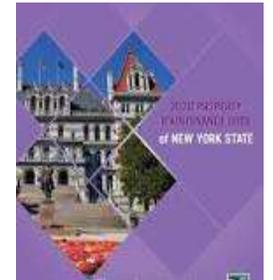
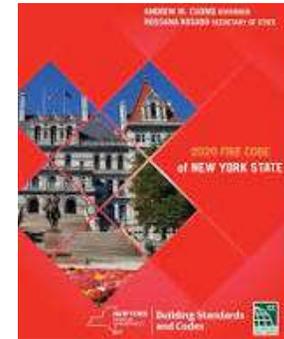


# SMOKE AND CO ALARMS



# NYS FIRE CODE

# NYS RESIDENTIAL CODE

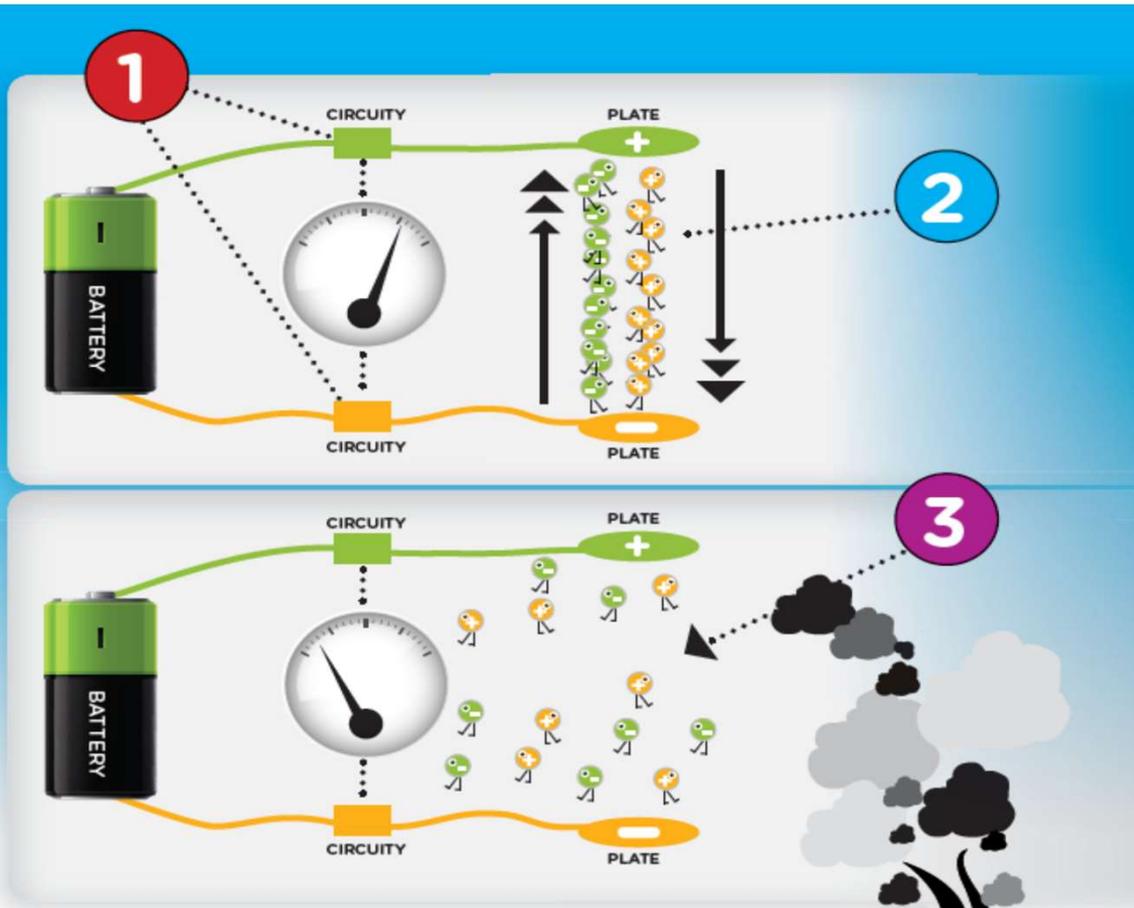


*WHY DO WE NEED A CODE?*

# BECAUSE BAD THINGS HAVE HAPPENED

- Roughly three out of five fire deaths happen in homes with either no smoke alarms or no working smoke alarms.
- More than one-third (38 percent) of home fire deaths result from fires in which no smoke alarms are present.
- The risk of dying in a home fire is cut in half in homes with working smoke alarms.

- King Hammurabi of Babylon  
1758 B.C



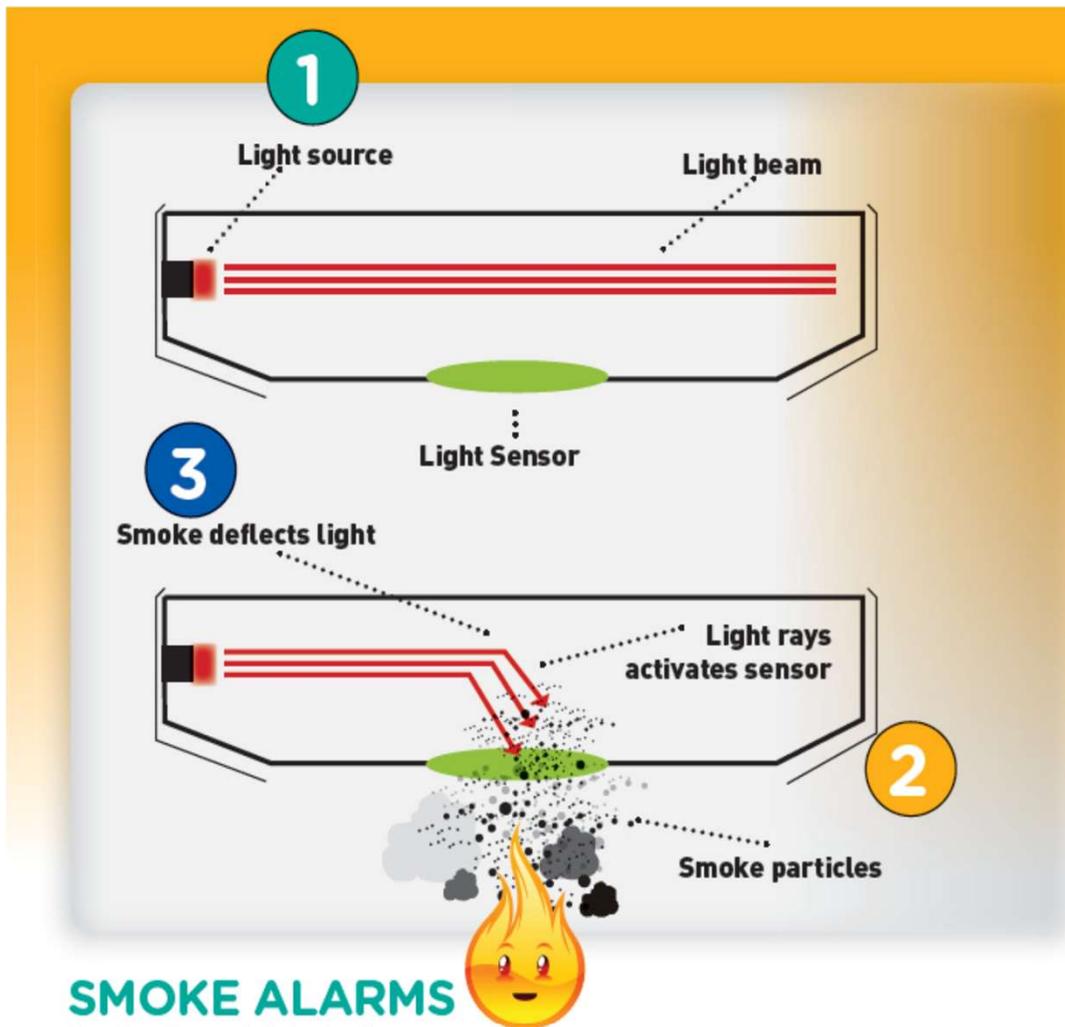
## SMOKE ALARMS

Did you know that scientists have spent many years working on smoke alarms to keep us safe? One of the most common types is an ionization smoke alarm. Here's how it works:

- 1** Inside the smoke alarm, there are two tiny metal plates called electrodes that are connected to a battery. This is called a circuit.

move toward the negative plate. This movement creates a complete circuit or path of electricity.
- 2** There is also a substance called Americium-241. Americium-241 converts air molecules into positive and negative ions. Because opposites attract, the negative ions move toward the positive plate and the positive ions
- 3** When smoke enters the smoke alarm, the ions bond with the smoke, breaking the path of electricity.
- 4** When the flow of electricity is reduced, the alarm goes off.





## SMOKE ALARMS



Another type of detector is an photoelectric smoke alarm. Here's how it works:

- 1 Inside the smoke alarm, there is an LED light that sends a beam of light (similar to a laser pointer) in a straight line across the chamber. In a separate compartment inside the chamber, there is a photosensor that detects light.
- 2 As smoke enters the detector, the smoke particles interrupt the light beam, scattering it in many directions. Some of the LED light scatters toward the light sensor. When light beams hit the sensor, the alarm will go off!
- 3 When the batteries in your smoke alarm get low, the smoke alarm automatically activates a low battery chirping sound different from the alarm sound so you know it's time to get new batteries.

Some smoke alarm contain both optical and ionization smoke detection systems.

# IONIZATION ALARM

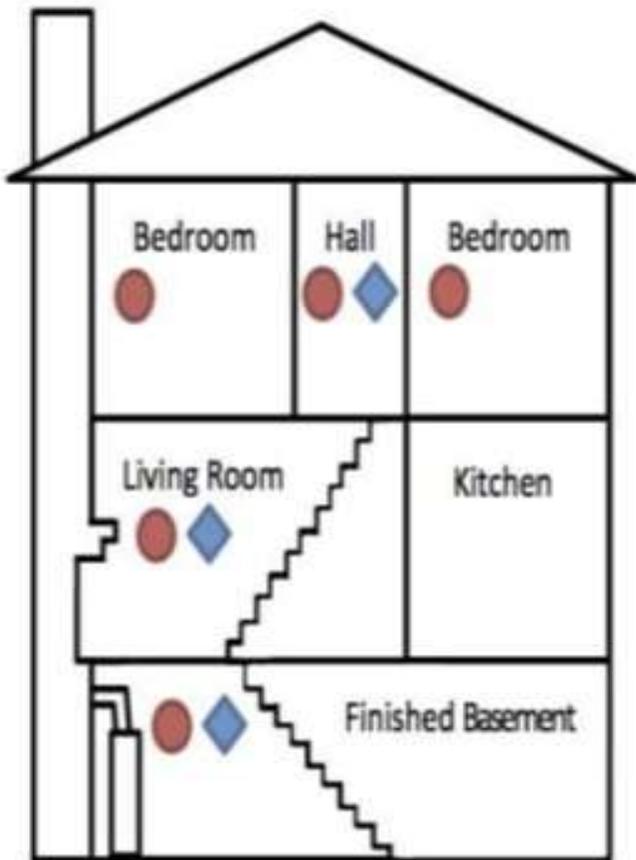
More responsive for Flaming Fires



# PHOTOELECTRIC ALARM

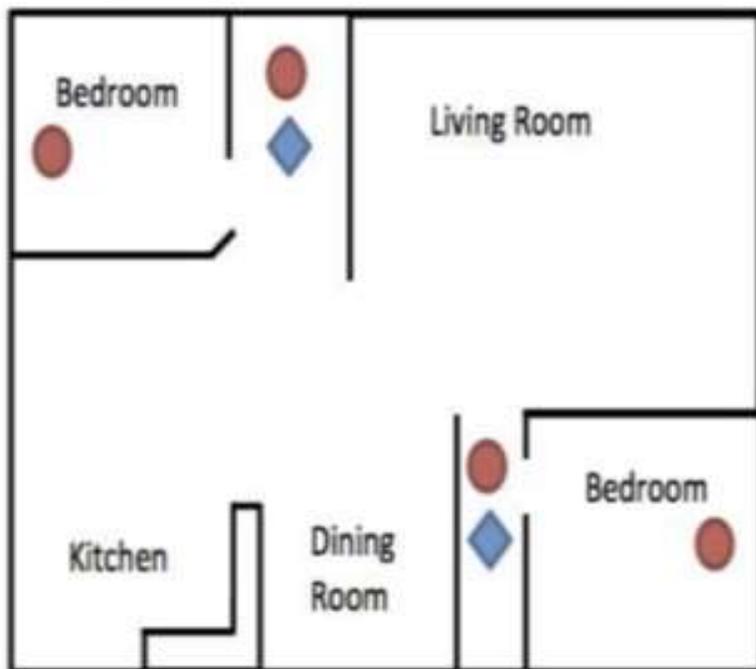
More responsive for Smoldering Fires



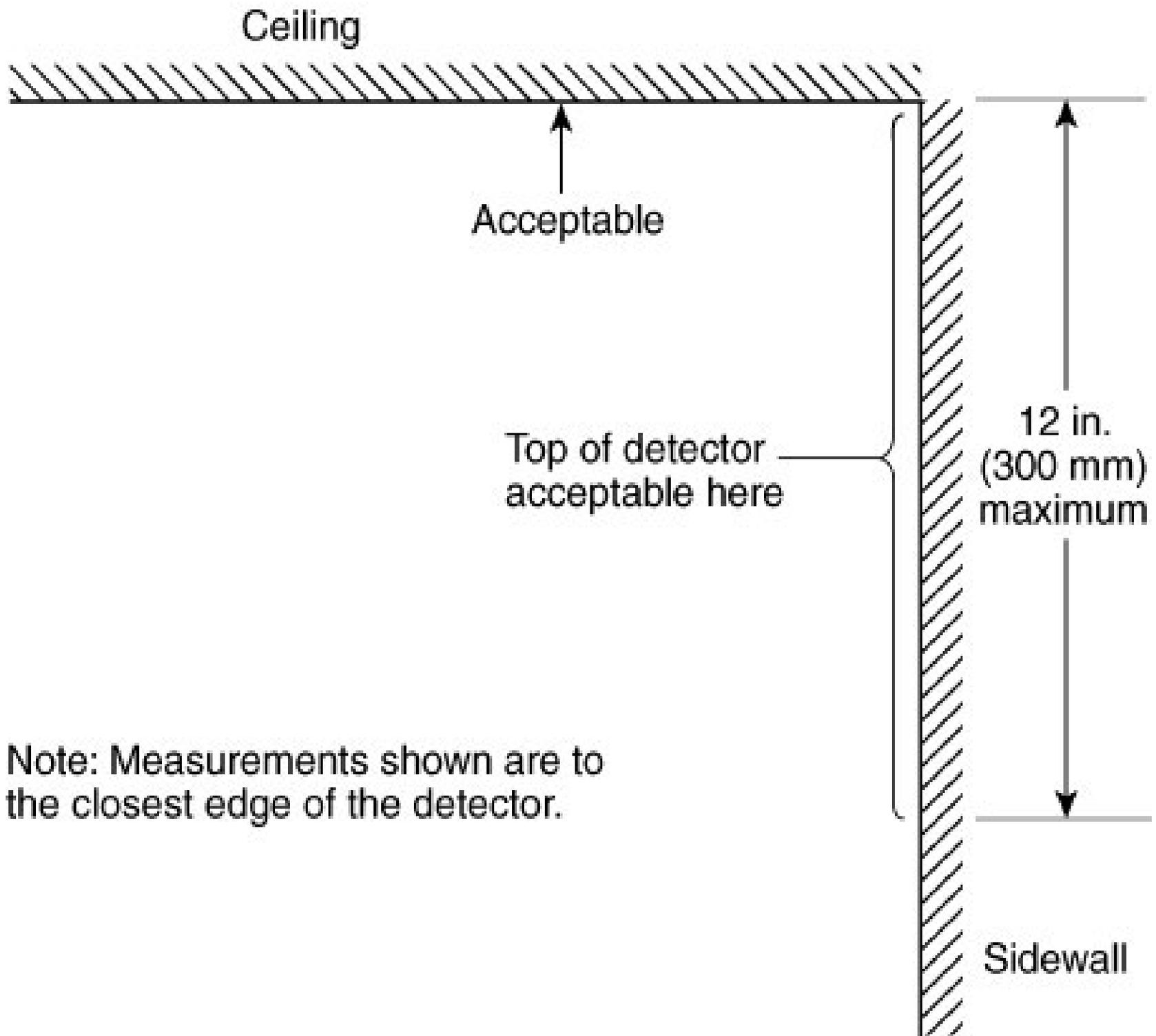


Multi Story Residence

KEY	● Smoke Alarms
	◆ CO Alarms
	● ◆ Both or Combination



Single Story Residence



# CONCLUSION

Fire Alarms battery good for 10years

Test Alarm monthly

Replace every 10 years

Where more than one smoke alarm is required to be installed, the alarms shall be interconnected so all alarms are actuated.

# CONCLUSION

CO alarms required on all levels of building with fuel burning appliances, (oil/gas burner, boiler, or fireplace)

**THANK YOU**