



Tech Tips 018

Proper Installation of CalTrans (PVC701) Waterstop Profile

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Preparation

- A. Uncoil waterstop 24 hours prior to installation for ease of handling and fabrication. (Plastics have a memory, and this will remove the curl from the waterstop.)
- B. Position waterstop to ensure proper distance (See Installation step C.)
- C. Protect waterstop from damage during progress of work.
- D. Clean concrete joint after first pour to remove debris and dirt.

Examination/Inspection

- A. Prior to placement of concrete notify engineer for field inspection approval.
- B. Inspect waterstop and field splices for defects.
- C. Upon inspection of waterstop installation, replace any damaged or unacceptable waterstop and dispose of defective material.

Installation

- A. Position waterstop in joint as indicated on drawings (See Figure 1).
- B. Center waterstop on joint, with approximately one-half of waterstop width to be embedded in concrete on each side of the joint. Use split form installation method. — do not bend or fold waterstop flat against forms.
- C. Allow clearance between waterstop and reinforcing steel of a minimum of 1.5 times the largest aggregate size. Prevent rock pockets and air voids caused by aggregate bridging.
- D. Ensure center U-shape is not embedded at expansion joints. Use the specified brand of expansion joint filler above and beneath the waterstop U-shape (See Figure 1).
- E. Secure waterstop in correct position using optional factory-installed brass eyelets or JPS hog rings crimped between last two ribs on 12 inch maximum centers), and wire tie to adjacent reinforcing steel.
- F. Staple, nail, or screw waterstop bottom leg at the bonding strip underneath the waterstop legs (See Figure 1).
- G. Carefully place concrete without displacing waterstop from proper position. (If Installation step E is followed, this will not be a problem.)



- H. Thoroughly and systematically vibrate concrete in the vicinity of the joint, and to maximized intimate contact between concrete and waterstop.
- I. After first pour, clean unembedded waterstop leg to ensure full contact of second concrete pour. Remove laitance, spillage, form oil and dirt.
- J. Repeat all steps for the second pour.

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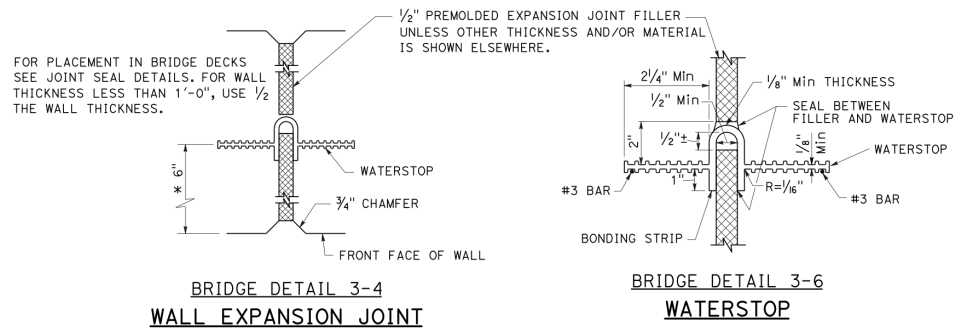


Figure 1 — Standard CalTrans Waterstop Details.