

St. Croix Stone, Inc.

Quality Control Dept.

Revised: 07/18/06 by Brian Norton

Test Lab - Braun Intertec of Minneapolis. Test results available upon request.

Testing Data

ICC-ES Criteria (AC51)

Test type	St. Croix Stone	AC51 Requirement
Compressive Strength	5200 psi	1800 psi
Flexural Strength	Pending	N/A
Tensile Strength	Pending	N/A
Absorption	15.4%	Less than 22 %
Freeze/Thaw (% loss)	1.20%	Less than 3 %
Shear Bond w/ Scratch Coat	Pending	50 psi
Density	79 pcf	N/A
R-Value (1.75 in. thickness)	>.7	.355 per inch of thickness
Flame Spread Index	0	N/A
Unit Weight/SF (Saturated)	10-12SF	15lb/SF Max

Summary Comments: The chart above was created to demonstrate the performance of St. Croix Stone manufactured products in comparison to industry standards. In 2001, the International Code Council (ICC) drafted & ratified documents outlining acceptance criteria for precast stone veneer. Known as AC51, this document specifically outlines several aspects of precast stone veneer. In the table below, all ASTM Test methods are listed. These represent the specific tests performed by an independent test laboratory. The definitions listed are general concepts meant to help consumers understand each test objective.

ASTM	Test Type	Definition
C39	Compressive Strength	Method for determining material behavior under crushing loads. Load pressure is increased until failure of specimen.
C348	Flexural Strength	Maximum stress developed in a specimen just before it cracks or breaks during a flexure test. In flexure (bending), the specimen's "top" will experience compression while the bottom will have tension.
C190	Tensile Strength	Limit of a material to withstand tensile stress without causing failure. Tensile stress occurs when an object is forced to expand (pulled apart).
C140	Absorption %	Ability of moisture transfer into the stone within a fixed period of time. This is calculated as a percentage of unit weight, dry versus wet.
C67	Freeze/Thaw % Loss	Test used to replicate harsh freeze/thaw environmental conditions, forecasting the potential durability of a material exposed to such conditions over time.
C482	Shear Bond w/ Scratch Coat	Test method used to calculate shear bond strength of materials when applied in a specific process.
C567	Density	The ratio of mass to volume when compared to some standard value or constant. Expressed in pounds per cubic foot.