

Prefabricated Wood Floor Cassette Erection JHA

Worked instructional example

Work and worksite

A crane and framing crew will install one identified factory-assembled wood floor cassette with attached decking onto released building supports. The fabricator's lifting and erection instructions and the US project design govern the complete unit, its connection sequence and temporary stability. The developing floor remains restricted until its supports, connections and fall controls are accepted. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- The actual fabricator provides cassette identity, weight, lifting points, storage/handling instructions and erection sequence compatible with the engineer's issued US project details.
- Receiving supports are released for the complete cassette, with protected landing access, designed temporary restraint and controls for perimeter edges, gaps and penetrations.
- Both floor-joint and subfloor matrix connections are partial: this is a complete prefabricated unit. Loose-joint installation, on-site cassette manufacture, deck-sheet installation and field redesign are excluded.

Questions before work

- Which supplier document authorizes lifting this complete cassette rather than applying individual-joint handling rules?
- How will receivers connect the cassette while every developing floor edge and panel gap remains protected?
- What must be accepted before crane support or restricted access can change?

Task Hazard Control

1 Match the complete cassette to the erection plan

Hazard: A wrong or incomplete unit can have different weight, lifting behavior and bearing locations.

Control: Erection lead matches cassette identification, factory decking, fittings and delivered condition to the fabricator's documents and issued project design. Confirm complete-unit weight, designated lifting points, receiving location and required erection-stage restraint. Hold damage, missing details or discrepancies for the fabricator and engineer; do not develop a lifting layout from a loose-joint handbook.

Verification: Lead records the matched cassette, current instructions and resolved release requirements.

Reasoning: Attached decking changes how the assembled floor is handled and supported.

2 Prepare storage receiving supports and protected access

Hazard: A distorted stored cassette, incomplete support or open floor edge can injure the receiving crew.

Control: Check the stored unit's supports and lateral restraint under fabricator instructions. Verify released receiving geometry, connection materials and bearing surfaces without unauthorized cutting or shimming. Establish protected receiving positions and a fall-control sequence for perimeter edges, panel gaps and openings. Keep the incomplete floor closed to unrelated trades and stored loads.

Verification: Named checker verifies receiving release, unit condition and usable protected access before rigging.

Reasoning: A decked cassette can look walkable before its erected support is complete.

3 Rig the designated complete-unit lifting points

Hazard: Unapproved rigging can bend the unit, pull out attachments or damage metal webs.

Control: Qualified riggers install the actual complete-cassette lifting arrangement at identified fabricator-approved points, checking rigging, load sharing and clearance under the accepted crane plan. Do not use webs, decking or convenient openings as improvised pick points. Clear packaging only as permitted while storage stability remains effective, and establish one signaler before taking the load.

Verification: Rigger and lead verify point identification, attachment condition and clear load paths.

Reasoning: An individual member's handling rule is not a complete-cassette lifting authorization.

Complete the work and hand over

4 Hoist and seat the cassette

Hazard: A broad suspended unit can swing or trap hands between its bearing and support.

Control: Maintain the planned exclusion zone and wind limits while the signaler directs controlled travel. Receive from designated protected positions and guide with the selected means without reaching beneath the unit or standing in the closing bearing gap. Lower onto the specified supports in the planned orientation, stopping for misalignment, obstruction or unexpected deflection rather than forcing a fit.

Verification: Receiving lead checks orientation, bearing contact and stable seating before connection work.

Reasoning: A small seating error can leave part of a complete floor unsupported.

5 Connect and accept erection-stage restraint

Hazard: Releasing crane support can permit movement or expose an unprotected developing floor.

Control: With the instructed crane support retained, complete the project-defined perimeter/interunit connections and temporary restraint in their specified sequence. Maintain protection at all edges and gaps during access. Check installed fasteners, bearing and required restraints against actual acceptance criteria, and obtain the named release before unloading and removing the lifting arrangement.

Verification: Designated checker records the required connections and authorizes the crane-release hold point.

Reasoning: Factory decking does not replace erection-stage connections or fall protection.

6 Hand over the developing floor state

Hazard: Later loads, missing gap protection or premature removal of restraint can defeat the installation.

Control: Inspect the landed unit for handling damage and preserve required temporary restraint. Secure or protect remaining gaps and penetrations under the floor-use plan. Record accepted connections, incomplete interfaces, loading limits and any access hold, then transfer these to the next supervisor. Release floor use only through the project's required inspection and acceptance process.

Verification: Lead confirms recorded restrictions, maintained fall controls and the receiving supervisor's handover.

Reasoning: Cassette seating is one stage in a controlled floor-completion sequence.

Pause and reassess

- Complete-unit instructions, identification, weight, lifting points or receiving support release cannot be confirmed.
- Rigging or bearing moves unexpectedly, damage/deflection appears, signals are lost or weather exceeds the accepted criteria.
- A required connection, temporary restraint or floor-edge/gap control cannot be installed as planned before support release.

Improve the controls

Needs improvement: The loose-joist guide shows lifting points; use those for the panel.

More useful: Obtain the actual fabricator's complete-cassette lifting instructions and accepted project arrangement, accounting for factory decking, unit weight and all attachments.

Needs improvement: The deck is attached, so the floor is ready.

More useful: Verify erected bearings, connections, temporary restraint and protected gaps/edges, then record the actual floor-use release and remaining loading restrictions.

Decisions that change the analysis

Why is this a separate operation from I-joist and subfloor installation?

Those examples build a floor from loose members and then individually placed sheets. This operation moves and seats a factory-assembled structural/deck unit, with complete-unit lifting points, distortion control and staged connection release. Its matrix links cover those activities only where they connect to the prefabricated method.

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

- Fabricator-specific cassette identification, damage checks, handling points, connection sequence and reporting of unauthorized alterations.
- Crane erection coordination, protected receiving access, temporary stability and staged floor-use/fall-protection handover.

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 floor trusses: factory-assembled floor panels
<https://www.sbcacomponents.com/floor-trusses>

MiTek Posi-Joist Technical Handbook Issue 7: cassette handling context
<https://www.mitek.co.uk/wp-content/uploads/sites/23/2025/07/WoPT-Issue-7.pdf>

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 original draft supplies no fabricated inspection, signature or approval.