ACI 301-16

• Section 10 – Shrinkage-Compensating Concrete for Interior Slabs

• Section 11 – Industrial Floor Slabs

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### Changes to Section 10

**Shrinkage-Compensating Concrete for Interior Slabs**

<table>
<thead>
<tr>
<th>301-10</th>
<th><strong>structural concrete</strong>—plain or reinforced concrete in a member that is part of a structural system required to transfer loads from other portions of the structure to the ground and having a specified compressive strength of at least 2500 psi.</th>
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<tbody>
<tr>
<td>ACI CT</td>
<td><strong>structural concrete</strong> — plain or reinforced concrete in a member that is part of a structural system required to transfer gravity loads, lateral loads, or both, along a load path to the ground.</td>
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301-16 structural concrete - plain or reinforced concrete in a member required to transfer gravity loads, lateral loads, or both, to the ground.
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301-10  **10.2.1.2.b** Unless otherwise permitted, do not change type, brand, or dosage rate of admixtures without evaluating the revised concrete mixture for expansion as measured in accordance with ASTM C878.
301-16  **10.2.3.3 Revisions to concrete mixtures**—If concrete materials are changed or mixture proportions are revised in accordance with 4.2.3.6, evaluate the effect on expansion in accordance with ASTM C878/C878M and submit test results.
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3.3.2.5 *Welded wire reinforcement*—For slabs-on-ground, extend welded wire reinforcement to within 2 in. of concrete edge. Lap splice edges and ends of welded wire reinforcement sheets as indicated in Contract Documents. Unless otherwise specified or permitted, do not extend welded wire reinforcement through control joints. Place, support, and secure welded wire reinforcement to maintain positioning in slab during concrete placement. Do not place welded wire reinforcement on grade and subsequently raise it into position during placement of concrete.
301-16 **3.3.2.5 Welded wire reinforcement**—Support welded wire reinforcement in accordance with CRSI RB4.1 to maintain positioning during concrete placement.
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3.3.2.5(a) *Welded wire reinforcement in slabs on composite steel deck and slabs on ground*—Reinforcement shall be placed into position prior to concrete placement. Unless otherwise specified, do not extend welded wire reinforcement through movement joints. Place reinforcement as indicated in Contract Documents. If reinforcement less than W4.0 or D4.0 is specified, the continuous support spacing shall not exceed 12 in. Reinforcement nearest edge of slab shall be no farther from edge of slab than greater of specified cover or 2 in. Unless otherwise specified, overlap parallel wires at edges of reinforcement not less than 2 in.
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301-16  **11.2.5 Reinforcement**—If specified, use deformed reinforcing bars, tendons, or deformed or plain welded wire reinforcement in conformance with Contract Documents. Supports shall be used at a spacing to result in reinforcement placement in accordance with Contract Documents. If used, welded wire reinforcement shall have a wire spacing of at least 14 in. in both directions.
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301-16  **11.2.6 Fibers**—If specified, use fibers in concrete mixture in accordance with Contract Documents.
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301-10  **11.1.2 General requirements**—Concrete for industrial floor slabs shall comply with the requirements of Sections 1 through 5, unless otherwise specified in this section or in Contract Documents.

**11.1.2.1** Unless otherwise specified, industrial floor slabs shall be at least 6 in. thick. Unless otherwise specified, industrial floors shall be supported by at least 4 in. of specified graded aggregate base.
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301-16  **11.2.2 Concrete mixture**—Unless otherwise specified, proportion concrete mixture to satisfy the following:
(a) Specified compressive strength of 3500 psi at 28 days
(b) Slump between 4 and 6 in.
(c) Shrinkage limit, if specified in Contract Documents
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301-16  **11.1.3.3(a)** Drying shrinkage test results, for proposed concrete mixture determined in accordance with ASTM C157/C157M, except that instead of storage for 28 days in lime-saturated water, specimens are subjected to 7 days of moist curing followed by at least 21 days of air drying, unless a longer drying period is specified in Contract Documents. The initial length of specimens used as the basis for length change shall be measured at 24 hours ± 1/2 hour upon demolding specimens and drying-shrinkage measurements shall begin at completion of 7 day moist-curing period.
301-10  **11.3.7 Curing and protection**—Unless otherwise specified, comply with 5.3.6 and provide curing for at least 7 days. Apply curing covers as soon as practicable without marring the finished surface. Place moisture-retaining coverings in a manner to prevent surface discoloration or marking. Keep the slab continuously wet after final finishing is completed and during the curing period. Temperature of applied water shall not be more than 20°F colder than the concrete surface temperature.
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**11.3.7 Curing and protection**—Comply with 5.3.6 and provide curing for at least 7 days unless otherwise specified. If a sheet material is used, apply as soon as practicable without marring finished surface. Place moisture-retaining sheet materials in a manner to prevent surface discoloration or marking. Keep slab continuously wet after final finishing is completed and during curing period. Applied water shall not decrease the slab surface temperature by more than 20°F.
Joint Filler Separation

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301-16  **11.3.9 Joint filling**—Unless otherwise specified, fill joints with a semi-rigid joint filler. Install joint filler full depth of saw cuts. Unless otherwise specified, do not install joint filler earlier than recommended by filler manufacturer. Joints shall be overfilled and shaved flush. During project warranty period, monitor joint filler for separation and monitor concrete deterioration along joints as joints widen. Separations shall be corrected within project warranty period.
Thank You!

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