TOPIC: Fire Sprinkler Protection in Residential Garages ORSC/AT/#1 & OSSC/9/#3


REVISED: March 17, 2017 [Paul L. Scarlett], Director

REFERENCE: Oregon Residential Specialty Code – Appendix T
Oregon Structural Specialty Code – Chapter 9

SUBJECT: NFPA 13D System Sprinkler Protection Over Fuel-Fired Equipment in Garages in Residential Construction

QUESTION: Where NFPA 13D systems are required, are residential quick response sprinkler heads required to be installed over or adjacent to fuel-fired equipment located in garages?

RESPONSE: Yes. Where NFPA 13D systems are required under certain circumstances, quick response sprinkler heads must be installed over or adjacent to fuel-fired equipment that is located in a garage.

The Oregon Residential Specialty Code (ORSC), Appendix T (AT) 2904.1 states that when installed, residential fire sprinkler systems, or portions thereof, shall be in accordance with NFPA 13D, or Section AT2904. The Oregon Structural Specialty Code (OSSC) Section 903 states that automatic sprinkler systems installed in one and two family dwellings, Group R-3, R4-Condition 1, and townhouses shall be permitted to be installed in accordance with NFPA 13D standards. NFPA 13D Chapter 8 states that where fuel-fired equipment is below or on the same level as occupied areas of the dwelling unit, at least one quick-response intermediate temperature sprinkler shall be installed above the equipment or at the wall separating the space with the fuel-fired equipment from the occupied space. Sprinklers are not required in garages, open attached porches, carports, and similar structures. However, Annex A to NFPA Chapter 8 states jurisdictions may add this requirement locally for garages.
The Bureau of Development Services (BDS) has determined that sprinklers are required in garage in certain circumstances, described as follows:

**A. When this requirement applies:**

1. Where NFPA 13D systems are required by the OSSC for 1 and 2 family dwellings, Group-R3, Group R-4, or Townhouses constructed under the OSSC;
2. Where NFPA 13D systems are required for 1 and 2 family dwellings constructed under the ORSC, as required as the result of a building code appeal, land use review, fire department access deficiencies, water supply deficiencies, or other reason as determined by the Fire Marshal’s Office; or
3. Where NFPA 13D systems are voluntarily installed.

**B. Standard:**

1. Where fuel-fired equipment is below or on the same level as occupied areas of the dwelling unit, at least one residential quick-response intermediate temperature sprinkler shall be installed above the equipment or at the wall separating the space with the fuel-fired equipment from the occupied space; and
2. All other standards of NFPA 13D continue to apply

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