

CASTABLES for MINERAL PROCESSING

CEMENT, LIME, ORE

CONVENTIONAL CEMENT

Products	Chemistry (%)		Density (815°C, 1500°F)		CCS (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	7100	650	1200	Vibration Cast
KAST TECH® 28 P	43.6	49.1	2.27	142	82.70	12000	1540	2800	Vibration Cast, Self-Flow, Pump Cast, Shotcrete
KAST TECH® 34	95.8	0.2	2.74	171	-	-	1815	3300	Vibration Cast

ULTRA LOW CEMENT

Products	Chemistry (%)		Density (815°C,1500°F)		CCS (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® 90	90.4	8.2	2.98	186	62.01	9000	1870	3400	Vibration Cast, Pump, Shotcrete
ULTRACON 34 C	92.8	6.2	3.03	189	73.03	10600	1760	3200	Vibration Cast
ULTRACON 95	94.4	5.0	2.98	186	-	-	1870	3400	Vibration Cast



LOW CEMENT

Products	Chemistry (%)				Density (815°C, 1500°F)		CCS (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	35.0	-	-	2.74	171	59.94	8700	1700	3100	Vibration Cast, Pump
DURACON® 28	46.2	48.1	-	-	2.23	139	53.74	7800	1540	2800	Vibration Cast
DURACON® 30	47.2	46.3	-	-	2.34	146	68.80	9985	1650	3000	Vibration Cast
DURACON® 32	63.1	31.6	-	-	2.55	159	106.17	15410	1760	3200	Vibration Cast
DURACON® 70 C	69.2	25.6	-	-	2.71	169	113.69	16500	1760	3200	Vibration Cast
DURACON® NRSA	77.0	18.1	-	-	2.77	173	87.16	12650	1760	3200	Vibration Cast
DURACON® 86	87.0	8.7	-	-	2.93	183	109.55	15900	1790	3250	Vibration Cast
TUFF-FLO FSM	34.8	61.3	-	-	2.18	136	54.29	7880	1205	2200	Vibration Cast, Pump
TUFF-FLO 60A	59.6	36.2	-	-	2.58	161	104.7	15200	1700	3100	Vibration Cast, Pump
TUFFCRETE® FS	15.6	81.8	-	-	2.00	125	82.68	12000	1205	2200	Vibration Cast, Pump, Shot
TUFFCRETE® 47	47.1	46.5	-	-	2.21	138	82.68	12000	1540	2800	Vibration Cast, Pump, Shot
TUFFCRETE® ARZ	43.9	44.3	1.1	4.9	2.32	145	89.57	13000	1650	3000	Vibration Cast, Pump, Shot
TUFFCRETE® 60 M	60.5	34.3	-	-	2.52	157	106.80	15500	1705	3100	Vibration Cast, Pump, Shot
TUFFCRETE® 60 MZ	58.1	34.1	2.7	-	2.56	160	75.79	11000	1705	3100	Vibration Cast, Pump, Shot
TUFFCRETE® 604 Z	59.5	32.3	3.6	-	2.52	157	82.68	12000	1650	3000	Vibration Cast, Pump, Shot
TUFFCRETE® 60 M ARZ	54.5	33.8	1.1	5.0	2.58	161	146.76	21300	1705	3100	Vibration Cast, Pump, Shot
TUFFCRETE® 60 X	60.3	33.9	-	-	2.48	155	92.33	13400	1650	3000	Vibration Cast, Pump, Shot
TUFFCRETE® 60 SiC	21.3	12.1	-	63.6	2.60	162	113.69	16500	1650	3000	Vibration Cast, Pump, Shot
TUFFCRETE® 28 SiC Z	44.4	21.5	1.1	28.3	2.63	164	126.09	18300	1705	3100	Vibration Cast, Pump, Shot
TUFFCRETE® 63 X	62.4	31.4	-	-	2.53	158	103.35	15000	1650	3000	Vibration Cast, Pump, Shot
TUFFCRETE® 65 M	64.8	30.5	-	-	2.61	163	138.39	20085	1705	3100	Vibration Cast, Pump, Shot
TUFFCRETE® 608	59.3	28.3	-	7.9	2.60	162	206.7	30000	1650	3000	Vibration Cast, Self-Flow, Pump, Shot
TUFFCRETE® 70 ABR	69.6	24.8	-	-	2.69	168	144.69	21000	1760	3200	Vibration Cast, Pump, Shot
TUFFCRETE® 70 M	71.3	23.6	-	-	2.66	166	158.47	23000	1760	3200	Vibration Cast, Pump, Shot
TUFFCRETE® 70 X	68.0	25.8	-	-	2.58	161	98.53	14300	1650	3000	Vibration Cast, Pump, Shot
TUFFCRETE® 733	65.0	24.5	1.8	2.7	2.58	161	83.40	12100	1650	2850	Vibration Cast, Pump, Shot
TUFFCRETE® 80	79.6	14.0	-	-	2.76	172	79.90	11600	1760	3200	Vibration Cast, Self-Flow, Pump, Shot
TUFFCRETE® 86	85.4	10.1	-	-	2.76	172	66.10	9600	1785	3250	Vibration Cast, Self-Flow, Pump, Shot

NO CEMENT

Products	Chemistry (%)				Density (815°C 1500°F)		CCS (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® 80 FS P	19.9	79.1	-	-	2.00	125	58.6	8500	1315	2400	Vib Cast, Self-Flow, Pump, Shot
NANO-TEK® 61 HS	61.4	35.2	-	-	2.45	153	97.84	14200	1700	3100	Vib Cast, Pump, Shot
NANO-TEK® 60 Z HS	58.4	35.5	2.8	-	2.52	157	99.28	14410	1700	3100	Vib Cast, Pump, Shot
NANO-TEK® 55 A SR HS	56.0	36.3	1.3	4.9	2.53	158	62.35	9050	1700	3100	Vib Cast, Pump, Shot
NANO-TEK® 805 ARZ	48.4	34.7	5.7	8.1	2.50	156	84.23	12225	1700	3100	Vib Cast, Pump, Shot
NANO-TEK® 90	89.6	9.3	-	-	2.90	181	30.32	4400	1700	3100	Vib Cast, Pump, Shot
NANO-TEK® 75 SiC	17.1	5.2	-	74.9	2.66	166	35.66	5175	1650	3000	Vib Cast, Pump, Shot
QUICK-FIRE® 55	55.4	36.7	-	-	2.32	145	15.36	2230	1600	2900	Vib Cast
QUICK-FIRE® 88	88.2	3.9	-	-	2.74	171	18.95	2750	1650	3000	Vib Casting
QUICK-FIRE® 90	89.1	2.1	-	-			36.93	5360	1700	3100	Vib Casting
QUICK-FIRE® ONE 86	87.6	3.6	-	-	2.55	159	17.0 – 30.0	2400 - 4400	1650	3000	Vib Casting
STACKLINE B PC	98.1	0.2	-	-	2.18	136	58.57	8500	815	1500	Vib Cast, Pump, Shot

HIGH STAINLESS FIBER CONTENT

Products	Chemistry (%)				Density (815°C,1500°F)		CCS (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	1.0	27.3	2.69	168	82.68	12000	1430	2600	Vib Cast, Pump, Shot
ARMORMAX® 608	59.9	27.1	-	8.2	2.63	164	103.96	15089	1315	2400	Vib Cast, Pump, Shot
ARMORMAX® 70 SR	70.1	25.5	-	-	2.66	166	117.13	17000	1430	2600	Vib Cast, Pump, Shot
ARMORMAX® NRSA	82.4	11.9	-	-	3.00	187	185.34	26900	1430	2600	Vib Cast, Pump, Shot
ARMORMAX® 85	84.4	10.5	-	-	2.92	182	175.70	25500	1430	2600	Vib Cast, Pump, Shot
ARMOMAX® 90 SR	89.2	7.8	-	-	3.00	187	113.69	16500	1430	2600	Vib Cast, Pump, Shot
ARMORMAX® AZS 5 HZR	40.9	28.7	26.8	-	3.16	197	112.72	16360	1315	2400	Vib Cast, Pump, Shot



INSULATING MIXES

Products	Chemistry (%)		Density (815°C, 1500°F)		CCS (815°C, 1500°F)		Temp. Limit		Installation Method
	Al ₂ O ₃	SiO ₂	g/cm ³	lb/ft ³	MPa	psi	°C	°F	
INSULMIX® 2025	15.4	38.3	0.32-0.48	20-30	0.4-0.7	60-100	1090	2000	Vib Cast, Gun
INSULMIX® 2035 LI	37.9	42.3	0.60	36	1.0-1.7	150-250	1100	2000	Vib Cast, Gun
INSULMIX® 2250	30.2	50.4	0.80-0.86	50-54	1.4-4.1	200-600	1205	2200	Vib Cast, Gun
INSULMIX® 2350	38.2	39.9	0.80	50	1.4-2.8	200-400	1260	2300	Vib Cast, Gun
INSULMIX® 2460 LI	43.8	36.0	1.00	62	4.8	600-800	1315	2400	Vib Cast, Gun
INSULMIX® 2570	41.3	42.1	1.09-1.15	68-72	2.8-6.9	400-1000	1370	2500	Vib Cast, Gun
INSULMIX® 25 HS	29.0	50.6	1.47	92	17.2-20.7	2500-3000	1370	2500	Vib Cast, Gun
INSULMIX® 2680	48.3	39.3	1.20-1.31	75-82	4.1-8.3	600-1200	1430	2600	Vib Cast, Gun
INSULMIX® 2690 LI	42.5	46.3	1.44	90	6.2-9.0	900-1300	1425	2600	Vib Cast, Gun
INSULMIX® 2790	49.0	39.1	1.44-1.51	90-94	6.9-13.8	1000-2000	1480	2700	Vib 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

