

ENGINEERING

File No. 20-184 Date: 13/10/2020

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

BLOCK B

| Term | Options | Multiplier | Choose: | Value | unit | Fire Flow |
|---|---|-------------|-----------------------------------|------------------|-------|-----------|
| | | | | | | |
| Coefficient C related to the type of construction | Wood Frame | 1.5 | Non-combustible construction | | | |
| | Ordinary Construction | 1.0 | | | [| |
| | Non-combustible construction | 0.8 | | 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 | | | |
| | Townhouse - no. of units | 0 | | 7 | unit | |
| | Building - no. of units per floor | 2 | | | | |
| | Number of floors excluding the basement | | | 5 | floor | |
| | Floor space per unit | 1 | 557 | 557 | sq.m. | |
| Required fire flow | Fire Flow = 220 x C x Area^0.5 | | | L/min | 9,288 | |
| equired life flow | | | | L/s | 155 | |
| | | | | | | |
| 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 | 7,895 |
| | Rapid burning | 0.25 | | | L/s | 132 |
| 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 | 3,948 |
| | Fully supervised system | -0.10 | True | -0.1 | L/s | 66 |
| Exposure distance between units | North side | Over 45m | 0 | | | |
| | East side | 10.1 to 20m | 0.15 | | | |
| | South side | Over 45m | 0 | | L/min | 4,935 |
| | West side | 20.1 to 30m | 0.1 | 0.25 | L/s | 82 |
| | | | | | | |
| | Minimum required fire flow rate (rounded to nearest 100) | | | | L/min | 4,900 |
| Minimum required fire flow rate | | | | | L/s | 82 |
| | | | Required durat | ion of fire flow | min | 30 |