

Holiday safety tips from the Safety and Buildings Division



Trees

1. When purchasing an artificial tree, be sure it is labeled as fire retardant or flame resistive. This label does not mean the tree won't catch fire, it indicates the tree will resist burning and should extinguish quickly.
2. Flame proofing a natural cut tree will do little if anything to retard the fire. The U.S. Forest Products Laboratory at the University of Wisconsin stated that products currently available for flame proofing are ineffective on natural cut trees. Coating the needle prevents the tree from breathing, reducing water uptake, and actually enhances the tree's drying out. When a pine needle is exposed to heat, a gas build-up occurs in the needle. The needle explodes with the pressure build-up, the gas ignites and the fire rapidly builds.
3. When purchasing a live tree, check for freshness. Natural trees and natural decorations or trimmings should be as fresh as possible, with green needles which are hard to pull from branches. When bent, fresh needles do not break. The trunk butt of a fresh tree is sticky with resin. When tapped on the ground, a fresh tree should not lose many needles.
4. Keep a natural-cut tree as moist as possible by giving it plenty of water. Make sure the tree stand holds at least one gallon of water. As a general rule, stands should provide one quart of water per inch of stem diameter. The average 6-foot tree has a 4-inch diameter trunk and can consume as much as a gallon of water per day. When properly watered, fresh-cut trees will retain some natural fire resistance for approximately 21 days.
5. Trees and natural decorations should be located a safe distance (at least three feet) from heaters, lights, fireplaces, radiators, stoves, candles, and smoking areas. These areas present an ignition source and dry out a tree rapidly.
6. Do not place the tree in traffic patterns or block exits.
7. Try to position the tree near an outlet, so that cords are not running long distances.
8. Trees should be held upright in sturdy stands having a base broad enough for support against surrounding activities. Guy wires may be necessary. Anchorage should be in areas not subject to interference.
9. Remove the tree from your home when it begins dropping needles, and dispose of it properly. Dried-out trees burn easily and should not be left in a garage or placed against the house.

Electrical Cords and Equipment

1. Use no more than three standard-size sets of lights per single extension cord.
2. Make sure the extension cord is rated for the intended use.
3. Always unplug or switch off tree lights before leaving home or going to sleep.
4. Miniature lights do not dry out the needles as quickly as large lights.
5. Larger tree lights should have some type of reflector rather than a bare bulb.
6. Plug outdoor electric lights and decorations into circuits protected by ground fault circuit interrupters (GFCIs).

Lights

1. All lights should be listed by a nationally-recognized testing laboratory.
2. Use only lights that have fused plugs.
3. Check packaging to determine the maximum number of strings that may be connected or connect a maximum of three midget (push-in bulbs) light strings or up to 50 bulbs of light strings with the screw-in bulbs (C7s and C9s).
4. Never use electric lights on a metal tree. The tree can become charged with electricity from faulty lights, and a person touching a branch could be electrocuted. You can use colored spotlights above or beside the tree.
5. Follow the manufacturer's instructions on how to use tree lights.
6. Check each set of lights, new or old, for broken or cracked sockets, frayed or bare wires, or loose connections. Throw out damaged sets.
7. Always replace burned-out bulbs promptly with the same wattage bulbs.
8. Keep "bubbling" lights away from children. These lights with their bright colors and bubbling movement can tempt curious children to break candle-shaped glass, which can cut, and attempt to drink hazardous chemical liquid.
9. Fasten outdoor lights securely to protect them from wind damage.

Decorations

1. Use only non-combustible or flame-resistant materials to trim a tree.
2. Choose tinsel or artificial icicles of plastic or nonleaded metals. Leaded materials are hazardous if ingested by children.
3. Wear gloves to avoid eye and skin irritation from spun glass 'angel hair.'
4. Follow container directions carefully to avoid lung irritation while decorating with artificial snow sprays.
5. An individual should be assigned to periodically check the security and condition of the decorations, especially in public places.

Candles

1. Never use lighted candles on a tree or near other evergreens.
2. Always use sturdy, non-combustible candleholders that can collect dripping wax and won't tip over.
3. Place candles where they will not be knocked or blown over by a person or pet.
4. Keep candles away from other decorations and wrapping paper.
5. Extinguish a candle when two inches of wax remains or a half-inch if the candle is in a container. This prevents heat damage to the surface and stops glass containers from breaking.
6. Extinguish candles when leaving the room or going to sleep.
7. Keep candles, matches and lighters away from children. Store matches and lighters up high, out of the reach of children, preferably in a locked cabinet.
8. Don't leave children in a room with lit candles.

NFPA code provides holiday fire safety guidance



The Safety and Buildings Division of the Wisconsin Department of Commerce offers these fire safety precautions for the holiday season, based on the 2006 edition of the National Fire Protection Association Standard Number 1 Uniform Fire Code, as adopted by Wisconsin's Comm 14, Fire Prevention Code. (Local municipal ordinances may be more restrictive.)

NFPA 10.14 Combustible Vegetation: Combustible vegetation, including natural cut Christmas trees, shall be in accordance with Table 10.14.1.

10.14.2 In any occupancy, limited quantities of combustible vegetation shall be permitted where the Authority Having Jurisdiction [fire department] determines that adequate safeguards are provided based on the quantity and nature of the combustible vegetation.

Table 10.14.1 Provisions for Christmas Trees by Occupancy				
Occupancy	No Trees Permitted	Cut Tree Permitted with Automatic Sprinkler Systems	Cut Tree Permitted without Automatic Sprinkler Systems	Balled Tree Permitted
Ambulatory health care				X
Apartment buildings		Within unit	Within unit	X
Assembly	X			
Board and care	X			
Business		X		X
Day-care		X		X
Detention and correctional	X			
Dormitories	X			
Educational	X			
Health care				
Hotels	X			
Industrial		X	X	X
Lodging and rooming		X		X
Mercantile		X		X
One and two family		X	X	X
Storage		X	X	X

10.14.3.1 Artificial vegetation and artificial Christmas trees shall be labeled or otherwise identified or certified by the manufacturer as being fire retardant.

10.14.3.2 Such fire retardance shall be demonstrated by each individual decorative vegetation item, including any decorative lighting, in an approved manner.

10.14.4 Vegetation and Christmas trees shall not obstruct corridors, exit ways, or other means of egress.

10.14.5 Only listed electrical lights and wiring shall be used on natural or artificial combustible vegetation, natural or artificial Christmas trees, and other similar decorations.

10.14.6 Electrical lights shall be prohibited on metal artificial trees.

10.14.7 Open flames such as from candles, lanterns, kerosene heaters, and gas-fired heaters shall not be located on or near combustible vegetation, Christmas trees, or other similar combustible materials.

10.14.8 Combustible vegetation and natural cut Christmas trees shall not be located near heating vents or other fixed or portable heating devices that could cause it to dry out prematurely or to be ignited.

10.14.9.1 Where a natural cut tree is permitted, the bottom end of the trunk shall be cut off with a straight fresh cut at least ½ in. (13 mm) above the end prior to placing the tree in a stand to allow the tree to absorb water.

10.14.9.2 The tree shall be placed in a suitable stand with water.

10.14.9.3 The water level shall be maintained above the fresh cut and checked at least once daily.

10.14.9.4* The tree shall be removed from the building immediately upon evidence of dryness.