



~ TYPICAL SECTION ~

**NOTES:**

1. Hand - hold bars shall be installed on the inside of exterior beams and on both sides of interior beams when called for on the Design Drawings.
2. Termination and splicing of hand - hold bars shall occur at stiffeners or connection plates. Angle supports shall be used at intermediate locations only. All termination and splice plates shall be a minimum of 1/2 inch thick. Additional stiffeners shall be provided where necessary to meet the described requirements.
3. Hole sizes for bolts and hand - hold bars shall be 1/16 inch larger than the bolt / bar size. Edge distances for holes shall be 1 1/2 inches unless otherwise shown.
4. For unpainted applications, the hand - hold bar and nuts shall be galvanized to conform to ASTM M IIM/M III.

**MATERIALS:**

With unpainted structural steel - All steel.....AASHTO M 270/M 270M, Gr. 50W  
 With painted structural steel - All steel.....AASHTO M 270M/M 270, Gr. 36  
 Heavy hex nuts for 1"  $\phi$  bar .....AASHTO M 291