



# Build With BRAVA By ARCHITECTURAL

Whether you're taking your first steps, navigating mountain trails, walking beach side under blue skies, or sharing laughs around a campfire, life's core memories bring us back to one place: home.

Make it a home Built with BRAVA.





# Inspiring Beauty

# Every BRAVA Roof Tile Is A Choice Tile.

Extraordinary color, superior mineral pigment throughout, varigation within each tile and super fine detail create an unparalleled natural terracotta look.

### Compression Molded

Compression molding makes our tiles stronger and more detailed.

### Thicker, More Material

The gauge of BRAVA material is thicker and provides more headlap than comparable synthetic roofing products. The finished roof is more durable and dimensional.

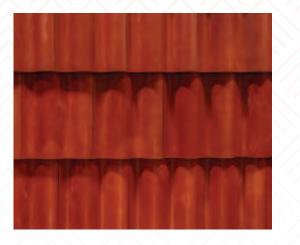
### Sustainable

We turn plastic destined for the landfill into a beautiful and durable roof made of recycled material that itself is fully recyclable.

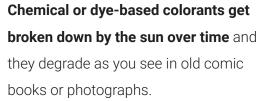
# **Color For Life**









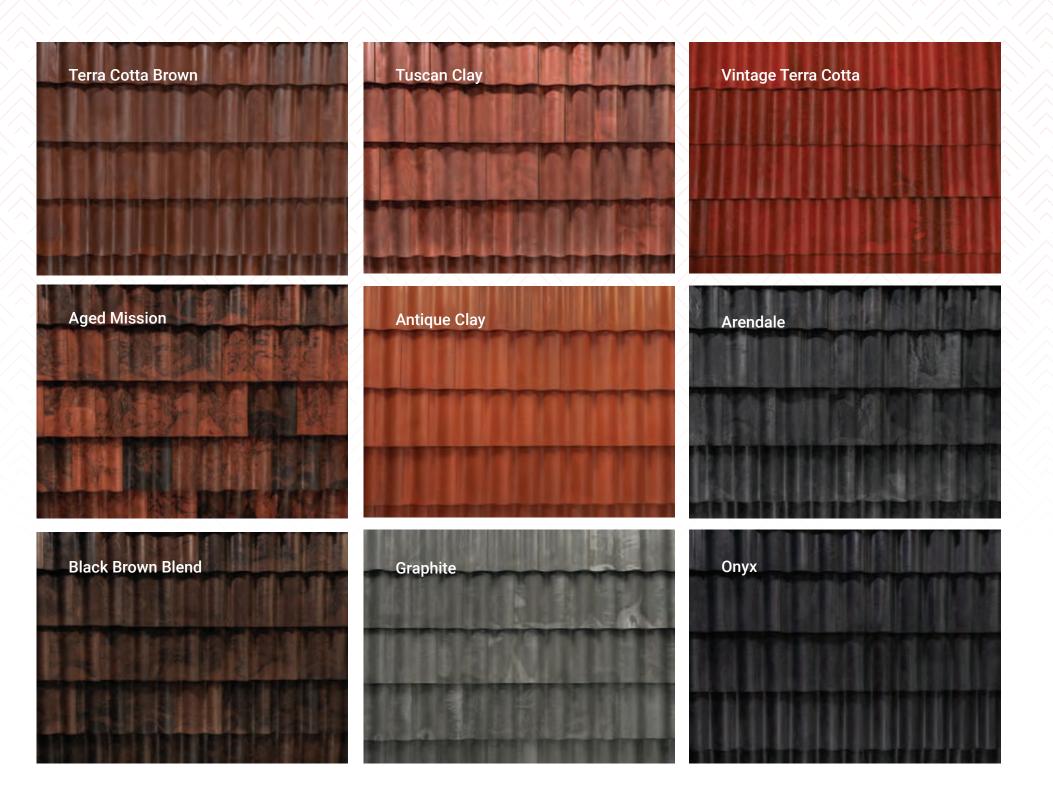


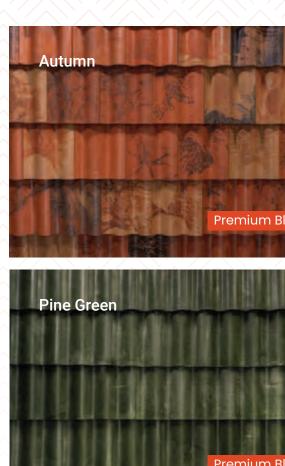


Pure mineral pigments keep a 3,000 year old wall colorful and paintings that are hundreds of years old remain bright.



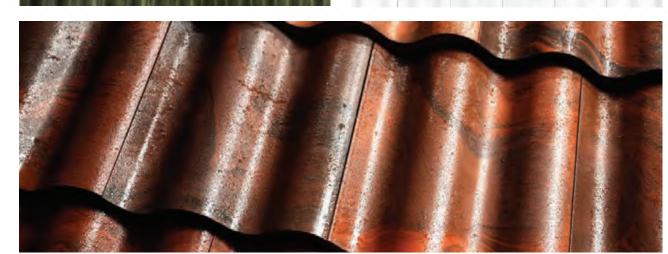
BRAVA tiles are made with pure mineral pigments found in nature – colorants that can last for centuries.







Mediterranean





**Standard** color line of natural color blends gives an authentic look of natural terracotta tile.

**Premium** striking color blends complimenting homes that strive for a luxurious look and feel.

**Cool Roof Colors** (Title 24 compliant) are perfect for any home looking for the benefits of increased energy efficiency.



Premium Blend

See our full selection of Catalogues & Brochures at ArchitecturalBling.com

or Scan the QR Code







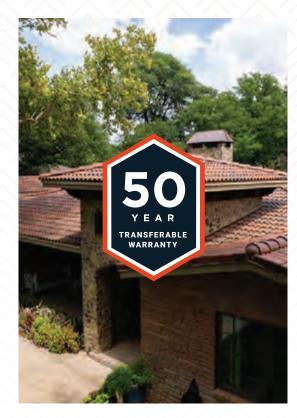






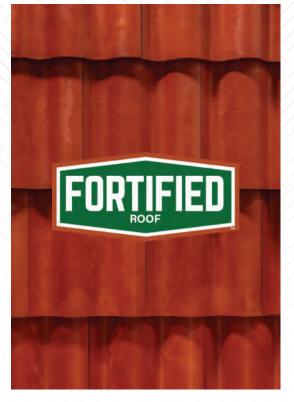


### **Industry Leading Protection**



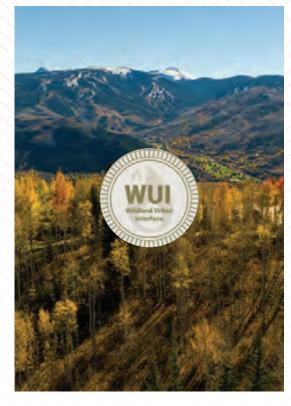
### Limited Lifetime Warranty

BRAVA offers a Limited Lifetime
Warranty with a coverage period of
50-years making it one of the strongest
warranties in the industry.



### Fortified Roof Program

Save money with grants and insurance policy discounts with FORTIFIED Roof™. See our website for program requirements and benefits **before** you start your project.



### Wildland Urban Interface

Some areas require compliance with the WUI code. BRAVA is a Class A fire rated roofing system and our products are WUI approved and reduce risk of wildfire spread.

## **Installed by Factory-Trained Roofing Contractors**

When you use a
BRAVA Preferred Contractor
you will be dealing with a
qualified, dependable and
professional contractor.

Superior workmanship.

Adequately **insured**.

Passed background check.

**Trained** by factory.

Consistently shows **ethical** contracting practices in their area.

Committed to ongoing training.



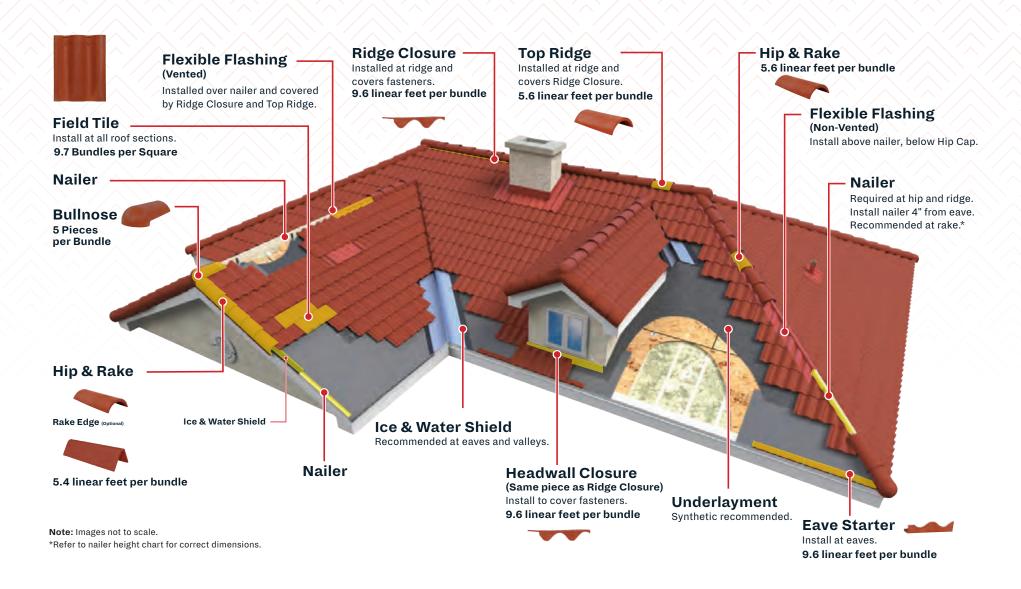




BRAVA trains hundreds of installers each year.

### An Integrated System to Keep You Safe & Dry

### Spanish Barrel Tile Roof System



# **BRAVA Spanish Roof Tile**



Beautiful appearance that fits your home.



No maintenance costs.



50-year transferable warranty.



Class A fire rating.



Highest resistance rating against hail and storm damage.



Lightweight and strong.

Does not require any structural changes.



Beautiful appearance that fits your home.



Must be inspected and repaired annually for cracked or slipped tiles, spalling, and fastener failures.



Natural slate is brittle and must be monitored and replaced by a specialist.



Class A fire rating. More sto hail



More susceptible to hail and storm damage.



Heavyweight requires additional structural reinforcement.

**Traditional Clay Tile** 



# **Build With Authenticity**

We work hard every day to be the premier synthetic tile manufacturer in the United States. We're driven by creativity, customer satisfaction, and a commitment to a cleaner planet.

Our tiles support homes and spaces filled with memories, reflect the lives of our customers and are a promise to leave the world better than we found it.



SCAN ME

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or Scan the QR Code







# LEED® PROGRAM GUIDE

# Shake, Slate & Barrel Tile

Revised November 14, 2024



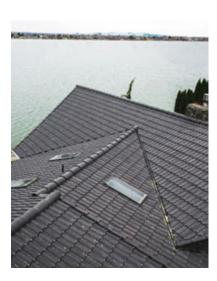












### Sustainability at Brava

Brava turns recycled plastics into beautiful and durable roofing material. Our composite products avoid depleting natural resources such as quarries for slate or lumber for wood shakes. And no energy is wasted mining slate, extracting clay, or harvesting trees. Any scraps from the installation can be recycled into new material. What's more, our composite tiles have a lower carbon footprint than traditional roofing shingles, when considering their complete life cycle.

There is an enormous amount of waste flowing out of the roofing industry, and we aim to avoid that cycle. An eco-friendly solution, our composite roof tile is made of compressed, recycled plastics and other sustainable/recyclable materials. This creates a composite tile that is much lighter in weight than traditional roofing systems, which reduces the weight of motor vehicles that transport them, increasing fuel efficiency and lowering emissions.

Choosing synthetic roofing materials can contribute to environmental conservation by reducing the demand for natural resources. Brava Roof Tile is committed to producing eco-friendly, sustainable tiles. Brava's products contain up to 50% recycled plastic, are fully recyclable, and have high solar reflectance that can help reduce energy demands on homes.

### What is LEED?

LEED (Leadership in Energy and Environmental Design) is the world's most widely used green building rating system. LEED certification provides a framework for healthy, highly efficient, and cost-saving green buildings, which offer environmental, social, and governance benefits.

### What Does "LEED Certified" Mean?

Being "LEED Certified" is sometimes used interchangeably to refer to both buildings and LEED professionals. Officially, people earn LEED accreditation (or "LEED credentials"). Buildings are considered LEED-certified, not products or people.





### What are the Benefits of LEED?

LEED buildings provide a range of economic, environmental, and social benefits, making them a desirable choice for both developers and occupants. LEED-certified buildings offer several benefits, including:

- **1. Environmental sustainability:** LEED buildings are designed to minimize energy consumption, reduce water usage, and promote environmentally friendly materials, contributing to a healthier planet.
- **2. Cost savings:** By using energy-efficient systems and sustainable materials, LEED buildings typically have lower operating costs, saving money over time on utilities and maintenance.
- **3. Healthier indoor environment:** LEED certification emphasizes indoor air quality, daylighting, and access to natural views, which can improve occupant health and productivity.
- **4. Marketability and brand enhancement:** LEED certification demonstrates a commitment to sustainability, which can attract tenants, customers, and investors who value environmental responsibility.
- **5. Regulatory compliance and incentives:** Some jurisdictions offer incentives, tax breaks, or expedited permitting for LEED-certified projects, encouraging developers to pursue sustainable building practices.

### Selecting a LEED Rating System

LEED is for all building types and all building phases including new construction, interior fit outs, operations and maintenance and core and shell. However, most LEED projects with Brava products will typically fall under these two rating systems.

**LEED Homes** is used for residential single-family homes, low-rise multi-family (one to three stories) or mid-rise multi-family (four or more). Homes and residential buildings that are greater than four stories may also use LEED BD+C.

**LEED BD+C** (Building Design & Construction) is used for new buildings and major renovations. It is the standard for green building design, construction, operations, and performance: a more streamlined user experience and more goal-oriented credits.













For more information on selecting a LEED rating system, please follow the <u>LEED Rating System Selection</u> <u>Guidance</u>.







### Certification includes a few simple steps:

- Determine your project type (new or existing space, building, or city or community).
   Review the rating systems.
- 2. **Select priorities** for your project based on outcomes outlined in the LEED rating system (ex. human health, energy efficiency, carbon reduction, etc.). Review priorities in the <u>credit library</u>.
- 3. Check the requirements and options. Minimum Program Requirements (MPRs) are the basic requirements that let you know if your project can pursue LEED. LEED credits allow project teams to customize how they pursue LEED. By fulfilling credits, project teams earn points that, once added together, determine a project's certification level.
- 4. Choose your rating system. For the new construction of whole buildings, start by finding the option that best fits your project by exploring the BD+C offerings. For residential projects (both single-family and multi-family) review the options specific to that sector.
- 5. Review the tools and resources available for LEED projects. Access tools.
- 6. **Document** achievement of rating system requirements and credits. <u>Go to LEED Online</u> or view sample forms.
- 7. **Submit** for review in <u>LEED Online</u>.

### How to Achieve LEED Certification

To achieve LEED certification, a project earns points by adhering to prerequisites and credits that address carbon, energy, water, waste, transportation, materials, health, and indoor environmental quality. Projects go through a verification and review process by GBCI and are awarded points that correspond to a level of LEED certification:

Θ	Integrative Process		1 pt.	0	Materials & Resources		13 pts.
Location & Transportation		16 pts.		Indoor Environmental Quality		16 pts.	
8	Sustainable Site		10 pts.	Ø	Innovation in Design		6 pts.
0	Water Efficiency		11 pts.	0	Regional Priority		4 pts.
0	Energy & Atmosphere		33 pts.		Total		110 pts.
相	建	1			种	444	
Plat	tinum	Gold			Silver	Certified	
80+	points earned	60-79 points	earned		50-59 points earned	40-49 po	ints earned





### **LEED Tools & Support**

There are a number of tools and resources available to support you when working on your LEED project, including:

- LEED for Homes v4
- Introducing LEED v4
- LEED Credit Library
- LEED v4.1 BD+C Guide
- Education
- View all of the tools













### **Compliance & Eligibility**

Compliance can be complicated, so this information is meant to help you understand some basic requirements and how Brava roofing products can help you comply with LEED requirements and contribute towards LEED certification.



# LEED® PROGRAM GUIDE Shake, Slate & Barrel Tile BRAVA By





### **LEED Homes**

### Sustainable Sites Credit: Heat Island Reduction

	Credit Req	uirements		Credit Options
roads that serv	least 50% of hardscapes ve multiple buildings, on t rements. Points are awar	Option 2. Nonabsorptive materials (1–2 points) Install light-colored, high-albedo		
Percentage of Hardscape Points				materials or vegetation-covered hardscapes. Acceptable strategies include the following:
	50-75%	Use ENERGY STAR* qualified roof products in appropriately		
	>75%	sloped applications (or performance equivalent for projects outside the U.S.).		
market. The Co specifiers updo program to en reflectance inc	22, no Energy Star certified to Roof Rating Council (Cate any references to Enesure the solar reflectance lex (SRI) values used for a led, and publicly accessibility.	<ol> <li>Use paving materials with a three-year aged solar reflectance (SR) of at least 0.28. If three-year aged value information is not available, use materials with an initial SR of at least 0.33 at installation.</li> </ol>		
Brava's Eligible Products				

Please refer to Appendix A to check Brava's eligible products and colors

### Materials & Resources: Environmentally Preferable Products

Credit Requirements	Credit Options
Use building component materials that meet one or more of the criteria below. A material must make up 90% of the component by weight or volume, except as noted. A single component that meets Option 1 and Option 2 can earn points for each (0.5 point per item).	Option 2. Environmentally preferable products (1 point roofing) Use products that meet the following criteria.  1. The product contains at least 25% postconsumer or 50% preconsumer content.

### **Brava's Eligible Products**

All Brava roof tile profiles. This includes Brava Shake, Slate and Barrel tiles. Brava tiles contain up to 50% pre-consumer recycled plastic and are 100% recyclable.

- Brava Cedar Shake
- Brava Slate
- Brava Spanish Barrel Tile

### LEED® PROGRAM GUIDE Shake, Slate & Barrel Tile BRAVA By





### **LEED v4.1 Building Design And Construction**

#### **SS Credit: Heat Island Reduction**

Credit Requirements	Credit Options			
<b>High-Reflectance Roof</b> Use roofing materials that have an aged SRI equal to or		Slope	Initial SRI	Aged SRI
greater than the values in Table 1. If aged SRI is not	Low-sloped roof	≤ 2:12	82	64
available, the roofing material shall have an initial SRI equal to or greater than the values in Table 1.	Steep-sloped roof	> 2:12	39	32

### **Brava's Eligible Products**

Please refer to Appendix A to view Brava's eligible products and colors.

Brava cool roof colors- CRRC rated products

### **Additional Resources**

For more information on LEED, please visit https://www.usgbc.org/leed.

Architectural Bling provides training, installation guidance, resources, and product certification documents for all products at https://www.ArchitecturalBling.com.

Brava's CRRC listings: https://coolroofs.org/directory/roof?keywords=brava

### **Ouestions?**

If you have any questions regarding Brava Roof Tile products and accessories, call 214.613.2285 and ask for Technical Support.

Or contact us through our website at https://www.ArchitecturalBling.com.









### Appendix A

### **Brava's Eligible Products and Colors**

Color	CRRC Prod ID.	Dua di cat Nama	Solar Re	flectance	Thermal Emittance		SRI	
Coloi	CRRC PIOUID.	Product Name	Initial	3 Year	Initial	3 Year	Initial	3 Year
	<u>1374-0002</u>	<b>Brava Cedar Shake</b> Cool Lake Forest	.25	.28	.92	.92	26	30
	<u>1374-0001</u>	<b>Brava Cedar Shake</b> Cool Weathered	.30	.35	.92	.91	33	39
	<u>1374-0005</u>	<b>Brava Cedar Shake</b> Cool Western Cedar	.28	.28*	.92	.89*	30	29*
	1374-0013	<b>Brava Cedar Shake</b> Cool Light	.65	.60*	.92	.89*	79	72*
	<u>1374-0007</u>	<b>Brava Slate</b> Cool Arendale	.27	.27*	.91	.88*	28	27*
	<u>1374-0008</u>	<b>Brava Slate</b> Cool Atlantic	.29	.27*	.91	.88*	31	27*
	<u>1374-0010</u>	<b>Brava Slate</b> Cool Light Arendale	.31	.29*	.91	.88*	33	30*
	<u>1374-0008</u>	<b>Brava Slate</b> Cool Weathered	.27	.26*	.91	.88*	29	26*
	<u>1374-0013</u>	<b>Brava Slate</b> Cool Light	.65	.60*	.92	.89*	79	72*
	<u>1374-0003</u>	<b>Brava Barrel Tile</b> Cool Terra Cotta	.37	.39	.89	.91	41	44
~~	<u>1374-0004</u>	<b>Brava Barrel Tile</b> Cool French Clay	.33	.34	.88	.89	35	37
	1374-0013	<b>Brava Barrel Tile</b> Cool Light	.65	.60*	.92	.89*	79	72*
* Indicates the product obto	Indicates the product obtained a Rapid Rating, which will be replaced by three-year aged values once the weathering period is complete.							





# **Cool Roof Colors**

CRRC Title 24 & Title 31 Compliant Roofing Materials







# Cool and sustainable high-performance roofing.

The beautiful look of natural products with Title 24 & Title 31 Compliance

#### **Cool color technology**

Brava's proprietary cool colors multi-coloring process means you get the authentic appearance of a natural product, complete with variegated cool colors throughout the entire product.

#### Truly realistic

Our proprietary process creates the most authentic-looking cedar shake on the market.

#### Superior performance

Brava is designed to withstand even the most severe weather, boasting the highest hail resistance rating in the industry.

#### **Enhanced curb appeal**

Curb appeal with cool color compliance directly correlates with owner satisfaction and higher property value.

#### Maintenance-free

Brava's proprietary formulation ensures extreme durability.

#### **Fully sustainable**

Brava uses recycled material to create a roof that is fully recyclable and solar reflective.

#### Complete

Brava offers a complete line of accessory tiles.

### Cedar Shake Cool Colors









Cool Lake Forest

Cool Weathered

Cool Western Cedar

Cool White

### Slate Cool Colors











Cool Arendale

Cool Light Arendale

Cool Weathered

Cool White

### **Barrel Tile Cool Colors**







Cool French Clay

Cool Terra Cotta

Cool White

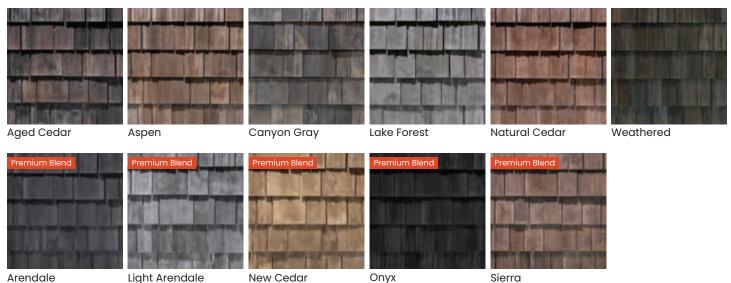




### **Introducing BRAVA's New Color Line for 2025!**

Our new color selections were created by refining our color blends and selecting the best quality blends for your building projects. In addition to our refined color blends, BRAVA Premium Color blends offer a luxurious look of high contrast color blends staying true to life in comparison to authentic slate, shake and clay tiles.

### **Cedar Shake Colors**



### **Slate Tile Colors**



### **Spanish Barrel Colors**



Note: Premium Blend and Cool Roof Colors (Tile 24 & Title 31) are available as an up-charge from Standard Color pricing. Please consult your sales representative for additional information.

### **BRAVA Cool Colors**

### **Cool Cedar Shake**





Cool French Clay



Cool White

Cool Terra Cotta











# **COLOR MATCHING GUIDE**

Cedar Shake, Slate, & Barrel Tile

Published May 31, 2024

This guide provides suggested flashing, trim, and accessory paint color options that complement our standard solid and variegated roof system colors. These suggestions are intended to assist homeowners and contractors in selecting trim and accessory paint colors that blend well with the roof system.



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### **DYNAMIC BRAVA COLOR**

The color in Brava roof tiles evolves as changes in lighting bring out different material characteristics. As seen in <a href="this dramatic series of timelapse photos">this dramatic series of timelapse photos</a>, the intensity of the hues is dynamic.

When selecting a Brava roof color, view samples at a distance of at least 40 feet under a range of natural lighting conditions, including full sun. While natural light is a significant element to consider, structural factors can also make the color of roof tiles look different to the human eye. For example, the slope of the roof changes the angle at which you see the tiles, and the height of the roof may affect how colors appear from a ground viewpoint.

#### **PAINT COLOR**

These same factors should be considered when selecting flashing, trim, and accessory colors to complement your roof.

Color matching flashing, trim, and accessory paint to roofing materials requires careful consideration for a cohesive and visually appealing result.

#### SEALANT COLOR

This guide also includes OSI Color Codes provided by the manufacturer. Clear, black, and other standard colors may also be used and are more readily available.





#### **COLOR MATCHING GUIDE NOTES**

Each roof color lists three potential paint color options, offering a starting point for achieving a cohesive and aesthetically pleasing exterior. These colors are based on the roof system's colors and are intended for matching flashing, trim, and roof accessory colors.

We recommend using your Brava sample and considering your color options. Contact your sales representative if you have questions about Brava colors. If you are uncertain about the color-matching process, consider consulting with a designer or paint specialist for guidance.

Please note that the suggested paint colors in this guide are not guaranteed to be exact matches but are provided as helpful guidelines to aid in your paint color selection process. Most paint brands can match these colors. Sealant colors are referenced in manufacturers' comparison charts. The final decision on paint and sealant colors rests solely with the property owner and the contractor, who should verify their selections to ensure satisfaction with the overall look.

The paint information provided is only for flashing, trim, and non-Brava roof accessories. Brava roof systems are not intended to be painted. Check available system color options with your Brava Sales Representative.

For all paint and sealants, refer to the product manufacturer's application and warranty information. Paints and sealants are not covered under the Brava Limited Lifetime Warranty and are considered maintenance items.

View the <u>Roof Accessory Paint & Sealant Technical Bulletin</u> available at ArchitecturalBling.com.

### **CONTENTS**





IMPORTANT: Brava recommends brush or roller applied paints for best results and color match options.

#### **CEDAR SHAKE STANDARD COLORS**













Color Codes				
Paint	Sealant			
SW 6076	OSI 220			
SW 7069	OSI 545			
SW 2735				

AGED CEDAR ..... 4

Color Codes			
Paint	Sealant		
SW 6075	OSI 232		
SW 6082	OSI 265		
SW 6041	OSI 211		

ASPEN ..... 5

CANTON GRAT					
Color Codes					
Paint	Sealant				
SW 7019	OSI 569				
SW 7048	OSI 563				
SW 7020	OSI 296				

CANVON CDAV

Color Codes Paint Sealant SW 9171 SW 7019 OSI 569 SW 7020 OSI 296

Color Codes Paint Sealant SW 6082 OSI 265 SW 6041 OSI 211 SW 7020 OSI 296

Color Codes Paint Sealant SW 6041 OSI 211 SW 7675 OSI 203 SW 6991 OSI 003

#### SLATE STANDARD COLORS















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Color Codes			
Paint	Sealant		
SW 7068	OSI 501		
SW 7674	OSI 581		
SW 6991	OSI 003		

Color Codes				
Paint	Sealant			
SW 6202				
SW 7048	OSI 563			
SW 6076	OSI 220			

**Color Codes** Paint Sealant SW 7674 OSI 581 SW 7675 OSI 203 SW 6076 OSI 220

Color Codes Sealant Paint SW 7016 OSI 502 SW 7019 OSI 569 SW 7068 OSI 501

**Color Codes** Sealant Paint SW 7067 OSI 589 SW 7068 OSI 501 SW 7674 OSI 581

Color Codes Paint Sealant SW 7674 OSI 581 SW 7048 OSI 563 SW 6258 OSI 009

WASHINGTON ..... 16 ONYX ...... 15 Color Codes Sealant Paint SW 7019 OSI 569 SW 7048 OSI 563 SW 7069 OSI 545

#### **BARREL TILE STANDARD COLORS**





Paint

SW 6340

SW 6348

SW 6349











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Color Codes					
Paint	Sealant				
SW 7598	OSI 941*				
SW 6068					
SW 6041	OSI 211				

ARENDALE ..... 19 ANTIQUE CLAY ..... 18 Color Codes

Sealant

OSI 941

Color Codes			
	Paint	Sealant	
	SW 7068	OSI 501	
	SW 7674	OSI 581	
*	SW 6991	OSI 003	

BLACK BROWN BLEND .... 20 Color Codes Paint

Sealant SW 6041 OSI 211 SW 6076 OSI 220 SW 6991 OSI 003

**GRAPHITE** Color Codes

Paint Sealant SW 7016 OSI 502 SW 7019 OSI 569 SW 7068 OSI 501

Color Codes Paint Sealant OSI 581 SW 7674 SW 7048 OSI 563 OSI 009 SW 6258

TERRA COTTA BROWN .... 23 **Color Codes** Paint Sealant SW 6041 OSI 211 SW 7069 OSI 545 SW 6076 OSI 220

TUSCAN CLAY ..... 24 

Color Codes			
Paint	Sealant		
SW 7598	OSI 941*		
SW 6068			
SW 6062			
SW 6068	001 541		



TERRA COTTA ..... 25

Color Codes			
	Paint	Sealant	
	SW 6342		
	SW 7598	OSI 941*	
	SW 6068		

Paint colors provided use Sherwin-Williams codes (SW ####) but may be used with any paint manufacturer.

Ensure that the paint and sealant used are appropriate for the material.

Sealant colors provided use OSI Quad codes (OSI ###) but may be used with any appropriate sealant.

Sealants used on Brava material should be OSI Quad, GeoCel 3500, Masterseal NP1, or other approved sealant.

<sup>\*</sup>Note: This color does not have a direct match given by OSI. OSI color code is given for a similar color.

### **CEDAR SHAKE AGED CEDAR**





SW 6076
Turkish Coffee

SW 7069 Iron Ore OSI Color Code: 545

SW 2735 Rockweed



### **CEDAR SHAKE ASPEN**





SW 6075 Color Code: 232

SW 6082 Cobble Brown COde: 592

SW 6041 Otter OSI Color Code: 211



### **CEDAR SHAKE CANYON GRAY**







SW 7019 **Gauntlet Gray** 

OSI Color Code: 569

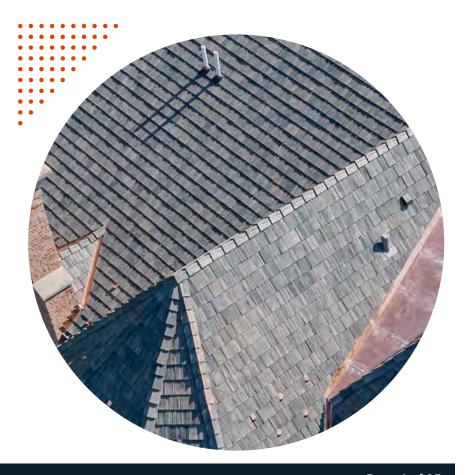
SW 7048 Urbane Bronze

> SW 7020 Black Fox

OSI Color Code: 296

OSI Color Code: 563





### **CEDAR SHAKE LAKE FOREST**







SW 9171 Felted Wool

SW 7019 Gauntlet Gray

OSI Color Code: 569

SW 7020 Black Fox

X COSI Color Code: 296





# CEDAR SHAKE NATURAL CEDAR





SW 6082 Cobble Brown

> SW 6041 Otter

OSI Color Code: 211

OSI Color Code: 265

SW 7020 Black Fox

O20 O2I Color Code: 596



### **CEDAR SHAKE WEATHERED**





Otter Color Code: 211

SW 7675 Sealskin OSI Color Code: 203

SW 6991 Black Magic OSI Color Code: 003



## **SLATE ARENDALE**





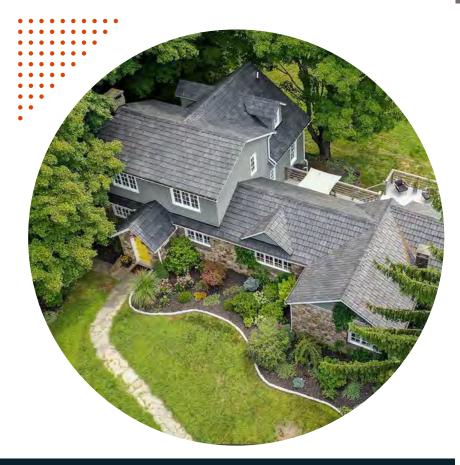
SW 7068 Grizzle Gray

OSI Color Code: 501

SW 7674 Peppercorn OSI Color Code: 581

SW 6991 Black Magic





## **SLATE ATLANTIC**





SW 6202 Cast Iron

SW 7048 Urbane Bronze

OSI Color Code: 563

SW 6076 Turkish Coffee





## **SLATE COTTAGE**





OSI Color Code: 581 SW 7674 Peppercorn

SW 7675 Sealskin

OSI Color Code: 203

SW 6076 Turkish Coffee



## **SLATE GRAPHITE**





SW 7016 Mindful Gray OSI Color Code: 502

SW 7019 Gauntlet Gray

OSI Color Code: 569

SW 7068 Grizzle Gray



## **SLATE LIGHT ARENDALE**





SW 7067 Cityscape OSI Color Code: 589

SW 7068 Grizzle Gray OSI Color Code: 501

SW 7674 Peppercorn





## **SLATE ONYX**





SW 7674 Peppercorn

74 corn Code: 581

SW 7048 Urbane Bronze

OSI Color Code: 563

SW 6258 Tricorn Black



## **SLATE WASHINGTON**





SW 7019 **Gauntlet Gray** 

OSI Color Code: 569

SW 7048 Urbane Bronze

OSI Color Code: 563

SW 7069 Iron Ore



## **BARREL TILE AGED MISSION**





SW 7598 Sierra Redwood Code: 941\*

SW 6068 Brevity Brown

Otter Code: 211



# BARREL TILE ANTIQUE CLAY





SW 6340 Baked Clay

SW 6348 Reynard

SW 6349 Pennywise

OSI Color Code: 941\*

\*Note: This color does not have a direct match given by OSI.
OSI color code is given for a similar color.

## **BARREL TILE ARENDALE**





SW 7068 Srizzle Gray Color Code: 501

SW 7674 Peppercorn OSI Color Code: 581

SW 6991 Black Magic



# BARREL TILE BLACK BROWN BLEND





OSI Color Code: 211 SW 6041 Otter

OSI Color Code: 220 SW 6076 Turkish Coffee

SW 6991 Black Magic





## **BARREL TILE GRAPHITE**



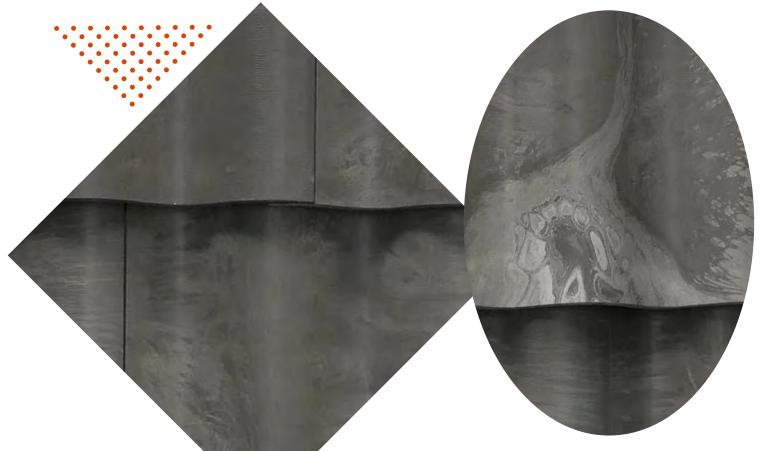


SW 7016 Mindful Gray OSI Color Code: 502

SW 7019 Gauntlet Gray

OSI Color Code: 569

SW 7068 Grizzle Gray



## **BARREL TILE ONYX**





SW 7674 SO ISO

SW 7048
Urbane Bronze

SW 6258
Tricorn Black



## BARREL TILE TERRA COTTA BROWN





Otter Color Code: 211

SW 7069 Iron Ore OSI Color Code: 545

SW 6076 Turkish Coffee



## **BARREL TILE TUSCAN CLAY**







Sierra Redwood Sierra Redwood Code: 941\*

SW 6068 Brevity Brown

SW 6062 Vintage Leather





\*Note: This color does not have a direct match given by OSI. OSI color code is given for a similar color.

# BARREL TILE VINTAGE TERRA COTTA





SW 6342 Spicy Hue

OSI Color Code: 941\* SW 7598 Sierra Redwood

SW 6068 **Brevity Brown** 



## **Unparalleled Performance**













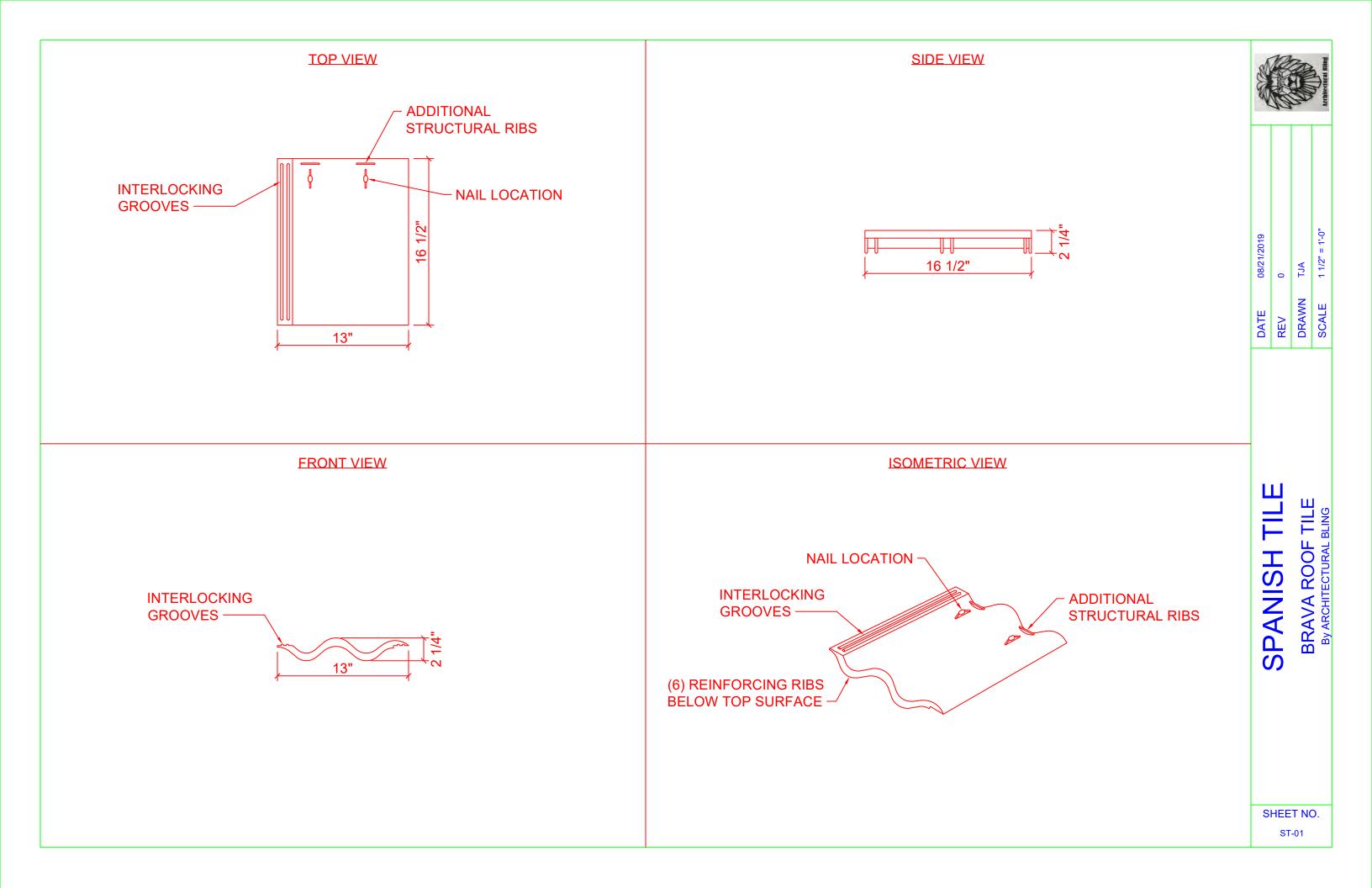
\*Brava tiles are tested and approved to withstand wind speeds of up to 188 mph with nails and up to 211 mph with high wind / screw installation.

Tolerances +or- 1/2". All specifications subject to change without notice.

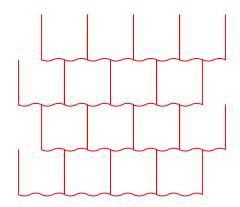
The printed colors shown may vary from actual colors. Before making a final selection, be sure to review actual material samples and roof installations. Please contact your salesperson for further assistance.

In order to achieve certain fire and wind ratings, special installation instructions may be required. Please reference Brava Roof Tile installation manuals at www.BravaRoofTile.com for more details.

ArchitecturalBling.com | 214.613.2285 | Sales@ArchitecturalBling.com

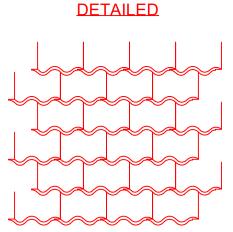


### TOP VIEW (DYNAMIC BLOCK)

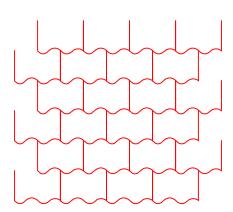


#### \*8:12 PITCH SHOWN

#### **FRONT VIEW (DYNAMIC BLOCK)**

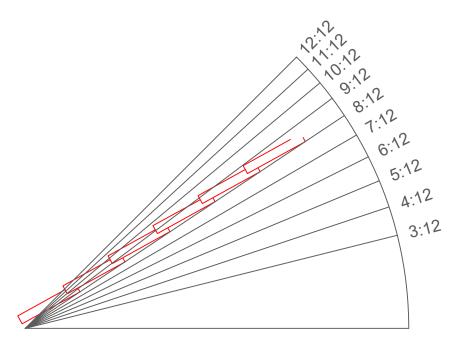


#### SIMPLE



#### \*8:12 PITCH SHOWN

#### SIDE VIEW (DYNAMIC BLOCK)



#### **DYNAMIC BLOCK INSTRUCTIONS**

#### **TOP AND FRONT VIEWS**

- 1. CREATE POLYLINE BORDER AT ROOF EDGES
- 2. COPY BLOCK TO DESIRED DRAWING
- 3. SELECT BLOCK
- 4. USE GRIPS TO STRETCH BLOCK OVER BORDER
- 5. ALIGN TILES WITH BORDER EDGES
- 6. EXPLODE BLOCK
- 7. USE TRIM COMMAND TO REMOVE EXCESS TILE

#### SIDE VIEW

- 1. COPY BLOCK TO DESIRED DRAWING
- 2. SELECT BLOCK
- 3. USE ARROW GRIP TO FLIP BLOCK
- 4. USE SQUARE GRIP TO MOVE BLOCK
- 5. USE CIRCLE GRIP TO ROTATE BLOCK
- 6. USE TRIANGLE GRIP TO EXTEND BLOCK

# SPANISH TILE

1/2" = 1'-0"

SHEET NO.

ST-02



Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile, Brava Flat Tile CERus-1014

#### **CODE EVALUATION REPORT**

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#### **CERUS-1014**

PUBLISHED: August 2022 REVISED: July 2024 EXPIRATION: July 2027

PRODUCT: Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile,

**Brava Flat Tile** 

REPORT HOLDER:

dba Brava Roof Tile by Architectural Bling

CONTACT DETAILS:

. . .

... USA

CSI DIVISION: 07 00 00 - Thermal and Moisture Protection

CSI SECTION: 07 32 26 – Plastic Roof Tiles

APPLICABLE CODES: 2021, 2018, 2015 International Building Code (IBC)

2021, 2018, 2015 International Residential Code (IRC) 2023, 2020, 2017 Florida Building Code, Building 2023, 2020, 2017 Florida Building Code, Residential

**EVALUATED:** Weather Resistance

Wind Resistance

Roof Fire-Classification Hail-Impact Resistance





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**QAI LABORATORIES** 

LOS ANGELES | TULSA | MIAMI | TORONTO | VANCOUVER | SEOUL | SHANGHAI

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## CODE EVALUATION REPORT

#### 1.0 APPROVED FOR FOLLOWING:

APPROVED TYPES OF	Type I-V/ AB
CONSTRUCTION:	
APPROVED USE:	Roof coverings for use in Class A and Class C roof assemblies.
APPROVED INSTALLATIONS:	New and existing roofs where existing roof is removed, including fire- classified assemblies as detailed in Section 4 of this report, including areas prone to hail impact.

#### 2.0 DESCRIPTION:

#### 2.1 General:

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products are composite polymeric based roof coverings including accessories molded from proprietary formulations to create the look of slate, cedar, Spanish clay tile and concrete roof tiles for use on slopes ≥ 4:12. Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile, and Flat Tile are a durable exterior roof covering available in various colors and two product formulations, Class A and Brava One. When installed in accordance with this report, Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products provide Class A or Class C roof-assemblies determined in accordance with Section 1505.1 of the 2021 / 2018 / 2015 IBC and Section R902.1 of the 2021 / 2018 / 2015 IRC with Class 4 resistance to hail and impact per UL 2218.

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile roof covering products have a spontaneous ignition temperature ≥ 650°F (343°C) when tested to ASTM D1929 and are classified as CC2 when tested to ASTM D635.

See Table 1 below for recognized models of Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Flat Tile products. See Section 2.2 of this report for applications of the described products. See Figures 2-5 in Section 9.1 of this report for drawings of the products listed in Table 1.

Table 1. BRAVA TILE COMPOSITE ROOF COVERING PRODUCT DIMENSIONS

PRODUCT	LENG	TH	WID.	TH	INSTALLED EXPOSURE		INSTALLED WEIGHT	
	inches	mm	inches	mm	inches	mm	lbs/ft <sup>2</sup>	kg/m²
			6	152				
Brava Slate	22	559	9	229	10	254	3.3	16.3
			12	305				
			5	127				
Brava Cedar Shake	22	559	7	178	10	254	2.9	14.0
			12	305				
Brava Spanish Barrel Tile	16.5	419	13	330	13.5	343	2.6	12.7
Brava Flat Tile	17.5	445	13.75	349	14	356	2.16	10.5

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products have various accessory elements including starter tiles, preformed hip/ridge caps, rake, bullnose, closure pieces, and solid back tiles.

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile Class A and Brava One products comply for use as roof coverings, including use in *High Velocity Hurricane Zones* as defined by the 2023 / 2020 Florida Building Code, Building and 2023 / 2020 Florida Building Code, Residential. See Section 10 of this report for further details.

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile,
Brava Flat Tile
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#### 2.2 PRODUCTS

#### 2.2.1 BRAVA SLATE:

Brava Slate products are supplied with dimensions of 22 inches (559 mm) x 6 inches (152 mm), 9 inches (229 mm), or 12 inches (305 mm) with an installed exposure of 10 inches (254 mm). Brava Slate have weights of 1.4 lbs (0.6 kg) (6-inch width), 1.8 lbs (0.8 kg) (9-inch width) and 2.7 lbs (1.2 kg) (12-inch width) per tile. Brava Slate products include designated fastener locators across the width of panel. Brava Slate are molded to create a slate style finish. Brava Slate products are available in a variety of colors.

#### 2.2.2 BRAVA CEDAR SHAKE:

Brava Cedar Shake products are supplied with dimensions of 22 inches (559 mm) x 5 inches (127 mm), 7 inches (179 mm), or 12 inches (305 mm) with an installed exposure of 10 inches (254 mm). Brava Cedar Shake products have weights of 1.1 lbs (0.5 kg) (5-inch width), 1.4 lbs (0.6 kg) (7-inch width), and 2.6 lbs (1.2 kg) (12-inch width) per tile. Brava Cedar Shake products include designated fastener locators across the width of the product. Brava Cedar Shake are molded to create a wood shake style finish. Brava Cedar Shake products are available in a variety of colors.

#### 2.2.3 BRAVA SPANISH BARREL TILE:

Brava Spanish Barrel Tile products are supplied with dimensions of 16.5 inches length x 13 inches (330 mm) width with an installed exposure of 13.5 inches (343 mm) weight of 2.9 lbs (1.3 kg) per tile. Brava Spanish Barrel Tile products include designated fastener locators across the width of the product. Brava Spanish Barrel Tile are molded to create a clay tile style finish. Brava Spanish Barrel Tile products are available in a variety of colors.

#### 2.2.4 BRAVA FLAT TILE:

Brava Flat Tile products are supplied with dimensions of 17.5 inches (445 mm) length x 13.75 inches (349 mm) width with an installed exposure of 14 inches (356 mm) weight of 2.7 lbs (1.2 kg) per tile. Brava Flat Tile products include designated fastener locators across the width of the product. Brava Flat Tile are molded to create a concrete tile style finish. Brava Flat Tile products are available in a variety of colors.

#### 3.0 DESIGN:

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products are roof coverings for installation over code complying roof sheathings and underlayment. Use of Brave Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products do not require professional design when installed in accordance with Sections 4.1 through 4.6 of this report. Use in applications outside those described in this report requires approval by the authority having jurisdiction.

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile are intended for use as the finished roof covering on new and over existing construction where existing roof coverings have been removed in accordance with Section 4.2 and 4.3 of this report as applicable.



Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile,
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Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile are approved for use in areas of maximum wind uplift for installations as outlined in Section 8.1 of this report. Use of Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products in applications of wind resistance greater than those described in Section 8.1 are outside the scope of this report and requires approval by the authority having jurisdiction.

When used in applications requiring roof fire classified assemblies, installation shall be in accordance with Section 4.4 and Table 3 of this report.

When installed in areas defined as hail-prone, installation shall be in accordance with Section 4.6 Table 4 of this report for the hail-impact classification levels described.

#### **4.0 INSTALLATIONS:**

#### 4.1 General:

Installation of Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products must comply with the manufacturer's published installation instructions, this report, and the applicable code(s). Where differences are found, this report and the applicable building code shall be followed.

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile product's require installation over solid wood panel or lumber sheathing of minimum  $\frac{1}{2}$  inch (13 mm) thickness complying with the applicable code. Attachment of the sheathing to underlying framing elements is to be in accordance with applicable code, and Table 2 found in Section 8.1 of this report and shall be sufficient to resist service wind loads. Roof slopes are to be  $\geq$  4:12 (33%) slope.

Flashing, counterflashing, and valley flashing shall be sheet metal complying with the applicable code, where the sheet metal is G90 galvanized of minimum 0.0179 inches (0.455 mm) uncoated thickness. Valley flashing shall be a minimum 15 inches (381 mm) wide sheet metal of minimum 0.0179 inches (0.455 mm) uncoated thickness. Flashing including fasteners shall not be in contact with dissimilar metals to avoid corrosion. Flashing shall prevent moisture from entering the wall and roof in accordance with Section 1503.2 of the 2021 / 2018 / 2015 IBC and Section R903.2 of the 2021 / 2018 / 2015 IRC.

While not required, drip edge flashings and rake edge flashings are recommended installed with good roofing practice.

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile,
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#### 4.1.1 Underlayment:

Underlayment must comply with and be installed in accordance with the applicable code and the manufacturer's published installation instructions. For fire-classified roof assemblies underlayment shall be installed in accordance with Section 4.4 and Table 3 of this report.

In areas where there is potential for or has been a history of ice forming along eaves causing the backup of water an ice barrier is required. The ice barrier may consist of:

- a) Two layers of ASTM D226 Type I, ASTM D4869 Type I or ASTM D6757 underlayment cemented together or
- b) A self-adhering polymer modified bitumen sheet complying to ASTM D1970.

Alternate ice barriers are outside the scope of this report but may be used where approved by the authority having jurisdiction.

The ice barrier shall be used as an alternative to the normal underlayment, extending from the lowest edges of all roof surfaces to a point at least 24 inches (610 mm) inside the exterior wall line of the structure. Following, the standard underlayment shall be lapped over the ice barrier and shall overlap a minimum of 4 inches (102 mm). Attachment and overlapping of the ice barrier to underlayment are outside the scope of this report and is to be in accordance with the applicable code and the ice barrier manufacturer's published installation instructions.

#### 4.2 New Construction:

Starter tiles are installed with a 1-inch (25 mm) overhang at the gable end fascia board and ½ inch (13 mm) overhang at eaves fascia boards across the roof deck. Alternatively, starter and field tiles may be installed flush with the D-Style drip edge when the drip edge overhang is not less than ½-inch. Subsequent Brava Tile products are installed at the exposures described in Table 1 of this report, with tile joints staggered between alternating rows and a 3/8-inch (10 mm) keyway spacing between adjacent tiles (Brava Slate and Brava Cedar Shake only). Approved fasteners as outlined in Table 2 found in Section 8.2, are installed through designated fastener locators on the respective product as illustrated in Figures 2-5 in Section 8.2 of this report. Upon reaching the roof peak, the last row of tiles are trimmed flush with the peak to accommodate the ridge and hip caps. All penetrations and chimneys are to be flashed in accordance with the appropriate code to prevent water ingress with compatible sheet metal complying with Section 4.1 of this report.

Ridge caps, hip caps and valleys are to be installed in accordance with the manufacturer's installation instructions and the applicable codes.

#### 4.3 Reroofing Applications:

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products are not intended for installation over existing roof systems. Existing roof coverings and underlayment are to be removed, and roof sheathing and penetrations as appropriate are to be inspected to ensure the roof structure is free of rot and damage prior to installation of the Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products. All past existing roof coverings shall be completely removed, following all installation conditions noted in Section 4.1 and 4.2 shall apply.

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile,
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#### 4.4. Roof Fire Classified Assemblies:

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products comply for use as Class A or Class C roof-assemblies per 2021 / 2018 / 2015 IBC Section 1505.1 and 2021 / 2018 / 2015 IRC Section R902.1 as outlined in Table 3 of this report. Installation including maximum roof slope is to be in accordance with Section 8.2 Table 3 of this report.

#### 4.6 Hail-Impact Resistant Assemblies:

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products are Class IV impact resistance rated evaluated following UL 2218. Installation is to be in accordance with Section 8.3 Table 4 of this report.

#### **5.0 LIMITATIONS**

- Installation of Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products are to comply with the applicable codes, this report and the manufacturer's installation instructions. Where differences are found, the applicable code and this report govern.
- Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products are intended for use on roof slopes ≥ 4:12 (33%).
- Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products are
  approved for use in areas where maximum uplift pressures are as stated in Section 3.0 and Section
  8.1 Table 2 of this report. Use in applications greater than those stated require approval by a
  registered design professional and approval by the authority having jurisdiction.
- Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products used in Class A or Class C roof-assemblies are to be installed in accordance with Sections 4.4 and 8.2 Table 3 of this report.
- Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products used in hail-prone areas are to be installed in accordance with Sections 4.5 and 8.3, Table 4 of this report.
- Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products are manufactured in Washington, Iowa with inspections by QAI Laboratories.

#### **6.0 SUPPORTING INFORMATION:**

The following data has been evaluated for Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile products:

- Data for use in roof fire classified assemblies determined in accordance with ASTM E108.
- o Data outlining < 10% loss of tensile strength after aging to ASTM G155 or 4500 hours.
- Data outlining CC2 rate of burning determined in accordance with ASTM D635.
- Data outlining spontaneous ignition temperature > 650°F (343°C) determined in accordance with ASTM D1929.
- Data for Wind Uplift evaluated in accordance with TAS 125.
- o Data outlining compliance for wind driven rain per TAS 100.
- o Data for outlining Class IV impact resistance per UL 2218.
- Data outlining compliance with ICC-ES AC07.

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#### 7.0 MARKINGS:

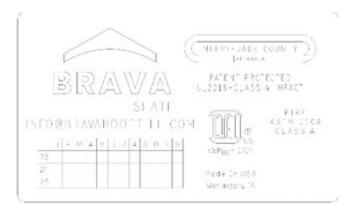


Figure 1a. Example of Brava Slate Approved Product Stamps



Figure 1b. Example of Brava Cedar Shake Approved Product Stamps

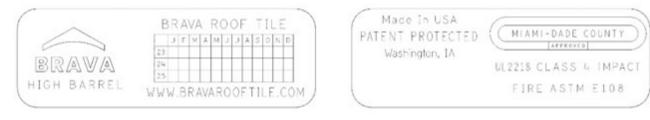


Figure 1c. Example of Brava Spanish Barrel Tile Approved Product Stamps

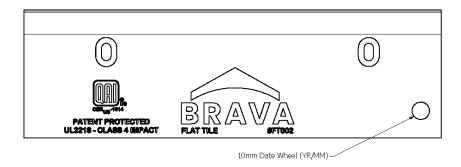


Figure 1d. Example of Brava Flat Tile Approved Product Stamps

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#### 8.0 RATINGS:

#### 8.1 Wind Uplift Resistance:

Table 2 – Maximum Allowable Wind Uplift Pressures on Roofing Panels

Product	Substrate <sup>1</sup>	Installation	Allowable Wind Uplift <sup>2</sup> psf (kPa)
Brava Slate	Minimum 15/32-inch-thick (12 mm) plywood attached to deck with 8d ring shank nails of minimum 2-1/2- inch (64 mm) length	Brava Slate installation is to be a maximum of 10" (254 mm) exposure, with each tile anchored into the sheathing with two (2) minimum 0.120-inch (3 mm) x 2-inch (51 mm) length ring shank nails applied at fastener locators.	81 (3.9)
		Brava Slate installation is to be a maximum of 10" (254 mm) exposure, with each tile anchored into the sheathing with two (2) minimum #8 x 2-inch (51 mm) length coarse thread wood screws applied at fastener locators.	206 (9.9)
Brava Cedar Shake Class A or Brava One  (12 mm) anchored wit 8d ring sha minimum 2-	Minimum 15/32-inch-thick (12 mm) plywood, anchored with galvanized	(12 mm) plywood, minimum #8 x 2-inch (51 mm) length flat head screws applied at	
	8d ring shank nails of minimum 2-1/2-inch (64 mm) length	Brava Cedar Shake installation is to be a maximum of 10" (254 mm) exposure, with each tile anchored into the sheathing with two (2) minimum #8 x 2-inch (51 mm) length coarse thread wood screws applied at fastener locators.	196 (9.4)
Brava Spanish Barrel Tile Class A or Brava Ope 8d ring shank nails of	Minimum 15/32-inch-thick (12 mm) plywood, anchored with galvanized	Brava Spanish Barrel Tile installation is to be a maximum of 13.5" (343 mm) exposure, with each tile anchored into the sheathing with two (2) minimum 0.120-inch (3 mm) x 2-inch (51 mm) length ring shank nails applied at fastener locators.	91 (4.4)
	8d ring shank nails of minimum 2-1/2-inch (64 mm) length	Brava Spanish Barrel Tile installation is to be a maximum of 13.5" (343 mm) exposure, with each tile anchored into the sheathing with two (2) minimum #8 x 2-inch (51 mm) length coarse thread wood screws applied at fastener locators.	202 (9.7)
Brava Flat Tile Brava One	Minimum 15/32-inch-thick (12 mm) plywood, anchored with galvanized 8d ring shank nails of minimum 2-1/2-inch (64 mm) length	Brava Flat Tile installation is to be a maximum of 14" (356 mm) exposure, with each tile anchored into the sheathing with two (2) minimum 0.120-inch (3 mm) x 2-inch (51 mm) length ring shank nails applied at fastener locators.	109 (5.3)

Note 1: Attachment of sheathing to framing is outlined per tested assembly as the minimum required for allowable loads noted. Anchorage of the framing elements to structure is to be capable of resisting noted uplift pressures and is outside the scope of this report.

Note 2: Maximum uplift pressure was determined in accordance with method TAS 125 with a factor of safety 2.0 applied to ultimate pressure achieved.

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#### 8.2 Roof Fire Classified Assemblies:

Table 3 - Roof Fire Classified Assemblies

System	Substrate	Approved Underlayment	Approved Roof Coverings	Installation Guidelines	Maximum Slope	Class
	Minimum 15/32- inch-thick plywood	layer of ASTM D226 Type II asphalt felt installed over the sheathing with offset joints minimum 6-inches (152 mm).	Brava Slate Class A Brava Cedar Shake Class A Brava Spanish Barrel Tile Class A		Unlimited	Α
New	Minimum 15/32'' (12mm) Exposure 1 Plywood	1 layer of Eco Chief Solarhide underlayment with joints overlapped minimum 4 inches (102 mm).	Brava Slate Brava One Brava Cedar Shake Brava One		Unlimited	Α
Construction Or Reroof when existing roof is	Minimum 15/32'' (12mm) Exposure 1 Plywood	1 layer of 4LMPX Low-E     Therma Sheet underlayment     with joints overlapped     minimum 4 inches (102 mm).	Brava Slate Brava One Brava Cedar Shake Brava One	See Sections 2.2, 4.1, 4.2, 4.3	Unlimited	Α
removed <sup>1</sup>	Minimum 15/32- inch-thick plywood	layer of ASTM D226 Type II asphalt felt installed over the sheathing with offset joints minimum 6-inches (152 mm).	Brava Slate Brava One Brava Cedar Shake Brava One Brava Spanish Barrel Tile Brava One		Unlimited	С
	Minimum 15/32'' (12mm) Exposure 1 Plywood	layer of Intertape Polymer Group <sup>®</sup> Palisade <sup>®</sup> synthetic underlayment, overlapped minimum 4 inches (102 mm).	Brava Flat Tile Brava One		Unlimited	С

Note 1: Installation of the Brava Slate, Brava Cedar Shake Brava Spanish Barrel Tile and Brava Flat Tile products requires complete removal of existing roof coverings and underlayment and inspection prior to installation in accordance with Section 4.3 of this report.

#### 8.3 Hail Impact Resistant Assemblies:

#### Table 3 - Impact Rated Assemblies

Substrate	Approved Underlayment	Approved Roof Coverings	Installation Guidelines	Hail-Impact Classification <sup>1</sup>
Minimum 15/32-inch- thick plywood	Unrestricted	Brava Slate Class A Brava Cedar Shake Class A Brava Spanish Barrel Tile Class A Brava Slate Brava One Brava Cedar Shake Brava One Brava Spanish Barrel Tile Brava One Brava Flat Tile Brava One	See Sections 2.2. 4.1, 4.2 and 4.3	Class IV

Note 1: Hail-impact classification determined in accordance with UL 2218.



#### 9.0 PRODUCT DETAILS:

#### 9.1 Profile Drawings

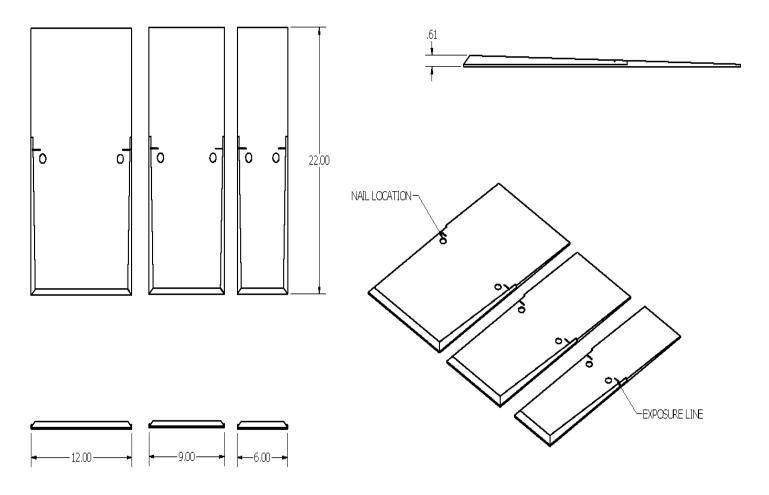


Figure 2. Brava Slate Product Drawings



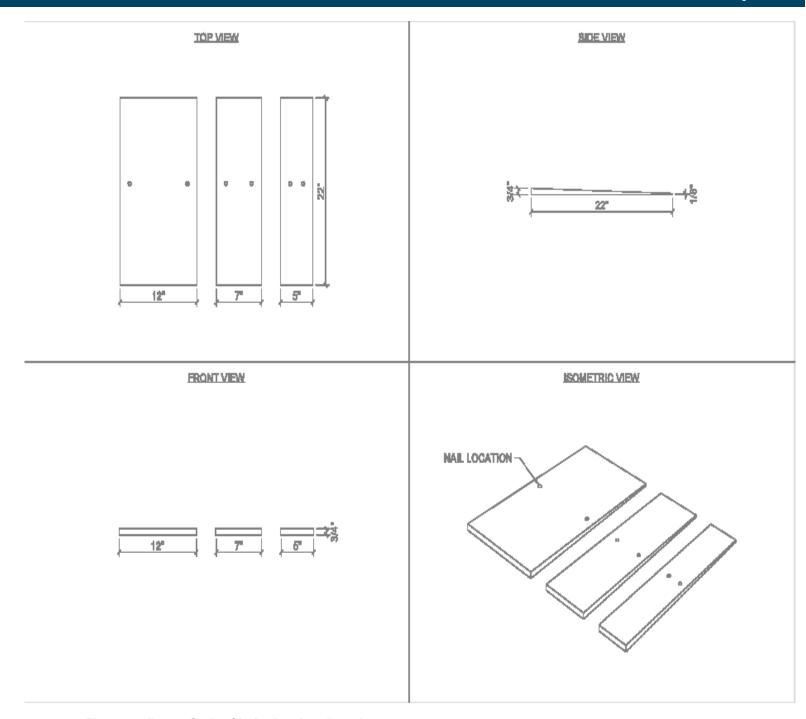


Figure 3. Brava Cedar Shake Product Drawings



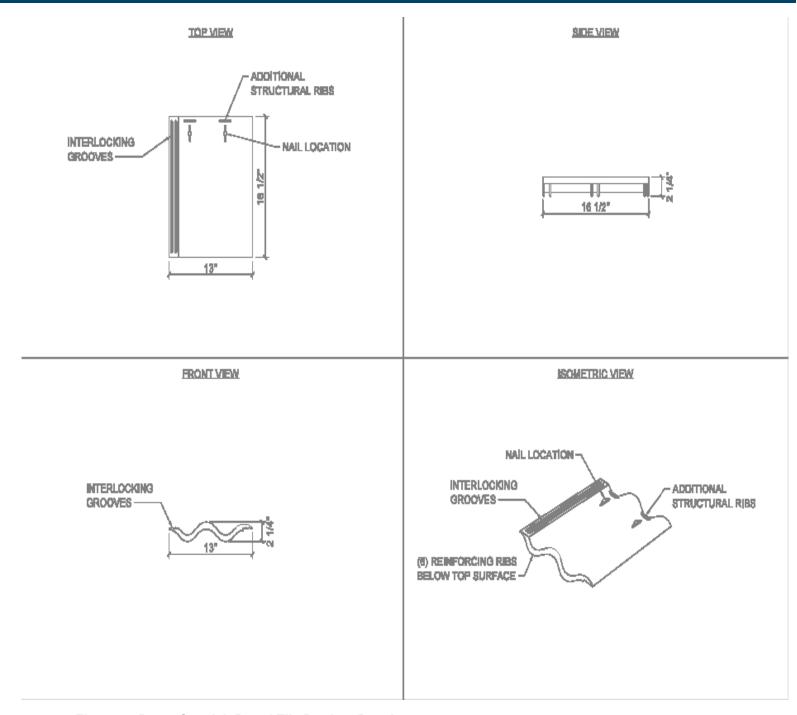
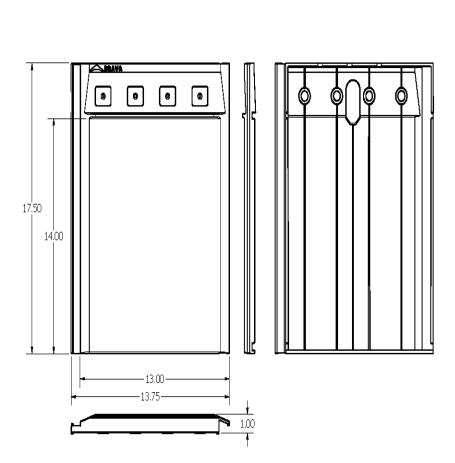


Figure 4. Brava Spanish Barrel Tile Product Drawings

FASTENER LOCATION -



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#### 10.0 SUPPLEMENTAL CODES

#### 10.1 2020 Florida Building Code:

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile Class A and Class C products as detailed in Sections 2.0 through 9.0 of QAI CER<sub>US</sub>-1014 comply with the 2023, 2020, 2017 Florida Building Code, Building and 2023, 2020, 2017 Florida Building Code, Residential when installed in accordance with the applicable building codes and this report.

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile Class A and Class C products comply with Section 1516 *High Velocity Hurricane Zones Fire Classification* of the 2023, 2020, 2017 Florida Building Code, Building when installed in accordance with Section 4.4 and Table 3 of this report.

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile Class A and Class C products comply with Section 1523 *High Velocity Hurricane Zones – Testing* of the 2023, 2020, 2017 Florida Building Code, Building when installed in accordance with Section 4 of this report for the maximum design wind pressures outlined in Table 2.

Brava Slate, Brava Cedar Shake, Brava Spanish Barrel Tile and Brava Flat Tile Class A and Class C polymer based composite products comply with Section 2615 *High Velocity Hurricane Zones – Plastics* of the 2023, 2020, 2017 Florida Building Code.

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## CODE EVALUATION REPORT

#### 11.0 ELIGIBILITY OF REPORT

QAI's Code Evaluation Report complies with the 2021 / 2018 / 2015 IBC Section 104.11 Alternative materials, design and methods of construction and equipment subsection 104.11.1 Research Reports. QAI's Code Evaluation Report complies with the 2024 IBC Section 104.2.3.6.1 Evaluation Reports. Supporting data has been evaluated by QAI for compliance of the noted materials and assemblies to the applicable code by QAI, and approved source as detailed below.

Per section 1703 of the IBC, QAI is an independent third-party testing, inspection and certification agency accredited by the International Accreditation Service, Inc. (IAS) for this specific scope (see IAS PCA-118). QAI can confirm that based on its IAS accreditation it meets IBC Section 1703.1 on Independence, Section 1703.1.2 on Equipment and Section 1703.1 on Personnel.

This Evaluation report has been designed to meet the performance requirements of IBC Section 1703.4 and contains the required information to show the product, material or assembly meets the applicable code requirements.

The product is labeled per section IBC 1703 and subject to follow-up inspection per IBC 1703.6 using QAI IAS accredited ISO/IEC 17020 inspection program (see IAS AA-723).

For more information regarding QAI Laboratories, please visit www.qai.org.



The above is an example of the QAI registered Listing mark. The Listing mark may only be used by the Report Holder per the QAI service agreement on products defined in this report. The 'us' indicator in the 4 o'clock position indicates the product complies with the properties evaluated with limitations outlined in this report for use in the US market. A 'c' indicator in the 8 o'clock position indicates the product has been evaluated for use in the Canadian market.

#### 11.0 REFERENCED STANDARDS

ASTM E108 Standard Test Methods for Fire Tests of Roof Coverings.

ASTM G155 Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials.

ASTM D635 Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position.

ASTM D1929 Test Method for Determining Ignition Temperature of Plastics.

TAS 125 Standard Requirements for Metal Roofing Systems.

TAS 100 Test Procedure for Wind and Wind Driven Rain Resistance of Discontinuous Roof Systems. UL 2218 Standard for Safety Impact Resistance of prepared Roof Covering Materials.

ICC-ES AC07 Acceptance Criteria for Special Roofing Systems.

