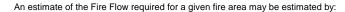
TABLE B2: FIRE FLOW REQURIEMENTS BASED ON FIRE UNDERWRITERS SURVEY(FUS) 2020

PROJECT: OTT-24006874-A0

Building: 1136 Gabriel Street



F = 220 * C * SQRT(A)

where: F = required fire flow in litres per minute

A = total floor area in m² (including all storeys, but excluding basements at least 50% below grade)

C = coefficient related to the type of construction



Task	Options	Multiplier	Input	Value Used	Fire Flow Total (L/min)	
	Wood Frame	1.5				
Choose Building Frame (C)	Ordinary Construction	1				
	Non-combustible Construction	0.8	Non-combustible Construction	0.8		
	Fire Resistive Construction	0.6				
	Fourth Floor		335			
	Third Floor		335			
	Second Floor		335	1340.0 m ²		
	First Floor		335			
	Basement (At least 50% be	ow grade, not included)	335			
Fire Flow (F)	F = 220 * C * SQRT(A)					
Fire Flow (F)	Rounded to nearest 1,000					

Reductions/Increases Due to Factors Effecting Burning

Task	Options	Multiplier		Input					Value Used	Fire Flow Change (L/min)	Fire Flow Total (L/min)		
	Non-combustible	-25%			Limited Combustible								
	Limited Combustible	-15%											
	Combustible	0%								-15%	-900	5,100	
	Free Burning	15%											
	Rapid Burning	25%											
Choose Reduction Due to Sprinkler System	Adequate Sprinkler Conforms to NFPA13	-30%			No Sprinkler					0%	0	5,100	
	No Sprinkler	0%											
	Standard Water Supply for Fire Department Hose Line and for Sprinkler System	-10%			Not Standard Water Supply or Unavailable					0%	0	5,100	
	Not Standard Water Supply or Unavailable	0%											
	Fully Supervised Sprinkler System	-10%			Not Fully Supervised or N/A						0%	0	5,100
	Not Fully Supervised or N/A	0%			Title Fally Supervised of Nyn								
						Exposed Wall Length							
Choose Structure Exposure Distance	Exposures	Separ- ation Dist (m)	Cond	Separation Conditon	Exposed Wall type	Length (m)	No of Storeys	Length- Height Factor	Sub- Conditon	Charge (%)	Total Charge (%)	Total Exposure Charge (L/min)	
	West	6.61	2	3.1 to 10	Type V	7.37	1	7.37	2A	15%			
	East	4.69	2	3.1 to 10	Type V	11.38	2	22.76	2B	16%	31%	1,581	6,681
	South	32.87	5	30.1 to 45	Type V	14.87	2	29.74	6	0%			
	North	39.05	5	30.1 to 45	Type V	30.42	1	30.42	6	0%			
Obtain Required	Total Required Fire Flow, Rounded to the Nearest 1,000 L/min = 7					7,000							
Fire Flow	Total Required Fire Flow, L/s = 11						116.7						

Exposure Charges for Exposing Walls of Wood Frame Construciton (from Table G5)

Type V Wood Frame

Type IV-III (U) Mass Timber or Ordinary with Unprotected Openings
Type IV-III (P) Mass Timber or Ordinary with Protected Openings
Type II-I (U) Noncombustible or Fire Resistive with Unprotected Openings
Type II-I (P) Noncombustible or Fire Resistive with Protected Openings

Conditons for Separation

Separation Dist	Condition					
Om to 3m	1					
3.1m to 10m	2					
10.1m to 20m	3					
20.1m to 30m	4					
> 30.1m	5					