

PRELIMINARY FIRE FLOW CALCULATION



Project Name		City Project No	
Project Description			

This form is to estimate fire flow requirements to determine possible watermain extension. Actual fire flow requirements for the proposed facility will be verified by the Fire Prevention Division.

FIRE AREA (A)		
1 st Floor		Sq. Ft.
2 nd Floor		Sq. Ft.
3 rd Floor		Sq. Ft.
4 th Floor		Sq. Ft.
5 th Floor		Sq. Ft.
6 th Floor		Sq. Ft.
TOTAL AREA (A)		Sq. Ft.

CONSTRUCTION TYPE (C)	
Wood Frame	1.5 = C
Ordinary	1.0 = C
NonCombustible	0.8 = C
Fire Resistive	0.6 = C

BASE FLOW (Q)		GPM
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← $Q = 18(C)(\sqrt{A})$

HAZARD (P)		%
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Hazard Classification Table	
Light	-25%
Ordinary	0%
Extra	+25%
Complete Auto Sprinkler	-30%

NEW BASE FLOW (N)		GPM
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← $N = (1+P)*Q$

EXPOSURES %			
	Distance (Ft.)	Charge	
North			%
South			%
East			%
West			%
TOTAL % (E)			%

Exposure Charge Table	
0 – 10'	+25%
11 – 30'	+20%
31 – 60'	+15%
61 – 100'	+10%
101 – 150'	+5%

(75% Maximum)

TOTAL FLOW (T)		GPM
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← $T = (1+E)*N$

# HYDRANTS NEEDED		GPM
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← $T/1000$

(within 500' of remote point of building)

Calculated By:	Date:
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