

CITY OF MERCER ISLAND

Fire Marshal's Office

3030 78th Ave SE | MERCER ISLAND, WA 98040

PHONE: 206.275.7966 | www.mercerisland.gov



2020 RESIDENTIAL FIRE AREA SQUARE FOOTAGE CALCULATION

Project Type: <input type="checkbox"/> New Single Family <input type="checkbox"/> Alteration <input checked="" type="checkbox"/> Addition	
Project Address: 6408 E Mercer Way - Mercer Island, WA 98040	
Contact Name: Matthew Mawer	Phone No. 425.417.7817
Owner Name: Wei Zhang	

Gross floor area shall be that area in square feet under the roof line of the structure including all usable area whether heated or not, above and below grade. This includes the garage and any unheated storage rooms or attachments including covered decks. If it is *usable space*, then it is included in the **Gross** square footage calculation. *This is not the same calculation for floor area ratio.*

For all construction types, add all the interior wall measurements of each floor and the basement and total that figure.

NEW CONSTRUCTION *(over for addition or alteration)*

N/A

Measurements	Square Footage
Main Floor interior	
Lower Floor Interior	
Other Floors interior	
Basement interior	
Attached Garage interior	
Covered Decks interior	
Other interior	
TOTALS	0.00

ADDITION or ALTERATION

Does this house have an existing Fire Sprinkler System? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> / Fire Alarm System Yes <input type="checkbox"/> No <input type="checkbox"/>					
Measurements	Existing Square Footage	Standardized Value	Added Footage	Final Square Footage	
Main Floor interior	2161	x \$177.76 \$ 384,139.36		2161	
Lower Floor Interior	1685	x \$177.76 \$ 299,525.60	722	2407	
Other Floors interior	1871	x \$177.76 \$ 332,588.96		1871	
Basement interior		x \$177.76 \$ 0.00		0	
Attached Garage interior	530	x \$36.88 \$ 19,546.40		530	
Covered Decks interior		x \$36.88 \$ 0.00		0	
Other interior		x \$177.76 \$ 0.00		0	
TOTALS	6,247.00	\$1,035,800.32	722	6,969.00	

Construction Cost \$ 150,000

Official Use

Verified Cost \$ _____

Higher of Verified or Cost \$ _____ / Value \$1,035,800.32 = % _____

- Valuation Ratio
- Exempt structure – detached garage or similar structure less than 750 sf.
 - Less than 10% (fire review not required)
 - 10 – 49% (monitored Household Fire Alarm System per NFPA 72 Chapter 29, if fire deficiency)
 - 50% or greater (substantial alteration)

2015 INT'L FIRE CODE

901.4.4 Additional Fire Protection Systems. In occupancies of a hazardous nature, where special hazards exist in addition to the normal hazards of the occupancy, or where the fire code official determines that access for fire apparatus is unduly difficult, the fire code official shall have the authority to require additional safeguards. Such safeguards include, but shall not be limited to, the following:

- Automatic fire detection systems,
- Fire alarm systems,
- Automatic fire-extinguishing systems,
- Standpipe systems, or
- Portable or fixed extinguishers.

Fire protection equipment required under this section shall be installed in

accordance with this code and the applicable referenced standards.

2015 INT'L RESIDENTIAL CODE

AV107.1 Fire Sprinklers. An approved automatic fire sprinkler system shall be installed in new one-family and two-family dwellings and townhouses in accordance with Appendix Q.

AV107.2 Fire Sprinklers in Existing Buildings. An approved automatic fire sprinkler system shall be installed throughout the residence in existing one-family and two-family dwellings (and townhouses) in accordance with Appendix Q when undergoing a remodel or addition when the construction value of all additions, alterations or repairs performed within

a sixty-month period exceeds 50% of the value of the residence. Value shall be determined by a method approved by the fire code official.

AV107.3 Household Fire Alarm System. An approved household fire alarm system shall be installed throughout the residence in existing one-family and two-family dwellings (and townhouses) that have deficiencies in fire flow, hydrants or access. This system shall be installed in accordance with NFPA 72 Chapter 29 when undergoing a remodel or addition when the construction value of all additions, alterations or repairs performed within a sixty-month period is within 10% to 50% of the value of the residence. Value shall be determined by a method approved by the fire code official.