

NCFI Polyurethanes
Div. of Barnhardt Manufacturing Co.
PO Box 1528 • Mount Airy, NC 27030
800-346-8229 www.NCFI.com

# TerraThane 24-038 Geotechnical Foam System

#### **Technical Data Sheet**

NCFI 24-038 is a plural component, co-blown, all PMDI-based, nominal 8 pcf density, hydro-insensitive polyurethane foam system designed for concrete slab raising, under-slab void fill and cavity fill applications where a high degree of foam strength is demanded. NCFI 24-038 is formulated to be machine processed using applicable plural component polyurethane processing equipment.

## **Typical Properties of Components**

Component	B-24-038	A2-000
Appearance	clear black liquid	clear brown liquid
Brookfield Viscosity @ 20 rpm	750 cps at 72°F	200 cps at 72°F
Specific Gravity	1.10	1.24
Storage Temperature	60°F - 90°F	60°F- 90°F

#### Mix Ratio

## **Typical Properties of Mixing**

	Hand mix at 72°F	Equipment mix at 120°F
Cream Time	28 seconds	8 seconds
Rise Time	90 seconds 20 seconds	
Free Rise Core Density	8 pcf	7.5 pcf

#### **Process Parameters**

Iso Temperature	110°F to 125°F
Poly Temperature	110°F to 125°F
<b>Equipment Dynamic Pressure</b>	800 – 1000 psi

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## **Typical Foam Physical Properties**

In-Place Density (ASTM D-1622)	8 pcf	8.5 pcf	
Compressive Strength (ASTM D-1621)	175 psi	200 psi	
Compressive Modulus (ASTM D-1621)	3200 psi	3500 psi	
Tensile Strength (ASTM D-1623)	165 psi	185 psi	
Tensile Modulus (ASTM D-1623)	2700 psi	3100 psi	
Resistance to Mold and Mildew	Excellent		
Resistance to Solvents	Excellent		
Closed cell content (ASTM D-6226)	> 94%		
Maximum service temperature	180°F		

## **Storage and Handling**

Store the poly from 60°F to 90°F. Avoid moisture contamination during storage, handling, and processing. For both components, pad containers and day tanks with either nitrogen or dry air (desiccant cartridge or air dryer @ -40°F dew point). For optimum shelf life, the recommended storage temperature for iso is 50°F to 90°F. Shelf life is 6 months for factory sealed containers.

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