

**TECHNICAL DATA SHEET
&
INSTALLATION GUIDE**

For all technical questions
please contact Stonepark Inc
Email: info@stonepark.ca
www.stonepark.ca



Stonepark Inc is a local *Canadian* company that prides itself on premium quality stone veneers that we manufacture and supply to our customers. Before installing Stonepark products please check with your cities building officials for all the code requirements. Please measure and assess your work area before installing Stonepark products.

Weight & Thickness

Weight and thickness vary depending on the style. Stonepark products average weight per sqft is 5 lbs-13 lbs., thickness measures from 0.35"-2".

* Please see catalog or Table 1, Table 2 and Table 3 for specific stone style and accessories specs.

Stone Sizes

The length and width of veneer stones should be sized to a tolerance of $\pm 0''$ - $\pm 3/16''$

* Please see catalog or Table 1 & Table 2 for specific stone style specs.

Basic Use & Limitations

Stonepark products are intended for interior and exterior use and can installed on virtually any surface. Products are suitable for residential and commercial projects. Stonepark products do not require brick ledges or structural footing support. Stonepark products should not be used below water level as chemicals may discolor product. The use of paving application is not recommended.

Colors

Colors Stonepark products use the best organic iron oxide and stone base mixture to give the best quality and durability on the market. Stonepark offers colour matching if you have a sample to get the best result for you. Colors may appear brighter and stronger on newly manufactured stones due to surface dust and curing time. Depending on weather and environment, curing process can take up to 12 months for colors to set to the original color.

Surface Dust

Surface dust occurs on highly pigmented/colored stones. As mentioned, Stonepark uses an organic iron oxide, when you receive your newly manufactured stone, you may notice some dusty coloring coming off the surface of the stone. This is a result of excess pigmentation, as the cement dries in production the coloring (iron oxide) is being absorbed by the cement. The cement has a certain absorption limit to suck in the pigment. Once it reaches the absorption limit the rest of the pigment stays on the surface of the stone and we call this surface dust. It takes time for it to wash off naturally or if you choose to, you may wash the stone 3-4 times manually. Every time it is washed, the color coming off will lessen and it will reach to a point that won't come off no more and original color will stay on the stone.

CSA/ASTM Codes

Stonepark products are manufactured to CSA and ASTM standards.

- A3000-13
- A179-14
- A371-14
- ASTM C270
- ASTM C482
- ASTM C578
- ASTM C847
- ASTM C979/979M
- ASTM C1063
- ASTM C1384
- ASTM C1670/C1670M
- ASTM C1780
- ASTM C1788
- ASTM E2556/E2556M
- ASTM F1667

Application Materials & Tools

- Stonepark Products
- Poly-modified cement **OR** masonry glue
- Non-polymer modified cement (If applicable)
- Mortar coloring (If applicable)

Tools

- Diamond blade or Wet saw
- Safety glasses/Boots
- Trowel
- Bristle Brush

Determine the Area

Before you begin you need to determine how much product you need. The calculations should be exact with 5%-10% for waste and cut offs. Keep in mind each stone covers area differently for both corners and flats.

1. Flats (SQFT): $L \times W = \text{Total sqft.}$



2. Subtract Openings: Door/Window $L \times W = \text{Opening Area sqft}$



3. Total SQFT – Open Area = **Actual SQFT (Flats required)**



4. Measure length of Corners then $\times 0.75 = \text{Wall Area Covered by Corners (WACC) in sqft}$
(For limestone block stones multiply by 1.75)



5. **Actual SQFT – WACC = Net SQFT of Flats Required**

Installation

1. **Preparation Work:** Open all boxes and spread out Stonepark products at the jobsite giving you a better visual of sizes, shapes and colours to choose from. Use small stones next to large ones, textured stones next to smooth and thick stones next to thin ones. Mixing stones will give you a nice variety and contrast that allows a desirable balance on the finished project.

*Note: 100sqft is a full set of stone styles

**Please see table below for color blends ratio

Stonepark Veneer Color Blends	
Name of Color	Percentage of Colors
Banff Blend	Lighter Grey: 40% Darker Grey: 30% Brown: 20% Black: 10%
Driftwood	Blended Dark Brown 35% Blended Buff & Black 25% Brown 25% Grey 15%
Barren Hill	Blended Brown 40% Brown 30% Beige 30%
Golden Oaks	Light Buff 50% Brown 35% Dark Buff 15%
Smokey Mountain	Blended Grey 50% Grey 35% Black 15%
Brunswick	Grey: 45% Black: 35% Brown: 20%
Collingwood	Blended Light Green & Black 40% Dark Green 35% Beige 25%
Rosedale Valley	Green/Buff 50% Light Green 30% Dark Green 20%
Grand Canyon	Beige: 55% Brown: 45%
Blue Mountain	Lighter Grey: 50% Darker Grey: 50%
Manitoba	Black: 60% Dark Green: 40%
Silver Oak	Grey: 60% Buff Grey: 40%
Valley Rose	Light Red 40% Dark Red 40% Blended Red & Black 20%
Diamond Black	Black 70% Dark Grey 30%
Mushroom Brown	Dark Brown 75% Dark Buff 25%
Cambridge	Red 60% Blended Red & Black 25% Black 15%
Harvest Blend	Yellow 55% Blended black and yellow 45%
Smoke Stack	Black 80% Dark Grey 20%

Installation Continued...

2. **Application:** Veneer stone cannot be installed all the way down to the ground, ensure you leave a 3” - 4” space from the ground. (Applies only for outdoor application)

Next step is to start applying your stone, we recommend you use a permanent or temporary base that will assist you with a leveled starting point. (Ex; 2x2 wood strip)

Ensure you make necessary cuts and edge straightening shavings as needed.

Always install your corner stones first, then apply flats working from bottom up. Be extra careful to keep your lines straight and leveled, check every few rows up. (With few exceptions of certain stone styles i.e., fieldstone and euro cobble which are more of a random fit style).

On the back of the stone, start by buttering the edges of the stone with the poly-modified cement, this discourages water from getting in behind the stone, which also makes it easier to install on surfaces. This technique is called the vacuum effect.

Press the stone firmly into place, with a gentle wiggling motion in order to bond properly. **Never** tap the stone into place, it may break the bond of the previously laid stone.

Once all stones are applied to surface, you can start applying your mortar joints (if applicable) using a grout bag and non-poly modified cement (Type-S recommended) pipe in cement in desired spaces as required. If desired you can tint the color of your mortar joints. Which may compliment the colour of the stone being installed. This can greatly enhance the appearance of the finished installation.

3. **Dress Stone:** When mortar joints are firm, but not completely dry; use a wooden or metal striking tool and remove excess mortar. At the same time firmly press mortar joints into the joints so edges are thoroughly sealed. Using a whisk broom brush mortar joints until smooth and all loosed mortar have been brushed away. Brush off any loose mortar that may have set on the face of your stone, ensure you never let mortar set over night.
4. **Control Joints:** The Control joint must be water proofed to protect the material under from water seeping through. Stonepark Products should overlap the joints from both sides. This allows air to get in and moisture to drain accordingly.
5. **Completion:** Clean any remaining mortar off stones with a dry brush. Blow away any dust left on the stone, from the cutting with a diamond blade and use a damp sponge to wipe off the stone, the dust may stain the stone if not removed.

Weather Conditions

We recommend installing Stonepark products in temperatures between 4 °C and 34 °C continuous temperature. Anything below 4 °C will make your cement freeze and the stone won't bond properly. Temperatures above 34 °C will quickly dry out the cement (Please refer to the instructions of cement manufacturer's specs as reference). To avoid that it's better applied in a shady area (If applicable). Store cement in a cool area, add cold water into the mixture to keep it cool, as well as when applied to your surface be sure to check and keep a spray bottle to keep it moist.

Maintenance

Like natural stone, manufactured stone requires a little maintained. Exterior applications where excessive dust or dirt accumulates should be washed with water occasionally. An annual inspection is recommended.

Cleaning

With a soft bristle brush use warm water, then rinse immediately with fresh water (multiple times if necessary). Do not use acid-based or wire brushes on Stonepark products.

Note: Apply this step minimum 4 days after installation.

Efflorescence

A natural occurrence in all cementitious products, which is a white powdery deposit that may appear on exterior masonry applications. This indicates there is excessive moisture in the wall or can be caused by de-icing chemicals. However, Stonepark products are manufactured with special key ingredients that help reduce the occurrence of efflorescence. To prevent efflorescence, you may seal the stone after installation which will make the occurrence of efflorescence to a minimal. In the event of efflorescence occurs, efflorescence cleaner that can be used.

Sealers

Sealers are recommended if installing near wet/damp areas which are prone for efflorescence to occur due to excessive moisture, like a kitchen, bathrooms, pools, etc. However, sealers are not required with dry surfaces. If efflorescence does occur, clean the stone and seal the product. Be cautious, depending on the type of sealer you use it may change the appearance of your stone. If you choose to seal your stone, we advise you to test your sealer on any extra stones or cut offs you may have after installation and allow it to dry for 24 hours to see the final outcome prior to sealing everything.

TERMINOLOGY

Sheathing Board: Material used in commercial or residential construction to form a foundation/building structural frame.

Such as Dens-glass, plywood, cement board etc.

Air/Water Barrier: There are different types of air/water barriers served for the same purpose it is to water proof sheathing.

Rain Screen System: Material that is placed on the air barrier which allows drainage and evaporation.

Continuous Insulation: Material that is used to keep heat from escaping.

Such as EPS/Mineral wall.

Cement Board: A cement board is a combination of cement and reinforcing fibers formed into sheets, of varying thickness that are typically used as a tile backing board.

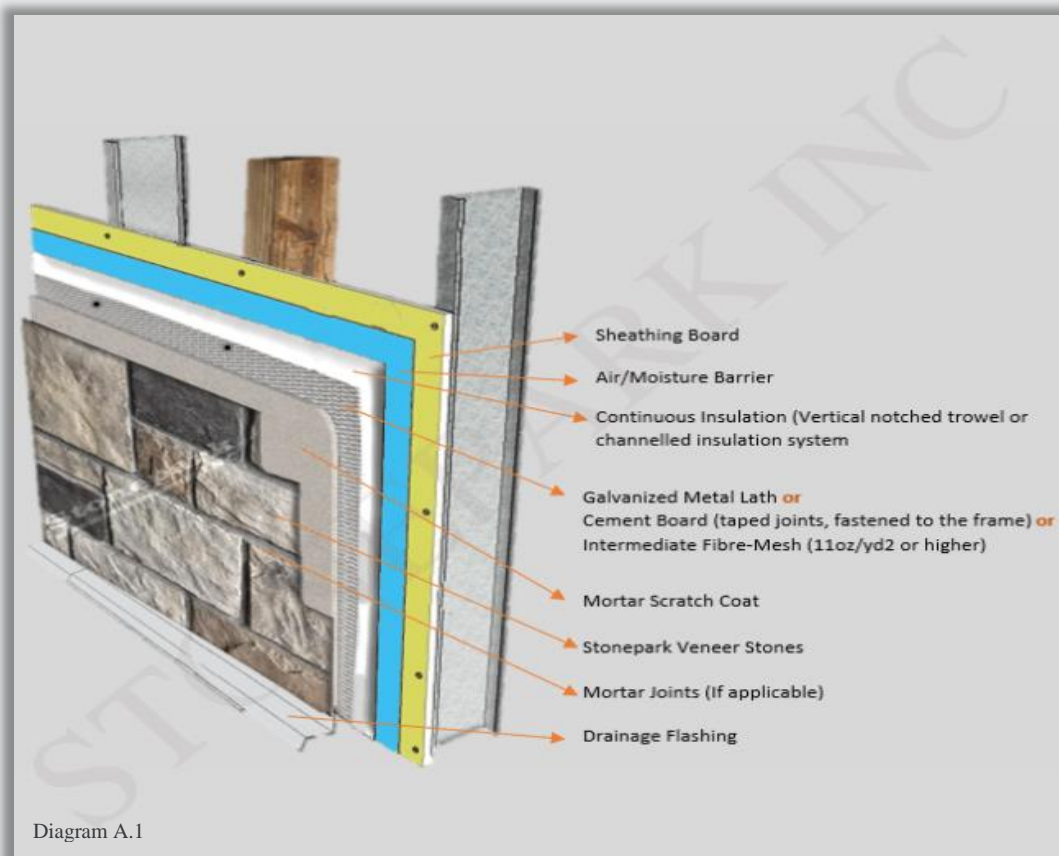
Galvanized Metal Lath: To hold the materials in place to the sheeting and make the bond stronger.

Intermediate Fibre Mesh: A mid-weight glass fibre-reinforced mesh available in a 1 metre (39") wide format used for reinforcing EIFS on main wall area locations.

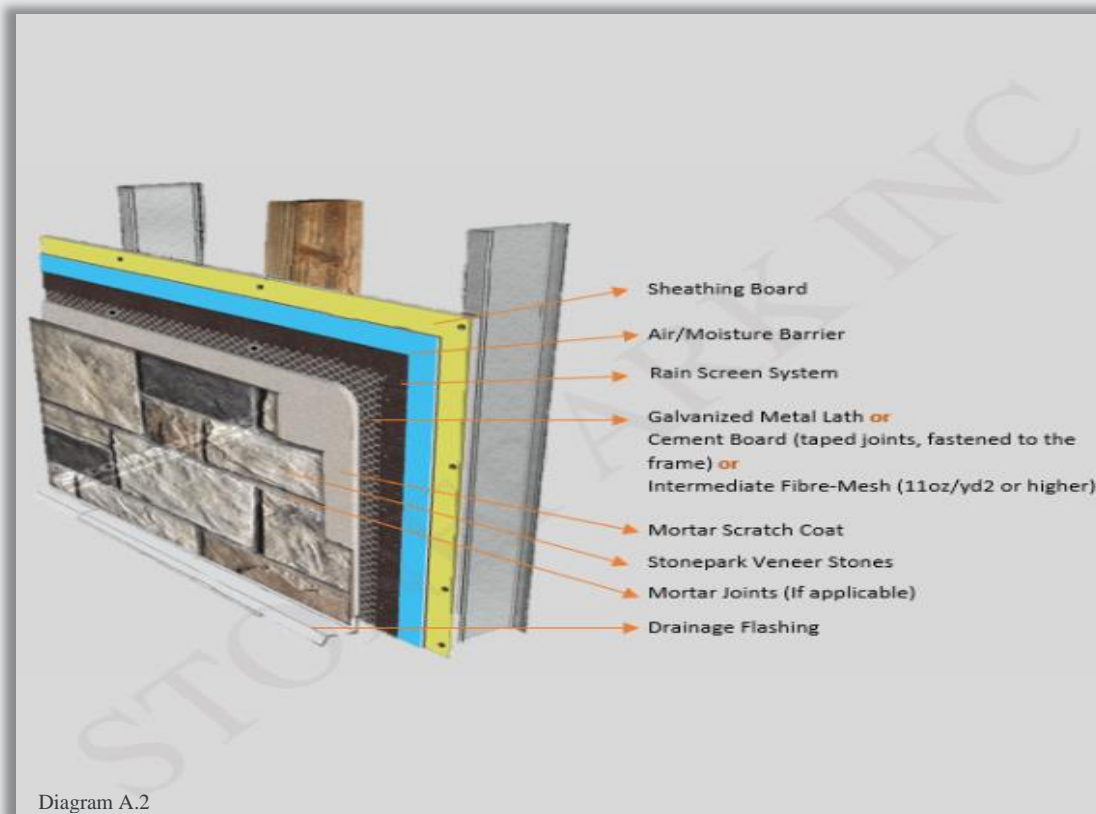
Scratch Coat: A thin poly-modified mortar layer to help the Stonepark product bond more effectively.

Mortar Joints (if applicable): To fill the spacing between Stonepark stones and bricks which is made up of non-polymer mortar cement.

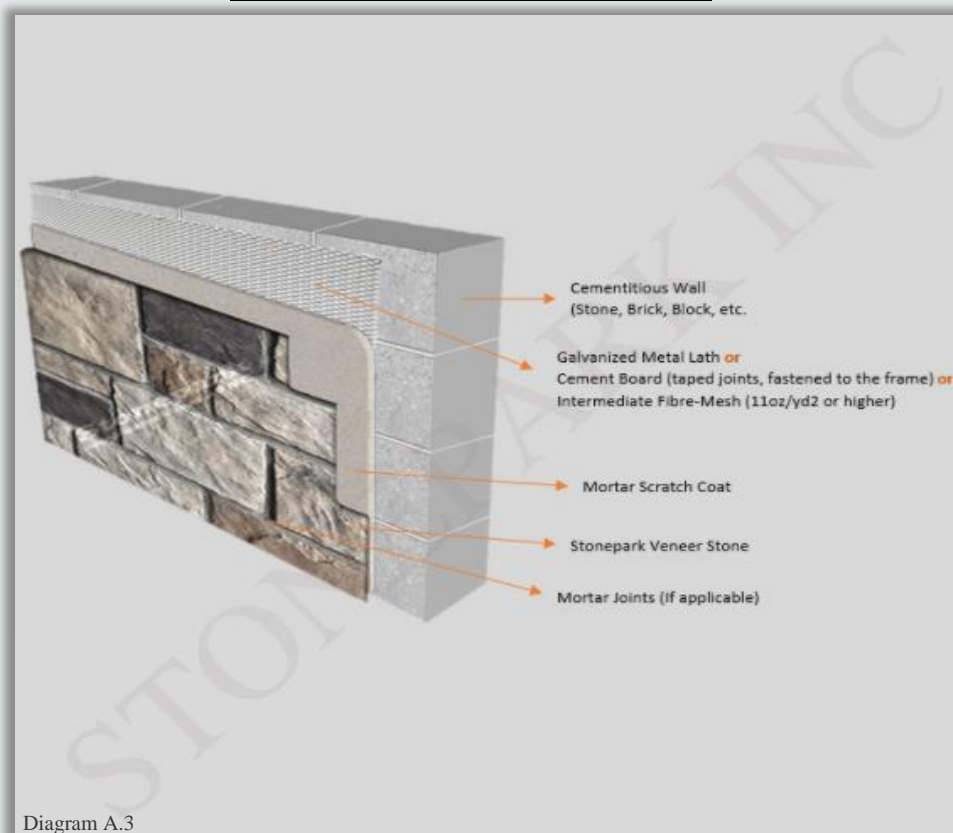
Continuous Insulation – Wood/Metal Frame Wall System



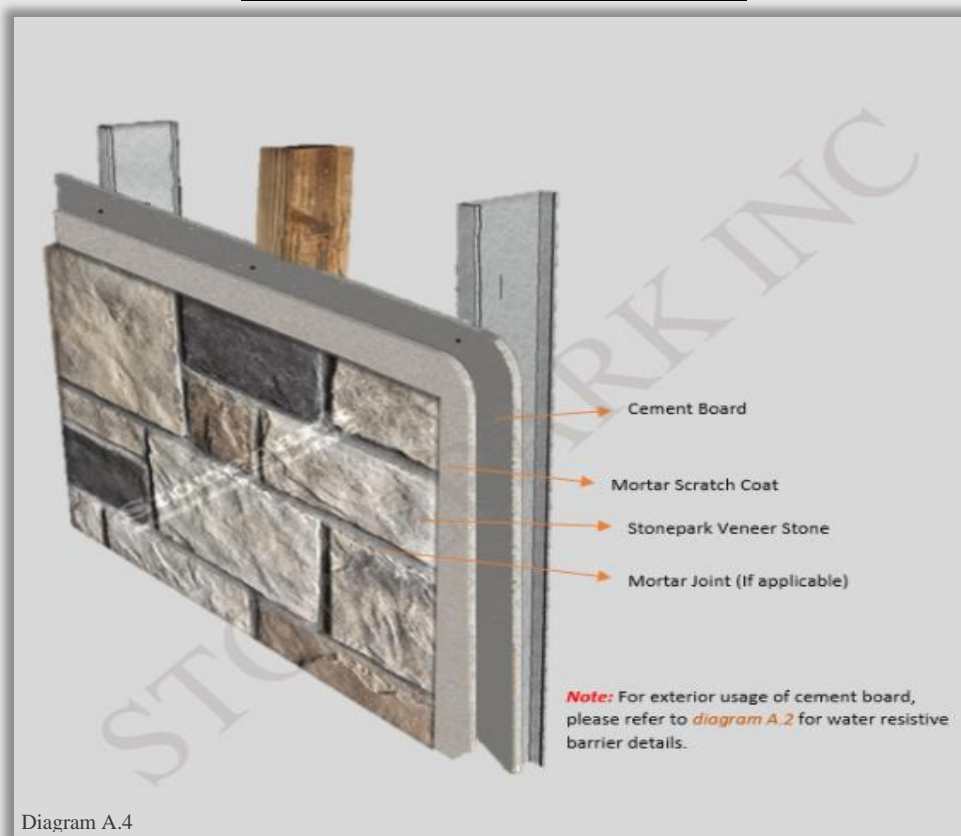
Typical Wood/Metal Framed Wall System



Stone/Brick/Concrete Wall System

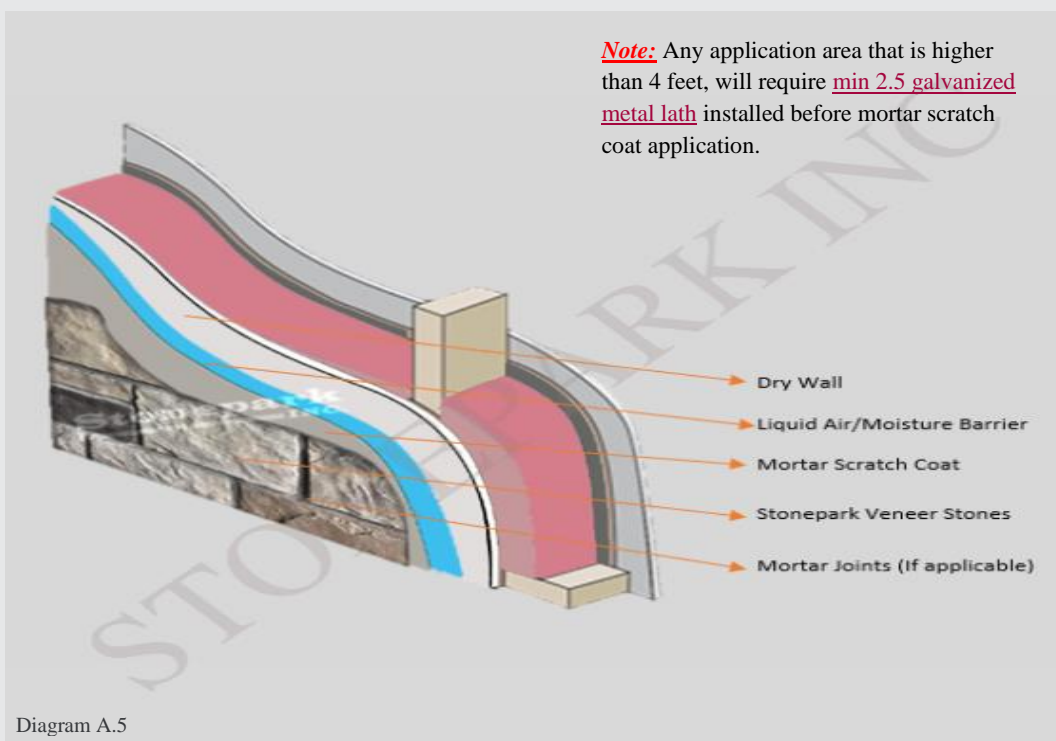


Cement Board (Interior Application)

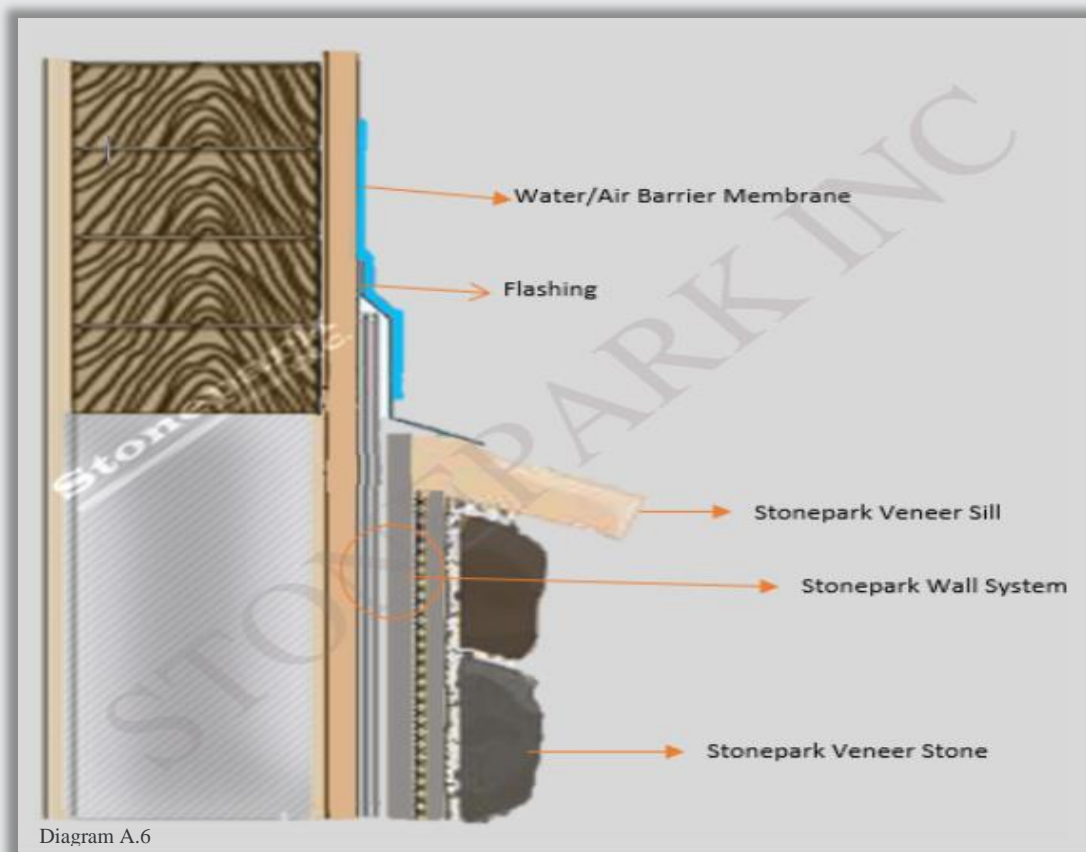


Interior Drywall Wall System

Note: Any application area that is higher than 4 feet, will require min 2.5 galvanized metal lath installed before mortar scratch coat application.



Sill Flashing System



STONEPARK WARRANTY
(50 Year Limited Warranty)

Our warranty is valid for 50 years from the date of purchase. Stonepark will only warrant its products that is installed-on structures which conform to local building codes and installed in accordance with the Stonepark's installation instructions. Only products manufactured by Stonepark Inc, and of which are determined to be defective, will be covered under this warranty. This warranty does not cover damages resulting from the following:

Improper Installation
 Structure Settlement
 Wall Movement|
 Surface discoloration due to air pollution or airborne contaminants
 Direct contact with harmful chemicals and salt
 Misuse or Abuse
 Natural Disasters
 Staining or Oxidation
 Paint
 Efflorescence
 Normal Weathering of the Surface
 (such as extreme weather conditions, overtime sun exposure)

Or any other causes that are out of the control of Stonepark Inc. This warranty covers only manufacturing defects manufactured by Stonepark Inc. Warranty coverage is limited to replacement of defective materials only. Stonepark Inc is not responsible for labor cost incurred during the removal and replacement of defective products. The products manufactured by Stonepark Inc, are not recommended for use in walkways, driveways, or any other ground surface and will not be covered by the warranty when used in these applications. Stonepark's warranty is limited to the original purchaser and may not be transferred.

Stonepark Inc reserves the right to make changes and/or discontinue any of its products without notice. If the product covered by warranty is no longer available a comparable product will be substituted the manufacturer's sole discretion.

Please notify Stonepark Inc, if you feel the manufactured stone has a defect. If the product is determined to be defective, Stonepark Inc, will replace the defective stone. This warranty will apply to the manufactured stone products only and not the installation since Stonepark Inc has no control of the installation.

STONEPARK INC STONE & BRICK VENEER MEASUREMENTS

Note: These are all approx. dimensions and ranges. Actual dimensions may slightly vary

*Tolerance allowance for out-of-square is ± 0 " - $\pm 3/16$ " difference in length of the two diagonal measurements.

** Flatness tolerance for surfaces vary from $\pm 1/16$ " - $\pm 3/16$ ".

	Length	Height	Corner Returns	Thickness
Hackett	4 ½" – 18"	2 ¼"-9 ½ "	Long Return: 9"-11" Short Return: 4"	5/8"-1 ¾"
Euro Castle *	3 ½ " – 15 ½ "	3 ¾ " – 11"	Long Return: 11" Short Return: 4"	5/8 " – 1"
Euro Limestone	4 ½ " – 17"	2"-6"	Long Return: 10 ½ " – 12" Short Return: 3 ½ " – 4"	5/8" – 1 ¾ "
Euro Cobble	5 ½ " – 16"	2 ½ " – 7"	Long Return: 9"-11" Short Return: 3"	5/8"-1 ½ "
Limestone	5 ½ " – 14"	2 ½ " – 8"	Long Return: 10 ½ " – 12" Short Return: 3"-4"	5/8"-1 ¾ "
Fieldstone	5 ½ " – 14"	3"-10 ¾ "	Long Return: 10"-11" Short Return: 3"-4 ½ "	½ " – 2"
Ledgestone	6"-17"	1 ¼ " – 4"	Long Return: 6"-11" Short Return: 4"	½ " – 2 ½ "
Stackstone	5"-16"	1 ¼ " – 4"	Long Return: 7 ½ " – 10 ½ "	5/8"-2"
River Rock	3"-12"	4"-10"	Long Return: 9"-10" Short Return: 3"-4"	¼ " – 2 ½ "
Limestone Block Smooth * **	23 ¼ "	11"	Long Return: 16" Short Return: 4"	1 1/8 "
Limestone Block Rough *	23 ¼ "	11"	Long Return: 16" Short Return: 5"	1 1/8 "
Mountain Ledge Quickfit *	5 ½ " – 16 ½ "	4"	Long Return: 6"-1- ¾ "	½ " – 2"
Midwestern Quickfit *	20 ¾ "	5"	Long Return: 11 ½ " Short Return: 5"	1"-2"
Rustic Quickfit *	8"-14"	4"	Long Return: 8 ½ " Short Return: 3 ½ "	½ " – 1 ½ "
Aucourant Brick * **	11 3/8"	2 ¼ "	Long Return: 11 ½ " Short Return: 3 ½ "	5/8"
King Size Brick *	11 1/8"	3"	Long Return: 10" Short Return: 2 ¾ "	½ "
Used Brick	7 ¼ "	2 ¼ "	Long Return: 7 ¼ " Short Return: 3"	5/8
European Brick	7 ½ "	2 ½ "	Long Return: 7 ½ " Short Return: 3 ½ "	5/8

Table 1

STONEPARK INC STONE VENEER ACCESSORIES MEASUREMENTS

Note: These are all approx. dimensions and ranges. Actual dimensions may Slightly vary.

	Width	Height	Length	Depth
Double Keystone	9"-14"	16 "		
Notched Keystone	5"-9 ½ "	8 ¾"		
Keystone Textured	3 ¾	8 ½"		
Keystone Rough	5 ¼ -10"	12"		
Keystone Beveled Smooth	4"-8"	9 ¾"		
Window Sill	2 ½ "		18"	3 ½ "
Trim Stone	4" & 6"		7 ¾" & 7 ¾"	
Arch Trim Stone	4"	7 ½"	7 ½ "	
Hearthstone	21" & 28"	21" & 28"		
Chateau Trim Left Corner	4 ¾ "		18"	
Chateau Trim Right Corner	4 ¾ "		18"	
Chateau Trim	4 ¾ "		18"	
Water Faucet		7 ½"	6"	1 ¼"
Electrical Box		7"	5 ½"	1 ¾"
Corner Quoin		7 ¾ "	Short Return: 8" Long Return: 12"	

Table 2

BOXING AND PACKAGING

Note: Due to some styles having different sizes, sqft/lmft may differ from approx. ± 0.50 - 0.75 sqft/lmft

Square foot/Linear foot coverage is based on installation with 3/8" - 1/2" mortar joint. (With the exception of all Quickfit styles, they must be installed without mortar joints.)

These are all approx. total weight may slightly vary.

<u>Stone Style</u>	<u>Flats (SQFT)</u>	<u>Weight (LBS): Flats</u>	<u>Corners (LNFT)</u>	<u>Weight (LBS): Corners</u>
Euro Castle	10 sqft/per box	65.7 lbs./per box	7 lnft/per box	66.1 lbs./per box
Euro Cobble	10 sqft/per box	71 lbs./per box	6 lnft/per box	63.5 lbs./per box
Euro Limestone	10 sqft/per box	76.3 lbs./per box	6 lnft/per box	74.3 lbs./per box
Fieldstone	10 sqft/per box	81.4 lbs./per box	6.5 lnft/per box	62.2 lbs./per box
Hackett	10 sqft/per box	90.4 lbs./per box	6.5 lnft/per box	75 lbs./per box
Ledgestone	10 sqft/per box	83.2 lbs./per box	6 lnft/per box	58 lbs./per box
Limestone	10 sqft/per box	84.4 lbs./per box	6 lnft/per box	68.3 lbs./per box
Limestone Block: Rough Faced	184 sqft/ per skid 92 pc/per skid Min 10sqft per order	18.1 lbs./per pc	56 pc/ per skid (Each pc covers approx. 1.6 sqft)	18.1 lbs./per pc
Limestone Block: Smooth Faced	200 sqft/ per skid 100 pc/per Skid Min 10sqft per order	17 lbs./per pc	72 pc/ per skid (Each pc covers approx. 1.75 sqft)	14.1 lbs./per pc
Mountain Ledge Quickfit	7.5 sqft/per box	73.6 lbs./per box	6 lnft/per box	68.1 lbs./per box
Midwestern Quickfit	100 sqft/ per skid Min 10sqft per order	1,079.2 lbs./per skid	4 lnft/ per box	77.2 lbs./ per box
River Rock	10 sqft/per box	74.3 lbs./per box	6 lnft/per box	61.1 lbs./per box
Rustic Quickfit	10 sqft/per box	79.8 lbs./per box	6 lnft/per box	61.9 lbs./per box
Stackstone	10 sqft/per box	84.4 lbs./per box	9 lnft/per box	81.3 lbs./per box
Aucourant Brick	20 sqft/per box	82 lbs./per box	15 lnft/per box	69.1 lbs./per box
European Brick	17.5 sqft/per box	80.7 lbs./per box	15 lnft/per box	67.2 lbs./per box
King Size Brick	20 sqft/per box	78.7 lbs./per box	15 lnft/ per box	61.3 lbs./per box
Used Brick	15 sqft/per box	86.3 lbs./per box	15 lnft/per box	74.4 lbs./per box

Table 3