PROLIFT

Ditch Break - CAN

Pour-In-Place Slab Jacking

ProLift - Ditch Break is a two-component, water and HFC-245fa co-blown, polyurethane foam system designed for use as a void fill, trench-break material. ProLift - Ditch Break has been formulated to process at 2.0–2.2 pcf depending on lift thickness. ProLift - Ditch Break is designed to be built up in significant lift thickness without scorch or splitting. This product is also offered in a high altitude variation that will maintain the 2 pcf density when processed at higher elevations. ProLift - Ditch Break is UL-94-FR rated.

Typical Properties of Components

Component	B-ProLift-Ditch Break	A-ProLift-Ditch Break
Appearance	Transparent amber liquid	Transparent brown liquid
Brookfield Viscosity @ 50 rpm	580 cps at 72 F	200 cps at 72 F
Specific Gravity	1.07	1.24
Storage Temperature	40^{O}F – 90^{O}F	40^{O}F – 90^{O}F

Mix Ratio

By weight……100 parts poly : 116 parts iso
By volume……100 parts poly : 100 parts iso

Typical Properties of Hand-Mixed System at 50^{O}F and Sprayed at 130^{O}F

Cream Time	5 seconds	
Tack Free Time	22 seconds	5 seconds
Rise Time	33 seconds	
Free Rise Core Density	2.0 pcf	

Process Parameters

Iso Temperature	110^{O}F to 130^{O}F
Poly Temperature	110^{O}F to 130^{O}F
Mix Pressure	800 – 1200 psi

Typical Physical Properties

	Free Rise	Sprayed
Free-Rise Density (ASTM D1622)	2.0 lb/ft^3	
Compressive Strength (ASTM D1621)	27 psi	43.5 (parallel)
Compressive Modulus (ASTM D1621)	560 psi	1122 psi
Closed Cell Content (PSI TM-300)	> 95%	91.6%
Flexural Strength (ASTM D790)		128 psi
Flexural Modulus (ASTM D790)		4734 psi
Shear Strength (ASTM C273)		49.3 psi
Shear Modulus (ASTM C273)		395 psi
Water Absorption (ASTM D2842)	≤ 0.08 lbs/ft^2	≤ 0.08 lbs/ft^2
Moisture Vapor Transmission (ASTM E96)	2 – 4 perm·in	2.02 perm·in
Resistance to Solvents	Excellent	Excellent
Resistance to Mold & Mildew	Excellent	Excellent
Maximum Service Temperature	180^{O}F	180^{O}F
28-Day Dimensional Stability Testing (ASTM D2126)	Volume change	
-20° F	-0.1%	0.04%
200° F	-0.2%	-0.38%
158° F, 95% R.H.	1.2%	-0.11%
K- factor (ASTM C-518)	-	0.179 (initial)
Tensile Strength	-	66.1 psi
Limiting Oxygen Index	-	20.0%

Storage and Handling

Avoid entraining air during mixing. Store the poly from 65°F to 85°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 60°F to 90°F. Do not expose iso to lower temperatures – freezing may occur. Shelf life is 6 months for factory sealed containers.

Origination Date: 05/15/2011
Update 1: 04/10/2017
Update 2: 06/30/2017
Update 3: 07/10/2017
Update 4: 06/22/2018