

Please note the ICC-ES language excerpt on the left and the corresponding IAPMO language excerpt on the right. The text highlighted in red indicates identical text and the text highlighted in yellow indicates synonymous text that has the same meaning or identical text that has been moved around.

## ICC-ES AC 86 (2008)

### 3.2 Limiting Heights Based on Wall Assembly

**Stiffness:** Testing shall be in accordance with Section 4.1 of this criteria and the analysis of test data shall be in accordance with Sections 3.2.1 through 3.2.5.

3.2.1 Wall assembly bending stiffness,  $EI$ , shall be based on the equation for midspan deflection of a simply supported beam with uniformly distributed loading over its entire span. An  $EI$  value for each midspan deflection target shall be calculated based on the incremental deflection from previous set deflection after release of load to the current set deflection after application of load. Average  $EI$  values shall be determined from the test results for each test assembly height. For a specific test specimen, the arithmetical average of the  $EI$  values derived for each deflection target shall be used when the deviation of any individual deflection target  $EI$  value does not exceed  $\pm 15$  percent of the specimen's average  $EI$  value. If such a deviation from the average value exceeds 15 percent for any test assembly, then the  $EI$  values for each specific deflection target of all specimens shall be averaged. The deflection-target-specific  $EI$  values shall be used to calculate the limiting heights for that test assembly height.

3.2.2 The wall assembly's controlling  $EI$  value derived in accordance with Section 3.2.1 shall be used to calculate limiting wall heights for deflection target values  $L/360$ ,  $L/240$  and  $L/120$  (if a  $L/120$  deflection level cannot be obtained, it shall be permitted to use  $L/180$  in place of  $L/120$ ); and transverse design loads of 5,  $7\frac{1}{2}$ , 10, and 15 psf (240, 360, 480, and 720 Pa), provided.

## IAPMO EC 004-2010

**Limiting Heights Based on Wall Assembly Stiffness:** Testing shall be in accordance with Section 4.1 of this criteria and the analysis of test data shall be in accordance with Section 5.2.1 through 5.2.5.

Wall assembly bending stiffness,  $EI$ , shall be based on the equation for midspan deflection of a simply supported beam with uniformly distributed loading over its entire span. An  $EI$  value for each midspan deflection target shall be calculated based on the incremental deflection from previous set deflection after release of load to the current set deflection after application of load. Average  $EI$  values shall be determined from the test results for each test assembly height. For a specific test specimen, the arithmetical average of the  $EI$  values derived for each deflection target shall be used when the deviation of any individual deflection target  $EI$  value does not exceed  $\pm 15$  percent of the specimen's average  $EI$  value. If such a deviation from the average value exceeds 15 percent for any test assembly, then the  $EI$  values for each specific deflection target of all specimens shall be averaged. The deflection-target-specific  $EI$  values shall be used to calculate the limiting heights for that test assembly height.

The wall assembly's controlling  $EI$  value derived in accordance with Section 5.2.1 shall be used to calculate limiting wall heights for deflection target values  $L/360$ ,  $L/240$  and  $L/120$  (if a  $L/120$  deflection level cannot be obtained, it shall be permitted to use  $L/180$  in place of  $L/120$ ); and transverse design loads of 5,  $7\frac{1}{2}$ , 10, and 15 psf (240, 360, 480, and 720 Pa), provided.