

Roof Truss Bundle Unloading and Staging JHA

Worked instructional example

Work and worksite

A delivery and framing crew will receive one identified wood roof-truss bundle, coordinate release of its transport securement, unload it by crane and establish supported ground storage. The supplier's handling information and unloading plan govern bundle weight, lifting geometry, storage restraint and the later controlled opening of bands. Work ends before individual roof-truss erection. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- The supplier identifies the bundle, weight, orientation, approved handling method and storage requirements; the actual crane/rigging plan and transport-securement sequence are accepted.
- Prepared ground storage has adequate bearing, supplier-directed support and independent stability restraint, with a controlled unloading route separated from traffic and people.
- The delivery/staging connection covers on-site receipt, unloading and bundle release; framing-material delivery is partial. Road transport, forklifts/telehandlers and roof erection are excluded.

Questions before work

- How will transport restraints be released without leaving the bundle unsupported or allowing trusses to spread?
- What supplier-approved lifting arrangement carries the bundle without treating its packaging bands as rigging?
- Which independent restraints remain effective when a selected storage band is cut?

Task Hazard Control

1 Receive and identify the delivered bundle

Hazard: Unknown weight, damaged trusses or the wrong unloading orientation can defeat the lift plan.

Control: Delivery lead matches the bundle and documents to the order, supplier handling information and crane plan. Inspect accessible components and shipping restraint from a safe position; document damage without climbing an unsecured load. Confirm bundle weight and pick arrangement with the supplier. Quarantine unidentified or damaged components pending a written disposition.

Verification: Lead records bundle identification, supplied handling instructions and discrepancies before any restraint is disturbed.

Reasoning: Packaging can conceal damage and does not establish a usable component.

2 Prepare ground storage and the unloading zone

Hazard: Weak bearing, blocked access or passing traffic can cause overturning or place people beneath the load.

Control: Prepare the supplier-directed storage supports and restraint on accepted ground before unloading. Check alignment, drainage and access for later individual retrieval. Separate delivery traffic, crane operation and pedestrians; confirm the crane setup and travel envelope under its accepted plan. Keep people clear of the bundle's potential roll, spread and suspended-load areas.

Verification: Unloading lead verifies storage readiness, route clearance and the maintained exclusion boundary.

Reasoning: A successful lift needs a stable destination before the load leaves the trailer.

3 Coordinate rigging and transport-restraint release

Hazard: Removing the wrong tie can release the bundle; lifting bands can fail or damage trusses.

Control: Qualified riggers fit the supplier-approved bundle lifting arrangement and check the actual rigging against the accepted lift plan. Coordinate with the carrier so only identified transport restraints are released at the planned hold point while bundle stability remains controlled. Do not lift by packaging bands or cut bundle bands during this transfer.

Verification: Lead confirms which restraints will change state and who authorizes their release.

Reasoning: Transport securement, bundle bands and lifting rigging perform different functions.

Complete the work and hand over

4 Lift and land the bundle

Hazard: A rotating bundle or uncontrolled landing can crush workers or damage unsupported trusses.

Control: Use one designated signaler and the accepted controlled lift method, maintaining the exclusion zone throughout clearance and travel. Guide only from planned safe positions using the selected means; nobody rides, stands beneath or catches the load. Lower onto the prepared supports in the supplier-required orientation and stop for unexpected movement or contact.

Verification: Signaler and receiving lead verify a clear path, stable landing and correct support contact.

Reasoning: Long components can move and bend despite a slow crane movement.

5 Restrain storage before opening bands

Hazard: Releasing bands can spring packaging or allow individual trusses to lean and fall.

Control: Complete and verify independent storage restraint before unloading rigging is released. For any later band opening, retain the bundle and the selected individual truss under the supplier-approved separation method before cutting an identified band. Stand outside recoil and fall paths, remove loose banding promptly and keep remaining trusses restrained throughout retrieval.

Verification: Storage lead checks the restraints that remain effective after each planned band is opened.

Reasoning: A restraint being cut cannot also be the only restraint credited for stability.

6 Inspect and hand over the staged components

Hazard: Unreported handling damage or missing storage controls can carry a hazard into roof erection.

Control: Inspect newly accessible trusses without entering an unstable stack. Record handling damage, identification, support arrangement and components held from use; obtain supplier disposition before repair or installation. Protect stored components under the actual handling guidance, keep access controlled and hand the erection crew the storage restrictions and accepted retrieval sequence.

Verification: Lead records the staged condition and communicates holds to the installation supervisor.

Reasoning: Ground-storage acceptance does not release an individual truss for roof erection.

Pause and reassess

- Bundle identity, weight, handling information or support arrangement is missing, inconsistent or outside the accepted unloading plan.
- A restraint moves unexpectedly, packaging or a truss is damaged, the lifting arrangement shifts or a person enters the load boundary.
- Independent storage restraint is incomplete, weather exceeds the accepted limits or band opening would leave any component unstable.

Improve the controls

Needs improvement: The bundle is banded; hook the bands and unload it.

More useful: Use the supplier-approved lifting arrangement and confirmed bundle weight; keep packaging bands separate from crane rigging and coordinate transport-securement release.

Needs improvement: It is on the ground, so cut all the bands.

More useful: Verify supported independently restrained storage, then retain the selected truss and remaining bundle before the planned band is opened.

Decisions that change the analysis

Where does this example end and the roof-truss installation example begin?

This example establishes accepted ground storage and a controlled component-release process. The published roof-truss example handles individual trusses at the building and completes erection restraint. An accepted bundle landing supplies neither the roof-bearing release nor the temporary/permanent bracing required for installation.

What must the crew record for actual use?

Record the work boundary, design/equipment documents, responsible people, acceptance criteria, control findings and unresolved actions. Communicate restrictions and obtain required project authorization. This learning example supplies no evidence that a control was installed or accepted.

Training needs

- Component handling and storage instruction using the supplied current BCSI jobsite information, bundle identification and damage-reporting process.
- Crane-unloading roles, rigging/signal qualifications, controlled restraint release, band recoil and individual-truss retention before separation.

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

References and adaptation

SBCA BCSI 2025 guidance and jobsite documents

<https://www.sbcacomponents.com/bcsi>

SBCA longspan truss hoisting guidance: bundle handling and lifting bands

<https://www.sbcacomponents.com/media/longspan-truss-hoisting-guidance-for-post-frame-builders>

OSHA 1926.251 Rigging equipment for material handling

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.251>

References reviewed October 9, 2026. Use actual equipment and product instructions, project design and site requirements. This original draft supplies no fabricated inspection, signature or approval.