

Producers of COREFLOOR HOLLOW-CORE SLAB
PRESTRESSED CONCRETE SLAB SYSTEMS

HOLLOW-CORE PRECAST BEARING

ACI 318-14 Standard provides guidelines on page 209 Section R16.2.6, for the minimum end bearing of simply supported hollow-core slabs. Below is a brief summary of the ACI Standard. This information should only be used as a guideline for the associated topping work in conjunction with a precast plank structure. Please consult the aforementioned section of the ACI Standard for a complete description of this work.

ACI Section 16.2.6

Dimensions of bearing connections shall satisfy 16.2.6.2 or 16.2.6.3 unless shown by analysis of test that lesser dimensions will not impair performance.

ACI Section 16.2.6.2

For solid or hollowcore slab, the minimum distance (inches), shall be the greater of $l_n/180$ or 2.

ACI Section 16.2.6.3

Bearing pads adjacent to unarmored faces shall be set back from the face of the support and the end of the supported member a distance of not less than 0.5in or the chamfer dimension at a chamfered face.

Example – A simply supported hollow-core slab is 20'-0 in length. The slab is to bear on a trowel finished concrete foundation ledge.

Calculate Bearing – The slab is 240" long, so $l_n/180$ is equal to approximately 1 ¼ inches. However, this is less than the minimum of 2 inches. Therefore, 2 inches is required. The concrete wall is an unarmored trowel edge. Therefore, per section 8.1.3, add ½ inch to the face of the foundation wall and ½ inch from the edge of the plank. The minimum bearing should be no less than 3 inches.

