

Project: Savannah Arena, Savannah, GA Owner: City of Savannah Design Firm: Perkins + Will

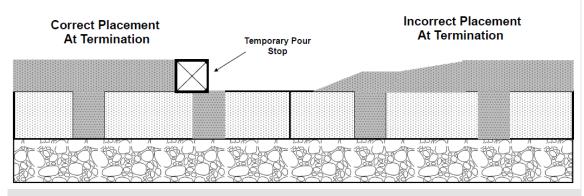


Celcore Installer: Bonitz of Georgia, Inc, Savannah, GA

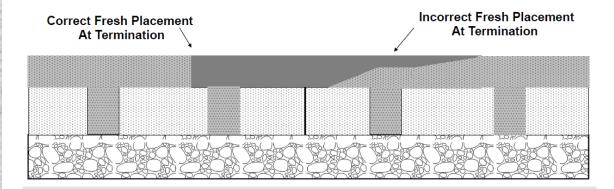
## **End of the day Deck Topping Placement Termination/Cold Joints**

It is not uncommon that the end of the day's work is not necessarily the end of the project. In the event that topping placement is discontinued, it must be done in a manner that causes the terminated placement to end having a full minimum 2-inch thickness above the EPS, thereby allowing the subsequent placement to adjoin with full-thickness, without overlaying or feathering. Thin section placement of cellular concrete for transitioning to an existing slab is not permitted. Full-thickness termination is commonly achieved by leaving screed bars in place to act as temporary pour stops. Once the terminating concrete placement has sufficiently stiffened or hardened, the screeds are removed thereby providing the necessary profile and thickness needed for receiving the adjoining deck topping placement. The following images are provided to illustrate examples of proper and improper placement terminations and post-termination fresh placements.

## Roof Deck Topping Cold Joint End of Day Termination



## Roof Deck Topping Cold Joint Fresh Placement Interface



What is wrong with feather edge termination? A primary reason for the 2-inch minimum thickness rule, as it applies to cellular concrete, is to provide that a fresh placement has sufficient mass to allow the necessary retention of hydration moisture required for proper early age strength development of the fill. By not having proper placement mass, a thin section placement of cellular concrete upon a tapered termination can lose hydration moisture quickly to evaporation and absorption into the underlying fill. This can result in a zone of fill along the joint having inadequate strength and a weakened bond to the parent material. It should also be noted for these same reasons, pump mix cellular concrete shall never be used to make thin-section roof deck topping repairs.

As is the standard of the industry, Celcore's Manufacturer's Installation Instructions require a topping placement thickness of not less than 2-inches. Our instructions also mention the use of screeds bars to ensure that this minimum placement thickness is uniformly and consistently accomplished. Further, as noted above, a screed bar can be conveniently used as temporary pour stops for end-of-day deck topping placement terminations.

Thank you for taking the time to read this Newsletter, and should you have any questions or comments, please do not hesitate to contact our office or me directly.

In Partnership,

**Travis Morton** 

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