

MODIFIED BY EI 87-025
EFFECTIVE 7/15/87

ENGINEERING INSTRUCTION

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

SUPERSEDED BY EB 98-014
EFFECTIVE 4/24/98

SUBJECT: BRIDGE DESIGN MANUAL, SPECIAL
SPECIFICATION FOR BRIDGES; 16555.6603-TRANSVERSE
SAWCUT GROOVING OF STRUCTURAL SLAB SURFACE
Subject Code: 7.27-1-555; 7.35-6

Distribution:

31 Main Office 33 Regions 34 Special

Code: EI 86-20

Date: 4/21/86

APPROVED:



Deputy Chief Engineer (Structures)

Supersedes: 84-27

Attached to this Instruction is Item 16555.6603 - Transverse Sawcut Grooving of Structural Slab Surface. Item 16555.6602 is hereby discontinued.

Item 16555.6603 changes the center to center spacing of the sawcut grooves from 3/4" to 1-1/2". No other changes have been made. This change is being implemented to prevent deterioration between the grooves associated with sawcuts spaced at 3/4" center to center. The Technical Services Division has ascertained that a 1-1/2" spacing will alleviate the problem of surface deterioration without significantly reducing drainage. In addition, tests have found no reduction in friction from the increased spacing.

This instruction becomes effective immediately. This office advises that ongoing contracts use the new spacing if at all possible. There should be no cost increases since the new spacing requirements will result in a significant cost saving in saw blades.

Grooves shall be spaced at 1 1/2"-center to center of groove \pm 1/16". The cutting of grooves over an area which has been grooved will not be permitted. No cutting blade shall be introduced into an already established groove.

During the grooving operations, the Engineer will verify, at random, that the minimum groove depth is being achieved. Should the Engineer determine that minimum groove depth is not being achieved, the Contractor shall stop grooving operations and make all adjustments necessary to achieve the minimum depth.

The Contractor shall supply the Engineer with two(2) accurate, easily readable, gauges with which to verify groove depth. The gauges shall be delivered no later than one week prior to the anticipated beginning of grooving operations. Gauges shall be accompanied by manufacturer's instructions for their use, if such instructions are necessary for proper understanding of the gauge's functions.

Grooves shall terminate within the following limits unless otherwise indicated on the Contract Plans:

<u>Location</u>	<u>Closest Allowable Distance</u>	<u>Farthest Allowable Distance</u>
Drainage structure	1'-0"	1'-3"
Vertical face (curb or parapet), or face of railing (no curb)	1'-0"	1'-3"
Joint System	6"(a)	2'-6"(a)
Note (a). Dimension measured perpendicular to the centerline of the joint system.		

Grooving operations, which are performed after the installation of the joint system, or which are performed adjacent to an existing joint system, shall be done in such a manner that the joint system is not damaged to any degree.

All damage to the joint system shall be repaired in a manner satisfactory to the Engineer. If the Engineer determines that the joint system cannot be repaired in a manner which will allow proper function of the system, the Contractor shall replace the system. The replacement shall be a new system equal in all respects to the system being replaced.

Damage to any other portion of the structural slab, or anything attached to it, or embedded in it, attributable to the Contractor's operations shall be repaired in a manner satisfactory to the Engineer.

All repair, or replacement, costs shall be borne by the Contractor.

Slurry, or debris, from the grooving operation shall not be permitted to accumulate. Residue shall be continuously removed. The slurry shall not be permitted to harden. Slurry, or debris, shall not be disposed of in the structure, or highway, drainage system, nor on the roadway slopes. It shall be disposed of in a manner satisfactory to the Engineer.

If the grooving operations have been done under Option 2 and a second application of curing compound is required, the grooves shall be air-blown clean prior to the application of white-pigmented curing compound.

Method of Measurement. The work will be measured as the number of square feet of surface grooved as stated in the Estimate of Quantities, shown on the contract plans. No field measurements will be taken.

Basis of Payment. The unit price bid per square foot shall include the cost of all labor, materials and equipment necessary to complete the work.

No compensation will be made for any repair, or replacement, work necessitated by the Contractor's operations.