



CULTURED STONE®

Architectural Binder

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Premium Architectural Solutions for Inspired Living

Explore a diverse range of industry-leading brands and high-performance manufactured products.

Westlake Royal Stone Solutions



Westlake Royal Stone Solutions offers an extensive portfolio of architectural stone veneer to meet the needs of any project level, style and lifestyle.

No other material offers the depth, complexity of color, pattern, and tactile distinction as architectural stone veneer. Our product portfolio provides limitless design opportunities that suit a wide range of styles and budgets, making it easy to enhance your project's aesthetic using natural textures and authentic color palettes that are virtually indistinguishable from stone and other natural materials.

 CULTURED STONE®

culturedstone.com

 ELDORADO STONE®

eldoradostone.com

 DUTCH QUALITY STONE
CRAFTSMANSHIP BORN OF TRADITION

dutchqualitystone.com

VERSETTA
STONE®

versettastone.com

 STONECRAFT
INDUSTRIES

stonecraft.com

 KINDRED®
OUTDOORS + SURROUNDS

mykindredliving.com

For more information & design inspirations visit ElevateWithStone.com



Our Added Value

Backed by decades of industry leadership and manufacturing expertise, Westlake Royal Stone Solutions is committed to providing products that inspire, attract, and add value. With six diverse brands to choose from, no other manufacturer can match the range and selection of design solutions we offer.

Scale & Availability—We manufacture the products your customers demand in the regions where you build and have the capability to scale up as your business grows.

Brand Equity—As the original manufacturers of architectural stone veneer, we take pride in having built North America's most recognized brands and delivering high-quality architectural solutions through a breadth of combined portfolios.

Expertise—We are committed to being a driving force in the decorative stone industry. From increasing installation knowledge, to Warranty and Code Compliance training, to a leadership role with the National Concrete Masonry Association, our teams put an unmatched depth of technical and practical expertise in your hands.

Design Solutions—Through ongoing research and development, we not only design products that are innovative and beautiful but are engineered to solve design and installation challenges.



Additionally, our collections have expanded beyond stone to include modern profiles that resemble other popular materials such as tile, brick and wood. With numerous options to choose from, we have the perfect solution for achieving a sleek and modern look, quaint country feel, formal atmosphere or casually elegant ambiance.

Nationwide Distribution—Unlike most local and regional manufacturers, we have partnerships that span across the country, allowing for popular products to be stocked on the ground in each market. That means you can expect the product to be available where you build.

Dedicated Team—We take pride in not only working at the corporate level with our dedicated national team, but also bringing value at the local level with more than 90 sales and technical resources focused on supporting your projects. Whether you need technical knowledge, support with national purchasing optimization, or help improving project efficiencies, with Boral, you have a partner you can rely on.

About Westlake Royal Stone Solutions

At Westlake Royal Stone Solutions, we offer a diverse array of premium brands under one banner. Our innovative manufacturers and passionate teams help builders, specifiers and influencers grow their businesses with the highest quality architectural solutions and industry leadership in a variety of categories, including roofing, stone veneer, brick, siding, trim, shutters and windows.

For more information about Westlake Royal Stone Solutions, visit [ElevateWithStone.com](https://www.ElevateWithStone.com)

About Westlake Royal Stone Solutions

Westlake Royal Stone Solutions is the largest producer of architectural stone veneer in North America. With six unique brands featuring traditional and modern products, our natural textures and authentic color palettes offer an easy solution to enhance the aesthetic and tactile appeal of any project.

For more information about Westlake Royal Stone Solutions, visit [ElevateWithStone.com](https://www.ElevateWithStone.com)

Westlake
Royal Stone Solutions™

Invite the Outdoors In

With Striking Stone Veneer

For interior inspiration and stone veneer options, visit [ElevateWithStone.com](https://www.ElevateWithStone.com)



Add Definition & Differentiation to Any Interior Space.

Bring depth to spaces small and large with unique textures.

Seamlessly add interest to your existing color scheme.

Hundreds of options & endless ways to customize.

What Makes Architectural Stone Veneer Ideal for Interiors?

The varied shapes, sizes, colors and textures of architectural stone veneer provide design versatility that's perfect for creating an inviting space. Our products make it easy to add depth by blending into your current aesthetic, or create a new, show-stopping focal point.

Stone Materials Echo Outdoor Surroundings

The application of nature-inspired solutions creates a more relaxing, human-centric space in our homes and businesses. Architectural stone veneer combines natural world elements with modern interior design practices for a distinctive look that embraces a connection to the outdoors.

Architectural Stone Veneer Enriches Every Interior

No other material offers the depth, complexity of color and pattern, and tactile distinction of architectural stone veneer. With so many options, it's easy to achieve a sleek and modern look, a quaint country feel, a formal atmosphere, or a casually elegant ambiance.

The Quality and Value of Architectural Stone Veneer is Unmatched

With a solid foundation of industry knowledge and manufacturing expertise, Westlake Royal Stone Solutions brings industry-leading stone brands together with products that embody quality, reliability, and consistency. With unmatched performance, our architectural stone veneers provide maintenance-free design solutions that require no painting, coating, or sealing, all backed by a 50-year limited warranty.



For interior inspiration and stone veneer options,
visit [ElevateWithStone.com](https://www.elevatewithstone.com)

Westlake
Royal Stone Solutions™

It's All About Curb Appeal

According to Remodeling Magazine, 9 out of the top 10 highest return projects are “curb appeal” projects, like those involving manufactured stone veneer. In fact, year after year, manufactured stone veneer continues to provide one of the highest return values of any material.

**CURB APPEAL CAN INCREASE
YOUR HOME VALUE UP TO**

20%*

** According to real estate agents polled in a 2014 Zillow survey.*

Good First Impressions & Faster Sales

An exterior facade made with manufactured stone veneer makes a great first impression on real estate agents and homebuyers. Since it's considered a higher quality finish than many other materials, it can actually lead to higher appraisals and lasting value for homeowners.



Add Character Virtually Anywhere

Front entryways
Garage fronts
Full wall facade accents
Pillars
Chimneys

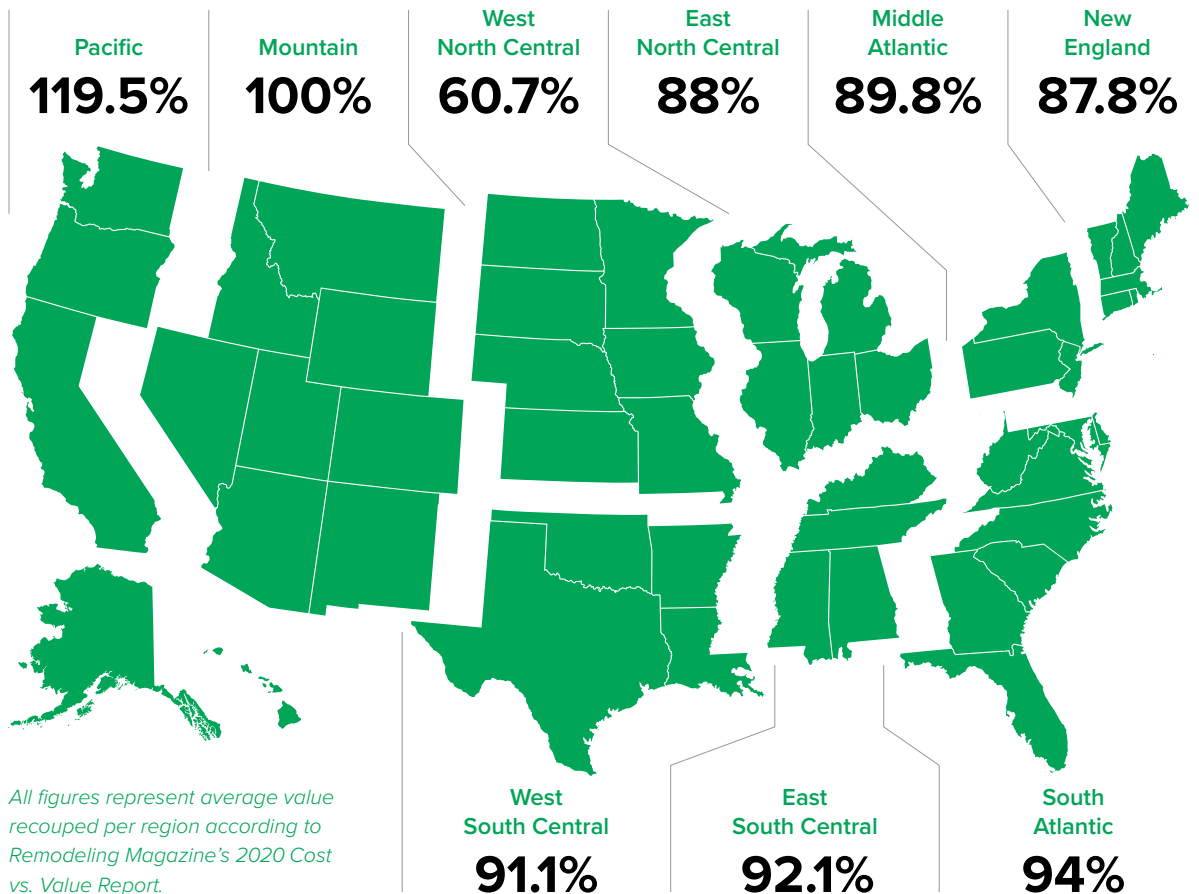
Exterior wainscoting
Retainer walls
Gardens
Pool & patio areas

For interior inspiration and stone veneer options,
visit [ElevateWithStone.com](https://www.elevatewithstone.com)

Westlake
Royal Stone Solutions™

95.6%

The average amount U.S. homeowners recoup from their manufactured stone veneer investment



Manufactured stone veneer doesn't just enliven your outdoor and indoor living spaces. According to multiple sources, it's also one of the most sound investments you can make to increase home resale value. It's cost effective, easy to install, and adds tremendous curb appeal to any number of exterior features.



Browse our entire portfolio of manufactured stone veneer
at [ElevateWithStone.com](https://www.ElevateWithStone.com)

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Royal Stone Solutions™



 CULTURED STONE®



EXCELLENCE FROM TRADITION.

LEGACY FROM INNOVATION.

For more than half a century, Cultured Stone® has produced premium manufactured stone veneer, created by the finest master craftsman. As we embrace the strong practices of excellence and artistry that define our heritage, we look ahead to create solutions that offer greater flexibility in design, meeting the design needs of today, and tomorrow.

Eleanor Roosevelt once said, "The future belongs to those who believe in the beauty of their dreams." We believe in offering products that help you achieve your dreams, beautifully.

You are not just a building professional, and these are not just products. You are a visionary, and these are the tools with which you are able to shape your future. Bring incomparable design to reality through the finest manufactured stone veneer available in the industry. The past has shaped us, but the future is ours to define.

SCULPTED ASHLAR

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
2 ¼" – 7 ¾"	5 ½" – 20 ½"	1" – 2"	4", 7", 10"

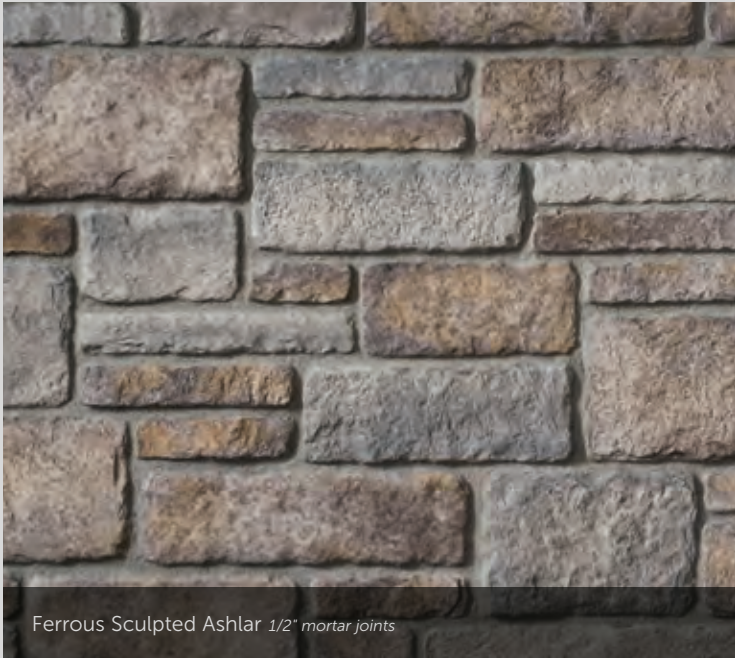
Grouse® Sculpted Ashlar 1/2" mortar joints



Echo Ridge® Sculpted Ashlar 1/2" mortar joints



Silver Shore® Sculpted Ashlar 1/2" mortar joints



Ferrous Sculpted Ashlar 1/2" mortar joints



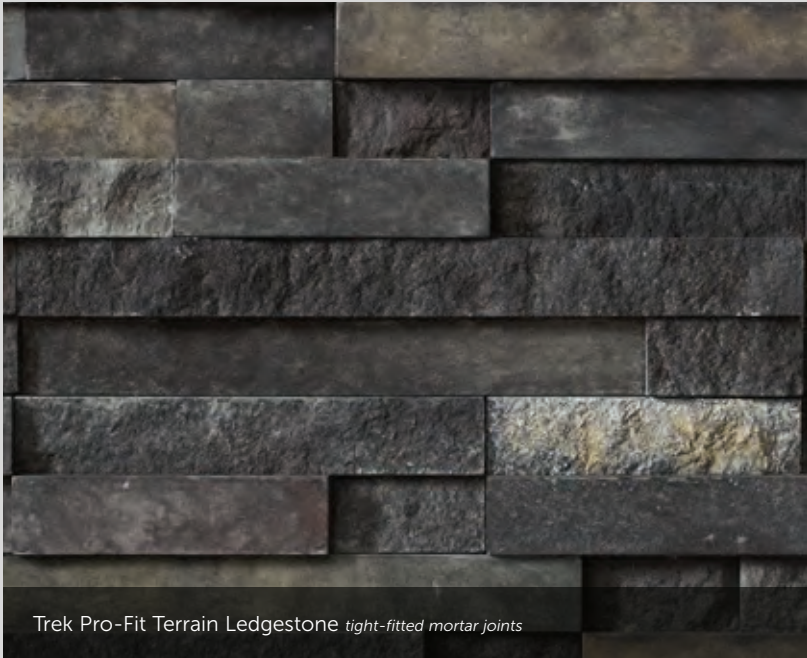
Arcadia Pro-Fit Terrain LedgeStone tight-fitted mortar joints



Arctic Pro-Fit Terrain LedgeStone tight-fitted mortar joints



Ethos Pro-Fit Terrain LedgeStone tight-fitted mortar joints



Trek Pro-Fit Terrain LedgeStone tight-fitted mortar joints

PRO-FIT® TERRAIN™
LEDGESTONE

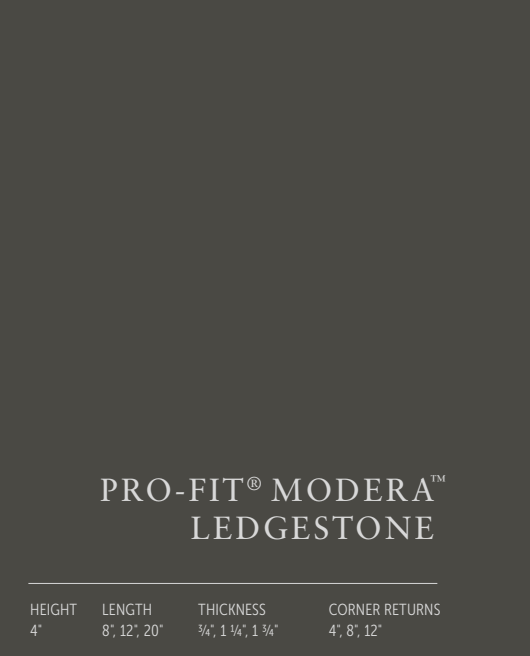
HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
4"	8", 12", 20"	¾", 1 ¼", 1 ¾"	4", 8", 12"



Carbon Pro-Fit Modera Ledgestone

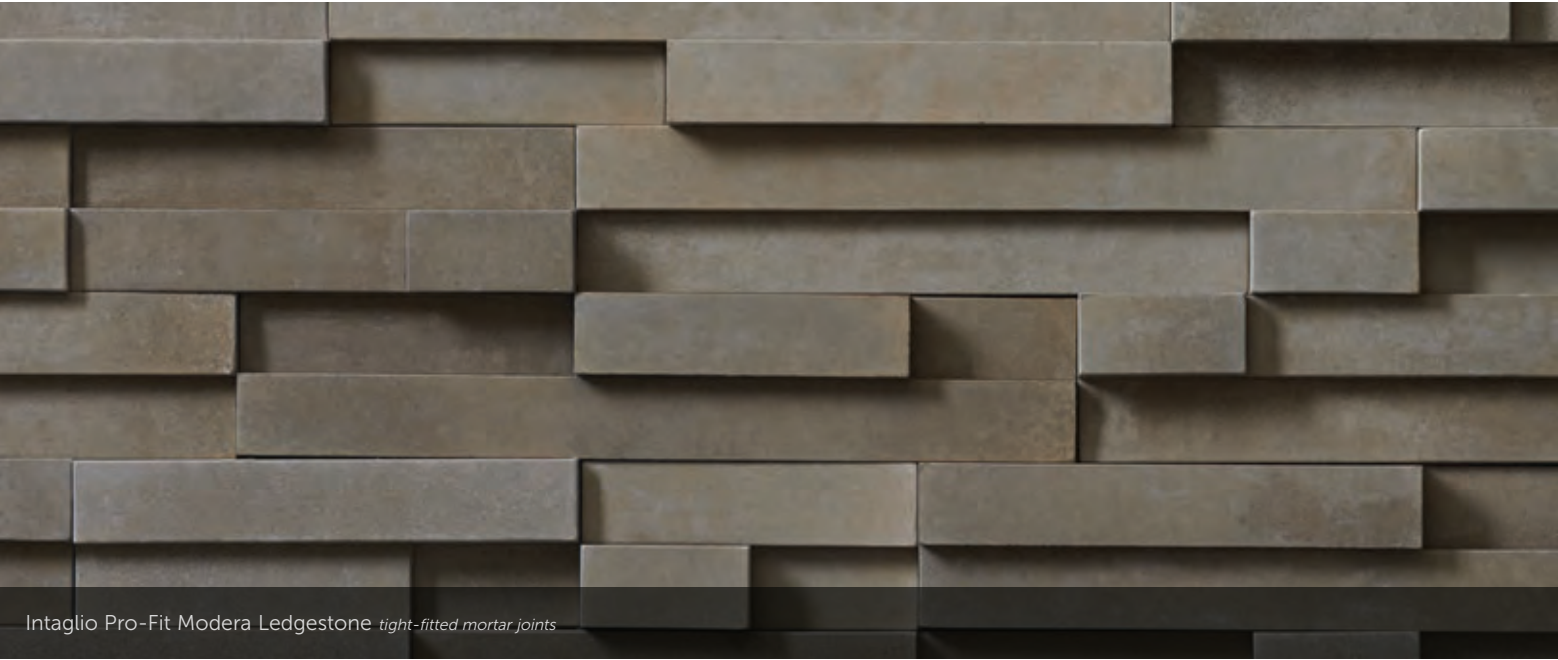


Carbon Pro-Fit Modera Ledgestone *tight-fitted mortar joints*

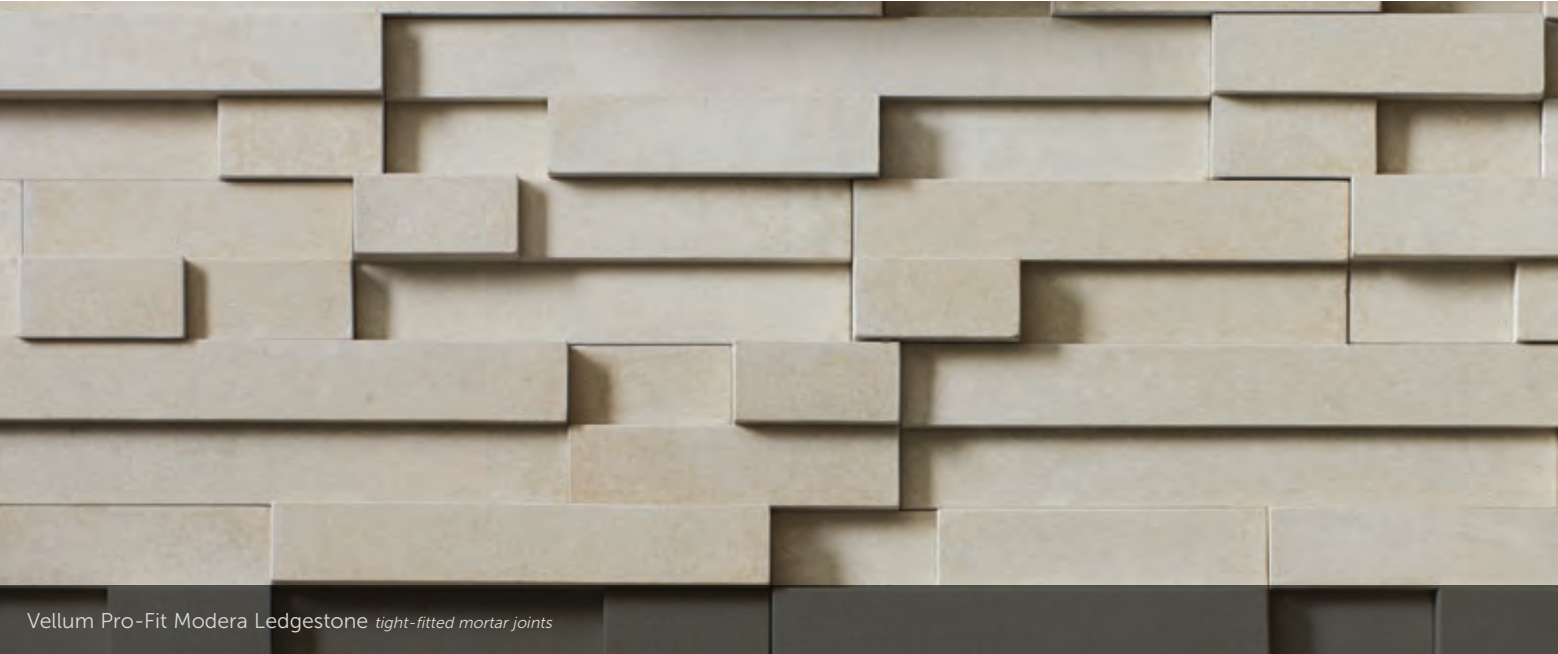


PRO-FIT® MODERA™ LEDGESTONE

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
4"	8", 12", 20"	¾", 1 ¼", 1 ¾"	4", 8", 12"



Intaglio Pro-Fit Modera Ledgestone *tight-fitted mortar joints*



Vellum Pro-Fit Modera Ledgestone *tight-fitted mortar joints*

PRO-FIT®
LEDGESTONE

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
4"	8", 12", 20"	½", 1 ½"	4", 8", 12"

Southwest Blend Pro-Fit Ledgestone *tight-fitted mortar joints*

Platinum Pro-Fit Ledgestone *tight-fitted mortar joints*

Gray Pro-Fit Ledgestone *tight-fitted mortar joints*

Mojave Pro-Fit Ledgestone *tight-fitted mortar joints*

Shale Pro-Fit Ledgestone *tight-fitted mortar joints*

Southwest Blend Pro-Fit Ledgestone

PRO-FIT® ALPINE
LEDGESTONE

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
4"	8", 12", 20"	¾" – 2 ¼"	4", 8", 12"

Black Mountain® Pro-Fit Alpine Ledgestone *tight-fitted mortar joints*

Echo Ridge® Pro-Fit Alpine Ledgestone *tight-fitted mortar joints*

Black Rundle Pro-Fit Alpine Ledgestone *tight-fitted mortar joints*

Chardonnay Pro-Fit Alpine Ledgestone
tight-fitted mortar joints

Pheasant Pro-Fit Alpine Ledgestone *tight-fitted mortar joints*

Summit Peak Pro-Fit Alpine Ledgestone
tight-fitted mortar joints

Dark Ridge™ Pro-Fit Alpine Ledgestone *tight-fitted mortar joints*

Umber Creek Pro-Fit Alpine Ledgestone *tight-fitted mortar joints*

Winterhaven™ Pro-Fit Alpine Ledgestone *tight-fitted mortar joints*

HEWN STONE™

PLEASE NOTE:
EACH SIZE IS SOLD SEPARATELY. MULTIPLE SIZES ARE SHOWN.

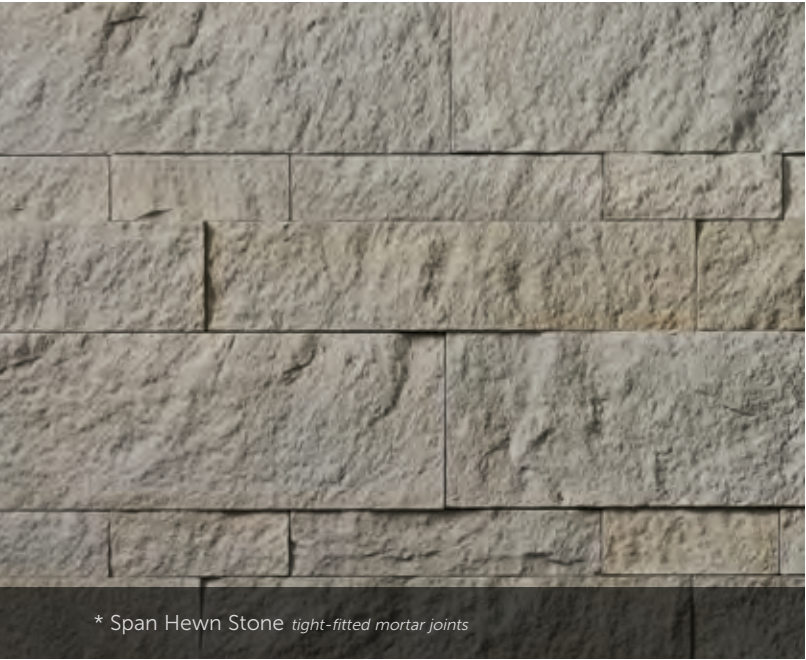
SIZE	HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
308	3"	8"	1 ½"	3", 7"
314	3"	14"	1 ½"	3", 7"
514	5"	14"	1 ½"	3", 10"
522	5"	22"	1 ½"	3", 10"
822	8"	22"	1 ½"	3", 10"



* Foundation Hewn Stone *tight-fitted mortar joints*



* Arctic Hewn Stone *tight-fitted mortar joints*



* Span Hewn Stone *tight-fitted mortar joints*



* Talus Hewn Stone *tight-fitted mortar joints*



Span Hewn Stone

* Each size is sold separately. Multiple sizes are shown. Refer to chart above for sizes.

CORAL STONE

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
4" – 12"	4" – 16"	1" – 1 ¼"	2 ½" – 8 ½"



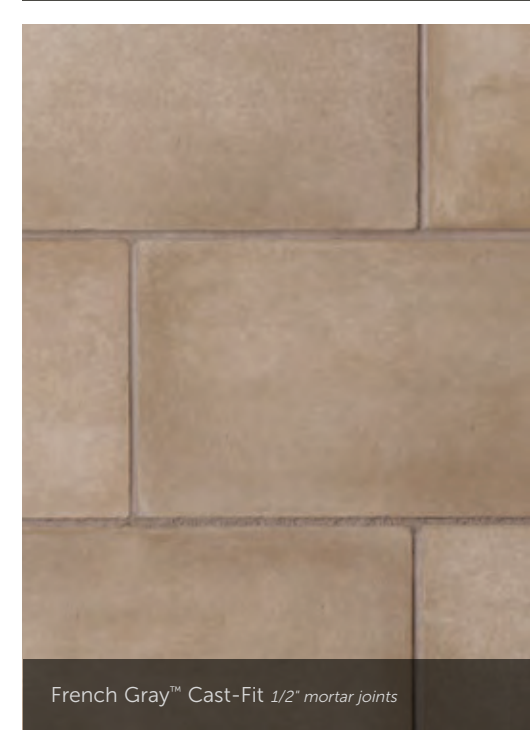
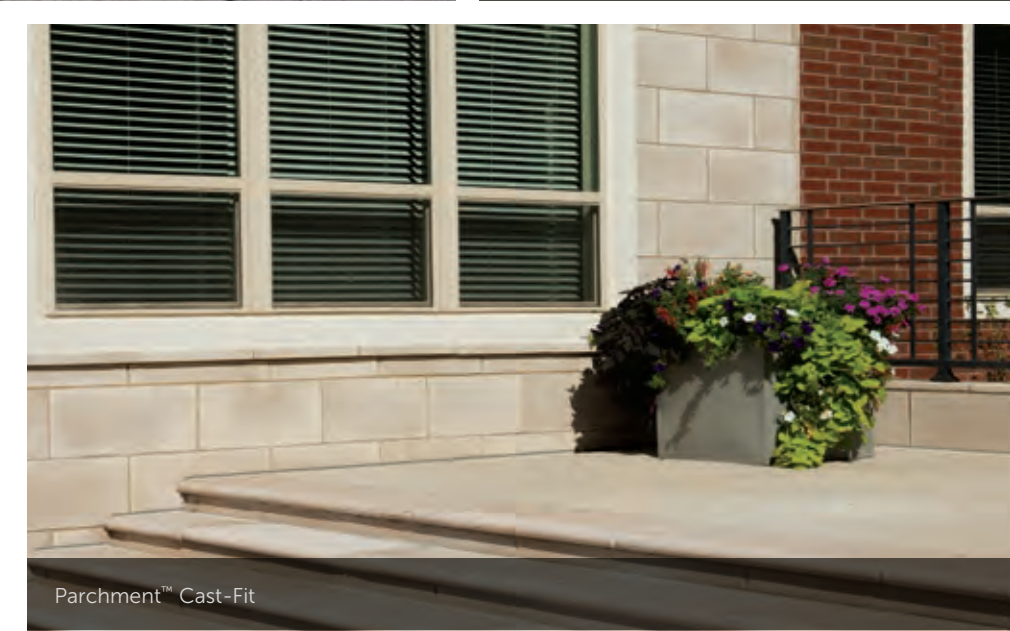
TEXTURED
CAST-FIT®

SIZE	HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
12" x 24"	11 ½"	23 ¾"	1 ½"	3 ¾", 11 ½"



CAST-FIT®

SIZE	HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
8" x 16"	7 ¾"	15 ½"	1 ½"	3 ¾", 9 ½"
12" x 24"	11 ½"	23 ¾"	1 ½"	3 ¾", 11 ½"



COUNTRY
LEDGESTONE

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
1½" – 6½"	4¼" – 22"	1½" – 2¾"	4" – 12"



Aspen Country Ledgestone
tight-fitted mortar joints



Ashfall Country Ledgestone
tight-fitted mortar joints



Gunnison™ Country Ledgestone
1/2" mortar joints



Hudson Bay® Country Ledgestone
tight-fitted mortar joints



Mojave Country Ledgestone
tight-fitted mortar joints



Black Rundle Country Ledgestone
tight-fitted mortar joints



Bucks County Country Ledgestone
tight-fitted mortar joints



Caramel Country Ledgestone
1/2" mortar joints



Chardonnay Country Ledgestone
tight-fitted mortar joints



Red Rock Country Ledgestone
1/2" mortar joints



Sevilla™ Country Ledgestone
tight-fitted mortar joints



Skyline Country Ledgestone
tight-fitted mortar joints



Wheaton™ Country Ledgestone
1/2" mortar joints



Echo Ridge® Country Ledgestone
tight-fitted mortar joints



Eucalyptus Country Ledgestone
1/2" mortar joints



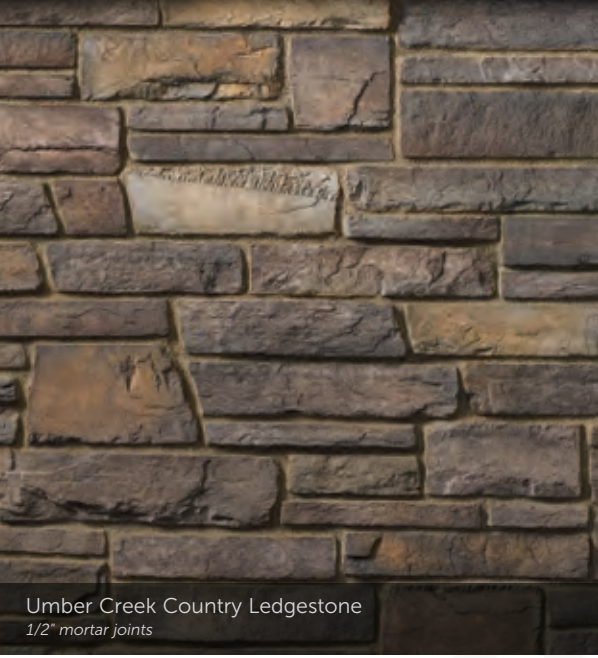
Grand Mesa Country Ledgestone
1/2" fitted mortar joints



White Oak Country Ledgestone
1/2" mortar joints



Wolf Creek® Country Ledgestone
tight-fitted mortar joints



Umber Creek Country Ledgestone
1/2" mortar joints

SOUTHERN
LEDGESTONE

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
½" – 6"	4" – 20"	1" – 2 ½"	4" – 12"



Aspen Southern Ledgestone 1/2" mortar joints



Fog Southern Ledgestone tight-fitted mortar joints



Gray Southern Ledgestone 1/2" mortar joints



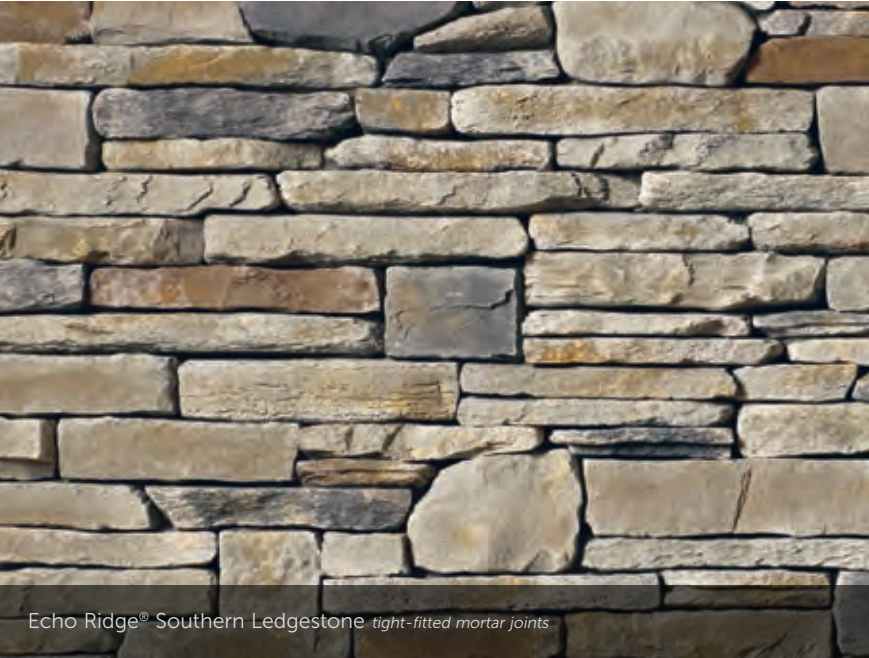
Bucks County Southern Ledgestone tight-fitted mortar joints



Rustic Southern Ledgestone 1/2" mortar joints



Chardonnay Southern Ledgestone tight-fitted mortar joints



Echo Ridge® Southern Ledgestone tight-fitted mortar joints



Wolf Creek® Southern Ledgestone tight-fitted mortar joints



Echo Ridge® Dressed Fieldstone



Echo Ridge® Country LedgeStone

A FIRST IMPRESSION SET IN STONE.

Remember how you felt the first time you walked into your dream home? That excitement and pride never goes away when you enhance the exterior of your home with our Cultured Stone veneers. Whether pulling into your driveway or catching a parting glimpse in the rearview mirror, the character and charm of a Cultured Stone exterior makes a bold and lasting impression. Realtors call it "curb appeal." You'll call it utter perfection.

DRESSED
FIELDSTONE

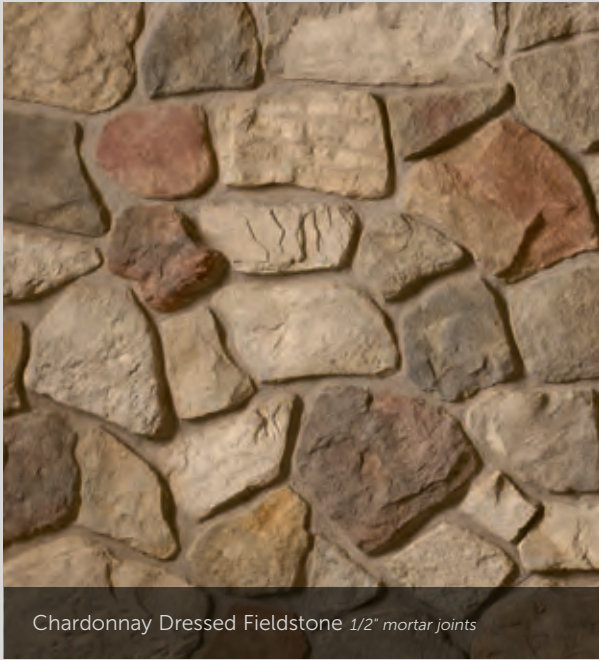
HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
2 ½" – 14"	4" – 22"	1 ¼" – 2 ½"	4" – 12"



Aspen Dressed Fieldstone 1/2" mortar joints



Bucks County Dressed Fieldstone 1/2" mortar joints



Chardonnay Dressed Fieldstone 1/2" mortar joints



Echo Ridge® Dressed Fieldstone
1/2" mortar joints



Sevilla™ Dressed Fieldstone 1/2" mortar joints



Wolf Creek® Dressed Fieldstone
1/2" mortar joints



Chardonnay Country LedgeStone and Dressed Fieldstone Blend



Chardonnay Country LedgeStone



Chardonnay Dressed Fieldstone

BLEND TO MIX, MATCH
AND MESMERIZE.

The menu of color choices in our Country LedgeStone and Southern LedgeStone textures were made to pair beautifully with our Dressed Fieldstone. The resulting blends—in whatever proportion you deem perfect—create something truly enticing that accentuates any setting or surface. Better still, they were all thoughtfully designed to complement everything from stucco and brick to wood and vinyl.

OLD COUNTRY
FIELDSTONE

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
1 ½" – 10"	4" – 16 ½"	1" – 2 ½"	4" – 12"



Chardonnay Old Country Fieldstone 1/2" mortar joints



Black Isle™ Del Mare Ledgestone tight-fitted mortar joints

DEL MARE
LEDGESTONE®

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
1" – 9 ¼"	4 ½" – 16"	¾" – 1 ¼"	4" – 12"



Echo Ridge Old Country Fieldstone



Echo Ridge® Old Country Fieldstone 1/2" mortar joints



Burnt Ochre Del Mare Ledgestone 1/2" mortar joints



Tudor Old Country Fieldstone tight-fitted mortar joints



Palermo Del Mare Ledgestone 1/2" mortar joints

CELEBRATING

THE SPACES IN BETWEEN.

While our gorgeous Cultured Stone veneers tend to be the center of attention, it's often the grouting styles in between that can really make a difference. Creating the right mortar joint for a project is a matter of choosing not only the perfect color, but also the right width—a choice that naturally affects the total square footage. And while a standard mortar joint is typically 1/2" in width, some stone textures allow for a dry stacked, tight-fitted joint to achieve a clean, tailored appearance.



ANCIENT VILLA LEDGESTONE™

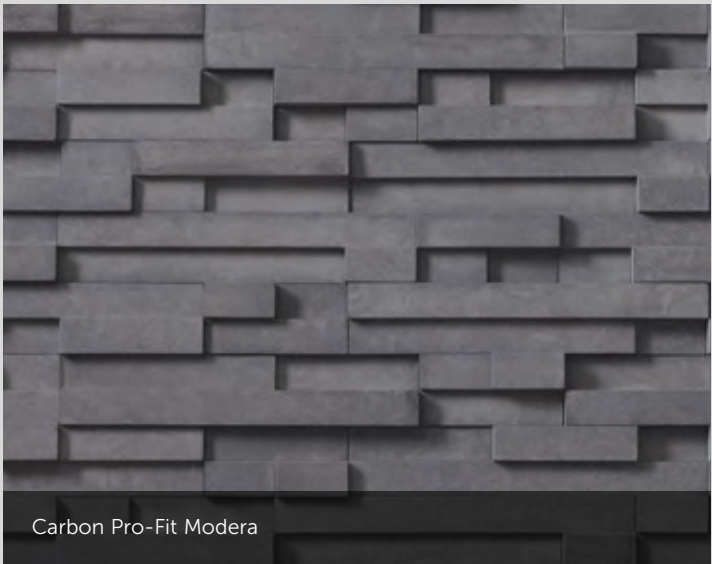
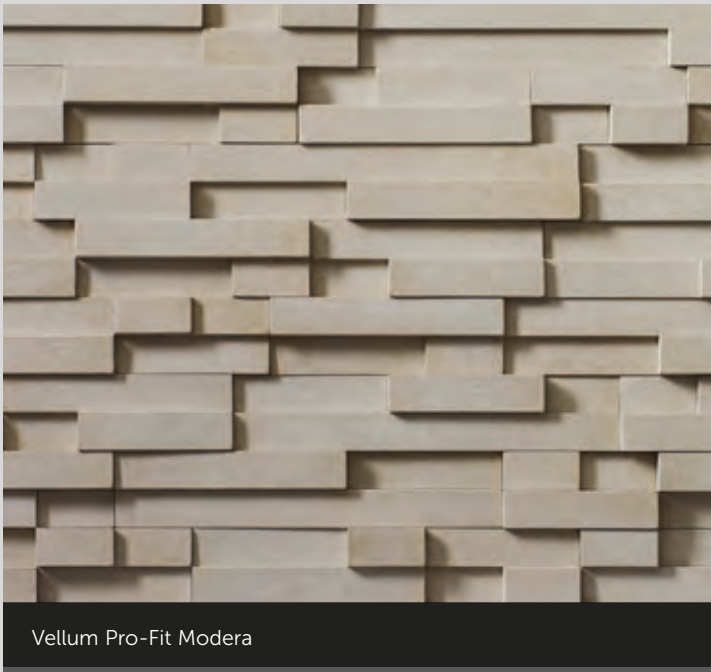
HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
2' - 12'	5' - 16'	1 1/4" - 1 3/4"	4' - 12'



A PAST REMEMBERED.

A FUTURE IMAGINED.

Historically, artisan stonework has been used to dramatically define indoor settings—from prominent stacked-stone hearths to meticulously crafted mosaic floors. With Cultured Stone veneers, an exciting new era comes to life inside the home with cleverly designed interior creations that transform simple backsplashes, accent walls, columns and fireplaces into stunning works of timeless art.



COBBLEFIELD®

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
2" – 8"	4" – 20"	1" – 2 ½"	3" – 12"

Chardonnay Cobblefield 1/2" mortar joints

Desert Blend® Cobblefield 1/2" mortar joints

Bucks County Limestone 1/2" mortar joints

LIMESTONE

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
1 ¼" – 6"	4" – 16 ¾"	1 ½" – 2 ½"	4" – 11"

Echo Ridge® Cobblefield 1/2" mortar joints

Gray Cobblefield 1/2" mortar joints

Chardonnay Limestone 1/2" mortar joints

Golden Buckeye Limestone 1/2" mortar joints

San Francisco Cobblefield 1/2" mortar joints

Texas Cream Cobblefield 1/2" mortar joints

Suede Limestone 1/2" mortar joints



FALL IN LOVE WITH OUTDOOR LIVING.

If home is where the heart is, your outdoor space is where the real love affair is waiting to unfold. Think of it — a canvas of possibilities waiting to be designed and enjoyed with a gorgeous stone fireplace, a dramatic fountain or even an entire outdoor room. With Cultured Stone veneers serving as the backdrop, even the simplest outdoor activities become unforgettable moments all day long and deep into a moonlit night.



Bucks County European Castle Stone



Bucks County European Castle Stone *tight-fitted mortar joints*

EUROPEAN
CASTLE STONE

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
2" - 12"	4" - 16"	1 1/8" - 1 1/2"	4" - 12"



Chardonnay European Castle Stone *tight-fitted mortar joints*



Chardonnay European Castle Stone

DRystack
LEDGESTONE
PANEL

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
6"	20", 24"	1" – 2 ½"	4 ¼", 8 ¼", 12 ¼"

High Plains™ Drystack Ledgestone Panel



Melrose™ Drystack Ledgestone Panel



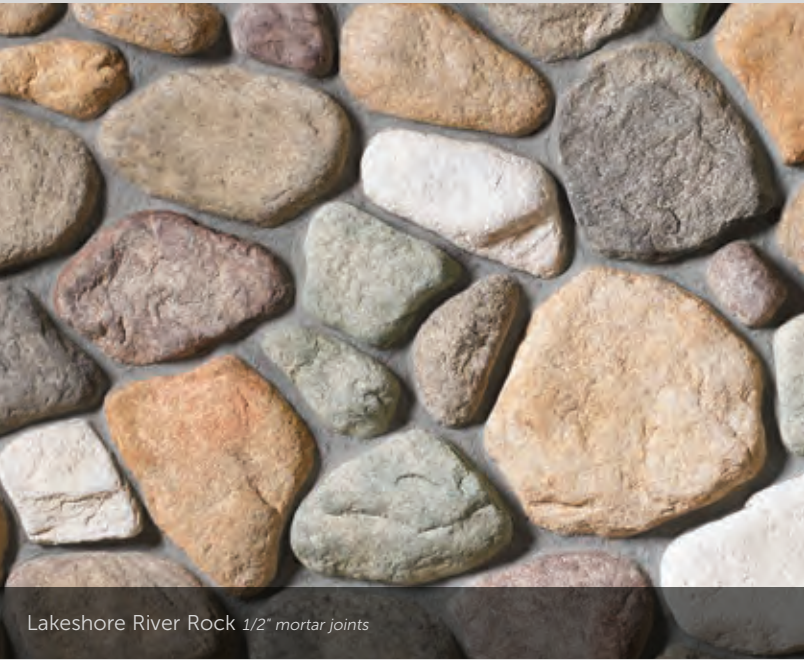
Rubicon™ Drystack Ledgestone Panel



Earth Blend River Rock 1/2" mortar joints



Lake Tahoe River Rock 1/2" mortar joints



Lakeshore River Rock 1/2" mortar joints



Spring Stream Stone 1/2" mortar joints



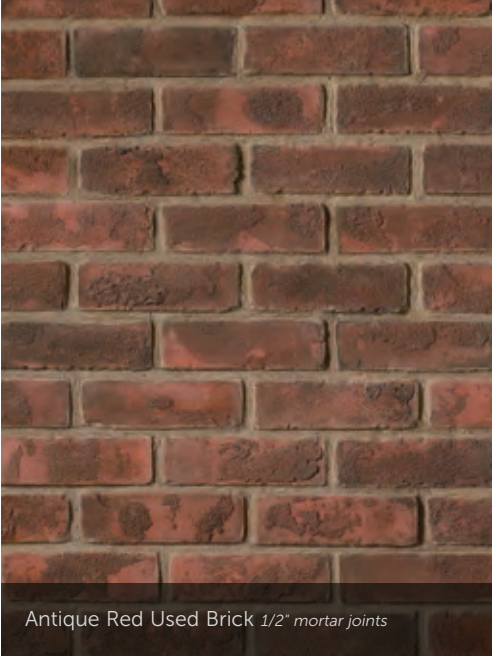
Summer Stream Stone tight-fitted mortar joints

RIVER ROCK

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
2" – 14"	2" – 14"	1" – 2 ¾"	3" – 12"

STREAM STONE

HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
2" – 12"	2" – 12"	1 ½" – 3 ½"	4" – 9 ¼"



Antique Red Used Brick 1/2" mortar joints



High Desert Used Brick 1/2" mortar joints

CULTURED BRICK®
VENEER

	HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
Used Brick	2 3/8" - 2 3/4"	7 7/8" - 8 1/8"	3/4"	4", 8"
Handmade Brick	2 3/4"	8 1/16"	3/4"	3 3/8", 8 1/4"



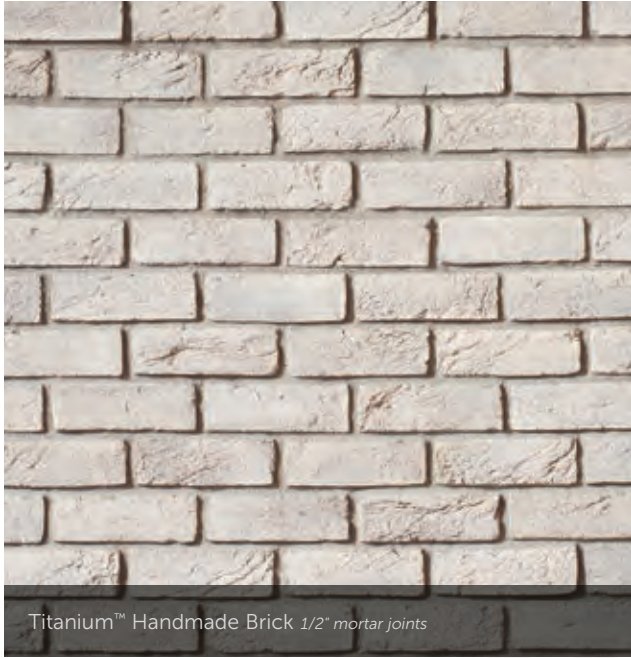
Canvas™ Handmade Brick 1/2" mortar joints



Moroccan Sand Handmade Brick 1/2" mortar joints



Carbon Handmade Brick 1/2" mortar joints



Titanium™ Handmade Brick 1/2" mortar joints

CREATING THE ULTIMATE IMPULSE BUY.

Today's savvy consumer wants more than a product when they're out shopping—they also want a memorable experience. With Cultured Stone veneers, a storefront, restaurant or hotel is sending a subtle but significant message about what their patrons can expect the moment they step inside. From chic and sophisticated to warm and inviting, Cultured Stone exteriors communicate just how special the interior experience will be.



Caramel Country LedgeStone



Antique Red Used Brick



Gray Cobblefield



CULTURED TRANSITIONS™

PERFECTION IS IN THE DETAILS.

Cultured Transitions, the new home for our ever-evolving collection of unique trim and accessories, adds even more beauty and functionality to the home or business. Everything you need to complete each project is in one convenient collection. From unique capstones and trim to elegant electrical boxes, our selection of timeless accents will add both style and protection to any commercial or residential façade.

Intaglio Cast-Fit Watertable Sill // Intaglio Pro-Fit Modera Ledgestone

CULTURED TRANSITIONS

ARCHITECTURAL
STONE TRIM



**ELECTRICAL BOX:
LARGE LIGHT FIXTURE**
Gray (shown), Nightfall™,
Sable, Taupe
9 ½" x 15" x 1 ¾"



**ELECTRICAL BOX:
STANDARD LIGHT FIXTURE**
Gray, Nightfall™, Sable
(shown), Taupe
8" x 10" x 1 ¾"



**ELECTRICAL BOX:
SINGLE RECEPTACLE**
Gray, Nightfall™, Sable,
Taupe (shown)
6" x 8" x 1 ¾"



KEystone
Champagne, Gray, Nightfall™,
Sable, Taupe (shown)
5 ½" x 8" x 10" x 1 7/8"



TRIM STONE
Champagne, Gray (shown),
Nightfall™, Sable, Taupe
6" x 8" x 1 7/8"



TUSCAN LINTEL
Champagne, Gray, Nightfall™, Sable
(shown), Taupe
6" x 22" x 2 ½"



WATERTABLE/SILL
Champagne, Gray, Nightfall™,
Sable (shown), Taupe
2 ½" x 18" x 3"



CAST-FIT® WATERTABLE/SILL
Carbon (shown), French Gray™,
Intaglio, Parchment™, Vellum
2 ½" x 18" x 3"

CULTURED TRANSITIONS

CAPSTONES &
HEARTHSTONES



FLAGSTONE PIER CAP
Champagne (shown), Gray,
Nightfall™, Sable, Taupe
24" x 24", 32" x 32"
2 ½" – 4 ½" thickness at peak



FLAT TEXTURED CAPSTONES*
Champagne, Gray (shown),
Nightfall™, Sable, Taupe
10" x 20", 12" x 20"
2" thickness

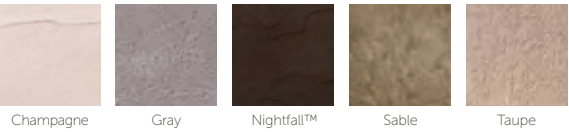


FLAGSTONE SLOPED WALL CAP
Champagne, Gray, Nightfall™,
Sable (shown), Taupe
12" x 20", 16" x 20"
2" – 2 ¾" thickness at peak



HEARTHSTONE
Blond, Chardonnay (shown), Cream,
Gray, Marsh, Nightfall™, Sable
19" x 20" x 1 ¾"

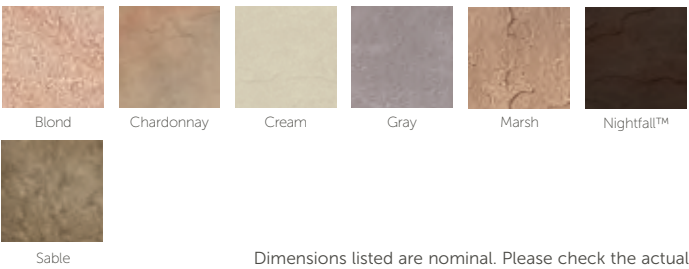
TRIM AND CAPSTONE COLORS



CAST-FIT® WATERTABLE/SILL COLORS



HEARTHSTONE COLORS



Dimensions listed are nominal. Please check the actual product size to ensure the right fit for your application.

Note: Flat Textured Capstones can be used for fireplace hearths. Hearthstones are not suitable for foot traffic.

COORDINATING COLOR GUIDE

We’ve designed our Cultured Transitions™ architectural accents to complement our textures and colors beautifully. Use the chart below as a guide to selecting the architectural accents that best harmonize with the Cultured Stone veneer products you have chosen.

	ACCESSORIES	HEARTHSTONES
ANCIENT VILLA LEDGESTONE™		
CHIANTI	FRENCH GRAY™, TAUPE	BLOND, MARSH
PALISADES	CARBON, FRENCH GRAY™, GRAY, SABLE, TAUPE	GRAY, MARSH, SABLE
SEVILLA™	FRENCH GRAY™, SABLE, TAUPE	CHARDONNAY, MARSH, SABLE
CAST-FIT®		
CARBON	CARBON, GRAY, INTAGLIO	GRAY
FRENCH GRAY™	FRENCH GRAY™, TAUPE	MARSH
PARCHMENT™	CHAMPAGNE, PARCHMENT™	CREAM
CULTURED® BRICK®		
ANTIQUE RED USED BRICK	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
HIGH DESERT USED BRICK	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
CANVAS™ HANDMADE BRICK	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
CARBON HANDMADE BRICK	CARBON, GRAY, INTAGLIO	GRAY
MOROCCAN SAND HANDMADE BRICK	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
TITANIUM™ HANDMADE BRICK	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
COBBLEFIELD®		
CHARDONNAY	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
DESERT BLEND®	FRENCH GRAY™, SABLE, TAUPE	BLOND, MARSH, SABLE
ECHO RIDGE®	CARBON, GRAY, INTAGLIO, NIGHTFALL™	GRAY, NIGHTFALL™
GRAY	GRAY, INTAGLIO	GRAY
SAN FRANCISCO	FRENCH GRAY™, GRAY, NIGHTFALL™, TAUPE	GRAY, NIGHTFALL™
TEXAS CREAM	CHAMPAGNE, PARCHMENT™	CREAM
CORAL STONE		
FOSSIL REEF	CHAMPAGNE, PARCHMENT™	CREAM
COUNTRY LEDGESTONE		
ASHFALL	FRENCH GRAY™, GRAY, INTAGLIO, TAUPE	GRAY, MARSH
ASPEN	FRENCH GRAY™, TAUPE	GRAY, MARSH
BLACK RUNDLE	GRAY, NIGHTFALL™	GRAY, NIGHTFALL™
BUCKS COUNTY	FRENCH GRAY™, GRAY, TAUPE	GRAY, MARSH
CARAMEL	FRENCH GRAY™, TAUPE	BLOND, MARSH
CHARDONNAY	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
ECHO RIDGE®	CARBON, GRAY, INTAGLIO, NIGHTFALL™	GRAY, NIGHTFALL™
EUCALYPTUS	FRENCH GRAY™, GRAY, TAUPE	CHARDONNAY, MARSH
GRAND MESA	TAUPE	MARSH
GUNNISON™	GRAY, NIGHTFALL™	GRAY, NIGHTFALL™
HUDSON BAY®	FRENCH GRAY™, SABLE, TAUPE	CHARDONNAY, MARSH, SABLE
MOJAVE	FRENCH GRAY™, TAUPE	BLOND, MARSH
RED ROCK	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
SEVILLA™	FRENCH GRAY™, SABLE, TAUPE	CHARDONNAY, MARSH, SABLE
SKYLINE	FRENCH GRAY™, GRAY, INTAGLIO, TAUPE	GRAY, MARSH
UMBER CREEK	FRENCH GRAY™, NIGHTFALL™, SABLE, TAUPE	MARSH, NIGHTFALL™, SABLE
WHEATON™	CHAMPAGNE, PARCHMENT™	CREAM
WHITE OAK	CHAMPAGNE, PARCHMENT™	CREAM
WOLF CREEK®	FRENCH GRAY™, NIGHTFALL™, SABLE, TAUPE	MARSH, NIGHTFALL™, SABLE

	ACCESSORIES	HEARTHSTONES
DEL MARE LEDGESTONE®		
BLACK ISLE™	NIGHTFALL™	GRAY, NIGHTFALL™
BURNT OCHRE	FRENCH GRAY™, SABLE, TAUPE	BLOND, MARSH, SABLE
PALERMO	FRENCH GRAY™, SABLE, TAUPE	BLOND, MARSH, SABLE
DRESSED FIELDSTONE		
ASPEN	FRENCH GRAY™, TAUPE	GRAY, MARSH
BUCKS COUNTY	FRENCH GRAY™, GRAY, TAUPE	GRAY, MARSH
CHARDONNAY	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
ECHO RIDGE®	CARBON, GRAY, INTAGLIO, NIGHTFALL™	GRAY, NIGHTFALL™
SEVILLA™	FRENCH GRAY™, SABLE, TAUPE	CHARDONNAY, MARSH, SABLE
WOLF CREEK®	FRENCH GRAY™, NIGHTFALL™, SABLE, TAUPE	MARSH, NIGHTFALL™, SABLE
DRYSTACK LEDGESTONE PANEL		
HIGH PLAINS™	CHAMPAGNE, PARCHMENT™	CREAM
MELROSE™	CHAMPAGNE, PARCHMENT™ TAUPE	CREAM
RUBICON™	GRAY, NIGHTFALL™	GRAY, NIGHTFALL™
EUROPEAN CASTLE STONE		
BUCKS COUNTY	FRENCH GRAY™, GRAY, TAUPE	GRAY, MARSH
CHARDONNAY	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
HEWN STONE		
ARCTIC	CHAMPAGNE	CREAM
FOUNDATION	VELLUM	CREAM
SPAN	CARBON, FRENCH GRAY™	GRAY
TALUS	CARBON, INTAGLIO, VELLUM	CREAM, MARSH
LIMESTONE		
BUCKS COUNTY	FRENCH GRAY™, GRAY, TAUPE	GRAY, MARSH
CHARDONNAY	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
GOLDEN BUCKEYE	TAUPE	MARSH
SUEDE	FRENCH GRAY™, GRAY, INTAGLIO, TAUPE	GRAY, MARSH
OLD COUNTRY FIELDSTONE		
CHARDONNAY	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
ECHO RIDGE®	CARBON, GRAY, INTAGLIO, NIGHTFALL™	GRAY, NIGHTFALL™
TUDOR	GRAY, NIGHTFALL™	GRAY, NIGHTFALL™
PRO-FIT® ALPINE LEDGESTONE		
BLACK MOUNTAIN®	GRAY, INTAGLIO, NIGHTFALL™	GRAY, NIGHTFALL™
BLACK RUNDLE	GRAY, NIGHTFALL™	GRAY, NIGHTFALL™
CHARDONNAY	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
DARK RIDGE™	GRAY, NIGHTFALL™	GRAY, NIGHTFALL™
ECHO RIDGE®	CARBON, GRAY, INTAGLIO, NIGHTFALL™	GRAY, NIGHTFALL™
SUMMIT PEAK	FRENCH GRAY™, TAUPE, VELLUM	GRAY, MARSH
PHEASANT	CARBON, GRAY	GRAY
UMBER CREEK	FRENCH GRAY™, NIGHTFALL™, SABLE, TAUPE	MARSH, NIGHTFALL™, SABLE
WINTERHAVEN™	CHAMPAGNE, PARCHMENT™, VELLUM	CREAM

	ACCESSORIES	HEARTHSTONES
PRO-FIT® LEDGESTONE		
GRAY	GRAY, INTAGLIO	GRAY
MOJAVE	FRENCH GRAY™, TAUPE	BLOND, MARSH
PLATINUM	CHAMPAGNE, GRAY, PARCHMENT™	CREAM, GRAY
SHALE	FRENCH GRAY™, GRAY, INTAGLIO, TAUPE	GRAY, MARSH
SOUTHWEST BLEND	CHAMPAGNE, PARCHMENT™	CREAM, BLOND
PRO-FIT® MODERA LEDGESTONE		
CARBON	CARBON	GRAY, NIGHTFALL™
INTAGLIO	INTAGLIO	GRAY, MARSH
VELLUM	VELLUM	CREAM
PRO-FIT® TERRAIN™ LEDGESTONE		
ARCADIA	CARBON, GRAY	GRAY
ARCTIC	CHAMPAGNE	CREAM
ETHOS	INTAGLIO	CREAM, MARSH
TREK	NIGHTFALL™	NIGHTFALL™
RIVER ROCK		
EARTH BLEND	TAUPE	BLOND, MARSH
LAKE TAHOE	GRAY, TAUPE	GRAY
LAKESHORE	TAUPE	BLOND, CREAM, MARSH

	ACCESSORIES	HEARTHSTONES
SOUTHERN LEDGESTONE		
ASPEN	FRENCH GRAY™, TAUPE	GRAY, MARSH
BUCKS COUNTY	FRENCH GRAY™, GRAY, TAUPE	GRAY, MARSH
CHARDONNAY	FRENCH GRAY™, TAUPE	CHARDONNAY, MARSH
ECHO RIDGE®	CARBON, GRAY, INTAGLIO, NIGHTFALL™	GRAY, NIGHTFALL™
FOG	GRAY, TAUPE	CREAM, GRAY
GRAY	GRAY, INTAGLIO	GRAY
RUSTIC	TAUPE	BLOND, MARSH
WOLF CREEK®	FRENCH GRAY™, NIGHTFALL™, SABLE, TAUPE	MARSH, NIGHTFALL™, SABLE
SCULPTED ASHLAR		
ECHO RIDGE®	CARBON, GRAY, INTAGLIO, NIGHTFALL™	GRAY, NIGHTFALL™
SILVER SHORE	CHAMPAGNE, VELLUM	CREAM
GROUSE	CHAMPAGNE, VELLUM, TAUPE, FRENCH GRAY™	CREAM, MARSH
FERROUS	CARBON, NIGHTFALL™, SABLE	NIGHTFALL, SABLE
STREAM STONE		
SPRING	GRAY, TAUPE	GRAY, MARSH
SUMMER	CHAMPAGNE, TAUPE	BLOND, MARSH
TEXTURED CAST-FIT®		
STANHOPE™	GRAY, FRENCH GRAY™, SABLE	GRAY, SABLE

STONE VENEER DIMENSIONS*

*These are all nominal dimensions and ranges. Actual dimensions may vary.

	HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
ASHLAR				
CAST-FIT® 8" x 16"	7 1/8"	15 3/8"	1 1/2"	3 5/8", 9 1/8"
CAST-FIT® 12" x 24"	11 3/8"	23 3/8"	1 1/2"	3 5/8", 11 3/8"
TEXTURED CAST-FIT® 12" x 24"	11 3/8"	23 3/8"	1 1/2"	3 5/8", 11 3/8"
BRICK				
HANDMADE CULTURED BRICK®	2 3/4"	8 1/16"	3/4"	3 3/8", 8 1/4"
USED BRICK	2 3/8" – 2 3/8"	7 7/8" – 8 1/8"	3/4"	4", 8"
FIELD				
DRESSED FIELDSTONE	2 1/2" – 14"	4" – 22"	1 3/4" – 2 3/8"	4" – 12"
OLD COUNTRY FIELDSTONE	1 1/2" – 10"	4" – 16 1/2"	1" – 2 3/8"	4" – 12"
LEDGE				
ANCIENT VILLA LEDGESTONE™	2" – 12"	5" – 16"	1 1/4" – 1 3/4"	4" – 12"
COUNTRY LEDGESTONE	1 1/2" – 6 1/2"	4 1/4" – 22"	1 1/4" – 2 3/8"	4" – 12"
DEL MARE LEDGESTONE®	1" – 9 1/2"	4 1/2" – 16"	3/4" – 1 3/4"	4" – 12"
DRystack LEDGESTONE PANEL	6"	20", 24"	1" – 2 1/2"	4 1/4", 8 1/4", 12 1/4"
PRO-FIT® ALPINE LEDGESTONE	4"	8", 12", 20"	3/4" – 2 1/4"	4", 8", 12"
PRO-FIT® LEDGESTONE	4"	8", 12", 20"	1/2" – 1 1/2"	4", 8", 12"
PRO-FIT® MODERA™ LEDGESTONE	4"	8", 12", 20"	3/4", 1 1/4", 1 3/4"	4", 8", 12"
PRO-FIT® TERRAIN™ LEDGESTONE	4"	8", 12", 20"	3/4", 1 1/4", 1 3/4"	4", 8", 12"
SOUTHERN LEDGESTONE	1/2" – 6"	4" – 20"	1" – 2 3/8"	4" – 12"

	HEIGHT	LENGTH	THICKNESS	CORNER RETURNS
RANDOM ASHLAR				
COBBLEFIELD®	2" – 8"	4" – 20"	1" – 2 3/8"	3" – 12"
CORAL STONE	4" – 12"	4" – 16"	1" – 1 1/4"	2 1/2" – 8 1/2"
EUROPEAN CASTLE STONE	2" – 12"	4" – 16"	1 3/8" – 1 3/8"	4" – 12"
HEWN STONE™ 308	3"	8"	1 1/2"	3", 7"
HEWN STONE™ 314	3"	14"	1 1/2"	3", 7"
HEWN STONE™ 514	5"	14"	1 1/2"	3", 10"
HEWN STONE™ 522	5"	22"	1 1/2"	3", 10"
HEWN STONE™ 822	8"	22"	1 1/2"	3", 10"
LIMESTONE	1 1/4" – 6"	4" – 16 3/4"	1 1/2" – 2 3/8"	4" – 11"
SCULPTED ASHLAR	2 1/4" – 7 3/4"	5 1/2" – 20 1/2"	1" – 2"	4", 7", 10"
ROUNDED				
RIVER ROCK	2" – 14"	2" – 14"	1" – 2 3/8"	3" – 12"
STREAM STONE	2" – 12"	2" – 12"	1 1/2" – 3 1/2"	4" – 9 1/2"



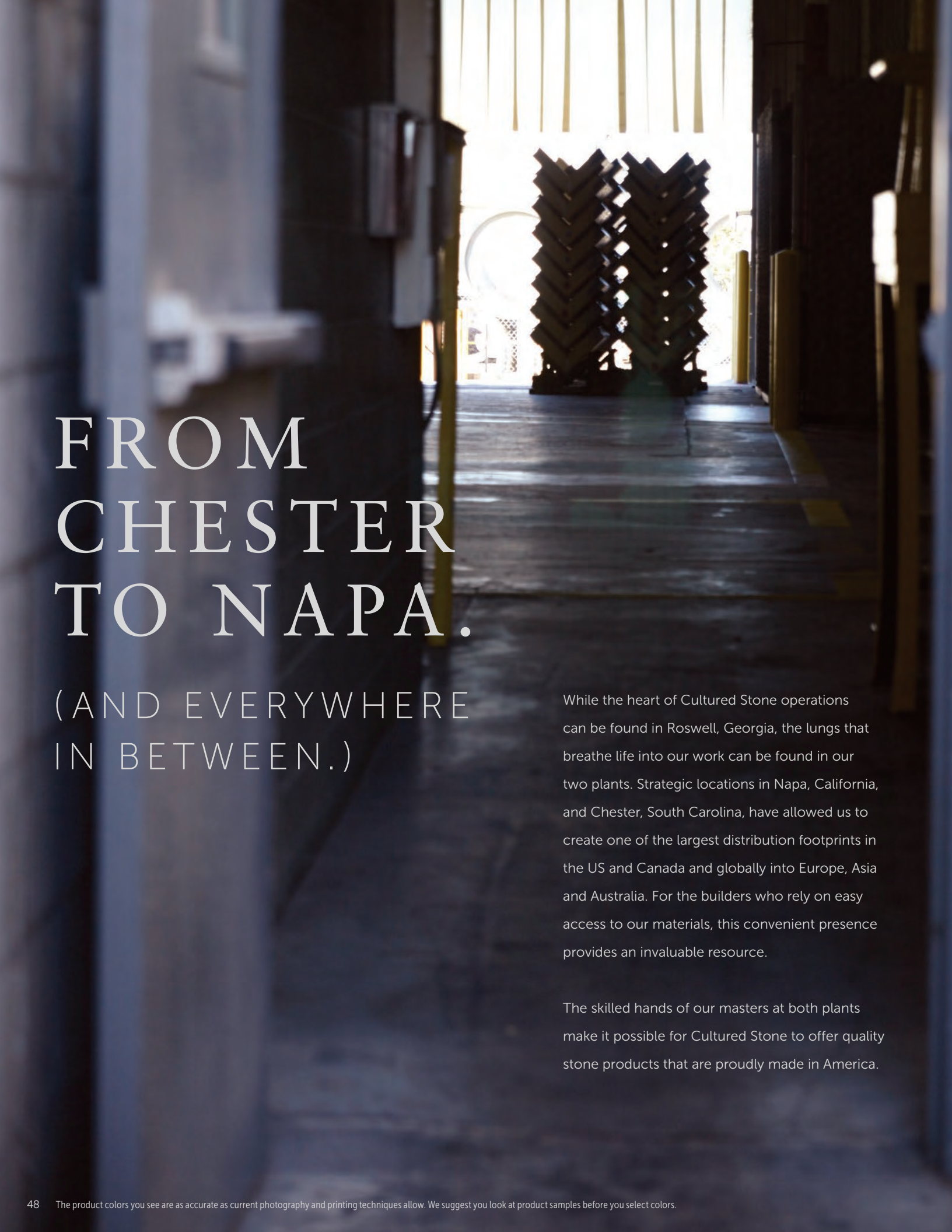
THE ART

OF RENEWAL

We strive to meet today's building needs without compromising the future. Cultured Stone veneers are designed to not only beautify spaces but also take care of our shared environment along the way. To that end, our closed-loop recycling system allows us to reuse water during manufacturing, which proves especially important in California's drought-prone environment.

Cultured Stone veneer products contain an average of 58% recycled content.





FROM CHESTER TO NAPA.

(AND EVERYWHERE
IN BETWEEN.)

While the heart of Cultured Stone operations can be found in Roswell, Georgia, the lungs that breathe life into our work can be found in our two plants. Strategic locations in Napa, California, and Chester, South Carolina, have allowed us to create one of the largest distribution footprints in the US and Canada and globally into Europe, Asia and Australia. For the builders who rely on easy access to our materials, this convenient presence provides an invaluable resource.

The skilled hands of our masters at both plants make it possible for Cultured Stone to offer quality stone products that are proudly made in America.

WARRANTY

50-YEAR TRANSFERRABLE EXPRESS LIMITED WARRANTY

Cultured Stone® manufactured stone veneer products carry a 50-year transferrable express limited warranty subject to the terms of the warranty. The warranty is limited, in manufacturer's sole discretion, to either (i) repair or replacement of covered, nonconforming products or (ii) a refund of the price paid for such products. Labor costs for removal or installation of such products are not covered under the warranty. The warranty may be transferred to subsequent purchasers of the applicable home or building subject to the transferability and coverage terms set forth within the warranty.

Complete warranty information is available on request.

INSTALLATION

Cultured Stone veneer can be used on most structurally sound wall surfaces. It is light weight and quick adhesion allows for fast, easy installation without additional footings or wall ties. Each piece of Cultured Stone veneer is applied individually with Type N or Type S mortar and attaches permanently to the wall surface

BE SURE TO READ THE CULTURED STONE FULL DETAILED INSTALLATION INSTRUCTIONS. GET A COPY FROM YOUR CULTURED STONE® DEALER, AT WWW.CULTUREDSTONE.COM OR BY CALLING 1.800.255.1727.

THE NATIONAL CONCRETE MASONRY ASSOCIATION OFFERS A WEALTH OF INFORMATION AT WWW.MASONRYVENEER.COM.

MAINTENANCE

Cultured Stone and Cultured Brick veneers are virtually maintenance-free. If required, lightly wash to remove dust or dirt. Do not sandblast or wash with acid, abrasives or hi-pressure water. Damaged or graffiti-marred stones can be removed and replaced with matching materials.

*See actual warranty at www.culturedstone.com. Overhead, horizontal or sloped applications are not included in our building code evaluation reports or acceptances. These applications often require special approval/inspections by local building inspectors. Contact your architect or engineer for assistance designing these installations.

TECHNICAL DATA

Cultured Stone products are engineered to meet or exceed the specifications set by building code officials.

Unit Weight is approximately 8-12 lb/ft² (39-58 kg/m²) but not more than 15 lb/ft² (72 kg/m²)

Thickness 1 3/4" average. May vary depending on choice of texture.

Colorfast Colors become an integral part of the stone during casting. Existing applications show no undesirable change in color after years of weathering.

Noncombustible/Surface Burning Characteristics UL tested and listed. Cultured Stone products tested out with zero flame spread, zero smoke development.

Technical Support Complete copies of Cultured Stone research reports, approvals, tests, listings or acceptances conducted by independent testing agencies are available on request. Cultured Stone products meet or exceed all ICC-ES Acceptance Criteria #51, requirements for pre-case stone veneer.

Other manufacturers who claim to produce equivalent products should be asked to provide documentation of claims.



"Architects have leaned on us for many years to help fulfill their vision for their customer; time and time again, we get that done with Cultured Stone®."

Doug McCall, OldcastleCoastal, Tampa, FL

"Cultured Stone prides itself on the manufacturing process, the coloring process."

Nick Ridge, Mason Steel, Cleveland, OH

"We are over 115 years old and the oldest brick and block manufacturer in the Pacific Northwest. Cultured Stone is a great addition to our product line. We have been partners for 35 years."

Bill Houlahan, Jr., Mutual Materials, Bellevue, WA

"Innovation. New products. Just phenomenal."

Gordon Strout, Instone, Millstone Township, NJ

"We were part of the growth of an industry. When we started, there was not even a product category for manufactured stone, and now it's fully established."

Keith Polster, Mason Steel, Cleveland, OH

Left to right: **Doug McCall**, OldcastleCoastal; **Nick Ridge**, Mason Steel; **Kyle Destree**, Brock White; **Bill Houlahan**, Mutual Materials; **Rob Rosson**, Mutual Materials; **Dennis Ehlert**, **Brock White**; **Patrick Knapik**, OldcastleCoastal; **Gordon Strout**, Instone; **Keith Polster**, Mason Steel

WE ARE CULTURED STONE

Born from great partnerships, Cultured Stone is a family affair. Rooted in our commitment to quality, a long-standing history of working closely with distributing partners, developing new products, textures and colors together - from the Southeast to the Pacific Northwest, we are Cultured Stone.



 CULTURED STONE.

ORIGINALITY

NEVER GOES OUT OF STYLE.

From cast to model, the entire Cultured Stone veneer production process is very much hands-on—down to the trademark CSV® (Cultured Stone Veneer) stamp that has been hand-applied since 1962, to each and every stone we craft. Only genuine Cultured Stone products have a CSV® indicia embossed on the edge, guaranteeing that you're getting the original, proven and preferred brand. After all, a master's touch is all in the detail.

Explore the endless possibilities of building with Cultured Stone veneer products by visiting our website at www.culturedstone.com. For more detailed information, please call **1.800.255.1727**.



The product colors you see are as accurate as current photography and printing techniques allow. We suggest you look at product samples before you select colors.

© 2021 Cultured Stone

MADE IN THE USA



Innovations at Work

Prepare your wall to receive stone or stucco with Drain-N-Dry Lath, our industry leading solution for advanced moisture control.

Drain-N-Dry™ Lath

with DELTA®-DRY Technology

A superior lath and best in class rainscreen in one product

Installs fast, providing two additional component systems in one pass

- Eliminates the need for a secondary layer of Water Resistive Barrier (WRB)
- Rainscreen
- Lath

Ultimate in moisture management through drainage, drying and moisture vapor control

Nothing to rust or corrode and the ultimate in alkaline resistance with integral Alkali Resistant (AR) glass lath

A fastener band every 6" ensures solid connection to structure and easy visual inspection of fastener spacing

Substantial reduction of fastener penetrations in the primary WRB that typically occur when multiple materials are installed independently

Built in self-furring feature to ensure proper mortar embedment and scratch coat thickness

Extremely light and easy to transport, move around the job and install from scaffolding

Installs with hand driven or pneumatic nails or staples with no caps or washers needed

Cutting and modification is so easy it can be done with a utility knife or scissors

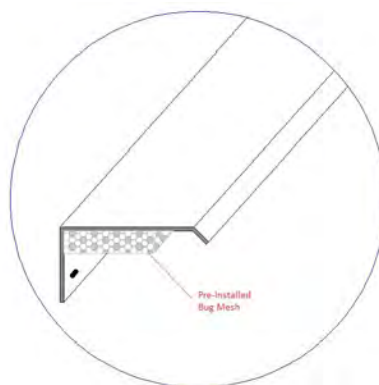
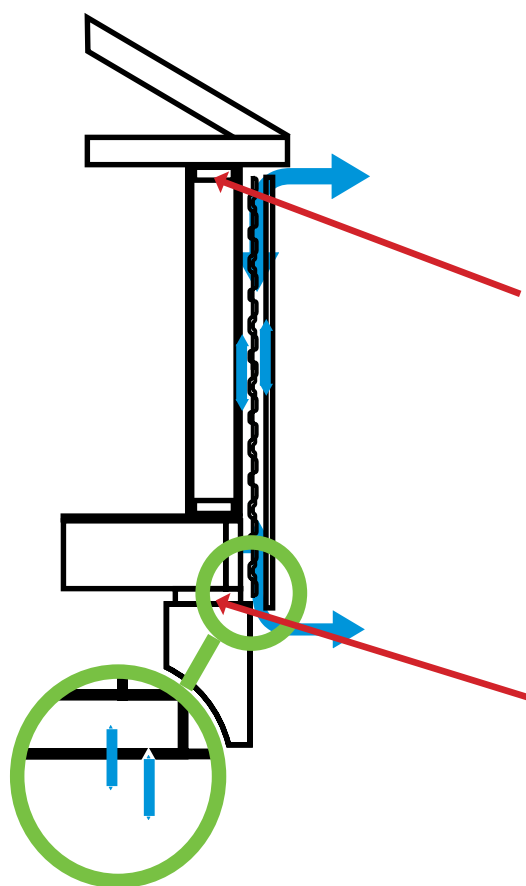
Product Detail

Roll Coverage = 150 sqft

Roll Width = 39 3/8" (1m)

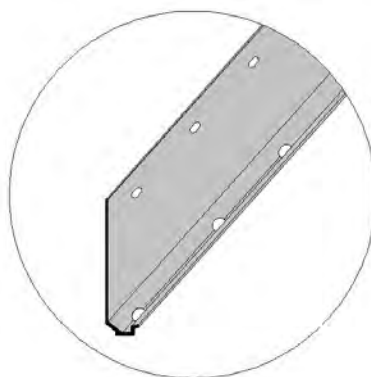
Roll Length = 46'

Lath is 1 1/2" - 2" wider to allow for overlapping lath at edge seams



Top Side Ventilation Trim

- Manufactured from UV durable white PVC
- 2 1/4" projection from the wall
- 1 1/4" attachment flange
- Available in 10' length



Weepscreed Starter Strip

- Manufactured from UV durable Mortar Gray PVC
- 7/8" projection from the wall
- 3 1/2" attachment flange
- Available in 10' length

Drain-N-Dry™ Topside Ventilation Trim - This part functions to terminate adhered stone veneer or stucco at the top of the system. This part comes with a bug mesh already installed, providing an exit ventilation opening at the top of the wall.

Drain-N-Dry™ Weepscreed Starter Strip - This part functions as a weepscreed termination that allows liquid water drainage and provides an inlet for ventilation drying. It may be used with or without bug mesh or bug screen (Sold separately).

OUR COMMITMENT TO THINKING AND BUILDING GREEN



At Cultured Stone®, we strive to meet today's building needs without compromising the world we leave to the future. Sustainability is at the heart of how we do business. This commitment to thinking and building green is evident in the design, manufacturing and people behind our Cultured Stone veneer brand.

PRODUCTS FOR A SUSTAINABLE FUTURE.

Recycled content. We incorporate an average of 58% pre-consumer waste stream material into all our Cultured Stone veneer products.

Superior durability. Our products stay beautiful and are capable of 50+ years of service. Superior quality control measures, quality raw materials, and industry leading testing provide the confidence to offer a 50-year limited warranty.* We meet or exceed the most stringent building code testing requirements in the industry, including the ICC AC-51 and

ASTM C1670. This testing has been evaluated and confirmed by ICC Evaluation Services and documented in ICC ESR 1364. Once installed, our products don't require painting, coating or sealing.

PROCESSES FOR A SUSTAINABLE FUTURE.

Protecting well-being. We operate our manufacturing facilities in a manner that protects the health of our employees and the environment.

Recycling water. We've implemented a closed-loop system that reuses water during manufacturing. As a result, we've reduced our water consumption in North America from 2006–2009 by 50% per ton of product produced.

Waste reduction. We've implemented process changes that have reduced our landfill waste by 80% per ton of product produced since 2009.

PEOPLE MAKING THE WORLD A BETTER PLACE.

Championing greener communities. We believe that being good neighbors is a requirement, not an option. It's reflected in the way we encourage our employees and retirees to give back to the communities in which we operate. And this includes sharing our knowledge to help create a sustainable future.

 CULTURED STONE®



ICC-Evaluation
Service ESR-1364



Underwriters
Laboratories



Visit GreenApprovedProducts.com
for More Information



Minimum of 58% Recycled Content on
All Cultured Stone® Veneer Products

1.800.255.1727 | culturedstone.com

* Visit culturedstone.com for full warranty details





THE ANATOMY OF A DURABLE & HEALTHY MANUFACTURED STONE VENEER

INTRODUCTION

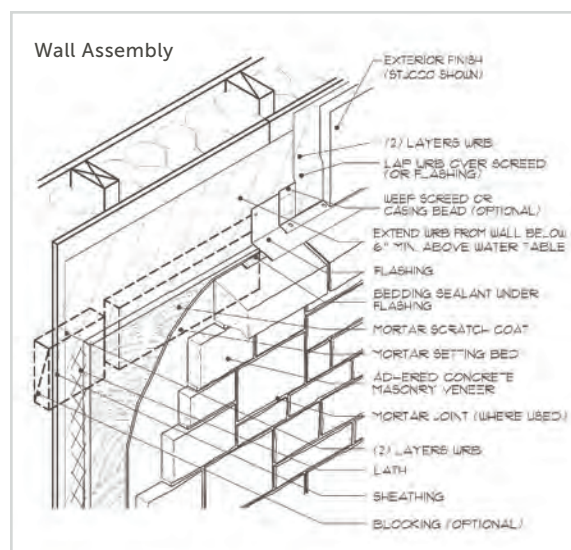
When looking at a stone wall it can be hard to decipher whether it's sourced naturally or manufactured. Often, even the most experienced eye has challenges seeing the difference. This attention to detail is a testament to the progress the manufactured stone industry has made over the past 60 years.

Commonly referred to as "faux stone" or "MSV," Manufactured Stone Veneer is a versatile product with endless creative design possibilities. Its use has seen steady growth over the years due to having many benefits over natural stone products along with aesthetically appealing designs that create beautiful results. Like all building materials, manufactured stone veneer needs to be installed, paired and integrated properly with other systems present in the wall or building. This article will touch on several aspects of using manufactured stone veneer to help designers, owners, and installers achieve a beautiful wall with long-term performance.

WALL PREPARATION

Manufactured stone veneer has been installed with success over both metal and wood framed walls. It can also be installed over masonry substrates of CMU block or brick and even poured concrete. This opens up options to beautify almost any building or landscape feature you might encounter. However, it is imperative that appropriate application steps are taken to prepare a wall to receive stone veneer.

Prior to any installation, it's important to evaluate the wall to assure it is in compliance with local building codes and not showing any evidence of structural failure or deterioration. If you have any questions or concerns about the wall, call an expert to evaluate it and prescribe measures to address any shortcomings. Make sure sheathing materials are gapped properly; typically they require $\frac{1}{8}$ " gap at all sheathing seams. Failure to provide this gap can lead to expansion forces cracking the veneer.



Source: NCMA Installation Guide

 CULTURED STONE®

MANUFACTURED STONE VENEER



In framed construction, you will likely be looking at stud spacing of 16" on center and some type of sheathing material. While there are options that allow installation over "open stud" construction, that technique is limited to a relatively small geographic area and we will leave that topic for another article. To prepare a framed wall you will have to apply two layers of Water Resistive Barrier (WRB) and install a weep screed. Building codes define what materials are suitable WRBs but you might consider the following to help improve the performance of your wall. First let's talk about the two layers of WRB.

The first layer of WRB on a framed wall is referred to as the "Primary WRB." This layer is responsible for most of the draining of any incidental water that gets into the system. Good primary WRB is money well-spent. Consider some of the common properties in your decision like: vapor permeability, tear resistance, water resistance, perforated or spun bond, ease of installation, jobsite durability, fastener penetration risks and time exposed to UV prior to being covered. Pick a WRB that suits the weather and living conditions of your specific building. The second layer of WRB is referred to as the "Sacrificial Layer." The purpose of this layer is to protect the primary WRB from mortar adhesion and to create a small drainage plane between the two layers. While you should consider all the same properties in the selection of this material, you can save some money here as this layer has less to do.

Before installing any WRBs let's consider the "Foundation Weep Screed." Imagine a few drops of water between two layers of WRB. Gravity will play its role and cause those drops to descend to the bottom of the adhered veneer system. This water needs a location to exit. Borrowing from the stucco system building code requirements, a foundation weep screed is installed to provide this exit point and protect any framing materials that could potentially be damaged by water. While placement of this weep screed is a subject of some debate, the intent of the building code is clear. Installing a weep screed at the transition between foundation and framing protects these susceptible framing materials. The weep screed also acts to kick the water out from the building and provide the appropriate clearance from grade or a paved surface. In most cases, the weep screed is installed to provide a 4" clearance from grade or a 2" clearance from any paved surface. The weep screed is the first to be installed so that WRB materials can lap over its 3" attachment flange in shingle fashion.



In masonry construction, building codes do not require application of a WRB or a weep screed. However most manufacturers and code officials will still require stone be installed meeting the same clearance requirements. There is nothing that precludes installation of a WRB in these applications, but by doing so you will likely lose the option to adhere directly to the masonry. Installation of lath is also optional unless you have applied a WRB or need the lath to address a questionable bonding surface. Examples of some questionable bonding surfaces include: sealed masonry, painted masonry, dirty surfaces, extremely smooth surfaces or masonry that has been covered by a non-bondable WRB.

WATER MANAGEMENT PRINCIPLES

There are three principles that come into play in water management of a wall system. First is a "barrier system" which claims to stop water at the exterior face of the cladding. Second is a "concealed barrier system" which employs a second material further into the wall to drain/manage water. Most adhered veneer systems fall in this second category where the WRB is the concealed barrier. The third is a hybrid of the concealed barrier system called a "Rainscreen," which utilizes the same concealed barrier (WRB) but also provides a larger physical air space between the WRB and the cladding. This installation method is required in a few climates of North America. With this technique, the designer can obtain nearly unobstructed liquid water drainage and ventilation drying. Even in jurisdictions that don't require this method, we find users view it as a belt-and-suspenders approach that can protect them against failed WRB or flashing-installation details, condensation risks, and to ensure overall health of the wall system.

LATH—“THE SKELETON OF THE SYSTEM”

The stucco industry has been using lath for centuries and much has been written and standardized on this topic. If the framing in framed construction is the skeleton of the building, then lath is the skeleton of the adhered veneer system. ASTM Standard C1063 goes into great detail regarding the specifics of proper lath installation. This standard can be supplemented by an article written by Gary Maylon called *Expanded Metal Lath Installation for the Application of Portland Cement Stucco. The Eight Deadly Sins*.

The point is lath installation is critical. Fasten lath to framing so the weight load of the adhered veneer system can be transferred to framing. Use the appropriate length fastener to obtain no less than ¾" penetration into framing. Fasteners should be spaced 6" on center and into framing. Lap lath 1' at vertical and horizontal seams and cause those vertical seams to occur at framing locations. At both inside and outside corners, wrap the lath past the corner to the next framing member approximately 16" down the wall.

You have many choices when it comes to lath. These include expanded metal lath, woven wire lath, welded wire lath, fiberglass lath and even some plastic choices. Since this component is so critical to the performance of the system, this is not a good place to cut corners. As you make your choice, consider that manufactured stone, mortar and lath can weigh up to 25 lbs/sq ft, and lath with its attachment will carry this load to framing. Select a manufacturer that can provide proof of compliance to the appropriate ASTM material specification.

SCRATCH COAT

Scratch coat provides two primary functions. First, by fully encapsulating the lath with a mortar scratch coat, the amount of water and air that can reach the lath is minimized. This functions to extend the corrosion resistance of the lath (in the case of metal). The second contribution is for total weather resistance of the wall. The mass of the total scratch coat combined with setting bed mortar and stone units provides the capability to manage water through absorption and evaporation. The scratch coat should be ½–¾" thick. And, by using a self-furred lath or a lath furring fastener, the lath should be centered near the middle of this mortar thickness. Reinforcement in the center of the mortar provides the optimum crack resistance. Failure to fur the lath will make it difficult to obtain the required scratch coat thickness and does not allow the reinforcement to function to its fullest extent.

SETTING BED & ACHIEVING GOOD BOND

Building codes require that all adhered veneer achieve a minimum bond strength of 50 psi. This is not an overly stringent requirement and can easily be achieved with a few key guiding principles.

- **Prepare the stone units.** Make sure they are clean and any loose material is scrubbed from the back with a wire brush.
- **Address weather conditions.** Hot/dry weather will require you to dampen the back of each stone unit and the scratch coat. Mortar manufacturers have some specific instructions for these conditions. Cold weather conditions will require materials to be heated and the application to be tented and heated during installation and while curing.
- **Pick quality mortar.** Regardless if you mix mortar from scratch or buy pre-mixed just-add-water mortar, pick a quality product that meets the requirements of the stone manufacturer you are installing. Mix and install it per the manufacturer's requirements.
- **Mix the mortar right and know when it's trash.** Your setting bed mortar should be mixed wet enough that a trowel covered with it can be inverted and the mortar will remain adhered to the trowel. Only mix what you can use in the working time of the mortar. Re-temper the mortar as prescribed by the mortar manufacturer and applicable ASTM standards. When the working time has expired, dispose of remaining mortar and mix a new batch. Bond is too important to take any chances here.
- **Select the application method that works for you.** The options commonly used are:
 1. Trowel mortar onto the wall in approximately 5 sq ft area, ½–¾" thick and press stone unit into the mortar with a slight rotation back and forth as you set the stone.
 2. Apply a thin layer of mortar to the back of the stone, pressing it completely into the texture. This is like buttering bread when you have high cholesterol. Apply a second back-buttered layer, again covering entire back of stone to a ½–¾" thickness and press onto prepared scratch coat.
 3. A combination of both previous methods.

The goal of this step is to create a uniform layer of mortar on the wall that supplements the mortar of the scratch coat from the standpoint of weather resistance. It also provides the minimum 50 psi shear bond strength required by building code. You should not have voids within the mortar layers that could capture water. Captured water can freeze and cause units to de-bond. Captured water can also lead to efflorescence and find a way into the building. Remember to always provide a full setting bed of mortar.

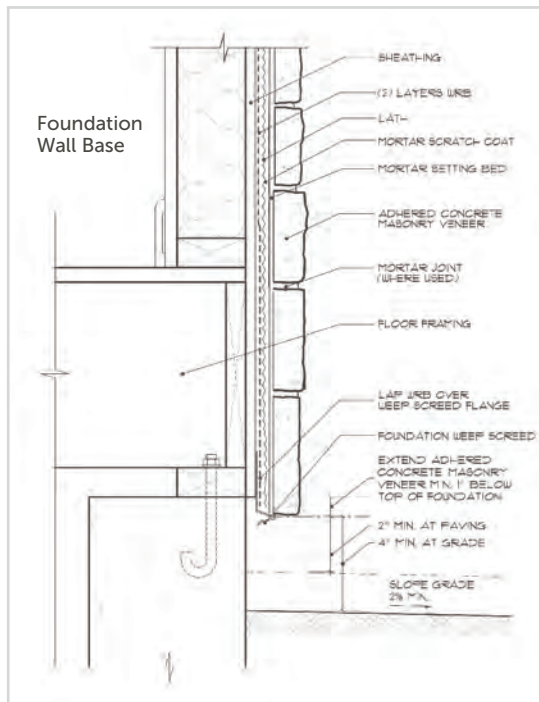
MANUFACTURED STONE VENEER



COMMON MISCONCEPTIONS & COSTLY MISTAKES

There is no substitute for experience, testing and following instructions. Over the years, techniques and best practices for installing manufactured stone veneer have evolved. Here are a few common misconceptions:

- **The doughnut method:** This is an application where the setting bed mortar is applied in a ring around the outside of the unit. The theory was that the void in the center would provide "suction" to help the stone stay on the wall. The fact is less mortar bonded to the stone and a large void to catch water are detrimental to the installation.



Source: NCMA Installation Guide

- **Failure to maintain proper clearance:** Running stone to or below grade might look more realistic but is a potential violation of building code and could impact warranty coverage. Clearance is required to allow drainage, prevent moisture from wicking up the wall, minimize soil staining and efflorescence and, in some jurisdictions, provide termite inspection zones.
- **Lath lap/overlap:** Failure to lap lath correctly, especially at corners, can lead to cracking.
- **Anti-freeze/accelerators in mortar:** Be very careful with these chemicals. Some can lead to efflorescence problems and others may impact corrosion of lath. Contact your mortar or stone manufacturer for more details.
- **Installation on stair risers:** While this application dresses up a stairway, it's not practical when the appropriate clearance (2") is provided from the paved surface, the step. This application is a water management challenge and can lead to exposure to de-icing chemicals. All of which can impact the performance of the stone and warranty coverage.

- **Proper capping:** Good water management principles govern transitions between materials. Flashing these transitions is required and capping is also critical. Manufactured stone veneer is no exception. Cap your installation with a material that overhangs the stone installation by 1–2". If possible, provide a drip edge or kerf to force water to drop off your capping material promptly.

MAINTENANCE FOR LONGEVITY

Each manufactured stone veneer manufacturer publishes specific care and maintenance requirements. Most will have positions on sealing, cleaning, efflorescence, de-icing chemicals, use in pools or fountains, and power washing. Read and understand all of these before proceeding as they can have drastic impact on performance and warranty coverage

CONCLUSION

The products available to you today as manufactured stone veneer are endless. The design options and variations are robust and will add the curb appeal everyone wants. Take the time to evaluate your suppliers and read all the installation materials available to you. Ask questions and understand the "why" behind certain requirements. Decisions regarding materials you use and how they will be installed can make it a project you will always be proud of, yielding years of pleasure for you and your customers.



Installation Guide and Detailing Options for **Compliance with ASTM C1780**



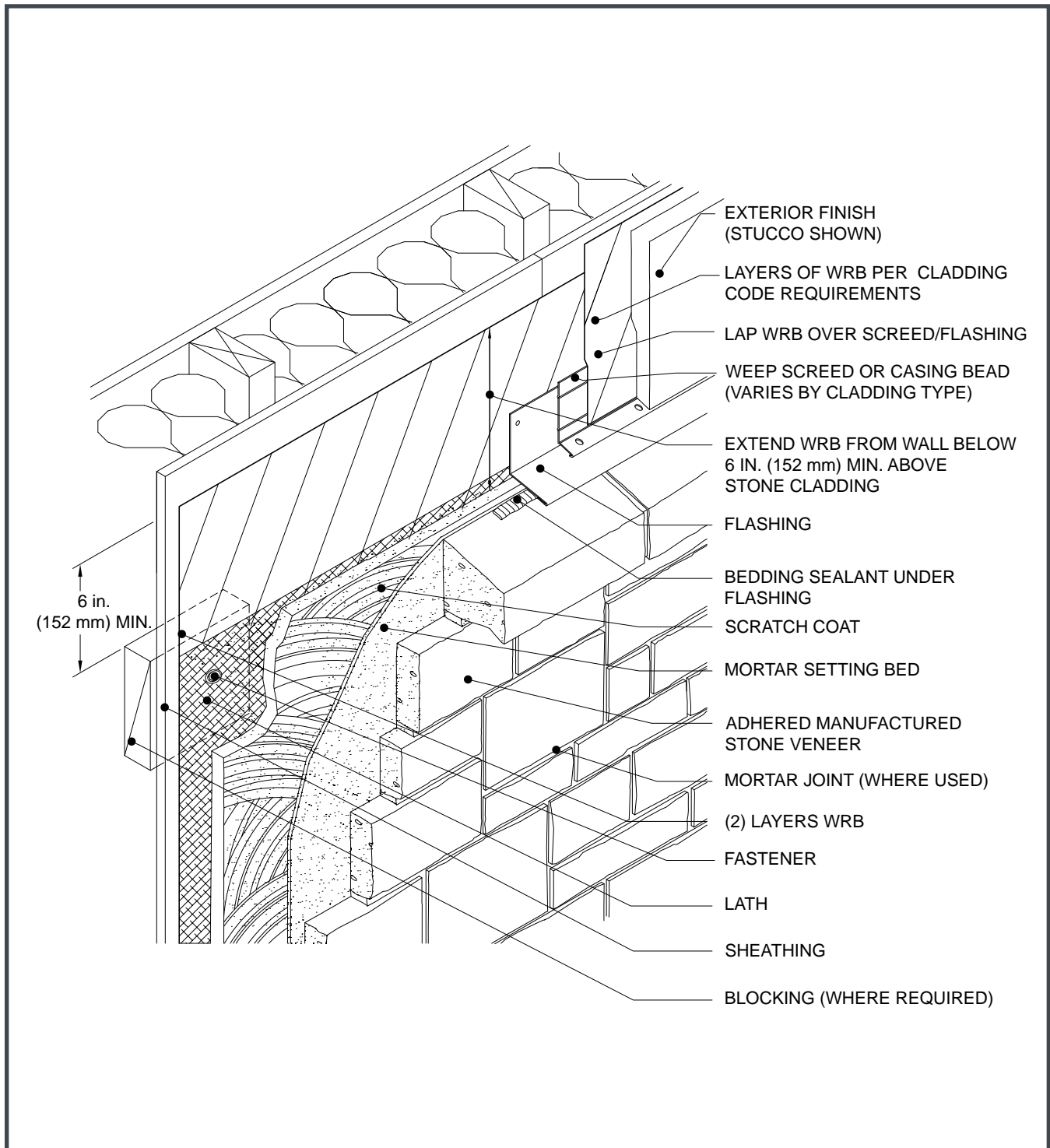
For Adhered Manufactured Stone Veneer 5th Edition, 4th Printing

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ASSOCIATION



NCM MSV

Figure 3. Wall Assembly Transition



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Figure 4a. Typical Frame Wall Section

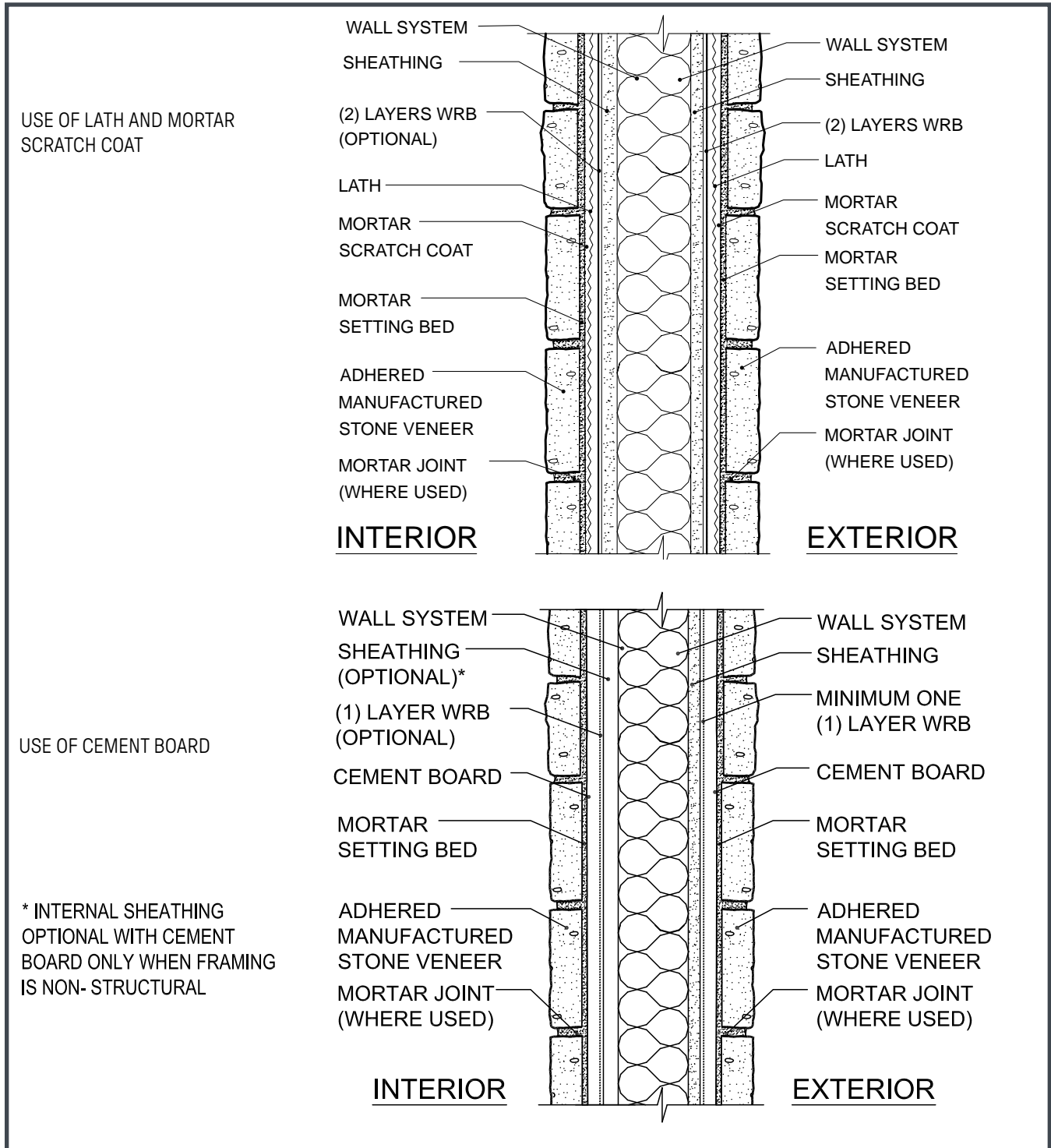


Figure 4b. Typical Wall Frame Section with Continuous Rigid Insulation

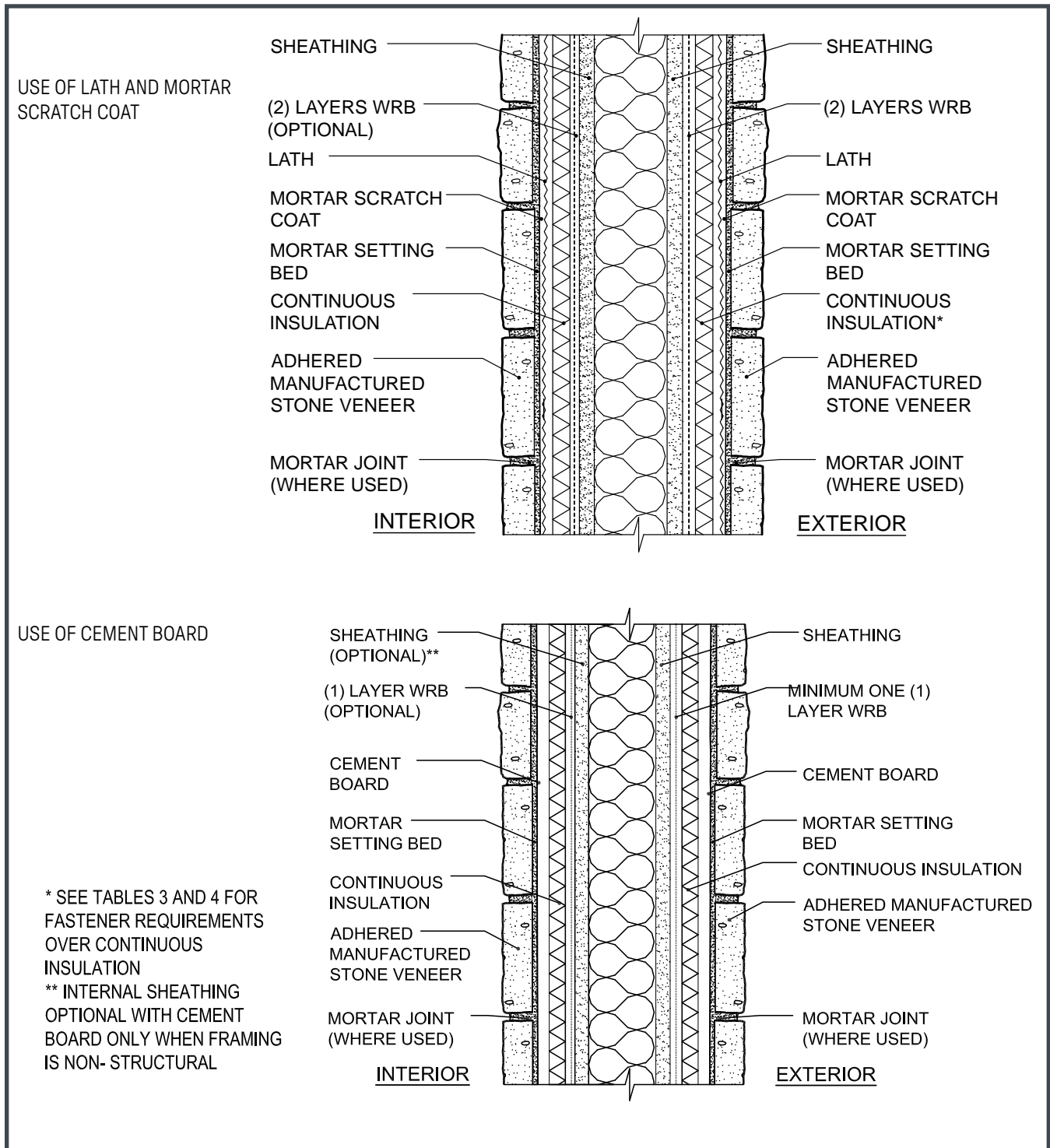


Figure 5a. Foundation Wall Base

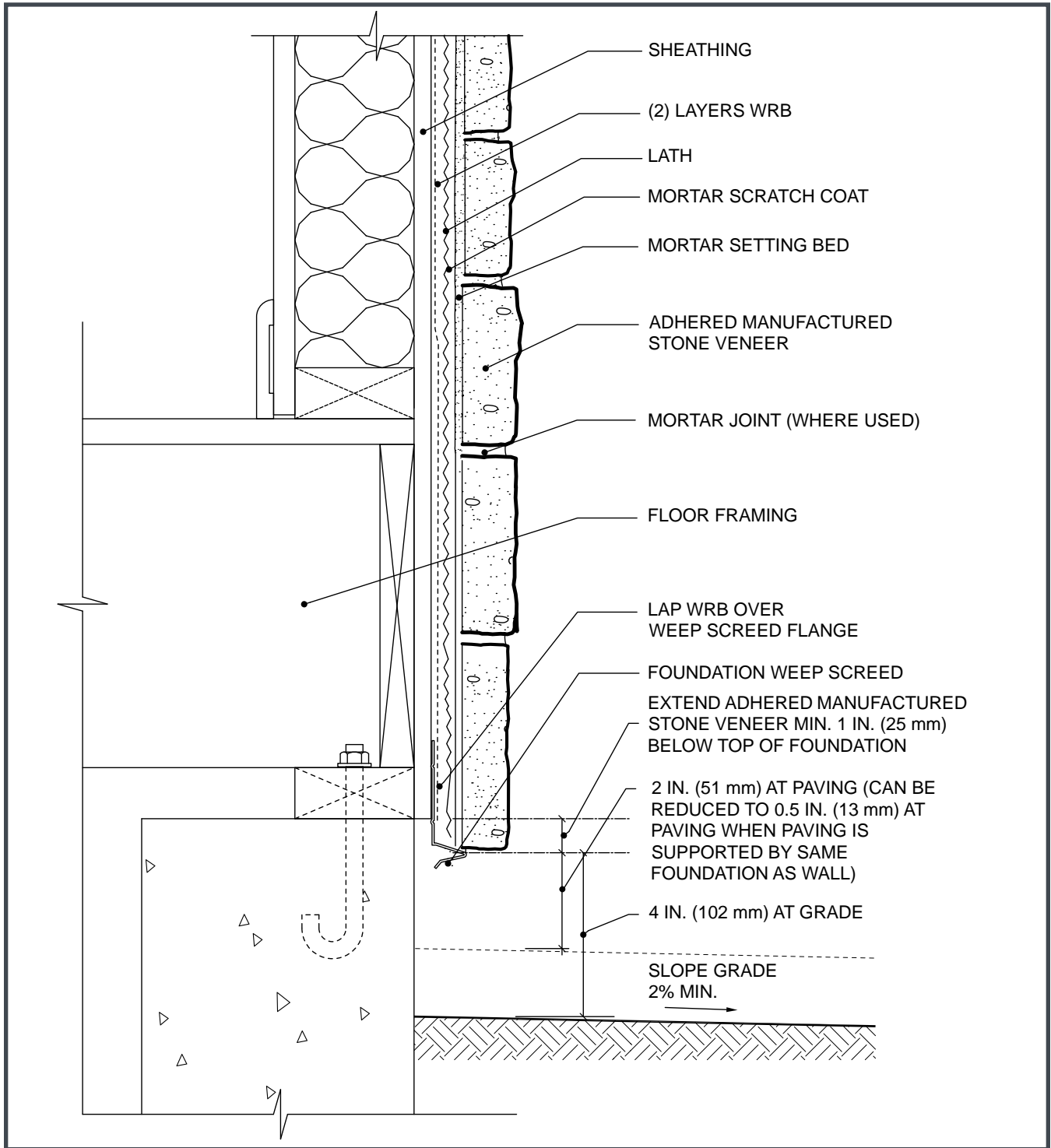
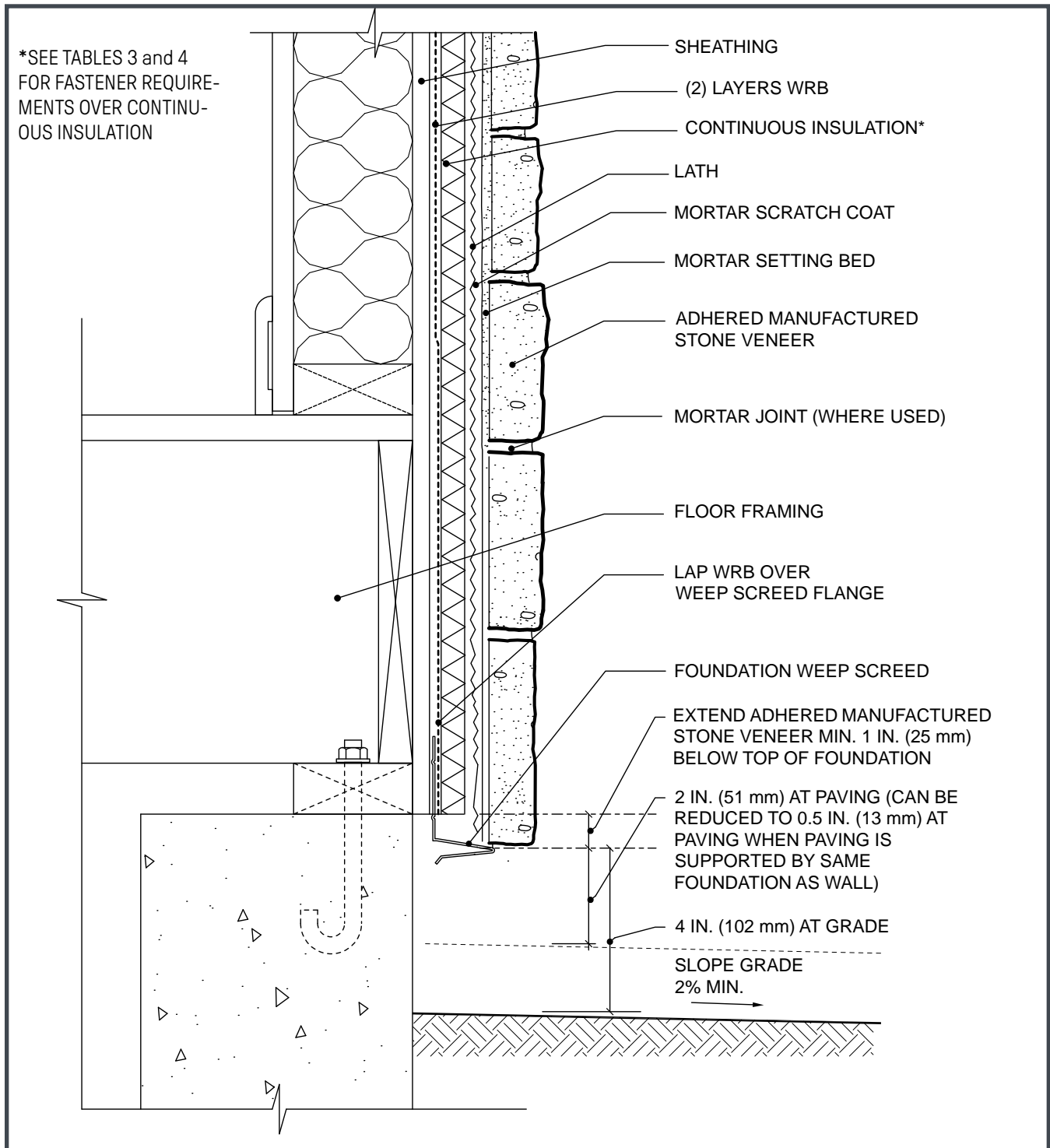


Figure 5b. Foundation Wall Base Over Continuous Rigid Insulation



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Figure 6. Foundation Wall Base – AMSV Overlapping Foundation

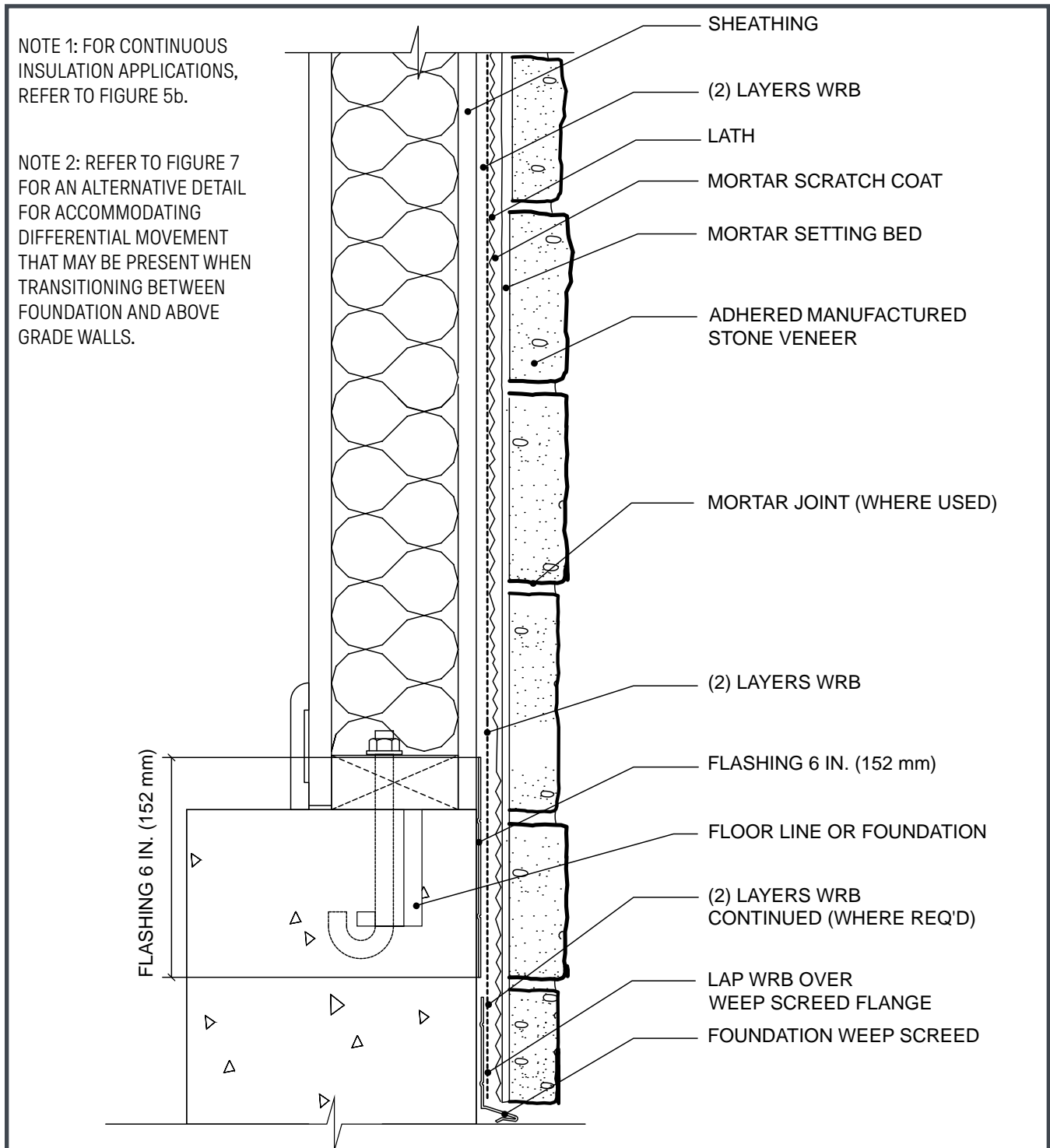
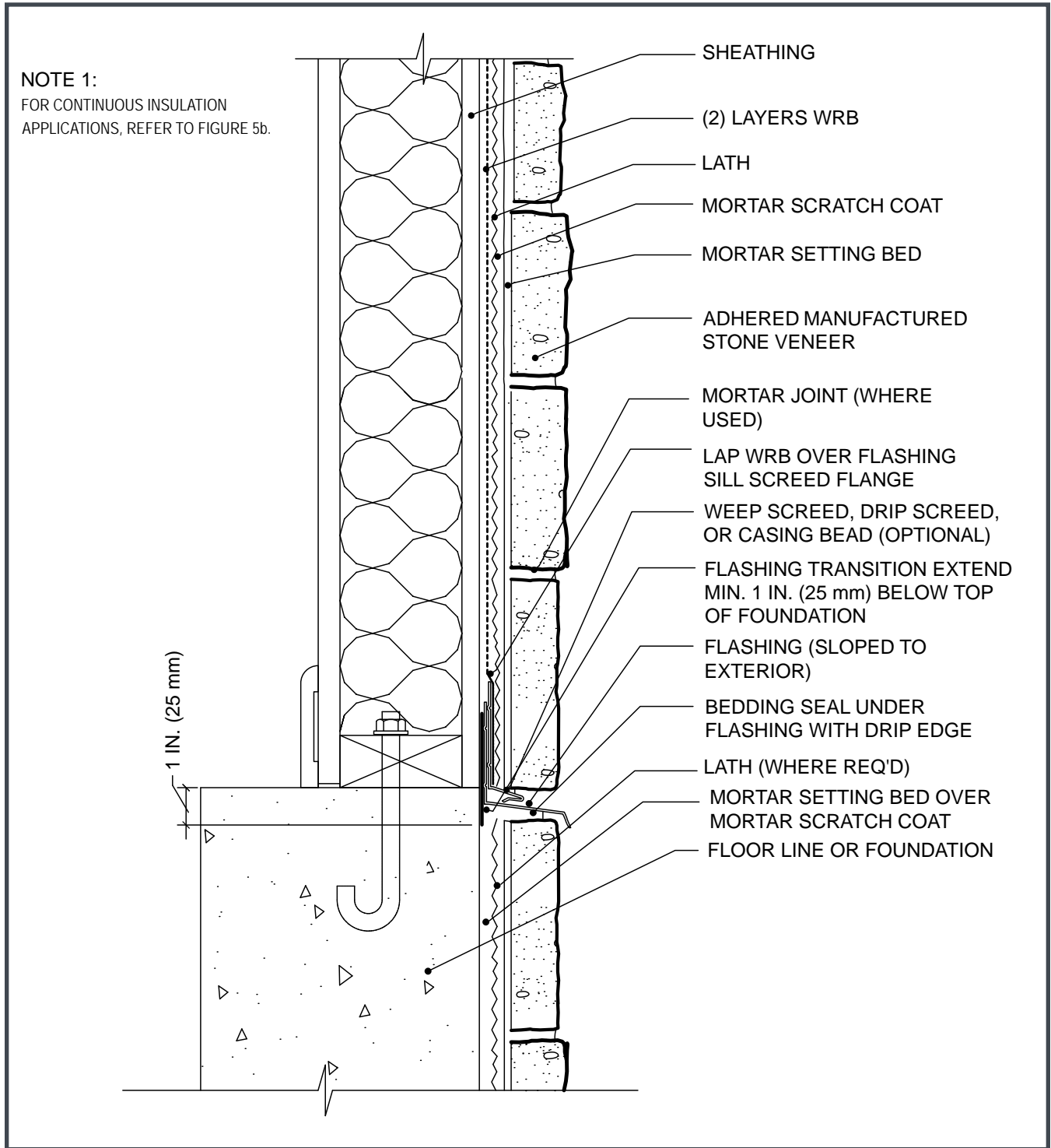


Figure 7. Foundation Wall - Transition to AMSV Continuing Down Foundation



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Figure 8a. Cladding Transition

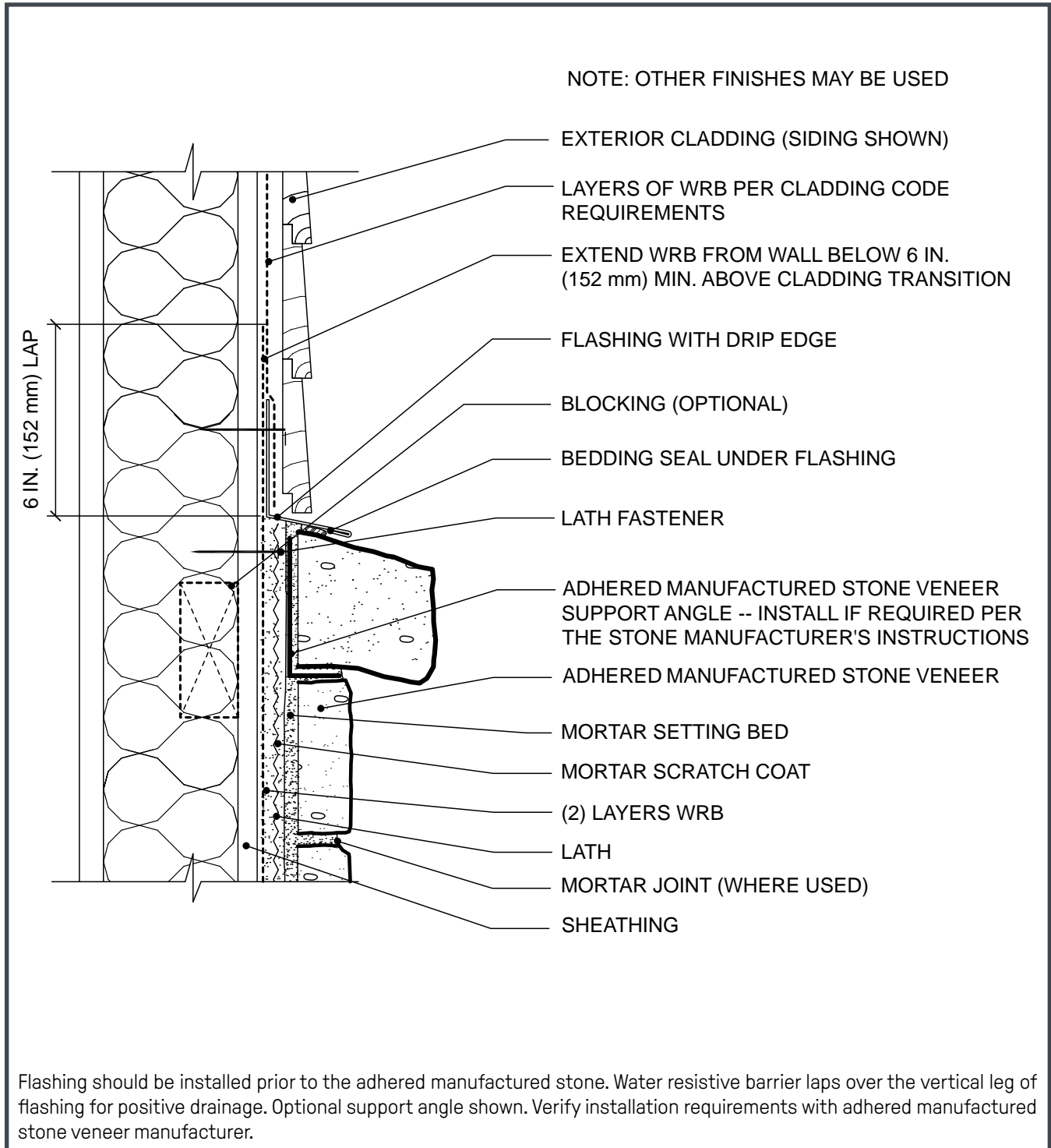
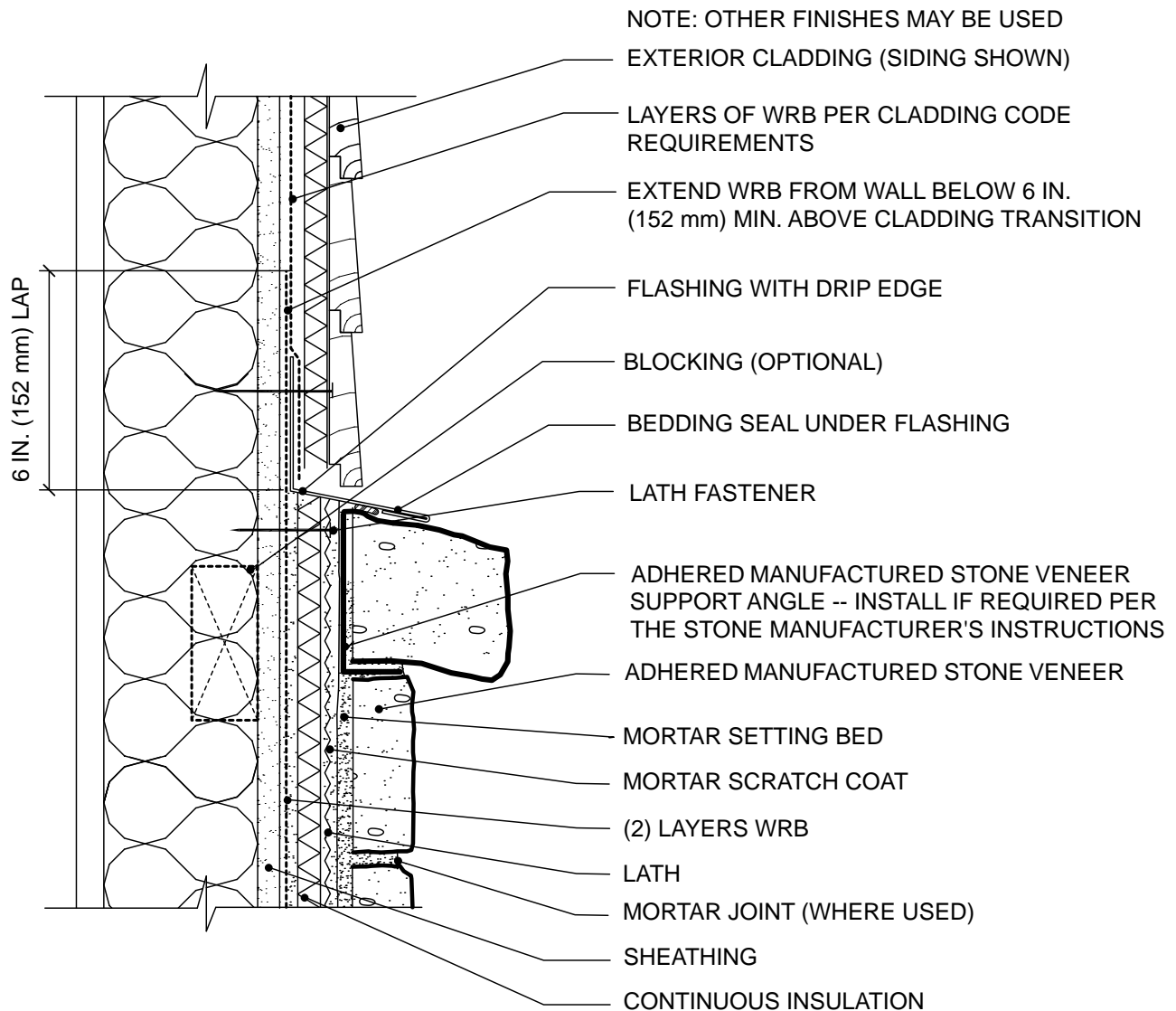


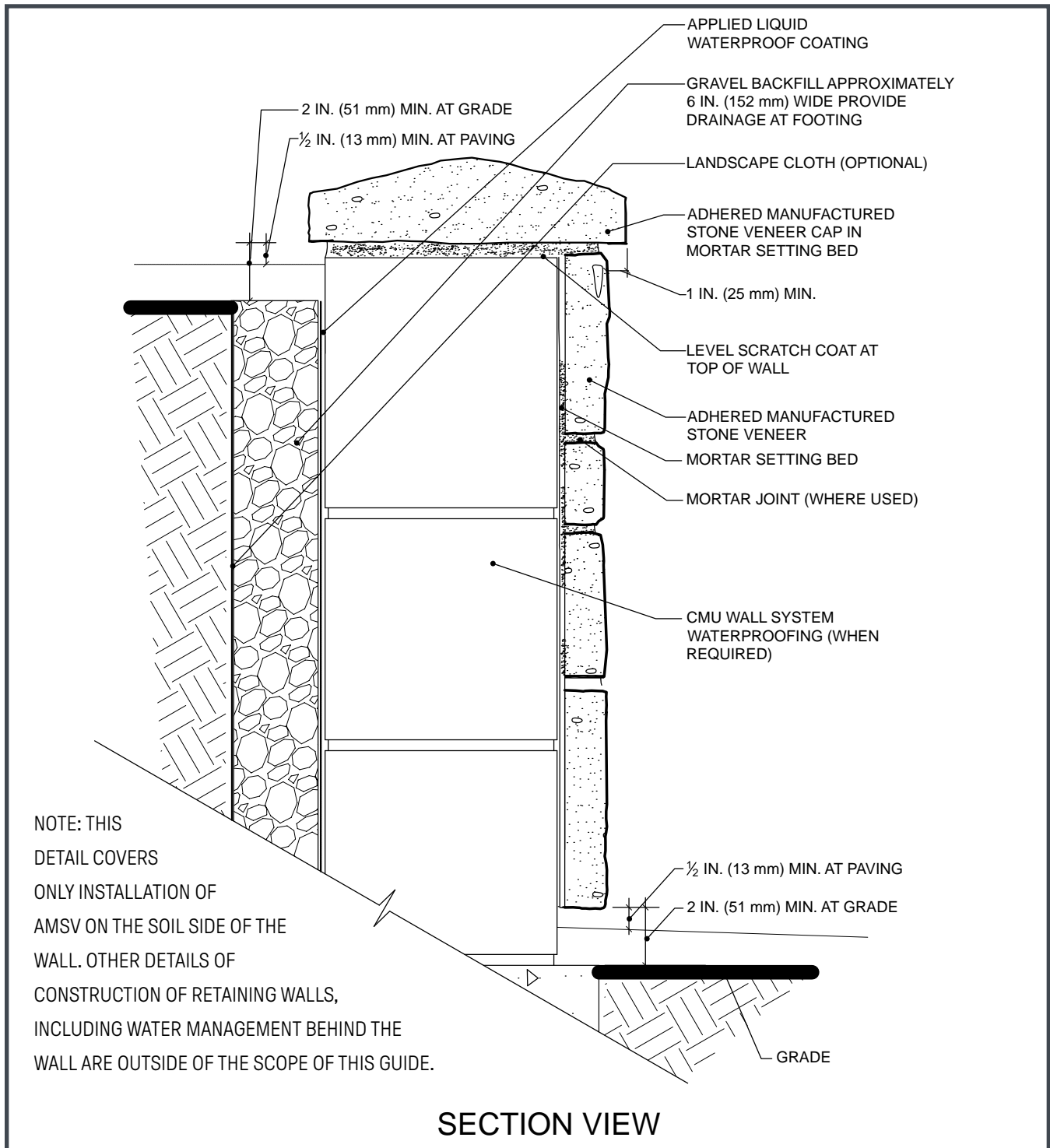
Figure 8b. Cladding Transition Over Continuous Rigid Insulation



Flashing should be installed prior to the adhered manufactured stone. Water resistive barrier laps over the vertical leg of flashing for positive drainage. Optional support angle shown. Verify installation requirements with adhered manufactured stone veneer manufacturer.



Figure 39. Retaining Wall (CMU)



NCMA MSV

MANUFACTURED STONE VENEER

For additional information or questions on the
items contained here, please contact NCMA at:
(703) 713-1900

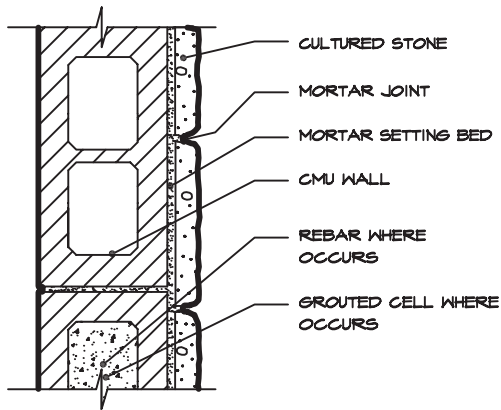
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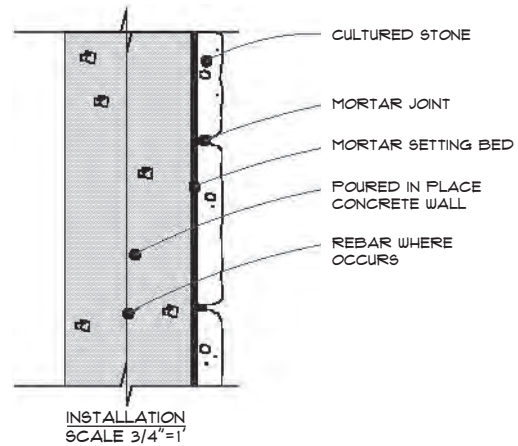
DETAILS ON

MASONRY/CONCRETE WALLS

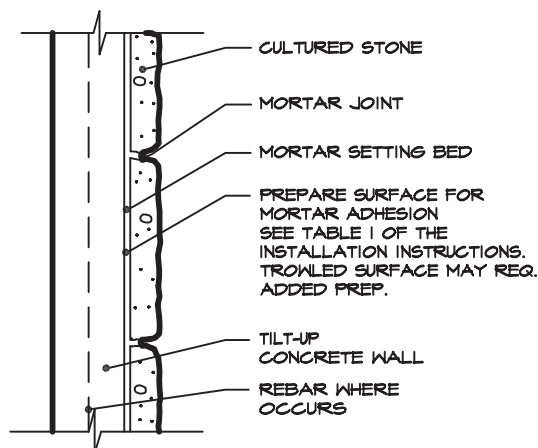
PRODUCT DIMENSIONS & INSTALLATION DETAILS




 CULTURED STONE OVER CMU
SCALE N.T.S.



 INSTALLATION ON CONCRETE WALL
SCALE AS NOTED

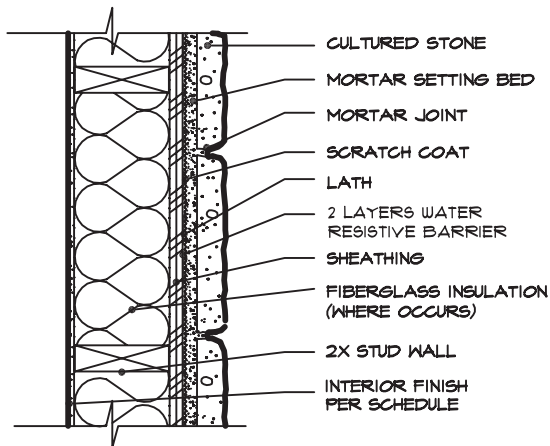


 CULTURED STONE
OVER TILT-UP WALL
SCALE 1 1/2" = 1'-0"

DETAILS OVER

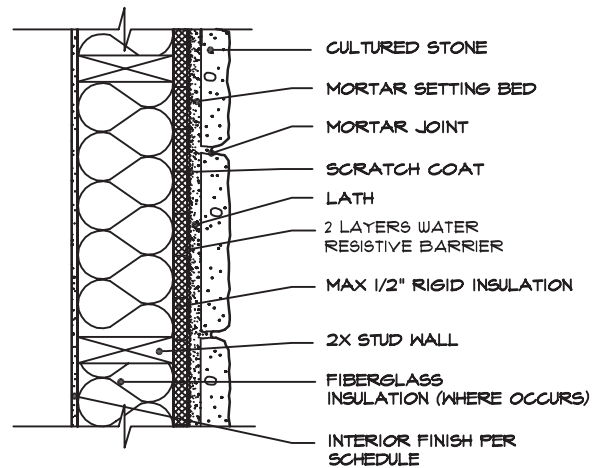
WOOD FRAMING

PRODUCT DIMENSIONS & INSTALLATION DETAILS



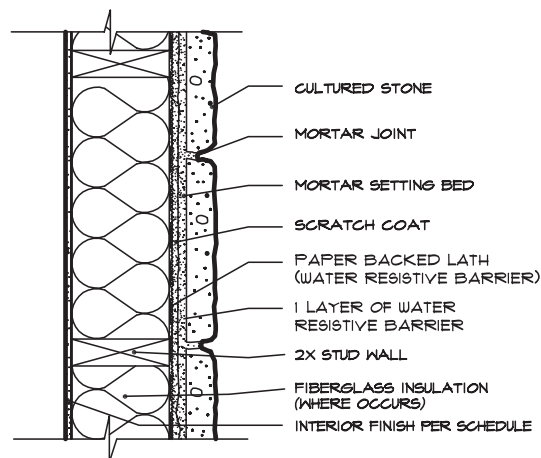
CULTURED STONE
OVER SHEATHING OVER STUDS

SCALE N.T.S.



CULTURED STONE
OVER RIGID INSULATION

SCALE N.T.S.



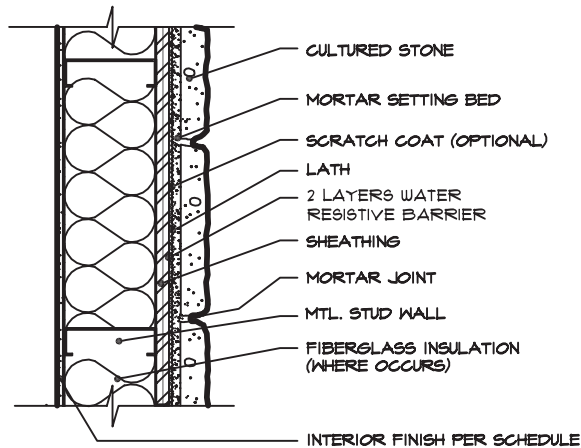
CULTURED STONE
OVER OPEN STUD FRAMING

SCALE N.T.S.

DETAILS OVER

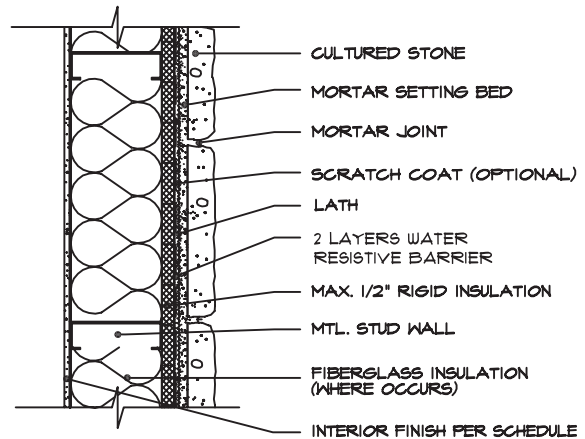
METAL STUDS

PRODUCT DIMENSIONS & INSTALLATION DETAILS



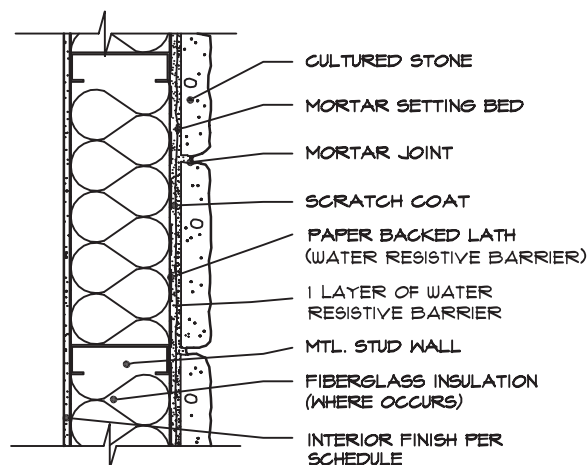
CULTURED STONE OVER SHEATHING WITH METAL STUDS

SCALE N.T.S.



CULTURED STONE OVER RIGID INSULATION WITH METAL STUDS

SCALE N.T.S.



CULTURED STONE OVER OVER OPEN METAL STUDS

SCALE N.T.S.



TECHNICAL RESOURCES

ONLINE DIRECTORY



Cultured Stone® is engineered to meet or exceed specifications for all major code approvals.

Note: Local building codes vary by area; always check with your local building authorities before installing stone.

Please visit www.culturedstone.com/resources to view all digital materials available for download.

PRODUCT LITERATURE

- 2020 Source Guide
- 2020 Product Guide
- Architectural Solutions
- Design Solutions Brochure
- 2020 Digital Architectural Binder

SPECIFICATIONS & DETAILS

- 3-Part Specification
- Technical Submittal Packet 2021
- NCMA CAD Drawings
- Safety Data Sheet
- Warranty Information
- Stone Dimensions and Accessory Color Guide
- CAD + BIM Library
- Technical Data Sheet
- ICC-ESR-1364
- Building Codes Overview
- Technical Evaluation Report

EDUCATION

- CEU-AIA Education Courses
- Beginner's Guide to MSV
- It's All About Curb Appeal
- Invite the Outdoors In
- 13 Things to Know Before Your Start Building
- Technically Speaking Webinar Series
- Dealer Resources
- Interior Design Resources
- Repair & Remodel Resources

INSTALLATION & MAINTENANCE

- NCMA Installation Guide
- Cultured Stone Installation Guide
- Cultured Stone Cast-Fit Installation Guide
- Cultured Stone Warranty
- Anatomy of Durable & Healthy MSV
- Applications Over Continuous Insulation
- Technical Advisory: Using MSV on Fireplaces



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CEU Virtual Course Offerings

WESTLAKE ROYAL STONE SOLUTIONS

The following are CEU courses offered under Westlake Royal Stone Solutions:

Designing Commercial Projects with Manufactured Masonry – AIA

Design guidelines for sustainable manufactured stone veneer buildings, including product innovations and industry related education.

1 LU | HSW

Precision & Performance with Manufactured Stone Veneer – AIA / IDCEC

Explore manufactured stone veneer as an inspirational design element, born from innovative technology and creative solutions.

1 LU | IDCEC

COURSE ALSO AVAILABLE ON-DEMAND
Register Here: culturedstone.com/on-demand



Architectural Stone Veneer: Transforming Spaces Through Color & Texture – AIA

Understand the benefits of specifying architectural stone veneer in your design projects and learn about proper installation techniques.

1 LU | HSW

Architectural Stone Veneer: Designing With Nature in Mind – AIA / IDCEC

Discover how incorporating architectural stone veneer into your project can help promote well-being, sustainability, and design versatility.

1 LU | IDCEC

COURSE AVAILABLE ON-DEMAND
Register Here: eldoradostone.com/on-demand



Understanding Mortarless Stone Veneer and Other Stone Veneer Products – AIA

An examination of the new Mortarless Stone Veneer category of cladding products as it relates to other types of stone veneer, specifically around the areas of installation and applications.

1 LU | HSW

TECHNICAL DATA

The **Cultured Stone®** collection of manufactured stone veneers is engineered to meet or exceed specifications for all major code approvals. Manufacturers who offer “just like” or a so-called “equivalent” to Cultured Stone manufactured stone veneer products should be asked to document claims of test results and research reports.

Complete copies of these Cultured Stone manufactured stone veneer building code evaluation reports, research reports, approvals and listings are available upon request:

- ICC-ES ESR-1364
- Tested and listed by Underwriters Laboratories, Inc.
- Texas Department of Insurance–
Product Evaluation Report, EC-21
- Florida Product Approval FL15047
- HUD Materials Release No. 1316
- BMEC Authorization

Note: Local building codes may vary; always check with your local building code authority prior to installation.

Results of tests conducted by an independent testing agency confirm that the Cultured Stone collection of manufactured stone veneers conforms to or exceeds the following test requirements as specified in ICC Evaluation Service Acceptance Criteria 51 for Precast Stone Veneer:

MATERIALS

CEMENT	ASTM C 150 or ACI 318 Section 3.2.1
SAND	ASTM C 144 or C 33
AGGREGATE	ASTM C 33 or C 330 (except gradation), C 331

TESTING

SHEAR BOND TEST (ADHESION)	Tested in accordance with ASTM C 482	> 50 psi
WATER ABSORPTION	Tested in accordance with UBC 15-5	9%–22% depending on texture
FREEZE/THAW CHARACTERISTICS	Testing procedures follow those outlined in ASTM C 67	< 3% mass loss
COMPRESSIVE STRENGTH	Tested in accordance with ASTM C 39	> 1800 psi @ 28 days
UNIT WEIGHT	Density is determined in accordance with ASTM C 567	< 15 lbs. per square foot
TENSILE STRENGTH	Tested in accordance with ASTM C 190	Reported
FLEXURAL STRENGTH	Tested in accordance with ASTM C 348	Reported
THERMAL PROPERTIES	Tested in accordance with ASTM C 177-71	R-value is .620 based on a 1.75" thick sample. Average thickness may vary on different Cultured Stone veneer products, and the R-value will vary accordingly.
NONCOMBUSTIBLE	Tested and listed by Underwriters Laboratories, Inc.	Cultured Stone brand products showed zero flame spread and zero smoke development.



SECTION 04 73 00 MANUFACTURED STONE VENEER

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Cultured Stone Veneer.
- B. Architectural Trim Stone.

1.2 RELATED SECTIONS

- A. Section 04 20 00 - Unit Masonry.
- B. Section 06 10 00 - Rough Carpentry.
- C. Section 05 40 00 - Cold-Formed Metal Framing.
- D. Section 07 27 00 - Air Barriers.
- E. Section 07 28 00 - Underlayments.*
- F. Section 07 62 00 - Sheet Metal Flashing & Trim.
- G. Section 07 90 00 - Joint Protection.
- H. Section 09 24 13 - Adobe Finish.
- I. Section 10 30 00 - Fireplaces and Stoves.

1.3 REFERENCES

- A. ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
- B. ASTM C 67 - Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile.
- C. ASTM C 177 - Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus.
- D. ASTM C 192 - Standard Practice for Making and Curing Concrete Test Specimens in the Laboratory.
- E. ASTM C 482 - Standard Test Method for Bond Strength of Ceramic Tile to Portland Cement.
- F. ASTM C 1670 - Standard Specification for Adhered Manufactured Stone Masonry Veneer Units.
- G. ASTM C 1780 - Standard Practice for Installation Methods for Adhered Manufactured Stone Masonry Veneer
- H. UL 723 - Standard for Safety for Surface Burning Characteristics of Building Materials.
- I. ICC ES AC 51 Acceptance Criteria for Manufactured Stone Veneer
- J. Masonry Veneer Manufacturers Association (MVMA): Installation Guide for Adhered Manufactured Stone Veneer
- K. US Department of Housing and Urban Development (HUD): Material Release Numbers 910Fs
- L. LEED: US Green Building Council's Leadership in Energy and Environmental Design Green Building Rating System.



1.4 DESIGN / PERFORMANCE REQUIREMENTS

- A. Building Code Compliance:
 - 1. International Code Council (ICC):
 - a. ES Report: ICC ESR 1364
 - b. UBC Standard No. 14-1, Kraft Waterproof Building Paper.
 - 2. Florida Product Approval Number FL15047
 - 3. Texas Department of Insurance: Product Evaluation–EC 21
 - 4. US Department of Housing & Urban Development (HUD): MR 1316.
 - 5. Tested by Underwriters Laboratories, Inc.
- B. Average Recycled Content of 58 percent validated by 3rd party analysis.
- C. Backup Wall System and installation method for manufactured stone veneer shall meet the requirements of ASTM C 1780–Standard Practice for Installation Methods for Adhered Manufactured Stone Masonry Veneer.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation standards and methods.
- C. Shop Drawings: Submit drawings depicting proper installation and flashing techniques. Coordinate locations with those found on the Drawings.
- D. LEED Submittals: Provide documentation of how the requirements of Credit will be met:
 - 1. LEED v 4, Product Data for Credit MR 4: For products having recycled content documentation; indicating percentages by weight of post-consumer and pre-consumer recycled content. Include statement indicating cost for each product having recycled content.
 - 2. LEED v 4, Product Data for Credit MR 4: For products having recycled content documentation; indicating percentages by weight of post-consumer and pre-consumer recycled content. Include statement indicating cost for each product having recycled content.
 - 3. LEED v 4, Product Data for Credit EQ 2: For products and materials to comply with low emittance standards, provide documentation substantiating that products comply with requisite low emittance standards.
 - 4. LEED v 4, Product Data for Credit for location and distance from Project of material manufacturer and point of extraction, harvest or recovery for main raw material.
- E. Selection Samples: For each finish product specified, two complete sets of color sample representing manufacturer's full range of available colors and textures.
- F. Verification Samples: For each finish product specified, two samples, minimum size 8 inches (203 mm) square, representing actual product, color, and texture.
- G. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- H. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for cleaning and repair of components.



1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer who is a current member of Masonry Veneer Manufacturers Association (MVMA) with a minimum of 5 years documented experience manufacturing and marketing all Manufactured Stone products of the type specified in this section.
- B. Installer Qualifications: Company with documented experience in installation of manufactured masonry of the type specified including at least five projects within a 400 mile (650km) radius of the Project.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish panel of size and location designated by Architect.
 - 2. Minimum size 3 foot by 3 foot and showing transition to adjacent materials anticipated.
 - 3. Do not proceed with remaining work until workmanship, color, texture and pattern are approved by Architect.
 - 4. Refinish mock-up area as required to produce acceptable work.
- D. Pre-Installation Conference:
 - 1. Contractor shall arrange a meeting not less than thirty days prior to starting stone veneer work.
 - 2. Attendance: Contractor, Architect/Owner Representative, veneer stone installer and manufacturer's representative.

1.7 DELIVERY, STORAGE & HANDLING

- A. Store and handle products in conformance with the manufacturer's requirements and recommendations.
- B. Store products off the ground on pallets in manufacturer's unopened packaging until ready for installation.
- C. Protect materials from precipitation and freezing temperatures. Product with visible frozen moisture should not be installed.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- B. Cold weather installations: Maintain materials and ambient temperature at minimum 40 degrees F (4 degrees C) prior to, during, and 48 hours after installation.
- C. Hot weather installations: Mist water on the scratch coated surface and the backs of the masonry veneer for installations that exceed 90 degrees (32 degrees C).

1.9 WARRANTY

- A. Provide manufacturers 50-year limited warranty.



PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: **Cultured Stone®** by **Boral®**, which is located at: 200 Mansell Court E. Suite 305; Roswell, GA 30076; Toll Free Tel: 800-255-1727; Email to request info: boralstoneanswers@boral.com; Web: www.culturedstone.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 MANUFACTURED STONE VENEER—GENERAL

- A. Manufactured Stone Veneer Performance Requirements: Conforming to ASTM C 1670 and as follows:
 - 1. Compressive Strength: Not less than 1800 psi (12.4 MPa) average for 5 specimens and not less than 2100 psi (14.4 MPa) for individual specimen when tested in accordance with ASTM C 39 & ASTM C 192.
 - 2. Bond Between Manufactured Masonry Unit, Mortar and Backing: Not less than 50 psi (345 kPa) when tested in accordance with ASTM C 482 using Type S mortar.
 - 3. Thermal Resistance: R-value of not less than 0.355 per inch (25.4 mm) of thickness when tested in accordance with ASTM C 177.
 - 4. Freeze/Thaw: No disintegration and less than 3 percent weight loss when tested in accordance with ASTM C 67.
 - 5. Water Absorption: Tested in accordance with UBC 15-5 9-22% depending on density value.
 - 6. Unit Weight: Not more than 15 psf (73 kg/m²) saturated.
 - 7. Surface Burning Characteristics: Not more than the following when tested in accordance with UL 723:
 - a. Flamespread: 25.
 - b. Smoke Development: 450.
 - 8. UV Stable - Mineral oxide pigments.
- B. Certifications:
 - 1. ICC ES AC 51 Acceptance Criteria for Manufactured Stone Veneer
 - 2. ICC Evaluation Service - Evaluation Report ESR 1364 & ASTM C 1670.
 - 3. HUD Material Release Number 1316c
 - 4. UL Tested for Surface Burning Characteristics
 - 5. Texas Department of Insurance Product Evaluation EC-21
 - 6. Florida Product Approval Number FL15047

2.3 CULTURED STONE VENEER

Materials

A. Stone Veneer & Brick Veneer:

SELECT DESIRED PROFILE FROM THE CULTURED STONE WEBSITE [PRODUCTS](#) PAGE; INSERT PROFILE AND COLOR SPECIFICATION BELOW.

1. Profile: _____ . Include matching corner pieces.
2. Color: _____ .

B. Accessories

SELECT DESIRED STONE ACCESSORIES FROM THE CULTURED STONE WEBSITE [ACCESSORIES](#) PAGE; INSERT DESIRED ACCESSORIES BELOW AND INSERT TEXTURE IF REQUIRED. VERIFY THAT DIMENSIONS, IF REQUIRED, ARE SHOWN ON THE DRAWINGS.

1. Stone Accessories: _____ .
2. Color: _____ .

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared in conformance with ASTM C 1780 for the backup wall system indicated on the Drawings.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install manufactured stone masonry veneer in accordance with MVMA Installation Guide for Adhered Manufactured Stone Veneer, ASTM C 1780 and applicable Codes.
- C. Install/Apply Related Materials in accordance with type of substrate and manufactured stone veneer manufacture's installation instructions.
- D. General:
 1. Walls: Provide with Single Color and Texture throughout.
 2. Walls: Provide with Blended Color / Texture specified.
 3. Special Shapes: Color to match stones specified.
 - a. Provide Stones manufactured specifically for installation at corners where located on the Drawings.
 - b. Install Quoins on corners as indicated on the Drawings.
 4. Mortar Joints
 - a. Style:
 - 1) Tight Fit joints.
 - 2) Standard 1/2 inch tooled
 - 3) Wide joint
 - 4) Wide Overgrout
 - b. Strike all grout joints flush.
 - c. Tool all grout joints.
 - d. Overgrout all grout joints.
 5. Stone Direction:
 - a. Random placement



- b. Horizontal placement
 - c. Vertical placement
 - 6. Windows, Doors & Wall Openings:
 - a. Butt field stones to wall opening.
 - b. Install specified trim stones where located on the Contract Drawings.
 - 7. Sills: Install Sills where located on the Drawings.
 - 8. Caps: Install Capstones where located on the Drawings.
 - E. Seal all joints at wall openings and penetrations with a sealant approved for use with masonry products.
 - F. Flashing: Coordinate with Flashings specified in Section 07 62 00 - Sheet Metal Flashing and Trim.
 - G. Rainscreen: Coordinate with Rainscreens specified in Section 07 27 00 - Air Barriers.
- 3.4 FIELD QUALITY CONTROL
- A. Manufacturer's Field Services: Provide periodic site visits as requested by Architect. Report any discrepancies to the Contractor with copies to the Architect within 24 hours of each visit.
- 3.5 CLEANING
- A. Clean manufactured masonry in accordance with manufacturer's installation instructions
- 3.6 PROTECTION
- A. Protect finished work from rain and work on either side of the wall during and for 48 hours following installation.
- B. Protect installed products until completion of project.
- C. Clean prior to project closeout.
- D. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

50-YEAR TRANSFERABLE LIMITED WARRANTY



LIMITATIONS ON THE TRANSFERABILITY OF THIS
WARRANTY ARE SET FORTH HEREIN

INTRODUCTION

Thank you for your recent purchase of **Cultured Stone®** manufactured stone veneer products ("Product(s)"). This express limited warranty ("Warranty") only covers Cultured Stone manufactured stone veneer products manufactured by Westlake Royal Stone Solutions ("Westlake").

WHO IS COVERED & FOR HOW LONG

Subject to the following terms, Westlake warrants its Products for fifty (50) years to the original purchaser (the "Purchaser") (based upon the date of retail purchase, date of substantial completion of the installation if professionally installed, or date of settlement of the purchase of a newly constructed building, whichever is applicable). This Warranty is personal to you; however, the Warranty may be transferred to any subsequent purchaser(s) of your home or building during the first fifteen (15) years after the original purchase date (as described above), but the warranty period as to such subsequent owners is limited to fifteen (15) years from the original purchase date (as described above).

WHAT BORAL WARRANTS

Westlake, subject to the conditions and limitations listed herein, warrants its Products to be manufactured in compliance with the International Code Council Acceptance Criteria 51 ("ICC AC 51") for Precast Stone Veneer; however, Products that are accessories and Products that are not wall veneer shall not meet the weight, density and dimension parameters of ICC AC 51.

WHAT IS NOT COVERED

We do not cover damage to the Product due to any cause not expressly covered herein. This Warranty does not cover any problems with non-defective material caused by conditions or handling beyond our control.

Some examples of conditions not covered by this Warranty include:

1. Improper application, use of accessories which do not properly receive and/or secure our Products, or installation not in strict adherence to the applicable installation instructions or installation not in accordance with local building code requirements.
2. Damage resulting from accident, misuse, neglect, casualty, fire, vandalism, plant growth, impact of foreign objects, salt or de-icing chemicals, excessive exposure to water due to things such as standing water, water backups, improper flashing, leaks, seepage or irrigation systems, failure of or damage to the wall substrate on which the Product was applied caused by movement, distortion, cracking, or settling of such wall or the foundation of the building, surface discoloration due to airborne stains, pollutants, algae, fungi, lichens or cyanobacteria, exposure to harmful chemicals, external heat sources (including, but not limited to, a barbecue grill, fire, or reflection from windows and doors), acts of God, or other such occurrences beyond the control of Boral;
3. Product or material that has been painted, varnished, sealed with non-breathable sealer, or similarly coated over the manufacturer's original finish; and
4. The use of sandblasting, power washing, silicone treatments, or any other form of chemical wash.

Products shall not be in breach of this Warranty if they contain or exhibit (i) minor chipping, as defined under ASTM C1364, Section 8.2; or (ii) minor cracks, as defined under ASTM C 90-05, Section 7.2.1, incidental to the usual methods or materials of manufacture or minor chipping resulting from customary methods of handling in shipment and delivery which do not affect the proper placement of the unit or significantly impair the strength or permanence of the construction.

Products are not warranted against discoloration caused by air pollution, exposure to harmful chemicals, or "normal weathering" resulting from exposure to the elements. "Normal weathering" is defined as the damaging effects of sunlight and extremes of weather and atmosphere that may cause any colored surface to oxidize, fade, or become soiled or stained over time.

Westlake strives to accurately reproduce the colors of its masonry stone veneer Products in its marketing literature and sample boards. The Product colors that you see are as accurate as technology allows. Westlake makes no warranty with respect to any real or perceived color differences between those depicted in its marketing literature and sample boards and those of the actual Products that will be installed on or within the home or building. Westlake recommends that you look at actual Product samples before making a color selection for your home or building.



WHAT IS YOUR REMEDY

If the Products are not in conformance with our Warranty, Westlake will, in its sole discretion, either (i) repair or replace the nonconforming Products at no charge to you, or (ii) refund the price paid for the Products. Labor costs for removal or installation are not covered. Any Products repaired or replaced hereunder will continue to be covered under the terms of this Warranty for the remainder of the original warranty period.

SUBMITTING A WARRANTY CLAIM

To obtain performance under this Warranty, the Purchaser(s) shall notify Westlake of the claim promptly following its discovery, and shall submit with such notification proof of date of purchase and/or installation, and proof of property ownership, in order to provide Westlake an opportunity to investigate the claim and examine the material claimed to be defective. All notifications shall be provided to Westlake at **Westlake Royal Stone Solutions Warranty Department, 2256 Centennial Road, Toledo, Ohio 43617** or call **1-800-255-1727**. Shortly after we receive your communication, we will contact you regarding your claim. To fully evaluate your claim, we may ask you to provide pictures of your Products or samples for us to test. If you have any questions, do not hesitate to write us at the address above or call **1-800-255-1727**.

REPLACEMENT & PRODUCT VARIATIONS

As a result of our ongoing efforts to improve and enhance our product line, we reserve the right to discontinue or modify our Products, including their colors, without notice to the Purchaser(s) and shall not be liable to the Purchaser(s) as a result of such discontinuance or modification. We are not liable to you if you make a warranty claim in the future and any replacement Products you receive vary in color or finish because of normal weathering or changes in our product line. You should understand that if we replace any Products under this Warranty, we reserve the right to provide you with substitute Products that are comparable only in quality and price to your original Products.

LIMITATIONS

EXCEPT AS SET FORTH ABOVE, WESTLAKE MAKES NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ANY PRODUCT SOLD. ORAL STATEMENTS CONCERNING THE PRODUCT(S) COVERED BY THIS WARRANTY, OR STATEMENTS CONTAINED IN WESTLAKE'S GENERAL ADVERTISING, PAMPHLETS OR OTHER PRINTED MATERIALS DO NOT CONSTITUTE WARRANTIES, AND PURCHASER ACKNOWLEDGES THAT IT HAS NO RIGHT TO RELY UPON SAME. WESTLAKE, WHETHER AS A MANUFACTURER OR CARRIER, SHALL NOT BE LIABLE FOR ANY COMMERCIAL LOSSES, SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES, OR FOR ANY LOSS, DAMAGE OR EXPENSE ARISING UNDER OR IN CONNECTION WITH ANY SALE OF PRODUCT. WESTLAKE'S LIABILITY FOR DAMAGES OF ANY KIND SHALL IN NO EVENT EXCEED THE ORIGINAL PURCHASE PRICE OF THE PARTICULAR ORDER, LOT OR SHIPMENT (OR THE ORIGINAL PURCHASE PRICE OF THAT PORTION THEREOF WHICH IS NOT REPAIRED OR REPLACED) WITH RESPECT TO WHICH A CLAIM IS ASSERTED. IN PARTICULAR, WESTLAKE SHALL NOT BE LIABLE FOR LOSS OF SALES, REVENUES OR PROFITS OR CLAIMS OF ANY THIRD PARTIES.

LEGAL RIGHTS

Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. Some states do not allow the exclusion or limitation on incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. If the laws of a particular state require terms other than or in addition to those contained in this Warranty, this Warranty shall be deemed modified so as to comply with the appropriate laws of such state, but only to the extent necessary to prevent the invalidity of this Warranty or any provision of this Warranty or to prevent the imposition of any fines, penalties or any liability.



CULTURED STONE®

The Cultured Stone® collection of manufactured veneer products is engineered to meet or exceed specifications for all major code approvals. Building code requirements vary from area to area. Check with local authorities for building code requirements in your area. Carefully read all installation instructions before proceeding with your Cultured Stone products application. Observe safety precautions. Cultured Stone products are covered by a 50-Year Limited Warranty when installed in accordance with the manufacturer's installation instructions. See the complete warranty on our website at www.culturedstone.com.

For additional information on Cultured Stone products and services, visit online at www.culturedstone.com or call 1.800.255.1727.



