

Air Barrier:

Research shows that 40% of building heat loss can be attributed to air leakage conducted through the building envelope. Tests for air leakage conducted by an independent laboratory recognized by the CCMC show that POLARFOAM™ PF-7300-0 SOYA exceeds 500 times the requirements of the NBC as an air barrier material.

These results confirm that POLARFOAM™ PF-7300-0 SOYA is one of the highest performance air barrier materials on the market and this feature is the key element in an air barrier system that meets the objectives of the NBC.

By creating a sealed air barrier and eliminating air exfiltration, POLARFOAM™ PF-7300-0 SOYA does not allow wall condensation that can often result in mold, mildew and wall degradation. POLARFOAM™ PF-7300-0 SOYA fully adheres to provide a seamless, monolithic air barrier that conforms to irregular shapes and allows easy detailing around penetrations. Its closed cell rigid polyurethane foam formulation creates an effective, rigid, seamless and durable air barrier.

- National Building Code requirements :
Air barrier material = 0.02 L / (s.m²) @ 75 Pa
- Tested results of POLARFOAM™ PF-7300-0 SOYA
Air barrier material, thickness 25 mm = 0.00004 L / (s.m²) @ 75 Pa

Vapour Barrier:

Water vapour permeance is the speed to which water goes through an homogeneous material. The National Building Code, stipulates that a vapour barrier must have a water vapour permeance less than 1.05 PERM (60 ng/Pa*s*m²).

- 75 mm of POLARFOAM™ PF-7300-0 SOYA spray applied on an exterior gypsum board = 44 ng / Pa*s*m² (0.77 PERM).
- 75 mm of POLARFOAM™ PF-7300-0 SOYA spray applied on concrete blocks = 22 ng / Pa*s*m² (0.38 PERM).

When a building envelope assembly contains only a plastic foam as insulating material and that the permeance rate of this assembly is less than 1.05 PERM (60 ng / Pa*s*m²), this assembly does not need any additional vapour barrier.

As far as sustainability of the building envelope is concerned, it is imperative to have a perfect continuity of the air barrier material which is much more important than the performance of the vapour barrier.



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You have our teams assurance of quality and service.



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A HIGH PERFORMANCE PRODUCT APPLIED EXCLUSIVELY BY LICENSED PROFESSIONALS.

The CCMC assigned design thermal resistance is 1.05 RSI per 25.4 mm or R6 per inch. The user should verify the local fire and building regulations for covering the surface of spray applied polyurethane insulation to protect it against fire, excessive heat and excessive moisture. The foam product made from these chemicals is combustible. Do not expose to flames or other ignition sources. The information, recommendations and data contained in this document are believed to be accurate, however, no warranties, guarantees or representations of any kind or nature whatsoever are made as to the accuracy, completeness or suitability thereof for any specific purpose and PFSI Inc. makes no warranty of results to be obtained thereof or that such use will not infringe any patent. It is expressly understood that PFSI Inc. shall not be deemed or held liable upon or under any representation, recommendation or data herein.



ZERO OZONE DEPLETION SUBSTANCE

RECYCLED PLASTICS

VEGETABLE OIL

ECOLOGICAL INSULATION

The All-In-One Wall System



- Air Infiltration – A Vicious Circle
- In cool weather, heat escapes
- In warm weather, cool air escapes
- Air infiltration takes away your energy efficiency

INSULATION, AIR BARRIER & VAPOUR BARRIER

CCMC Approved Insulation Material, Air Barrier Material #13244-L and Vapour Barrier



INSULATION MADE FROM RECYCLED PLASTICS AND SOYA

The All-In-One Insulating

and Air Barrier Wall System

POLARFOAM PF-7300-0 SOYA

proven performance

THE PERFECT SOLUTION TO BUILDING INSULATION DESIGN PROBLEMS

POLARFOAM™ PF-7300-0 SOYA is being used by Architects to design buildings that are attractive and comfortable for the occupants, inexpensive to operate and maintain and remain so for the life of the building. POLARFOAM™ PF-7300-0 SOYA insulating foam solves building insulation design problems for architects, because it combines proven thermal protection while also offering superior air barrier properties.

IDEAL FOR NEW OR RETROFIT CONSTRUCTION

POLARFOAM™ PF-7300-0 SOYA is a spray applied cellular plastic that forms a continuous, monolithic barrier on walls, around corners, and on all contoured surfaces, and protrusions. It adheres directly to the substrate forming a seamless permanent coverage over and around even the most difficult shapes. The POLARFOAM™ PF-7300-0 SOYA System is ideal for insulation either new or retrofit construction projects.

Due to its fast installation, POLARFOAM™ PF-7300-0 SOYA decreases your construction costs while increasing the energy efficiency of your building envelope. The installation of 75 mm of POLARFOAM™ PF-7300-0 SOYA on the exterior side of the walls can reduce up to 50% the energy consumption for heating or cooling purposes and increases the occupants comfort.

**ENERGY EFFICIENT
INSULATING MATERIAL
WITH HIGHEST R-VALUE RATING**

the science behind the science

POLARFOAM PF-7300-0 SOYA SUSTAINABLE DEVELOPMENT

POLARFOAM™ PF-7300-0 SOYA an environmentally friendly high performance, closed cell rigid polyurethane foam used for insulation, is spray-applied exclusively by certified applicators in accordance with the standards CAN/ULC S705.2 (Standard for Thermal Insulation Spray Applied Rigid Polyurethane Foam, medium density – Applicator's responsibilities) with third party quality control inspection throughout Canada.

POLARFOAM™ PF-7300-0 SOYA is fully self-adhered to the substrate which makes your building much stronger and much stiffer. There is no air space between the insulation material and the substrate, no joints, no glue, no mechanical fasteners and no convection air movement. With POLARFOAM™ PF-7300-0 SOYA, you get 100% of the insulating value during the lifetime of the building.

POLARFOAM™ PF-7300-0 SOYA is ideal for use in walls, below grade exterior applications and cathedral ceilings. In addition scientific tests prove that POLARFOAM™ PF-7300-0 SOYA resists molds and mildew and does not contribute in any way to their growth.

POLARFOAM™ PF-7300-0 SOYA has been designed for use in the following building types:

- Commercial
- Residential
- Industrial
- Agricultural
- Institutional

THE IDEAL BUILDING ENVELOPE SYSTEM!

POLARFOAM™ PF-7300-0 SOYA is a system used to create a highly effective envelope which includes these three essential elements in one application:

- A High R value
- A Perfect air barrier
- A vapour barrier

INSULATION:

Independent laboratory tests confirm the on site long term thermal performance of POLARFOAM™ PF-7300-0 SOYA. Using POLARFOAM™ PF-7300-0 SOYA spray foam insulation in the building envelope system increases thermal performance of the building envelope. The long term minimum insulating value (LTTR) is : (R-6 / 1") RSI 1.05 / 25 mm.

