

Product Information Bulletin

EnerSpan® and DuroSpan® GPS Insulation Intertek Code Compliance Research Report CCRR-1033

EnerSpan® insulation is rigid, closed cell graphite-enhanced insulation with a silver-gray color that meets or exceeds requirements for expanded polystyrene (EPS) insulation manufactured to ASTM C578¹ and CAN/ULC-S701². **EnerSpan** insulation is manufactured using **Neopor® F5300 Plus**, a graphite-enhanced expandable polystyrene (GPS) resin provided by **BASF**.

The graphite within the silver-gray cellular structure of **EnerSpan** insulation reduces radiation heat transfer and results in an enhanced thermal resistance compared to standard white EPS insulation manufactured to ASTM C578 and CAN/ULC-S701.

Intertek Code Compliance Research Report CCRR-1033 addresses **EnerSpan** insulation compliance with the following codes:

- 2009, 2012 and 2015 International Building Code® (IBC)
- 2009, 2012 and 2015 International Residential Code® (IRC)
- 2012 International Energy Conservation Code® (IEEC)
- National Building Code of Canada 2010 and 2015.
- 2012 International Green Construction Code (IgCC).

CCRR-1033 addresses evaluation for the following specific requirements:

1. **DuroSpan GPS** insulation: **EnerSpan** insulation manufactured with laminated film adhered to the top and bottom surfaces (see Plasti-Fab PIB 354 for additional information).
2. Physical properties in accordance with:
 - a. ASTM C578 Types I, VIII, II, II+ and IX.
 - b. CAN/ULC-S701 Types 1, 2 and 3.
3. Surface-burning characteristics in accordance with:
 - a. ASTM E84 (UL723)
 - b. CAN/ULC-S102.2
4. Use of **EnerSpan** insulation ASTM C578 Types I, VIII, II, II+ and IX in attic and crawl applications where permitted by the IBC and IRC.
5. **EnerSpan** insulation enhanced thermal resistance values of R-4.7 per inch of thickness for all ASTM C578 types and RSI-0.82 per 25 mm of thickness for all CAN/ULC-S701 types.
6. IgCC material emissions requirements – see Plasti-Fab PIB 223 for additional information.

Intertek CCRR-1033 (5 pages) can be downloaded at www.plastifab.com/technical-library/tcs-plastifab.html for additional detail.

¹ ASTM C578 - **Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.**

² CAN/ULC-S701 - **Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering.**