

Figure 5-397.630(A)

Waterproof Expansion Device (Raised Median or Sidewalk with F Barrier and Parapet)

Approved and signed, August 24, 2016. Last date revised: October 22, 2019.

Revised: 10-22-2019

At the ELEVATION and at ELEVATION - RAISED SIDEWALK DETAILS and at MEDIAN ELEVATION:

- Added numbered note ① to the details.

Throughout the Standard:

- Added (Typ.) to the See Bent Stud Detail 1'-6" Max. Spg. note.

Revised: 02-22-2018

Throughout the Standard:

- Changed the flathead cap screw length from a 1" flathead cap screw to a 1 1/2" flathead cap screw.
- Changed the terminology when referring to recessing the cover plates, changed the term "below" to "from" at all locations.

At ELEVATION - RAISED SIDEWALK DETAILS:

- Changed note to pointing to the cover plate to read: 3/8"x 1'-9" raised pattern plate to be recessed 1/8" from horizontal top surface and 1/4" from vertical curb face of sidewalk.

At MEDIAN ELEVATION:

- Changed note to pointing to the cover plate to read: 3/8"x 1'-9" raised pattern plate to be recessed 1/4" from horizontal top surface and vertical curb face of sidewalk.
- Changed the note for the coupling nut and bolt from a 4" to a 3" bolt length.

At SECTION THROUGH BARRIERS – INTEGRAL SIDEWALK:

- Changed the name of the detail from "Concrete Parapet Barrier" to "Concrete Parapet".
- Added note: *Top of Block Out.
- Added an asterisk to the Block Out dimensions.

At the ELEVATION (Concrete parapet and back of type F barrier)

- At the slotted hole note, removed the word "DIA" from the dimensions of the long slotted hole.

Under Notes:

- Removed the reference to "Standard Figure 5-397.627(A)" and replaced with "other waterproof expansion device sheet" in two locations.

Added bubbled Designer Note: "Always include Standard Figure 5-397.627(A) along with this sheet".

Approved 08-24-2016

GENERAL:

- Sheet number changed from 5-397.630 to 5-397.630(A) to accommodate the addition of a Type S Barrier (Fig. 5-397.630(B)).
- Changed the title of the sheet from "Waterproof Expansion Device (Raised Median or Sidewalk with Parapet)" to "Waterproof Expansion Device (Raised Median or Sidewalk with F Barrier and Parapet)".

At SECTION D-D:

Changed note from "3/4" dia. x 4" bolt" to "3/4" Dia. x 4" bolt staggered (Typ.) at 1'-0" max. spacing"

Added note "(Integral Sidewalk)" beneath title.

At ELEVATION:

Changed sheet reference from 5-397.627 to 5-397.627(A).

At ELEVATION RAISED SIDEWALK DETAILS:

Added 1'-9" dimension to plate size.

Added 6" max. to left side of joint.

Under GENERAL NOTES:

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Updated notes to use active voice.

Changed sheet reference from 5-397.627 to 5-397.627(A).

Added "Provide bond beaker (duct tape, etc.) to underside of cover plate" to end of note ①.

At SECTION THROUGH BARRIERS – INTEGRAL SIDEWALK

Added "1'-6" Max. Spg. Bent Studs" note.

Removed aesthetic reveal on backside of F barrier.

At MEDIAN ELEVATION:

Updated detail to more closely match layout and dimensions shown in "Elevation - Raised Sidewalk Details".

Revised 05-25-2016

Under GENERAL NOTES:

- Changed numbered note ① to read: Provide smooth concrete finish beneath plate with 0" min. to 1/8" max. gap between concrete and underside of plate.
- Changed numbered note ③ to read: Dimensions shown are required to comply with A.D.A. standards.
- Changed the term within numbered note ④: From "Bridge Bearing Lubricant" to "Bridge Grease".

Throughout the Standard:

- Removed the Bit Felt from the underside of the sidewalk, median, barrier and parapet plates and the accompanying note.
- Changed the taper of the concrete surface from the expansion/movement side of the cover plate to the top of the sidewalk surface. The length of taper changed from 1 1/2" to 6" minimum to comply with A.D.A. standards.

At the Raised Sidewalk Options 1 & 2:

- Changed the 8" sidewalk height dimension to an open dimension to be filled in.

At the Raised Sidewalk Details:

- Changed the plate note to read: 3/8" Raised Pattern Plate to be recessed 1/8" below walkway surface and 1/4" below face of sidewalk.

At Section D-D:

- Added numbered note ③ to the section name.
- Changed the dimension labeled as numbered note ③ to 1/8".

At Elevation:

- Added a dimension with numbered note ② to the expansion joint/cover plate movement location.

At Detail "A":

- Added numbered note ③ to the detail name.
- Added numbered note ① to the gap between the plate and the sidewalk surface.
- Changed the dimension showing the height of the concrete taper from 1/2" max. to 1/2" ± 1/8".
- Changed the concrete taper length from 1 1/2" to 6" minimum to comply with A.D.A. standards.

At Median Elevation:

- Removed the "See Detail "A" with leader line and circled location.

Revised 11-06-2013

Under GENERAL NOTES:

- Changed first note *from*: See "Detail"..... *to*: See "Standard Figure".....
- Added second note: 3/4 " Dia. X 1" Flat Head Cap Screw With 1/2 " Square Or Hex Socket Per Spec 3391. Cap Screws Shall Be Countersunk 1/16 " Below Top Of Plate. Apply Bridge Bearing Lubricant To Screw Threads. ④
- Changed numbered note ②. Changed the word "Detail" to "Standard Figure" within the note.
- Added numbered note ③. 1/8" (1/4" Max.).
- Added numbered note ④. Lubricant Per MnDot Approved/Qualified Products List: Bridge – Bridge Bearing Lubricant.

At the SHEET TITLE:

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- Changed the sub title to read: (Raised Median Or Sidewalk With Parapet)
- At SECTION THROUGH SIDEWALK - OPTION 1 and OPTION 2:
- Changed the section name to: “SECTION THROUGH RAISED SIDEWALK” for Option 1 and Option 2.
 - Changed the sidewalk slope designation to: “.01’/ FT.” with a directional slope line.
- At SIDEWALK DETAILS – ELEVATION:
- Changed name from “SIDEWALK DETAILS” to “RAISED SIDEWALK DETAILS”.
 - Changed note to read: ⌀ 3/4 " Dia. X 1" Flat Head Cap Screw With 1/2 " Square Or Hex Socket. Apply Bridge Bearing Lubricant To Screw Threads. ④
- At INSIDE ELEVATION:
- Changed the name of the detail *from*: “INSIDE ELEVATION” *to* “ELEVATION”.
 - Changed the words “Railing” and “Rail” *to* “Barrier” in the subtitle for the detail.
 - Changed the look of the plate to reflect the brush curb shape. Added “Top Of Brush Curb” with leader.
 - Changed the look of the coupling nuts and 4” bolts to reflect their direction.
 - Changed the note pointing to the plate *from* a 10” high plate *to* a 1’-0” high plate. Combined two notes into one: 2" LONG HEX COUPLING NUT and 3/4 " DIA. x 4" BOLT with leader line pointing to two locations.
 - Changed the note pointing to the coupling nut locations to read: ⌀ 3/4 " Dia. X 1" Flat Head Cap Screw With 1/2 " Square Or Hex Socket. Apply Bridge Bearing Lubricant To Screw Threads. ④
 - Split the note pointing to the slotted hole and coupling nut location in the plate into two notes. They read:
(note one) 1” Dia. X 6” Long Slotted Hole For 3/4 " Dia. X 1 ½” Flat Head Cap Screw With ½” Square Or Hex Socket. Apply Bridge Bearing Lubricant To Screw Threads. ④
(note two) 2" Long Hex Coupling Nut And 3/4 " Dia. X 4" Bolt. Do Not Tighten Down Cap Screw. See Detail “A” On Standard Figure 5-397.627.
- At SECTION THROUGH RAILING – INTEGRAL SIDEWALK and related detail locations:
- Changed the word “Railing” to “Barrier” at the title and related detail locations.
 - Changed the shape of the plates on the back of the F barrier and front of the parapet barrier to reflect the brush curb shape.
 - Changed the shape of the back of the parapet barrier to reflect the 2” x 1’-0” coping.
 - Changed the note pointing to the brush curb plate to read: “ 3/8” X 1’-0” X 2’-2” Plate With Brush Curb To Be Recessed 1/4” Below Face Of Barrier (3/4” Inside Bend Radius)(Typ.)
 - Added the weld symbol at the brush curb plate.
- At MEDIAN SECTION:
- Removed the Acetate Gland and related note.
 - Removed the Median Joint and changed the accompanying note to read: Symmetrical About ⌀ Median.
- At DETAIL “A”:
- Removed the plate dimension (1’-0 ½”) from the Raised Pattern Cover Plate note.

Revised 02-23-2011

Under GENERAL NOTES:

- Added numbered note: ① Use Largest Single Piece Possible. Use Of Small Pieces Or Scraps Secured Together Is Prohibited.
- Added numbered note: ② See Note ② On Detail Sheet 5-397.627.

Added: DETAIL “A” to the sheet. (Showing in detail the expansion/contraction opening of the cover plate and the sidewalk.)

At INSIDE ELEVATION:

- Added: ① to the existing note “ ½” Bit. Felt Or Equal”

At MEDIAN SECTION:

- Added: ① to the existing note “ ½” Bit. Felt Or Equal”

At SECTION THROUGH SIDEWALK – OPTION 1:

- Added: ① to the existing note “ ½” Bit. Felt Or Equal Under Free End Of Plate”

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At SECTION THROUGH SIDEWALK – OPTION 2:

- Added: Ⓞ to the existing note “ $\frac{1}{2}$ ” Bit. Felt Or Equal Under Free End Of Plate”

At MEDIAN ELEVATION:

- Removed note: “ $\frac{1}{4}$ ” Bevel” from the cover plate.
- Added: Ⓞ to existing note “ $\frac{1}{2}$ ” Bit. Felt Or Equal”.
- Added note: “SEE DETAIL “A” with leader line to circled area of detail.

At SIDEWALK DETAILS / ELEVATION:

- Removed note: “ $\frac{1}{4}$ ” Bevel” from the cover plate.
- Added: Ⓞ to existing note “ $\frac{1}{2}$ ” Bit. Felt Or Equal”.
- Added note: “SEE DETAIL “A” with leader line to the circled area of detail.

At SECTION THROUGH RAILINGS – INTEGRAL SIDEWALKS:

- Added the *BIT. FELT* to the detail between the two barriers, under the cover plate.
- Added note: Ⓞ “ $\frac{1}{2}$ ” Bit. Felt Or Equal” with leader line to the *BIT. FELT*.

At SECTION D-D:

- Added the *BIT. FELT* to the detail under the cover plate.
- Changed: Both the cover plate and the edge of the concrete to show more of a tapered edge at the expansion side of the detail.
- Removed : The $\frac{1}{2}$ ” dimension showing the edge of the concrete and the leader line with the word “CHAMFER”
- Added: Ⓞ “ $\frac{1}{2}$ ” Bit. Felt Or Equal Under Free End Of Plate” with leader line pointing to the *BIT. FELT*.
- Added note: “SEE DETAIL “A” with leader line to the circled area of detail.

Revised 03-30-2010

At SIDEWALK DETAILS – ELEVATION:

- Adjusted the arrow to point to the correct location for the note “ $\frac{3}{4}$ ” Dia. x 4” Bolt”.

At MEDIAN ELEVATION:

- Added note – “ $\text{⌀} \frac{3}{4}$ ” Dia. x 1” Flat Head Cap Screw”. And changed the line style for the note.
- Added the concrete hatch to the view for the deck.

Revised 10-28-2008

At SECTION THROUGH RAILINGS – INTEGRAL SIDEWALK:

- Changed the section to show Bent Studs on the expansion device under the sidewalk.

Approved, and signed, September 26, 2003.