in either Ordinary Moment Frame or Special Moment Frame systems within the member size limitations given in Table 3-8. Figure 3-13 presents a detail for the connection.

![Figure 3-13 Bolted Unstiffened End Plate (BUEP) Connection](image)

**Notes**

1. ASTM A36 end plate. For sizing see Section 3.6.1.1.
2. CJP groove weld. This weld has special requirements. See FEMA-353, Recommended Specifications and Quality Assurance Guidelines for Steel Moment Frame Construction for Seismic Applications, for fabrication details. Weld: QC/QA Category AH/T.
3. Fillet weld both sides, or CJP weld; see Section 3.6.1.3 for sizing requirements. See FEMA-353, Recommended Specifications and Quality Assurance Guidelines for Steel Moment Frame Construction for Seismic Applications, for fabrication details. Weld: QC/QA Category BM/L.
4. Pretensioned ASTM A325 or A490 bolts. Diameter not to exceed 1-1/2 inch. See Section 3.6.1.1 for sizing requirements.
5. Bolt location is part of the end plate design. See Section 3.6.1.1.
6. For continuity plates and web doubler plates, see Figure 3-6. For calculation of panel zone strength, see Section 3.6.1.1.
7. Shim as required. Finger shims shall not be placed with fingers pointing up.