

# Chrome GPS

## GRAPHITE ENHANCED POLYSTYRENE INSULATION

Chrome GPS is a rigid insulation board manufactured from closed-cell graphite polystyrene (GPS). It delivers high thermal resistance, low moisture absorption, excellent freeze/thaw durability, and stable long-term thermal performance with no loss of R-value over time. Chrome GPS contains graphite within the foam structure to reflect radiant heat and increase thermal resistance, helping deliver R-values equivalent to XPS while remaining breathable and resource-efficient.



Chrome GPS is available in a range of compressive strengths to suit above-grade, below-grade, and high-load applications. It contains no CFCs, HCFCs, or other refrigerant gases, is biologically inert, and will not support mould, mildew, or fungus growth.

### APPLICATIONS

- Perimeter insulation for grade beams and foundation walls
- Under concrete slabs on grade
- Crawlspace
- Frost protected shallow foundations
- Continuous exterior insulation
- Cavity wall and masonry wall assemblies
- Exterior Insulation Finish Systems (EIFS)
- Roofing insulation, including sloped, flat, and tapered applications
- Coolers, freezers, and ice arenas
- Snow melt systems
- Landscaping and geotechnical applications

### CLASSIFICATION

- Chrome GPS 1000 — CAN/ULC S701 Type 1
- Chrome GPS 1600 — CAN/ULC S701 Type 2
- Chrome GPS 2000 — CAN/ULC S701 Type 3
- Chrome GPS 2500 — Type 4
- Chrome GPS 3000 — Type 4

### SIZES

Thickness	Sheet Sizes
½" – 48" (12 mm – 1220 mm)	2ft × 8ft (610 × 2440 mm) 4ft × 8ft (1220 × 2440 mm)

*\*Custom Sizing Available*

*Edge Profiles:*

*Square edge, Shiplap, Custom drainage or furring profiles available*

### PRODUCT ATTRIBUTES AND CHARACTERISTICS

- High thermal performance with R-5.0 per inch at 10°C (50°F)
- R-4.7 per inch at 24°C (75°F)
- R-value increases as temperatures decrease
- Equivalent thermal performance to XPS with no LTR loss
- Excellent freeze / thaw durability
- Low moisture absorption
- Breathable and semi-permeable
- Contains no CFCs, HCFCs, or other refrigerant gases
- Biologically inert and non-toxic
- GREENGUARD Gold Certified
- Available in a wide range of compressive strengths for insulation and high-load applications

### PACKAGING, HANDLING AND PROTECTION

Packaging and bundle sizes vary by product type, thickness, and region. Please contact Beaver Thermal Solutions to confirm locally available packaging specifications and bundle sizes.

Chrome GPS must be protected from damage during transit and from UV degradation during storage and after installation. Store covered and away from excessive heat, sparks, flames, and ignition sources. Care should be taken to protect exposed product surfaces from reflective sunlight and prolonged solar exposure. Do not expose the product to volatile hydrocarbons such as fuel oils, gasoline, or alcohols.

### MAINTENANCE INSTRUCTIONS AND PROCEDURES

Chrome GPS is incompatible with aromatic or aliphatic hydrocarbons, esters, amines, or anhydrous acids, which may cause degradation

### INSTALLATION

Install products in accordance with the manufacturer's instructions for each specific application. Cover exposed insulation with a finish acceptable to local building authorities.

**TECHNICAL DATA**

PHYSICAL PROPERTY	UNITS IMPERIAL R VALUE (Metric)	ASTM TEST PROCEDURE	Chrome 1000 TYPE 1	Chrome 1600 TYPE 2	Chrome 2000 TYPE 3	Chrome 2500 TYPE 4	Chrome 3000 TYPE 4
Minimum thermal Resistance (R-Value)	hr. ft <sup>2</sup> °F BTU /1 in. (m <sup>2</sup> °C W/25mm)	C-177-93 @ 10°C (50°F)	5.0 (0.88)	5.0 (0.88)	5.0 (0.88)	5.0 (0.88)	5.0 (0.88)
		C-177-93 @ 24°C (75°F)	4.7 (0.83)	4.7 (0.83)	4.7 (0.83)	4.7 (0.83)	4.7 (0.83)
Compressive Strength	psi (kPa)	D 1621-73	10 (70)	16 (110)	20.4 (140)	25 (170)	30 (210)
Capillary Action	-	-	none	none	none	none	none
Water vapor permeance (max)	perm - in (ng/Pa.s.m-2)	E 96-80	5.25 (300)	3.5 (200)	2.25 (130)	2.25 (130)	2.25 (130)
Water absorption % (max)	%	ASTM C272	1.1	1.1	1.1	1.1	1.1
Dimensional Stability	% Linear Change	ASTM 2126	-	-	-	1.5	1.5
Flexural Strength	psi (kPa)	ASTM C518	-	-	-	46 (325)	50 (350)

**TECHNICAL INFORMATION**

**Chemical Properties**

Expanded polystyrene should not be exposed to volatile hydrocarbons such as fuel oils, gasoline, some alcohols, aromatic or aliphatic hydrocarbons, esters, amines, or certain acids, as these may degrade the product.

**Flammability Characteristics**

Chrome GPS contains a fire-retardant additive to inhibit accidental ignition from a small fire source. However, it will burn when exposed to a large continuous flame or excessive heat. Standard fire precautions and good housekeeping should be followed during storage and application.

**Health and the Environment**

Chrome GPS contains no CFCs or HCFCs, contains only air within the foam structure, and does not contribute to ozone depletion. It is non-toxic, hypo-allergenic, biologically inert, and does not support mould, mildew, or fungus growth. GREENGUARD Gold certification supports indoor air quality performance.

**CODE EVALUATIONS APPROVALS**

- GREENGUARD Gold Certified
- Performance testing certified by Intertek
- CCMC 12982-L.

**TECHNICAL SUPPORT**

For technical inquiries please contact:

- [productsupport@bvrthermal.com](mailto:productsupport@bvrthermal.com)
- (888) 453-5961 Toll Free

Website:

<https://bvrthermal.com/>

**APPLICABLE STANDARDS**

Chrome GPS is manufactured to meet or exceed applicable requirements of:

<b>ASTM C177</b>	Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus.
<b>ASTM C578</b>	Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
<b>ASTM D1621</b>	Standard Test Method for Compressive Properties of Rigid Cellular Plastics.
<b>ASTM D1623</b>	Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics.
<b>ASTM C272</b>	Standard Test Method for Water Absorption of Core Materials for Structural Sandwich Constructions.
<b>ASTM D2842</b>	Standard Test Method for Water Absorption of Rigid Cellular Plastics.
<b>ASTM E84</b>	Standard Test Method for Surface Burning Characteristics of Building Materials.
<b>ASTM E96</b>	Standard Test Methods for Water Vapor Transmission of Materials.
<b>CAN/ULC-S701</b>	Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering.

**MANUFACTURER**

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