

**TRAVIS COUNTY EMERGENCY SERVICES DISTRICT 2**  
**PFLUGERVILLE FIRE DEPARTMENT**  
**203 E. PECAN STREET**  
**PFLUGERVILLE, TEXAS 78660**  
**(512) 251-2801**

Dear Apartment Managers and Maintenance Staff,

Please closely read the blue **Fire Safety Management Manual** we designed specifically to support apartment staff so you can make informed decisions on protecting your residents and your property. Also provided is a red **Fire Safety Folder** for your team to maintain all fire-related materials and inspection documents. Please also closely review ALL materials in this folder prior to your upcoming INSPECTION.

The following outlines the general requirements on smoke and CO alarm placement and maintenance:

1. All apartment facilities must at a minimum provide a working smoke alarm in every bedroom, and in the common area outside of the bedrooms--such as the living room or hallway within a unit.
2. Regarding replacement of smoke alarms, NFPA 72 requires the replacement of any faulty smoke alarm or when the smoke alarm reaches 10 years past the manufacturer's date stamped on the alarm. *Ex: for Manufacturer Date Nov2016, the smoke alarm would need to be replaced by November 2026.*
3. It is also a requirement that however the smoke alarm is currently powered, that level of protection and that set-up will need to be maintained. *Ex: If you only have battery-powered smoke alarms, you can replace them with battery-powered smoke alarms. But if the smoke alarms on your property have the capability to be hardwired, then they must be replaced with a hardwired smoke alarm.*
4. Regarding carbon monoxide (CO) alarms, any apartment building (new or existing) that is supplied by gas, or has an attached garage or any type of fireplace, is required to install and maintain CO detection, in accordance with 2015 IFC § 915. You will be required to replace any faulty CO alarms and those alarms which have exceeded their expiration. Options for types of CO alarms are outlined on page 3 of your Management Manual.
5. We also require that you provide us with a **written Smoke & Carbon Monoxide Alarm Maintenance Plan** for your property that you intend to follow. **Please email your plan to [AStrupeck@pflugervillefire.org](mailto:AStrupeck@pflugervillefire.org) before your upcoming inspection**, to include:
  - A. When you plan to replace or install these items, if needed.
  - B. What type of alarms you generally plan to use. (We strongly recommend sealed alarms with 10-year lithium batteries for lower maintenance, lower long-term cost, and higher protection of life and property. Further information is available for you on page 3 of your Fire Safety Management Manual.)
  - C. How often you will push the test button on EACH alarm on the property. (We strongly recommend at least every 6 months.) Also, how often your staff will change the batteries in each alarm. (We strongly recommend at least once a year.) It is not sufficient to test alarms, replace alarms, and replace batteries only "at turns" or "upon request."
  - D. How you will let residents know any expectations you may have of them regarding smoke alarms and general fire safety, and how they should communicate to you any needs on their alarms or fire safety.

If there are any questions, please contact us at (512) 251-2801 and ask to speak with our Community Risk Reduction personnel.



## RE: SMOKE & CARBON MONOXIDE ALARMS MAINTENANCE PLAN

Dear Apartment Property Manager,

Please **copy the text below onto your own property or corporate letterhead**, answer each of the four questions, save the completed document, and then email it back to our apartment educator, Allison Strupeck, at [astrupeck@pflugervillefire.org](mailto:astrupeck@pflugervillefire.org). We welcome any questions you may have. **Failure to submit and get approval on your Plan prior to your Fire Inspection will be noted during the inspection process.** Thank you for partnering with Travis County ESD No. 2 (the Pflugerville Fire Department) and caring about fire safety.

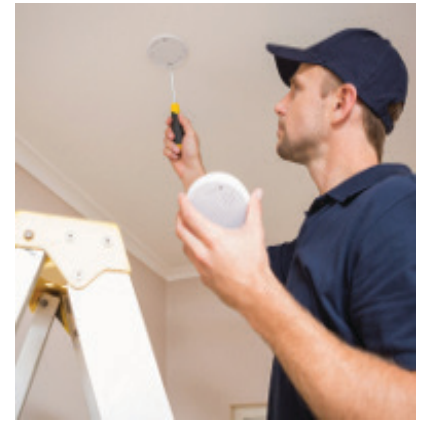
### Smoke & Carbon Monoxide (CO) Alarm Maintenance Plan

- A. When you plan to replace or install the required alarms, if needed.
- B. What type of alarms you generally plan to use. (We strongly recommend sealed alarms with 10-year lithium batteries for lower maintenance, lower long-term cost, and higher protection of life and property. Further information is available for you on page 3 of your Fire Safety Management Manual.)
- C. How often you will push the test button on EACH alarm on the property. (We strongly recommend at least every 6 months.) Also, how often your staff will change the batteries in each alarm. (We strongly recommend at least once a year.) It is not sufficient to test alarms, replace faulty/expired alarms, and replace batteries only "at turns" or "upon request."
- D. How you will let residents know any expectations you may have of them regarding smoke alarms and general fire safety, and how they should communicate to you any needs on their alarms or fire safety.

# Smoke and Carbon Monoxide Detectors Maintenance Plan

To protect property and lives, all apartment facilities should at a minimum have a smoke detector in each bedroom, a smoke detector in the common area outside the bedrooms, and a carbon monoxide (CO) detector. Detectors should be completely replaced at least every 10 years, after which point they are more likely to fail.

The following are a variety of plans to achieve this important protection.



## GOOD

## BETTER

## BEST



### Basic Smoke Detectors + Basic CO Detector

Single-sensor (smoke *or* heat) smoke detectors powered by 9V batteries, and a plug-in CO detector

#### Benefits

- ✓ Basic property and life safety protection; *however* a single-sensor detector may not detect all types of fire/smoke situations in a timely manner
- ✓ Short-term cost is lowest; *however* the long-term cost is the highest
- ✓ CO detector can be plugged into electrical outlets; no mounting of CO detector required

#### Ongoing Maintenance

Moderate

#### Estimated 10-year Cost

of materials for a 100-unit, 200-bedroom facility  
= \$12,264 + tax (\$1,226/yr)

*Includes per apartment unit:*  
3 basic (single sensor) smoke detectors  
1 plug-in CO detector  
8 9V-batteries per year

### Low-Maintenance Smoke Detectors + Basic Combo Smoke/CO Detector

Dual-sensor (smoke *and* heat) smoke detectors with sealed 10-year lithium ion batteries, and a basic combination smoke/CO detector

#### Benefits

- ✓ Better property and life safety protection
- ✓ Lowest long-term cost
- ✓ Dual-sensor smoke detectors can detect both smoke and heat more quickly
- ✓ 10-year batteries in MOST of the apartment's detectors reduces the cost of replacing batteries
- ✓ 10-year batteries in MOST of the apartment's detectors reduces maintenance needs
- ✓ Reduced maintenance to install and test a combination smoke/CO detector
- ✓ Lithium ion-powered detectors are sealed, preventing residents from tampering with the detector or removing the battery for any reason; this better ensures that property and lives are always protected 24/7

#### Ongoing Maintenance

Low to Moderate

#### Estimated 10-year Cost

of materials for a 100-unit, 200-bedroom facility  
= \$8,516 + tax (\$851/yr)

*Includes per apartment unit:*  
2 dual-sensor smoke detectors with lithium ion batteries  
1 basic combination smoke/CO detector  
2 9V-batteries per year

### Low-Maintenance Combo Smoke/CO Detectors

Dual-sensor (smoke *and* heat) combination smoke/CO detectors with sealed 10-year lithium ion batteries

#### Benefits

- ✓ Best property and life safety protection
- ✓ Lower long-term cost vs. basic detectors
- ✓ Dual-sensor smoke detectors can detect both smoke and heat more quickly
- ✓ 10-year batteries in ALL of the detectors eliminates the cost of replacing batteries
- ✓ 10-year batteries in ALL of the apartment's detectors greatly reduces maintenance needs
- ✓ Reduced maintenance to install and test a combination smoke/CO detector
- ✓ Lithium ion-powered detectors are sealed, preventing residents from tampering with the detector or removing the battery for any reason; this better ensures that property and lives are always protected 24/7

#### Ongoing Maintenance

Low

#### Estimated 10-year Cost

of materials for a 100-unit, 200-bedroom facility  
= \$11,850 + tax (\$1,185/yr)

*Includes per apartment unit:*  
3 dual-sensor combination smoke/CO detectors with 10-year lithium ion batteries

The cost of smoke detectors is tiny compared to the costs of lost lives, a burned down building, higher insurance premiums, potential lawsuits, and damaged public image.



You can bring your costs down further by purchasing in bulk. These estimates were based on single-item pricing at retail hardware stores. Also, these estimates assume that the apartment unit is entirely on one level; additional levels within a unit will require more detectors.

## Cost Estimate Calculator

### Good Plan

Basic single-sensor smoke detector (smoke <b>or</b> heat), requires 9V battery .....	\$5 / each
Basic plug-in CO detector, requires 9V battery for back-up .....	\$27 / each
9V batteries .....	\$175 / 156-pack (\$1.12 ea)

1-bedroom apartment = \$38.72 year 1	\$6.72 each year for next 8 years
2-bedroom apartment = \$50.96 year 1	\$8.96 each year for next 8 years
3-bedroom apartment = \$58.20 year 1	\$11.20 each year for next 8 years

### Better Plan

Low maintenance, dual-sensor smoke detector (smoke <b>and</b> heat), includes sealed 10-year lithium ion battery .....	\$20 / each
Basic combination dual-sensor smoke & CO detector, requires 9V battery .....	\$25 / each
9V batteries .....	\$175 / 156-pack (\$1.12 ea)

1-bedroom apartment = \$47.24 year 1	\$2.24 each year for next 8 years
2-bedroom apartment = \$67.24 year 1	\$2.24 each year for next 8 years
3-bedroom apartment = \$87.24 year 1	\$2.24 each year for next 8 years

### Best Plan

Low maintenance, combination dual-sensor smoke & CO detector (smoke <b>and</b> heat), includes sealed 10-year lithium ion battery .....	\$79 / 2-pack (\$39.50 ea)
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1-bedroom apartment = \$79 year 1	\$0 years 2-9
2-bedroom apartment = \$118.50 year 1	\$0 years 2-9
3-bedroom apartment = \$158 year 1	\$0 years 2-9

### Additional Options

Dual-sensor smoke detector (smoke <b>and</b> heat), requires 9V battery .....	\$23 / each
* Hardwired ionization smoke detector (heat <b>only</b> ), no back-up .....	\$12 / each
* Hardwired dual-sensor combination smoke & CO detector, requires 9V battery for backup .....	\$129 / 3-pack (\$43 ea)

*\* Ideally your facility was built with the smoke detectors hardwired together in each apartment unit. This ensures that if one detector is activated, they will all sound in that apartment. However, many of the apartment facilities in our fire district were built before this life-saving technology was available.*