



Technical Data

FURNA³™ 40

SHOTCRETABLE/SELF FLOW/PUMPABLE CASTABLE
FOR ALUMINUM CONTACT

Recommended Service Temperature Limit For	:Aluminum Non-wetting.....	2200°F
	:All Other Applications.....	2500°F
Water Required for Mixing	:Self Flow	7.0 - 8.5%
	:Vibrated, External or Internal Vibration	4.5 - 6.0%
	:Shotcreted.....	6.5 - 7.5%
Material Required Per Ft ³	:Self Flow	135 - 139 lb
	:Vibration	140 - 144 lb
	:Shotcreted (includes 5% rebound).....	142-146 lb
Packaging.....		55 lb bag

SELF FLOW/PUMPABLE

TEMPERATURE (°F)	BULK DENSITY (lb/ft ³)	LINEAR CHANGE (%)	MODULUS OF RUPTURE (lb/in ²)	COLD CRUSH STRENGTH (lb/in ²)	APPARENT POROSITY (%)	K-FACTOR ASTM C1113 (Btu·in/hr·ft ² °F)
220	138-142	-0.2 to 0.0	700-1100	5000- 9000	12 - 14	-----
1500	135-139	-0.3 to 0.0	600-1000	3000- 7000	17 - 19	10.5
2000	135-140	-0.4 to 0.0	700-1100	4000- 8000	17 - 19	10.8
2550	137-141	-0.1 to +0.3	1400-1800	4000- 8000	14 - 16	-----

SHOTCRETED

220	132-138	-----	1500-1900	5400-9400	13-16	-----
1500	128-134	-0.3 to 0.0	1300-1700	4900-8900	16-19	11.8
2000	129-133	-0.6 to 0.0	1300-1700	3500-5900	19-21	12.2
2550	131-137	-0.7 to 0.0	1000-1400	4000-8400	12 - 15	-----

CAST-VIBRATED

220	142-146	-0.4 to 0.0	1100-1500	10000-14000	7 - 9	-----
1500	140-144	-0.5 to -0.1	1500-1900	8000-12000	13 - 15	-----
2000	141-145	-0.7 to -0.3	1300-1700	7000-11000	13 - 15	-----
2550	140-144	-0.1 to +0.3	1500-1900	8000-12000	10 - 12	-----

CHEMICAL ANALYSIS: (Ignited)

Al ₂ O ₃	.....	41.8%
SiO ₂	.....	48.4
Fe ₂ O ₃	.....	1.2
TiO ₂	.....	1.7
CaO	.....	5.1
MgO	.....	0.4
Alkalies	.....	1.4

ALUMINUM CUP TEST

7075 Alloy, 1500°F, 72 Hours	
SILICON PICKUP RATIO	
220°F.....	1.1
1500°F.....	1.1

HOT MODULUS OF RUPTURE: (lb/in²)

	<u>Self Flow</u>
At 2000°F.....	1500-2500

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 property and specifications at any time without prior notice.

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