

CERAMIC HONEYCOMB MONOLITH

Heat Storage & Exchange,
Catalyst Carrier, Gaseous
Emissions Control, Chemical
Packing

Application: RTO & RCO, Metal
Casting, Scrubber, Packing Tower

We customize all products and
materials to individual customer
needs and specifications.

150x150x300x(50x50) Cellular Honeycomb Ceramics

Physical Performance

Material Item		Alumina Porcelain	Dense Cordierite	Cordierite	Mullite	Stoneware
Density	g/cm ³	2.68	2.42	2.16	2.31	2.47
	lb/ft ³	167.3	151.1	134.9	144.2	154.2
Bulk Density	kg/m ³	991.6	895.4	799.2	854.7	913.9
	lb/ft ³	61.9	55.9	49.9	53.4	57.1
Thermal Expansion Coefficient	10 ⁻⁶ /K	6.2	3.5	3.4	6.2	4.8
	10 ⁻⁶ /°F	3.4	1.94	1.89	3.4	2.7
Specific Heat Capacity	J/kg·K	992	942	1016	998	897
	Btu/lb·°F	0.237	0.221	0.243	0.238	0.214
Thermal Conductivity	W/m·K	2.79	1.89	1.63	2.42	1.37
	Btu/ft·h·°F	19.4	13.1	11.3	16.8	9.5
Thermal Shock Resistance	Max K	500	500	600	550	500
	Max °F	900	900	1080	990	900
Softening Temperature	°C	1500	1320	1400	1580	1380
	°F	2732	2408	2552	2876	2516
Maximum Service Temperature	°C	1400	1200	1300	1480	1280
	°F	2550	2228	2372	2696	2336
Average Heat Capacity	kW·h/m ³ ·K	0.273	0.234	0.226	0.237	0.228
	Btu/ft ³ ·°F	14.7	12.4	12.4	12.7	12.2
Water Absorption	%	≤20	≤5	15-20	15-20	≤5
Acid Resistance	%	0.2	5.0	16.7	2.5	0.3

Specifications

- Overall Dimensions – 150 x 150 x 300mm / 5.9 x 5.9 x 11.81 in
- Number of Cells – 50 x 50 = 2500
- Cell Width – 2.27 mm / 0.089 in
- Wall Thickness – 0.7 mm / 0.028 in
- Specific Surface Area – 1009 m²/m³ / 307.5 ft²/ft³
- Void Fraction – 57%