



Churches: Preventing Slips and Falls

Churches, just like any public places such as shopping malls, are at high risk simply because of the large volume of people who frequent the premises on a daily basis. Proper maintenance of the church's walking surfaces is essential to prevent slips and falls. Occupier's and premises liability issues demand that all safety precautions be taken for walking surfaces, including parking lots and driveways, sidewalks, entrances and exits, interior floor surfaces, and lighting. Consider your congregation and you will see a large percentage of the elderly and the very young. Slips and falls are the most common injury incident all industry, and they can be costly, all places of worship must become proactive instead of reactive in preventing them.

Parking lots and driveways

Most churches and places of worship often have large parking lots. Hazards in parking lots abound such as depressions, raised drain and sewer covers, potholes, standing water, loose or slippery surfaces, etc. and can become a serious liability hazard for slips and falls, especially when not properly maintained. Conduct regular periodic inspections of parking lots and any substandard conditions should be corrected as soon as possible. In your inspection, consider the following:

- Parking lot surfaces should be in good condition and free of large cracks or potholes
- Cracked, broken or unstable parking lot surfaces should be patched
- Surfaces should be free from debris and slippery material, such as rocks, mud, and sand
- Gravel parking lots should be leveled with fresh gravel
- Tire or wheel stops are a potential tripping hazard and should:
 - Not be higher than 15 cm (six inches)
 - Have at least one metre (three feet) between wheel stops
 - Reinforcing rods should be level with the top of the stop and not extend above the surface
 - Painted with a contrasting colour, usually high-visibility yellow

Sidewalks

Sidewalk maintenance is crucial in preventing slip and fall injuries. Regular periodic inspections of sidewalks should be conducted, and any substandard conditions corrected as soon as possible.

- Sidewalks should be in good condition and free of crack, loose gravel, rocks, and mud or trip hazards
- Sidewalks that have depressions can trap water and mud, creating slip hazards
- Tree roots can cause sidewalks to heave and buckle causing serious trip and fall hazards
- Most municipal ordinances say if there is greater than 13 mm (½ inch) height difference of a trip hazard, corrective actions must be taken
- Fallen leaves in autumn can create a slippery surface
- Grass can become wet and muddy
- Roof drains should discharge onto grass or sewers, do not allow water to run across sidewalks and freeze
- Items placed in the sidewalk path of travel (trash cans, garden planters, etc.), should be removed
- Landscaping that is planted too close to sidewalks should be kept trimmed, and if unchecked, it can overtake the sidewalk, creating trip and fall hazards

Entrances and exits

Entrance and exit areas should receive special attention for controlling slips and falls. Due to heavy foot traffic at these areas, the floor surface over time becomes smooth and will have less traction. Dirt and water deposits commonly tracked in from the outside will be higher in these areas and make the floor more susceptible to slips and falls.

- Ideally, a grate system with a catch basin should be installed at the entrance, which is most effective in removing moisture, dirt and debris from footwear. If a grate system is not feasible, heavy-duty or scraper mats should be installed, followed by runner or dryer mats
- The Carpet and Rug Institute (CRI) recommends selecting runner mats three metres (8 – 10 feet) in length that are long enough to take three full steps before stepping onto floor surfaces. Further CRI suggests:
 - Floor mats should be designed for removal of dust, soil, and moisture. Do **not** use carpet remnants, scatter rugs, or cheap mats (vinyl backing, or no backing)
 - Mats be properly placed with no gaps or overlapping
 - Mats are not curled, worn or torn
 - Mats have bevelled edges to prevent tripping
 - To decrease the potential of mats from sliding, a single larger mat can be used instead of multiple smaller mats
 - If mats are waterlogged, then wet vacuum or replace
 - Mats should receive proper cleaning and maintenance to ensure their integrity
- Always place “wet floor” signs prominently at entrances – pylons are preferred over “tent”-style

Interior flooring surfaces

Aesthetics always play a major role in deciding what type of interior flooring should be installed inside the church. A priority for church leaders should be to determine what type of flooring will be both aesthetically pleasing and to provide adequate protection from slips and falls. Typical interior floor surfaces include carpet, ceramic tile, vinyl, and hardwoods. Regardless, flooring should be correctly installed, then maintained properly to prevent slips and falls. Measures include:

- Flooring should have a high coefficient of friction (slip resistant rating) of 0.42 or higher dry or wet as per the DCOF AcuTest method for tiled surfaces
- Select high-traction, slip-resistant flooring materials when you build, expand or remodel
- Areas prone to the presence of water (entrances, bathrooms, etc.) should have high slip resistance characteristics
- Ensure changes of direction or elevations are readily identified

- Flooring should be level and in good condition. If there are any variances in level of more than $\frac{1}{4}$ inch, this can lead to a trip and fall
- Ensure “caution wet floor” signs are posted when maintaining floors or cleaning up a spill
- The Cleaning Industry Research Institute (CIRI) suggests using floor cleaning products appropriate to the floor surface from vendors that offer warranties and provide technical support and training
- A preventive maintenance program should be developed and include the routine sweeping or dusting procedures; proper mopping techniques (use of hot water, detergent dilution, and scrubbing), major maintenance activities (floor stripping, finishing, waxing, etc.)
- Carpeting has the best slip resistance rating, but should be kept clean and free from holes, rips and tears, and be adequately stretched to prevent it from bunching and becoming a trip hazard
- Obtain adequate slip/fall insurance from your cleaning contractor, as well as a written service agreement with a “hold harmless” clause

Stairs and steps

The majority of falls on stairs, occur while descending steps and stairs.

- Steps and stairways should be provided with slip resistant surfaces or refinish with an abrasive paint
- All steps should have adequate height and tread widths
- Always keep steps and stairs clear of obstacles, no storage of materials
- Stairs should not be damaged, have no cracks or chips and be not worn or sagging in the centre (if more than seven mm ($\frac{1}{4}$ inch) depth from the original surface level, consider re-surfacing the step)
- Secure stair handrails should be provided on all stairways with four or more steps and:
 - Be continuous throughout the whole flight
 - Be located at a height of between 81 – 91 cm (32 – 36 inches)
 - Be semicircular with a diameter of 3 – 5 cm (1 $\frac{1}{4}$ – 2 inches) allowing a power grip
 - Have at least five centimetres (two inches) of clearance between the handrails and the wall
 - Extend both the top and bottom step by 30 cm (12 inches)
- Clearly identify the step nosing for visibility and contrast
- Mossy growth on external stairs or pathways should be removed – very slippery
- Provide adequate illumination on indoor stairs, with access to light switches on both levels

Weather hazards

Cold weather, high winds, thunderstorms, and rain — severe weather of any type can put special stress on your building's structure and is a leading cause of slips and falls among congregation members. Being prepared for severe weather and responding to it promptly are your best accident deterrents.

- Don't get caught by surprise – monitor the weather forecast and changing conditions
- Remove (shovel or apply ice melt) snow and ice completely from walkways, stairways, and ramps before people arrive for church events and continue removal throughout the day if needed
- Treating surfaces early with salt and grit is more effective
- Apply deicers and/or abrasives to accelerate melting of ice and give traction
- Keep adequate supplies of snow and ice removal tools in the entrances
- Clearly identify steps, ramps, and other elevation changes that might not be visible in snowy conditions
- Ensure "walk-off" mats are used at all entrances to collect grit, water, snow, ice, etc.
- Ensure roof downspouts do not direct water over sidewalks where it can freeze and create a slip and fall hazard
- Pay particular attention to north-facing sides of buildings which receive less sunlight and tend to stay frozen longer
- Develop a plan for removing heavy snow or ice loads from roofs to prevent collapse
- Maintain records of treatment and snow/ice removal for walkways and parking lots
- Contract with a snow removal company to keep your parking lots and sidewalks clear of snow and ice. Obtain adequate slip/fall insurance from your snow removal contractor, as well as a written service agreement with a "hold harmless" clause

Lighting

Church functions are no longer limited to Sundays, as many churches have activities seven days a week or are running late into the evenings. Congregation members often find themselves using or leaving the church during times when there is little or no natural light. Inadequate lighting can be a major factor to slips and falls, as hazards can be difficult, if not impossible, to see when proper lighting is not provided.

- Lighting is now measured in lux. At a minimum, 100 lux (10-foot candles) should be provided outdoors, with higher levels of illumination in high risk areas
- Lighting should be provided for walkways, parking lots, stairways, hallways, and basements
- Avoid shadows reflection and glare (adjust lighting accordingly)
- Provide illumination on stairways and access to light switches on both levels
- Inspect all lighting on a daily basis and replace light fixtures or bulbs that do not work
- Use LED's: Lights incorporated into the stair nosings to illuminate steps or use photoluminescent light sensitive pigment in the tread material providing 'after glow' when light source is removed



Baptistery safety

Baptisms take place weekly in churches and the area surrounding a baptistery or pool can likely be wet, especially after a baptism, which could result in someone slipping and falling including the individuals being baptized. Precautions to prevent slips and falls at the baptistery should be taken including:

- Add non-slip adhesive on the stairs leading into the baptistery
- Install slip-resistant treads or surfaces at the bottom of the tank/pool
- Install handrails that extend beyond the stairs so people can enter and exit the baptistery safely
- Install carpet or other non-slip flooring around the baptistery
- Consider installing safety or child-proof barrier around the pool
- Always place “wet floor” signs or cones to warn people that the area is wet
- Keeping the area around the baptistery well-lit
- Ensure the baptistery is covered when it not in use
- Inspect all water fill and drain lines and connections for possible leaks – repair leaks

If an accident should occur

Develop your own emergency procedures and distribute it within the congregation. If an accident should occur, the injured should receive help as quickly as possible.

- Make the injured as comfortable as possible. **do not attempt to move them.** Keep him or her warm. Administer first aid only if you have the proper training.
- Call dial 9-1-1 and ask for an ambulance. Don't forget to give your address clearly and distinctly
- Do **not** admit liability
- Notify the injured's family. Explain the situation calmly and tell the family that you have called an ambulance and that help is on the way or tell the family which hospital the victim is being taken to
- Begin a preliminary investigation and note what happened simply and factually including a description of the walkway or surface, weather conditions, footwear worn by the injured party, etc.
- Document the corrective actions taken through the use of checklists and a logbook with a list of the areas inspected, the date and time of the inspections, and the name and signature of the inspectors
- Provide the names of any witnesses and always take photographs of incident area
- Inform your insurance agent of the incident along with the

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