



STRUCTURAL FOAM

TECHNICAL DATA SHEET

Structural application foam
B209-40, B209-50, B209-60, B209-80

Huntsman Building Solutions B209-00 product line series are two component spray applied rigid polyurethane foam system specially formulated for structural applications requiring a minimum compressive strength of 40, 50, 60 and 80 psi.

This product is manufactured with recycled plastic material (PET), renewable soya oil and other renewable oil. It uses zero ODS (Ozone Depletion Substance) blowing agents and meets all the requirements of the Montreal protocol to protect the ozone layer. This product has low global warming potential (GWP).

PHYSICAL PROPERTIES*				
	B209-40	B209-50	B209-60	B209-80
Overall density (ASTM D1622)	2,7 lb/pi ³ (43 kg/m ³)	4,0 lb/pi ³ (64 kg/m ³)	4,5 lb/pi ³ (72 kg/m ³)	5,0 lb/pi ³ (60 kg/m ³)
Core density (ASTM D1622)	2,0 lb/pi ³ (40 kg/m ³)	3,7 lb/pi ³ (59 kg/m ³)	4,1 lb/pi ³ (66 kg/m ³)	4,7 lb/pi ³ (75 kg/m ³)
Initial Thermal Resistance (ASTM C 518)	R 6,9 (1,2 RSI)	R 7,1 (1,3 RSI)	R 7,0 (1,2 RSI)	R 6,3 (1,1 RSI)
Compressive Strength (10 %) (ASTM D1621)	41 psi (283 kPa)	52 psi (359 kPa)	66 psi (455 kPa)	83 psi (572 kPa)
Dimensional Stability (ASTM D2126 – 28 days) (% Volume change)				
@ -20°C	-0,7%	+0,4%	+0,1%	-0,2%
@ 80°C	-1,4%	+0,3%	+3,5%	-1,4%
@70°C, 100% H.R.	-1,0%	+6,6%	+2,8%	+3,5%

*Applied on a substrate at 68°F (20°C) at a thickness of 1,5 in (38mm)

LIQUID COMPONENTS PROPERTIES***					
Property	Isocyanate A-100	B209-40	B209-50	B209-60	B209-80
Viscosity at 77°F (25°C)	150 – 250 cps	530-630cps	600- 700cps	810-910cps	760-860cps
Colour	Brown	Greenish, blue tint			
Specific Gravity	1,20 – 1,24	1,19 – 1,21			
Shelf life	6 months	6 months			

** See MSDS for more information.

RECOMMENDED PROCESSING PROCEDURES				
	B209-40	B209-50	B209-60	B209-80
Initial Recommended Components Temperature (A, B & Hose)	112°F (43°C)	116°F (47°C)	121°F (49°C)	121°F (49°C)
Mixing Ratio A/B	1/1			
Mixing Dynamic Pressure (minimum)	800-1000psi (5516-6895 kPa)			
Ambient and Substrate Temperature	> 59°F (> 15°C)			
Curing Temperature	> 59°F (> 15°C)			
Maximum thickness per pass	1,5" (38mm)			
Maximum thickness of successive passes	3" (75mm)			
Minimum cooling time period before applying over 75 mm (3") thick application	4 hours			

REACTIVITY PROFILE				
	B209-40	B209-50	B209-60	B209-80
Cream time (seconds)	0-1	0-1	0-1	0-1
Gel time (seconds)	4-5	3-4	3-4	3-4
Tack free time (seconds)	6-7	6-7	5-6	5-6
End of rise (seconds)	6-7	6-7	5-6	5-6

General information : It is recommended that the foam be covered with an approved thermal barrier in accordance with the applicable building code when used in buildings and cover by a UV coating when used outside. This product should not be used when the continuous service temperature of the substrate is outside the range of -60°C to 80°C (-76°F to 180°F). Do not apply excessive thickness in one application it may cause spontaneous combustion of the foam hours after the application. Respect the recommended procedures.

Disclaimer : The information herein is to assist customers in determining whether our products are suitable for their applications. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, express or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent inferred. The exclusive remedy for all proven claims is replacement of our materials. All patent rights are reserved.

