

OPERATING POLICY 4a FIRE FLOW REQUIREMENTS FOR SINGLE FAMILY HOMES



Kirkland Fire/Building Department • 123 Fifth Avenue, Kirkland, WA 98033 • (425) 587-3650

From the 2018 International Fire Code Effective November 2020

IFC TABLE B105.1(1) REQUIRED FIRE-FLOW FOR ONE- AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES

| FIRE-FLOW CALCULATION AREA (square feet) | AUTOMATIC SPRINKLER SYSTEM (Design Standard) | MINIMUM FIRE- FLOW (gallons per | FLOW DURATION (hours) |
|--|--|---------------------------------------|--------------------------|
| 0.2.600 | No cutouratio aggintulos custoss | minute | 1 |
| 0-3,600 | No automatic sprinkler system | 1,000 | 1 |
| 3,601 and greater | No automatic sprinkler system | Value in Table | Duration in Table |
| | | B105.1(2) | B105.1(2) |
| | | | at the required |
| | | | fire-flow rate |
| 0-3,600 | Section 903.3.1.3 of the | 500 | 1/2 |
| | International Fire Code or | | |
| | Section P2904 of the International | | |
| | Residential Code | | |
| 3,601 and greater | Section 903.3.1.3 of the | 1/2 value in | 1 |
| | International Fire Code or | Table | |
| | Section P2904 of the International | B105.1(2) | |
| | Residential Code | | |

TABLE B105.1(2)

REFERENCE TABLE FOR TABLE B105.1(1)

| Fire flow calculation area (square feet) | | | | | |
|--|-------------------|-----------------|-------------------|--------------|-----------------------------------|
| Type IA and IB | Type IIA and IIIA | Type IV and V-A | Type IIB and IIIB | Type V-B | Fire flow (gallons per min) |
| 0-22,700 | 0-12,700 | 0-8,200 | 0-5,900 | 0-3,600 | 1,500 * |
| 22,701-30,200 | 12,701-17,000 | 8,201-10,900 | 5,901-7,900 | 3,601-4,800 | 1,750 |
| 30,201-38,700 | 17,001-21,800 | 10,901-12,900 | 7,901-9,800 | 4,801-6,200 | 2,000 |
| 38,701-48,300 | 21,801-24,200 | 12,901-17,400 | 9,801-12,600 | 6,201-7,700 | 2,250 |
| 48,301-59,000 | 24,201-33,200 | 17,401-21,300 | 12,601-15,400 | 7,701-9,400 | 2,500 |
| 59,001-70,900 | 33,201-39,700 | 21,301-25,500 | 15,401-18,400 | 9,401-11,300 | 2,750 |