



Reticulated Alumina Type RAHP

General Information

ZIRCAR Ceramics' Reticulated Alumina Type RAHP are rigid, highly-porous bodies of fine-grain dense alumina. Manufactured using a "lost foam" technique, RAHP posts and plates are high-fired and have extremely low impurity levels. Each fine "web" is dense and creep-resistant. Their unique structure is low in mass and offers low thermal conductivity along with good strength when used in numerous industrial applications with temperatures as high as 1750°C (3182°F). RAHP is standard at 92% Al₂O₃ and is available at 99.5% Al₂O₃ as well. RAHP shows excellent resistance to chemical attack and is not affected by oil or water. It is, however, affected by hydrofluoric acid, phosphoric acids and strong alkalis.



Characteristics & Properties

Color	White
Composition, %	
Al ₂ O ₃	91.91
SiO ₂	8.01
Other	0.08
Softening Point, °C	1600+
Density, g/cc (pcf)	0.6-0.8 (37.5-50)
Maximum Use Temperature* °C (°F)	1750 (3182)
Open Pores Per Inch (PPI), Availability	
Rods	65
Plates	65, 45, 20, 10

The data presented herein is intended to help the user to determine the appropriateness of this material for their application. This data is a nominal representation of this product's properties and characteristics and therefore should not be used in preparing specifications. * Maximum use temperature is dependent on variables such as stresses, both thermal and mechanical, and the chemical environment that the material experiences.

Suggested Applications

Hearth components in low-mass rapid-cycle furnaces and insulation assemblies.
 Supports in high-temperature process equipment.
 Hot gas filtration. Catalyst supports.
 CIM and MIM sintering supports.

ZIRCAR Ceramics, Inc.

PO Box 519
 100 N. Main St., Florida, NY 10921-0519
 Telephone: (845) 651-6600
 E-mail: sales@zircarceramics.com

Technical Data Bulletin
 Reticulated Alumina Type RAHP
www.zircarceramics.com
 Page 1 of 2

Reticulated Alumina Type RAHP

Availability of Standard Reticulated Alumina

ITEM #	DESCRIPTION
D9112*	RAHP, 1.4"D x 3"T
D107A-001	RAHP-45, 4.0" x 4.0" x 0.5"
D107A-004*	RAHP-45, 6.0" x 6.0" x 0.5"
D107B-001	RAHP-65, 4.0" x 4.0" x 0.5"
D107B-004*	RAHP-65, 6.0" x 6.0" x 0.5"
D107A-010*	RAHP-45, 300mmL x 300mmW x 25mmT
D107C-010	RAHP-20, 300mmL x 300mmW x 25mmT
D107D-010	RAHP-10, 300mmL x 300mmW x 25mmT

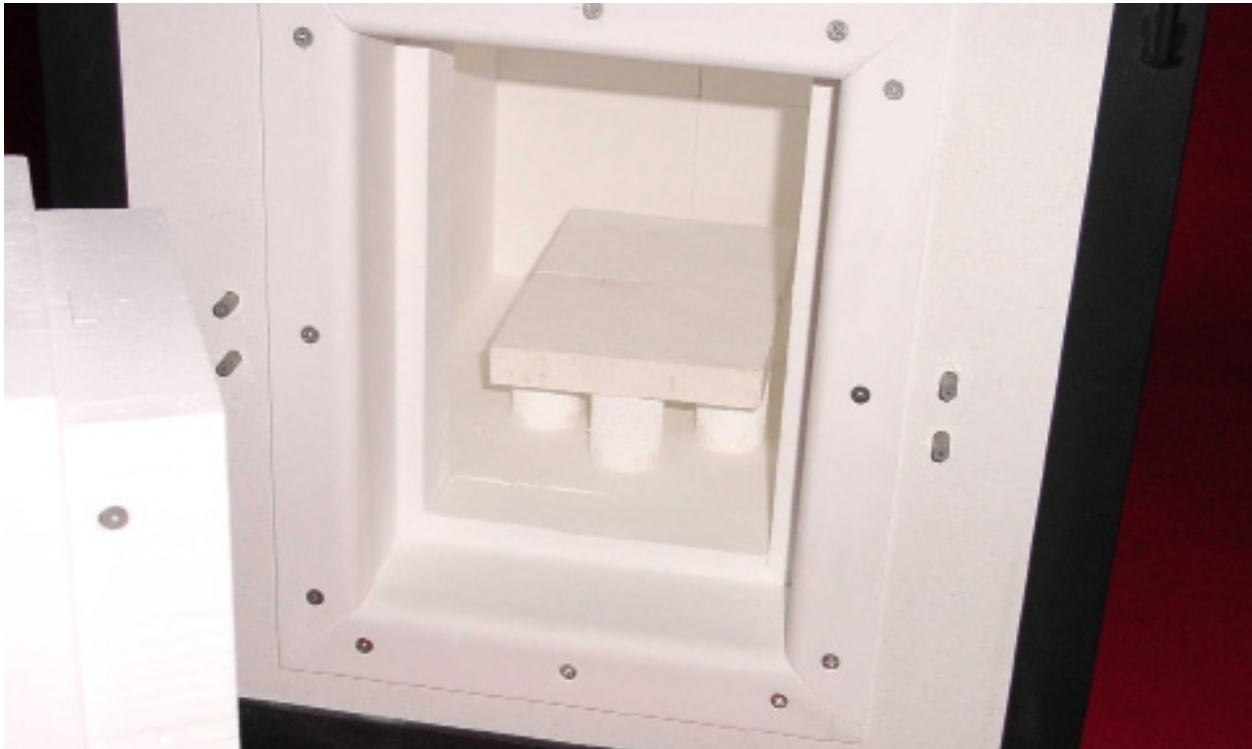
* Denotes standard stocked items.

To Order

Standard items: order online or specify quantity, item # and description.

Standard Hearth Posts are available for immediate shipment from stock. Standard plates usually ship within 10 days.

Custom preparations will be considered. Reticulated Alumina is available in a wide range of custom shapes and sizes and in a variety of compositions.



Reticulated Alumina Posts (Item D9112) are an effective low-mass method of supporting hearth plates in high temperature rapid-cycle laboratory and production furnaces.



ZIRCAR Ceramics, Inc.

PO Box 519

100 N. Main St., Florida, NY 10921-0519

Telephone: (845) 651-6600

E-mail: sales@zircarceramics.com

www.zircarceramics.com

Revision Date Oct. 7, 2017