the most fire-resistant. Some regions mandate a Class A rating for safety reasons.

Why is this Important?

Previously, Brava only offered a Class A version of our synthetic Shake and Slate roofing material, which could be installed over any ASTM D226 underlayment.

Customers can now achieve a Class A roof system even more easily and economically by combining Class C Brava material with one of our newly certified underlayment options.

- LOW-E ThermaSheet
- ECO CHIEF SOLARHIDE-SRW

This allows Brava to have greater material flexibility, faster production turn times, and lowered costs, while still meeting stringent fire safety requirements.

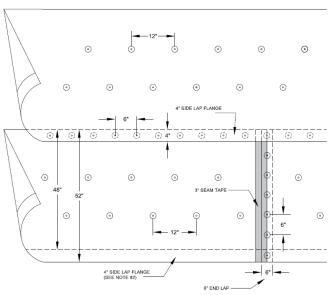
FR Underlayment Installation

Refer to the underlayment manufacturer's installation instructions prior to installation. When a Class A fire rating is required by code, fire resistant underlayment must be the topmost layer installed directly under the Brava Roof Tile system. Depending on code requirements, regional weather phenomena, and design specifications, Low-E ThermaSheet or SOLARHIDE may be installed as a single-layer underlayment when installed as part of a Brava roof system. Alternatively, a minimum ASTM D226 underlayment may be installed under Low-E ThermaSheet or SOLARHIDE.

ThermaSheet Installation and Accessories

Low-E ThermaSheet should be installed with minimum corrosion-resistant #12 x 1" cap nails with a minimum 1" diameter plastic cap. ThermaSheet has a built-in 4" foil flange that laps for horizontal seams (side lap). Lap vertical seams (end lap) 6". Fasten in the field of the sheet with two staggered rows of fasteners spaced 12" on center. Fasten side laps, through the flange, 6" on center. Fasten end laps, through the lap, 6" on center. Note: Before installing, orient the underlayment with this flange down the slope of the roof. This eliminates additional material needed for the horizontal laps. Low-E seam tape is required for all vertical seams.

Horizontal seams should be taped if rain or moisture is likely prior to roof covering installation. Seam tape minimizes the risk of water intrusion while underlayment is exposed. Maximum UV exposure time for Low-E ThermaSheet is 90 days.



Standard Fastener Pattern

#### **Recommended ThermaSheet Accessories:**

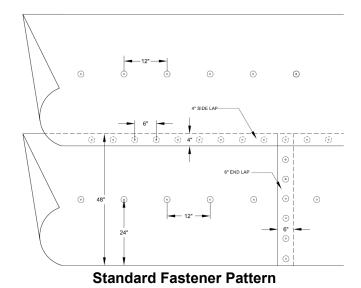
Seam Tape – Approx. 1 roll/100 SQ if only vertical (end lap) seams are taped.

(Approx. 1 roll/10 SQ if all vertical and horizontal seams are taped.)

Cap Nails – Approx. 102 nails/1 SQ

SOLARHIDE Installation and Accessories ECO CHIEF SOLARHIDE should be installed with minimum corrosion-resistant #12 x 1" cap nails with a minimum 1" diameter plastic cap. SOLARHIDE must be lapped 4" horizontally (side lap) and 6" vertically (end lap). Fasten in the field of the roll with one row of fasteners spaced 12" on center. Fasten both the side and end laps 6" on center. Maximum UV exposure time for SOLARHIDE is 180 days.

\*For slopes 3:12 or less, increase overlapping of side laps to 24" and end laps to 8".



#### **Recommended SOLARHIDE Accessories:**

Cap Nails - Approx. 83 nails/1 SQ

(Approx. 152 nails/SQ for low slope installation)

# Underlayment Recommendation

Brava recommends ASTM D1970 Ice & Water Shield be installed at eaves, rakes, and valleys (when appropriate for installation location) as described in published Brava installation instructions. Synthetic underlayment is recommended on the remainder of the roof under a selected fire-resistant underlayment for maximum protection. See manufacturer's specifications.

#### **Roof Ventilation**

Ensure roof and attic ventilation meets code and industry best practices. Insufficient roof ventilation may lead to roof deck failure. Contact the roof vent manufacturer and refer to local building code when determining roof venting requirements.

## Additional Benefits

ThermaSheet underlayment is designed as an insulation material that provides a thermal break and acts as a radiant barrier, reducing heat transfer. When combined with the built-in airspace under Brava's roof systems, it can significantly increase the R-Value – a measure of thermal resistance – of the roof, and by extension, the whole house. This results in better insulative properties and the potential for lowering heating and cooling costs. More information is coming soon on our resources page linked below.

#### **Notes**

Review the Brava Installation Guides at <a href="www.bravarooftile.com">www.bravarooftile.com</a> for product specifications and general installation guidelines. Verify code requirements and ensure compliance with underlayment manufacturers' published installation instructions. Ensure underlayment fasteners penetrate 3/4" into or completely through the roof sheathing.

#### Resources

Brava provides installation guidance for all products and other technical resources at <a href="https://www.bravarooftile.com/resources/">https://www.bravarooftile.com/resources/</a>.

Brava Technical Support offers In-Plant and Remote Installation Training in English and Spanish. Remote training is accessible regardless of location. Training prior to beginning installation can prevent costly delays. Schedule **HERE** using Calendly.

#### Questions

To schedule training, or if you have any questions regarding Brava Roof Tile products and accessories, call 844-290-4196 and ask for Technical Support. Or contact us through our website at <a href="https://www.bravarooftile.com/contact-brava/">https://www.bravarooftile.com/contact-brava/</a>.