OBC Fire Flow Calculations

Per OBC Div. B A-3.2.5.7.

Project Name: Larry Robinson Arena
Project No: 23211
Client: The City of Ottawa

Designed By: Adam Poapst, P. Eng.
Reviewed By: Francois Lafleur, P.Eng
Date: 2025-03-03

Building Description: Arena

Step		Input	Multiplier	Value Used	Fire Flow (L/min)
A	**Water Supply Cofficient (K)**				
	Type of construction:	Yes		22	
	Non-combustible or heavy timber, no fire-resistance rating				
	OBC Group or Division				
	A-1, A-3<				
B	**Building Volume (V)**				
	Building Footprint (m2)	3315			
	Average height (m)	9			
	Total volume (V) (m3)			29835	
C	**Spatial Coefficient Values (S)**				
	S North (m)	30	0.00		
	S South (m)	10	0.00		
	S East (m)	30	0.00		
	S West (m)	30	0.00		
	S Total = 1+[North+South+East+ West] (m)			1.00	
D	**Water Supply Calculation**				
	Q = KVS_{Total} (L)			656,370	
E	**Required Fire Flow (L/min) (from Table 2)**				9000
	Required Fire Flow (L/s)				150

Minimum Storage Required for 2 hr period (L)	**1,080,000**