



## Sproule WR-1200® PERLITE PIPE & BLOCK INSULATION

### DESCRIPTION

Sproule WR-1200® is a pre-formed, high temperature, non-wicking pipe and block insulation composed of expanded perlite uniformly reinforced with a high strength fiber for use on systems operating up to 1200°F(650°C). It is inorganic, non-combustible and meets or exceeds the physical property requirements of ASTM C610. Sproule WR-1200 is produced with a blue visual color coding dispersed throughout the product to assure it can be identified as asbestos-free. Integral to Sproule WR-1200 is **XOX**, a distinctive formula and process that inhibits corrosion to outside surfaces of pipe and equipment.

### ADVANTAGES

- Pipe insulation sections shrink-wrapped with poly film for protection from abrasion during shipment
- Block insulation manufactured with reinforcing scrim beneath the outside surface enhancing structural integrity

Available Forms and Sizes	
Pipe Sizes	
in.	mm
½ - 40	15-1000

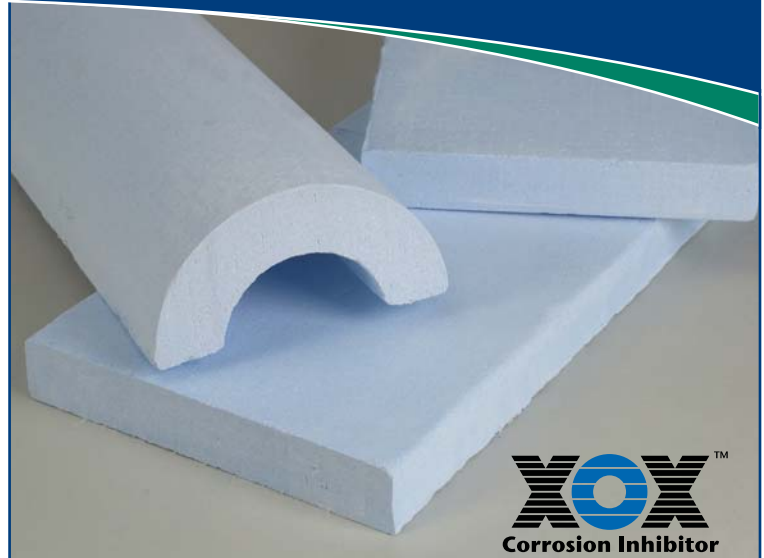
### APPLICATIONS

Because of its compressive strength, low thermal conductivity and corrosion inhibiting properties, it is an product for application on high temperature piping and equipment. In industrial processing and power generation facilities, Sproule WR-1200 is the preferred product for stainless steel piping, which is very susceptible to stress corrosion cracking at operating temperatures above 140°F (60°C). The **XOX** feature inhibits corrosion where moisture and chlorides may become trapped between insulation and stainless steel.

### FIRE SAFETY

**Surface Burning Characteristics.** When tested in accordance with ASTM E84, NFPA 255, and UL 723, Thermo-12 Gold has flame spread/smoke developed ratings of 0/0.

**Non Combustible.** When tested in accordance with ASTM E136 as defined by NFPA 255 and NFPA 101.



## Sproule WR-1200® OPERATING TEMPERATURE LIMIT: 1200°F(650°C)

Pipe Sizes		Sproule WR-1200
in.	mm	
½-40	15-1000	Pipe Insulation**
24-40	600-1000	Quad
30 Minimum	750 Minimum	Scored Block [12" (305 mm) wide] [18" (457 mm) wide ]
Flat Surfaces		Flat Block [6", 12" and 16" wide (152 mm, 305 mm and 457 mm wide)]

Sproule WR-1200 pipe insulation is 36"(914 mm) in length, and is available in thicknesses from 1" to 5" (25 mm to 127 mm) in ½" (15 mm) increments. Thick wall material is furnished in double layers.

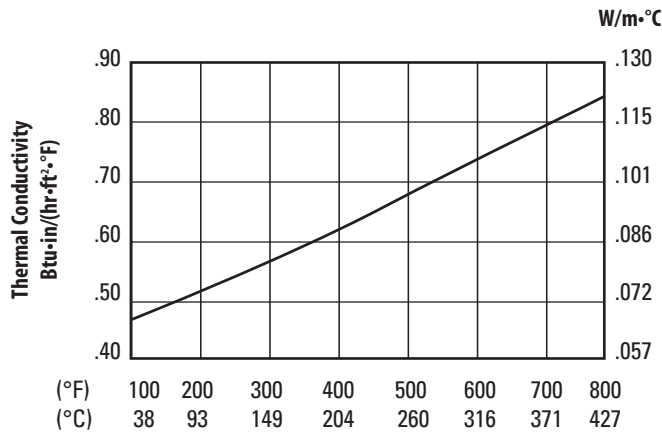
Sproule WR-1200 flat block insulation is 12" (305 mm) wide and 36" (914 mm) in length, and is available in thicknesses from 1" to 4" (25 mm to 100 mm) in ½" (15 mm) increments. Non-standard widths of 18", 24" and 36" (457 mm, 610 mm and 914 mm) are available on a made-to-order basis. Inquire for price and availability.

\*\*Double layered pipe insulation is available for heat-traced line applications.

### SCORED BLOCK APPLICATION GUIDE

Minimum Diameter					
Insulation Thickness		Triple Scored		Single Scored	
in.	mm	in.	mm	in.	mm
1½	38	30	762	95	2413
2	51	40	1016	125	3175
2½	64	50	1270	155	3937
3	76	60	1524	190	4826
3½	89	70	1778	220	5588
4	102	-	-	250	6350

**THERMAL CONDUCTIVITY\***



Mean Temperature	°F	100	200	300	400	500	600	700	800
	°C	38	93	149	204	260	316	371	427
Btu · in/(hr · ft² · °F)		.47	.51	.56	.62	.68	.74	.79	.85
W/m · °C		.068	.074	.081	.089	.098	.107	.114	.123

\*Sproule WR-1200 Pipe & Block Insulation is tested in accordance with ASTM C177, ASTM C518, ASTM C335.

SPECIFICATION COMPLIANCE	
ASTM C165 Compressive Strength	80 psi (550 kPa) to Produce 5% Compression
ASTM C203 Flexural Strength	50-60 psi (345-415 kPa)
ASTM C302 Average Density	13 lbs. per cu. ft. (210 kgs./m³)
ASTM C356 Linear Shrinkage	Less than 2% After 24-Hour Soaking Period at 1200°F(650°C)
ASTM C442 Maximum Service Temperature	1200°F (650°C)
ASTM C610 Material Specification	Passes
ASTM C665 Corrosivity to Steel	Passes-Inhibits
ASTM C795/C891/C692	Passes-Inhibits
ASTM C1338 Fungi Resistant	Passes
ASTM C1617 Corrosivity to Steel	Passes-Inhibits
ASTM E84 Surface Burning Characteristics	Flame Spread - 0 Smoke Developed - 0
ASTM E136 Noncombustibility	Passes
NRC Reg. Guide 1.36	Passes
R-Value @ 75°F	2.2 per inch of thickness

**PRODUCT CERTIFICATION**

When ordering material to comply with any government specification or any other listed specification, a statement of that fact must appear on the purchase order. Government regulations and other listed specifications require specific lot testing, and prohibit the certification of compliance after shipment has been made. There may be additional charges associated with specification compliance testing. Please refer to IIG-CSP-3 for Certification Procedures and Charges. Call customer service for more information.

**QUALITY STATEMENT**

IIG Products are designed, manufactured and tested to strict quality standards in our own facilities. This along with third party auditing is your assurance that this product delivers consistent high quality.

Industrial Insulation Group, LLC is a Calsilite/Johns Manville joint venture. IIG manufactures MinWool-1200® mineral fiber pipe, block and a variety of other insulations; Thermo-12® Gold Calcium Silicate pipe and block insulation; Super Firetemp® fireproofing board; SprouleWR-1200® Perlite pipe and block insulation; high temperature adhesives, and insulating finishing cement.

The physical and chemical properties presented herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Numerical flame spread and smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Customer Service Office to assure current information. All Industrial Insulation Group products are sold subject to the IIG Limited Warranty and Limitation of Remedy. For a copy of the IIG Limited Warranty and Limitation of Remedy, email - info@iig-llc.com.



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