



# Technical Bulletin

Installation Supplement

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## Brava Roof Sheathing Options Plywood, OSB, Plank, and Spaced Sheathing

Summary	Brava roof systems should be installed over a smooth, flat, clean surface with a minimum 15/32" CDX plywood or a minimum 7/16" Oriented Strand Board (OSB). For the most comprehensive code certification and for the highest pull-through in high-wind environments, Brava recommends the use of plywood sheathing. Sheathing should comply with IBC, IRC, and any additional regional or local codes.
Contents	<b>Historic Sheathing Materials   Modern Sheathing Materials   Standard Sheathing Thickness   Benefits of Modern Sheathing   Installation over Plank or Spaced Sheathing   Required Special Installation   Warranty Limitations   Fire &amp; Wind Rating Limitations   Notes   Resources   Questions</b>
Historic Sheathing Materials	Roof sheathing has developed significantly over the last 100 years. Before plywood and OSB became common in the 1970s, it was common to see planks – usually nominal 1"x6" or 1"x8" boards – laid across the rafters. These replaced rough-cut timbers used throughout the 19th century. Planks were nailed directly to the rafters, and then the roofing material was installed. This is referred to as plank sheathing or plank decking. In some cases, planks were installed with spaces between them instead of edge-to-edge. This is referred to as spaced or skip sheathing.
	<div></div> <div>Plank Sheathing</div> <div>Spaced Sheathing</div>
Modern Sheathing Materials	Plywood or OSB sheet material is the standard and preferred sheathing material for modern roofs. It is also common to replace or cover old plank or spaced sheathing with these modern building materials when replacing the roof material. Plywood and OSB sheathing are sold in 4'x8' sheets, aiding in consistent and efficient installation.



Plywood



OSB

## Benefits of Modern Sheathing

**Strength:** Sheet materials like plywood and OSB offer uniform structural strength across the roof, improving resistance to wind and other loads.

**Stability:** Plywood and OSB are dimensionally stable, reducing expansion and contraction compared to planks, which enhances fastener connections, particularly in regions with large temperature swings, and lessens stress on the roofing material due to thermal movement.

**Support:** The continuous surface of sheet materials ensures comprehensive support for roofing materials and a uniform surface for fasteners, preventing sagging, premature failure, or missed fasteners in gaps between plank sheathing.

## Standard Sheathing Thickness

- 15/32" CDX plywood and 7/16" OSB sheathing is common when roof rafters or trusses are spaced  $\leq 24"$  apart and is the minimum thickness for Brava roof systems.
- 5/8" sheathing is more common for areas subject to high wind speeds or heavy snow loads, or when the roof rafters or trusses are spaced more than 24" apart.
- 3/4" sheathing is typically used for special applications that require extra strength, such as the installation of solar panels.

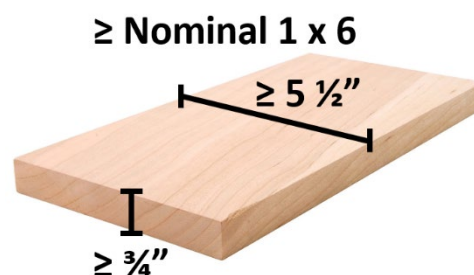
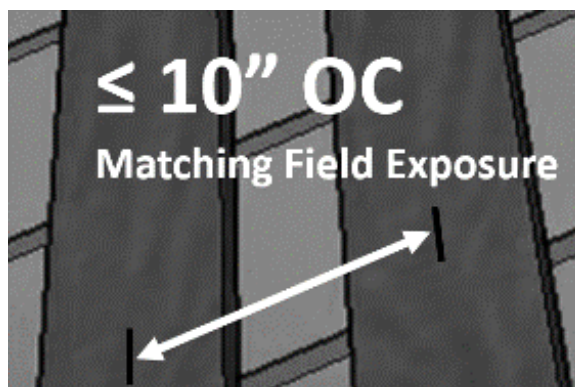
*Note: Local or regional building codes may specify sheathing type and thickness. \**

## Installation over Plank or Spaced Sheathing

When it is not possible to use solid sheet sheathing, Brava Cedar Shake and Brava Slate may be installed on plank or spaced sheathing with special installation requirements and significant limitations to warranty coverage and code compliance certification. \* Brava recommends installation over plywood sheathing.

## Required Special Installation

- A solid deck is always recommended, especially in areas where high wind and wind-driven rain/snow are common.
- Brava Spanish Barrel Tile and Brava Flat Tile are not approved for use with plank or spaced sheathing.
- Plank and spaced sheathing must be a minimum nominal 1x lumber.
- Spaced sheathing should be minimum nominal 1x6 boards spaced on centers equal to the desired shake exposure. For example, if the desired exposure is 10", the 1x6 inch boards would be installed at 10" on center.
- Maximum allowable spacing is approximately 3 1/2" measured from edge to edge between the sheathing boards.
- Roofing felt system interlay between the shake or slate courses is required when installed on spaced sheathing.



<b>Warranty Limitations</b>	<p>There is a higher tendency for plank and spaced sheathing to experience increased movement and inconsistent thermal stability when compared to plywood and OSB. Fasteners installed over plank sheathing may miss the planks between boards and lead to lower wind uplift resistance. Movement, uneven ventilation, and temperature variations could result in performance and aesthetic inconsistencies in the roof, such as lifted, buckled, curled, or undulating tiles and courses. Brava will not be liable for concerns related to these issues or other issues that may be caused by installations over substrates of plank or spaced sheathing, and these will not be covered under Brava's Lifetime Limited Warranty.</p> <p><b>Full warranty coverage requires ≥15/32" plywood or ≥7/16 OSB sheathing.</b></p>
<b>Fire &amp; Wind Rating Limitations</b>	<p>Brava Roof Systems have not been tested for fire classification or wind rating over plank, spaced, or OSB sheathing and are not certified when installed over those substrates. *Fire classification rating and wind uplift testing and certification have been completed using 15/32" plywood sheathing and have not been validated with plank, spaced, or OSB sheathing. Additional testing is projected to expand certified sheathing options. Applicable codes may require plywood sheathing or a thicker roof deck. <i>For example, in Miami-Dade compliant counties, ≥19/32" Plywood sheathing is required.</i></p>
<b>Notes</b>	<p>This bulletin is not intended to replace state or local code documents and publications. Check with your building official to ensure deck compliance with applicable codes. Always review the most updated source documents for building code requirements. Fasteners must penetrate 3/4" into or completely through the sheathing.</p>
<b>Resources</b>	<p>Brava provides installation guidance, code and testing details, and other resources for all products at <a href="https://www.bravarooftile.com/resources/">https://www.bravarooftile.com/resources/</a>.</p> <p>Brava Technical Support offers Online, In-Plant, and Remote Installation Training. Online and Remote training is accessible regardless of location. Training prior to beginning installation is recommended.</p>
<b>Questions</b>	<p><b>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.</b> Or contact us through our website at <a href="https://www.bravarooftile.com/contact-brava/">https://www.bravarooftile.com/contact-brava/</a>.</p>