

Wood Beam and Header Installation JHA

Worked instructional example

Work and worksite

A framing crew will mechanically place one identified engineered wood beam or header onto released posts and bearings in a new low-rise building. The lift arrangement provides support until the specified connection and lateral restraint are complete. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- Member identity, orientation, bearing, connections and the temporary restraint sequence are established in current framing documents.
- The mechanical handling equipment, member weight and lifting attachment method are selected and released for this operation.
- This excludes field notching, cutting or drilling, bundled multi-ply assembly and removal of a loaded existing header.

Questions before work

- Which member mark, orientation and bearing details apply at each end?
- What restraint must be complete before the handling support is released?
- Where can installers work clear of the moving member and its pinch points?

Task Hazard Control

1 Release supports and member details

Hazard: An unsuitable post, wrong member or missing bearing can lead to collapse at placement.

Control: Framing lead confirms both receiving supports, member identity and orientation against current documents. Verify the required temporary restraint and connection sequence; stop for damaged material or unresolved bearing geometry.

Verification: Lead records support readiness and member identification before the lift.

Reasoning: The receiving load path must exist before the member arrives.

2 Prepare handling and protected access

Hazard: An unverified lifting method or unsafe receiving position can expose workers to falls and dropped material.

Control: Use the released equipment and compatible handling arrangement for the actual member weight and shape. Provide protected access at both ends, exclude work below and agree the operator-guide signals. Do not borrow lifting points from another product.

Verification: Handling lead checks equipment, attachments, access and the route before pickup.

Reasoning: An engineered wood beam still needs its own handling and access plan.

3 Lift and approach the bearings

Hazard: A rotating long member can strike an installer or trap someone against a post.

Control: Keep the travel and receiving zones clear, move only on agreed signals and guide from planned positions outside swing and pinch paths. Stop if visibility or communication is lost; installers wait for controlled positioning before approaching connections.

Verification: Movement lead monitors the full member length and receiving positions.

Reasoning: The hazard extends to both ends rather than only the lifting point.

Complete the work and hand over

4 Seat without releasing support

Hazard: Partial bearing or fingers beneath the member can cause crushing or loss of support.

Control: Land onto the specified bearing and use suitable positioning tools from protected positions. Keep hands out of the interface and retain handling support while orientation, seating and required alignment are checked; do not force fit by altering the member.

Verification: Framing lead checks both bearings against the released criteria.

Reasoning: Touching a post is not the same as complete designed seating.

5 Install restraint before release

Hazard: A seated but unrestrained beam can roll or move when equipment support is removed.

Control: Complete the drawing-specified connections and lateral restraint using identified compatible fasteners and connector instructions. The designated framing lead authorizes support release only after those checks; retain additional temporary measures required by the sequence.

Verification: Lead records completed restraint and communicates a deliberate support release.

Reasoning: Bearing and lateral stability are separate parts of the release.

6 Hand over for loading

Hazard: Later framing or stockpiles can load an unfinished member or disturb temporary restraint.

Control: Identify remaining connections and keep required bracing in place. Transfer the permitted loading stage and alteration restrictions to the next crew; inspect and remove handling gear from the controlled area after safe release.

Verification: Receiving lead confirms member status and loading limits before follow-on work.

Reasoning: A placed beam is not automatically released for every construction load.

Pause and reassess

- Damaged member, incorrect orientation or inadequate bearing.
- Unexpected movement, lost communication or failed protected access.
- Required restraint cannot be completed before handling support release.

Improve the controls

Needs improvement: Work carefully and wear PPE.

More useful: Keep the travel and receiving zones clear, move only on agreed signals and guide from planned positions outside swing and pinch paths. Stop if visibility or communication is lost; installers wait for controlled positioning before approaching connections.

Needs improvement: Check that everything is ready.

More useful: Framing lead confirms both receiving supports, member identity and orientation against current documents. Verify the required temporary restraint and connection sequence; stop for damaged material or unresolved bearing geometry.

Decisions that change the analysis

Can the beam be notched on site when it interferes with another member?

No alteration is authorized by this example. Obtain the actual engineered product's and project designer's written disposition. A glulam, LVL or other engineered product cannot inherit another member's cutting rules.

What must the crew record for actual use?

Identify the actual equipment and work boundaries, responsible people, applicable criteria, inspection findings and open actions. Resolve changes with affected crews and obtain required project authorization before work.

Training needs

- Actual engineered member handling, connection and lateral-restraint sequence for the assigned crew.
- Applicable lifting roles and fall-protection training for the selected equipment and work positions.

Confirm applicable qualifications and actual training evidence for the people assigned. Related toolbox talks support discussion; they do not establish competence.

References and adaptation

APA Four best practices for glulam installation

<https://www.apawood.org/guides-tools-training/technical-document-library/technical-guides/4-best-practices-for-glulam-installation/>

Simpson Strong-Tie Product installer guide

<https://www.strongtie.com/resources/product-installers-guide/landing>

OSHA 1926.501 Duty to have fall protection

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.501>

References reviewed October 9, 2026. Use actual equipment and product instructions, project design and site requirements. This instructional example supplies no actual inspection results, signatures or work approval.