



## Clark County Department of Building & Fire Prevention

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<b>Division:</b>	<b>Building Division – Engineering</b>	<b>Policy &amp; Procedure:</b>	<b>BD-CI-221</b>
<b>Subject:</b>	<b>Concrete Tilt-Up</b>	<b>Effective Date:</b>	<b>05/01/2007</b>
<b>Code:</b>	<b>2018 IBC &amp; ACI 318-14, 11.7.2.2 and 12.7.2.2</b>	<b>Revised Date:</b>	<b>01/01/2021</b>

### A. CODE REQUIREMENT

In a typical concrete tilt-up application there will be a cold joint between the footing and the tilt-up wall. Dowels are used to transfer the shear load from the tilt-up walls to the slab and/or foundation.

### B. INTERPRETATION

The spacing of these dowels shall be determined by calculation based on the required area of steel with a maximum spacing of 18 inches on center.

### C. RATIONALE

Section 12.7.2.2 requires diaphragms to have a maximum reinforcement spacing of 18 inches. Section 11.7.2.2 requires exterior pre-cast (tilt-up) walls to have a maximum longitudinal reinforcement spacing of 18 inches. The ACI 318 is unclear on the maximum spacing of the dowels that transfer the shear load from the wall to the slab and/or foundation. The interpretation outlined above is based on an interpretation from ACI on this issue.

**Prepared By:** Building Division

**Date Prepared:** 2007

**Revision History:**

Title		Revision/Approved Date	Effective Date
Concrete Tilt-Up	AD-CI-IBC-014		05/01/2007
Concrete Tilt-Up	BD-CI-004	08/15/2008	
Concrete Tilt-Up	BD-CI-004	06/30/2013	
Concrete Tilt-Up	BD-CI-004	06/20/2014	
Concrete Tilt-Up	BE-CI-004	06/15/2015	
Concrete Tilt-Up	BE-CI-004	07/13/2016	
Concrete Tilt-Up	BD-CI-221	01/01/2021	

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Concrete Tilt-Up