Morgan Alphawool Pyro-Stack™ Module

Product Data Sheet

Product Description

Alphawool Pyro-Stack Modules are manufactured from stacked edge-grain segments of Alphawool (polycrystalline wool) blankets. Each module is pre-compressed to a specific density and secured with two stainless steel tubes positioned away from the hot face. This design ensures exceptional thermal stability up to 1500°C in oxidizing, reducing, and chemically aggressive environments. All Pyro-Stack Modules include a standard T-Anchor system for quick and secure attachment to furnace, boiler, or kiln linings. The T-module is fixed using a pre-studded, external side-fix yoke. Custom anchor systems are available to meet specific application requirements.

Please contact us for guidance on the best internal anchoring hardware for your application.

Features

- High dimensional stability up to 1500°C
- Excellent chemical resistance in oxidizing, neutral, and mildly reducing atmospheres
- Excellent compression resistance and resiliency
- Excellent thermal insulation.
- Exempt from carcinogenicity classification under EU Directive 97/69/EC.
- Not subject to RCF regulations
- Quick, convenient and efficient installation

Applications

- Forging furnaces
- High temperature furnaces
- Industrial equipment
- Process heaters
- Reformers

www.morganthermalceramics.com
Email: marketing.tc@morganplc.com
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Properties	Morgan Alphawool Stacked Module	
Colour	White	
Max. Continuous Use Temperature, °C	1600	
Classification Use Temperature, °F	2912	
Thermal Conductivity* (W/m•k, BTU•in/hr•ft²•°F), ASTM C 201		
Measured Pyro -Stack density, kg/m3	170	192
200°C	0.10	0.10
400°C	0.11	0.13
600°C	0.14	0.17
800°C	0.20	0.24
1000°C	0.27	0.34
1200°C	0.37	0.47
Chemical Analysis , %		
Alumina, Al_2O_3	72	
Silica, SiO_2	28	

Standard dimension and Product availability

Standard tubes and yokes for Alphawool Pyro-Stack modules are ASTM 316 stainless steel.

Higher grades of steel (ASTM 310 or Inconel 601) are also available upon required for more arduous service conditions.

Studs are a minimum of ASTM 304 stainless steel, higher grades can be specified where warranted by service conditions.

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