RENO REFRACTORIES, INC

Reno FireCast 905

TECHNICAL DATA SHEET

Reno FireCast 905 is a high alumina, no-cement castable, fortified with silicon carbide. This is designed to be installed by vibration casting.

- Based on Reno's new propriety FireCast bond system with a very easy to use character.
- Water based, easy mixing, easy dry out, consistent wear patterns.
- Rapid dry out capability while still retaining reduced porosity and high strengths.
- Excellent material for applications in vertical channel and auto-pour iron furnaces, cupola iron runner troughs, past the slag dam, de-sulf, treatment, and ductile iron transfer ladles.
- Excellent resistance to iron, slag, thermal shock, and oxidation.

Service Temperature:	3000°F / 1649°C	Wt. Required for Estimating:	187 lbs./ft ³
Liquid Type:	Water	Storage Life:	6 months
Addition Quantity:	4.8% - 5.2%	-	
-	TYPICAL CHEMICA	ANALYSIS (% Calcined Basis)	

Al ₂ O ₃	SiO ₂	SiC	Fe ₂ O ₃	TiO ₂	MgO	CaO	Alkalies
80.5	8.5	5	1	2.2	1.3	0.8	< 1.1

TYPICAL COLD PHYSICAL PROPERTIES							
Prefired to °F	Cold Modulus of Rupture (psi)	Cold Crushing Strength (psi)	Density (pcf)	Porosity (%)	Linear Change (%)	Abrasion Loss (cc)	Thermal Shock Loss (%)
Green	510	3,630	187				
250	519	2,717	191	15.1	-0.1		
750	421	2,457	190	16.0	-0.1		
1500	1,011	5,788	187	17.1	-0.1	< 10	
2000	4,680		187				- 66%
2500	2,552	>14,588	187	16.1	0.5	< 4	
2800	2,453	>14,194	187	14.1	0.7	< 4	

TYPICAL HOT PHYSICAL PROPERTIES

Prefired to °F	HMOR (psi)	Thermal Conductivity (BTU/ft²/hr./in/°F)	Thermal Expansion (%)
250		16.2	-0.05
750		14.8	0.00
1500	1,919	14.0	0.06
2000		13.7	0.26
2500	1,224	13.4	0.70
2750	217	13.3	-0.14

Coefficient of Thermal Expansion: 3.11 E⁻⁶ in/in/°F

Standard Cure Out Schedule: Schedule D

Packaging: 72 / 55 lb. bags per pallet or 2/2000# Bulk Bags

23-109

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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.

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