

TD.437 – TECHNICAL DATA: BACE-LINE™ 6.3M

Revised: 11/7/2023 Version: 1.7

Product Description:

BACE-LINE™ 6.3M is a self-leveling, fast setting, high early strength, concrete overlay, designed for leveling uneven concrete floors and as a form and pour structural repair mortar. Application thickness can range from ¼" / 6mm to 2" / 50.8mm in a single pour and substantially thicker with additional approved aggregate load. Additionally, provides increased corrosion protection of steel reinforced structures with natural corrosion inhibitors, and very low chloride ion permeability. Moisture sensitive coatings can be applied in 24 hours in most environments.

Typical Uses:

- Leveling uneven concrete floors
- Form and pour cavities and spalls in horizontal or vertical concrete structures
- Precision grouting under machinery

Key Features:

- Self leveling
- Supports epoxy coatings in as little as 24 hours
- 3-hour compressive strength: 3,300 psi

Physical Properties

@ 77° F / 24° C, 50% R.H.

Reaction to fire	EN 13501-1:2018	B _{FL} – s1
Compressive strength	ASTM C109	
3 hours		3,300 psi
24 hours		6,500 psi
7 days		9,000 psi
28 days		10,200 psi
Flexural strength	ASTM C348	
7 days		1,500 psi
28 days		2,000 psi
Tensile strength	ASTM C190	
7 days		430 psi
28 days		660 psi
Bond strength	ASTM C882	
1 day		2,300 psi
7 days		2,450 psi
Length of change	ASTM C157	
28 days (dry)		-0.14%
28 days (wet)		+0.08%
Chloride Ion Permeability	ASTM C1202	
28 Days		Moderate (<2550 Coulombs)
With approved HYDROPHO™ sealer		Very Low (<500 Coulombs)
Flow time		12 seconds
Spread, cm		
0 Minutes		14.2
10 minutes		13.5
% retention		95.1
Working time @ 73° F /23° C		15 minutes

Application:

Prepare concrete by removing all contaminants and loose concrete and laitance using appropriate preparation standards. Dam edges to contain material to desired height. Apply BACE-LINE™ 6.3M primer to prepared substrate at 250 sq. ft. / 23.2 m² per 1 gallon / 4 L and allow to dry, approximately 10-20 minutes at 73°F / 22°C.

Mixing:

After primer has dried, pour 5 quarts of clean potable water into a 5-gallon pail or suitable-sized mixing container and slowly add powder to water (never add water to powder). Mix for 2 minutes or until all clumps are thoroughly wetted out using a variable speed drill and mixing equipment (this material is a high-density mortar, contact your technical representative for recommended mixing equipment).

Pour out and spread with a trowel, screed rake or gauge rake to achieve maximum flow. (Product will flow out and level over the substrate.)

After curing 8 hours @ 70°F / 20° C a recommend single component sealer may be applied.

If topping with an epoxy coating, an aggressive sanding is required at 8 hours for material placement after 24 hours.

For thicker applications:

Addition of coarse aggregate, meeting ASTM C33 should be used for pours greater than 2 inches / 50 mm in depth. Add 25 lbs. of clean washed & dry ¼" pea stone or crushed granite per 50 lb. bag. Addition of aggregate may inhibit self-leveling and require troweling.

Excellent for form and pour spall repair applications or deep repairs of concrete structures.

Temperature of surfaces must be between 35°F and 90°F / 2°C and 32°C at time of placement.

For cold and hot weather placement, contact your technical representative.

Working time is 15 minutes @ 73°F / 23°C. Not recommended exterior for freeze-thaw environments.

Important references available on request as validity of physical properties:

- CTL Group: ASTM C882 – Project 391649
- CTL Group: ASTM C1202 (AASHTO T277) – Project 391649
- CTL Group: ASTM C157 (modified per ASTM C928) – Project 391649
- AkzoNobel: Technical Report – Project ECS Formula #60

Shelf Life: 1 year from date of manufacture.