

CASTABLES for MINERAL PROCESSING

CEMENT, LIME, ORE

CONVENTIONAL CEMENT

Products	Chemistry (%)		Density (815°C, 1500°F)		C.C.S. (815°C, 1500°F)		Temp. Limit		Installation Method
	Al ₂ O ₃	SiO ₂	g/cm ³	lb/ft ³	Mpa	psi	°C	°F	
TUFFLOOR	34.1	44.5	2.11	132	48.92	7,100	649	1200	Cast
TUFFCRETE 2800	44.4	48	2.27	142	82.68	12,000	1538	2800	Vib Cast, Pump, Shot
CAST 3400	95.3	0.1	2.77	173	75.79	11,000	1871	3400	Cast

ULTRA LOW CEMENT

Products	Chemistry (%)		Density (815°C, 1500°F)		C.C.S (815°C, 1500°F)		Temp. Limit		Installation Method
	Al ₂ O ₃	SiO ₂	g/cm ³	lb/ft ³	Mpa	Psi	°C	°F	
TUFFCRETE 61 A ULC	61	35.5	2.61	163	70.28	10,200	1704	3100	Vib Cast, Pump, Shot
TUFFCRETE 90	90.4	8.2	2.98	186	62.01	9,000	1871	3400	Vib Cast
ULTRACON 34 C	92.8	6.2	3.03	189	73.03	10,600	1760	3200	Vib Cast
ULTRACON 95	94.4	5	2.98	186	-	-	1871	3400	Vib Cast

HIGH STAINLESS FIBER CONTENT

Products	Chemistry (%)				Density (815°C, 1500°F)		C.C.S. (815°C, 1500°F)		Temp. Limit		Installation Method
	Al ₂ O ₃	SiO ₂	ZrO ₂	SiC	g/cm ³	lb/ft ³	Mpa	psi	°C	°F	
ARMORMAX® 28 SiC	45.4	21.8	1.00	27.3	2.69	168	82.68	12,000	1427	2600	Vib Cast, Pump, Shot
ARMORMAX® 608	59.9	27.1	-	8.2	2.63	164	103.96	15,089	1316	2400	Vib Cast, Pump, Shot
ARMORMAX® 70 SR	70.1	25.5	-	-	2.66	166	117.13	17,000	1427	2600	Vib Cast, Pump, Shot
ARMORMAX® NRSA	82.4	11.9	-	-	3.00	187	185.34	26,900	1427	2600	Vib Cast, Pump, Shot
ARMORMAX® 85	84.4	10.5	-	-	2.92	182	175.70	25,500	1427	2600	Vib Cast, Pump, Shot
ARMORAX® 90 SR	89.2	7.8	-	-	3.00	187	113.69	16,500	1427	2600	Vib Cast, Pump, Shot
ARMORMAX® AZS 5 HZR	40.9	28.7	26.8	-	3.16	197	112.72	16,360	1316	2400	Vib Cast, Pump, Shot

LOW CEMENT

Products	Chemistry (%)				Density (815°C, 1500°F)		C.C.S. (815°C, 1500°F)		Temp. Limit		Installation Method
	Al ₂ O ₃	SiO ₂	ZrO ₂	SiC	g/cm ³	lb/ft ³	Mpa	psi	°C	°F	
LCF 798 P	61.5	35	-	-	2.74	171	59.94	8,700	1704	3100	Vib Cast, Pump
DURACON® 28	46.2	48.1	-	-	2.23	139	53.74	7,800	1538	2800	Vib Cast
DURACON® 30	47.2	46.3	-	-	2.34	146	68.80	9,985	1649	3000	Vib Cast
DURACON® 32	63.1	31.6	-	-	2.55	159	106.17	15,410	1760	3200	Vib Cast
DURACON® 70 C	69.2	25.6	-	-	2.71	169	113.69	16,500	1760	3200	Vib Cast
DURACON® NRSA	77	18.1	-	-	2.77	173	87.16	12,650	1760	3200	Vib Cast
DURACON® 86	87	8.7	-	-	2.93	183	109.55	15,900	1788	3250	Vib Cast
TUFF-FLO FSM	34.8	61.3	-	-	2.18	136	54.29	7,880	1204	2200	Vib Cast, Pump
TUFFCRETE® FS	15.6	81.8	-	-	2.00	125	82.68	12,000	1204	2200	Vib Cast, Pump, Shot
TUFFCRETE® 47	47.1	46.5	-	-	2.21	138	82.68	12,000	1538	2800	Vib Cast, Pump, Shot
TUFFCRETE® ARZ	43.9	44.3	1.1	4.9	2.32	145	89.57	13,000	1649	3000	Vib Cast, Pump, Shot
TUFFCRETE® 60 A SR	59.6	36.2	-	-	2.58	161	104.73	15,200	1704	3100	Vib Cast, Pump, Shot
TUFFCRETE® 60 M	60.5	34.3	-	-	2.52	157	106.80	15,500	1704	3100	Vib Cast, Pump, Shot
TUFFCRETE® 60 MZ	58.1	34.1	2.7	-	2.56	160	75.79	11,000	1704	3100	Vib Cast, Pump, Shot
TUFFCRETE® 604 Z	59.5	32.3	3.6	-	2.52	157	82.68	12,000	1649	3000	Vib Cast, Pump, Shot
TUFFCRETE® 60 M ARZ	54.5	33.8	1.1	5.0	2.58	161	146.76	21,300	1704	3100	Vib Cast, Pump, Shot
TUFFCRETE® 60 X	60.3	33.9	-	-	2.48	155	92.33	13,400	1649	3000	Vib Cast, Pump, Shot
TUFFCRETE® 60 SiC	21.3	12.1	-	63.6	2.60	162	113.69	16,500	1649	3000	Vib Cast, Pump, Shot
TUFFCRETE® 28 SiC Z	44.4	21.5	1.1	28.3	2.63	164	126.09	18,300	1704	3100	Vib Cast, Pump, Shot
TUFFCRETE® 63 X	62.4	31.4	-	-	2.53	158	103.35	15,000	1649	3000	Vib Cast, Pump, Shot
TUFFCRETE® 65 M	64.8	30.5	-	-	2.61	163	138.39	20,085	1704	3100	Vib Cast, Pump, Shot
TUFFCRETE® 66 M	64.5	30.2	-	-	2.58	161	78.55	11,400	1704	3100	Vib Cast, Pump, Shot
TUFFCRETE® 70 ABR	69.6	24.8	-	-	2.69	168	144.69	21,000	1760	3200	Vib Cast, Pump, Shot
TUFFCRETE® 70 M	71.3	23.6	-	-	2.66	166	158.47	23,000	1760	3200	Vib Cast, Pump, Shot
TUFFCRETE® 70 X	68	25.8	-	-	2.58	161	98.53	14,300	1649	3000	Vib Cast, Pump, Shot
TUFFCRETE® 72 M	71.5	22.6	-	-	2.60	162	112.31	16,300	1704	3100	Vib Cast, Pump, Shot
TUFFCRETE® 733	65	24.5	-	-	2.58	161	83.37	12,100	1566	2850	Vib Cast, Pump, Shot
TUFFCRETE® 74	74.3	20.2	-	-	2.69	168	67.18	9,750	1760	3200	Vib Cast, Pump, Shot

NO CEMENT

Products	Chemistry (%)				Density (815°C 1500°F)		C.C.S. (815°C,1500°F)		Temp. Limit		Installation Method
	Al ₂ O ₃	SiO ₂	ZrO ₂	SiC	g/cm ³	lb/ft ³	Mpa	psi	°C	°F	
NANO-TEK® FS P	0.2	99.5	-	-	1.84	115	31.69	4,600	1204	2200	Vib Cast, Pump, Shot
NANO-TEK® 61 HS	61.4	35.2	-	-	2.45	153	97.84	14,200	1704	3100	Vib Cast, Pump, Shot
NANO-TEK® 60 Z HS	58.4	35.5	2.8	-	2.52	157	99.28	14,410	1704	3100	Vib Cast, Pump, Shot
NANO-TEK® 55 A SR HS	56	36.3	1.3	4.9	2.53	158	62.35	9,050	1704	3100	Vib Cast, Pump, Shot
NANO-TEK® 805 ARZ	48.4	34.7	5.7	8.1	2.50	156	84.23	12,225	1704	3100	Vib Cast, Pump, Shot
NANO-TEK® 90	89.6	9.3	-	-	2.90	181	30.32	4,400	1704	3100	Vib Cast, Pump, Shot
NANO-TEK® 75 SiC	17.1	5.2	-	74.9	2.66	166	35.66	5,175	1649	3000	Vib Cast, Pump, Shot
QUICK-FIRE 55	55.4	36.7	-	-	2.32	145	15.36	2,230	1593	2900	Vib Cast
QUICK-FIRE 88	88.2	3.9	-	-	2.74	171	18.95	2,750	1649	3000	Vib Cast
QUICK-FIRE 90	89.1	2.1	-	-			36.93	5,360	1704	3100	Vib Cast
STACKLINE B PC	98.1	0.2	-	-	2.18	136	58.57	8,500	816	1500	Vib Cast, Pump, Shot

HIGH STAINLESS FIBER CONTENT

Products	Chemistry (%)				Density (815°C,1500°F)		C.C.S. (815°C,1500°F)		Temp. Limit		Installation Method
	Al ₂ O ₃	SiO ₂	ZrO ₂	SiC	g/cm ³	lb/ft ³	Mpa	psi	°C	°F	
ARMORMAX® 28 SiC	45.4	21.8	1.00	27.3	2.69	168	82.68	12,000	1427	2600	Vib Cast, Pump, Shot
ARMORMAX® 608	59.9	27.1	-	8.2	2.63	164	103.96	15,089	1316	2400	Vib Cast, Pump, Shot
ARMORMAX® 70 SR	70.1	25.5	-	-	2.66	166	117.13	17,000	1427	2600	Vib Cast, Pump, Shot
ARMORMAX® NRSA	82.4	11.9	-	-	3.00	187	185.34	26,900	1427	2600	Vib Cast, Pump, Shot
ARMORMAX® 85	84.4	10.5	-	-	2.92	182	175.70	25,500	1427	2600	Vib Cast, Pump, Shot
ARMOMAX® 90 SR	89.2	7.8	-	-	3.00	187	113.69	16,500	1427	2600	Vib Cast, Pump, Shot
ARMORMAX® AZS 5 HZR	40.9	28.7	26.8	-	3.16	197	112.72	16,360	1316	2400	Vib Cast, Pump, Shot



INSULATING MIXES

Products	Chemistry (%)		Density (815°C, 1500°F)		C.C.S. (815°C, 1500°F)		Temp. Limit		Installation Method
	Al ₂ O ₃	SiO ₂	g/cm ³	lb/ft ³	Mpa	psi	°C	°F	
INSULITE® 2025	15.4	38.3	0.32-0.48	20-30	0.4-0.7	60-100	1090	2000	Cast, Gun
INSULITE® 2570	41.3	42.1	1.09-1.15	68-72	2.8-6.9	400-1000	1370	2500	Cast, Gun
INSULITE® 2035 LI	37.9	42.3	0.6	36	1.0-1.7	150-250	1100	2000	Cast, Gun
INSULITE® 2350	38.2	39.9	0.80	50	1.4-2.8	200-400	1260	2300	Cast, Gun
INSULITE® 2570	41.3	42.1	1.09-1.15	68-72	2.8-6.9	400-1000	1370	2500	Cast, Gun
INSULITE® 2460 LI	43.8	36.0	1.0	62	4.8	600-800	1315	2400	Cast, Gun
INSULITE® 25 HS	29.0	50.6	1.47	92	17.2-20.7	2500-3000	1371	2500	Cast, Gun
INSULITE® 2690 LI	42.5	46.3	1.44	90	6.2-9.0	900-1300	1425	2600	Cast, Gun
PUMPLITE 60 LI	39.7	47.6	1.02	64	4.1-5.5	600-800	1370	2500	Pump, Shot
PUMPLITE 80 LI	42.2	46.7	1.28	80	6.2-9.7	900-1400	1425	2600	Pump, Shot

