

**CHAPTER 16.50
FIRE FLOW**

Sections:

- 16.50.010 Statement of Policy
- 16.50.020 Definitions
- 16.50.030 Fire Flow Calculation Area
- 16.50.040 Fire Flow requirements for Buildings

16.50.010 Statement of Policy: This chapter is enacted to establish the procedure to determine the fire flow requirement for buildings. (Ord. 2801, 3/8/16)

16.50.020 Definitions:

- A. Fire Flow: The flow rate of water supply, measured at a minimum of twenty (20) pounds per square inch (psi) (138 kPa) residual pressure, that is available for fire fighting.
- B. Fire Flow Calculation Area: The floor area, in square feet used to determine the required fire flow. (Ord. 2801, 3/8/16)

16.50.030 Fire Flow Calculation Area:

- A. General: The fire flow calculation area shall be the total floor area of all floor levels within the exterior walls, and under the horizontal projections of the roof of a building except for Type IA and 1B construction buildings.
- B. Area Separations: Portions of buildings which are separated by fire walls without openings, constructed in accordance with the International Building Code, are allowed to be considered as separate fire flow calculation areas.
- C. Type 1A and 1B Construction: The fire flow calculation area of buildings constructed of Type 1A and Type 1B construction shall be the area of the three (3) largest successive floors. (Ord. 2801, 3/8/16)

16.50.040 Fire Flow Requirements for Buildings:

- A. One and two family dwellings. The minimum fire flow and flow duration requirements for one (1) and two (2) family dwellings having a fire flow calculation area that does not exceed three thousand six hundred (3,600) square feet shall be one thousand (1,000) gallons per minute for one (1) hour. Fire flow and flow duration for dwellings having a fire flow calculation area in excess of three thousand six hundred (3,600) square feet shall not be less than specified in Table B105.1 of the 2012 edition of the International Fire Code.
- B. Buildings Other Than One and Two Family Dwellings: The minimum fire flow and flow duration for buildings other than one (1) and two (2) family dwellings shall be as specified in Table B105.1 of the 2012 edition of the International Fire Code.
- C. Fire Sprinkler Credit: Fire flow may be reduced up to fifty percent (50%) for buildings equipped with an automatic fire sprinkler system designed to National Fire Protection Association (NFPA) Standard 13. Fire flow may be reduced up to twenty-five percent (25%) for buildings equipped with an automatic fire sprinkler system designed to NFPA Standard 13R.

For buildings located more than five (5) road miles from the closest City of Moses Lake Fire Station, a maximum reduction of forty percent (40%) will be granted for NFPA 13 systems and ten percent (10%) for NFPA 13R systems.

D. Fire Flow Adjustment Based on Occupancy Classification:

1. Non-Combustible: 25% reduction
2. Slow burning, limited combustibles: 15% reduction
3. Moderate burning: No reduction
4. Free Burning: 15% addition
5. Quick, intense, flash burning: 25% addition

E. Fire flow Adjustment Based on Structural Exposures:

- 0-10 feet: 25% addition
 - 11-30 feet: 20% addition
 - 31-60 feet: 15% addition
 - 61-100 feet: 10% addition
 - 101-150 feet: 5% addition
- (Ord. 2801, 3/8/16)