
L A B O R A T O R Y R E P O R T

TITLE: FLEXICLAD LC & PC
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Introduction:

ENECON has a large selection of polymer coatings for repairing, protecting and enhancing the appearance of metal and concrete floors, walls and structures.

To compliment these coatings ENECON is introducing two expansion joint sealants to its extensive line of products. These sealants, called FLEXICLAD LC (Liquid Caulk) and FLEXICLAD PC (Paste Caulk), were developed specifically for use in secondary containment areas and other demanding applications but can also be used in simple construction and waterproofing joints.

Description:

FLEXICLAD LC and FLEXICLAD PC are two-component, polyaspartic-based elastomeric sealants for use in horizontal or vertical expansion joints and construction joints in concrete and steel surfaces.

They are chemical curing sealants intended for use in most properly designed joints with a minimum depth of ¼ inch.

These products exhibit exceptional chemical resistance to acids, bases, automobile fluids, detergents, bleach, etc. and they are solvent-free, low odor and low VOC materials.

FLEXICLAD LC is a self-leveling sealant for horizontal joints. It can be applied by pouring or pumping.

FLEXICLAD PC is a non-sag sealant for vertical or overhead joints. It can be applied by troweling.

Properties:

Technical Data:

Volume capacity per ½ kg unit	28 in ³ / 460 cm ³			
Mixed density	0.036 lbs. per in ³ / 1.08 gm per cc			
Volume solids	100%			
Mixing ratios	FLEXICLAD LC		FLEXICLAD PC	
	Base	Activator	Base	Activator
By volume	3	2	5	3
By weight	3	2	5	3

Cure Times:

	Working Life	Initial Set	Full Cure
77 °F (25 °C)	1 hr.	4 hrs.	3 days
86 °F (30 °C)	¾ hrs.	3 hrs.	2 days

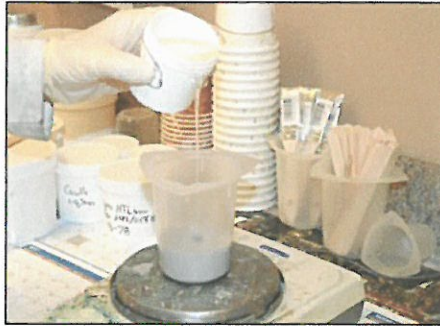
Physical Properties:

	Typical Values	Test Method
Hardness – Shore A	60	ASTM D-2240
Tensile Elongation	700%	ASTM D-2370
Tensile Shear Adhesion		
Steel	1300 psi	ASTM D-1002
Aluminum	1200 psi	ASTM D-1002
Direct Tensile Adhesion		
Concrete	300 psi (concrete failure)	ASTM D-4541

Chemical Resistance:

Anti-Freeze	Excellent
Bleach	Excellent
Gasoline	Excellent
Motor oil	Excellent
Sodium chloride	Excellent
Sodium hydroxide 20%	Excellent
Sodium hydroxide 50%	Good
Sulfuric acid 20%	Excellent
Sulfuric acid 30%	Good

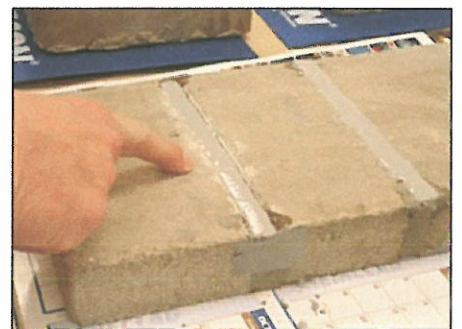
FLEXICLAD LC is a two component, polyaspartic-based elastomeric sealant for use in horizontal expansion joints and construction joints in concrete and steel surfaces.



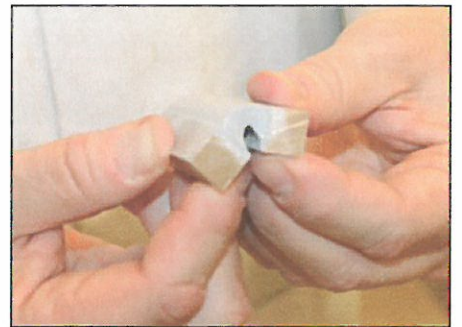
Mixing the two components until a uniform consistency is reached.



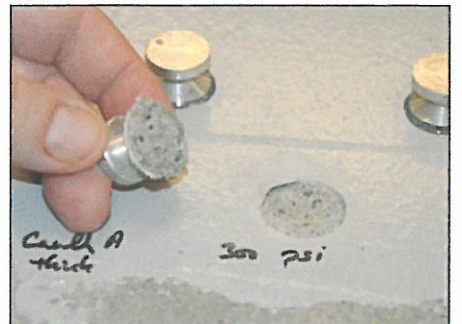
Filling horizontal cracks in concrete.

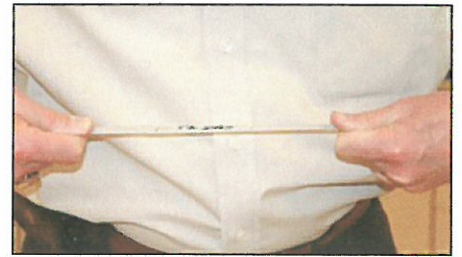
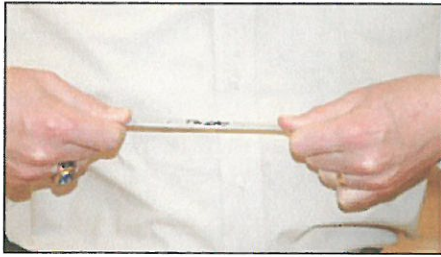
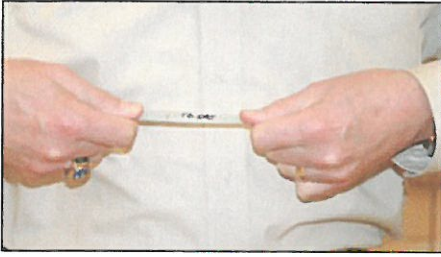


Flexibility test between two aluminum blocks.

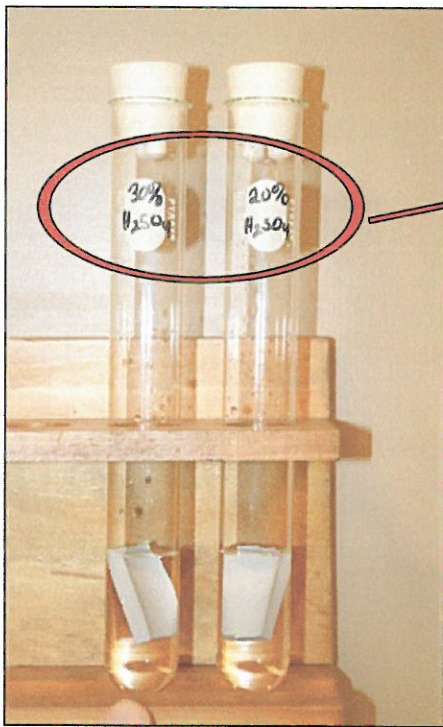


Direct tensile adhesion test. Results show the concrete fails cohesively vs. the FLEXICLAD LC failing adhesively.

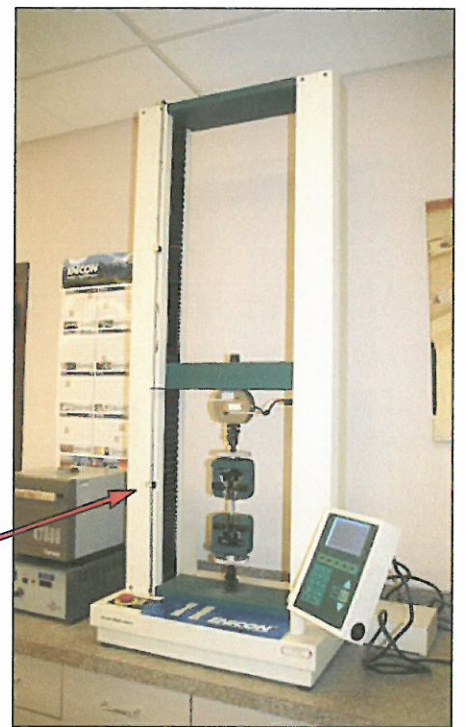




Manual 'stretch' test.
Note: When tension is released the FLEXICLAD LC returns to it's original dimension.



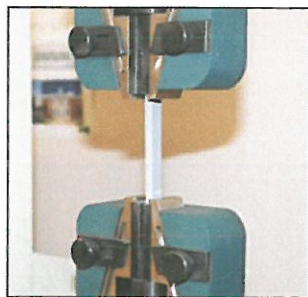
Chemical resistance testing in 20% and 30% sulfuric acid.



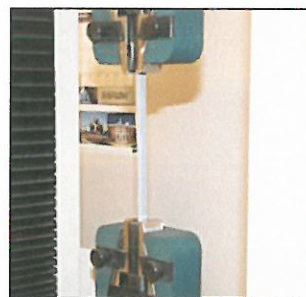
Elongation testing performed on Tinus Olsen universal tester.



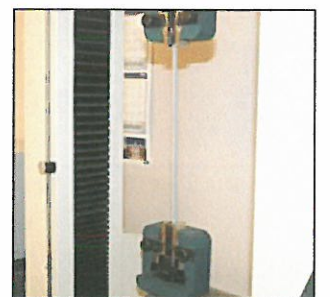
Elongation at 0%.



Elongation at 150%.



Elongation at 350%.



Elongation at 700+%.