

La Quinta Apartments

Certificate of Approval Application – Proposed Historic Roof Replacement

1710 Denny Way, Seattle, Washington

Project Request

We respectfully request approval to replace the existing approximately 100-year-old cast-concrete barrel tile roofing at La Quinta Apartments with **Brava Spanish Tile**, a lightweight roofing product designed with a traditional Spanish barrel-tile profile.

The purpose of this project is to address the advanced deterioration and repeated failure of the existing roofing system while preserving the historic visual character of the building. The proposed Brava Spanish Tile was selected specifically because its dimensional barrel profile provides an appearance much more compatible with the historic concrete tile than a conventional flat asphalt composition shingle, while substantially reducing the dead load imposed on the building's aging roof structure.

Existing Historic Roof

The existing roof consists primarily of painted cast-concrete barrel-shaped tiles believed to be original to the approximately 100-year-old building.

We recognize that this barrel-tile roof is an important character-defining feature of La Quinta Apartments, and our intention is to preserve that historic appearance as closely as reasonably possible.

However, the existing roofing material has reached an advanced state of deterioration. The problems are widespread throughout multiple roof areas rather than being limited to a small number of individually damaged tiles.

Existing Conditions Documented by Roof Inspection

The enclosed roof inspection photographs document the present condition of the roof.

The photographs show numerous areas of deterioration and previous repair, including:

- Cracked, deteriorated, displaced, and missing concrete tiles;
- Numerous metal shims and patches inserted beneath or between existing tiles;
- Replacement pieces of different materials and colors throughout the roof;
- Deterioration and previous repairs around roof penetrations;
- Deteriorated conditions at valleys, ridges, hips, and transitions;

- Moss, organic material, and debris accumulating between tiles;
- Irregular and uneven tile courses;
- Areas where the roof surface appears to have sagged or deflected; and
- Evidence that localized repairs have already been performed repeatedly throughout the roof.

The roof diagram further identifies numerous areas where metal shims have been installed as part of previous efforts to maintain the existing tile roof.

The quantity and distribution of these repairs demonstrate that the problem is no longer limited to a few isolated tiles. The roofing system as a whole has experienced extensive deterioration and repeated intervention.

Repair Has Been Considered

We understand that preservation of original historic roofing material through repair is generally preferable when repair remains practical.

For that reason, we investigated repairing the existing concrete tile rather than replacing the roof.

We have brought **two roofing contractors** to the property to evaluate the possibility of repair. After reviewing the age and existing condition of the roof, both contractors declined to undertake a repair project because of the extensive deterioration and the risk associated with disturbing the approximately 100-year-old concrete tiles.

The existing tiles have become aged and fragile. Accessing one damaged area can require walking on, lifting, moving, or otherwise disturbing surrounding tiles. This creates the potential for additional damage to otherwise intact-looking tiles and makes continued spot repair increasingly difficult and unreliable.

The photographs also demonstrate that spot repairs have already been used extensively. Numerous metal shims and replacement pieces are visible throughout the roof. Despite these previous interventions, deterioration continues.

For these reasons, we believe another round of localized patching would postpone rather than resolve the underlying roofing problem.

Estimates for roof replacement, using the Brava Spanish Barrel Tile system are approximately \$200,000.

Roof Sagging and Structural Weight Concern

Of particular concern are areas where the roof plane appears uneven and visibly sagged or deflected.

Because the building and roof structure are approximately 100 years old, the continued dead load of the existing heavy cast-concrete tile is an important consideration in determining an appropriate long-term roofing solution.

We are not proposing to alter the historic roof form. Rather, we are seeking to reduce the weight carried by the existing structure while maintaining the historic barrel-tile appearance.

Replacing the existing roof with another comparably heavy concrete roofing system would continue to impose substantial dead load on the aging roof framing. A substantially lighter roofing material would reduce that load and provide a long-term benefit to the preservation of the building.

Please see the project Structural Engineer's evaluation and opinion, included as an attachment to this packet.

Why In-Kind Concrete Tile Replacement Is Not Proposed

We considered the historic appearance of the existing concrete tile when evaluating replacement materials.

An exact in-kind replacement using new concrete tile would maintain the material type, but it would also continue the significant weight associated with concrete roofing.

Given:

- the approximately 100-year age of the building;
- the extensive deterioration of the existing roofing system;
- the visible unevenness and apparent deflection in portions of the roof;
- the substantial weight of concrete roofing;
- the extensive history of localized patching and repair; and
- the contractors' unwillingness to continue repairing the existing aged concrete tile,

We believe installation of another heavy concrete roofing system would not provide the best long-term solution for preservation of the building.

Proposed Replacement – Brava Spanish Tile

After receiving Historic Preservation staff's comments regarding the importance of maintaining the visual texture of the original barrel-shaped tile, we reconsidered the use of conventional flat asphalt composition shingles.

We agree that a flat asphalt shingle would not adequately reproduce the depth, shadow lines, profile, and architectural character of the original barrel-shaped roof.

We therefore propose **Brava Spanish Tile** as the replacement roofing material.

The Brava product was selected because it provides the dimensional appearance and traditional barrel profile associated with Spanish tile while being substantially lighter than traditional concrete roofing.

The proposed replacement is intended to preserve the important visual characteristics of the existing historic roof, including:

- The Spanish/barrel-shaped tile profile;
- The three-dimensional appearance of the roof;
- Similar depth and shadow lines;
- The rhythm and pattern of individual tiles;
- A color selected to complement the historic appearance of the existing roof; and
- The overall character of the roof when viewed from the street and surrounding properties.

Manufacturer product information, photographs, color information, dimensions, installation information, and roofing weight information for the proposed Brava Spanish Tile are included as part of this Certificate of Approval application.

The project team is proposing the color Antique Clay, which appears to most closely match the original clay tile selected by the original Architect and Developer. Standard metal flashing will be used per the roofing manufacturer's specifications. The flashing and drip edge metals will be painted to match the body color of the building, which is a like-for-like replacement and treatment.

The existing skip-sheathing will be covered over by 15/32" CDK plywood, per Brava's sheathing requirements. A standard roofing underlayment will be provided meeting Brava's recommendations (30 lb felt, ASTM D226). Self Adhered membranes will be used at valleys and transitions per industry standard roofing practices.

There is a small portion of flat roof over the caretaker's unit. That torch-down roof is proposed to be replaced with a 60 mil Gray TPO roof following standard installation practices. It is not visible from the ground level.

Preservation Benefit

We believe the proposed solution provides an appropriate balance between preservation of the building's historic character and protection of the approximately 100-year-old structure.

The proposal does **not** seek to change the historic roof configuration or replace the character-defining barrel-tile appearance with a visually unrelated modern roof.

Instead, the project would:

1. Remove a severely aged and repeatedly repaired roofing system;
2. Correct deteriorated roofing and flashing conditions;
3. Provide a complete and reliable weather-resistant roofing assembly;

4. Reduce the dead load imposed on the aging roof structure;
5. Address concerns associated with the visibly uneven and apparently deflected roof areas; and
6. Preserve the prominent three-dimensional Spanish barrel-tile appearance that contributes to the historic character of La Quinta Apartments.

Conclusion

The existing cast-concrete tile roof has served the building for approximately a century. The inspection photographs demonstrate extensive deterioration, numerous previous repairs and patches, displaced and damaged tiles, and uneven areas of the roof.

We investigated continued repair, but two roofing contractors who evaluated the roof declined to perform the repair work because of the roof's age and condition.

We therefore respectfully request approval to replace the existing deteriorated cast-concrete roofing with **Brava Spanish Tile**.

We believe this material provides a preservation-sensitive solution because it retains the historic barrel-tile profile and visual character while significantly reducing the weight imposed on the approximately 100-year-old structure.

Our goal is to protect La Quinta Apartments for the long term while preserving the distinctive historic roof appearance that is an important part of the building's architectural character.

Please see the following attachments to help in your decision-making process.

- Ground Level Building Photos for Reference
- Structural Engineer Roof Evaluation Memo
- Overall Roof Aerial Photo
- Photographs of the roof in various locations
- Photos of Brava Roof Tile positioned in context of existing roofing
 - Antique Clay (Proposed Color)
 - Vintage Terra Cotta (Alternate Color)
 - Tuscan Clay (Alternate Color)
 - Aged Mission (Alternate Color)
- Best available color photos for flashing color reference
- Proposed flat roof color change (TPO)
- Brava Spanish Barrel Tile Marketing Brochure
- Brava Spanish Barrel Tile Specifications Sheet
- Brava Spanish Barrel Tile Installation Details
- Brava Spanish Barrel Tile Turret Installation Technical Bulletin

- Excerpts from La Quinta Landmark Nomination packet, with detailed description of the roof as well as select photos







Structural Review Letter

PROJECT La Quinta Apartments Roof Replacement 1710 E Denny Way Seattle, WA 98122 NE Project: 26-057	RECIPIENT DEP Holdings I, LLC Cao Huynh 3040 78th Ave SE #220 Mercer Island, WA 98040	ENGINEER Nickerson Engineering LLC Chris Nickerson, PE, SE Letter Date: September 4, 2026
--	--	---

Roof Framing Review

Subject	Existing Roof Framing and Replacement Roofing Alternatives
----------------	--

To Whom It May Concern:

Nickerson Engineering LLC (NE) was retained by DEP Holdings I, LLC to perform a limited structural review of the existing roof framing at the La Quinta Apartments in connection with replacement of the existing Spanish barrel-profile concrete tile roofing. This letter compares the structural loading associated with a new concrete tile roof and a lightweight composite tile alternative. The review is intended to assist the owner in selecting a replacement roof covering that reduces demand on the existing framing while maintaining an appropriate barrel-tile appearance.

Purpose and Basis of Review

NE observed accessible portions of the attic framing on September 2, 2026, and obtained field measurements and photographs. The evaluation uses an installed weight of 19 psf for the existing concrete tile roof covering, an estimated total existing roof dead load of 34 psf, and a uniform roof snow load of 25 psf. For comparison, one representative lightweight composite tile option considered by the owner has a published field-tile weight of approximately 2.81 psf. The specific replacement product has not been selected.

Observed Framing

The typical roof framing consists of 1x straight plank sheathing over 2x6 rafters at approximately 16 inches on center. The rafters bear at an intermediate line on a short 2x4 pony wall. That pony wall transfers load to a built-up (2)2x10 wood beam spanning approximately 12 feet in the controlling condition. The attic ceiling framing consists of 2x4 joists at approximately 16 inches on center spanning approximately 16 feet in the opposite direction and supporting a plaster ceiling.

Structural Evaluation

The following comparison uses the same 15 psf allowance for framing, sheathing, ceiling, and associated materials in each case and isolates the effect of changing the roof covering:

Load component	Existing concrete tile	Representative lightweight composite tile
Roof covering	19.0 psf	2.81 psf
Total dead load	34.0 psf	17.8 psf
Dead load + roof snow	59.0 psf	42.8 psf

Note: Composite values use a representative field-tile weight of 2.81 psf. Before installation, the complete selected assembly, including accessories and any added deck or underlayment, should be verified to weigh less than the existing 19 psf roof-covering allowance.

The installed weight of a new concrete tile roof cannot be assumed to match the existing 19 psf covering. Depending on the selected tile, hip and ridge units, mortar, battens, underlayment, flashing, and sheathing repairs, a new concrete tile assembly could equal or exceed the existing weight and could therefore maintain or increase demand on the existing framing.

The representative 2x6 rafters have adequate capacity for the stated loading and observed support arrangement. The controlling element is the built-up (2)2x10 beam supporting the pony wall. Under the 34 psf dead load and 25 psf roof snow load, calculated demand on this beam exceeds its allowable capacity using current code-based criteria. The current-code evaluation is used as a comparative benchmark for the roofing alternatives and does not, by itself, determine whether reroofing triggers a complete upgrade of the existing framing.

Using the representative composite tile weight, the roof-covering load is reduced by approximately 16.2 psf, or about 85 percent, and the combined dead-plus-snow gravity load is reduced by approximately 27 percent. The controlling attic beam remains overstressed under the current-code comparison; however, the lighter roofing materially reduces demand relative to both the existing roof and a replacement concrete tile assembly. Reducing sustained dead load also reduces the potential for additional long-term creep and deflection in the wood framing. The lower roof weight further reduces seismic mass and the corresponding inertial demand transferred through the roof diaphragm and supporting lateral system.

Structural Opinion

From a structural-loading standpoint, NE recommends use of a properly specified lightweight composite tile system in lieu of a new concrete tile roof. A concrete replacement could be as heavy as or heavier than the existing covering, whereas verification of a lighter complete composite assembly ensures that roof dead-load demand is reduced. The composite alternative does not eliminate the current-code deficiency identified in the controlling attic beam, but it improves the demand-to-capacity relationship, reduces sustained-load creep risk, and reduces seismic weight. The final product submittal should document the complete installed roof-covering weight before installation.

Limitations

This review was limited to readily accessible and observable conditions and did not include destructive investigation or material testing. Member sizes and spans are approximate, and representative conditions were assumed to continue beyond the areas observed. The structural calculations address gravity-load capacity. The seismic discussion is limited to the qualitative benefit of reduced mass; no evaluation of the roof diaphragm, connections, or lateral-force-resisting system was performed. Required wind-uplift resistance and attachment of the selected roof covering are outside the scope of this review.

Regards,

Nickerson Engineering LLC



Chris Nickerson, PE, SE
Principal

Replace plumbing pipe flashing



**Rake tile areas to
install metal shims**



**2026 Roof Diagram
not to scale**









FLAT ROOF
SECTION TO BE
REPLACED























Example of sag

ANTIQUE CLAY



ANTIQUE CLAY

CURRENT PAINTED
FLASHING EXAMPLE



VINTAGE TERRA COTTA



VINTAGE TERRA COTTA



TUSCAN CLAY



TUSCAN CLAY



AGED MISSION



AGED MISSION





Figure 28. Balconies, looking north.
Photographer: Jesse L. Young, Seattle.



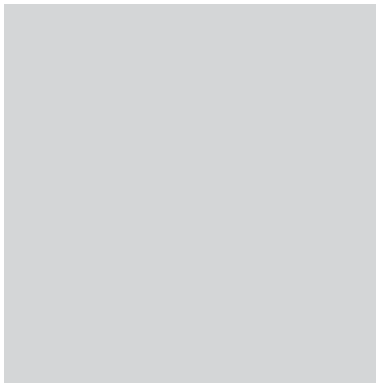
Figure 29. Tower, northwest, looking west.
Photographer: Jesse L. Young, Seattle.



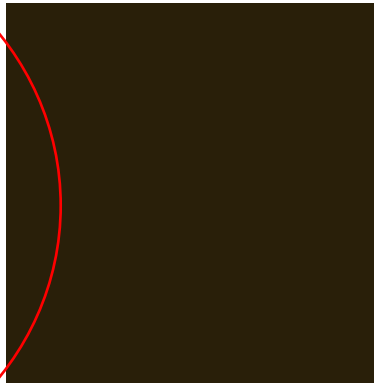
PROPOSED COLOR FOR FLAT ROOF OVER
CARETAKER'S STUDIO. NOT VISIBLE FROM
ANY PUBLIC VANTAGE POINT. PROPOSE
LIGHTER COLOR FOR HIGHER REFLECTIVITY
RE: COOLING BENEFITS

For Technical Information,
visit www.gaf.com
or call 1-800-ROOF-411
(1-800-766-3411)

In-Stock Colors*



Gray



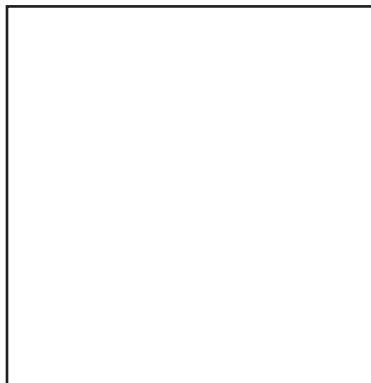
Dark Bronze



Slate Gray



Tan



White

Custom Colors

(800 sq. minimum, 6-8 week lead time)

GAF can manufacture virtually any TPO color
membrane you need
for your project—
the possibilities
are limitless!



* 45 and 60 mil membranes are in stock. 80 mil
membranes require 4-6 week lead time.

Proposed TPO
thickness





Beautifully Authentic High-Performance Roofing

Spanish Barrel Tile





Autumn

Build With BRAVA

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, variegation 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.

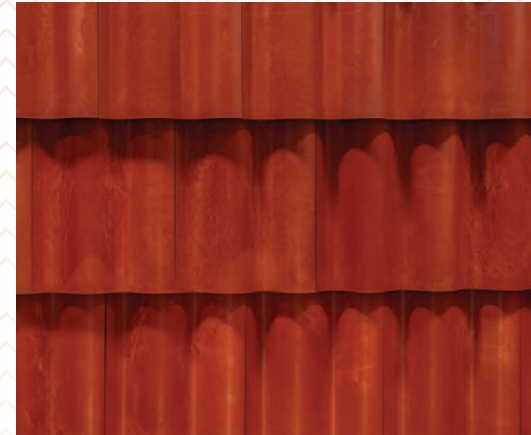
Color For Life



Chemical or dye-based colorants get broken down by the sun over time and they degrade as you see in old comic books or photographs.



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.





Terra Cotta Brown



Tuscan Clay



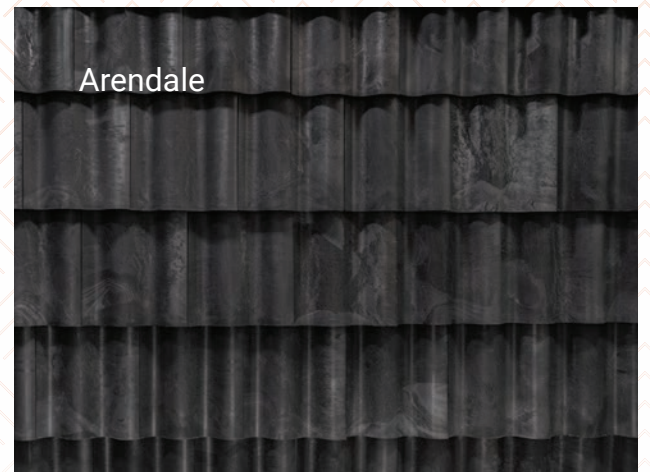
Vintage Terra Cotta



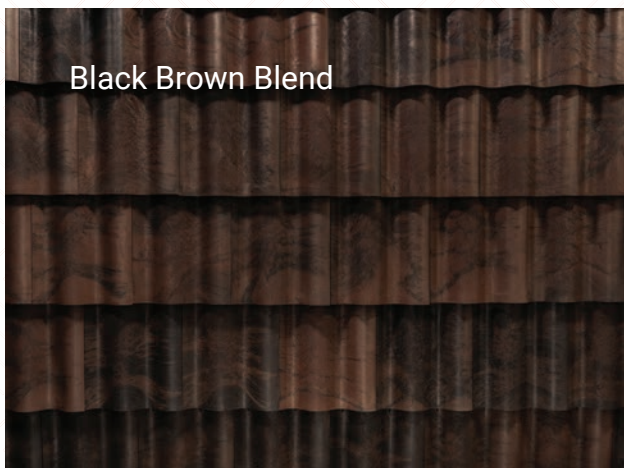
Aged Mission



Antique Clay



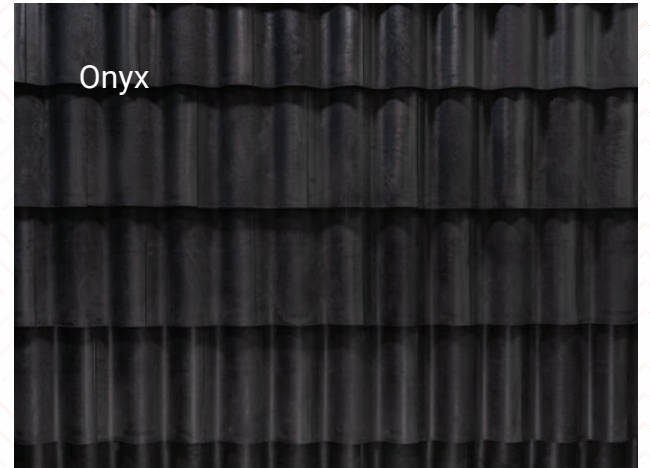
Arendale



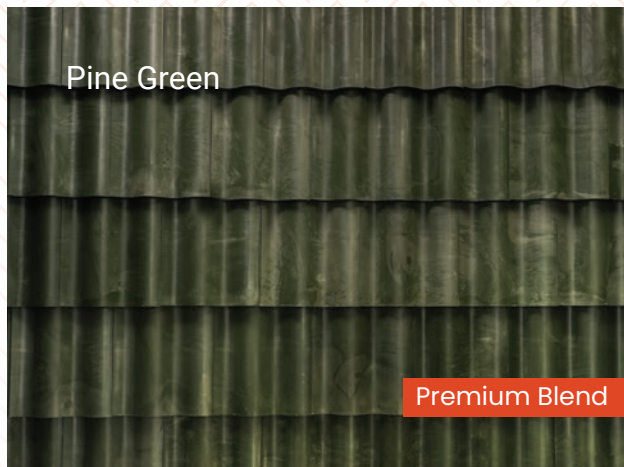
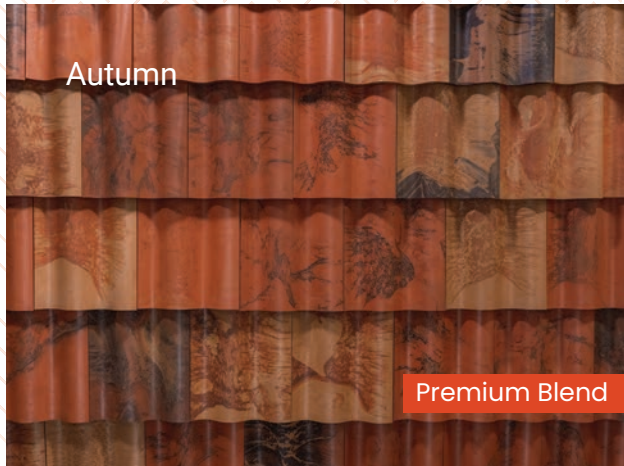
Black Brown Blend



Graphite



Onyx

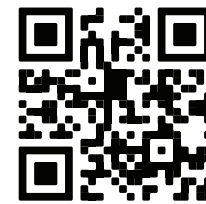


Mother Nature Inspired Hues

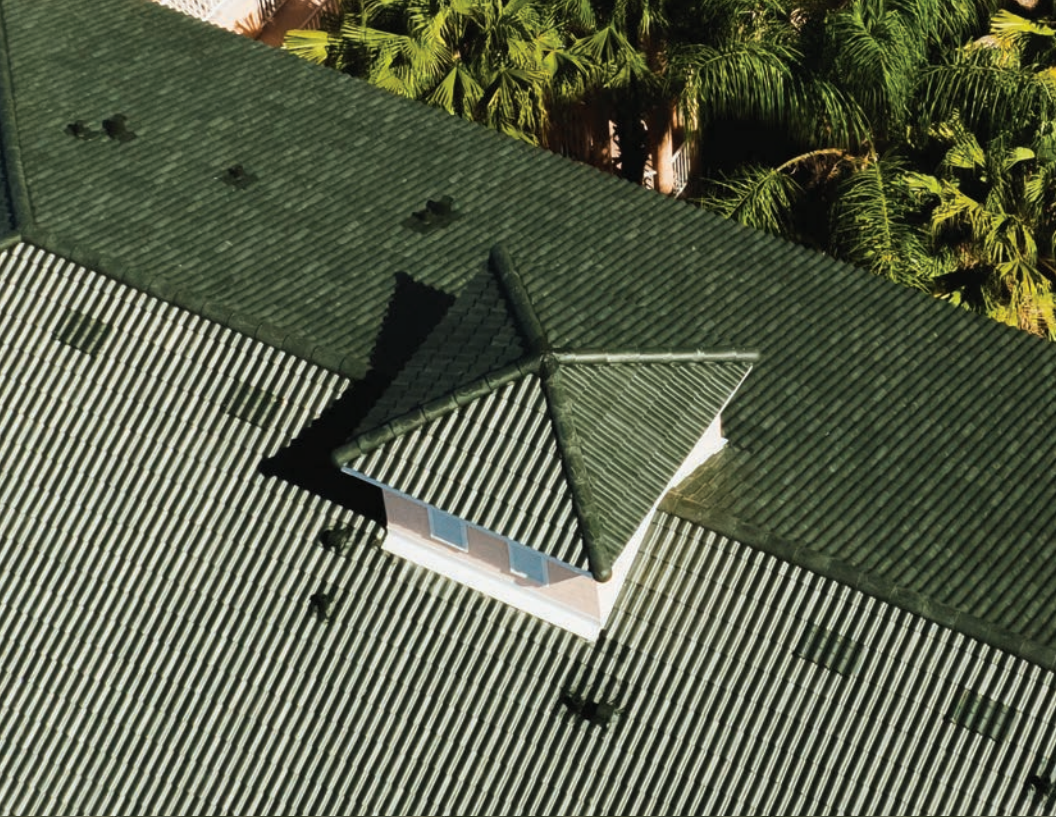
Standard color line of natural color blends gives an authentic look of natural terracotta tile.

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.



VIDEO: See how color changes throughout the day and access high resolution photos. **Scan QR Code.**



Brutally Tough

BRAVA materials won't suffer damage during transport, installation, or even the friend who always slices on the fairway.

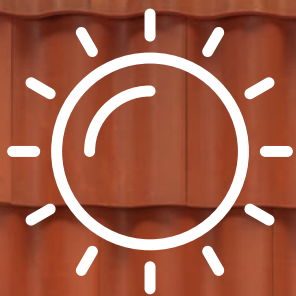




Pine Green



Antique Clay



Lasting Color

Revolutionary fade-resistant technology ensures your roof will look stunning year after year.



Lightweight

BRAVA materials are lightweight enough to be installed on homes without any structural reinforcement.

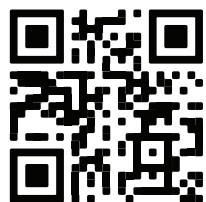




Arendale



Blessed Stanley Rother Shrine



VIDEO: See the full story of this historical project - scan QR Code.

Antigua
(custom color)



Trusted By

Historical & Landmark Buildings

What we do is more than protecting
homes. We set out to impact and
inspire our communities.

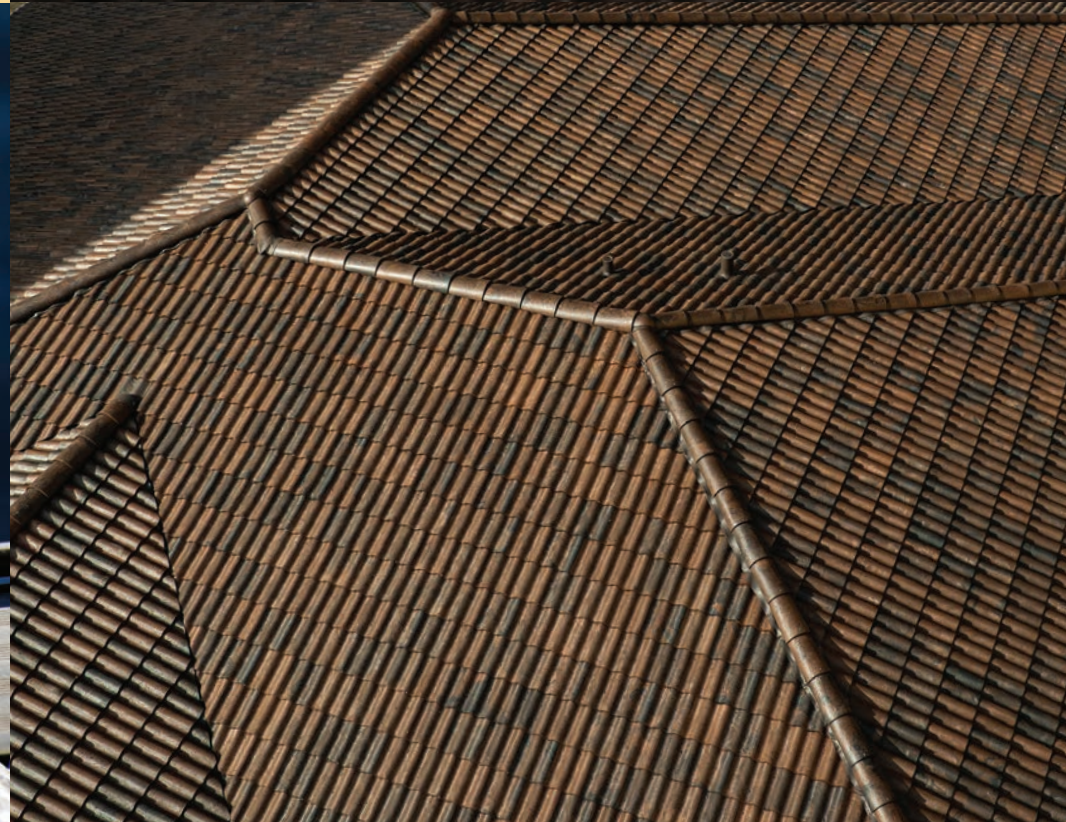
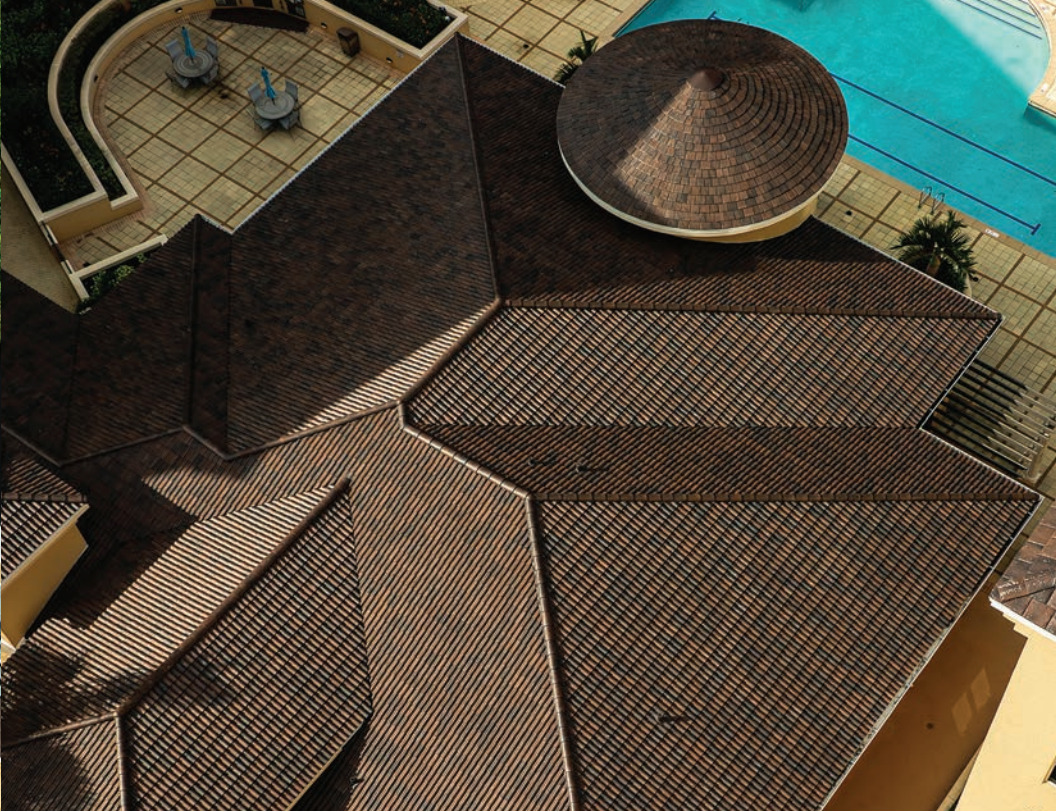








Black Brown Blend





Sustainable

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

An aerial photograph of a residential community. The houses are white with red-tiled roofs, arranged in a row. There are palm trees and other greenery around the houses. A swimming pool is visible in the background. The ocean is on the right side of the image.

Trusted by Homeowner's Associations

When a community is developed, architecture and design are critical for success. Creating a cohesive and beautiful-looking community is easy with BRAVA roofing.

Tuscan Clay

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



Field Tile

Install at all roof sections.
9.7 Bundles per Square

Nailer

Bullnose
5 Pieces
per Bundle

Hip & Rake



Rake Edge (Optional)

5.4 linear feet per bundle

Flexible Flashing (Vented)

Installed over nailer and covered by Ridge Closure and Top Ridge.

Ridge Closure

Installed at ridge and covers fasteners.
9.6 linear feet per bundle

Top Ridge

Installed at ridge and covers Ridge Closure.
5.6 linear feet per bundle

Hip & Rake

5.6 linear feet per bundle

Flexible Flashing (Non-Vented)

Install above nailer, below Hip Cap.

Nailer

Required at hip and ridge.
Install nailer 4" from eave.
Recommended at rake.*

Ice & Water Shield

Ice & Water Shield

Recommended at eaves and valleys.

Nailer

Headwall Closure

(Same piece as Ridge Closure)
Install to cover fasteners.
9.6 linear feet per bundle

Underlayment

Synthetic recommended.

Eave Starter

Install at eaves.
9.6 linear feet per bundle

Note: Images not to scale.

*Refer to nailer height chart for correct dimensions.

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 susceptible
to hail and storm
damage.



Heavyweight requires
additional structural
reinforcement.

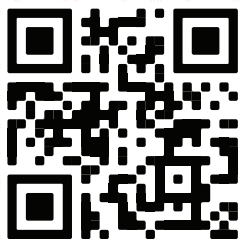
Traditional Clay Tile



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.



VIDEO: Tour our plant,
meet our people and see how
BRAVA products are made -
scan this QR code!



Antique Clay





Brava Spanish Barrel Tile



Brava Spanish Barrel Tile Black Brown Blend



Brava Spanish Barrel Tile French Clay



Brava Spanish Barrel Tile Mediterranean



Brava Spanish Terra Cotta

Beautifully authentic high-performance roofing.

The beautiful look of a Spanish barrel tile roof without the maintenance.

Truly realistic

Our proprietary process creates the most authentic-looking Spanish barrel tile 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 directly correlates with owner satisfaction and higher property value.

Maintenance free

Brava's proprietary formulation ensures extreme durability.

Color technology

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

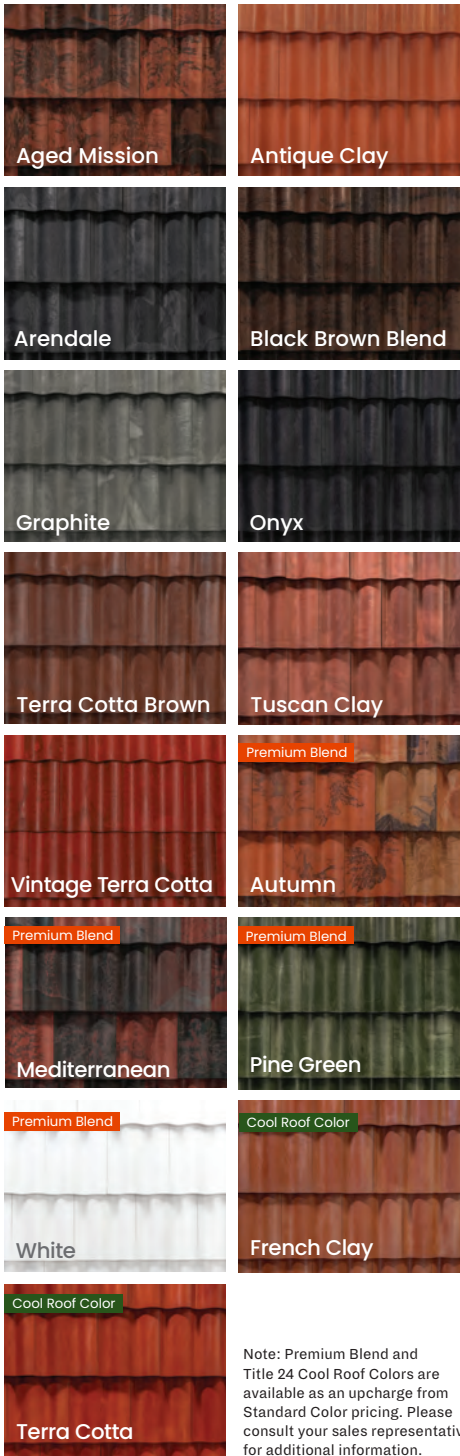
Fully sustainable

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

Complete

Brava offers a complete line of accessory tiles.

Unparalleled Performance



Note: Premium Blend and Title 24 Cool Roof Colors are available as an upcharge from Standard Color pricing. Please consult your sales representative for additional information.

Description	Weight	Dimensions
Spanish Field Tile	2.9 lbs.	13" x 16 1/2"
Eave Starter	0.6 lbs.	11 3/4" x 3"
Ridge Closure	0.5 lbs.	11 3/4" x 2 1/2"
Hip & Rake	3.5 lbs.	8 1/4" x 9" x 17 1/2"
Top Ridge	4.2 lbs.	10" x 10 3/8" x 17"
Bullnose	3.9 lbs.	7 3/4" x 8 3/4" x 17 1/2"
Rake Edge (Optional)	3.0 lbs.	5 1/2" x 6 1/2" x 16"

Weight Per Square	281 lbs./sq.
-------------------	--------------

Aesthetics	Brava Spanish Barrel Tile	Clay / Concrete Spanish Tile
Authentic Look	✓	✓
Multi-Colored Variegated	✓	✗

Performance	Brava Spanish Barrel Tile	Clay / Concrete Spanish Tile
Fire Retardant: Class A or Class C	✓	✓
Wind Resistance: 188+ mph*	✓	✗
Impact Resistance: Class 4	✓	Varies by manufacturer
Freeze/Thaw Resistant	✓	✗
Maintenance Free	✓	Requires repair throughout life cycle
Colorfast	✓	Varies; concrete may develop efflorescence (powdery appearance)
Hail Warrantied	✓	Varies by manufacturer

Installation	Brava Spanish Barrel Tile	Clay / Concrete Spanish Tile
Lightweight	✓	✗
Estimated Waste Factor	Low	High; tiles with hairline cracks or broken during install will be discarded
Gun Nailed in Cold Weather	✓	✗



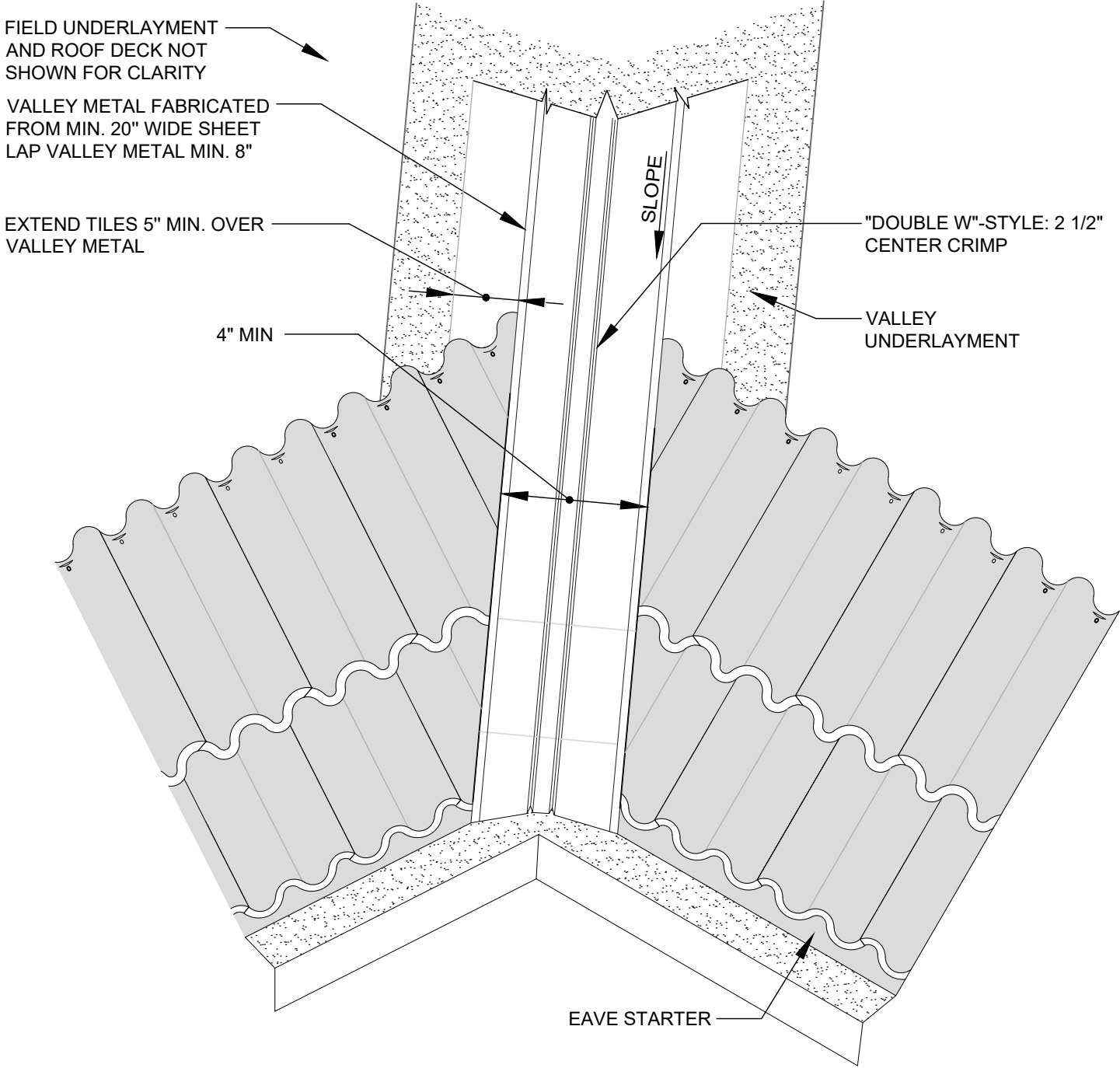
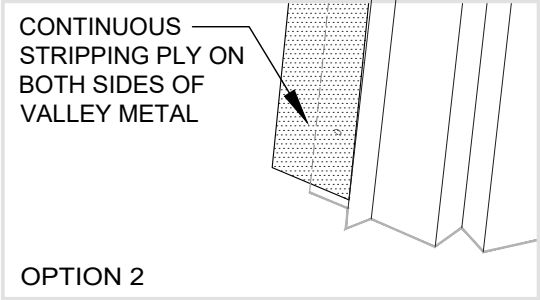
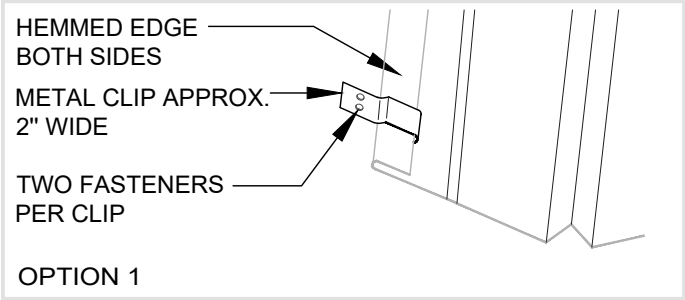
*Brava tiles are tested and approved to withstand wind speeds of up to 188 mph with nails and up to 211 mph with high wind / screw installation.

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.

bravarooftile.com • (844) 290-4196 • info@bravarooftile.com



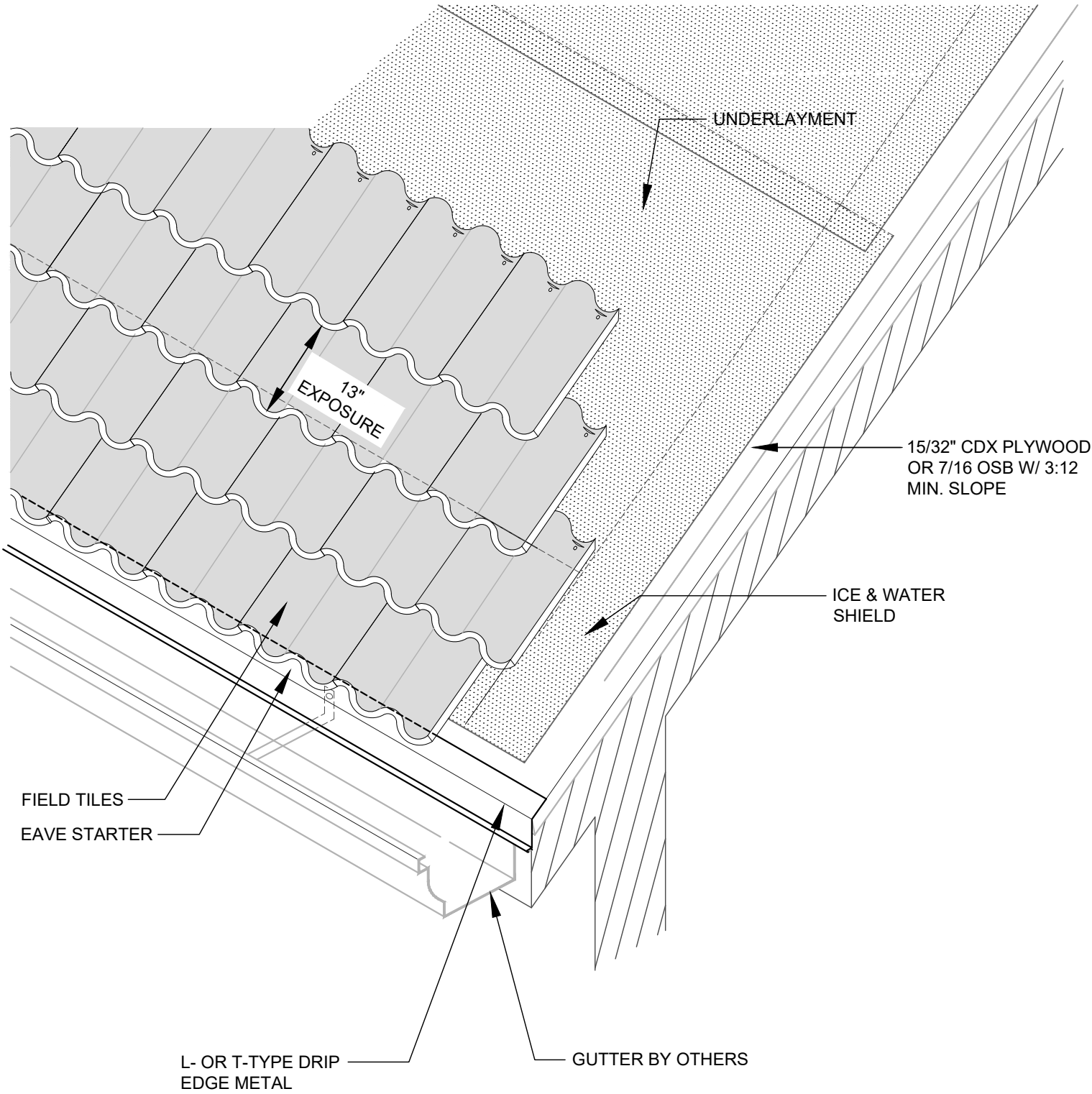
OPEN VALLEY DETAIL

BRAVA SPANISH BARREL

DETAIL NO.

BS-2

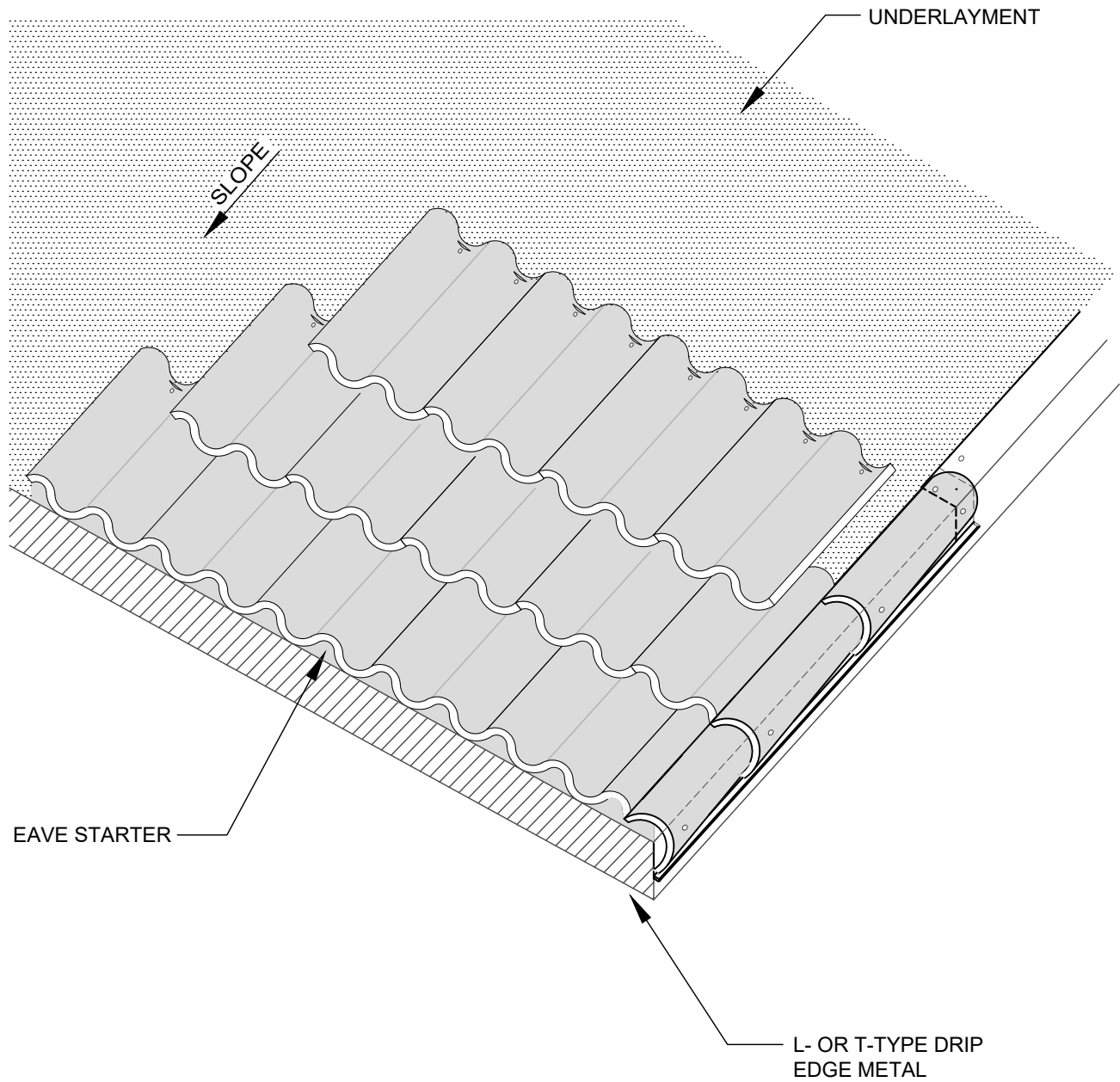
NOT DRAWN TO SCALE



NOTES:

- 1. THIS DETAIL SHOWS ONE TYPE OF GUTTER SUPPORT. GUTTER SECUREMENT AND SUPPORT OPTIONS VARY.
- 2. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

	EAVE WITH GUTTER DETAIL	DETAIL NO.
		BSB-3
	BRAVA SPANISH BARREL	NOT DRAWN TO SCALE



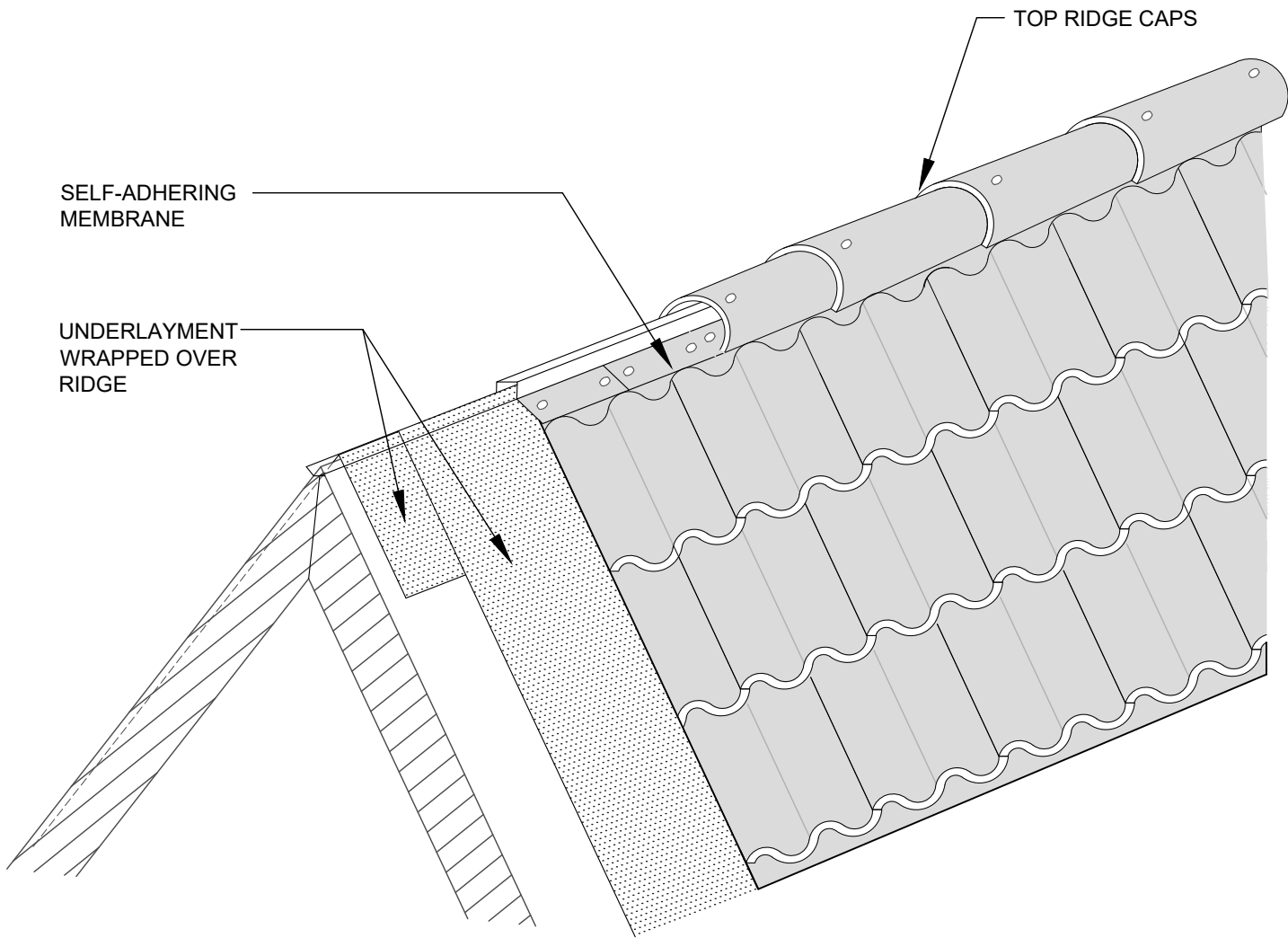
RAKE DETAIL

BRAVA SPANISH BARREL

DETAIL NO.

BSB-4

NOT DRAWN TO SCALE



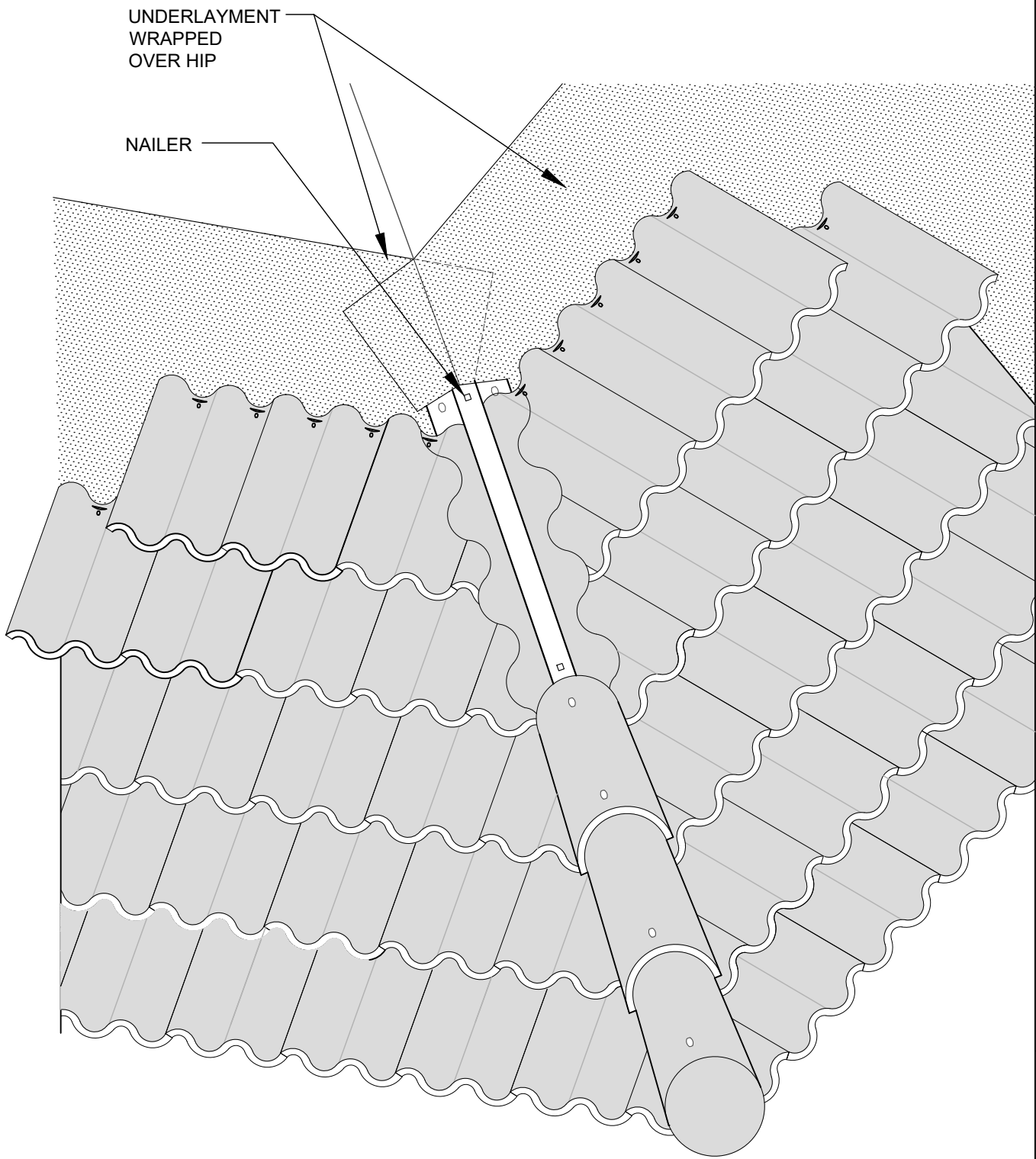
RIDGE DETAIL

BRAVA SPANISH BARREL

DETAIL NO.

BSB-5

NOT DRAWN TO SCALE



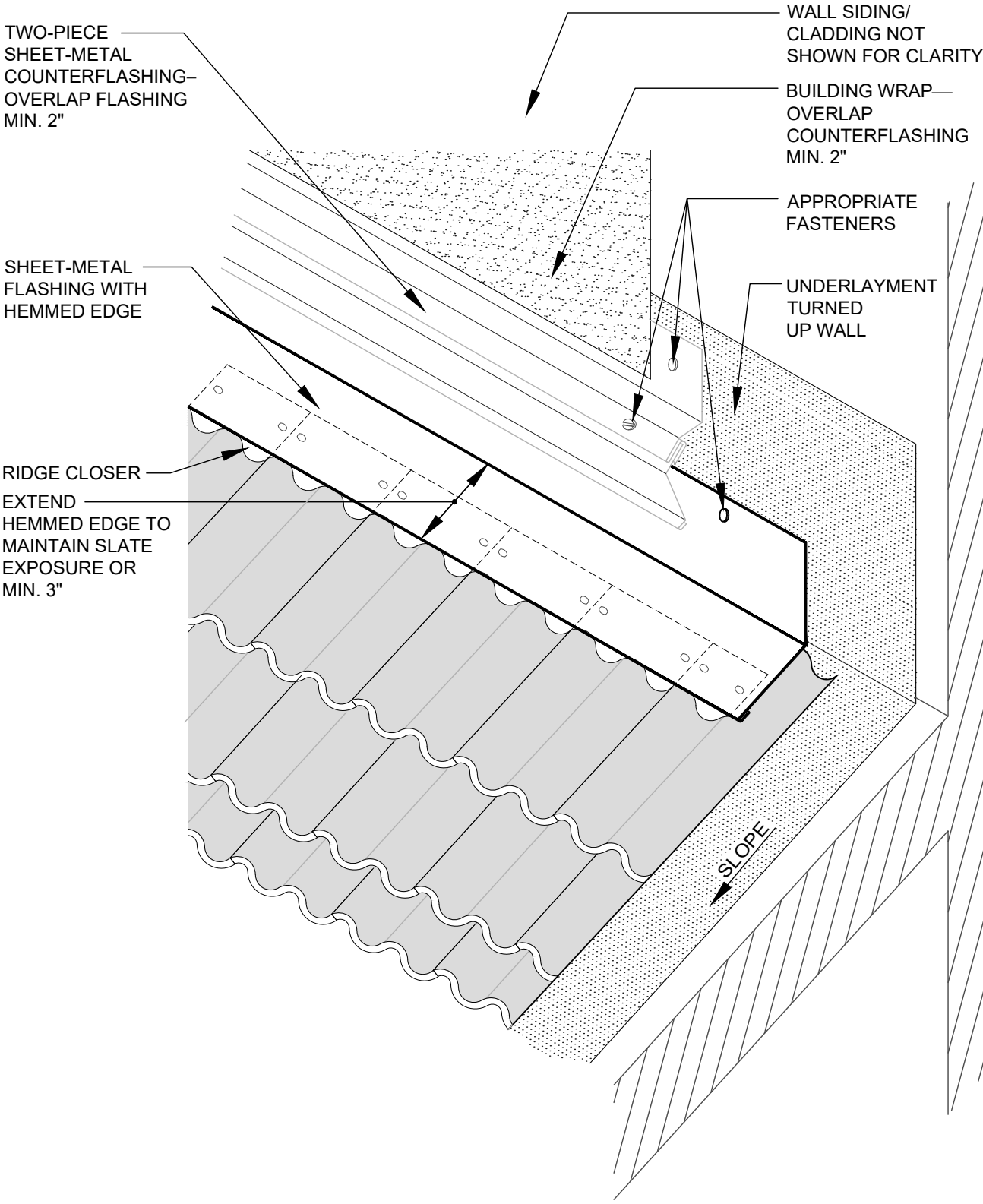
HIP DETAIL

BRAVA SPANISH BARREL

DETAIL NO.

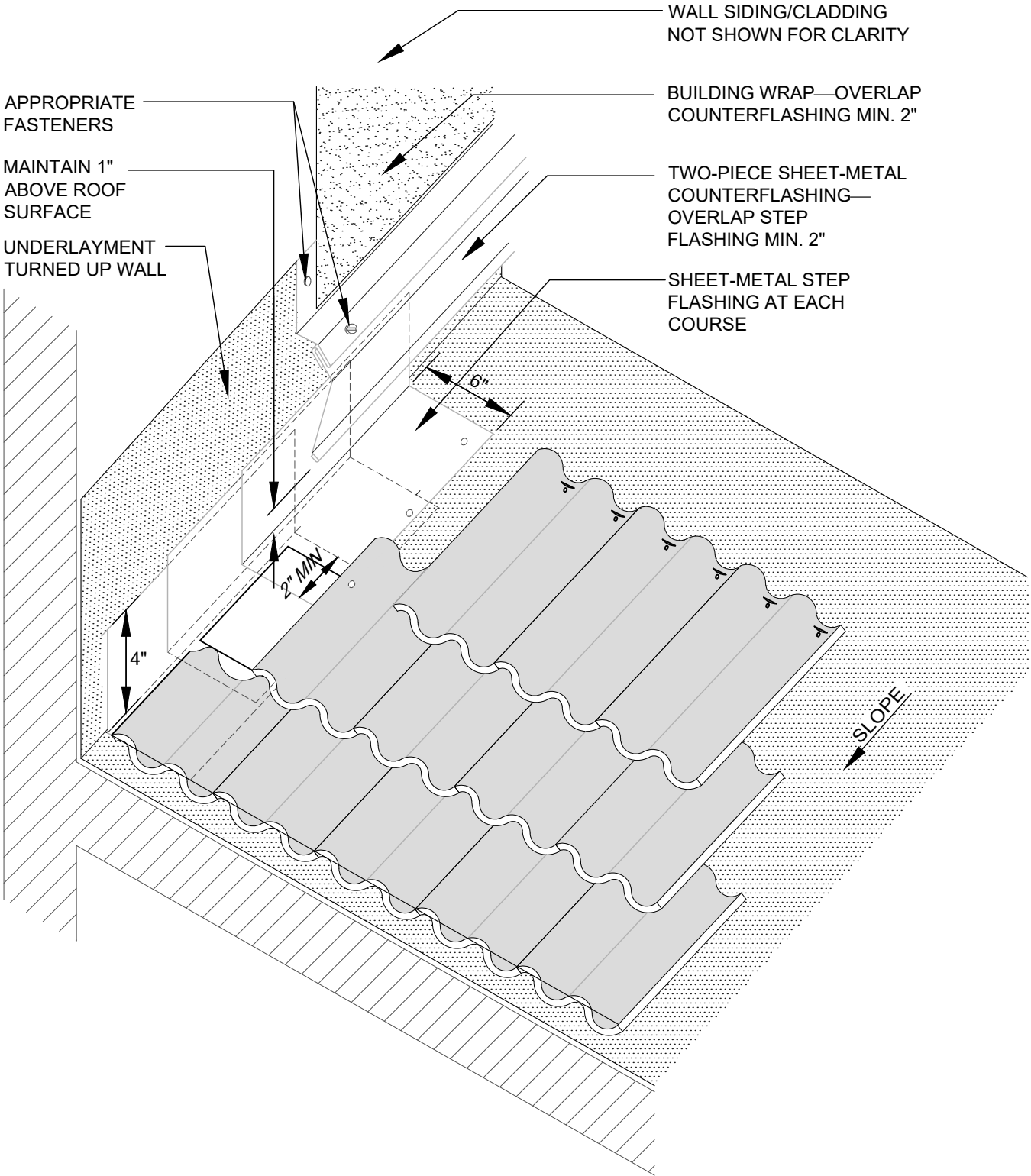
BSB-6

NOT DRAWN TO SCALE



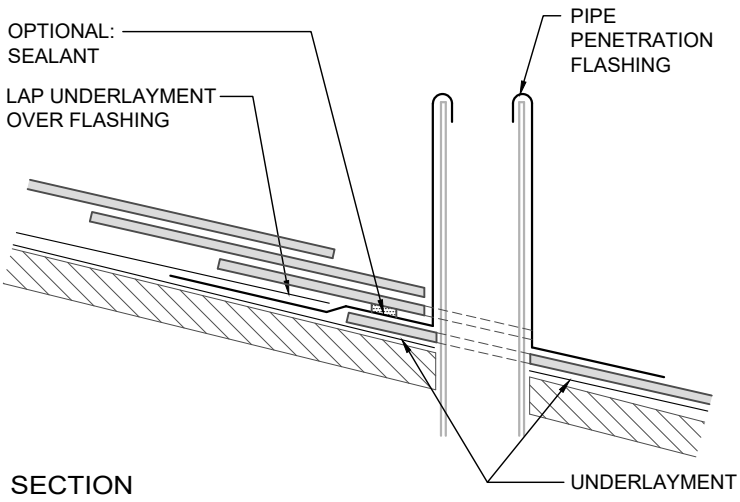
- NOTES:
- 1. FOR SECUREMENT AND JOINERY INFORMATION FOR SHEET METAL AND COUNTERFLASHING, REFER TO THE NRCA ROOFING MANUAL: ARCHITECTURAL METAL FLASHING AND CONDENSATION AND AIR LEAKAGE CONTROL.
 - 2. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

	HEADWALL DETAIL	DETAIL NO.
		BSB-7
	BRAVA SPANISH BARREL	NOT DRAWN TO SCALE



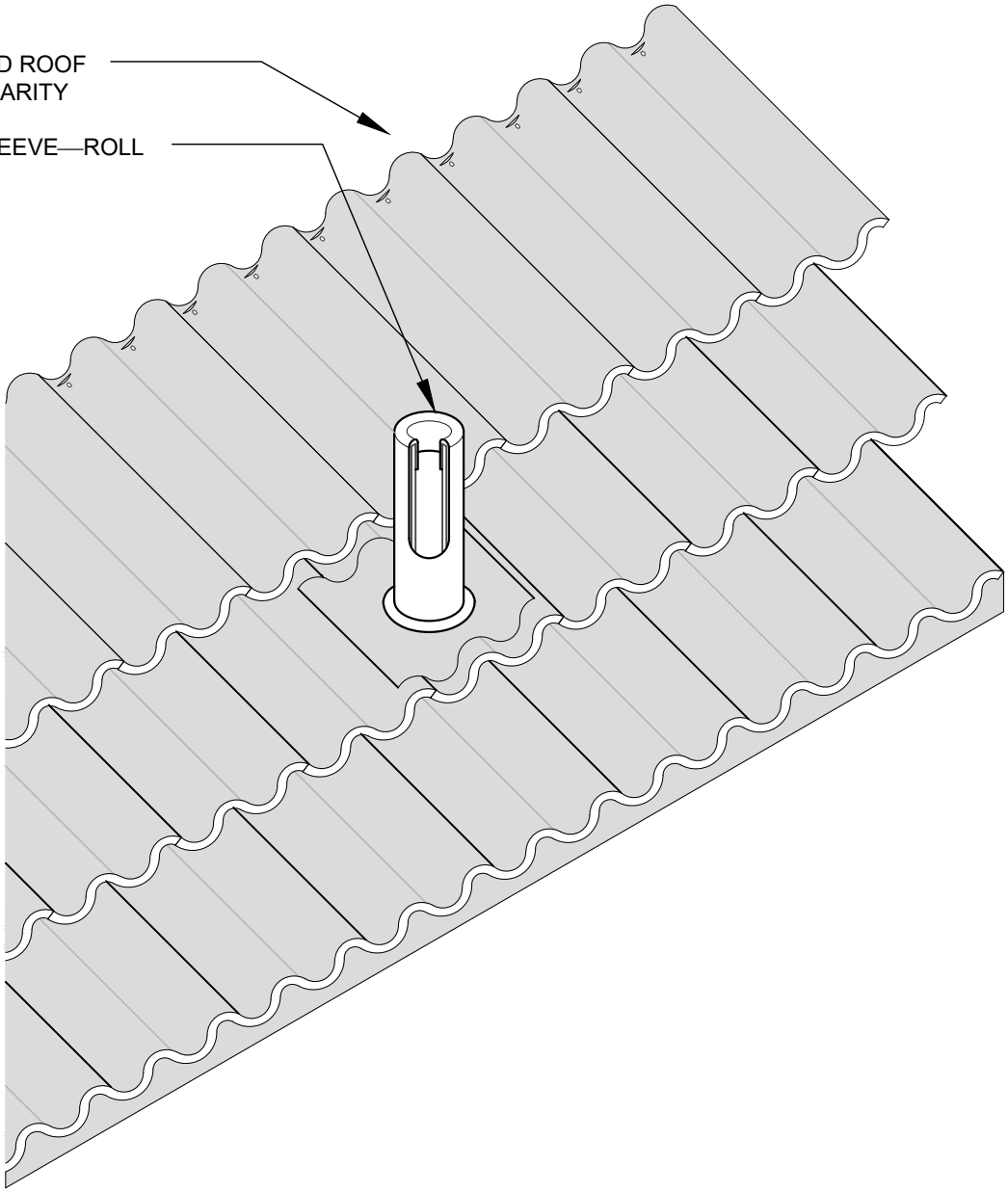
- NOTES:
1. FOR SECUREMENT AND JOINERY INFORMATION FOR SHEET METAL AND COUNTERFLASHING, REFER TO THE NRCA ROOFING MANUAL: ARCHITECTURAL METAL FLASHING AND CONDENSATION AND AIR LEAKAGE CONTROL.

 BRAVA	SIDEWALL FLASHING WITH TWO-PIECE COUNTERFLASHING	DETAIL NO.
		BSB-8
	BRAVA SPANISH BARREL	NOT DRAWN TO SCALE



FIELD UNDERLAYMENT AND ROOF
DECK NOT SHOWN FOR CLARITY

SOFT-METAL FLASHING SLEEVE—ROLL
INTO PIPE APPROX. 1"



VENT PIPE PENETRATION

BRAVA SPANISH BARREL

DETAIL NO.

BSB-9

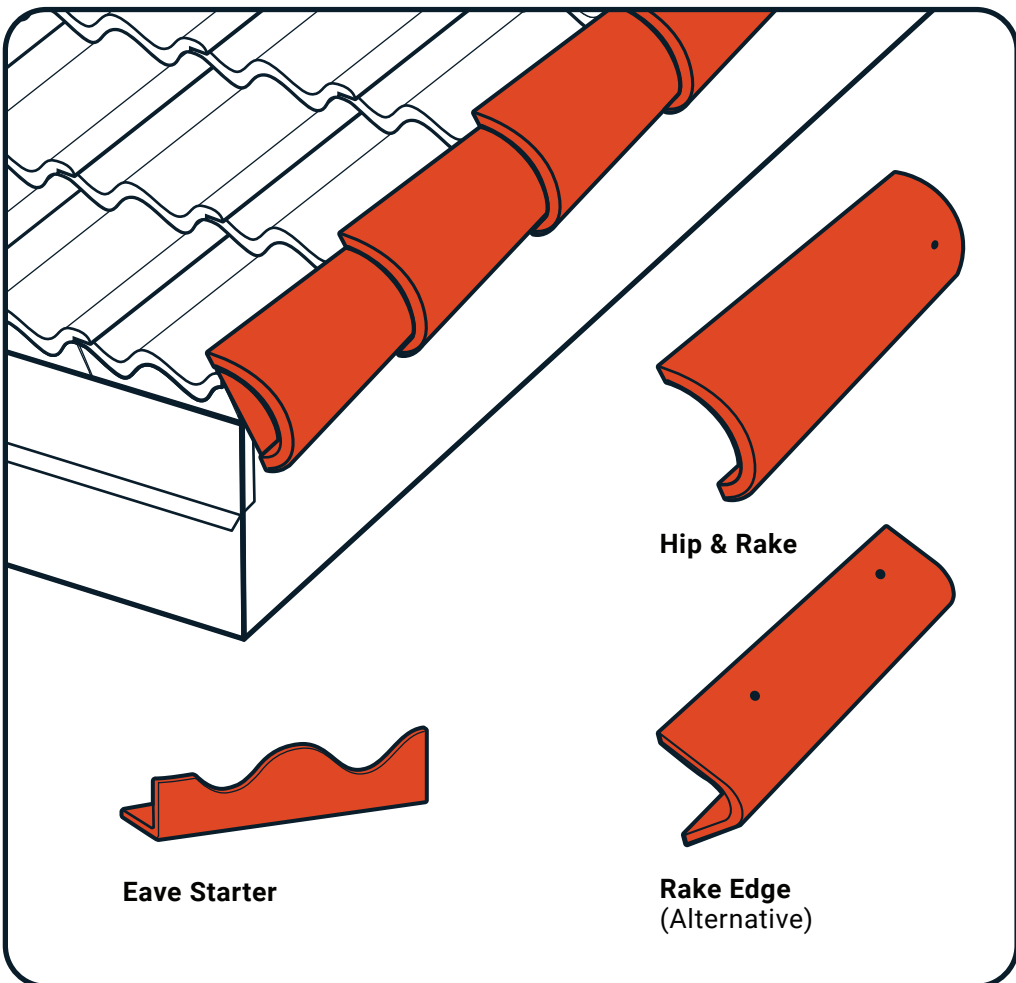
NOT DRAWN TO SCALE



PRO DETAILS

SPANISH BARREL TILE

RAKE EAVE CLOSURE



This detail may be used at rake terminations to create a finished, weather-tight closure between the Hip & Rake trim and the fascia at the eaves.

Always refer to full Installation Guide and technical resources at bravarooftile.com/resources.

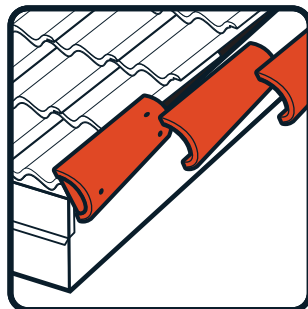
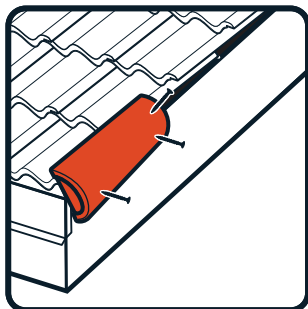
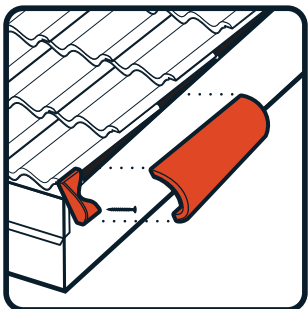
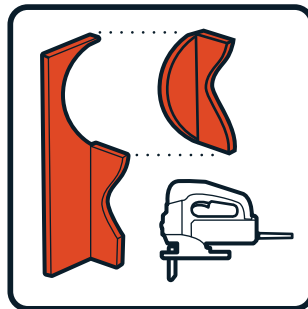
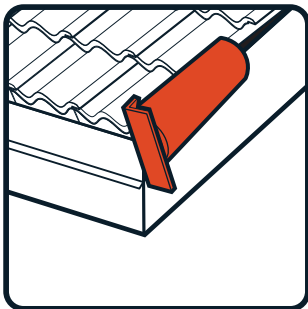
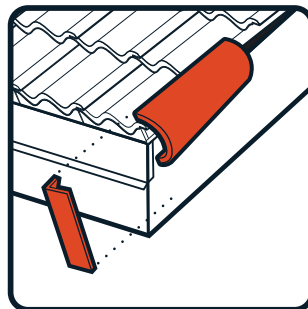
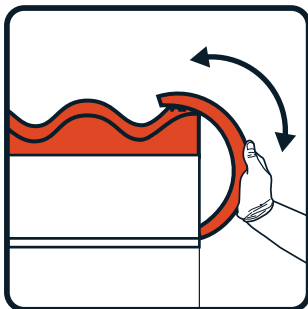
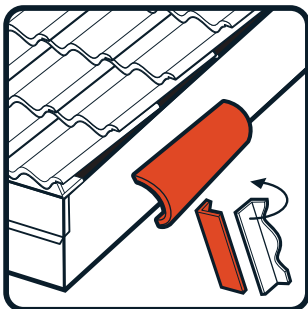




PRO DETAILS

SPANISH BARREL TILE

RAKE EAVE CLOSURE



Step 1: Field Tiles to Rake

Install Spanish Barrel tiles up to the rake edge per standard exposure, fastening, and alignment requirements.

Step 2: Dry Fit Rake Trim

Position Hip & Rake or Rake Edge trim along the rake to verify fit and proper overlap.

Step 3: Mark Eave Starter

Trace profile and underside opening of rake trim onto an Eave Starter to prepare a custom closure.

Step 4: Cut Eave Starter

Using a fine-tooth blade, cut Eave Starter along marked lines for a precise, tight-fitting closure.

Step 5: Test Fit & Fasten Closure

Check alignment of closure, trim as needed, and secure to the fascia for a weather- and pest-resistant seal.

Step 6: Install Rake Trim

Attach Hip & Rake or Rake Edge trim over closure and field tiles per manufacturer fastening and overlap guidelines.

TURRET INSTALLATION GUIDANCE

SUMMARY

This bulletin provides step-by-step guidance for installing Brava Roof Systems on turrets. Turret installations require extra time and care in the planning and installation stages. Still, your roofing project's resulting aesthetic and distinctiveness will be worth the effort, showcasing craftsmanship that stands the test of time.

TURRET TYPES

Historically, turrets were an integral part of defense for castles. Modern turrets may be recreations of those symbols or even remnants of that time and have become an architectural design feature.

Turrets come in many shapes and sizes depending on the style and design of the building. Other terms for a turret include steeple, tower, and spire. From an installation perspective, major types include round, semi-round, square, and hipped turrets. Round and semi-round turrets have a continuous curve, while square and hipped turrets can be sectioned into small triangles allowing for a flat installation.

SYSTEM COMPATIBILITY

ROUND OR SEMI-ROUND TURRETS

Round or semi-round turrets have a continuous curve in a circle or semi-circle.

**BRAVA CEDAR SHAKE, BRAVA SLATE, AND
BRAVA SPANISH BARREL TILE***



SQUARE OR HIPPED TURRETS

Square or hipped turrets can be sectioned into small triangles allowing for a flat installation.

**BRAVA CEDAR SHAKE, BRAVA SLATE,
BRAVA SPANISH BARREL TILE**



Solid Shakes or Solid Slates are recommended at cut edges and may be appropriate for the entire turret, depending on the design and desired appearance.

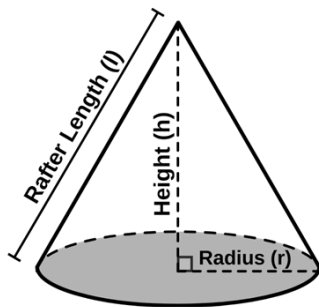
Trimming of Shake, Slate, and Barrel Tile may require additional material. For turret sections, the waste factor should be increased by 5-10% for Field Tiles and Accessories.

*Adjustment to eaves and decking, and addition of hips may be required for Spanish Barrel Tile as all Field Tile courses must be installed to straight lines.

CONTENTS

- Turret Types
- System Compatibility
- Measuring Turret Area
- Material Requirements & Recommendations
- Installation Guidance
- Notes
- Resources
- Questions

MEASURING TURRET AREA



ROUND OR SEMI-ROUND TURRETS

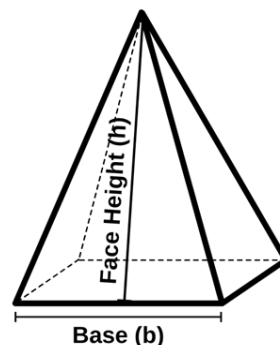
Measure the Height (h) and the Rafter Length (l) of the Turret.

Solve for the Radius (r).

$$r = \sqrt{l^2 - h^2}$$

Solve for the lateral roof area (A_l)

$$A_l = \pi * r * l$$



SQUARE OR HIPPED TURRETS

Measure the Face Height (h) and Base (b) of each turret section.

(Note that the face height is used; not the apex height of the pyramid.)

Solve for the section Area (A_s).

$$A_s = h * b * \frac{1}{2}$$

Combine A_s of all sections for total Area (A).

MATERIAL REQUIREMENTS & RECOMMENDATIONS

SHAKE AND SLATE

For rounded turrets, Shake and Slate tiles must be trimmed for a natural look, and keyway spacing (3/16" minimum required) between each piece.

On very steep slope (>24:12) turrets, or turrets with a large radius, the early courses - near the eave - may not require trimming. Shakes and Slates may be cut in these locations to provide a consistent keyway.

SOLIDS

When cut, standard Field Shake and Field Slate structural ribbing may be visible from some areas. This does not affect performance; however, solids are recommended at cut edges and may be appropriate for the entire turret, depending on the design and desired appearance.

Solids (4.16 ft² per bundle) are manufactured in 12" widths and can be estimated at 24 bundles per square (100 ft²) with no waste.

BARREL TILE

Barrel Tile must be installed in straight lines. Tiles at eaves may be trimmed to form a rounded appearance.

Hip nailers are required and should be sized appropriately for Hip & Rake pieces to sit flush with the Field Tile.

Hip & Rake pieces (5.6 lineal feet of coverage per bundle) and a finishing Bullnose (hip starter) pieces should be ordered for hips added to turret sections.



For rounded turrets, decking must be modified to form hipped flat sections.

INSTALLATION GUIDANCE

Installation should be completed using the published [Brava Cedar Shake Installation Guide](#), the [Brava Slate Installation Guide](#), or the [Brava Barrel Tile Installation Guide](#) supplemented by the installation videos available on the [Resources Page](#) on the [Brava Website](#) and on [Brava's YouTube Channel](#).

Estimate additional time and material to account for additional layout, cutting, and any required deck modifications. Take note of the Keys to Success in each Installation Guide and contact Brava Technical Support for clarification on any unique details.

PRE-PLANNING & LAYOUT

Accurately measure the turret and plan the layout on paper first. This will help visualize the roof system layout and identify any potential adjustments needed before installation begins.



CHALK LINES

Use standard horizontal chalk lines for square and hipped turrets. For rounded turrets, snap vertical chalk lines from the peak to the eave every 2-3 feet as guides. Do not align keyways or tile edges with these lines. Only use them to ensure each course is correctly oriented towards the turret's peak.



SIDELAP

For Shake and Slate installations, ensure that the joints between tiles are staggered from one course to the next, leaving a minimum sidelap of 1-1/2". This enhances the overall aesthetic and ensures correct keyway offset to prevent water infiltration.

KEYWAY SPACING

Shake and Slate must be installed to allow a minimum 3/16" keyway space between each piece. This allows for thermal expansion and contraction. On turrets, cuts may need to be made at an angle to ensure the minimum keyway along the entire side of each piece.



CUTTING & SOLIDS

More cutting is usually necessary during turret installation. Take care to make cuts clean, especially when a cut edge might be visible. Use of a circular saw, jig saw, or miter saw may be appropriate depending on the type and visibility of the cut edge. When possible, do not cut corners off Field Shakes or Field Slates to preserve the full coverage width and avoid exposing structural ribbing. Use Solid Shakes or Solid Slates for cut shakes and slates when appropriate for the best appearance.

FLASHING

Use appropriate metal or flexible flashing around transitions and other intersections to prevent water ingress. Ensure that flashing is sealed and conforms well to the contours of the roof.

REGULAR CHECKS

Step back and check the alignment and symmetry of the tiles from a distance frequently. Adjustments are easier to manage before the entire installation is complete.

TURRET CAP

Custom metal caps are common on turrets and are recommended when possible. Measurements for the final cap should be done after the roofing system is installed to ensure a perfect fit and finish.



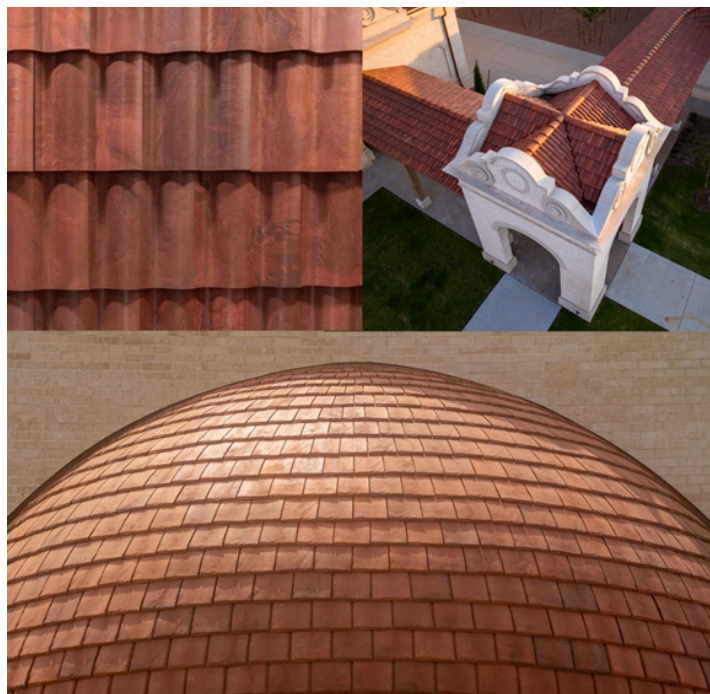
NOTES

Each turret is different and will be an architectural focal point. Plan extra time and ensure adequate materials are ordered to complete these unique architectural roof features.

Consider adding to the standard waste factor for turret sections due to additional cuts at keyways and/or added hips. Solid Shakes and Solid Slates are recommended for the best appearance at cut edges and may be appropriate for a percentage of the turrets or the entire turret, depending on specifics.

Brava Barrel Tile must be installed to straight lines. For rounded turrets, adjustment to decking is required. Alternatively, a color-matched Brava Slate pairs well with projects that do not meet Barrel Tile installation requirements.

Shake and Slate Hip & Ridge Caps are available for Low (160°), Standard (120°), and Steep (90°) slopes. Measure the angle of the hips and confirm that the correct Hip & Ridge Caps are ordered to match the roof angle.



Matching Brava Slate and Brava Barrel Tile
[Blessed Stanley Rother Shrine, Oklahoma City, OK](#)

RESOURCES

Check for updates to this and other [Technical Bulletins](#) on our [Resources Page](#).

Complete Installation Training, View Resources, and Contact Technical Support by visiting our [Technical Support Portal](#).

Training before any installation can improve project outcomes.

QUESTIONS

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 the [Technical Support Portal](#).



building. Original shrubs consist of several Japanese Aucuba with variegated leaves, and a rose at the north end of the west facade.⁹ The Aucubas would have been a relatively new plant introduction and as such a novelty, similar to the Monkey Puzzle Tree, that added to the evergreen Mediterranean aesthetic even though the plant is from Japan. There is an added Holly off the southwest corner with added arborvitae extending along the length of the south facade. **(Figures 155-156)**

Foundation & Structure

The building features a reinforced concrete grade beam foundation supporting a wood, platform frame structure. Board formed concrete walls (ten-inch width) enclose the excavated basement below the north portion of the building. The two wings are built-out on grade without a basement. Support posts mid-span below the first floor framing are six by six-inch with concrete footings. The floor framing consists of six by eight-inch girders with two by twelve (first floor), two by ten-inch (second floor), and two by eight-inch (attic) joists on sixteen inch centers. Ceiling heights are generally 8 feet 6 inches.¹⁰ **(Figures 75, 109-110)**

Exterior Walls

The building's exterior walls consist of painted stucco applied over metal lath. The stucco has a rough troweled texture. Decorative design elements occur at the center of the south facade of the two wings and at the two arched entrances on the south side of the building's central portion. **(Figures 15-23)**

The wing end elements each consist of a tall, round arched raised panel with narrow angled stones set into the stucco and arranged above the header imitating voussoirs. The raised panels consist of molded stucco forming an outer band enclosing two panels. Both the band and panels were originally white. Set within the band and panels are colored (including red, green, black, gray, tan) tiles. The coloring is marbled and appears to have been applied to each piece. Vents consisting of metal grilles occur in exterior walls and correspond with individual units. **(Figure 24)**

The arched entrance features consist of narrow angled stones set into the stucco and arranged above the header at the two doorways imitating voussoirs. **(Figures 25)**

The detached garage consists of concrete block walls with a concrete floor.

Roof

The building features low-pitched hip roofs over the main portion and the two wings, with roof extensions at the two enclosed sleeping porches. Additionally, there are low-pitched

⁹ Attribution of original is based on comparison of a 1937 assessor photograph with existing plant size, habit, leaf size/shape.

¹⁰ Dimensions and spacing of support posts, ceiling heights, and floor framing based on data from the King County property record card for the building. Interior framing was not visible within the building due to finish materials.

tent (hipped on back side) roofs at the two canted towers, pent roofs at the balconies, a small shed-roof addition (built 1950) at the northwest corner, and a flat roof with low parapets at the attached garage/studio apartment. The flat roof is clad with rolled asphalt composition roofing with metal coping flashing along the parapet. All other roofs except the shed roof addition are clad with precast concrete tiles, American Spanish tile having flat valleys with anchor locations at the top of each valley and painted red. The system is laid up in regular courses and not staggered. Ridge and hip tiles are used at all slope junctures. The shed roof addition uses half round Mission tiles with rake tiles wrapping the eave. The pent roofs extend onto the south facade below the sun porches and return with a hip back into the building facade. **(Figures 26-38)**

The hipped, tent, and pent roofs have broad, boxed eaves with a decorative bed molding along the top edge of the wall/soffit junction. Tongue and groove bead board encloses the soffits, with a broad fascia board along the outer edge. Scroll cut wood brackets occur along the eaves of the hip and pent roofs, except along the alley, and the north side of the hip roof over the main building portion. Brackets are placed at the outer and inner building corners, and flanking window openings. Brackets occur with greater frequency at the hip and pent roofs fronting the courtyard.

The balconies feature tall parapet walls set behind the pent roofs with only a portion of the wall projecting above the roofline as a wide stucco clad curb. Stucco clads the inner faces of the parapets with painted membrane or similar roofing material comprising the floor of each balcony over the underlying wood framing. Metal egress ladders at the balconies extend out over the concrete tiles from the curb with a second at each balcony attached to the wall adjacent the tower. Metal flashing caps the top edge of the tiles with cement fill at the voids between the flashing and tiles.

The detached garage has a low pitched front gable roof with modest eave and gable overhangs and asphalt composition shingle roofing.

Both the apartment building and the detached garage have metal gutters and downspouts.¹¹

A stucco clad chimney servicing the basement boiler system projects off the north side of the building. Clay tiles wrap the top edge of the chimney.

Windows

Painted original wood sash windows provide ventilation and day lighting for the building, with all the original windows remaining in use. Added vinyl exterior storm sash protect the original wood sash at the building's outer south, east, and west facades. Windows all feature original narrow raised casings with projecting sills and leaded muntins. Interior original casings remain and consist of wide casing boards with raised outer edge bands, projecting stools and aprons below the stools. Most windows originally had interior roller blinds. Window configuration and function varies depending on location. **(Figures 39-41)**

¹¹ The main building originally had 6-inch wood gutters.

CURRENT PHOTOGRAPHS



Figure 4. Courtyard view, looking down and northwest. E Denny Way is at left and 17th Avenue E along the upper left corner.
Photographer: Jesse L. Young, Seattle.



Figure 5. Courtyard, looking west from a second floor balcony.
Photographer: Jesse L. Young, Seattle.



Figure 26. Balcony, looking west.
Photographer: Jesse L. Young, Seattle.



Figure 27. Balcony, looking southeast.
Photographer: Jesse L. Young, Seattle.



Figure 28. Balconies, looking north.
Photographer: Jesse L. Young, Seattle.



Figure 29. Tower, northwest, looking west.
Photographer: Jesse L. Young, Seattle.



Figure 30. Tower, northeast, looking east.
Photographer: Jesse L. Young, Seattle.



Figure 31. Balconies, sun porch, and tower, looking northeast.
Photographer: Jesse L. Young, Seattle.



Figure 34. Balcony, northwest corner, looking south.



Figure 35. Roof, looking north.
Photographer: Jesse L. Young, Seattle.

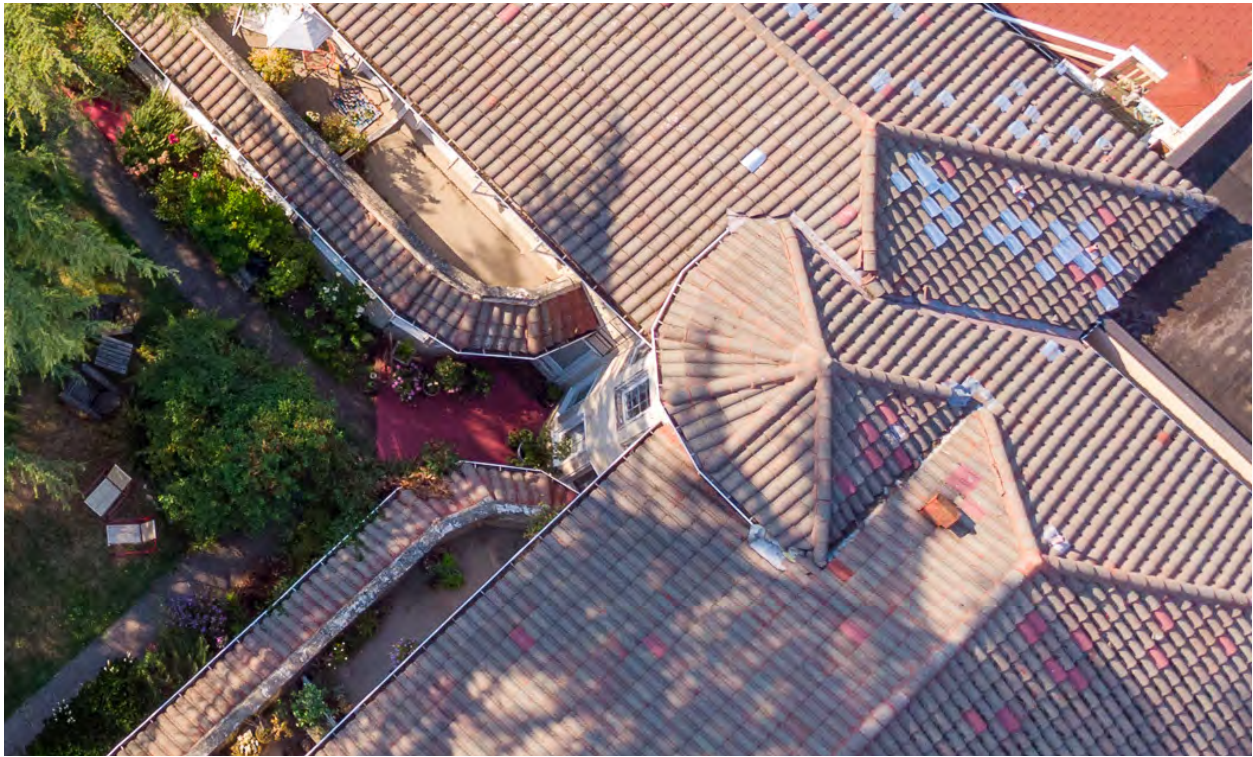


Figure 36. Roof, showing hips and valleys.
Photographer: Jesse L. Young, Seattle.



Figure 37. Roof details.
Tower and boxed eaves (above left) and concrete tiles painted red with flat valleys (above right).