

ENGINEERING

File No. 20-184 Date: 14/10/2020

Project:Proposed Apartment BuildingsDesigned:Guillaume BrunetProject Address:3817-3843 - Innes RoadChecked:Guillaume BrunetClient:Oligo DevelopemtnDrawing Reference:C200 & C300

BLOCK A & C

Term	Options	Multiplier	Choose:	Value	unit	Fire Flow
Coefficient C related to the type of construction	Wood Frame	1.5	Non-combustible construction	0.8		
	Ordinary Construction	1.0				
	Non-combustible construction	0.8				
	Fire resistive construction <2 hrs	0.7				
	Fire resistive construction >2 hrs	0.6				
Type of housing	Single family dwelling	0	Building - no. of units per floor	12		
	Townhouse - no. of units	0			unit	
	Building - no. of units per floor	2				
	Number of floors excluding the basement			3	floor	
	Floor space per unit	1	892	894	sq.m.	
Required fire flow	Fire Flow = 220 x C x Area^0.5			L/min	9,115	
tequired fire flow				L/s	152	
Occupancy hazard reduction or surcharge	Non-combustible	-0.25				
	Limited combustible	-0.15	Limited combustible			
	Combustible	0		-0.15		
	Free burning	0.15			L/min	7,747
	Rapid burning	0.25]		L/s	129
Sprinkler reduction	Sprinklers (NFPA13)	-0.30	True	-0.3		
	Water supply is standard for both the system and fire department hose lines	-0.10	True	-0.1	L/min	3,874
	Fully supervised system	-0.10	True	-0.1	L/s	65
Exposure distance between units	North side	Over 45m	0			
	East side	10.1 to 20m	0.15			
	South side	Over 45m	0		L/min	4,842
	West side	20.1 to 30m	0.1	0.25	L/s	81
Minimum required fire flow rate (rounded to nearest 100)					L/min	4,800
Minimum required fire flow rate					L/s	80
Required duration of fire flow					min	30