

TECHNICAL BULLETIN **HALO® INTERRA® PROPERTIES CHART**
 No.8 - 030517 **COMPARISON**
 Rev1 030717 **CANADA**

Halo rigid insulation products are made from an advanced expanded polystyrene with infused graphite - graphite expanded polystyrene (GPS). Created by BASF, GPS offers up to 30% more insulation compared to conventional expanded polystyrene (EPS).

PROPERTIES COMPARISON CHART - EPS vs GPS

| physical properties per CAN/ULC S701 | EPS | GPS ¹ |
|---|------|------------------|
| Classification Type (based on CAN/ULC S701, unless noted otherwise) | 1 | 1 |
| Thermal Resistance, RSI, at 24°C | 0.65 | 0.88 |
| Compressive Resistance, min, kPa | 70 | 70 |
| Water Absorption, max. % by volume | 6.0 | 1.1 |
| Flexural Strength, min, kPa | 170 | 170 |

1. Unless noted, otherwise, properties for Interra provided by BASF 3rd party testing on 1" thick unfaced GPS. Interra is made with Type 1 GPS.

In addition, GPS consists of properties comparable to Type 4 XPS insulation materials. The table below compares Halo Interra against a common insulation product manufactured by Dow Chemical.

PROPERTIES COMPARISON CHART FOR INTERRA

Interior Basement Wall Applications (physical properties per CAN/ULC S701)

| | Styrofoam™ SM ³ | Interra ⁴ |
|---|-------------------------------|----------------------|
| Classification Type (based on CAN/ULC S701, unless noted otherwise) | 4 | 1 |
| Thermal Resistance, RSI, at 24°C | 0.88 | 0.88 ¹ |
| Long-term Thermal Resistance, RSI, at 24°C | 0.79 ² | 0.88 ¹ |
| Compressive Resistance, min, kPa | 210 | 70 |
| ⁵ Water Absorption, max. % by volume | 0.7 | 1.1 |
| ⁶ Water Vapor Permeance, max, ng/Pa-s-m² | 90 | 1.7 ² |
| Flexural Strength, min, kPa | 350 | 170 |
| Dimensional Stability, % | 1.5 | 1.5 |
| Oxygen Index, % | 24 | 24 |

1. Based on nominal 1" thickness (actual thickness = 1.06")
2. Based on indepent testing conducted by QAI. properties tested with laminate and 1" thick Neopor.
3. Properties provided by manufacturer's product data sheets based on 1" thickness.
4. Unless noted, otherwise, properties for Interra provided by BASF 3rd party testing on 1" thick unfaced GPS.
5. Refer to Technical Bulletin 3 for further comparison between XPS and EPS regarding water absorption properties.
6. Refer to Technical Bulletin 2 for further comparison between XPS and EPS regarding permeance properties.
7. Based on manufacturer's limited warranty of 90% R-value retention.

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