



Expansion Joint Systems

Steel Plate Drainage Trough System

The D.S. Brown Drainage Trough System is a flexible water drainage system designed for use with open dam expansion joint systems. The D.S. Brown Drainage Trough System acts as part of the bridge drainage system by collecting runoff and channeling it into rigid downspouts, thus protecting the steel structure below from corrosion, waterways from pollution, and/or traffic from falling aggregate and roadway runoff.

Trough Material Options:

- 1/8" Two-Ply Neoprene
- 1/4" Two-Ply Neoprene
- 1/8" Two-Ply Nitrile
- 5/32" Three-Ply Nitrile



The D.S. Brown Drainage Trough System provides superior performance when trough splices become necessary. For trough splices less than 72 inches, the D.S. Brown Company uses the time-tested and lab-proven method of hot vulcanization to make splices in drainage trough systems. The D.S. Brown Company uses cold-chemical vulcanization for trough splices exceeding 72 inches.

The D.S. Brown Drainage Trough System can be manufactured to meet the requirements of most state departments of transportation. Material specified for these drainage systems is composed of multiple plies (2 or 3) of synthetic fabric laminated with an elastomer (neoprene or nitrile) and vulcanized to form an integral laminate. Several common material options are shown above. The D.S. Brown Drainage Trough System can be custom-designed for almost any bridge geometry. Please consult the D.S. Brown Company Engineering Department for design advice regarding attachment schemes and configuration considerations.

Bridge the World with Leading Infrastructure Solutions