DEVELOPING AND VALIDATING NEW BOLTED END-PLATE MOMENT CONNECTION CONFIGURATIONS

Nonish Jain

Thesis submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

in

CIVIL ENGINEERING

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Draft 09/01/2009

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   - Figure 4-11 8E-4W-1-1/2-62 Specimen Dimensions
   - Figure 4-12 End Plate Layout for Specimen 8E-4W-1-1/2-62
   - Figure 4-13 Load-deformation behavior for Specimen 8E-4W-1-1/2-62
   - Figure 4-14 End-Plate Separation for Specimen 8E-4W-1-1/2-62
   - Figure 4-15 Bolt forces for Specimen 8E-4W-1-1/2-62
   - Figure 4-16 8E-4W-3/4-3/4-62 Specimen Dimensions
   - Figure 4-17 End Plate Layout for Specimen 8E-4W-3/4-3/4-62
   - Figure 4-18 Load-deformation behavior for Specimen 8E-4W-3/4-3/4-62
   - Figure 4-19 End-Plate Separation for Specimen 8E-4W-3/4-3/4-62
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   - Figure 4-2 End Plate Layout for Specimen 8E-4W-1.25-1-30
   - Figure 4-3 Load-deformation behavior for Specimen 8E-4W-1.25-1-30
   - Figure 4-4 End-plate separation for Specimen 8E-4W-1.25-1-30
   - Figure 4-5 Bolt 2 strains for Specimen 8E-4W-1.25-1-30
   - Figure 4-6 8E-4W-1.25-1.375-36 Specimen Dimensions
   - Figure 4-7 End Plate Layout for Specimen 8E-4W-1.25-1.375-36
   - Figure 4-8 Load-deformation behavior for Specimen 8E-4W-1.25-1.375-36
   - Figure 4-9 End-plate separation for Specimen 8E-4W-1.25-1.375-36
Figure 4-10 Bolt 2 strains for Specimen 8E-4W-1.25-1.375-36

Figure 4-21 8ES-1.25-1-30 Specimen Dimensions
Figure 4-22 End-Plate Layout for Specimen 8ES-1.25-1-30
Figure 4-23 Load-deformation behavior for Specimen 8ES-1.25-1-30
Figure 4-24 End-plate separation for Specimen 8ES-1.25-1-30
Figure 4-25 Bolt 11 strains for Specimen 8ES-1.25-1-30

Figure 4-31 8ES-1.25-1.25-36 Specimen Dimensions
Figure 4-32 End-plate Layout for Specimen 8ES-1.25-1.25-36
Figure 4-33 Load-deformation behavior for Specimen 8ES-1.25-1.25-36
Figure 4-34 End-plate separation for Specimen 8ES-1.25-1.25-36
Figure 4-35 Bolt 3 strains for Specimen 8ES-1.25-1.25-36

Figure 4-26 8ES-0.875-0.75-24 Specimen Dimensions
Figure 4-27 End-Plate Layout for Specimen 8ES-0.875-0.75-24 [redrawn]
Figure 4-28 Moment-Deflection behavior for Specimen 8ES-0.875-0.75-24
Figure 4-29 End-plate separation for Specimen 8ES-0.875-0.75-24
Figure 4-30 Bolt forces for 8ES-0.875-0.75-24

Figure 4-36 8ES-0.875-1-24 Specimen Dimensions
Figure 4-37 End-Plate Layout for Specimen 8ES-0.875-1-24 [redrawn]
Figure 4-38 Load-deformation behavior for Specimen 8ES-0.875-1-24
Figure 4-39 End-plate separation for Specimen 8ES-0.875-1-24
Figure 4-40 Bolt forces for Specimen 8ES-0.875-1-24


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Sincerely,

Nonish

Nonish Jain
Graduate Research Assistant
Structural Engineering and Materials Program
Department of Civil and Environmental Engineering
Virginia Polytechnic Institute and State University
Tom Murray <thmurray@vt.edu>  
To: Nonish Jain <nonishj@vt.edu>  

Permission granted.

Tom Murray

At 08:41 PM 7/1/2015, you wrote:

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Figure 4â€“15 Bolt forces for Specimen 8E-4W-1-1/2-62À  
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Figure 4â€“18 Load-deformation behavior for Specimen 8E-4W-3/4-3/4-62  
Figure 4â€“19À  
End-Plate SeparationÂ for Specimen 8E-4W-3/4-3/4-62  
Figure 4â€“20 Bolt forces for SpecimenÂ 8E-4W-3/4-3/4-62


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Nonish Jain
Graduate Research Assistant
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Virginia Polytechnic Institute and State University
Nonish Jain <nonishj@vt.edu>
To: Tom Murray <thmurray@vt.edu>

Thank you so much! Hope you had a great 4th.

[Quoted text hidden]

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