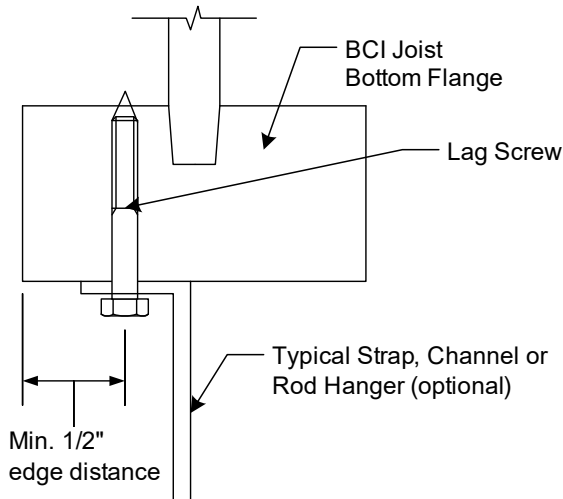
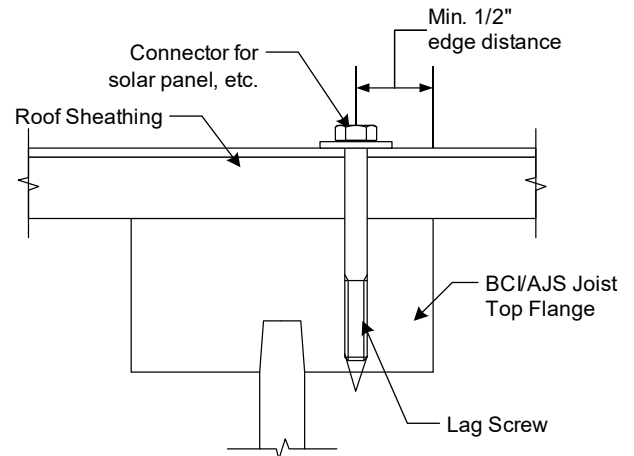




### Bottom Flange Connections



### Top Flange Connections



### Maximum Lag Screw Size and Allowable Withdrawal Loads

- BCI® 4500, 5000, 6000 & 6500 Joists
  - 1/4" Lag Screw = 125 lb
    - 5/8" min. screw thread in flange (not including tapered tip)
    - 1/8" diameter pilot hole required if not proprietary self-driving type screw
- BCI® 60 & 90 Joists
  - 1/4" Lag Screw = 150 lb
    - 3/4" min. screw thread in flange (not including tapered tip)
    - 1/8" diameter pilot hole required if not proprietary self-driving type screw
  - 3/8" Lag Screw = 205 lb
    - 3/4" min. screw thread in flange (not including tapered tip)
    - 1/4" diameter pilot hole required for all screws
- AJS® Joists
  - 1/4" Lag Screw = 115 lb
    - 3/4" min. screw thread in flange (not including tapered tip)
    - 1/8" diameter pilot hole required if not proprietary self-driving type screw
  - 3/8" Lag Screw = 155 lb
    - 3/4" min. screw thread in flange (not including tapered tip)
    - 1/4" diameter pilot hole required for all screws

### General Notes

- BCI®/AJS® joist shall be designed considering the additional loading from connectors.
- 1/4" & 3/8" lag screws may be installed no closer than 6" on-center in single row, 4" on-center if rows staggered minimum 1/2" apart.
- Gypsum board may be installed between connector and flange in bottom flange condition.
- Smaller Wood Screw Withdrawal Capacities for All BCI®/AJS® Series (based on 3/4" min. screw thread in flange)

- #7 & #8 Wood Screws = 50 lb
- #9 & #10 Wood Screws = 60 lb
- #12 & #14 Wood Screw = 70 lb
- Load duration factor of 0.9 considered in withdrawal capacities listed in this document.
- No pilot hole required for smaller wood screws with diameters less than ¼" (#14 & smaller)
- Closest spacing for smaller wood screws: #7 = 1.5", #8 = 1.6", #9 = 1.8", #10 = 1.9", #12 = 2.2", #14 = 2.4" (reduce by 50% if proper pilot holes are pre-bored). When installed at closest allowable spacing, no greater than four screws allowed in a specific area (such as a group of screws attaching a bracket). Space groups of screws at 24" o.c. Multiple rows of screws shall be offset by the closest spacing listed.
- Screws that are installed per the listed provisions may be installed centered about flange width (into flange rout) without any reduction in fastener allowable loads listed in this document or BCI®/AJS® joist capacity.
- For lateral connections (shear), both side (connector) and main (flange) member shall be considered. An equivalent specific gravity of 0.5 may be used for BCI® flange, 0.42 for AJS® flange.
- For information regarding proprietary screws, refer to fastener manufacturer's current evaluation report for capacity and minimum spacing requirements.
- Maximum load supported off bottom flange in any 5'-0" section is not permitted to exceed 500 lbs.