

Residential Fire Sprinklers

Residential fire sprinklers serve multiple purposes in the protection of single family structures within the Evergreen Fire Protection District (EFPD). A properly designed and installed NFPA 13D residential fire sprinkler system is designed to protect key areas within a residence while providing time for the occupants to safely escape a fire. In most cases if the fire is not fully extinguished it will be contained to the room or area of origin and kept in check until the arrival of fire fighters who will then be able to fully extinguish the fire. Within mountain communities like Evergreen these systems are supplied by a static water source determined by the sprinkler designer to provide a minimum of 20 minutes of water flow. This may also serve to minimize water damage and environmental impact from run-off.

When application is made for a building permit the County in which the building is to be constructed will often require documentation from the appropriate fire district that confirms that emergency service will be provided. At EFR we typically will provide a Will Serve On-Off Site letter that confirms the property in question is within the EFPD, the closest fire station, distance to a water source, acceptance or objection to access (based upon a review of a grading plan), and any requirement for fire protection systems.

Evergreen Fire/Rescue applies the following criteria in determining the need for protection systems within the district:

- Ability to meet the design requirements for roads and driveways as determined by the Jefferson and Clear Creek County transportation design and construction manuals. Auto sprinklers may serve as an alternative to meeting these guides;
- Application of the Insurance Service Organization Property Protection Classification (ISO PPC). An ISO PPC of 3X, 4X, or 10 will require the installation of auto sprinklers;
- Existing homes that are remodeled/renovated where the scope of work exceeds 50% of the structure may require the installation of protection systems based upon the criteria above.

The Evergreen Fire Protection District has an ISO PPC of 3, 4, and 10. The Evergreen Metro Water District (EMD) is ISO 3 due to the water distribution system and regular placement of fire hydrants. Areas outside of the EMD are ISO 4 and any location more than 5 miles from an EFR fire station are ISO 10. For the ISO 3 and 4 locations this PPC is modified with an X designation when the distance to a credible water source (recognized by ISO) exceeds 1000'. While there are many water sources within the district such as ponds and streams they are not all useable. EFR maintains all credible water sources in data and response bases such as I Am Responding and First Due.