

**STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION 849
ELASTOMERIC COMPRESSION SEALS FOR
STRUCTURAL STEEL JOINTS**

June 14, 1995

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849.01 Description. This item shall consist of furnishing and installing elastomeric compression seals for bridge deck joints either armored with or composed of structural steel.

849.02 Materials. Elastomeric compression seals shall conform to Supplemental Specification 949.

849.03 Preparation for Installation. Prior to installing compression seals in structural steel joints, steel and seal surfaces which are to be bonded together shall be thoroughly cleaned and kept dry until the adhesive has been applied.

The preparation of steel surfaces shall be accomplished not more than 24 hours prior to adhesive bonding. Bare steel surfaces shall be prepared to Grade SA 3, ASTM D 2200. Galvanized steel surfaces shall be lightly sanded. Immediately after mechanical preparation, the fresh surfaces shall be wiped with methylethyl ketone, toluene or other approved solvents to remove contaminant traces.

Prior to use, all exterior elastomeric surfaces shall be cleaned with methylethyl ketone, toluene or other approved solvent using clean disposable cloths. Then, not more than 7 days prior to seal installation, a thin coating of approved cyclizing paste shall be applied to the elastomeric bonding surfaces only. After from 25 to 40 minutes, the paste shall be washed from the surface with clean water.

849.04 Installation. Substrate surfaces shall be clean, dry and maintained above 7°C (45°F) during seal installation and adhesive curing. Supplemental heating will be permitted. Adhesive shall be applied liberally to both the steel and elastomeric bonding surfaces using a serrated spatula if necessary to achieve a complete and relatively uniform coating. The elastomeric seal shall then be compressed sufficiently so that it can be inserted and allowed to expand within the joint.

Adhesive shall then be removed from the exposed joint and seal surfaces after which a small bead of adhesive, approximately 6 mm (1/4 - inch) in diameter, shall be applied to fillet the corners formed by the top edges of the seal and the sides of the joint.

Seals shall be installed with equipment designed or specifically adapted for the installation of elastomeric compression joint seals. This equipment shall not elongate the seal or cause structural damage to the completed installation.

849.05 Method of Measurement. The quantity of elastomeric compression joint seals shall be the actual number of meters (linear feet) measured horizontally along joint centerlines.

849.06 Basis of Payment. Payment for furnishing and installing compression seals will be made at the contract price for:

Item	Unit	Description
516	Meter (Linear foot)	Structural Expansion Joints including elastomeric compression seals, _____ mm (inch) width.