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**APPROVED SOURCES  
LOAD TRANSFER DOWELS & DOWEL ASSEMBLIES**

<b><u>SUPPLIERS (FABRICATORS)</u></b>	<b><u>ADDRESS</u></b>
Alton Steel, Inc. (ASI)	Alton, IL
Ambassador Steel Corporation (Fabricator: Dayton Superior, Inc.) (Fabricator: Steel Structures, Inc.) (Fabricator: Wady Industries)	Des Moines, IA
American Highway Technology	Kankakee, IL
Construction Materials, Inc.	Des Moines, IA
Dayton Superior, Inc.	Parsons, KS
Logan Contractors Supply, Inc. (Fabricator: Blue Grass Steel Company) (Fabricator: Wady Industries) (Fabricator: Erect-A-Line, Inc.)	Des Moines, IA   Dallas, TX
Wady Industries	Maquoketa, IA
W.G. Block & Company (Fabricator: Blue Grass Steel Company)	Davenport, IA

**BASIS OF ACCEPTANCE**

Dowel assemblies / load transfer dowels shall meet the requirements of the design standard PV-101.

With each shipment, the supplier shall furnish a letter of compliance identified with the county, project number, and contractor. This letter shall itemize the following:

1. Quantity of material shipped
2. A certification statement that assures the material was fabricated in accordance with approved shop drawings, and indicates the approval date of the drawings
3. A statement for epoxy coating shall include the name of the coating company, compliance with ASTM A775, and indicate that the coating reports for the material are retained in the files of the assembly supplier (subject to review by the Iowa Department of Transportation).
4. Copies of Mill Test Reports of heat numbers of steel used in fabrication of these assemblies are identifiable and maintained in the records of the assembly supplier on a project-by-project basis.
5. The assembly supplier shall retain the records of Coating Reports and Mill Test Reports for three years.

This compliance document shall be distributed in accordance with IM 451, paragraph titled, "Certification Acceptance Procedures."

### **BOND BREAKERS**

Alternate bituminous or paraffin-based lubricant bond breakers shall be used to dip the assemblies and / or approved equal.

The bituminous bond breaker shall meet the requirements of either:

- A. [Section 4137](#) (Asphalt Binder)
- B. [Section 4138](#) (Cut back or Liquid Asphalt)
- C. [Section 4140](#) (Emulsified Asphalt)

\*Tectyl 506 (Paraffin Based Lubricant)

Dayton Superior DSC BB-Coat

<u>Dowel Bar Size</u>	<u>Dowel Bar Diameter</u>
#6 (#20)	3/4-inch (19 mm)
#10 (#30)	1 1/4-inch (31 mm)
#11 (#35)	1 1/2-inch (38 mm)

### **STORAGE AND HANDLING**

Epoxy coated dowels in dowel assemblies stored outdoors longer than two months either at the fabricator or at the project site shall be protected from sunlight, salt spray, and weather exposure. The coated dowels in the dowel assembly shall be covered with a non-transparent or other suitable opaque protective material. Provision shall be made for adequate ventilation to minimize condensation. The date of which the coated dowels assemblies are placed outdoors, shall be recorded on an identification tag. Weathered / discolored / faded dowel bars shall be rejected. Visual inspection for acceptance and / or rejection shall be at the discretion of the District Materials Engineer.

Dowell assemblies shall be stored off the ground on a wood / timber support. When stacking is necessary, wood / timber support shall be placed between assemblies.

\*Tectyl 506 is formulated to be used as supplied by the manufacturer and to be stored at a temperature between 50 – 95° F (10-35° C). Mild agitation is required and recommended prior to use.