



# Surface Retarder Reference Guide

MasterFinish® Retarders for  
Creating Beautiful Exposed  
Aggregate Concrete

 **BASF**

We create chemistry

# Surface Retarder Reference Guide for Exposed Aggregate Concrete

Retarder	MasterFinish HC	MasterFinish HC	MasterFinish HV
	Light Etches	Regular Etches	
<b>Key Feature</b>	Light Etch	Heat Resistant	Vertical Pours
<b>Base</b>	Solvent	Solvent	Solvent
<b>Description</b>	Light etch form retarder. Can be used to reduce or eliminate costly sandblasting.	General purpose form retarder, also recommended for excessive heat or extended time in form applications.	Specialized high abrasion resistant form retarder recommended for vertical pours, extended pour time, or other difficult casting conditions.
<b>Etch Color Code (1) &amp; (2)</b>	Blue, Gold	Lilac, Pink, Tan, Brown	Gold, Lilac, Pink, Grey
<b>Concrete Placement Time</b>	20 to 30 min.	10 to 15 min.	25 to 35 min.
<b>Recommended Maximum Concrete Temperature (3)</b>	110 °F 120 °F (Gold)	160 °F	110 °F
<b>Coverage – ft<sup>2</sup>/gallon</b>	200	200	200
<b>Method of Application (4)</b>	S,R	S,B,R	S,B,R
<b>Retarder Transfer Agent Needed</b>	MasterFinish QD 200	MasterFinish QD 200	MasterFinish QD 200
<b>Concrete Temp. – Recommended Time (5)</b>	70 °F - 72 h 100 °F - 24 h	70 °F - 7 days 110 °F - 72 h 160 °F - 8 h	70 °F - 48 h 90 °F - 20 h 110 °F - 16 h
<b>Drying Time (6)</b>	15 min.	15 min.	15 min.

Aggregate size	Etch
Sandblast/Acid Etch	Blue
1/8 in. - 1/4 in.	Gold
1/4 in. - 3/8 in.	Lilac
3/8 in. - 1/2 in.	Pink
1/2 in. - 5/8 in.	Tan
5/8 in. - 3/4 in.	Brown
3/4 in. & up	Grey

Etch on white concrete will generally be lighter than grey concrete

- (2) For custom blending of retarder, consult a BASF representative.
- (3) Recommendation is based on results with 3:1:1 concrete made with US white cement, Type I. Grey Type I withstands 10 °F higher temperature.
- (4) S - Spray - Conventional air spray or airless equipment.  
B - Brush  
R - Short Nap Roller
- (5) This is the maximum recommended time at the internal concrete temperature mentioned, which should provide full depth of exposure according to the etch (color) selected.

# Surface Retarder Reference Guide for Exposed Aggregate Concrete

MasterFinish UC	MasterFinish EA	MasterFinish XR	Retarder Transfer Agent (use under MasterFinish HC and MasterFinish HV only)
			MasterFinish QD 200
One Coat	Top Surface	Heavy Bodied, Pigmented	General purpose, particularly for Vertical Pours, Abrasion or Heat
Solvent	Water	Water	Solvent
Specialized, one-coat, general purpose form retarder with excellent abrasion resistance. No retarder transfer agent required. Saves time.	Top surface retarder for new sidewalks, driveways, construction joints, and other face-up exposed aggregate concrete applications.	Heavy bodied, pigmented, water-based retarder. Recommended for use on top surfaces, or as a form retarder on flat panels, ICF formliners or construction joints (9).	Helps retarder film transfer from the form to the concrete during the stripping process. Specially formulated for vertical pours, extended pour time, or extreme pouring conditions.
Lilac, Pink	Regular, Deep (7)	Lilac, Pink	N/A
20 to 30 min.	N/A	5 to 10 min.	N/A
100 °F	110 °F	110 °F	160 °F
300	150	200	250
S, B, R	S (8)	S,B,R (top surface S only)	S,B,R
None	None	None	N/A
70 °F - 48 h 90 °F - 36 h 110 °F - 24 h	70 °F - 36 h 90 °F - 24 h 110 °F - 16 h	70 °F - 48 h 90 °F - 36 h 110 °F - 20 h	N/A
10 - 20 min.	Does not apply	30 min.	10 min.

- (6) Time required for complete drying before casting. This is based on 8 mil application (200 ft<sup>2</sup>/gallon) for retarders at 75 °F and 50% humidity on a flat surface. High humidity, cold temperatures and poor ventilation will increase drying time.
- (7) MasterFinish EA Regular is generally used on 1/2 in. or smaller aggregate. MasterFinish EA Deep on 1/2 in. or larger aggregate.
- (8) MasterFinish EA Regular and MasterFinish EA Deep can be sprayed with a pump type garden sprayer.

- (9) MasterFinish XR can be used to keep brick or tile clean from grout leakage on brick or tile faced precast panels (Consult BASF).

Information contained herein is based on scientific methods used under laboratory conditions. Field conditions differ and give variable results accordingly. For best results, samples should be made using the same mixture proportions, panel thickness, etc. The BASF technical staff should be consulted. Refer to the data sheets for additional information. No warranty of results is implied.

The Master Builders Solutions brand brings all of BASF's expertise together to create chemical solutions for new construction, maintenance, repair and renovation of structures. Master Builders Solutions is built on the experience gained from more than a century in the construction industry.

The know-how and experience of a global community of BASF construction experts form the core of Master Builders Solutions. We combine the right elements from our portfolio to solve your specific construction challenges. We collaborate across areas of expertise and regions and draw on the experience gained from countless construction projects worldwide. We leverage global BASF technologies, as well as our in-depth knowledge of local building needs, to develop innovations that help make you more successful and drive sustainable construction.

The comprehensive portfolio under the Master Builders Solutions brand encompasses concrete admixtures, cement additives, chemical solutions for underground construction, waterproofing solutions, sealants, concrete repair & protection solutions, performance grouts, performance flooring solutions.

## Master Builders Solutions products from BASF for the Construction Industry:

### MasterAir®

Solutions for air-entrained concrete

### MasterBrace®

Solutions for concrete strengthening

### MasterCast®

Solutions for manufactured concrete products

### MasterCem®

Solutions for cement manufacture

### MasterEmaco®

Solutions for concrete repair

### MasterFiber®

Comprehensive solutions for fiber reinforced concrete

### MasterFinish®

Solutions for formwork treatment

### MasterFlow®

Solutions for precision grouting

### MasterGlenium®

Solutions for high-performance flowing concrete

### MasterInject®

Solutions for concrete injection

### MasterKure®

Solutions for concrete curing

### MasterLife®

Solutions for enhanced durability

### MasterMatrix®

Advanced rheology control solutions for self-consolidating concrete

### MasterPel®

Solutions for watertight concrete

### MasterPolyheed®

Solutions for moderate slump concrete with superior finishability

### MasterPozzolith®

Solutions for conventional slump concrete

### MasterProtect®

Solutions for concrete protection

### MasterRheobuild®

Solutions for high slump concrete

### MasterRoc®

Solutions for underground construction

### MasterSeal®

Solutions for waterproofing and sealing

### MasterSet®

Solutions for set control

### MasterSure®

Solutions for workability control

### MasterTop®

Solutions for industrial and commercial floors

### Ucrete®

Flooring solutions for harsh environments

## Contact

### United States

23700 Chagrin Boulevard  
Cleveland, Ohio 44122-5544  
Tel: 800 628-9990 ■ Fax: 216 839-8821

### Canada

1800 Clark Boulevard  
Brampton, Ontario L6T 4M7  
Tel: 800 387-5862 ■ Fax: 905 792-0651

[www.master-builders-solutions.basf.us](http://www.master-builders-solutions.basf.us)

## LIMITED WARRANTY NOTICE

We warrant our products to be of good quality and will replace or, at our discretion, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, BASF MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS, and BASF shall have no other liability with respect thereto. Any claims regarding product defect must be received in writing within one (1) year from the date of shipment. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the BASF Technical Manager.

This information and all further technical advice are based on BASF's present knowledge and experience. However, BASF assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights. BASF SHALL NOT BE RESPONSIBLE FOR CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES (INCLUDING LOSS OF PROFITS) OF ANY KIND. BASF reserves the right to make any changes according to technological progress or further developments.