



ConduFill® (HT-450) Technical Data Sheet

PHYSICAL PROPERTIES			
Property	ASTM Test Method	SI	Metric
Density , pcf (kg/m ²), Nominal	D-1622	2.45	(38.5)
Compressive Strength , psi (kPa) @ 10% Deflection Parallel to Rise Perpendicular to Rise	D-1621	30 27	(207) (186)
k-factor , BTU-in/hr-ft ² -°F (w/mK) Initial Aged 180 Days @ 75°F (24°C) Aged 90 Days @ 140°F (60°C)	C-518	0.13 0.165 0.18	(0.018) (0.022) (0.026)
Water Absorption , psf (g/cm ²) % By Volume	D-2842	0.035 <2	(0.017) <2
Water Vapor Permeability , Perm-in (ng/Pa-S-M)	E-96	4.0	(5.8)
Service Temperature , °F (°C) Continuous Intermittent		-100°F to 400°F (+450°F)	(-73°C) to (202°C) (230°C)
Closed Cell Content , %	D-2856	87	
Dimensional Stability , % Change Dry Heat, 400°F (202°C) 1 Day 7 Days 28 Days	D-2126	Length +1.3 +2.3 +1.6	Volume +0.1 +2.3 -4.4
Surface Burning Characteristics¹ Flame Spread Smoke Developed	E-84	40 80	

¹This numerical flame spread rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

The physical properties shown above were obtained by processing the chemicals through a conventional low pressure high shear mixing machine. Chemical temperatures were maintained at 90° F (32° C) for the isocyanate component and 80° F (27° C) for the polyol. Box pours measuring 24" x 24" x 24" (61cm x 61 cm x 61 cm) were made and the resulting foam was cured for 30 days at room temperature, approximately 77° F (25° C). Testing was done on core samples cut from the box pour.

CHEMICAL PROPERTIES			
Property	Component A	Component B	Component C
Viscosity, cps @ 77°F (25°C)	600-800	750-1000	275-450
Specific Gravity, cps @ 77°F (25°C)	1.24	1.24	1.24
Ratio, parts by Weight	67	16.5	16.5
Reaction Profile	200 gm Lab Hand Mix With 3000 rpm Mixer Start of Rise: 15-45 seconds String Gel: 60-150 seconds Rise Time: 90-240 seconds Free Rise Density: 2.1 – 2.3 pcf (33.7 – 37 kg/m ³)		