

Material Characteristics

NCFI-2.8F is a 2.8 lb/ per ft fast-reacting system formulated for targeted residential lifting and void filling. With a 1-2 second cream time and 16-19 second rise time, it provides precise, controlled lifts ideal for sidewalks, driveways, and garage slabs. Though not hydrophobic, the reactivity allows it to perform effectively in saturated areas. 2.8F is also suitable for light commercial projects for stabilization and lifting.

Applications

Foundation Repair
Sidewalks
Driveways
Pool Decks
Patios
Trip Hazard Mitigation
Floor Leveling



NSF/ANSI/CAN 61 - 5".
*Upon Request

Unique Advantages

Fast Reactivity
High Control for Pinpoint Lifting
Strengthens Loose Soils
Water Blown System

Reactivity at 110°F

Cream Time	1 - 2 seconds
Gel Time	6 - 8 second
Tack Free Time	11 - 14 seconds
Rise Time	16 - 19 seconds
Cure Time	95% @ 30min. Full cure at 24hrs

Chemical Resistance

<i>Solvents...</i>	Excellent
<i>Mold and Mildew...</i>	Excellent

Performance

<i>Wet Environments...</i>	Poor
<i>Lifting Capacity...</i>	Excellent

Physical Properties

Physical Properties	Test Method	Free Rise	Restrained
Density	ASTM D1622	2.8 pcf	3.5 - 4 pcf
Compressive Strength	ASTM D1621	27 psi	55 - 65 psi
Compressive Modulus	ASTM D1621	695 psi	1700 psi
Tensile Strength	ASTM D1623	66 psi	100 - 120 psi
Tensile Modulus	ASTM D1623	100 psi	
Water Absorption	ASTM D2842	≤0.04lbs/ft ²	≤0.04lbs/ft ²
Closed Cell Content		>90%	>90%
Max Service Temp		180°F	180°F
Elongation	ASTM D1623	7%	
Shear Strength	ASTM C273	38 psi	
Shear Modulus	ASTM C273	490 psi	
Flexural Strength	ASTM D790	56 psi	
Flexural Modulus	ASTM D790	1279 psi	

Component Properties

Component	B-NCFI-2.8F	A2-000
Appearance	Transparent Liquid	Clear Brown Liquid
Brookfield Viscosity @20rpm	600 cps at 72°F	200 cps at 72°F
Specific Gravity	1.08	1.24
Weight per Gallon	9.01 lbs	10.3 lbs
Storage Temperature	50-100°F	50-100°F

Mix Ratio

By weight...	115 parts A-side: 100 parts B-side
By volume...	100 parts A-side: 100 parts B-side

Processing Parameters

A-side Temperatures	100 – 120°F
B-side Temperatures	100 – 120°F
Mixing Pressure	1000 psi static 800 psi dynamic

Storage and Handling

For optimum shelf life, the recommended storage temperature is 50°F to 100°F. **Do not expose A-side to lower temperatures – freezing may occur.** Avoid moisture contamination during storage, handling, and processing. After opening, pad the containers and day tanks with either nitrogen or dry air (desiccant cartridge or air dryer @ -40°F dew point). Store components at 70°F to 90°F for several days prior to use to minimize viscosity issues. Shelf life of B-side is 6 months and A-side is 2 years for factory sealed containers.

Application Cautions

Careful consideration should be given to selection and application of any NCFI Polyurethane foam system where excessive foam mass build-up can occur. Excessive polyurethane foam lift thickness will result in high internal temperatures within the injected foam, which can result in degraded foam properties, or in extreme cases, fire or spontaneous combustion. **Any flammability rating contained in this literature is not intended to reflect hazards presented by this or any other material under actual fire conditions.** Each person, firm or corporation engaged in the application, installation or use of any polyurethane product should carefully determine whether there is a potential fire hazard associated with such product in a specific usage and utilize all appropriate precautionary and safety measures. Please consult NCFI Polyurethanes for safety considerations, polyurethane system selection and application recommendations.

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