

# TPO Curb Flashing Installation JHA

Worked instructional example

## Work and worksite

A single-ply roofing crew will flash an accepted existing equipment curb on a released low-slope TPO roof. The work covers compatible curb upstands, corners, field welds and the specified top termination without setting equipment or altering the roof opening. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- The curb and opening protection are accepted, with equipment isolation and nearby work coordination established where applicable.
- The selected membrane system and actual curb geometry have an accepted compatible flashing and termination detail.
- Equipment lifting, curb erection, opening enlargement, skylights and energized equipment servicing are excluded.

## Questions before work

- Which actual upstand, corner and termination detail applies to this curb?
- How are the curb opening and nearby equipment hazards controlled?
- What establishes acceptable weld conditions before final flashing begins?

# Task Hazard Control

## 1 Release curb access and nearby work

**Hazard:** An opening, active equipment or uncoordinated crew can expose the roofer around the curb.

**Control:** Confirm opening/edge protection, released roof access and coordination with the equipment owner. Resolve isolation and movement concerns before starting; maintain protection as the crew changes position around the curb.

**Verification:** Roofing lead records access, protection and equipment-interface findings.

**Reasoning:** An existing curb does not establish safe access or equipment status.

## 2 Confirm compatible materials and detail

**Hazard:** Wrong flashing materials or an unsuitable termination can leave defects that are hidden by subsequent work.

**Control:** Match membrane, accessories and substrate preparation to the accepted system detail and actual geometry. Stage only compatible materials within roof loading limits; stop where the existing curb or substrate cannot satisfy the released detail.

**Verification:** Lead confirms materials, curb condition and the actual detail revision.

**Reasoning:** A workable-looking corner is not evidence of a compatible system.

## 3 Establish tools and weld conditions

**Hazard:** Heat, electrical leads, wet conditions or unsuitable welding settings can expose workers and damage material.

**Control:** Inspect the suitable welding equipment and electrical protection, route leads clear of walking paths and keep combustibles controlled. Establish test-weld acceptance for the actual weather and material conditions under the system instructions before production work.

**Verification:** Assigned roofer records equipment checks and the required test-weld findings.

**Reasoning:** Settings from yesterday do not establish today's acceptable weld.

## Complete the work and hand over

### 4 Fit upstands and corners

**Hazard:** Cutting and awkward access can expose hands while poorly fitting corners create extra rework.

**Control:** Use controlled cuts and stable working positions to fit the specified flashing and corner components. Preserve required opening protection and geometry; avoid stretching or improvising material arrangements to bridge an unresolved fit or substrate defect.

**Verification:** Installer checks fit and corner detail before completing each assembly.

**Reasoning:** A fit problem can indicate a condition that the accepted detail does not cover.

### 5 Weld and finish termination

**Hazard:** Burns, missed corner seams or incomplete termination can occur at tight changes of plane.

**Control:** Maintain heat-tool control and the qualified welding conditions as the crew welds the required seams. Complete the specified curb-top termination, seal and fastening details, then inspect seams with the actual cooled-weld acceptance method; record defects for repair and recheck.

**Verification:** Roofing lead checks seam and termination findings, repairs and reinspection.

**Reasoning:** Three-dimensional corners need their own inspection rather than a field-seam assumption.

### 6 Hand over the flashed curb

**Hazard:** Unrecorded defects or access restrictions can expose the equipment or following roofing crew.

**Control:** Remove sharp scraps and secure tools. Record completed flashing, open repairs, protection and equipment-interface restrictions; transfer them to the receiving lead without implying that equipment operation or opening protection has been independently released.

**Verification:** Receiving lead acknowledges the flashing status and remaining actions.

**Reasoning:** Flashing completion does not authorize equipment use or removal of opening controls.

### Pause and reassess

- Unaccepted curb/opening condition, equipment interface or incompatible materials.
- Test welds or production seams fail the actual acceptance checks.
- Wet/changed weather, defective equipment or a detail/fit change outside the released scope.

## Improve the controls

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

**More useful:** Inspect the suitable welding equipment and electrical protection, route leads clear of walking paths and keep combustibles controlled. Establish test-weld acceptance for the actual weather and material conditions under the system instructions before production work.

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

**More useful:** Confirm opening/edge protection, released roof access and coordination with the equipment owner. Resolve isolation and movement concerns before starting; maintain protection as the crew changes position around the curb.

## Decisions that change the analysis

### Does a field-membrane test weld release every curb corner?

No. Establish suitable weld conditions, then inspect the actual flashing seams, corners and termination using the system criteria. Record defects, repairs and rechecks at this curb.

### 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

- TPO curb upstand/corner/termination detail, test welding and actual cooled-seam inspection instruction.
- Heat-tool and electrical controls, opening/fall protection and equipment-owner coordination.

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

## References and adaptation

Carlisle U 5A TPO curb flashing detail

<https://www.carlisesyntec.com/Document-Viewer/u-5a-curb-flashing-tpo/3JBkIRf7X02zXGScUzscIQ>

Carlisle Test welds and seam probing

<https://www.carlisesyntec.com/en/Resources/Media/Blog%20Landing%20Page/TecTopics/2023/03/21/Focus%20on%20Test%20Welds%20and%20Seam%20Probing>

OSHA 1926.404 Wiring design and protection

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.404>

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.