Birdbaths on Concrete Slabs

Position Statement #7

wners, architects, and engineers have a variety of perceptions and expectations regarding birdbaths on concrete slabs. Birdbaths are small ponds or puddles of water that appear on a level or sloped concrete surface after a rain or washing the slabs (see photo). Many specifications attempt to eliminate birdbaths and often require a final water washing of the slab to check for birdbaths. The specifications require these birdbaths to be corrected by grinding or patching the slab surface.

Owners, architects, and engineers sometimes believe that birdbaths are a result of poor construction practices and can be eliminated. ACI 117-90, "Standard Specifications for Tolerances for Concrete Construction and Materials" doesn't address the issue.

Eliminating birdbaths would require zero tolerances. The adjacent figure shows a birdbath at the valley of a slab surface profile under a 10 ft. straightedge. The tolerances shown are from ACI 117 and would indicate the maximum depth of the birdbath.



Expecting or requiring no birdbaths on level or sloped slabs is not compatible with ACI 117 tolerances. Specifying a relatively large permissible gap under a straightedge (low F_F) results in numerous deep birdbaths. Specifying a small gap under a straightedge (high F_F) results in a few shallow birdbaths.

Concrete contractors are responsible for meeting the flatness requirements of Division 3 in the specifications. Birdbaths are an unavoidable consequence of a flatness tolerance. ASCC contractors will meet the flatness requirements but will not be responsible for corrective action to eliminate birdbaths.

If you have any questions, contact your ASCC concrete contractor or the ASCC Technical Hotline at (800) 331-0668.



