**TIPS:**

To view non-printing **Editor's Notes** that provide guidance for editing, click on the Show/Hide button or Word 2010 offers a convenient keyboard shortcut; press the Ctrl+\* keystroke to toggle on/off. (Press the Ctrl key, Shift key, and the number 8 simultaneously).

##### Retain the applicable section title below to suit the project.

SECTION [03 30 00 CAST-IN-PLACE CONCRETE] [03 35 00

CONCRETE FINISHING (INTERIOR)]

**PART 1 GENERAL**

1. 01 SUMMARY

* 1. Section Includes
     1. Application of membrane-forming, nondissipating curing compound to interior steel troweled concrete.
  2. Related Requirements

##### Retain subparagraphs below to suit the project.

* + 1. Section 01 25 00- Substitution Procedures.
    2. Section 01 33 00- Submittal Procedures.
    3. Section 01 45 80- Testing Laboratory Services.
    4. Section 01 60 00- Product Requirements.
  1. REFERENCES
  2. The date of the standard is that in effect as the date of receipt of bids for the project.
  3. American Concrete Institute (ACI):
     1. ACI 301- Specification for Concrete Construction.
     2. ACI 305.1- Specification for Hot Weather Concreting.
     3. ACI 306.1- Specification for Cold Weather Concreting.
     4. ACI 308.1- Specification for Concrete Curing.
  4. ASTM International (ASTM):
     1. ASTM C156M- Standard Test Method for Water Loss Through Liquid Membrane-Forming Curing Compounds for Concrete.
     2. ASTM C309M- Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
  5. SUBMITTALS

1. Product Data:
   * 1. Submit manufacturer’s product data sheets and tested physical and performance properties on products to be used for the work.
   1. DELIVERY, STORAGE AND HANDLING
      1. Deliver materials in original containers, with seals unbroken, bearing manufacturer labels indicating brand name and directions for storage.
      2. Store concrete hardener/densifier in environment recommended on published manufacturer’s product data sheets.
2. Store containers upright in a cool, dry, well-ventilated place, out of the sun with temperature between 45- and 100-degrees Fahrenheit (7 and 38 degrees Celsius).
3. Protect from freezing.
4. Do not drop containers or slide across sharp objects.
5. Do not stack pallets more than three high.
6. Keep containers tightly closed when not in use.
   1. FIELD CONDITIONS
      1. Environmental limitations:
         1. Comply with manufacturer’s written instructions for substrate temperature and moisture content, ambient temperature and humidity, ventilation, and other conditions affecting performance and finishing requirements.
      2. Protect the completed slab to prevent damage by the other trades during floor completion.
      3. Temperature Limitations:
         1. Apply when surface and air temperature are between 40 degrees Fahrenheit (4 degrees Celsius) and above 100 degrees Fahrenheit (38 degrees Celsius) unless otherwise indicated by manufacturer’s written instructions.
      4. Do not apply to surface that has standing water.
      5. Suspend application when rain is anticipated during the application and for a period of 12 hours after application, unless otherwise indicated by manufacturer’s written instructions.

**PART 2 PRODUCTS**

* 1. MANUFACTURERS
     1. Substitutions: [No Substitutions] [In accordance with Section 01 25 00 – Substitution Procedures].
  2. MATERIALS
     1. Clear, Waterborne, Membrane-Forming, Nondissipating Curing Compound: Complying with ASTM C309M, Type 1, Class A&B.
        1. Product: [Consolideck DensiKure](https://prosoco.com/product/densikure/), manufactured by PROSOCO, Inc., Lawrence, KS, (800) 255-4255, www.prosoco.com.
        2. Subject to compliance with the following minimum performance requirements:
           1. Comply with national, state, and district AIM VOC regulations.
           2. VOC Content: Minimum 5 g/L.
           3. Solids Content: 15 percent by weight.
           4. ASTM C156: Less than 0.55 km/m2 in 72 hr
  3. EQUIPMENT
     1. Low-Pressure Spray Equipment.

**PART 3 EXECUTION**

* 1. CURING

1. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures per ACI 301, ACI 305.1 and ACI 306.1.
2. Comply with requirements of ACI 308.1R.
3. Maintain concrete with minimal moisture loss at a relatively constant temperature for the period necessary for hydration of cement and hardening of concrete.
   1. Normal Concrete: Not less than seven days.
4. Clean concrete slab and joints to remove dirt and debris prior to application.
   1. Remove loose or compacted saw debris with a vacuum with HEPA- rated filter.
5. Apply clear, waterborne, membrane-forming, nondissipating curing compound after final concrete finishing and final soft cut control joints to interior steel troweled concrete.
6. Apply according to manufacturer’s written instructions as soon as free water has disappeared and before the surface is dry.
7. Apply as follows:
   1. Apply per manufacturer’s recommended application rate to designated finished floor area, with a low pressure sprayer fitted with a 0.5 gpm spray tip.
   2. Apply sufficient material to wet the surface without producing puddles.
   3. Use a clean soft-bristle push broom or microfiber pad to spread the curing compound evenly to achieve uniform wetting. Avoid spreading once drying begins.
   4. Allow treated surfaces to dry.

##### Retain and edit subparagraphs below to suit the project; if an additional coat of a densifier is required after placement, a protective treatment, topical coating, or final finish similar to carpet, vct, or epoxy is necessary.

* 1. Prior to application of [densifier,] [protective treatment,] [topical coating,] [and final floor finish,] remove residual remains of curing compound in accordance with manufacturer's published recommendations.
  2. PROTECTION
     1. Do not permit foot traffic over unprotected concrete floor surfaces for a minimum of 12 hours after application of curing compound.
     2. Do not permit heavy loading traffic over unprotected concrete floor surface until fully cured and concrete has gained its design strength.
     3. Protect concrete from water for 12 hours after application of curing compound.
     4. Protect finished floors to prevent damage including staining, gouges and scratching by construction traffic and activities until possession.
     5. Do not drag or drop equipment or material across the slab which will scratch or chip it.
     6. Inspect tires for debris prior to use on slab. Remove embedded items which may cause damage to floor slab.
     7. Clean up spills on slab immediately. Provide cleaning chemicals and absorptive materials.
     8. Develop a concrete protection procedure which addresses the following procedures:
        1. Communication of protection plan to subcontractors and vendors.
        2. Procedures for cleaning up slab spills, including use of and availability of cleaning chemicals and absorptive materials at Site.
     9. Provide a clean slab surface using concrete daily maintenance cleaner within an auto scrubber, equipped with soft nylon brushes, in accordance with manufacturer's published recommendations.

END OF SECTION