

**IOWA DEPARTMENT OF TRANSPORTATION**

To Office Bridges and Structures Date January 26, 2004  
Attention All Employees Ref No. 521.1  
From Gary Novey  
Office Bridges and Structures  
Subject Method's Memo No. 89 (Shear Stud Lengths and Haunch Requirements for Steel Girders)

Because of construction problems with shear studs projecting above the top mat of steel, the following office policies have changed:

1. A minimum length shear stud of 3 ½ -inches (90 mm) may be used in the negative moment regions over the piers
2. Unless special situations warrant a maximum shear stud length of 5-inches (130 mm) should be used in the positive moment regions.

For haunch construction (allowable field haunch), the haunch thickening will be limited by:

1. Up to ½ inch top flange embedment into the slab.
2. 3 ½ inch clearance between the top of slab and shear stud.
3. 2-inch minimum penetration of shear stud into the bridge deck
4. 3-inch maximum haunch.

For haunch design, the haunch thickness shall remain 0-inch minimum and 2-inch maximum.

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