

## FL Bridge Deck Grooving Spec

**400-15.2.5.5 Grooving:** After the concrete surface profile has been accepted by the Engineer, and prior to opening the bridge to traffic, groove the bridge deck and approach slabs perpendicular to the centerline of the structure. Cut grooves into the hardened concrete using a mechanical saw device which will leave grooves nominally 1/8 inch (3 mm) wide and 3/16 inch (5 mm) deep. Space the grooves apart in random spacing center of grooves in the following sequence: 3/4 inch (20 mm) in 6 inch (150) repetitions across the width to be grooved in one pass of the mechanical saw device. One 6 inch (150) sequence may be adjusted by 1/4 sequence increments to accommodate various cutting head widths provided the general pattern is carried out. The tolerance for the width of the grooves is +1/16 to -0 inch (+1.6 to 0 mm) and the tolerance for the depths of grooves is +- 1/16 inch (+-1.6 mm). The tolerance for the spacing of the grooves is +-1/16 inch (+-1.6mm).

Cut grooves continuously across the deck or approach slab to within 18 inches (450 mm) of gutter lines at barrier rail, curb line and median divider. At skewed metal expansion joints in bridge deck surfaces, adjust groove cutting by using narrow width cutting heads so that all grooves of the bridge deck surface or approach slab surface end with in 6 inches (150 mm), measured normal to centerline of the joint, leaving no ungrooved surface adjacent to each side of the joint greater than 6 inches (150 mm) in width. Ensure that the minimum distance to the first groove, measured normal from the edge of the concrete joint or from the junction between the concrete and the metal leg of the armored joint angle, is 1 inch (25 mm). Produce grooves that are continuous across construction joints or other joints in the concrete surface less than 1/2 inch (13 mm) wide. Apply the same procedure described above where the gutter lines at barrier rails, curb lines and median dividers are not parallel to the centerline of the bridge to maintain the 18 inches (450 mm) maximum dimension from the grooves to the gutter line. Cut grooves continuously across formed concrete joints.