

Churches use ladders on a daily basis for numerous tasks, including painting, changing light bulbs, cleaning gutters, window washing, hanging holiday decorations and performing maintenance to the building. According to the Underwriters Laboratories (UL), more than 163,000 ladder injuries are treated in U.S. emergency rooms each year. Unfortunately, many of the injuries that occur in churches impact employees and/or volunteers who are unfamiliar with ladders. Employees and/or volunteers whose job tasks may require the use of a ladder need to understand the apparent dangers of using ladders. This fact sheet covers several aspects of ladder safety, including selecting the appropriate type, proper use, inspection and maintenance.

## Ladder Selection

The unsafe use of ladders can result in many serious injuries. The first step in working with ladders, is selecting the correct type of ladder to safely perform the task at hand. The following lists the types of ladders that are available:

- ❑ **Stepladders** (Photo A) – Self supporting portable ladder that is non-adjustable in length with flat steps and a hinged back. Stepladders should be used for work at low and medium heights.
- ❑ **Straight (single) ladders** – Non-self supporting portable ladder that is non-adjustable in length and consists of one section.
- ❑ **Extension ladders** (Photo B) – Non-self supporting portable ladder that is adjustable in length. Always select a ladder that is longer than what you need to reach. Extension ladders should be used for climbing to higher elevations, such as windows, gutters and roofs.

Photo A:



Photo B:



## Construction Types

- ❑ **Aluminum ladders** – Should not be used around electrical sources, as aluminum ladders conduct electricity.
- ❑ **Wood ladders** – Are a non-conductor of electricity when dry. Wood ladders age fast, as they are susceptible to drying and splitting with age. Wood ladders need some type of protective, clear finish to preserve and extend the useful life of the wood.
- ❑ **Fiberglass ladders** – Do not conduct electricity when dry. Generally, fiberglass ladders do not require a protective finish to preserve them.

## Ratings

- ❑ Ladders have ratings associated with them based on weight and use.
- ❑ Type III ladders should not be used and should be replaced with a Type II or higher rated ladder.
- ❑ If the rating label is not found on the ladder, the ladder should be replaced. Without knowing the rating of the ladder, this could create an injury if the user is too heavy.
- ❑ The chart below lists these ratings:

Type	Weight Rating (in pounds)	Duty Rating
Type IAA	375	Super Heavy Duty
Type IA	300	Extra Heavy Duty
Type I	250	Heavy Duty Industrial
Type II	225	Medium Duty Commercial
Type III	200	Light Duty Household



This photo is an example of a rating label that is affixed to a fiberglass step-ladder. This particular ladder is a type II.

## Employee Training

A church can provide their employees/and or volunteers with the safest ladders on the market. However, accidents will still occur if they are not trained on how to properly use them.

Employees should be trained how to properly operate any ladder, as well as how to recognize hazards related to ladders. Training should include the following:

- Ladders should only be used for their designed purpose.
- Do not load ladders beyond their maximum intended load-carrying capacities. Be aware of the ladder's load rating and of the weight it is supporting, including the weight of any tools or equipment.
- Ladders should only be placed on firm and level surfaces, and never on boxes, barrels or other unstable bases to obtain extra height.
- Ladders must be provided with safety feet that are adapted to the type of surface that the ladder is to be used.
- Ladders should be secured when placed in areas, such as passageways, doorways, driveways or where they can be displaced by workplace activities.
- Avoid electrical hazards by looking for overhead power lines before handling a ladder. Never use a metal ladder around power lines or electrical equipment.
- Always inspect the ladder prior to using it. If the ladder is damaged, it must be removed from service and tagged until repaired or discarded.
- Do not move, shift or extend ladders while in use.
- Always face the ladder when moving up or down the ladder. Use at least one hand to grasp the ladder when climbing. The "three point rule" should be followed when ascending and descending a ladder, which is to keep at least three of your hands and feet in contact with the ladder at all times.
- Do not carry objects or loads that could cause loss of balance and falls.
- Employees should understand the nature of fall hazards in work areas.
- Be sure to use proper construction, use, placement and care in handling of all ladders.
- Two people should work together when using a ladder (someone is available to hold the ladder in position).
- Individuals who use ladders should be physically capable (age, height, weight) to use the ladder safely. (Those who are too old, too young, or have health or physical concerns should not be permitted to use ladders.)
- A four to one rule should be followed – one rung length out from the wall for every four rungs to where the ladder touches the wall.
- When in use, ladders should extend at least three feet above elevated surfaces.
- Individuals should be instructed not to use the top two steps of stepladders as steps.
- After being positioned, all straight and extension ladders should be securely tied to the building or other fixed object in order to prevent the ladders from slipping or tipping over.
- Ladders should have automatic locking mechanisms (extension and step ladders should be equipped with at least two automatic locks of an approved design).

- ❑ Ladders must not be tied or fastened together to create longer sections unless they are specifically designed for such use.

## Inspection and Maintenance

Over time, the condition of ladders will deteriorate and eventually become unsafe to use. Ladders should be inspected for visible defects periodically and after any incident that could affect their safe use. Employees should be trained to inspect ladders for the following:

- ❑ Before using any ladder, it should be inspected to look for the following faults:
  - Loose or missing rungs, cleats or bracing;
  - Loose nails, bolts or screws;
  - Cracked, broken, split, dented, or badly worn rungs, cleats, or side rails;
  - Wood splinters;
  - Corrosion of metal ladders or metal parts; and
  - Missing or damaged side rails or foot pads.
- ❑ Ladders with broken side rails, faulty equipment, or broken or missing steps, rungs, or cleats should be removed from use.
- ❑ Ladders should be protected from excessive heat and the weather whenever possible, and should be hung on a ladder rack of suitable design to protect against damage during long periods of inactivity.
- ❑ Metal ladders should be legibly marked with signs cautioning against using them around electrical power sources.
- ❑ Damaged ladders should be removed from service. However, if repairing the ladder is the only option, the ladder must be restored to a condition meeting its original design criteria before the ladder is returned to use.



This photo is an example of a ladder that should be removed from service. The leg has been damaged and wire is being used to hold the leg together.

- ❑ Ladders should be free from paint, which will have a tendency to hide defects.



This photo is an example of two wood step ladders that should be removed from service since they have been painted. Painting ladders may cover up flaws or cracks in the wood, as well as cover any rating or hazard labels.

While many people don't think of dangers associated with ladder use, the truth is that ladders can be extremely dangerous if they are not used properly. By following the above recommended guidelines for ladder selection, employee training, and inspection and maintenance, your employees and volunteers will be less likely to experience injuries associated with ladder use; and you will be better able to protect your ministry.