

GUIDE TO CURE & SEALS

Unlike cures, cure & seals are the 'long distance runner'. They are formulated to last longer and not break down as quickly as the cures. Different resins are used to accomplish this.

Applied to the fresh concrete immediately after the disappearance of the surface water sheen

ASTM Standard for curing & sealing compounds is ASTM C-1315 (max. water loss 0.40 kg/m² in 72 hrs. when applied @ 300 ft²/gal); Min. solids content of 25%

ASTM C-1315 is divided by Type and Class, but it is very different than ASTM C-309 for cures:

- Type: I (clear)
- Type: II (white pigmented)
- Class: 'A' are non-yellowing
- Class: 'B' may have moderate yellowing
- Class: 'C' may undergo severe darkening & has no requirement relative to yellowing

ACI 308 Guide to Concrete Curing recommends a cure & seal meeting ASTM C-1315, Type I, Class A for curing colored concrete floors and slabs. They also note that even non-yellowing compounds will discolor over time

In addition to the water loss, reflectance & dry time tests that ASTM C-309 requires, C-1315 also requires UV testing, acid/alkali resistance testing & adhesion of tile cements testing

If any finish flooring system is to be installed over a cure & seal, it is recommended to ALWAYS test the mastic/adhesive to be used on the job with the cure/seal to be assured of compatibility.

Meeting ASTM C-1315 does not assure compatibility between all mastics / adhesives and the curing & sealing membrane in question.

ASTM C-309 & C-1315 vs. ACI 308

While ASTM C-309 and C-1315 address just *liquid* membrane-forming curing and curing/sealing compounds, ACI 308 addresses the whole picture. **ACI 308, the "Guide to Curing Concrete"**, addresses all acceptable methods of curing including water, plastic film, reinforced paper as well

as liquid membrane-forming compounds. The use of ACI 308, rather than the ASTM C-309, allows the constructor to use the appropriate method of curing based upon the floor finish and the environmental conditions

COLD WEATHER 'ALERT':

Colder weather does not lessen the importance of proper curing techniques and materials. Cold weather requires the same, if not more, urgency for curing than in the summertime. "Even when the relative humidity of the outdoor air is high, at low temperatures this translates to very low quantities of water vapor. Cold air is therefore generally dry, even at high humidity"¹. Remember, it is in the cold weather that you use the lip balm to prevent chapped lips....cold weather & low humidity dries lips. Concrete, in the cold weather and low humidity, also undergoes a loss of moisture & thus the need for proper curing techniques to prevent the loss of water that could cause distress, deterioration and esthetic problems.

¹ "Avoiding Injury in Cold Weather: For Humans and for Recently-Cast Concrete" Kenneth C. Hover, Concrete International, Nov. 2000

DAYTON SUPERIOR CURE & SEALS

Cure & Seal WB (J-18) - ASTM C-309 Type I, Classes A & B

Cure & Seal WB 30% (J-19) - ASTM C-309 Type I, Class A & B

General Purpose Cure & Seal™ (J-20 UV) - ASTM C-309 Type I, Classes A & B

Cure & Penetrant (J-21 CP) - blend of silane & acrylic copolymers meeting ASTM C-309

Day-Chem Cure & Seal™ 1315 (J-22 UV) - ASTM C-309 Type I, Classes A & B, and ASTM C-1315, Type I, Class A

Day-Chem Cure & Seal™ 30% (J-23 UV) - ASTM C-309 Type I, Classes A & B

***Cure & Seal 309 EF** - ASTM C-309, Type I, Classes A & B

***Cure & Seal 1315 EF** - ASTM C-309 Type I, Classes A & B, and ASTM C-1315, Type I, Class A

Refer to www.daytonsuperior.com for latest Technical Data Sheet and MSDS
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Technical Assistance: (866) 329-8724

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CONTINUED

* EARTH FRIENDLY PRODUCTS:

- Are Bio-based
- V.O.C. of less than 100 g/L
- High performance
- Contribute to LEED EQ credit 4.2

* BIO-BASED:

Are high performance products primarily made from sustainable green ingredients that are more environmentally friendly than conventional solvent-based technologies or older water-based technologies



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