

## 723-R-802 REINFORCED CONCRETE THREE-SIDED STRUCTURES

(Adopted 06-19-25)

The Standard Specifications are revised as follows:

SECTION 723, BEGIN LINE 300, INSERT AS FOLLOWS:

**723.11 Placement of Structure Sections and Wingwalls**

For three-sided arch-topped structures and three-sided flat-topped structures, the structure sections shall be set on *high strength plastic*, masonite, or steel shims. Each wingwall that is not precast as one unit with the footing shall be set on *high strength plastic*, masonite, or steel shims. A minimum gap of 1/2 in. shall be provided between the footing and the bottom of each section or wingwall. Once the wingwalls or structure sections are placed, the space underneath the wingwall or structure leg section to the top of the keyway sides shall be filled with prepackaged grout in accordance with ASTM C1107, or conventional or self-consolidating fine grout in accordance with ASTM C476, except as modified herein. If conventional fine grout is used, it shall be troweled into the keyway and mounded on one side of the leg or wingwall. The mound of conventional fine grout shall be vibrated until it passes through to the other side of the leg or wingwall. After completing this process on one side, if the conventional fine grout has not passed through to the other side, the process shall be repeated on the other side. Conventional or self-consolidating fine grout shall be from a prepackaged source or composed of one of the following mixtures:

SECTION 723, BEGIN LINE 341, DELETE AND INSERT AS FOLLOWS:

True arch shape structures may have grout leveling pads poured in the footing keyways to ensure the correct seating of the true arch sections. Leveling pads shall be approximately 2 in. thick and 16 in. long to ensure that each true arch section is resting on approximately 8 in. of pad at each joint. The leveling pads shall be poured within 1/8 in. of the required elevation. No loads shall be placed on the grout leveling pads within 72 h of their placement. *High strength plastic or Masonite* shims may also be used as leveling pads. Concrete blocks of 1 1/2 in. thickness, hardwood wedges, and steel or plastic shims shall be placed to retain the true arch sections in their proper positions until grout can be placed in the keyway. Grout shall be consolidated in the keyway to ensure that the entire area around the true arch section is completely filled. The grout used to construct the leveling pads and to fill the keyways shall be in accordance with this section. Grout shall not be placed if the air temperature is expected to be below 35°F for a period of 72 h following grout placement.

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