

Section 4191. Keyway and Expansion Tubes

4191.01 DESCRIPTION.

Meet the following requirements:

A. Metal Keyway.

1. Coated or uncoated sheets of 24 gage (nominal 0.6 mm thick) iron or steel formed to produce a trapezoidal offset in the face of the concrete of 1 inch (25 mm) plus 1/4 inch (6 mm) or minus 1/8 inch (3 mm).
2. Dimension and installation details as required in the contract documents.
3. Keyway punched along the center line of the face, to receive the bars.
4. Furnished in lengths which are multiples of the bar spacing.
5. Keyways formed on the grade during the paving operation may be of coated or uncoated sheets of 26 gage (nominal 0.4 mm thick) iron or steel.

B. Expansion Tubes to be used as Dowel Caps on Dowel Bars through Expansion Joints.

1. Noncollapsible metal or plastic tubes with one end closed.
2. Formed with a positive bar stop, capable of withstanding a push of more than 20 pounds (90 N).
3. The stop located at least 2 3/4 inches (70 mm) from the open end of the tube.
4. Internal diameter not more than 1/16 inch (2 mm) larger than the nominal diameter of the bar. That part of the tube having this diameter must extend beyond the stop a distance no less than the width of the expansion joint.