

# Installer Training

## Home Fire Campaign- Palmetto SC Region



**American Red Cross**  
Palmetto South Carolina Region

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# Purpose

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This training presentation is designed to provide instructions on how to successfully install smoke alarms in accordance with current standard practices.

Information contained within this presentation is adapted from guidance issued by leading fire safety agencies, such as the South Carolina Office of State Fire Marshal, South Carolina Firefighters Association, and the American Red Cross.



# Team Overview

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- ❖ In a client's home, teams have 3 goals:
    - ❖ Assess and test current smoke alarms and install new smoke alarms if needed
    - ❖ Educate clients on fire safety
    - ❖ Document clients' information, services provided, and all information required on the **Service Acknowledgement Form**
  
  - ❖ Team roles reflect the goals:
    - ❖ Smoke Alarm Installer
    - ❖ Disaster Safety Educator
    - ❖ Reporter/Documenter
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# Kidde i9010 Smoke Alarm

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- ❖ Ionization sensor technology
- ❖ 10-year life lithium-ion battery
- ❖ Sealed battery; can't be changed
- ❖ Minimizes nuisance alarms
  - ❖ "Hush" button silences nuisance alarms
- ❖ Retailers for about \$20



# Determining the Need of a Home

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- ❖ Ask homeowner to show you all existing smoke alarms
  - ❖ Replace alarms if:
    - ❖ 5+ years old
      - ❖ If in doubt about how old the smoke alarm is, replace it
      - ❖ Age of alarm can be determined by locating the manufacturer's date on reverse side of alarm
    - ❖ Painted over
    - ❖ Dirty and/or unmaintained
    - ❖ Damaged in any way
  - ❖ Do **NOT** replace alarms if:
    - ❖ Less than 5 years old
      - ❖ If incorrectly positioned just move
    - ❖ They are hard wired
    - ❖ They are part of a private security system
- ❖ Install additional alarms per the code



# Installation Overview

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- ❖ Do **not** leave uninstalled smoke alarms with residents under any circumstances
  - ❖ Even if they promise to do the installations themselves in the future
- ❖ Teams should expect to spend approx. 20 minutes in each home
  - ❖ Time varies according to the number of alarms installed
  - ❖ Smoke alarm installation and safety education should take place concurrently
- ❖ On average 2.5 alarms per home are installed
  - ❖ Larger homes may require several alarms
  - ❖ Some homes may require only one installation
  - ❖ Some may even be already “prepared” and require no installations



# Installation Overview

- ❖ No **Bedside Alarms** will be installed during the blitzes
  - ❖ For the deaf, hearing impaired, etc. collect contact information from the residents. Red Cross will arrange a later date for installations.



- ❖ Hard-wired smoke alarms will not be removed or installed
  - ❖ If they have a test button, test it.
  - ❖ Change batteries if needed





# Installation Overview

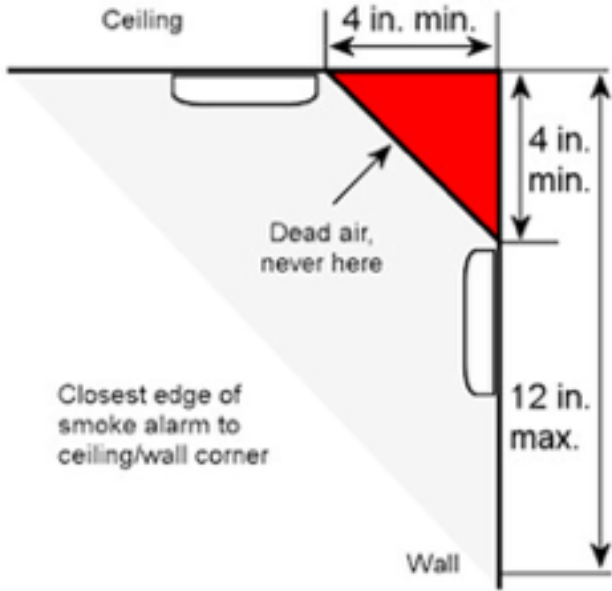
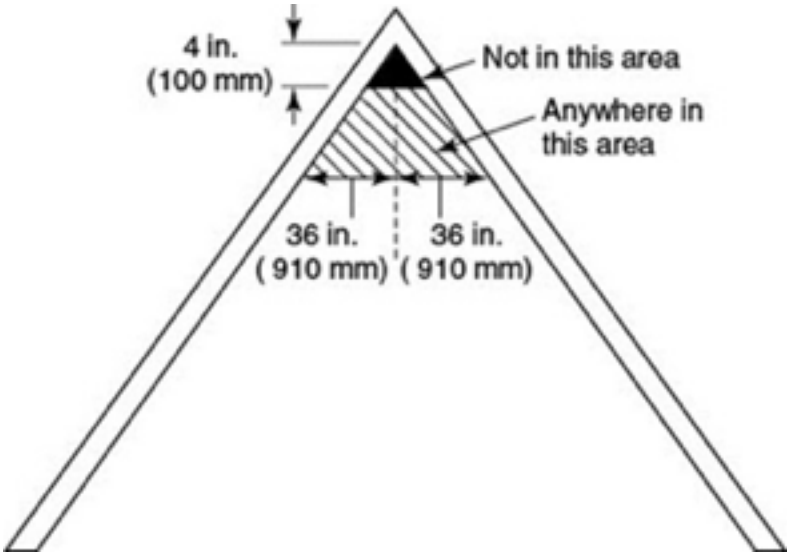
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- ❖ Install alarms per the adopted fire codes
  - ❖ One smoke alarm in every bedroom
  - ❖ One smoke alarm outside of sleeping areas
    - ❖ Main hallway, outside separate master bedroom, etc.
  - ❖ At least one on every floor
    - ❖ Basement, top of stairs, etc.
    - ❖ Except attics and crawlspaces
- ❖ When you remove the old alarm, keep it
- ❖ Leave at least one “Smoke Alarm User’s Guide” with the homeowner
  - ❖ Review the Use and Maintenance sections with them

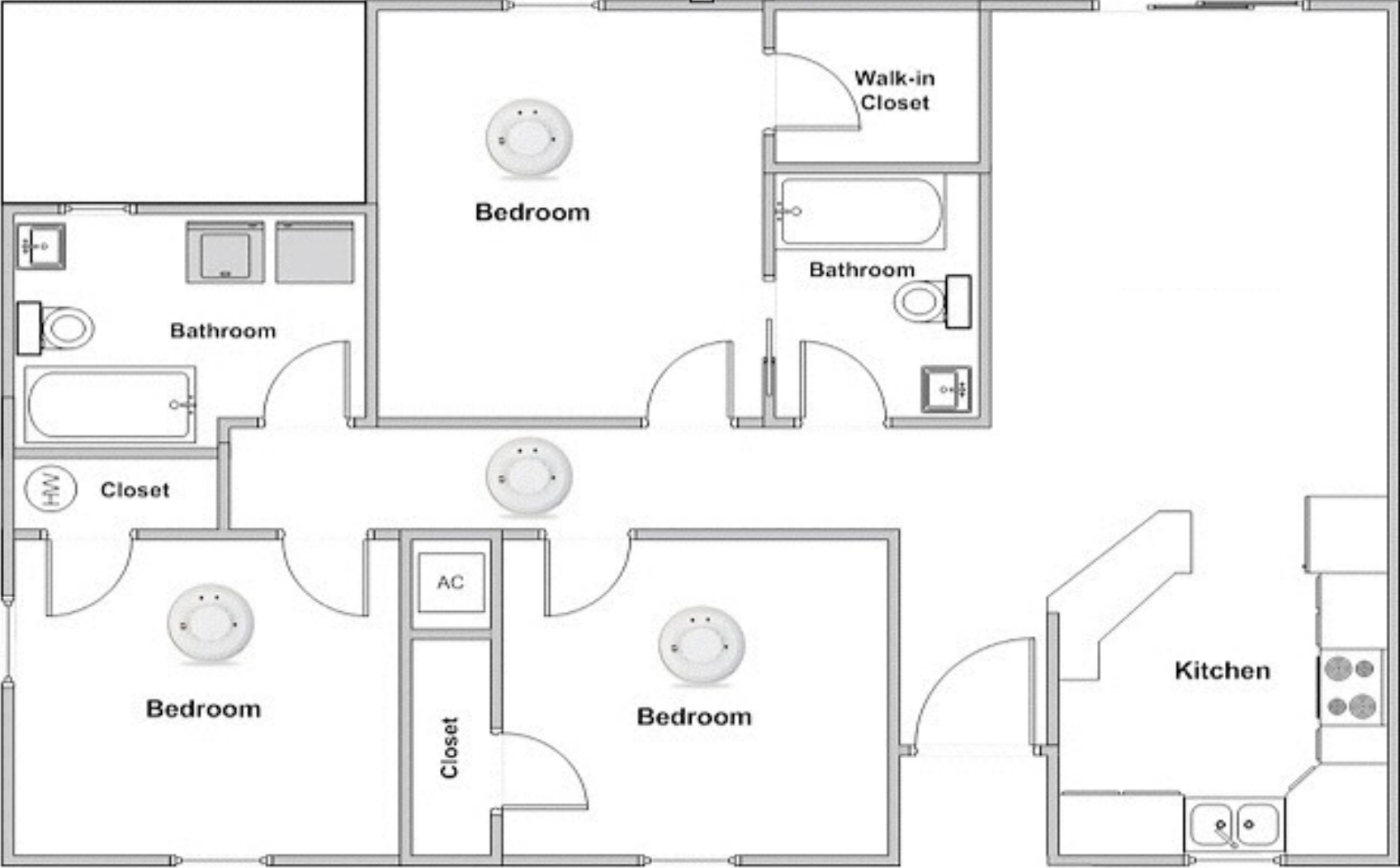


# Where to Install Alarms

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# Where Specifically?



# Where to Install Alarms

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- ❖ When the center of a room is not viable:

- ❖ Do not install in dead-air space zones
- ❖ Top of an alarm no closer than 4 inches from the ceiling
- ❖ Bottom of alarm no further than 12 inches from the ceiling

- ❖ For vaulted ceilings, install at the highest point

- ❖ On the side of the stairwell

- ❖ Install in a kitchen, away from a cooktop



3 ft of the

bottom of

10 ft from



# Bad Positioning

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## Avoid:

- ❖ Kitchens
- ❖ Garages
- ❖ Attics
- ❖ Extremely dusty areas
- ❖ Insect-infested areas
- ❖ Areas within 6 ft of furnaces

## Do not install alarms within 3 feet of:

- ❖ Bathrooms (steam may cause nuisance alarms)
- ❖ Fluorescent lights
- ❖ Ceiling fans
- ❖ Exterior doors, windows or particularly drafty areas
- ❖ Forced air heating and cooling vents



# Installation and Activation

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After choosing the correct smoke alarms location(s):

1. Attach the mounting bracket using the screws provided
  - ❖ **Ceiling:** the “A” line should be parallel with the hallway
  - ❖ **Wall:** the “A” line will be horizontal
2. Activate the Tamper Resistant feature by breaking off the 4 posts in the square holes in the mounting bracket
3. Rotate the alarm clockwise until it ratchets into place
  - ❖ The alarm has a battery permanently sealed inside the alarm so no battery installation is necessary
  - ❖ Once in place the alarm is activated thanks to a special feature
4. Test the alarm by holding down the test button until it beeps once. Alarm should then produce six test tones.



# Safety

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- ❖ Set up the ladder or step stool on a flat surface that is free from furniture, clutter or rugs that may slide
- ❖ Keep all legs of ladder on the same surface
- ❖ Assign a person to hold the ladder and pass materials to the person installing the alarm
- ❖ Never walk under an open ladder.
- ❖ Never stand on the highest step of a ladder.
- ❖ Wear eye protection (safety glasses) when installing the smoke alarm using a drill or screwdriver
- ❖ Operate all electrical equipment such as cordless drills in accordance with manufacturer's instructions



# Tools and Equipment for Installation

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- ❖ Manufacturer's instructions for smoke alarm installation and maintenance\*
- ❖ Cordless drills\*, extra charged drill battery\*
- ❖ Screwdrivers\* (Phillips head and standard)
- ❖ Small flashlights
- ❖ Safety ladder/step stool\* (4 ft minimum)
- ❖ Safety glasses or goggles\*
- ❖ Extra (drywall) screws\*
- ❖ Hand broom, dust pan and trash bags\*
- ❖ Electrical tape for disposing of old batteries
- ❖ Extra drill and driver bits
- ❖ Measuring tape

**\* = Required Equipment**

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# Questions and Comments

