

South Adams County Fire Department
6050 Syracuse Street
Commerce City, Colorado 80022



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www.sacfd.org

Dear Honorable Mayor and Members of the City Council,

The South Adams County Fire Department (SACFD) writes to express its unequivocal and strong support for maintaining the existing residential fire sprinkler ordinance for all new construction within Commerce City. This ordinance is not merely a regulation; it is a foundational investment in the life safety of our residents and the long-term well-being of the entire community. We urge the Council to uphold this vital standard that has proven to save lives, protect property, and enhance the safety of our first responders.

1. Protection of Public Safety and Civilian Lives

The primary function of a residential fire sprinkler system is to contain and often extinguish a fire in its incipient stage, limiting fire damage and, most critically, preserving life. In the modern construction environment, fire spreads rapidly, often rendering escape routes unusable within just a few minutes. Residential sprinklers activate quickly, controlling the fire's growth and drastically reducing heat and smoke levels, providing occupants with the necessary time to escape safely. Statistics unequivocally demonstrate that the risk of death in a home fire is reduced by approximately 85% when sprinklers are present. Maintaining this ordinance ensures that Commerce City continues to prioritize the highest level of protection for its growing population.

2. Enhanced Firefighter Safety

Firefighter safety is inextricably linked to the presence of sprinkler systems. When SACFD personnel respond to a reported structure fire in a sprinklered building, the incident is almost always a contained event. This immediate control reduces the risk of structural collapse, flashovers, and extreme heat exposure, the most significant dangers faced by our crews. By reducing the intensity and complexity of structure fires, the ordinance allows our firefighters to operate more safely, decreases the potential for career-ending injuries, and keeps our operational resources available for other emergencies across the city. The ordinance is a powerful tool for protecting the men and women who serve on the front lines.

3. Investment in the Future of Commerce City

As Commerce City continues its robust growth, maintaining the residential sprinkler ordinance is essential to responsible and sustainable development. Cities that adopt and maintain modern safety standards, like this ordinance, demonstrate a commitment to being forward-thinking, resilient communities. Requiring sprinklers in new construction sets a benchmark for quality of life and property protection, which positively impacts long-term insurance costs, reduces the environmental impact of severe structure fires, and prevents the emotional and financial devastation associated with loss of life and home. This is the best public safety policy for the future of Commerce City. While opponents cite inflated

figures, the actual, itemized cost for installing a residential fire sprinkler system during new construction is, on average, around \$5,300, not the \$16,000 amount being quoted. This minimal initial investment is a negligible fraction of the overall construction budget and is overwhelmingly offset by potential insurance premium reductions. Prioritizing verifiable data over alarmist claims confirms that this is an affordable, life-saving measure.

We urge you to preserve the residential fire sprinkler ordinance as a vital component of your legacy in public safety. To repeal or weaken this ordinance would be a regressive step—one that signals a dangerous indifference to the lives and property this council is sworn to protect. By upholding the current standard, you will solidify a life-saving foundation for future generations, ensuring that this city remains a national model for fire prevention and safety.

We stand ready to provide any technical data, statistics, or educational resources needed to support your deliberations on this critical matter. On behalf of the South Adams County Fire Department, we strongly recommend that the Commerce City City Council maintain the current residential fire sprinkler ordinance in its entirety.

Sincerely,



Bob Olme
Fire Chief
South Adams County Fire Department

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Fire Chief's Brief: Residential Sprinkler Statistical Analysis

Residential Sprinkler Ordinance

The Problem: Residential Fire Dangers

- **A. Current State of Residential Fires in South Adams County:**
 - **Statistics on Residential Fires:**
 - Number of residential fires annually:
 - Nationally- 344,600 to 358,500 residential structure fires per year. (USFA) 2017
 - SACFD- 88 ytd
 - Number of fire-related injuries:
 - Nationally- 11,650 civilian fire injuries in residential building fires
 - Estimated property damage from residential fires:
 - Sprinkled: \$2,166
 - Non-sprinklered: \$45,000 (assuming house isn't a total loss)
 - **Common Causes:** Cooking, Electrical, Heating Equipment, Smoking
USFA's "Residential building fire causes (2014–2023)"
- **B. Rapid Fire Spread in Modern Homes:**
 - Time to flashover:
 - Modern construction home (Non-Sprinklered) - 3-5 minutes
 - Modern construction home (Sprinklered) – flashover typically prevented. The NFPA 13D standard for residential sprinkler systems aims to prevent flashover for at least **10 minutes**
 - Impact on escape time:
 - Modern construction home w/o sprinklers- 2 to 3 minutes to escape
 - Modern construction home with sprinklers- 10 minutes+

The Solution: Residential Sprinkler Systems

- **A. Proven Effectiveness:**
 - **Reduction in Fatalities:**
 - 8/10 fire deaths occur at home

78% of fire deaths occur in residential occupancies “USFA Fire in the United States” Released Jan 2020

- National/State statistics on fatality reduction in sprinklered homes: 89% reduction

NFSA “US Experience with Sprinklers” Oct 2021

- **Reduction in Injuries:**
 - 31% reduction in injuries
- **Reduction in Property Damage:**
 - Average property loss from a home fire:
 - Sprinkled: \$2,166
 - Non-sprinklered: \$45,000 (assuming house isn’t a total loss)
- **Containment:**
 - 90% of home fires are contained by just one sprinkler head.
- **Response time:**
 - Residential fire sprinklers typically activate in 1.5 minutes
 - SACFD current average response time is 7.5 minutes
- **B. Benefits Beyond Life Safety:**
 - **Firefighter Safety:** Reduced risk for firefighters entering burning structures.
 - **Water Damage:** Often less water damage than traditional hose lines.
 - Volume from a fire hose- 3,000 gallons
 - Volume from sprinkler head- 341 gallons
 - **Environmental Impact:** Reduced emissions from smaller fires.
 - Greenhouse gas emissions are cut by 97.8%
 - Water usage is reduced between 50% and 91%
 - **Insurance Savings:** Potential for homeowner insurance premium reductions:
 - 30-35%- Home Fire Sprinkler Coalition

Addressing Common Concerns

- **A. Cost:**
 - **Average Installation Cost:**
 - Price of a retrofit system-
 - \$18-21K per system (~ \$7.00 per sq ft)
 - Average price of a system install-
 - NFPA 13D- \$6k-12k (3.98-5.00 per sq ft)
 - P2904- \$5k-7k (4.40-3.50 per sq ft)

- **B. Accidental Discharge:**
 - **Probability:**
 - 1 in 16 million chances of accidental discharge
 - SACFD education campaign for homeowners
 - **Causes:** Typical causes (freezing, mechanical damage, not spontaneous).
- **C. Aesthetics/Maintenance:**
 - Modern sprinkler heads are discreet, non-noticeable.
 - Minimal maintenance required.
- **D. Effect on Local Development:**
 - Number of Developments since the ordinance was put into effect-
 - 2024 Residential Sprinkler reviews completed 455
 - 2025 Residential Sprinkler reviews completed 188 so far
 - SACFD Fees associated with review and permitting of the systems- \$35
 - Increased Fire Hydrant Density (Fire Flow)

Repercussions of Appealing the Ordinance

- **A. Increase in prices for the system:**
 - Price of a retrofit system-
 - \$18-21K per system (~7.00 per sqft)
 - Average price of a system install-
 - NFPA 13D- \$6k-12k (3.98-5.00 per sqft)
 - P2904- \$5k-7k (4.40-3.50 per sqft)
- **B. Additional Costs for Homebuyers**
 - Water company tap fee charges
 - \$23,689 (3/4 in)
 - \$23,845 (1 in; fee for a single-family home currently doesn't exist because needing a tap this size implies a suppression system is present)
 - Higher insurance rates for the lifetime of the home