



COMMERCIAL FIRE-FLOW WORKSHEET

For all buildings constructed using the International Building Code, *Townhomes* and *Accessory Structures* more than 3,599 square feet



Permit Application # _____ Reviewed by: _____ Date: _____

Project Name: _____ Applicant Name: _____

Phone: _____ Email: _____

Exempt Reason:

Substantial Alteration Calculations (Structures constructed prior to November 14, 1992)

- Year Built: _____ Permit # _____ Existing building area _____
- Area of addition _____ + Area of replacement _____ + Area of remodel _____ Total = _____
- Lines 2 divided by line 1 x 100 = percent of alteration. _____
- Check alerts for cumulative total of any additions or replacements since 11/15/92.
- Add line 3 to line 4. If the total is equal to or greater than 50%, Fire Flow and Emergency Vehicle Access are required. _____

Accumulated alteration is less than 50%.

Required Fire Flow

- Fire Flow Calculation Area: _____
- Type of Construction: _____
- Fire flow from Table 17C.60-3 _____ gpm for _____ hrs
- Credits
Sprinklers¹: 75% 50%
- Required Fire Flow: _____ gpm for _____ hrs
- Fire Flow available (from purveyor letter) must equal or exceed line 5. _____ gpm for _____ hrs
- Hydrants: Existing Hydrant Adequate Additional Hydrants Required

¹ Sprinkler credit: 75% credit for NFPA 13 Sprinkler except H-occupancies receive 50% credit. Sprinkler credit: 50% for NFPA 13R. Shall not reduce to less than the minimum fire flow of Table 17C.60-3

TABLE 17C.60-3						
Required Fire Flow for all Buildings Constructed Using the International Building Code, all Townhomes, and Accessory Structures Over 3,599 Square Feet						
		IBC TYPE OF CONSTRUCTION				
REQUIRED FIRE FLOW (GPM)	DURATION (HOURS)	IA IB	IIA IIIA	VA IV- H.T.	IIB IIIB	VB
		WHEN TOTAL FIRE-FLOW CALCULATION AREA IN SQUAREFEET IS EQUAL TO OR LESS THAN THESE VALUES				
1,500	2	500	500	500	500	500
1,500	2	5,500	3,700	2,600	2,100	1,600
1,500	2	11,100	6,800	4,700	3,500	2,400
1,500	2	15,900	9,300	6,200	4,500	2,900
1,500	2	22,700	12,700	8,200	5,900	3,600
1,750	2	30,200	17,000	10,900	7,900	4,800
2,000	2	38,700	21,800	12,900	9,800	6,200
2,250	2	48,300	24,200	17,400	12,600	7,700
2,500	2	59,000	33,200	21,300	15,400	9,400
2,750	2	70,900	39,700	25,500	18,400	11,300
3,000	3	83,700	47,100	30,100	21,800	13,400
3,250	3	97,700	54,900	35,200	25,900	15,600
3,500	3	112,700	63,400	40,600	29,300	18,000
3,750	3	128,700	72,400	46,400	33,500	20,600
4,000	4	145,900	82,100	52,500	37,900	23,300
4,250	4	164,200	92,400	59,100	42,700	26,300
4,500	4	184,400	103,100	66,000	47,700	29,300
4,750	4	203,700	114,600	73,300	53,000	32,600
5,000	4	225,200	126,700	81,100	58,600	36,000
5,250	4	247,700	139,400	89,200	65,400	39,600
5,500	4	271,200	152,600	97,700	70,600	43,400
5,750	4	295,900	166,500	106,500	77,000	47,400
6,000	4	GREATER	GREATER	115,800	83,700	51,500
6,250	4			125,500	90,600	55,700
6,500	4			135,500	97,900	60,200
6,750	4			145,800	106,800	64,800
7,000	4			156,700	113,200	69,600
7,250	4			167,900	121,300	74,600
7,500	4			179,400	129,600	79,800
7,750	4			191,400	138,300	85,100
8,000	4			GREATER	GREATER	GREATER