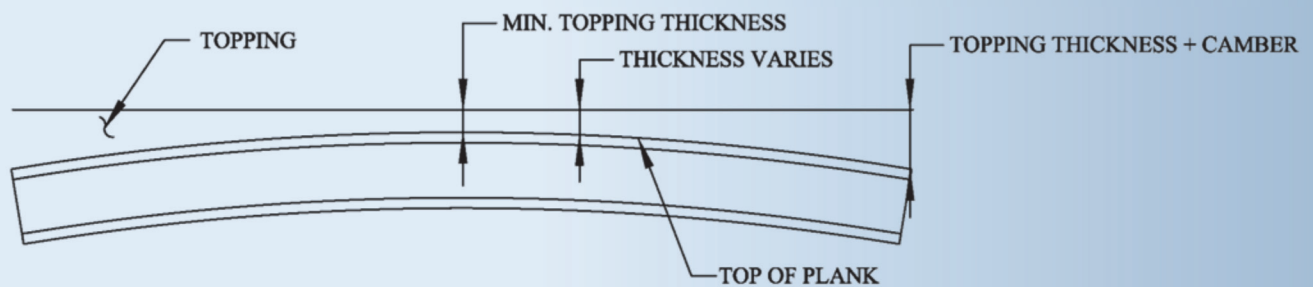


Preparation for Topping

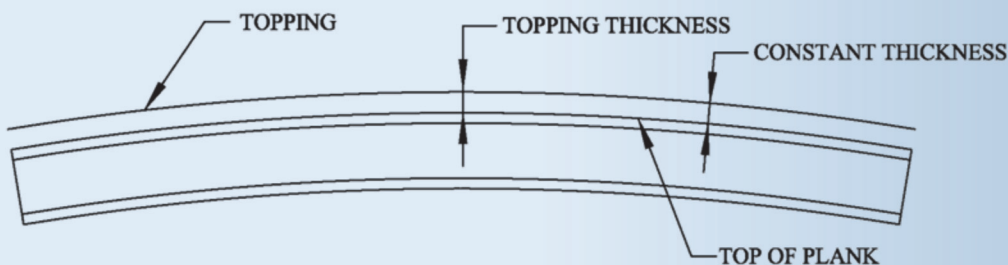
ACI standards provide guidance on the preparation and treatment of the concrete topping. This guidance helps ensure that the topping will have a good bond with the hollowcore and concrete delaminations will not occur. Since the concrete topping is often designed as composite with the hollowcore, a well bonded topping is required to meet design parameters. A poorly bonded topping may result in a reduction in the structural capacity of the hollowcore and topping or have a reduction in the long term durability of the topping.

Recommendations for the topping include:

1. Precast must be thoroughly cleaned of all debris that would prevent bonding. This includes sawdust, trash, dirt, masonry material, etc.
2. A suitable bonding agent or bonding procedure is recommended. This may include treatment of the slab surface with a cement slurry mixture, an epoxy bonding agent or applying a broom finish at the plant to roughen the top surface of the hollowcore pre-cast slabs. It is imperative that the bonding agent does not reach the initial set prior to placement. This may act as a bond breaker if allowed to set prior to topping placement.
3. Moisten the hollowcore surface prior to placement of the topping. Moistening should follow manufacturers guidance if a bonding agent is utilized. The surface should be fully saturated prior to the topping placement, however all standing water should be removed.
4. Review topping details in relation to camber. Consider plan details to address camber and adjust concrete quantities for longer span slabs and slabs with large camber. See Figure 4.



LEVEL TOPPING WITH CAMBER



CONSTANT THICKNESS TOPPING WITH CAMBER

FIGURE 4