



Church safety solutions

March 2007

Special points of interest

- Avoid serious injuries related to falls from ladders
- Choosing the right ladder for the job
- Lessons of loss—learn from others that have been there

Inside this issue

Ladder injuries cost churches \$1.4 million1

Right tool for the job1

Special Supplement – Ladder rules4

Lessons of loss5

Next month!
Learn how to avoid windstorm property damages

Ladder injuries cost churches \$1.4 million

Over sixty separate ladder-related injuries cost church groups associated with Zurich over \$1.4 million in losses during the first six months of 2006. The average cost per claim is nearly \$23,000 per incident.

Beyond the financial burden is the trauma to the injured person and the social anxiety associated with having a member of the congregation seriously injured on church property. Working on elevated surfaces (scaffolding, ladders, roofs, work platforms, aerial lifts) presents an added concern for employee, volunteer and contractor safety.

(Continued on page 2)



What's wrong with this picture?

First, the placement of the angle would not support the weight of anyone attempting to climb the ladder. Second, two ladders are joined together, forming a precarious condition.

Using the right tool for the job

Don't let the good intentions of church volunteer workers or employees end in a mishap. Rather than expanding the ministry, church communities may find themselves financially burdened paying for losses. Using ladders may seem like a common every day occurrence anyone should be able to perform. A sound injury prevention strategy at any church should begin with using the right tool for the job.

Ladders should be carefully selected for the tasks to be performed.

Ladder selection requires an evaluation of the type, duty-rating and size of the ladder most appropriate for the job. Ladder specifications can be found on the applied label on the ladder. Ladder ratings are based on maximum working load:

Extra heavy duty (I-A) up to 300 pounds or heavy duty (I) up to 250 pounds — Industrial stepladder, 3 to 20 feet for heavy duty, such as utilities, contractors and industrial use.

(Continued on page 2)

Ladder injuries cost churches \$1.4 million *(continued)*



The height of the ladder is inadequate for this worker's job. Never stand on the first or second step of the ladder.

Using a ladder to complete routine chores around your home may not seem that hazardous. However, when completing similar chores at a church property, paid and volunteer workers are presented with greater challenges due to higher ceiling elevations and unfamiliar or inadequate tools.

Tasks that require the worker to use a ladder or other elevating device around a church include roof repairs, cleaning windows, painting, hanging banners and decorations, changing light bulbs and repairing or adjusting ceiling or wall-mounted sound systems.

Church administrative or business committee members and church leaders should ensure these workers have been trained to:

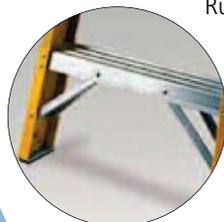
- Work within job limitations and comfort level, or use an outside service if safety is at all a concern
- Select the right tool for the job and use appropriate protective equipment such as fall restraint systems
- Inspect work areas and equipment prior to use
- Safely operate any equipment used to elevate the worker
- Restrict access to work areas to protect pedestrians

Using the right tool for the job *(continued)*

Medium duty (II) up to 225 pounds — Commercial stepladder, 3 to 12 feet for medium duty such as painters, offices and light industrial use.

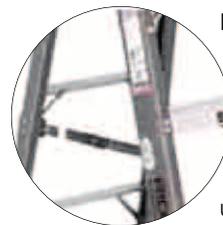
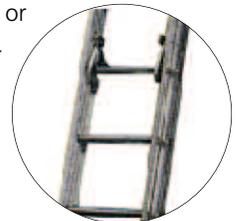
Light duty (III) up to 200 pounds — Household stepladder, 3 to 6 feet for light duty, such as light household use.

Homemade ladders are discouraged from use because the construction may not conform to code requirements and may therefore be unsafe to use.



Rungs must be shaped so that a worker's foot cannot slide off and must be skid-resistant.

Ladders must not be tied or fastened together to provide longer sections, unless they are specifically designed for such use as pictured here with the extension cleats securing the top extension to the lower half.



Foldout or stepladders must have a metal spreader or locking device to hold the front and back sections in an open position when in use.

Self-supporting (foldout) and non-self-supporting (leaning) portable ladders must be able to support at least four



Using the right tool for the job *(continued)*

times the maximum intended load, except extra-heavy-duty metal or plastic ladders, which must be able to sustain 3.3 times the maximum intended load.



Non-self-supporting ladders, which must lean against a wall or other support, are to be positioned at such an angle that the horizontal dis-

tance from the top support to the foot of the ladder is about 1/4 the working length of the ladder.

How do I avoid injuries while using portable ladders?

- Don't take short cuts.
- If workers are uncomfortable working at heights, don't allow them to use a ladder.
- You should be able to climb a ladder with one hand on the rung at all times.
- Position portable ladders so the side rails extend at least three feet above the landing.
- Secure side rails at the top to a rigid support and use a grab device when a three foot extension is not possible.
- Make sure the weight on the ladder will not cause it to slip off its support.
- Before each use, inspect ladders for cracked or broken parts such as rungs, steps, side rails, feet and locking components.
- Do not apply more weight on the ladder than it is designed to support.
- Use only ladders that comply with OSHA design standards [[29 CFR 1926.1053\(a\)\(1\)](#)].

Quick tips:

- Don't use metal ladders while working on electrical components including changing light bulbs or sound system adjustments.
- Don't use homemade ladders.
- Only use ladders in good working order.
- Ladders should extend three to four feet above the work area.
- Don't stand on the top or second-to-top step.
- Don't remove safety decals applied by the manufacturer.
- Keep one hand on the rail while climbing and descending.
- Ladder feet should have rubber slip-resistant material to prevent the ladder from moving.
- Tools should be secured so that no one will be hurt by falling objects.
- Rope off the work area with warning signs/caution tape to prevent pedestrian traffic.
- Ideally, workers should climb the ladder and then pull materials and tools up to the work area.



Special supplement – ladder rules

Use the following list of general ladder rules to train workers and volunteers working with ladders in or around the church property. Remember, these are minimum standards. For more details, refer to the manufacturer label attached to the ladder being used.

- Maintain ladders free of oil, grease and other slipping hazards.
- Do not load ladders beyond their maximum intended load or beyond manufacturer-rated capacity.
- Use ladders only for their designed purpose.
- Use ladders only on stable and level surfaces unless secured to prevent accidental movement.
- Do not use ladders on slippery surfaces unless secured or provided with slip-resistant feet to prevent accidental movement. Do not use slip-resistant feet as a substitute for exercising care when placing, lashing or holding a ladder upon slippery surfaces.
- Secure ladders placed in areas such as passageways, doorways or driveways, or where they can be displaced by workplace activities or traffic to prevent accidental movement. Or use a barricade to keep traffic or activity away from the ladder.
- Keep areas clear around the top and bottom of ladders.
- Do not move, shift or extend ladders while in use.
- Use ladders equipped with nonconductive side rails if the worker or the ladder could contact exposed energized electrical equipment.
- Face the ladder when moving up or down.
- Use at least one hand to grasp the ladder when climbing.
- Do not carry objects or loads that could cause loss of balance and falling.

Ladders needing repairs are subject to the following rules:

- Portable ladders with structural defects, such as broken or missing rungs, cleats or steps, broken or split rails, corroded components or other faulty or defective components must immediately be marked defective or tagged with "Do Not Use" or similar language and withdrawn from service until repaired.
- Fixed ladders with structural defects, such as broken or missing rungs, cleats or steps, broken or split rails or corroded components must be withdrawn from service until repaired.
- Defective fixed ladders are considered withdrawn from use when they are immediately tagged with "Do Not Use" or similar language, or marked in a manner that identifies them as defective, or blocked such as with a plywood attachment that spans several rungs.
 - Ladder repairs must restore the ladder to a condition meeting its original design criteria before the ladder is returned to use.

Lessons of loss

A masonry contractor had been hired by the church business committee to construct a life center. At the time of the incident, the worker was preparing a batch of mortar as instructed by the foreman.

Although no one saw the worker fall, evidence at the site suggested that he took the top portion of an aluminum extension ladder (without safety feet), placed one end on the wet concrete floor, and leaned the other end against a wall to reach the third floor area. Without attempting to tie off the ladder or secure it in any fashion, the worker began to climb the ladder. The bottom of the ladder apparently slipped on the wet floor, causing him to fall. There were no indications at the scene the worker was carrying a pail of mortar when he fell.

The worker was discovered by an employee of another contractor on the site. This individual said the worker was conscious, but was talking incoherently and bleeding from his ears. By the time the emergency rescue squad arrived 15 minutes after the fall, he had lost consciousness. He was transported to the hospital where he died three days later.

During the interviews, the employer could offer no reason why the worker used the ladder, which belonged to another contractor, instead of the stairway to access the work area. The general contractor stated the worker's employer did not have any extension ladders at the jobsite. There was no indication he had used a ladder in this way prior to the incident. The incident occurred on the employer's last day of work at the site.



References

Zurich Risktopics
4-10.011, October 2006 —
Working on elevated surfaces in
churches

CDC/NIOSH—September
2000—Worker deaths by falls

Photo courtesy of the U.S. Naval
Safety Center Navy Safety
Center-www.safetycenter.navy.mil

OSHA Stairways and Ladders, a
Guide to OSHA Rules OSHA
3124-12R 2003

OSHA Construction eTool—
Ladder Safety

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