

PRODUCT DATA
ALTRA® KVS
High Temperature Vacuum Formed Boards and Shapes

ALTRA® KVS high temperature vacuum formed products are available in formulations for service temperatures up to 1800°C. ALTRA® KVS boards and shapes feature low thermal conductivity, excellent thermal shock resistance, high purity, good machinability and good density uniformity. ALTRA® KVS is formed from alumina and/or aluminosilicate fibers with appropriate inorganic and organic binders. ALTRA® KVS products are pre-fired to 1000°C, resulting in an organic free composition.



Properties	Units	ALTRA® GRADE					
		KVS 124	KVS 144	KVS 164	KVS 164/302	KVS 174/400	KVS 184/400
Classification Temperature	⁰ F	2300	2600	3000	3000	3092	3272
	⁰ C	1260	1430	1650	1650	1700	1800
Service Temperature	⁰ F	2012	2372	2732	2912	3092	3272
	⁰ C	1100	1300	1500	1600	1700	1800
Density	lbs/ft ³	18	18	18	18	25	25
	(kg/m ³)	(300)	(300)	(300)	(300)	(400)	(400)
Linear Shrinkage 24 hrs @ Temperature “+” indicates growth	%	2% @ 1100 ⁰ C	2% @ 1250 ⁰ C	1% @ 1500 ⁰ C	+0.5% @ 1500 ⁰ C	+0.2 @ 1600 ⁰ C	0.1% @ 1700 ⁰ C
				2% at 1600 ⁰ C	+1.0 at 1600 ⁰ C	0.3% @ 1700 ⁰ C	0.8% @ 1800 ⁰ C
Thermal Conductivity 752 ⁰ F (400 ⁰ C) 1112 ⁰ F (600 ⁰ C) 1472 ⁰ F (800 ⁰ C) 1832 ⁰ F(1000 ⁰ C) 2192 ⁰ F(1200 ⁰ C) 2552 ⁰ F(1400 ⁰ C)	BTUin/hrft ² ⁰ F (W/mK)						
		0.62(0.09)	0.62(0.09)	1.18(0.17)	0.76(0.11)	0.97(0.14)	0.97(0.14)
		0.83(0.12)	0.83(0.12)	1.25(0.18)	0.97(0.14)	1.18(0.17)	1.18(0.17)
		1.04(0.15)	1.04(0.15)	1.39(0.20)	1.25(0.18)	1.39(0.20)	1.39(0.20)
		1.32(0.19)	1.32(0.19)	1.80(0.26)	1.59(0.23)	1.66(0.24)	1.73(0.25)
		1.73(0.25)	1.66(0.24)	2.36(0.34)	1.94(0.28)	1.94(0.28)	2.01(0.29)
2.36(0.34)	2.15(0.31)	3.05(0.44)	2.36(0.34)	2.43(0.35)	2.29(0.33)		
Chemical Composition	%						
		Al ₂ O ₃	50	55	65	78	81
		49	44	34	22	19	20

- All ALTRA® grades are available in boards, tubes and other vacuum formed shapes
- Standard Board Size: 24” x 36”, Thickness 1”, 1 ½ “ and 2”
- Other board sizes and thickness available upon request