

Post-Tensioning: Protect the Stressing Area

Todd Jerome Jenkins | v1.0 | October 12, 2026 | Discussion + field verification

Why this matters

Post-tensioning applies force through tendons and jacking equipment. People working nearby may not recognize the active area or understand when access is restricted.

Objective: Confirm the stressing area, authorized roles and access controls before tensioning begins.

Key hazards or failure points

Energy release; ejected components; people behind the jack; unnoticed access changes; conflicting work.

Practical controls

- Use the approved stressing procedure, equipment instructions and engineering release. Only assigned, trained personnel perform the operation.
- Install the required signs and barriers. Keep nonessential personnel from behind the jack during tensioning and control other identified exposure paths.
- Coordinate adjacent work and the start, stop and release signals. Do not move barriers or approach equipment because it has become quiet.

Verify It in the Field

Have the stressing lead identify today's tendon, jack and work location against the approved package. Resolve mismatches before setup proceeds.

From outside the restricted area, compare barrier locations and access routes with the task plan. Confirm other trades know the boundary.

Ask who authorizes starting and reopening the area. Confirm the specified equipment inspection and prerequisite evidence are complete before exposure.

Stop and reassess

Hold for missing authorization, uncertain tendon identity, damaged equipment, changed access or unexpected movement. Keep clear; let the authorized stressing team make the condition safe and control restart.

Ask the crew

1. Where is access restricted?
2. Who receives our stop request?
3. What permits the area to reopen?

Use this HOP tool — Procedure use: Choose the step immediately before tensioning. Ask the team to identify its prerequisite evidence and the person who releases that step. Name one site change that would invalidate the release. Practice communicating the hold from outside the restricted area, without operating equipment.

Sources: 1926.701(c). HOP concepts adapted from DOE-HDBK-1028-2009, Vol. 2 (June 2009). No claim to original U.S. Government work; no government endorsement implied.

Free next step: JHA/JSA planning and field-verification worksheet

Expanded guidance and separate forms: toddjeromejenkins.com/toolbox-talks/post-tensioning-stressing-area