

## Pre-job Inspection Checklist

Below is a checklist of items that need to be completed during the pre-job inspection.

Note that some specifications described in the following content may not be the same as the specifications followed by your agency. Always check with your State agency's standards and specifications when using these guidelines.

### Sections

- **General Checks**
- **Faying Surfaces**
- **Hole Placement and Dimensions**
- **Hole and Joint Alignment**
- **Gap Management**
- **Assemblies**

### General Checks

- Check component and surface preparation, especially on slip-critical joints**
- Be alert for corrosion or damage to plates, beams, or other structural members**

### Faying Surfaces

- Dirt, overspray, loose heavy mill scale, and oil are not permitted within the larger of 1 d or 1 in. around the bolts**
- Only tested and approved paint or coatings were applied**
- Coatings must be cured (dried) for the minimum time**
- Has blast cleaning, hand wire brushing, or other approved roughening been applied? If so, what are the results?**

### Hole Placement and Dimensions

- All non-standard holes must have engineering approval
- Standard holes 1/16th larger than bolt shank
- Remove burrs and weld spatter
- Slots should be transverse to expected movement
- Hardened washers or finger shims must be used on oversized or slotted holes
- Slotted holes are only in one ply

### Hole and Joint Alignment

- Structural members must first be aligned for general fit and function
- Minor hole alignment can be adjusted with a spud wrench or an alignment pin
- 50% of bolts (or temporary pins of the same diameter) should be in place in the holes before any bolt tightening begins

### Gap Management

- All joints regardless of type begin with snug-tight assembly
- All plies should be in contact with one another
- Severe gaps that cannot be closed should be rejected or shimmed by permission of the site engineer
- Tightening should begin at the most rigid part of the joint near the center and proceed toward the free edges

### Assemblies

- Bolt length and joint thickness should be matched
- A hardened washer is required under the turning nut or bolt head, and an optional second washer may be applied on the opposite face

## Bolted Connections – Inspection

AT-TC3CN006-18-T1-JA09

- The unthreaded shank of the bolt should normally be included at the point where the joint faces meet
- At least 5 threads should be included inside the “grip” to allow for sufficient tightening of the nut
- Anywhere from flush to 2–3 bolt threads should extend from the nut after tightening