

**STANDARD BAR SPLICER ASSEMBLY**

| Minimum Lap Lengths    |         |         |         |         |         |
|------------------------|---------|---------|---------|---------|---------|
| Bar size to be spliced | Table 1 | Table 2 | Table 3 | Table 4 | Table 5 |
| 3, 4                   | 1'-5"   | 1'-11"  | 2'-1"   | 2'-4"   | 2'-3"   |
| 5                      | 1'-9"   | 2'-5"   | 2'-7"   | 2'-11"  | 2'-10"  |
| 6                      | 2'-1"   | 2'-11"  | 3'-1"   | 3'-6"   | 3'-4"   |
| 7                      | 2'-9"   | 3'-10"  | 4'-2"   | 4'-8"   | 4'-6"   |
| 8                      | 3'-8"   | 5'-1"   | 5'-5"   | 6'-2"   | 5'-10"  |
| 9                      | 4'-7"   | 6'-5"   | 6'-10"  | 7'-9"   | 7'-5"   |

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Top bar lap, Class B

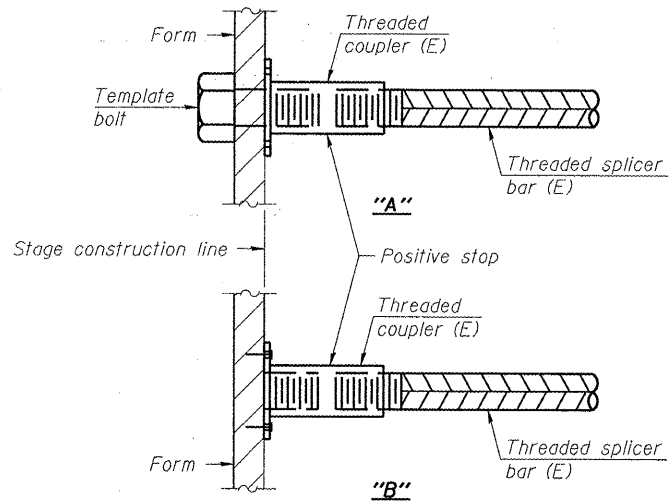
Threaded splicer bar length = min. lap length + 1 1/2" + thread length

\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

| Location         | Bar size | No. assemblies required | Table for minimum lap length |
|------------------|----------|-------------------------|------------------------------|
| Deck             | #5       | 616                     | Table 3                      |
| Diaphragm        | #6       | 16                      | Table 5                      |
| Appr. Slab       | #4       | 50                      | Table 3                      |
| Appr. Slab       | #5       | 92                      | Table 3                      |
| Appr. Slab Foot. | #5       | 80                      | Table 3                      |
| North Abut.      | #7       | 10                      | Table 4                      |
| South Abut.      | #7       | 10                      | Table 4                      |
| Pier 1           | #5       | 24                      | Table 4                      |
| Pier 1           | #7       | 10                      | Table 4                      |
| Pier 2           | #5       | 28                      | Table 4                      |
| Pier 2           | #7       | 10                      | Table 4                      |
| Pier 3           | #5       | 28                      | Table 4                      |
| Pier 3           | #7       | 10                      | Table 4                      |
| Pier 4           | #5       | 24                      | Table 4                      |
| Pier 4           | #7       | 10                      | Table 4                      |

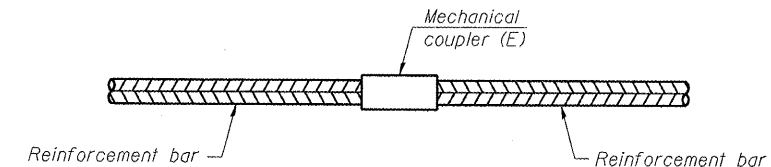
**NOTES**

- Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
- All reinforcement shall be lapped and tied to the splicer bars.
- Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
- See special provision for Mechanical Splicers.
- See approved list of bar splicer assemblies and mechanical splicers for alternatives.



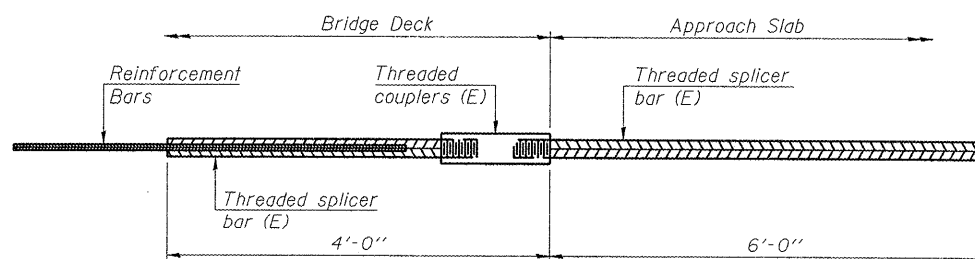
**INSTALLATION AND SETTING METHODS**

- "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.



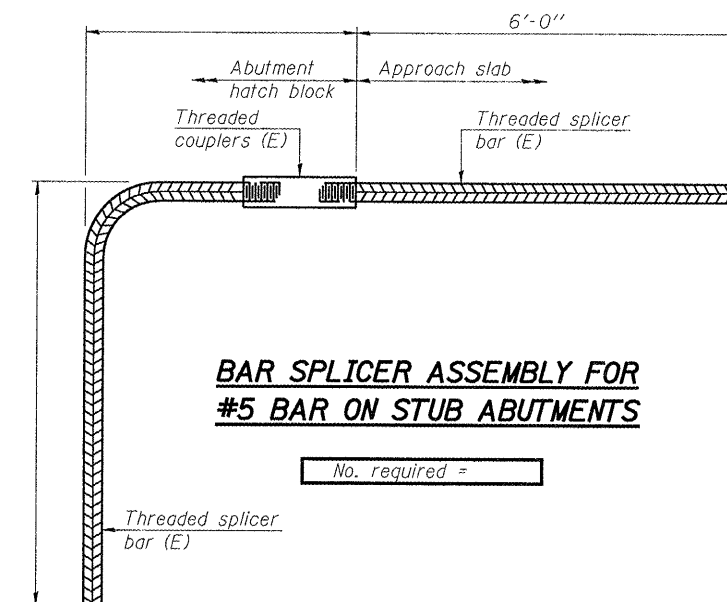
**STANDARD MECHANICAL SPLICER**

| Location | Bar size | No. assemblies required |
|----------|----------|-------------------------|
| Pier 1   | #5       | 36                      |
| Pier 2   | #5       | 36                      |
| Pier 3   | #5       | 36                      |
| Pier 4   | #5       | 36                      |



**BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

No. required = 76



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required =

HURST-ROSCHKE ENGINEERS, INC.  
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(217)532-3959 FAX (217)532-3212  
HR JOB # 190-1785

HR  
HURST-ROSCHKE  
ENGINEERS, INC.

BSD-1

7-1-10

| FILE NAME * | USER NAME * | DESIGNED - JSP | REVISED - |
|-------------|-------------|----------------|-----------|
|             |             | CHECKED - CJC  | REVISED - |
|             |             | DRAWN - UJ     | REVISED - |
|             |             | CHECKED - RVB  | REVISED - |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
STRUCTURE NO. 036-0071

| F.A.P. RTE. | SECTION      | COUNTY    | TOTAL SHEETS | SHEET NO. |
|-------------|--------------|-----------|--------------|-----------|
| 522         | (14-1-B1) BR | HENDERSON | 70           | 38        |

SHEET NO. 25 OF 27 SHEETS

ILLINOIS FED. AID PROJECT

CONTRACT NO. 68298