

Steel Roof Replacement

May 2026

Introduction

The purpose of this training is to equip Container Repair Technicians (CRTs) with the knowledge, skills, and confidence to safely and correctly perform a complete steel roof replacement. Through a combination of guided observation and hands-on application, participants will learn the proper sequence of steps, correct tool usage, and required safety practices. The training emphasizes identifying critical steps, avoiding common failure points, and recognizing potential hazards to ensure repairs are completed consistently, efficiently, and in compliance with company standards. Ultimately, this training is designed to improve repair quality, reduce rework, and promote a strong culture of safety in the field.

- **The Tell – Show – Prove – Review Cycle:** The most critical component of this training program is the Tell, Show, Prove, Review cycle. The training for each task should start with you explaining **(tell)** and demonstrating the task **(show)** before the trainee attempts the task themselves **(prove)** and you provide feedback **(review).** This cycle ensures that a trainee has been given instructions for and observed a demonstration of a task before attempting it themselves, reducing the risk for injury or damage.

The training team believes in continuous improvement. If you have any ideas on how to make this program better in any way, please reach out to the Corp Ops Training Team at PODSU@PODS.com.

Steel Roof Replacement Certification Program

Only trained, certified and validated CRTs perform can steel roof replacements safely, consistently, and to brand standards.

Certification Process

Prerequisites/Qualifications

- Minimum 90 days in CRT role
- Completed all core repair training modules in PODS U
- Demonstrated competency in:
    - Light repairs
    - Full understanding of Shop Floor Tracker + QC process
    - Proper PPE knowledge (as outlined in training)

Training

Tell | eLearning on PODS U

The participants should complete the eLearning before the Training.

Show | Training Leads a Full Roof Repair

During this exercise, participants will observe one complete steel roof replacement from start to finish. The trainer will actively guide the observation by calling out key elements throughout the process, including critical steps that must be executed correctly, common failure points where mistakes often occur, and safety risks that must be recognized and managed on the job. This real-time narration is intended to reinforce proper technique, increase awareness, and connect the procedure to real-world application.

Steel Roof Replacement – Trainer Talking Table

Step	Critical Step	Common Failure Points	Safety Risks
1. Remove Existing Roof	Remove bolts and lift plastic roof using forklift	Improper removal causing frame damage	Crush hazards, dropped load, pinch points
2. Clean Surface	Fully remove old roof tape	Leaving residue → poor sealing	Cuts from scraper, sharp edges
3. Remove Hardware	Remove dome straps and springs	Missing components left behind interfering with install	Hand injuries from tensioned parts
4. Seal Corners	Caulk top header corners	Skipping caulk → water leaks	Chemical exposure (caulk), improper handling
5. Place Steel Roof	Carefully position roof on container	Misplacement causing alignment issues	Lift hazards, hand crush points
6. Center Roof (CRITICAL)	Equal spacing side-to-side and front-to-back	Roof off-center → sealing and fit issues	Pinch points when adjusting with pry bar
7. Apply Weight	Place ≥5,000 lbs. load and verify gasket compression	Skipping step → poor seal, misalignment	Severe crush hazard from load placement
8. Drill Mounting Holes	Use ONLY 21/64” bit, drill straight, round holes	Wrong drill size or angled holes → fastener failure	Flying debris, eye injury, drill kickback
9. Select Spacers	Choose correct spacer size (½” or ¾”)	Incorrect spacer → uneven fit or stress	Hand injuries during placement

10. Apply Loctite	Apply before bolt installation	Skipping → bolts loosen over time	Chemical exposure
11. Install & Torque Bolts	Install all bolts with spacers, torque to 25 ft-lbs	Missing spacers, incorrect torque	Tool kickback, hand injuries
12. Adjust Corners	Use mallet to close gaps	Skipping → visible gaps and poor seal	Striking injuries (hands/fingers)
13. Drill Bumper Pilot Hole	Drill 21/64" through roof only	Drilling into frame too early	Drill injury, misalignment leading to rework
14. Drill Frame Hole	Drill 19/64" into frame	Incorrect hole size → fastener failure	Metal shavings, eye injury
15. Insert Spacer (Bumpers)	Install spacer before fastening	Forgetting spacer → loose bumper	Hand pinch points
16. Apply Loctite (Bumpers)	Apply before installation	Skipping → hardware loosening	Chemical exposure
17. Install Corner Bumpers	Install all 4 using correct screws	Installing too early or improper sequence	Tool slip, hand injuries
18. Final Documentation	Complete Sign-off of Quality Control form (Shop Floor Tracker) Submit Steel Roof Addition Form	Forgetting → tracking/compliance gap Quality is not to standard	Securement of roof

Do | Assisted Execution

In this portion of the training, the CRT will perform the full roof replacement while the trainer observes and provides direct, hands-on support. The trainer will intervene as needed to guide, correct, or demonstrate proper techniques, ensuring the repair is completed correctly and safely. Emphasis will be placed on following the proper sequence of steps, using tools appropriately, and maintaining strict adherence to all safety requirements throughout the process.

***Best Practice:** The trainer may read the steps aloud during the repair to reinforce the correct sequence and help the CRT stay aligned with the procedure in real time.

Review | Evaluation

Trainer Instructions | Evaluation Setup Guide

Before beginning the evaluation:

- Ensure the CRT has all required **tools, materials, and PPE** available
- Confirm the work area is safe and free of unnecessary hazards
- Explain that this is a **performance evaluation**, not just practice
- Let the CRT know you will:
    - Observe silently for most of the process
    - Only intervene if there is a **safety risk** or major error
- Have an evaluation form ready

During the Evaluation

- Observe without leading or coaching unless required for safety
- Watch closely for:
    - Proper sequence of steps
    - Correct drill bit usage and technique
    - Spacer selection and placement
    - Proper torque application
    - Safe work practices at all times
- Take notes on both **strengths and gaps**

After the Evaluation

- Conduct a debrief:
    - Start with what the CRT did well
    - Review any missed critical steps or errors
    - Reinforce safety observations
- Provide clear guidance on improvement areas
- Answer any questions

Trainer Read-Aloud Script (Pre-Evaluation)

“Alright, we’re now moving into the evaluation portion of the training. In this step, you’ll be completing a full steel roof replacement while I observe your performance.

I’ll be looking closely at a few key areas: your ability to follow the proper sequence, your tool usage, your execution of critical steps, and your adherence to all safety requirements.

During the evaluation, I will primarily observe and take notes. I will only step in if there is a safety concern or if something occurs that could result in damage or a failed installation.

Take your time, work through each step methodically, and rely on the training you've received. If you're unsure of something, you can talk through your thought process, but the expectation is that you lead the repair.

Safety is still the top priority—at any point, if something does not feel safe, stop and address it.

Once you've completed the repair, we'll review your performance together and go over what went well and any opportunities for improvement.

Do you have any questions before we begin?"

PODS Steel Retro Roof Installation Instructions

Tools Needed	Materials Needed	Personal Protective Equipment (PPE)

• Drill
• 3/8" Impact Driver
• 19/64" Drill Bit (Heavy Duty, P/N RDB101)
• 21/64" Drill Bit (Heavy Duty, P/N RDB100)
• 9/16" Socket
• 3/4" Socket
• #3 Phillips Bit
• Torque Wrench (10–50 ft-lbs and 100–600 in-lbs range)
• Pry Bar
• Dead Blow Mallet
• Caulk Gun
• Scraper
	• 16' Steel Roof – PPL116STL-1
	• 12' Steel Roof – PPL112STL
	• 7' Steel Roof – PPL108STL
	• Steel Corner Bumpers (4) – PFA119
	• Self-Tapping Screws 3/8" x 2" (8) – PFA113
	• Flat Head Screws (8) – PFA121 (Fastenal #1132511)
	• Plastic Spacers:
	  ○ ½" – PFA115
	  ○ ¾" – PFA116
	• Loctite 243 Thread Locker
		• Steel-toed shoes
		• Safety glasses
		• Bump cap
		• Cut-resistant gloves
		• Hearing protection
		• Full face shield
		•

Steel Roof Installation Procedure

1. Remove Existing Roof

- Remove roof bolts from the plastic roof using an impact driver and ¾" socket.
- Lift plastic roof off container using a forklift.

2. Clean Surface

- Scrape old roof tape off the container.

3. Remove Hardware

- Remove dome straps and springs from the top of the beams.

4. Seal Corners

- Apply caulk to gaps on the top two corners of the header.

5. Position Steel Roof

- Carefully place the steel roof onto the container.

6. Cor-Ten Steel Notes

- Cor-Ten steel forms a protective oxide layer that resists corrosion.
- No treatment is required before installation.

Optional Cosmetic Touch-Up (White Appearance):

- Clean surface with soap and water only
- Steps: Wash → Rinse → Wipe → Spray (Rustoleum Gloss White) → Dry
- Materials:
  - PODS cleaner
  - Rustoleum Gloss White spray paint
  - Rag

7. Center the Roof (CRITICAL)

- Roof must be centered on all sides.
- Use a crowbar and spacers to ensure equal spacing:
  - Side-to-side
  - Front-to-back
- Remove spacers before drilling.
- Note: Container widths vary—select correct spacer size.

8. Apply Weight (CRITICAL)

- Place a secondary container **(minimum 5,000 lbs.)** on top.
- Perform internal inspection to confirm gasket is fully compressed.

9. Drill Mounting Holes

- Drill **21/64” holes** into the container frame using roof pre-punched holes as guides.

Critical Requirements:

- MUST use 21/64” drill bit
- Holes must be perfectly round (not elongated)
- Keep drill straight
- Use water mist to ease drilling

Do NOT: Drill holes for corner bumpers at this step

10. Select Spacers

- Choose proper spacer length (½” or ¾”) based on container width variation.

11. Apply Thread Locker

- Apply Loctite 243 to bolt threads before installation.

12. Install Roof Bolts

- Install bolts using an impact driver with correct spacers between roof and angle iron.

Torque Requirement:

- All hex bolts MUST be torqued to **25 ft-lbs**

Do NOT: Install corner bumpers during this step

13. Adjust Roof Fit

- Use a dead blow mallet to adjust corners and close any gaps between sides and ends.

Steel Corner Bumper Installation Procedure

14. Drill Pilot Hole (If Needed)

- If holes are not pre-punched:
- Hold bumper in place
- Drill **21/64” pilot hole through roof only**

Important: Do NOT drill into container frame in this step

15. Drill Frame Hole

- Drill **19/64” hole through container frame** for mounting screw

16. Insert Spacer

- Insert ½” spacer between roof and frame aligned with hole

17. Apply Thread Locker

- Apply Loctite to threads

18. Install Corner Bumpers

- Use impact driver with #3 Phillips bit
- Install bumpers on all four corners using pan head screws

19. Documentation

- Complete Shop Floor Tracker with secondary sign-off by Manager or Lead
- Complete the Steel Roof Addition Form
- Email to: **assetmanagement@pods.com**
- This ensures the container is recorded as having a steel roof