



OREGON FIRE CODE Interpretations and Technical Advisories

A collaborative service by local and state fire professionals, along with our stakeholders and customers, to provide consistent and concise application of Oregon's fire prevention and life safety regulations.

Date: April 1, 2014

Ruling: Technical Advisory No. 14-04 (Revised TA #05-03 & #11-05)

Subject: Compounding Fire Flow and Sprinkler Flow

Code Reference: 2014 Oregon Fire Code, Appendix B

Question: Are sprinkler flow and fire flow demands cumulative?

- **Answer:** The answer to whether or not to compound sprinkler demand and fire flow may be based on two factors: whether or not the two demands share a single source and the amount of reduction granted for fire sprinklers. The following guidelines should be considered when determining whether or not to compound sprinkler demand and fire flow:
 - 1. Assuming a single, shared water source and a reduction in fire flow of up to 50% granted for fire sprinklers, the total required water supply may be either the sprinkler demand or the required fire flow, whichever is larger.
 - 2. Assuming a single, shared water source and a reduction in fire flow of more than 50% up to 75% granted for fire sprinklers, the total required water supply should be cumulative.
 - 3. When the sprinkler water supply and fire flow water supply are from completely separate sources, both the fire flow and sprinkler flow should be required.
 - 4. When inside and/or outside hose stream demand are not added to sprinkler flow demand, additional fire flow may be required.

Consideration should also be given to source controls in the rare event of a sprinkler system failure. The fire department should be capable of shutting off the water supply to the sprinkler system in order to make such water available to be used for fire suppression operations.

Other References: IFC Commentary NFPA 13