

The diameter of this part is the same as the diameter of the bar spliced.

The diameter of this part is equal or larger than the diameter of bar spliced.

ROLLED THREAD DOWEL BAR



**** ONE PIECE**

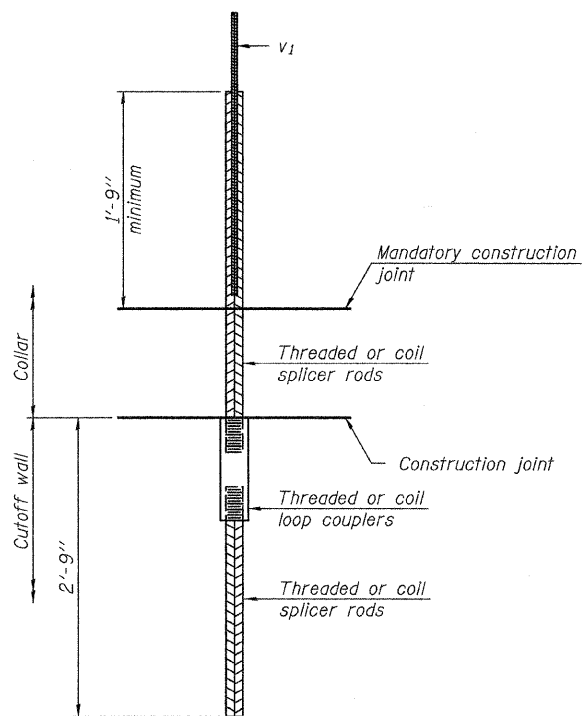
Wire Connector



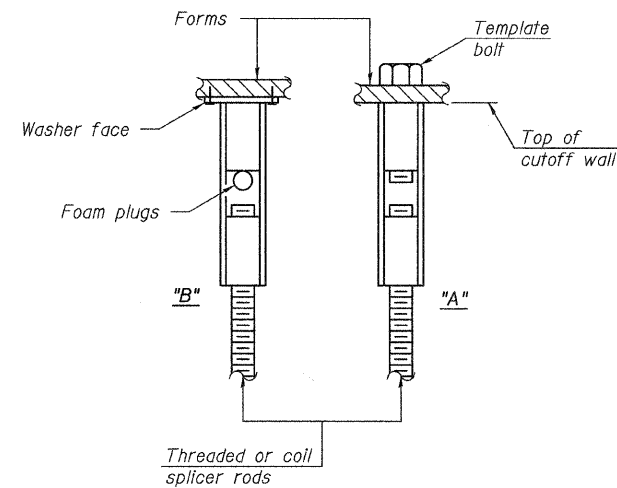
WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



FOR BOX CULVERT END SECTIONS



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity = $1.25 \times f_y \times A_t$
 (Tension in kips)
 - ② Minimum *Pull-out Strength = $0.66 \times f_y \times A_t$
 (Tension in kips)
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	24

BAR SPLICER ASSEMBLY DETAILS
IL. RTE. 84 OVER UNNAMED CREEK
F.A.S. RTE. 5857 - SEC. 1R-T
ROCK ISLAND COUNTY
STATION 68+99.62

DESIGNED - BAN	EXAMINED _____ DATE - ____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BOX CULVERT END SECTION & GABION WALL DETAILS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - ---	ENGINEER OF BRIDGE DESIGN			5857	1R-T	ROCK ISLAND	25	16
DRAWN - TAC	PASSED _____			CONTRACT NO. 64E31				
CHECKED - ---	ENGINEER OF BRIDGES AND STRUCTURES			ILLINOIS FED. AID PROJECT				
			SHEET NO. 5 OF 5 SHEETS					