Figure 5-397.627(A)  
Waterproof Expansion Device (With Type F Barrier)

Approved and signed, August 24, 2016. Last date revised: February 22, 2018

Revised 02-22-2018  
At BARRIER ELEVATION:  
• Changed the note pointing to the slotted hole by removing the word “DIA.” from the dimensions describing the long slotted hole.  
At DETAIL “A”:  
• Added a dimension and leader line with note “Embed Threads ¼” showing the depth of the bolt into the coupling nut.

Revised 01-05-2017  
At SECTION B-B:  
• Added Designer note: “On joint replacement projects omit elevations”  
• Changed all the X’s to underbars for the elevation and abutment “fill in” locations.

Approved 08-24-2016  
GENERAL - Throughout the Standard:  
• Sheet number changed from 5-397.627 to 5-397.627(A) to accommodate the addition of a Type S Barrier (Fig. 5-397.627(B)).  
• Removed the bituminous felt from the underside of the barrier plate and the accompanying note.  
At SECTION THROUGH BARRIER:  
• Labeled top of extrusion and added note 📊.  
• Added “*” and clarifying note “* Top of Block Out”. 
At BARRIER ELEVATION:  
• Removed bituminous felt.  
• Added note 📊 (2 locations).  
At GENERAL NOTES:  
• Updated all notes to use active voice.  
• Added note "Payment length is based on the horizontal distance between the outside edges of the deck measured along the centerline of joint.”  
• Updated "Designer Note" to include both notes 📊 and 📊.  
• Removed note 📊.  
• Added new note 📊, 📊, and 📊. 
At PLAN VIEW @ EXPANSION DEVICE:  
• Added note 📊.  
At SECTION B-B:  
• Added note 📊 (at 2 locations).

Revised 09-11-2014  
Under GENERAL NOTES:  
• Changed the 5th note From: ¼” DIA. X ½” flathead cap screw…. To: ¼” DIA. X 1½” flathead cap screw….  
• Changed the 6th note From: Length of payment for device is from out to out of extrusion along centerline of joint. To: Length of payment for device is from outer end to outer end of extrusion along centerline of joint. Refer to special provisions for more specific payment information.

Revised 11-06-2013  
Under GENERAL NOTES:  
• Changed numbered note 📊 to read: __At 45°F; __AT 90°F. 2” At All Temps.
• Added a designer note in front of numbered note ② for the designer to “Choose One Joint Opening Note And Delete Other”.
• At numbered note ②: Removed the sheet “1” reference and left the sheet no. “blank” to be filled in.

Revised 05-24-2012
Changed all instances of Railing to Barrier.

At BARRIER ELEVATION:
• Changed note to read: 1" Dia. X 6" Long Slotted Hole For ¾ " Dia. X 1 ½ " Flathead Cap Screw With ½ " Square Or Hex Socket. Apply Bridge Bearing Lubricant Per MnDot Approved Products List To Screw Threads.
• Changed note to read: ¾ " Dia. X 1 ½ " Flathead Cap Screw With ½ " Square Or Hex Socket. Apply Bridge Bearing Lubricant Per MnDot Approved Products List To Screw Threads.
• Added note: 2" Long Hex Coupling Nut And ¾ " Dia. X 4" Bolt. Do Not Tighten Down Cap Screw. See Detail "A".

At DETAIL “A”:
• Removed following note from detail: “After Assembly, Field Weld Lugs…..”
• Changed the look of the cap screw from a slotted type to a hex head type.
• Added note: ¾ " Dia. X 1 ½ " Flathead Cap Screw With ½ " Square Or Hex Socket. Apply Bridge Bearing Lubricant Per MnDot Approved Products List To Screw Threads.

Under GENERAL NOTES:
• Changed all instances of Mn/Dot Spec. to Spec.
• Added note: ¾ " Dia. X ½ " Flathead Cap Screw With ½ " Square Or Hex Socket Per Spec 3391. Cap Screws Shall Be Countersunk 1/16" Below Top Of Plate. Apply Bridge Bearing Lubricant Per MnDot Approved Products List To Screw Threads

Revised 02-23-2011
Under GENERAL NOTES:
• Added - ② Use The Largest Single Piece Possible. Use Of Small Pieces Or Scraps Secured Together Is Prohibited.

At RAILING ELEVATION:
• Added numbered note ② to the note ½” Bit. Felt Or Equal
At Detail “A”:
• Added numbered note ② to the note ½” Bit. Felt Or Equal

Approved, and signed, November 6, 1995.