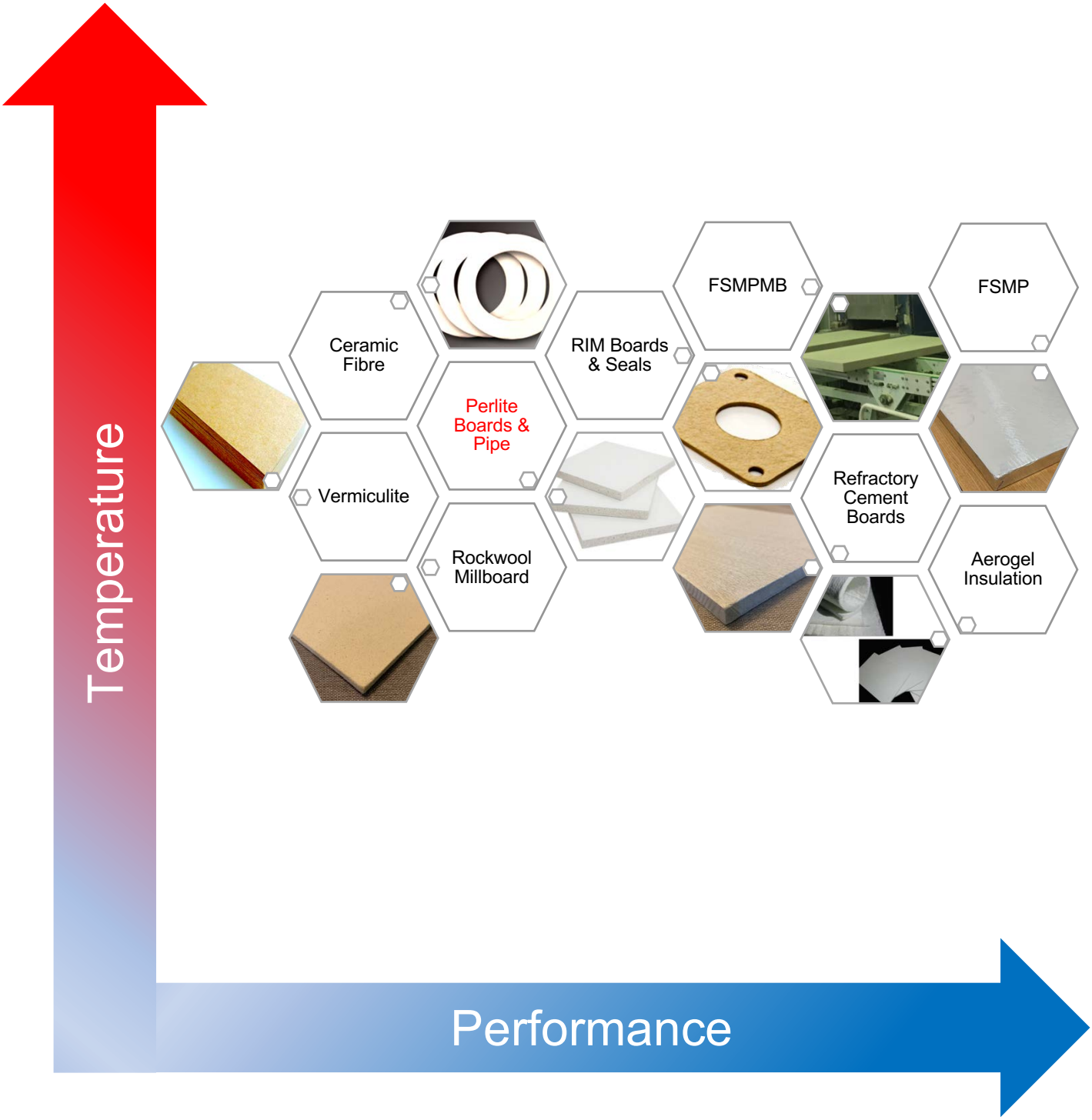
Wedge

Perlite Boards and Pipe Sections

Water Proof | Low Cost | High Insulation | Fire Proof



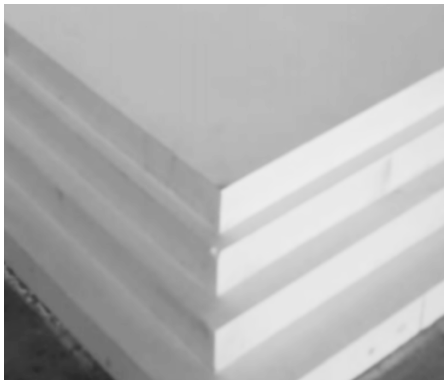
Perlite Insulation Boards & Pipe Sections

Wedge Perlite insulation board, also known as waterproof perlite insulation board, is made of expanded perlite bulk material as aggregate, adding waterproofing agent and binder for preparation, screening, pressure forming, drying processes. Expanded perlite is a white, ultra-lightweight aggregate ranging from a very fine powder to an aggregate with a particle size up to 6mm in size. It is inorganic, inert, neutral in pH, biologically stable and has no asbestos content. It has excellent thermal insulation properties over an extremely wide temperature range from cryogenics at minus 273°C (absolute zero) up to refractory applications at over 1000°C. It also has a highly adsorbent surface and a very low bulk density which makes it an ideal carrier or low cost filler for many compound formulations.

Perlite Insulation products have the benefit of containing a rust inhibitor which is activated if the insulation comes into contact with moisture. The inhibitor neutralises any chlorides present, thereby greatly reducing, if not totally eliminating, corrossion under insulation (CUI).

Advantages

- Light weight with very low bulk density.
- Waterproof with extremely high hydrophobicity.
- Low thermal conductivity.
- Most suitable for cryogenic applications -190°C.
- High temperature insulation up to 650 °C.
- Fireproof, rot proof, damp proof, sound proof.
- Construction safety is simple and easy, roof and wall.
- Environmentally friendly.
- Water repellent, non-flammable, loose-pour insulant improves the thermal performance on masonry walls and floors.
- Corrossion under insulation (CUI) resistant.



Applications

- High temperature insulation and heat protection
- Cryogenic application: Non-combustible ultra-lightweight mineral aggregate with excellent insulation & adsorption properties.
- Fire proofing and sound proofing.
- Swimming pools, cold storage, boilers and some insulation projects with special requirements for waterproofing.
- Perlite insulation is used in high temperature applications in the steel and foundry industries such as ladle topping, hot topping and riser.
- Expanded Perlite is suitable for a range of landscaping applications such as green roof construction, golf green renovation and construction, planters, drainage.
- Expanded perlite powder and board is a hydrophobic insulating aggregate.

Quality		W-Pearl220	W-Pearl250	W-Pearl350
Colour		White	White	White
Maximum Service temperature	°C	650	650	650
Minimum Service temperature	°C	- 190	- 190	- 190
Bulk density	kg/m3	220	250	350
Water Repelency / Hydrophobicity	%	99 - 100	99 - 100	99 - 100
Cold compressive strength	MPa	0.45	0.55	0.55
Flexural strength	MPa	0.25	0.3	0.3
Linear shrinkage @ Service Temperature	%	0.5 - 1.5	0.4 - 1.2	0.4 - 1.2
Thermal conductivity				
50 °C	W/m K	0.059	0.06	0.062
100 °C	W/m K	0.062	0.065	0.067
150 °C	W/m K	0.068	0.072	0.078
200 °C	W/m K	0.078	0.081	0.084
Specific heat capacity @ 400 °C	kJ/kg K	1.03		
Chlorine Content		ASTM C795	ASTM C795	ASTM C795
Standard Sizes				
Length	mm	600, 1050, 2100		
Width	mm	300, 900, 950		
Thickness	mm	25 to 100		
Dimensional Tolerance	mm	Length: +3 to -2 | Thickness: +/-2		

Fireproof MgO Perlite Board for Fire Resistant Doors Core

MgO Perlite boards are most suitable core materials for manufacturing of Fire Resistant Doors. The boards are Light weight, fire retardant and self-extinguishing, thermal insulation, soundproof and sound absorption, mould proofing, damp proof, waterproof, shockproof, and color weatherproof.

The boards are non-corrosive, alkali and acid resistance; non-toxic and chemical resistant easy to clean and maintain. You can perform with wood and metal processing tools: cutting / sawing / shearing / punching / drilling /nailing / milling / riveting / screwing / planning welding / painting / printing / photo mounting / laying / embossing /engraving / cleaning. Can work as the substitution of wood.

Technical Properties:

Density	: 300-360kg/m3
Temperature rise rate	: ≤0.25%
Bending Strength	: ≥8Mpa
Max Fire Resistance	: 0.6-2h;0.8-2h
Compression Strength	: 0.35-0.8Mpa
Burning Temperature	: ＞1000℃
Thermal Conductivity	: ≤0.035-0.046W/(m.k)
Acoustic absorptivity	: 0.03-0.8
Water Content	: ≤10%

Mgo Perlite Board Dimension:
Size1 : 2100x900x(30-50)mm;
Size2 : 2050x850x(30-50)mm