EIFS

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Exterior Insulation and Finish Systems is an insulating, decorative and protective finish system for exterior walls that can be installed on any type of construction. It is the only exterior wall covering that insulates and provides weather protection in a selection of shapes, colors, and textures that can replicate almost any architectural style or finish material, or stand by itself as an architectural finish. While similar in appearance to stucco, EIFS is an exterior cladding system that consists of components and installation requirements very different from traditional stucco

While giving the appearance of stucco, EIFS is actually a multi-layered wall system that consists of the following components:

- Insulation Board - Made of Expanded polystyrene (EPS) (or similar material), which is secured to the exterior wall surface.
- Base Coat - Applied on top of the insulation and reinforced with fiber mesh.
- Finish Coat - Applied on top of the base coat giving a durable, crack-resistant finish.

The first half of the acronym, "Exterior Insulation" is derived from the fact that the first component installed is an EPS foam insulation board. The foam board is mechanically and/or adhesively attached to the exterior sheathing of the home. In this respect the foam board serves as an exterior insulating layer. Over this foam board is applied a synthetic base-coat material in which is embedded a fiberglass reinforcing mesh. This is typically referred to as the "base-coat". On top of the base coat is applied one or more "finish coats". This is the exterior layer that gives the product its stucco-like appearance. Hence the second part of the acronym "Finish Systems".

EIFS provides many advantages that other exterior finishes and sidings do not. Among these are superior energy efficiency and great design flexibility. Studies have shown that EIFS can reduce the air infiltration in a wall by as much as 55%, when compared to standard brick or wood construction. One should bear in mind that an EIFS system is a non-structural component of the wall. In other words, it is not designed to be weight bearing.

Most EIFS now incorporates some sort of a drainage plane to allow for moisture drainage.

Amvic Building System is an approved manufacturer of Exterior Insulation and Finish System (EIFS), using the stick specification guidelines of the EIFS Council of Canada and is an approved original component supplier to the leading stucco manufacturers.

Amvic's manufacturing process for EIFS Insulation board is industry leading, we are one of the few companies that place the large pre-cut billets into specially designed curing rooms to ensure our EIFS insulation board exceeds industry standards for moisture content.

The Amvic EIFS insulation board comes in 2' x 4' sheets in thickness's from 0.5" to 6" standard sizes. We also manufacture drainage systems to stucco manufacturer's specifications.

Physical Properties of Amvic EIFS Insulation Board				
Standard	**Description**	**Product Designation**		
		Type I	**Type II**	**Type IV**
ASTM D1622	Density lb/ft^3 Density Kg/m^3	1.0 lb/ft^3 16.0 Kg/m^3	1.5 lb/ft^3 24.0 Kg/m^3	2.0 lb/ft^3 32.0 Kg/m^3
ASTM C518	R-Value/1-inch @ 75˚F RSI/25mm @ 24˚C	3.9 ft^2·h·˚F/BTU 0.65 (m^2·˚K/W)	4.1 ft^2·h·˚F/BTU 0.70 (m^2·˚K/W)	4.3 ft^2·h·˚F/BTU 0.76 (m^2·˚K/W)
ASTM STP1320	R-Value/1-inch @ 0˚F RSI/25mm @ -18˚C	4.6 ft^2·h·˚F/BTU 0.81 (m^2·˚K/W)	4.8 ft^2·h·˚F/BTU 0.84 (m^2·˚K/W)	5.0 ft^2·h·˚F/BTU 0.88 (m^2·˚K/W)
ASTM D1621	Compressive strength at 10% strain	12.5 psi (86.0 kPa)	22.4 psi (154.6 kPa)	37.3 psi (257.4 kPa)
ASTM C203	Flexural strength	27.8 psi (192.0 kPa)	45.0 psi (310.0 kPa)	63.2 psi (436.0 kPa)
ASTM D2842	Water absorption (% by volume)	3.8%	1.87%	1.57%
ASTM E96	Water vapor permeance	282.0 ng/Pa.s.m^2 (4.95 perms)	187.23 ng/Pa.s.m^2 (3.29 perms)	104.29 ng/Pa.s.m^2 (1.83 perms)
ASTM D2126	Dimensional Stability Linear change	-1.5%	-1.5%	-1.3%
ASTM D2863	Limiting Oxygen Index	>24%	>24%	>24%

Surface Burning Characteristics of Amvic EIFS Insulation Board in accordance with CAN/ULC-S102.2			
Material Details		**Classification or Rating**	
Thickness (mm)	**Density (Kg/m3)**	**Flame Spread Index**	**Smoke Developed**
25 (Min)	16	225	475
25	22	240	500
50	22	200	380
75	22	205	495
100	22	175	Over 500
25-100	32	220	Over 500

Expanded Polystyrene (EPS) is a combustible material. When tested in accordance with CAN/ULC S102.2, combustible material of greater density or increased thickness will increase fuel loading and hence increase the measured flame spread ratings