

Carpenter bracket scaffolds

Initiative

Each year, the Minnesota Occupational Safety and Health Division (MNOSHA) investigates numerous accidents due to the improper installation and use of carpenter brackets on construction sites.

The purpose of this Minnesota OSHA Safety Hazard Alert is to heighten public awareness of the proper installation techniques and use of these brackets to prevent the scaffolds from collapsing.

Description of the hazard

Factors that can lead to carpenter bracket scaffold failure include:

- exceeding the maximum intended load on any particular section, i.e., no more than two employees and 75 pounds of tools and materials should occupy any given eight feet of the bracket at one time;
- use of nails to attach brackets to the wall, rather than the required bolts;
- use of homemade brackets that have not been rated by a qualified engineer;
- attaching the scaffold only through the wall sheathing and not through or around a wall stud; and
- installation of the scaffold by someone other than a competent person.

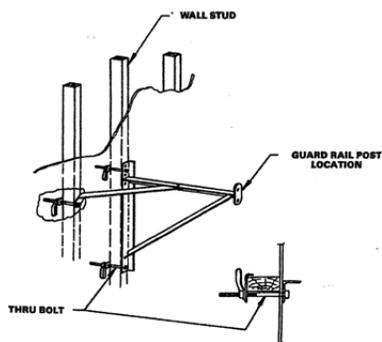
Controlling and eliminating the hazard

One key method to prevent carpenter bracket accidents is to attach the scaffold to the structural wall with the bolts going all the way through the stud and sheathing. A bolt size of at least 5/8" in diameter is recommended. (See the diagram on the next page.) An alternative would be to attach the scaffold with J-bolts going through the sheathing and around the stud.

The manufacturer's recommendations for bracing should be followed when installing the scaffold. Manufacturers commonly supply a diagonal brace extending from the top bracket, near where the planking rests, back to the wall. The function of the brace is to stabilize the bracket. According to most manufacturers, this brace can be secured with a nail. Refer to the manufacturer's instructions for the size of the nail that may be used.

A maximum bracket spacing of no more than eight feet on centers should be maintained, and the platform must be at least 18" wide and fully decked. Any carpenter bracket scaffold platform that exceeds 10 feet above the adjacent ground or floor must be provided with a guardrail or all occupants must use personal fall-arrest systems. No more than two people should be on a scaffold section at any one time and a means of access, such as a ladder, must be provided and secured.

Carpenter Bracket Scaffold



For more information

Employers and employees with questions or concerns can consult the federal OSHA website at www.osha.gov or call MNOSHA Compliance at (651) 284-5050 or toll-free at 1-877-470-6742. For more information about requirements and recommendations, refer to 29 CFR 1926.451, 29 CFR 1926.452(g) and 29 CFR 1926 Subpart L Appendix A(2)(g). For the use of carpenter bracket scaffolds in general industry, refer to 29 CFR 1910.28(k).

Acknowledgements

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