



SHEET METAL TRADE EXHAUST VENT PLACEMENT

PROJECT OVERVIEW

A general contractor was hired to repair damage to the outside of a commercial building.

HVAC EXHAUST VENT PLACEMENT ISSUES

The general contractor inspected the outside area of the building to determine if the damage was due to the weather.

The contractor found the following issues:

- Rotting wood on a soffit.
- Mold growing on the underside of the gutters against the soffit.

He determined these issues were not caused by weather but caused by an exhaust vent from the laundry room.

- The vent was pushing hot, humid air out, damaging the building.

He suggested the building owner call an HVAC technician and fix the underlying issue before he makes repairs.

- The HVAC technician moved the vent to the other side of the building, where there was vinyl siding and no wood.
- The HVAC technician also installed a different type of vent cover to direct air away from the building.

The general contractor returned, replaced the mold-covered gutters, cut out the damaged wood, and replaced it with pressure-treated lumber.

LESSONS LEARNED

The approximate cost of this issue was \$12,000, included:

- The HVAC technician moved the vent to the other side of the building and installed the proper vent cover.
- The general contractor's labor and materials to remove and replace the damaged gutters and wood soffit.

How This Issue Could Have Been Avoided

Suppose the person who originally installed the vent had paid more attention to the placement.

- **He should have known that the moisture** from the vent would eventually cause damage to the lumber and found a better area to place the vent.
- **Sometimes, the closest spot is not the best spot.**

Placement matters.

DISCUSSION QUESTIONS

1. Have we checked the area around the vent will not be damaged by the moisture in the exhaust leaving the vent?
2. Do we have the proper vent cover to direct the exhaust away from the structure?
3. Have we planned ahead as to where we will place the vent and how we will connect the vent to the source of the exhaust?



Quality Safety Times wants to present your industry professional, real-life work stories and scenarios. Your stories are learning tools to improve the industry to help reduce rework and improper installation. Consider sharing your stories via our website. www.qualitysafetytimes.com, at **Tell Your Story**.

It is the contractor's responsibility to follow all directions in project documents, architect's instructions, local jurisdictional codes, and manufacture specifications. Contractors need to seek clarity from design professionals and jurisdictional authorities prior to proceeding if there is any discrepancy. Information in this document is for reference and general knowledge only. Quality Safety Times™ takes no liability for the information provided. This copyright protected document is owned by QST, LLC™ 2024. Distribution of this document outside of the organization which purchased this is a copyright violation. Protection of copyrighted material will be enforced.

Q07-43 v1.0 Final



SHEET METAL TRADE FALL PERSONAL PROTECTION SAFETY TOOLBOX TALK

OVERVIEW

Falls are among the most common causes of serious work-related injuries and deaths. Employers must set up the workplace to prevent employees from falling off platforms, elevated workstations, or into holes in the floor and walls. The use of guardrails is the easiest form of fall prevention.

LEARN AND APPLY THE FOLLOWING

Personal Fall prevention is a system that protects workers from contacting an object below them. The Personal Fall Prevention System has three components called the A, B, C's of Personal Fall Prevention.

"A" is for Anchor. A designed, manufactured, or structural building component that will support twice the intended load of a falling person(s).

"B" is for Body Harness. Trade workers wear a full-body harness properly fitted to each person.

"C" is for Connector. A Lanyard, Self-Retracting Lanyard (SRL), or Lifeline connector is designed and manufactured for fall prevention with a built-in deceleration device.

With Proper Training, Workers Can Safely Work at Heights or Around Dangerous Equipment

Types of Anchor Points

Designed Fixed Support: Load-related anchors are designed for and permanently installed for fall prevention.

Temporary Fixed Support: Anchor points attached to the structure, set on a stable substrate following the manufacturer's instructions, also called mobile anchor points.

Structural Features/Improvised Anchors: **Not intended** to be used as an anchor point. A qualified or competent person to make sure the anchor point has the capacity for the intended load.

Things to Consider

- Require that anchor points support 5,000 pounds per employee or twice the intended load. **Note:** Inspect anchor points and equipment before each use.
- Check for swing fall distance. Always select an anchor point directly above the worker to reduce swing distance.
- Use Leading Edge Technology to protect fall equipment from sharp edges. Select anchor points so the lanyard or lifeline **does not** pass over rails, walls, or other protruding structures to the best conditions allow.

Do Not Do

- **Never** use damaged or questionable fall prevention equipment.
- **Do not** use temporary anchors when permanent anchors are available.
- **Do not** tie off to items such as pipes, vents, guard rails, roof hatches, antennas, or other items not rated for the force applied by a fall.

Fall Protection Harnesses Requirements

Do not start work until satisfied with the inspection and condition of your fall prevention equipment. If you have questions, contact a supervisor or refer to manufacturer guidelines.

- Follow the manufacturer's instructions and (1) make sure your straps are adjusted correctly and (2) ensure your harness is fit to your body correctly.
- Inspect harness straps for wear and tear and inspect D-rings and buckles.
- Fall protection harnesses will have straps around the trunk and thigh area.
- A lanyard **must** be connected to the dorsal D-ring on your harness and secured to the anchor point for proper fall arrest.
- If you fall, your harness will distribute "stopping force" across your pelvis, chest, legs, and shoulders to prevent injury from falling.

DISCUSSION QUESTIONS

1. Are there General Contractor or Building Owner specific rules that apply to Sheet Metal Trade–Fall Personal Protection above OSHA standards?

Anchor Point



Meeting Date:

Supervisor:

Employee Name: