

# Designed Floor Opening Framing JHA

Worked instructional example

## Work and worksite

A framing crew will install the designed solid-sawn headers, trimmers and interrupted joists around one new stair opening in a low-rise building floor before decking. The incomplete frame is worked from protected positions under a released erection sequence. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- Current framing documents define each member, bearing, hanger, fastener and temporary support needed around the opening.
- Protected access, the area below and opening protection remain effective as the interconnected frame is assembled.
- Cutting an existing loaded floor, roof openings, design calculations and a general floor-joist installation sequence are excluded.

## Questions before work

- Which members and connections complete the opening's redistributed load path?
- How are the header and trimmer assembly supported before all connections are complete?
- What protection permits each work position and the later decking handover?

# Task Hazard Control

## 1 Release the opening frame

**Hazard:** Missing support or a substituted header can leave interrupted joists without a load path.

**Control:** Framing lead checks the opening layout, member schedule, bearings and connection sequence against current documents. Identify temporary support and loading restrictions; hold work for conflicting dimensions or an unresolved hanger or trimmer detail.

**Verification:** Lead compares all opening members and supports with the released drawing.

**Reasoning:** A floor opening changes several connected members rather than one hole in a joist.

## 2 Protect the assembly area

**Hazard:** Workers or tools can fall through the developing opening or incomplete joist lines.

**Control:** Provide the planned protected platforms or conventional fall-protection arrangement and practicable rescue. Separate work below and retain suitable guarded or covered access where the sequence permits; do not treat a loose member as a walkway.

**Verification:** Access lead checks every proposed receiving and fastening position.

**Reasoning:** The opening remains an exposure before any deck is installed.

## 3 Stage and restrain the members

**Hazard:** Long stock can roll, strike a helper or overload an incomplete bay.

**Control:** Use the released handling method and landing locations for identified headers, trimmers and joists. Support and restrain members in their installation orientation, keep workers clear of movement and avoid stockpiling on an unaccepted frame.

**Verification:** Movement lead checks material locations and planned supports before transfer.

**Reasoning:** The surrounding frame's incomplete state controls where materials may land.

## Complete the work and hand over

### 4 Assemble headers and trimmers

**Hazard:** A partially connected header can drop or rotate as a receiving joint closes.

**Control:** Follow the drawing's interconnected assembly sequence with the specified temporary support. Use positioning tools and safe hand locations, complete required initial connections and keep support until the designated release; do not alter a hanger or bearing to force fit.

**Verification:** Framing lead checks seating and connection progress at the planned hold points.

**Reasoning:** Both the carried member and its supporting trimmer need verified restraint.

### 5 Connect interrupted joists and restraint

**Hazard:** An omitted fastener or unrestrained assembly can fail during decking or construction loading.

**Control:** Install the identified joists, compatible connectors and specified restraint with all required fasteners. Maintain protected positions and temporary support while the complete load path is reviewed; no universal hanger fastening pattern substitutes for the actual detail.

**Verification:** Lead records actual bearing, connector and restraint findings against the drawing.

**Reasoning:** The opening frame functions as a connected assembly, not isolated pieces.

### 6 Hand over the opening and load limits

**Hazard:** Decking crews may remove protection or load a frame whose connections remain incomplete.

**Control:** Retain required opening protection, identify unfinished connections and transfer permitted landing and loading locations. Obtain the designated frame release before decking begins; later stair installation or guard changes require their own coordinated handover.

**Verification:** Receiving lead confirms frame status and the continuing opening-control method.

**Reasoning:** Structural acceptance and safe opening access are separate handover duties.

### Pause and reassess

- Opening geometry, supporting members or connector details differ from the current drawing.
- Temporary support or protected assembly positions cannot be maintained.
- An unplanned stockpile, existing-floor cut or change to opening protection is requested.

## Improve the controls

**Needs improvement:** Work carefully and wear PPE.

**More useful:** Use the released handling method and landing locations for identified headers, trimmers and joists. Support and restrain members in their installation orientation, keep workers clear of movement and avoid stockpiling on an unaccepted frame.

**Needs improvement:** Check that everything is ready.

**More useful:** Framing lead checks the opening layout, member schedule, bearings and connection sequence against current documents. Identify temporary support and loading restrictions; hold work for conflicting dimensions or an unresolved hanger or trimmer detail.

### Decisions that change the analysis

**Can the crew cut an opening into an already loaded floor using this sequence?**

No. This new-construction example begins before decking and uses a designed opening frame. An existing-floor alteration requires its own survey, load control, temporary support and released removal plan.

**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

- The actual interconnected header, trimmer, joist and temporary-support sequence and its loading-release criteria.
- Applicable fall-protection and rescue training, controlled member handling and the selected fastening tools.

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

### References and adaptation

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>

OSHA 1926.21 Safety training and education

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.21>

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.