

# **SMOKE DETECTORS SAVE LIVES AT HOME**

A Brochure For One And Two Family  
Dwellings



## **Why are smoke alarms necessary?**

Most home fires occur between 11:00 P.M. and 6:00 A.M., when people are sleeping. Working smoke alarms detect fire in its early stages and provide your family with critical minutes necessary to reach safety. Deaths from home fires are more frequently due to smoke inhalation and toxic fumes than from burns. Early warnings save lives!

## **Working smoke alarms greatly reduce your risk of dying in a fire.**

Wisconsin fire deaths have been reduced by more than 42% since 1987 (when Wisconsin began requiring smoke alarms in older homes.) Unfortunately, about 30% of home fires start in rooms without working smoke alarms.

**Wisconsin law requires homes to be protected by smoke alarms (previously called smoke detectors) or a smoke detection system.** Owners must install and maintain the smoke detectors, and tenants must inform owners of any smoke alarm problems.

## **How do you decide what kind of smoke alarm is best for your house?**

You can choose either ionization or photoelectric types but all smoke alarms must be listed by Underwriters Laboratories (UL) or an equivalent testing organization.

Ionization alarms respond to quick burning fires such as from wood or paper. The alarm sounds when the sensor becomes blocked by smoke particles.

Photoelectric alarms respond to slow burning fire such as upholstery or bedding. The alarm sounds when smoke particles break a light beam. Photoelectric alarms are less likely to sound a false alarm.

## **What kind of smoke alarm is required in your home?**

It depends on when the permit to build your home was issued. Local ordinances may require additional features. In general, homes permitted:

prior to April 1, 1992, you may use self-contained battery-operated smoke alarms.

after April 1, 1992, refer to the table on the back of this brochure.

It is *recommended* that:

- All smoke alarms in your home be interconnected [if one activates they all sound together]and powered by both a building circuit and batteries to ensure they operate properly in all situations.
- Smoke alarms should be connected to regular lighting circuit, but not on a switch, so the loss of power to the alarm is noticed because the lights are not working.

## **Where must they be installed?**

Generally, homes built: (local ordinances may be more stringent)

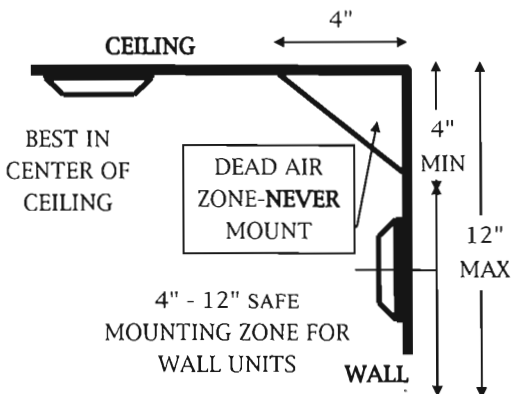
- Before December 1, 1994 must have at least one smoke alarm installed on each floor level including the basement.
- After December 1, 1994 refer to the table on the back of this brochure.

It is *recommended* that:

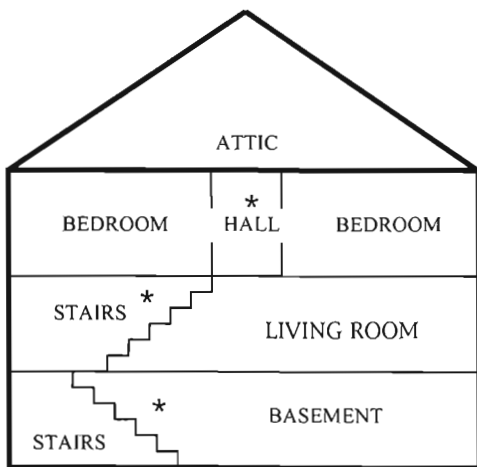
- Alarms are placed between each sleeping area and the rest of the home, and above the base of any stairs on each floor level.
- Alarms are located in the hall outside the bedroom area and inside each bedroom.

- Bedroom doors should be kept closed for additional protection.

**[Fig. 1]**  
**SMOKE ALARM INSTALLATION DIAGRAM**  
 See manufacturers recommendations



**[Fig. 2]**  
**MINIMUM SMOKE ALARM PLACEMENT**  
 See table for additional requirements



One and Two Family Dwellings

## How should smoke alarms be installed?

All smoke alarms should be installed per the manufacturer's instructions. [Note: If you're unable to locate your smoke alarm manufacturer's recommendations, some basic information, including the manufacturer's address, is on the smoke alarm.]

Battery operated smoke alarms require only a screwdriver and drill.

Building Circuit Alarms are connected directly to your home's electrical system and should be installed by a qualified electrician.

Typical alarm mounting requirements include:

- Basement mounts - to the bottom of any exposed basement ceiling joists.
- Ceiling mounts - at least 4 inches from the wall.
- Wall mounts (required for mobile homes) 4 to 12 inches from the ceiling. (see figure 1)
- Peaked or sloped ceilings mounts - within 3 feet of the highest part of the slope or peak.
- Kitchens -- it is *recommended* that smoke alarms with a temporary reduced-sensitivity switch be installed near kitchens.

Do not mount your smoke alarm:

- Within 3 feet of any window, door or air register where drafts could prevent smoke from reaching the smoke alarm.
- Where subject to temperature extremes, excess humidity or heavy dust such as in bathrooms, unheated garages or attics.

## What maintenance is required?

- Batteries - change at least once a year or more often if the low-battery warning activates. The National Fire Protection Association recommends that you change your battery twice a year at the same time that you change your clocks. [Note: Some smoke alarms are available with ten-year batteries.]
- Never “borrow” batteries from your smoke alarm to use in any other device.
- Photoelectric bulbs – change when the trouble indicator activates.
- Test your alarms monthly by using the test button or as required by the manufacturer. If it doesn’t work, replace the battery. If it still doesn’t work, replace the smoke alarm. [ See manufacturers recommendations.]

- Remove the cover and vacuum the alarm yearly to remove any sensor blocking dust particles.

Replace all smoke alarms every 10 years or as recommended by the manufacturer.

Landlords must inform tenants in writing that they are responsible for informing their landlord in writing of any smoke alarm problems, such as a dead battery. The landlord has five days to correct the problem.

It is *recommended* that tamper-resistant smoke alarms, or preferably, building current powered smoke alarms be installed if there is a problem with battery removal or disconnection.

**Remember, when the alarm sounds, get out and stay out!**

### Summary of Smoke Detector Requirements

ss. 101.145, Wis. Stats.

[Fig.3]

\*L.U. means Living Unit

Date of occupancy or building permit	Battery – Powered Only	Building Electrical System Powered	Building Power & Battery Backup	Interconnection between Smoke Alarms within L.U.*	Smoke Alarm on Every Floor Level	Smoke Alarms Outside Each Sleeping Area	Smoke Alarms in Each Bedroom
1 & 2 Family prior to 4-1-92	X				X		
1 & 2 Family since 4-1-92		X		X	X		
1 & 2 Family since 12-1-95		X		X	X	X	
1 & 2 Family since 4-1-01			X	X	X	X	X

## Tips To Keep Your Family Safe

Smoke alarms are not a replacement for fire prevention. Look at your property and your family's habits for sources of fires and eliminate them. A home safety checklist can be obtained from your local fire department.

- Be sure everyone in your household is familiar with the sound of the alarm.
- Plan and practice a fire escape drill with your family which includes at least two ways out of every room. Identify an outside meeting place where everyone will gather after the escape.
- Call the fire department immediately after you are safely out of the house.
- Keep matches and lighters out of children's reach and never leave candles unattended.
- Don't overload outlets or extension cords and replace or repair frayed electrical cords, sparking outlets or appliances.
- Clean fireplaces yearly and use metal or glass screens.
- Never smoke in bed, dispose of smoking materials in approved containers.
- Store flammable and combustible liquids away from heat sources and in their original containers.