



Insulating Castables

Cast Data

RESCOCAST 3-20R

RESCOCAST 3-20R is a lightweight insulating material designed to replace insulating block. Its low density results in very low “K” factors for super insulation. It can be used as a back up material in bi-wall linings or as a single component lining where the temperatures are not to exceed 2000°F.

Maximum Service Temperature: 2000°F (1095°C)

Bulk Density:
After 1500°F (815°C): 23 pcf (368 kg/m³)

Cold Crushing Strength:
After 1500°F (815°C): 50- 100 psi (4-7 kg/cm²)

Permanent Linear Change(%):
After 1500°F (815°C): -0.8 to -1.5
After 2000°F (1095°C): -1.0 to -2.0

Apparent Porosity, %
After 1000°F (540°C) 80%

Thermal Conductivity or “K” Factor:

Mean Temp.	BTU/ft ² /Hr/°F/in	W/mK
500°F (260°C)	0.90	0.13
1000°F (540°C)	0.90	0.13
1500°F (815°C)	1.10	0.16

Typical Chemical Analysis (%):

Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	CaO	MgO	TiO ₂	Alkalies
37.3	23.0	5.1	19.4	10.5	1.0	3.7

Standard Packaging: 40-25 lb. bags per pallet (bulk packaging available)

The properties shown on this data sheet represent typical average results generated using standard ASTM test methods (unless otherwise noted) conducted under controlled condition (using standard rectangular shapes), and should not be considered to be guaranteed specifications. Properties are subject to normal manufacturing statistical standard deviation ranges, and Resco Products, Inc. reserves the right to modify the properties and specifications at any time without prior notice.

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02/29/08 is the date that this data sheet was updated. Check with your RESCO sales representative or RESCO website to determine you have the current sheet

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RESCOCAST 3-20R

GUNNED DATA

Data shown are the average results of tests following the guidelines set forth in ASTM C-903, "Preparing Refractory Castable Specimens by Cold Gunning." Results will vary subject to normal variations in manufacturing, testing and installation procedures in the field.

<u>Maximum Service Temperature:</u>	2000°F (1095°C)	
<u>Bulk Density:</u> After 1500°F (815°C)	30- 40 pcf (480-640 kg/m ³)	
<u>Cold Crushing Strength:</u> After 1500°F (815°C)	100-200 psi (7-14 kg/cm ²)	
<u>Permanent Linear Change(%):</u> After 1500°F (815°C) After 2000°F (1095°C)	-0.5 to -1.5 -1.0 to -2.0	
<u>Apparent Porosity, %</u> After 1000°F (540°C)	75%	
<u>Thermal Conductivity or "K" Factor:</u>		
Mean Temp.	BTU/ft ² /Hr/°F/in	W/mK
500°F (260°C)	1.05	0.15
1000°F (540°C)	1.15	0.17
1500°F (815°C)	1.25	0.18