**Material Specifications**

**Nelson® PSR Studs** (Minimum Values)
(per AWS D1.1, ASTM A108 Grades 1010-1020)
- Yield Strength: 51,000 psi (350 MPa)
- Tensile Strength: 65,000 psi (450 MPa)
- Elongation: 20% in 2 inches (51 mm)
- Reduction of Area: 50%

**Rail** (Minimum Values)
(per AWS D1.1, ASTM A108 Grades 1010-1020)
- Yield Strength: 44,000 psi (300 MPa)
- Tensile Strength: 65,000 psi (450 MPa)
- Elongation: 20% in 8 inches (203 mm)
- Reduction of Area: 50%

**Installation of Shear Rail**
- Maintain a minimum of 2" clear cover to slab edge
- Align end of rail with finished face of column
- Place shear rail perpendicular to each column face
- Equally space required number of assemblies on each column face
- Insert shaft of chair through punched hole in shear rail
- Nail shear rails to formwork to prevent movement during concrete placement

<table>
<thead>
<tr>
<th>Stud Shank Diameter</th>
<th>Head Diameter</th>
<th>Shank Area</th>
<th>Rail Width</th>
<th>Rail Depth</th>
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