



RENO REFRACTORIES, INC

RENO AluSHIELD 45 QH

TECHNICAL DATA SHEET

RENO AluSHIELD 45 QH is a high alumina ultralow cement castable.

FEATURES:

- Non-wetting to aluminum
- Excellent hot strength, resistant to abrasion and alkali vapor
- Applications include aluminum furnace walls and transfer troughs

METHOD OF INSTALLATION

Cast, Pump

SERVICE TEMPERATURE:

2800°F

MIXING WATER:

6 – 7%

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	TiO ₂	MgO	CaO	Alkalis	Other
45	46	0.9	1.7	0.1	2.1	0.7	3.2

TYPICAL PHYSICAL PROPERTIES (Cast)

Prefired to °F	Density pcf	Linear Change %	Modulus of Rupture, psi	Cold Crushing Strength, psi	Abrasion Loss cc
250	149	Nil	2,115	9,774	--
1500	146	-0.3	2,471	11,269	4.3
2000	145	0.1	2,954	14,267	--
2500	145	0.1	3,330	14,450	--

TYPICAL PHYSICAL PROPERTIES (Pumped)

Prefired to °F	Density pcf	Linear Change %	Modulus of Rupture, psi	Cold Crushing Strength, psi	Abrasion Loss cc
250	148	Nil	2,012	9,328	--
1500	147	-0.4	2,573	8,112	5.8
2000	143	-0.2	2,956	11,860	--
2500	145	0.5	2,641	13,596	2.7

HOT MODULUS OF RUPTURE: 3,603 psi at 1500°F (Pump)

THERMAL SHOCK (AFTER 2200°F) (ASTM C-1171): 50% MOR Loss (Pump)

17-008

603045 – 4/14/17

The data presented represents typical average results obtained by testing under ASTM or other acceptable procedures as required. They are subject to normal variations and should not be used for specification purposes.

**Reno Refractories, Inc. PO Box 201, Morris, Alabama 35116
205.647.0240 | Toll Free 1.800.741.7366**