

SECTION 1021—ARMORED PREFORMED NEOPRENE COMPRESSION DAM

1021.1 DESCRIPTION—This work is the furnishing and installation of armored preformed neoprene compression dams for bridge joints, including the necessary fabricated structural steel.

1021.2 MATERIAL—

(a) **General.** Use a prequalified fabrication shop, as specified in [Section 1105.01\(a\)](#).

(b) **Preformed Neoprene Compression Seal and Lubricant Adhesive.** [Section 705.4\(d\)](#), from a manufacturer listed in [Bulletin 15](#).

(c) **Structural Steel.** [Section 1105.02\(a\)2](#), painted as specified in [Section 1060](#) or hot-dip galvanized as specified in [Section 1105.02\(s\)](#). The galvanization in the retainer extrusion must be of uniform thickness and free of excessive build-up, which would hinder the installation of the dam.

(d) **Studs.** [Section 1105.02\(e\)](#)

1021.3 CONSTRUCTION—As shown on the [Standard Drawings](#) and as follows:

Before fabrication, submit shop drawings, as specified in [Section 105.02\(d\)](#), showing complete details, dimensions, size, type, and compression-deflection characteristics of the seal, as well as other information and data necessary for the complete fabrication and erection of the dam. Obtain acceptance of shop drawings before beginning manufacture.

The seal may be installed in the shop, at the width determined for the erection temperature. For a shop-installed seal, make final width adjustment on the completed seal, if necessary, in the field for the temperature at the time when the dam is securely fastened to beams. No field adjustment will be needed for a ± 6 °C (± 10 F) variation in temperature from the temperature for which the joint width was adjusted in the shop.

After width adjustment, the seal may be installed in the field.

Before installing the seal, clean metal surfaces in direct contact with the seal, to remove foreign material and to provide for proper bond between the seal and the metal surfaces. Clean, as specified in [Section 1060.3\(b\)](#).

Swab the lubricant-adhesive on the faces of the angles forming the groove, according to the material manufacturer's instructions. While the adhesive is wet, install the seal, as recommended by the manufacturer.

Do not splice the seal, unless indicated. If splices are indicated, use splices vulcanized by the manufacturer.

If stretching of the seal during installation is unavoidable, do not exceed 5% elongation.

Place the top of the seal at the walls, in contact with the deck joint structural steel, at a uniform depth of 5 mm (1/4 inch) minimum to 15 mm (1/2 inch) maximum below the deck surface.

The Department will not accept cocked or twisted seal installations.

Remove and replace seals that are damaged during installation.

1021.4 MEASUREMENT AND PAYMENT—Meter (Linear Foot)

For the movement specified.

Measured out-to-out along the centerline of the exposed surfaces of the seal and the steel plates, including sidewalks if applicable, following the vertical and sloped faces of curbs and barriers, resulting in a true length, not a horizontally projected length.