

*"When only the best will do!"*



Cell: 208-859-4200

[les@castlerockx.com](mailto:les@castlerockx.com)

PO Box 1258 Meridian, ID 83680

## Product Data Sheet:

### ICAP Insulated, Mortar-less, Dekton Exterior Cladding System

The ICAP Panel system is manufactured by CastleRock Building Products, Inc. located in Meridian, ID 83642. The panel system is patented US Patent # 8,176,70,1, B2 and Canadian Patent #2,588,294 (A summary of the installation is in the specification and a detailed version with illustrations in the Installation Guide)

#### **Product Description and Code Compliance:**

The basic ASTM E84 product is porcelain adhered to a Type XV EPS foam panel with a foam thickness range between 1" and 6". The NFPA 285 version of the product incorporates a ½ in. layer of Type X gypsum between the foam and the porcelain. Porcelain is available with a variety of appearances from granite, marble or wood grains to stone & brick "look" are adhered to the foam. The porcelain thickness varies from 6mm to ½". The Large porcelain size. The basic ASTM E84 product is porcelain adhered to a Type XV EPS foam panel with a foam thickness range between 1" and 6". The NFPA 285 version of the product incorporates a ½ in. layer of Type X gypsum between the foam and the porcelain. Porcelain is available with a variety of appears from granite, marble or wood grains to stone & brick "look" are adhered to the foam. The porcelain thickness varies from 6mm to ½". The Large porcelain sizes are sold as ICAP series, the side version 6"x60" to 12"x 60" is sold as CastleRock Siding. Brick and Stone looks are sold as InsulStone. All series are available in the ASTM E84 version and the NFPA 285 version.

*"When only the best will do!"*



Cell: 208-859-4200

[les@castlerockx.com](mailto:les@castlerockx.com)

PO Box 1258 Meridian, ID 83680

Description:

**Foam Panel:**

EPS High-Density Panels: 60 PSI, 3-Lb./cu. ft. density, gray foam panels with 1-1/2" tongue on 2-sides of the panel and receptacle groove on the opposite 2 sides. The tongue design is offset to allow fasteners to penetrate the tongue and embed into the studs without interfering with the coupling of the groove. The design covers and hides the fasteners from visibility once the panels are installed.

**Dekton Fascia Panels:**

A Dekton brand compressed stone panel 8mm in thickness and of various dimensions up to 24" x 126" are laminated to the high-density foam panel using proprietary adhesive materials and methods.

**Landmark Stone and Brick Fascia Panels:**

Stone Panel Sizes:

1. 6" x 24" nominal
2. 6" x 48" nominal

Brick Panel Sizes:

1. 6" x 30" nominal
2. 6" x 42" nominal

The ICAP Cladding System has been tested by Intertek Laboratories and are manufactured under quarterly quality assurance inspection in compliance with a Factory Audit Manual (FAM) and is listed under the ETL® Mark. are sold as ICAP series, the side version 6"x60" to 12"x 60" is sold as CastleRock Siding. Brick and Stone looks are sold as InsulStone. All series are available as the ASTM E84 version and the NFPA 285 version.

---

PO Box 1258, Meridian, ID 83680

Phone: 208-859-4200

[les@castlerockx.com](mailto:les@castlerockx.com) or [accouting@icap-usa.com](mailto:accouting@icap-usa.com)

“When only the best will do!”



Cell: 208-859-4200  
[les@castlerockx.com](mailto:les@castlerockx.com)  
 PO Box 1258 Meridian, ID 83680

**PORCELAIN PERFORMANCE DATA**

**COLORED BODY PORCELAIN - Rectified Monocaliber**

PHYSICAL PROPERTIES	TEST ASTM	NORTH AMERICAN STANDARD A137.1*/ A137.3*	PORCELAIN TILES (REF A137.1)	PORCELAIN PAVERS FRONTIER20 (REF A137.3)	PORCELAIN VENEERS VENEER WORLD (REF A137.1)
			RESULTS	RESULTS	RESULTS
Water absorption *	C373	≤ 0.5%	COMPLY WITH ANSI A137.1	COMPLY WITH ANSI A137.3	COMPLY WITH ANSI A137.1
DCOF Average dynamic coefficient of friction **	ANSI A.326.3	As reported	IW - Interior, Wet	EW - Exterior, Wet	NOT APPLICABLE
Skid Resistance	EN 16165 (EX DIN 51097)	-	-	A+B+C	NOT APPLICABLE
	EN 16165 (EX DIN 51130)			R11	
Resistance to freeze/thaw cycling *	C1026	As reported	RESISTANT	RESISTANT	RESISTANT
Resistance to thermal shock	C484	As reported	RESISTANT	RESISTANT	RESISTANT
Warpage (edge)	C485	Warpage ± 0.4% or ± 0.05 in	COMPLY WITH ANSI A137.1	COMPLY WITH ANSI A137.3	COMPLY WITH ANSI A137.1
Warpage (diagonal)	C485	Warpage ± 0.4% or ± 0.07 in	COMPLY WITH ANSI A137.1	COMPLY WITH ANSI A137.3	COMPLY WITH ANSI A137.1
Wedging	C502	± 0.25% or ± 0.03 in	COMPLY WITH ANSI A137.1	COMPLY WITH ANSI A137.3	COMPLY WITH ANSI A137.1
Chemical resistance	C650	As reported	UNAFFECTED	UNAFFECTED	UNAFFECTED
Resistance to stain	C1378	As reported	UNAFFECTED	UNAFFECTED	UNAFFECTED
Thickness	C499	Range: 0.04 in	COMPLY WITH ANSI A137.1	COMPLY WITH ANSI A137.3	COMPLY WITH ANSI A137.1
Breaking strength	C648	250 lbf or greater	COMPLY WITH ANSI A137.1	-	COMPLY WITH ANSI A137.1
	C1050	2000 lbf	-	COMPLY WITH ANSI A137.3	-
Module of Rapture	C1050	5000 psi	-	COMPLY WITH ANSI A137.3	-

\* Average values referred to our production and related to the matt finish of the product.  
 \*\* As far as values relating to the matt finish of the product and to tests carried out by certified external laboratories whose results are available upon request at Headoffice, we are willing to check the lot you are interested in purchasing.  
 - Be sure to use tiles belonging to the same caliber.  
 - Test results are available on request.  
 - The information provided can be subject to change. Please refer to [lcusa.com](http://lcusa.com) for the latest, most accurate and up-to-date information.

PO Box 1  
[les@cast](mailto:les@cast)



“When only the best will do!”



Cell: 208-859-4200  
[les@castlerockx.com](mailto:les@castlerockx.com)  
 PO Box 1258 Meridian, ID 83680

**PORCELAIN BRICK PERFORMANCE DATA**

PHYSICAL PROPERTIES	TEST ASTM	NORTH AMERICAN STANDARD A137.1-	RESULTS
Water absorption *	C373	≤ 0.5%	COMPLY WITH ANSI A137.1
DCOF Average dynamic coefficient of friction **	BOT 3000 test	≥ 0.42	≥ 0.42
Resistance to freeze/thaw cycling *	C1026	As reported	RESISTANT
Warpage (edge)	C485	Warpage ± 0.4% or ± 0.05 in	COMPLY WITH ANSI A137.1
Warpage (diagonal)	C485	Warpage ± 0.4% or ± 0.07 in	COMPLY WITH ANSI A137.1
Wedging	C502	± 0.25% or ± 0.03 in	COMPLY WITH ANSI A137.1
Chemical resistance	C650	As reported	UNAFFECTED
Breaking strength	C648	250 lbf or greater	COMPLY WITH ANSI A137.1
Thickness	C499	Range: 0.04 in	COMPLY WITH ANSI A137.1

\* Average values referred to our production and related to the matt finish of the product.

\*\* As far as values relating to the matt finish of the product and to tests carried out by certified external laboratories whose results are available upon request at Headoffice, we are willing to check the lot you are interested in purchasing.

- Be sure to use tiles belonging to the same caliber.
- Test results are available on request.
- Landmark tiles can be slippery when wet. We recommend to make sure that the surface is always dry.
- The information provided can be subject to change. Please refer to <https://outdoor.landmarkceramics.com> for the latest, most accurate and up-to-date information.

PO Box 1

[les@cast](mailto:les@cast)



BLACK DARK

*"When only the best will do!"*



Cell: 208-859-4200

[les@castlerockx.com](mailto:les@castlerockx.com)

PO Box 1258 Meridian, ID 83680

<b>Maximum Size:</b>	
Length	126 inches
Width	24"
<b>Minimal Size:</b>	6
Length	6"
Width	4"
<b>Nominal Type XV Styrofoam Weight:</b>	
LBS Per Square Foot (Foam thickness 2")	.5 /LBS
LBS Per Square Foot (Foam thickness 6")	1.5/LBS
<b>Nominal Unit Weight:</b>	
<b>Dekton, Porcelain</b>	3.0 - 4.0 LBS/ Square Foot
<b>Landmark Porcelain Stone Unit</b>	3.0 - 4.0 LBS/ Square Foot
<b>Landmark Porcelain Brick Unit</b>	3.0 - 4.0 LBS/ Square Foot
<b>Porcelain Unit</b>	3.0 - 4.0 LBS/ Square Foot

---

PO Box 1258, Meridian, ID 83680

Phone: 208-859-4200

[les@castlerockx.com](mailto:les@castlerockx.com) or [accouting@icap-usa.com](mailto:accouting@icap-usa.com)

*"When only the best will do!"*



Cell: 208-859-4200  
[les@castlerockx.com](mailto:les@castlerockx.com)  
PO Box 1258 Meridian, ID 83680

<b>Type XV EPS Styrofoam</b>		
<b>Property</b>	<b>Test Method</b>	<b>Value</b>
<b>Density (nom. pcf)</b>	ASTM C303	3.0
<b>R-value (Resistance) - per inch (hr•ft<sup>2</sup>•°F)/BTU @ 25 °F @ 40 °F @ 75 °F</b>	ASTM C518 or ASTM C177	5.10 5.05 4.60
<b>C-Value (Conductance) - per inch BTU/(hr•ft<sup>2</sup>•°F) @ 25 °F @ 40 °F @ 75 °F</b>	ASTM C518 or ASTM C177	0.196 0.198 0.217
<b>Compressive Strength (psi, 10% deformation)</b>	ASTM D1621	60
<b>Flexural Strength (min. psi)</b>	ASTM C203	75
<b>Dimensional Stability (maximum %)</b>	ASTM D2126	2.0
<b>Water Vapor Permeance (max. perm., 1 inch)</b>	ASTM E96	2.5
<b>Water Absorption (max. % vol.)</b>	ASTM C272	2.0
<b>Capillarity</b>	–	none
<b>Flame Spread</b>	ASTM E84	< 20
<b>Smoke Developed</b>	ASTM E84	150-300

PO Box 1258, Meridian, ID 83680

Phone: 208-859-4200

[les@castlerockx.com](mailto:les@castlerockx.com) or [accounting@icap-usa.com](mailto:accounting@icap-usa.com)

*"When only the best will do!"*



Cell: 208-859-4200

[les@castlerockx.com](mailto:les@castlerockx.com)

PO Box 1258 Meridian, ID 83680

**1.3 Manufacturer's Information**

	<b>Applicant/Listee of Product and Listing</b>
Company Name:	CastleRock Building Products, Inc.
Address:	PO Box 1258, Meridian, ID 83680 100 S. Adkins Way, Suite 104 Meridian, ID 83642
Contact Person:	Les Cullen
Alternate Contact:	N/A
Tel:	208-859-4200
Fax:	208-639-6422
Email:	<a href="mailto:Les@castlerockx.com">Les@castlerockx.com</a>
Hrs. of Operation:	8 am to 4:30 pm Monday - Friday

**Panel Joints:**

Tongue is composed of a 3/4" x 1-1/2" tapered tongue which inserts into a corresponding shape groove to wedge into a tightly fit joint.

**Fasteners, sheathing and panel direction:**

**Metal Framing:**

Fasteners of corrosion resistant #10 x 3" torque-head TEK style screws for metals framing with a 1-1/4" diameter corrosion resistant fender washer located on the tongue flange nearest the body shoulder of the panel which separates the body of the panel from the tongue. The fastener penetrates through the foam and into the metal or metal studs located a minimum of every 16" on center. Vertical installation methods include attachment to horizontal metal hat channels located every 16" vertically or CastleRock corrosion resistant staples into OSB/plywood sheathing.

*"When only the best will do!"*



Cell: 208-859-4200

[les@castlerockx.com](mailto:les@castlerockx.com)

PO Box 1258 Meridian, ID 83680

**Wood Framing:**

Wood framing attaching to studs

1. #10 x 3" Corrosion resistant deck screws into the wooden stud framing located on 16 inch centers and penetrating a 1-1/4" diameter corrosion resistant fender washer located on the tongue flange nearest the body shoulder of the panel which separates the body of the panel from the tongue. The fastener penetrates through the foam and into the wooden stud a minimum of every 16 ".
2. 16-gauge corrosion resistant staples with a 1" crown x 2-1/2 leg length located every 4" through the tongue and into the OSB/plywood sheathing without required attachment to studs. Specialized staples and staple guns are available from CastleRock Building Products Phone: 208-859-4200 or [les@castlerockx.com](mailto:les@castlerockx.com).

**Starter Metal (SSS-101):**

This part is required at the base of the wall and sometimes above window or protrusions. The starter metal is installed first to provide a straight surface for the first row of panels. A long level or straight edge is usually placed on top of the first row of panels to ensure straightness before continuing up the wall with additional panels

**Window/Door/Opening Transitions:**

**Option #1:**

**Metal window/door/opening flashings:**

Colored metal flashings, usually matching the color of the window body are installed on all sides of the windows as water management flashings and the sill at the bottom of a window.

*“When only the best will do!”*



Cell: 208-859-4200

[les@castlerockx.com](mailto:les@castlerockx.com)

PO Box 1258 Meridian, ID 83680

**Option #2:**

**Porcelain Returns:**

Porcelain returns are more expensive than metal. Porcelain returns require different flashings. A butt joint is usually used with the face porcelain “proud”. Metal flashings still provide the water management and porcelain return are cosmetic. Details are available in the Installation Guide.

**Outside and Inside Corners:**

Outside corners are available in the following options.

**Option #1:**

1. **Butt fit** outside corners can be ordered from the factory or made to fit on-site (See Installation Guide).
2. **Inside corners** are “cut to fit” on-site. (See Installation Guide).
3. **Metal flashing** can be used to cover the outside joint. (See the Installation Guide)

**Option #2:**

Corners can be installed by field cut miters or ordered from the factory for outside corners. See the “Installation Guide for details”.

*“When only the best will do!”*



Cell: 208-859-4200

[les@castlerockx.com](mailto:les@castlerockx.com)

PO Box 1258 Meridian, ID 83680

**Soffit and parapet:** Terminating at these points usually requires flashings, backer rod and sealant to provide a watertight termination.

A soffit termination usually required cutting the adjoining panel to be cut ½”-3/4” short to allow for the tongue and groove interlock to couple and slide into place. This will leave a void between the top panel and the soffit with no easy way to fasten it into place.

Step #1: Install backer rod and sealant to fill the void.

Step #2: Use a 1-1/2” angle shaped piece of sheet metal attached to the soffit to retain the top panel tightly against the wall and hide the sealant joint.

**Parapet Termination:**

Metal flashing caps are usually used to terminate at the top of a parapet wall. Extend the down the sides at least 4” and sealed to prevent water intrusion into the structure.

**Transitions to other claddings:**

Depending on the elevation plane, custom flashings (typically form Z metals) will be designed by others to comply with the unique conditions.

See the “Installation Guide” for further illustrations and details.

For additional support contact CastleRock Building Products at:

[les@castlerockx.com](mailto:les@castlerockx.com)

208-859-4200