BROCHURE #98
FIRE FLOW TABLE B103.3

What is fire flow?
Fire flow is the term used for how much water it takes to put out a fire.

When is fire flow required?
Fire flow is required when a division of land occurs or your house is 5,000 square feet or more.

How much fire flow is needed?
When required, 500 gallons per minute (g.p.m.) for a minimum of thirty (30) minutes is needed for one and two family homes here in Kitsap County. To provide fire flow, at least one fire hydrant must be within 600 feet of the dwelling and shall be capable of supplying 500 g.p.m.

How is square footage calculated for fire flow?
To calculate the square footage of your house for fire flow:
Total Square Footage within exterior walls _____
Plus (+) Square footage of any covered decks or porches _____
Plus (+) Square footage of any areas below elevated decks that may be used for storage _____
Equals (=) Total Fire Flow Square Footage _____

When can I use Fire Flow Table B103.3?
If the total square footage is 5,000 square feet or more and your home is on an existing lot, not created by a subdivision then you may use the table below to choose your fire flow options.
The below table is used to provide different methods of fire protection to meet your fire flow requirements, which is 100% or 500 g.p.m. which is needed to meet when your house is 5,000 square feet or more.
Below are the methods for achieving the fire protection credits, and the explanation. You may use multiple methods in order to reach 100%. If you choose to use fire flow credit 6 through 10 you must show how you meet the credit on the construction plans.

Method	Fire Protection Credit
1.) Automatic Fire Sprinkler System **The installation of a residential fire sprinkler system throughout the living space.**	100% or 500 g.p.m. fire protection credit.
2.) An existing fire hydrant within 1000 feet (1,000') of structure which is capable of supplying 500 g.p.m. for 30 minutes and on an accessible road. **To find out where your closest hydrant is located and how much water is available contact your water department, they will be able to tell you how much fire flow is coming from the closest hydrant and were that hydrant is located. If you have the fire flow and it is**	100% fire protection credit.

within the 1000 feet, ask for a letter from the water department to provide to the Fire Marshal's Office.	
3.) NFPA 13D (partial system) Residential fire sprinkler system for target hazards (systems may use domestic water supply.) **The installation of a residential fire sprinkler system in the kitchen and/or attached garages. You can use the domestic water supply line to provide the water for this system.**	Kitchens = 50% or 250 g.p.m. credit. Garages = 25% OR 125 g.p.m. credit. 75% or 375 g.p.m. credit for protection of kitchen and attached garage.
4.) Automatic fire extinguishing system for protection of cooking appliances. **A fire extinguishing system over the cooking appliance can be two (2) sprinkler heads installed in the kitchen or the installation of the Guardian III Automatic Residential Fire Suppression System under the exhaust hood. The Guardian III is limited to electric ranges up to 42" wide x 24" deep or gas ranges 36" wide x 24" deep. If your appliance is larger, a commercial fire suppression system is needed.**	25% or 125 g.p.m. fire protection credit.
5.) An approved monitored fire alarm system. **The installation of a compliant fire alarm system that is monitored by a UL licensed monitoring company, provides heat detectors, smoke detectors and audio/visual notification throughout the residence and is approved by the Fire Marshal Office. A combination fire/burglar system can be installed provided the fire alarm overrides the burglar alarm.**	25% or 125 g.p.m. fire protection credit.
6.) Fire-rated sheetrock installed throughout structure and automatic door closure for attached garage. **Type X sheetrock, (5/8" thickness) installed on all walls and ceilings throughout the structure and an automatic door closure on the door from the living quarters to the attached garage.**	50% or 250 g.p.m. fire protection credit.
7.) Class (A) or (B) Non-Combustible Roof Covering. **Examples of Class A roofing materials include: Fiberglass reinforced asphalt shingles, tile, clay tile, concrete, brick, slate, metal roofing and fiber cement shingles. Class A materials generally need an underlayment of additional materials to give it the A rating.** **Examples of Class B roofing materials include: Pressure-treated shakes and shingles.** **The Class and description should be provided on the building plans.**	25% or 125 g.p.m. fire protection credit.

8.) Create defensible space within 30 feet (30') around the structure. Use of fire resistant landscaping plants and vegetation. **A defensible space is an area where combustible material, including vegetation, has been treated, cleared or modified to slow the rate and intensity of an advancing fire and to create a safer area for fire suppression operations to occur.** **FEMA Technical Fact Sheet No. 4 Defensible Space, Home Builder's Guide to Construction in Wildfire Zones is available upon request or can be downloaded at https://www.fema.gov/media-library/assets/documents/15962**	25% or 125 g.p.m. fire protection credit.
9.) Ignition-resistant construction in accordance with the International Urban Wildland Interface Code. **Chapter 5 Section 503-506 of the International Urban Wildland Interface Code lists the classes of Ignition Resistant Construction that can be applied to the structure. There are three (3) classes available to choose from however be aware that the class chosen for your residence also requires additional protection be provided for items such as eaves, vents, exterior doors, decks, etc. A copy of the code is available in our office for your review.**	25% or 125 g.p.m. fire flow credit
10.) Modified fire wall between an attached garage and the living spaces is installed with: Automatic door closure with solid core or 1-hour-rated door; Latched on all openings in ceiling of garage; Ceiling openings to be 22-inches by 36-inches minimum, to allow firefighter access; Fire-rated sheetrock, both sides of wall, from roof sheathing in attic to floor; penetrations sealed airtight. **Any living spaces above the garage cannot be included in the 25% square footage subtraction of the garage from the total dwelling size. If you have a living space above the garage a one hour floor/ceiling assembly needs to be installed.**	25% or 125 g.p.m. fire flow credit. 25% of the square footage of the garage shall be subtracted from the total residential dwelling size to Determine need for fire flow or fire protection credits.