



ICC-ES Listing Report

Reissued January 2025

ESL-1051

This listing is subject to renewal January 2026.

CSI: DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
Section: 07 21 00—Thermal Insulation

Product Certification System:

The ICC-ES product-certification system includes evaluating reports of tests of standard manufactured product, prepared by accredited testing laboratories and provided by the listee, to verify compliance with applicable codes and standards. The system also involves factory inspections, and assessment and surveillance of the listee's quality system.

Product: Solarpol Expandable Polystyrene Beads, Grade F

Listee: HYUNDAI ENGINEERING PLASTICS CO., LTD.

Evaluation: Solarpol Expandable Polystyrene Beads, Grade F, when molded into EPS insulation boards with nominal densities and thicknesses no greater than those specified in Table 1 below, were evaluated when tested to the following standards:

- ASTM E84-04, Standard Test Method for Surface Burning Characteristics of Building Materials, ASTM International.
- UL 723-03 (revisions through May 2005), Standard for Test for Surface Burning Characteristics for Building Materials, Underwriters Laboratories, Inc.

TABLE 1—INSULATION BOARD NOMINAL DENSITY AND MAXIMUM THICKNESS

TYPE ¹	NOMINAL DENSITY (pcf)	MAXIMUM THICKNESS (inches)
I	1.0	6
VIII	1.25	5
II	1.5	5
IX	2.0	6

For **SI**: 1 pcf = 16.018 kg/m³, 1 inch = 25.4 mm.

¹Type is as designated in ASTM C578-06.

Findings: Solarpol Expandable Polystyrene Beads, Grade F, when molded into EPS insulation boards, have a flame-spread index of 25 or less and a smoke-developed index of 450 or less, in accordance with ASTM E84 / UL 723, as referenced in the applicable sections of the following code editions:

- 2006 *International Building Code*®
Applicable Section: 2603.3
- 2006 *International Residential Code*®
Applicable Section: R314.3

Identification:

1. The bead containers must bear a label noting the product designation; the name and address of Hyundai Engineering Plastics Co., Ltd.; the ICC-ES listing number (ESL-1051) and/or ICC-ES Evaluation Report number ([ESR-1640](#)), and when applicable, the ICC-ES listing mark.

2. The report holder's contact information is the following:
HYUNDAI ENGINEERING PLASTICS CO., LTD.
#665 BUKOK-DONG, NAM-KU
ULSAN CITY, 680-110
SOUTH KOREA
www.hyundai-ep.com

Installation: The product must be installed in accordance with the applicable codes.

Conditions of listing:

1. Additional attributes and their applications can be found in the ICC-ES Evaluation Report, [ESR-1640](#).
2. The listing addresses only conformance with the standards and code sections noted above.
3. Approval of the product's use is the sole responsibility of the local code official.
4. The listing applies only to the materials tested and as submitted for review by ICC-ES.