

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

ROLLED THREAD DOWEL BAR

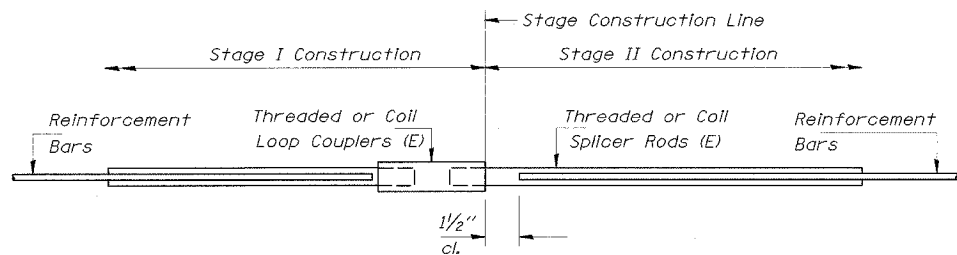


•• ONE PIECE

Wire Connector



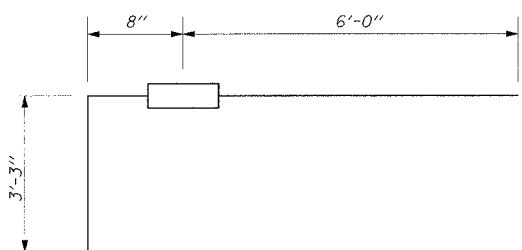
WELDED SECTIONS



SPLICER DETAIL

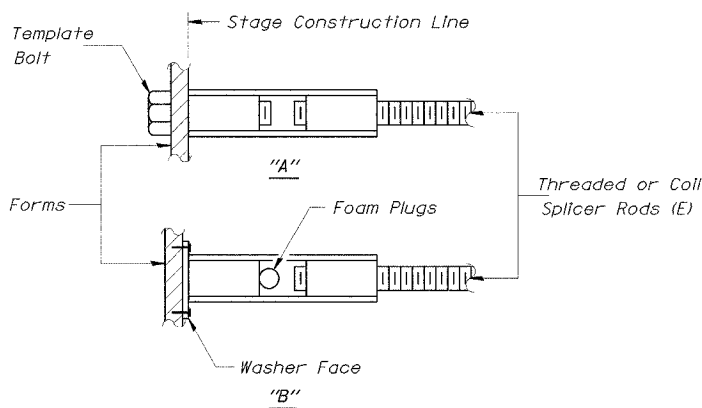
BAR SPLICER ASSEMBLY ALTERNATIVES

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



BACKWALL BENT BAR SPLICER DETAIL

#5 (E) Bar Splicer
97 req'd. East Abutment
97 req'd West Abutment



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.
 (E) : Indicates epoxy coating.

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.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
- ② Minimum *Pull-out Strength (Tension in kips) = $1.25 \times f_{s\ allow} \times A_t$

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s\ allow}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, paid for at the contract unit price each for "BAR SPLICERS."

Bar Size	No. Assemblies Required	Location
#5	590	Median Barrier *
#5	861	Deck
#7	6	Deck
#5	103 **	West Abutment
#5	103 **	East Abutment

* See Sheet SB-10 for Median Barrier Bent Bar Splicer Detail.

**Includes bent bar splicers in the backwall.

DESIGNED	EL
CHECKED	JAS
DRAWN	ABW
CHECKED	EL

BAR SPLICER DETAILS
WILLOW ROAD OVER
DES PLAINES RIVER
F.A.P. RTE. 305
SECTION 2004-088B
COOK COUNTY
STA. 397+76.18
STR. NO. 016-0530

EDWARDS AND KELCEY