



## EXTREME SERVICE CASTABLES

PRODUCT DATA

### RESCOCAST 17E

*RESCOCAST 17E HAS BEEN USED FOR MANY YEARS AS AN EROSION RESISTANT LINING MATERIAL. IT'S LOW IRON CONTENT MAKES IT A GOOD CHOICE FOR UNITS OPERATING WITH HIGH CO CONTENTS, SUCH AS BLAST FURNACE TAKE-OFFS AND FLUE GAS LINES. RESCOCAST 17E IS USED IN APPLICATIONS WHERE IT IS NOT PRACTICAL TO INSTALL THE MATERIAL BY VIBRATION CASTING OR GUNNING. TYPICALLY IT WOULD BE USED HANDPACKING INSTALLATIONS SUCH AS FIELD JOINTS OR APPLICATIONS USING HEX-STEEL TYPE ANCHORAGE SYSTEMS.*

MAXIMUM SERVICE TEMPERATURE (M.S.T.) (1510°C)

BULK DENSITY

@ 110°C	133 - 140	LBS/FT <sup>3</sup>	2130 - 2247	KG/M <sup>3</sup>
@ 815°C	126 - 134	LBS/FT <sup>3</sup>	2018 - 2146	KG/M <sup>3</sup>

COLD CRUSHING STRENGTH

@ 540°C	8000 - 12000	P.S.I.	560 - 840	KG/CM <sup>2</sup>
@ 815°C	7000 - 11000	P.S.I.	490 - 770	KG/CM <sup>2</sup>
@ 1400°C	8000 - 12000	P.S.I.	560 - 840	KG/CM <sup>2</sup>

COLD MODULUS OF RUPTURE

@ 540°C	1400 - 1800	P.S.I.	98 - 126	KG/CM <sup>2</sup>
@ 815°C	1300 - 1800	P.S.I.	91 - 126	KG/CM <sup>2</sup>
@ 1400°C	1400 - 1800	P.S.I.	98 - 126	KG/CM <sup>2</sup>

PERMANENT LINEAR CHANGE

@ 815°C	- 0.10 TO - 0.30 %
@ 1095°C	- 0.20 TO - 0.40 %

EROSION LOSS (ASTM C-704) LESS THAN 12.0 CC

POROSITY (CAST) 30 PERCENT @ 540°C

CONDUCTIVITY OR "K" FACTOR

<u>MEAN TEMP</u>	<u>BTU/FT<sup>2</sup>/Hr/°F/in</u>	<u>W/mK</u>
@ 540°C	6.8	0.95
@ 815°C	6.9	0.97
@ 1095°C	7.7	1.08

TYPICAL CHEMICAL ANALYSIS (%)

<u>Al<sub>2</sub>O<sub>3</sub></u>	<u>SiO<sub>2</sub></u>	<u>Fe<sub>2</sub>O<sub>3</sub></u>	<u>CaO</u>	<u>MgO</u>	<u>TiO<sub>2</sub></u>	<u>AlK</u>
55.6	36.7	0.7	5.5	0.2	1.0	0.3

The properties shown on this data sheet represent typical average results generated using standard ASTM test methods (unless otherwise noted) conducted under controlled conditions 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. RESCO PRODUCTS disclaims any expressed or implied warranties based on this sheet. 01/08/13 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



# RESCOCAST 17E

RESCOCAST 17E CAN BE APPLIED BY THE GUNITE METHOD, HOWEVER IT IS STRONGLY RECOMMENDED THAT RESCOCAST 17E BE USED FOR GUNITE INSTALLATIONS. LONGER "AGEING" TIMES AFTER PRE-WETTING PARTICULAR IN COLDER WEATHER WILL BE REQUIRED. DATA SHOWN ARE AVERAGE RESULTS OF TESTS FOLLOWING THE GUIDELINES SET FORTH IN ASTM C-903-70 "PREPARING REFRACTORY CONCRETE SPECIMENS'S BY COLD GUNNING".

## BULK DENSITY

@ 815°C	125 - 130	LBS/FT <sup>3</sup>	2000 - 2080	KG/M <sup>3</sup>
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## COLD CRUSHING STRENGTH

@ 540°C	4000 - 7000	P.S.I.	280 - 490	KG/CM <sup>2</sup>
@ 815°C	4500 - 7000	P.S.I.	280 - 490	KG/CM <sup>2</sup>
@ 1400°C	4000 - 7000	P.S.I.	280 - 490	KG/CM <sup>2</sup>

## COLD MODULUS OF RUPTURE

@ 540°C	800 - 1200	P.S.I.	56 - 85	KG/CM <sup>2</sup>
@ 815°C	800 - 1200	P.S.I.	56 - 85	KG/CM <sup>2</sup>
@ 1400°C	800 - 1200	P.S.I.	56 - 85	KG/CM <sup>2</sup>

## PERMANENT LINEAR CHANGE

@ 815°C	- 0.10	TO	- 0.50 %
@ 1095°C	- 0.20	TO	- 0.60 %

## PACKAGING

25 KG BAGS

## POROSITY (GUNNED)

27 PERCENT @ 540°C

## EROSION LOSS ASTM C-704

LESS THAN 16.0 CC