

Bar splicer assemblies shallbe of an approved type and shalldevelop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shallbe of minimum 60 ksi yield strength, threaded or coiled full length. All reinforcement bars shall be lapped and tied to the splicer rods or dowelbars. Bar splicer assemblies shall be epoxy coated according to the requirements for

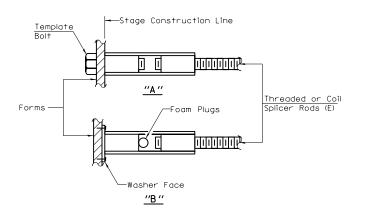
Other systems of similar design may be submitted to the Engineer for approval Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- Minimum Capacity (Tension in kips) = 1.25 × fy × A_t
- Minimum *Pull-out Strength = 0.66 x fy x A_†

Where fy = Yield strength of lapped reinforcement bars in ksi. ${\rm A}_{\rm T}$ = Tensile stress area of lapped reinforcement bars.

* = 28 day concrete

	BAR SPLICER ASSEMBLIES				
		Strength Requirements			
Bar Size to be Spliced	DowelBar Lenath	Min.Capacity kips - tension	Min.Pull-Out Strength kips - tension		
#4	1'-8''	14.7	7.9		
#5	2'-2''	23.0	12.3		
#6	2'-7''	33.1	17.4		
#7	3′-5′′	45.1	23.8		
#8	4′-6′′	58.9	31.3		
#9	5′-9′′	75.0	39.6		
#10	7′-3′′	95.0	50.3		
#11	9'-0''	117.4	61.8		



BAR SPLICER ASSEMBLY ALTERNATIVES

WELDED SECTIONS

ROLLED THREAD DOWEL BAR

** ONE PIECE

— Wire Connector

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

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

INSTALLATION AND SETTING METHODS

 $^{\prime\prime}\text{A}^{\prime\prime}$:Set bar splicer assembly by means of a template bolt. $^{\prime\prime}\text{B}^{\prime\prime}$:Set bar splicer assembly by nailing to wood forms or cementing to steel forms. (E): Indicates epoxy coating.

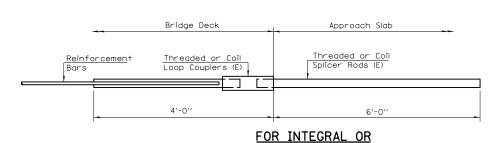
Approach slab

Abutment hatch block

FOR STUB

ABUTMENTS

Threaded or Coil Loop Couplers (E)



Bar Splicer for #5 bar Min. Capacity = 23.0 kips - tension Min. Pull-out Strength = 12.3 kips - tension

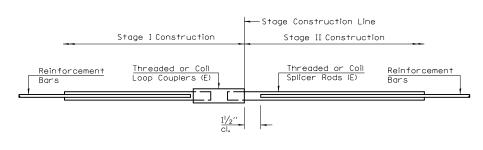
No. Required = N.A.

SEMI-INTEGRAL ABUTMENTS

The diameter of this part is

equalor larger than the diameter of bar spliced.





STANDARD

Bar Size	No. Assemblies Required	Location
# 7	4	DECK ENDS
#6	6	HATCH BLOCKS

STRUCTURE NO. 092-0144

Min. Pull-out Strength = 12.3 kips - tension No. Required = N.A. BAR SPLICER ASSEMBLY DETAILS

BSD-1

10-1-08

FILE NAME =	USER NAME = simsgm	DESIGNED - GMS	REVISED -		BAR SPLICER ASSEMBLY DETAILS S.N. 092-0144 SCALE: SHEET NO. 13 OF 18 SHEETS STA. TO STA.		F.A.P.	SECTION	COUNTY TOTAL SHEET	
c:\pw_work\pwidot\simsgm\d0132144\D57059	6-sht-Strucure Repair Plans.dgn	DRAWN - GMS	REVISED -	STATE OF ILLINOIS			729	38BR-1	VERMILION 25 16	
	PLOT SCALE = 40.0001 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION				CONTRACT NO. 70596		
	PLOT DATE = 6/14/2011	DATE -	REVISED -				FED. ROAD DIST.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		