



POLYURETHANE FOAM SYSTEMS for CONCRETE LIFTING & STABILIZATION

Since 1986 NCFI Polyurethanes has been manufacturing and supplying highly specialized polyurethane foams for the concrete lifting and stabilization industry. NCFI has over 40 years experience in the formulation and manufacturing of polyurethane foams. Our 24-486 system and our 24-003 system are designed for optimum lifting efficiency. Typically far less total pounds of NCFI polyurethane foam is required per job, compared to other lifting foams used today. Specially designed for lifting curb sections, bridge approaches and departures, highway and street sections, airport runways and taxiways, and both residential and commercial concrete slabs. Our systems are approved by many Departments of Transportation, Departments of Public Works, and local municipalities.

- ◆ **Economical**-- NCFI's polyurethane foam systems in many cases eliminate the need for expensive and time consuming concrete replacement.
- ◆ **Efficient**-- Compared to grout lifting methods, there is no need for oversized core holes which can range from 1.5" to 3" in diameter. The foam lifting method requires a 5/8" diameter hole which eliminates unsightly patches and, since foam cures in minutes, there is no discoloration or staining of the surrounding concrete surface.
- ◆ **Rapid application** -- Because NCFI's polyurethane foams cure in minutes (typically 90% of full compression strength in 15 minutes after being injected) large surface areas can be lifted and reopened to use reducing downtime and labor cost.
- ◆ **Moisture tolerant**-- NCFI's specially formulated polyurethane foam system can be injected into wet areas while still maintaining its physical characteristics during reaction and expansion.
- ◆ **Moisture Resistant**-- The high density, closed cell nature of polyurethane foam makes it resistant to water penetration.
- ◆ **Conformable**-- During the injection process the polyurethane foam will flow freely into cracks and voids, expanding to its final in-place density which is typically greater than its free rise density. Free rise density is determined without any loads or restrictions placed on the polyurethane foam.



Highly skilled operators efficiently complete the job



Where other systems can lose over half of their compressive strength, NCFI's exclusive formulation retains over 95% of its strength when injected into wet or high moisture environments

PHYSICAL PROPERTIES

NCFI Pour-in-Place System 24-486 is a two-part closed-cell system with high compressive strength designed for concrete jacking and cavity fill.

Free Rise Density (nominal)	3.7 lb/ft ³
Compressive Strength	69 psi
Tensile Strength	146 psi
Elongation	5%
Closed cell content	>85%
Water Absorption, ASTM D2842	≤0.04 lbs/ft ²
K-factor	0.206
Resistance to Solvents	Excellent
Resistance to Mold/Mildew	Excellent
Max Service Temperature	200°F
Shelf Life	6 months
Mix Ratio by volume	1:1

PHYSICAL PROPERTIES

NCFI Pour-in-Place System 24-003 is a two-part closed-cell system with high compressive strength designed for concrete jacking and cavity fill.

Free Rise Density (nominal)	4.0 lb/ft ³
Compressive Strength	90 psi
Tensile Strength	110 psi
Elongation	5%
Closed cell content	>94%
Water Absorption, ASTM D2842	≤0.04 lbs/ft ²
K-factor	0.186
Resistance to Solvents	Excellent
Resistance to Mold/Mildew	Excellent
Max Service Temperature	200°F
Shelf Life	6 months
Mix Ratio by volume	1:1

CONTACT NCFI POLYURETHANES FOR YOUR
CONCRETE LIFTING OR STABILIZATION NEEDS



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