

EXP 2090

In-form retarder

DESCRIPTION

In-form surface retarders (IFSR) for simulating acid-etch or sandblast finishes, and creating exposed aggregate finishes.

EXP 2082A - EXP 2094 is a unique series of in-form surface retarders used for obtaining architectural finishes on precast concrete. The etch-depths provide a full-range of finishes from a very-light, acid-etch (or sand blast) finish to traditional, deep exposed aggregate finish. Application rates vary by etch-depth from 350 to 500 ft²/gal (8.6 - 12.3 m²/L)

The EXP 2082A - EXP 2094 series of products are designed for simulating a sandblast appearance down to a deep exposed aggregate finish. The table in the Technical Data Sheet shows the etch-depth range options and coverage rates. The application rate of 350 - 500 ft² per gallon makes this an economical option for achieving the look you need.

ADVANTAGES

- One light coat, fast drying
- May be spray applied
- Excellent etch consistency
- High coverage rates = low cost per ft²
- Easy formwork cleanup without solvents
- Can be cast against up to 24 hours after application of retarder
- Can be demolded up to 72 hours after casting

FIELDS OF APPLICATION

- For use in grey or white concrete mixes (Type I/II, III)
- For use on sealed wood, fiberglass, Polyurathane or steel forms or molds

Method of Use

Dosage

- w/c ratio: 0.38 – 0.45
- Cement content: 600 – 800 lbs/yd³
- Sand/Aggregate ratio: 0.4 – 0.5
- Application and Casting temperatures: 50 – 95 °F (10 – 35 °C)
- Concrete Curing temperatures: 40 – 158 °F (4 - 70 °C)

Additional Usage Recommendations

- Spray or roll apply in light pattern left to right and then top to bottom of the formwork. There should be no visible paint pattern.
- Molds made of sealed wood, fiberglass, polyurathane or steel must be clean and free from imperfections and loose debris before application.
- All EXP in-form surface retarder (or IFSR) products must be mixed well prior to each use with a mechanical paint stirrer to blend any precipitated material on bottom of can. Mix for a minimum of three-minutes ensuring the product looks smooth and uniform.
 - If spraying, you may pour EXP IFSRs through paint strainer into container to reduce the chance of clogging the spray tip. It is recommended to use an airless paint sprayer with a stain tip.
 - If rolling, use no more than a ¼" nap roller. Pre-saturate the roller with EXP 2082A before applying EXP IFSFs to the form.
- Apply one light coat uniformly, without any gaps or excess. If excess material forms, wipe off with a clean rag and then re-apply once the first coat is dry. This prevents drying inconsistencies.
- Average drying time is about 30 minutes depending on temperature and humidity. It is important that EXP IFSRs surfaces are completely

The information contained in this technical data sheet is given to the best of our knowledge and the result from extensive testing - which were conducted in order to remain as objective as possible. However, it cannot, in any case, be considered as a warranty involving our liability in case of misuse or any different use of our products, other than those from the "Application" paragraph of this technical data sheet. Some application tests should be carried out before using the product to ensure that the methods of use and conditions of application of the product are satisfactory. Our technical assistance is at the disposal of the users.

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dry before contuning with form setup or casting concrete onto it.

- Concrete should be a very fluid mix with high-slump, flowable or be Self-Consolidating Concrete (SCC).
- Minimize vibration (if needed) after 20 minutes of the concrete being in contact with tje EXP IFSRs, as not to disturb to surface. This can move the retarder and cause a non-uniform finish. Pouring a monolithic concrete panel is preferred also to reduce disruption to the activated retarder.
- Allow the concrete to harden until approximately 3500 psi before removing from formwork. Use a pressure washer (2500 – 3500 psi) to remove the retardered surface within eight hours of removal from the form (as long as the demolded panel stays dry).
 - If the panel is exposed to rain or high humidity start removing the immediately.
- Begin by wetting/soaking the entire retardered concrete surface with water and let stand for about one minute. Continue to pressure wash the concrete surface, side-to-side, overlapping each pass. Keep the fan spray perpendicular to the concrete surface as to maintain a uniform pressure to avoid creating wand marks.
- Make sure to thoroughly rinse surface once competed to remove any overspray from other pieces. Allow to dry completely before handling, then you may touch up as needed.

Complimentary Products

- Use of Fly ash or other supplementary cementitious materials are not recommended.

Process Component

- Follow precast concrete best practices in accordance with [Precast/Prestressed Concrete Instutue \(PCI\) MNL 117](#).
- It is recommended to use shoe protection if walking in the form during set-up to avoid scratching the retardder, or transferring grease, oils, dust or anything else that can create a barrier between the concrete and the retarder.

CHARACTERISTICS

Product Nature	Liquid
Color	Cyclades blue
Shelf life	12 months

PRECAUTIONS

- Solvent based liquid.
- Density at 68°F (20°C): See Table 1.
- Viscosity at 68°F (20°C): See Table 1.
- Flash point: 109°F (43 °C) (SETAFLASH method).
- Freezing point: approx. < 5°F (-15°C).

PACKAGING

- 20 L bucket

ADDITIONAL INFORMATION

Table 1 – Specific Etch-Depth Coverages Rates and Specifications

Estimated etch-depth*	EXP	EXP Approx. Color	Coverage Rate (s.f./gal)	grams/sq. ft.	Finish equivalent			Density	Viscosity
					Acid etch	Sand Blast	Exposed Aggregate		
Surface (Skin) only	2082A	Mint Green	500	7.2	Acid etch	Sand Blast	Exposed Aggregate		
Matrix exposure (1/32 to 1/16)	2084	Beige	400	9.6	Light	Light	--		
up to about 3/32"	2085	Blue	400	9.6	Light-med.	Light	--		
Up to about 1/8"	2086	Brown	350	11.3	Med.	Light	--		
Up to about 3/16"	2087	Green	350	11.3	Deep	Med.	Light		
Up to about 1/4"	2088	Yellow	350	11.3	Very deep	Med.	Med.		
Up to about 5/16"	2089	Lt. purple	350	11.3	--	Med.	Med.		
Up to about 3/8"	2090	Lt blue	350	11.3	--	Med.	Med.		
Up to about 1/2"	2091	Lt. yellow	350	11.3	--	--	Med.		
Up to about 5/8"	2092	White	350	11.3	--	--	Deep		
5/8" to about 1"	2093	Orange	350	11.3	--	--	Deep		
1" to 1.5"	2094	DK Purple	350	11.3	--	--	Deep		

SAFETY

- Flammable product. Keep away from sparks, open flames.
 - Use respirator for spray applications.
 - This product must be kept in its original packaging.
 - Shipping Classification: Paint, 3, UN1263, Flammable liquid, P.G II.
- Prior to any use, please read carefully the Safety Data Sheet.

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