

EXCERPTS FROM
CHIEL EPS FOAM BEAD RESIN
TESTING DOCUMENT NO. 3025950-1

RE. EPS FOAM VAPOUR PERMEANCE TESTING OF
NUDURA EPS FOAM TO ASTM E-96

AS A COMPONENT OF
NUDURA™ INTEGRATED BUILDING TECHNOLOGY
INSULATED CONCRETE FORMS

CONDUCTED AT PLASTIQUES CELLULAIRES POLYFORM
MANUFACTURING FACILITY



NOTE:

ON NOV 1st, 2002, THE COMPANY FORMERLY KNOWN AS "AIM BUILDING PRODUCTS INC." BECAME INCORPORATED UNDER THE COMPANY NAME OF "NUDURA CORPORATION"

Description

Foam Description: Nudura I.C.F. High Performance Wall System Insulating Concrete Forms manufactured at Plastiques Cellulaire Polyform Granby, Quebec.

Material: Expanded polystyrene foam manufactured from one (1) bead type identified as Starex SF-301H Cheil Industries.

Foam Panel Dimensions: 18" high X 96" long X 2-5/8" thick each side

Color: Green

Web Description: Polypropylene reinforcing webs are cast into EPS foam to create a positive connection between interior and exterior EPS walls and to serve as an anchor point for surface finishing materials.

Web Material: Injection Molded Polypropylene manufactured by Polymax, Granby Quebec

Web Spacing: Every 8" (203 mm) horizontally

Web Color: Black

Summary of Test Results

Starex SF-301H Cheil Industries

Property	CAN/ULC-S701-01 Requirement Number	Requirement	Result	Comment
Flexural Strength	5.1.1 table 1	Min 240 kPa	276 kPa (40.1 lb/in ²)	Met requirement
Compressive Strength	5.1.1 table 1	Min. 110 kPa	128 kPa (18.6 lb/in ²)	Met requirement
Water Vapour Permanence	5.1.1 table 1	<300 ng/Pa.s.m ² @ a thickness of 25 mm	96 ng/Pa.s.m ² @ a thickness of 25 mm	Met requirement
Dimensional Stability	5.1.1 table 1	Max. 1.5%	-0.47% Max. change	Met requirement

Test Results

1. Water Vapour Permeance: ASTM E 96

Starex SF-301H Cheil Industries

	Sample #1	Sample #2	Sample #3	Average
Thickness (mm)	25.0	25.5	25.0	
Surface area (m ²)	0.027	0.027	0.027	
Duration (h)	312	312	312	
Test Temperature (°C)	23	23	23	
Relative Humidity (R1-R2)(%)	53	53	53	
Saturation Pressure (Pa)	2810.4	2810.4	2810.4	
Moisture Gain (g)	3.94	4.13	4.88	
WVT (g/h.m ²)	0.468	0.490	0.579	
Water vapour Permeance (ng/Pa.s.m ²)	87	91	108	95
Permeability (ng/Pa.s.m)	2.18	2.32	2.70	
Estimated water Vapour Permeance (ng/Pa.s.m ²) @ a thickness of 25 mm	87	93	108	96
Requirement				<300ng/Pa.s.m ² @ a thickness of 25 mm