





## 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 (649°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  a distinctive formula and process that inhibits corrosion to outside surfaces of pipe and equipment, especially stress corrosion cracking of austenitic stainless steel.

### APPLICATIONS

Because of its compressive strength, low thermal conductivity and corrosion inhibiting properties, it is an excellent 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  feature inhibits corrosion where moisture and chlorides may become trapped between insulation and stainless steel.

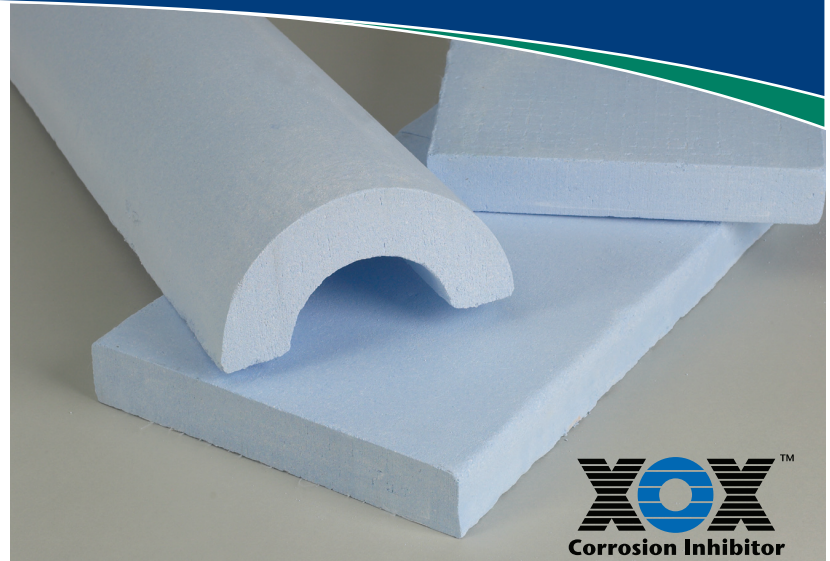
### ADVANTAGES

- Guards stainless steel against corrosion
- No binders to burn out; no loss of insulation integrity
- Resistant to mold growth
- 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
1/2 - 40	15-1000

See Sproule WR-1200 Packaging and Shipping Data (IIG-P-5) to determine form by I.D. pipe size. Double layer must be specified at time of order entry.



## Sproule WR-1200®

INSULATION TYPE*	WIDTH		THICKNESS	
	in.	mm	in.	mm
Pipe**	-	-	1-4	25-102
Flat Block	6 or 12	152 or 305	1-5	25-127
Scored Block	12	305	1½-5	38-127
V-Groove Block	12	305	2-5	51-127

Notes:  
\*All pipe and block insulation products are 36" (914 mm) in length.  
\*\*Double layered pipe insulation is available for heat-traced line applications.

### V-GROOVED 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

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### FIRE SAFETY

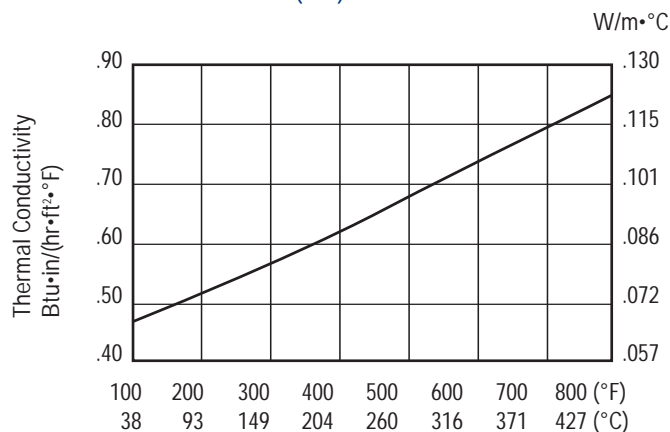
Surface Burning Characteristics. When tested in accordance with ASTM E 84, Sproule WR-1200 has flame spread/smoke developed ratings of 0/0.

**Hot Surface Performance.** Sproule WR-1200 passes ASTM C 411 to 1200°F (649°C).

### SPECIFICATION COMPLIANCE

ASTM C 610  
 ASTM C 1338  
 ASTM C 795  
 NRC Reg. Guide 1.36  
 Mercury Free  
 Food Grade Acceptable  
 Certification of Conformance available on request.

### THERMAL CONDUCTIVITY ("k")\*



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 Block Insulation as tested in accordance with ASTM C 177, ASTM C 518.

### MINIMUM PHYSICAL PROPERTY REQUIREMENTS OF ASTM C 610

Average Density	13.0 lbs. per cu. ft. (208.3 kgs./m³)
Flexural Strength	50-60 psi (345-414 kPa) ASTM C 203
Compressive Strength	80 psi (552 kPa) to Produce % Compression ASTM C 165
Linear Shrinkage	Less than 2.0% After 24-Hour Soaking Period at 1200°F (649°C) ASTM C 356
Maximum Service Temperature	1200°F (649°C) ASTM C 411
Surface Burning Characteristics	Flame Spread - 0 Smoke Developed - 0 ASTM E 84
Acid Resistance	After 1 Week Exposure: 10% Sulfuric Acid . . . . . No Effect 10% Hydrochloric Acid . . . . . No Effect
Water Absorption	By Volume-Avg. . . . . 0.4% By Weight-Avg. . . . . 6.0% ASTM C 610
Corrosion Protection	ASTM C 795 . . . . . Passes ASTM C 1617 Corrosiveness, Steel . . . . . Passes

### GOVERNMENT CERTIFICATION

When ordering material to comply with any government specification or any other listed specification, a state-ment of the 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.

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.



**Industrial Insulation Group, LLC**  
 A Calsilite/Johns Manville Joint Venture

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**CUSTOMER SERVICE,  
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