

Osceola County Department of Fire Rescue and Emergency Medical Services



Office of the Fire Marshal – Fire Plans Review & Permits
1 Courthouse Square, Suite 1400, Kissimmee, FL 34741
Phone: 407-742-6700



FIRE FLOW WORKSHEET NFPA METHOD

Date: _____ Calculated by: _____

Site Development Plan Permit #: _____ Owner: _____

Project Address: _____

Construction Type: _____ Number of stories: _____ Occupancy Classification: _____

Section 1

Minimum Required Fire Flow and Flow Duration for Buildings:

Using NFPA 1, "Fire Code" (currently adopted edition), Chapter 18, Table 18.4.5.2.1 - Minimum Required Fire Flow and Flow Duration for Buildings (see page 2), provide the total floor area, required fire flow, and flow duration in the area provided below.

The fire area shall be the total floor area of all floor levels of a building except as modified in 18.4.4.2

18.4.4.2 - The fire flow area of a building constructed of Type I (443), Type I (332), and Type II (222) Construction shall be the area of the three largest successive floors.

Total Floor Area _____ Sq. Ft. @ 100%

Total Floor Area _____ Sq. Ft. of the three largest successive floors.

Required Fire Flow (GPM) _____ Flow Duration (hours) _____

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FIRE-FLOW CALCULATION AREA (square feet)					FIRE- FLOW (gallons per minute)	FLOW DURATION (hours)
Type I(443) I(332), II(222)	Type II(111), III(211)	Type IV(2HH), V(111)	Type II(000), III(200)	Type V(000)		
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500	2
22,701-30,200	12,701-17,000	8,201-10,900	5,901-7,900	3,601-4,800	1,750	
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	
38,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,400	2,500	
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750	3
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000	
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	
97,701-112,700	54,901-63,400	35,201-40,600	25,901-29,300	15,601-18,000	3,500	
112,701-128,700	63,401-72,400	40,601-46,400	29,301-33,500	18,001-20,600	3,750	
128,701-145,900	72,401-82,100	46,401-52,500	33,501-37,900	20,601-23,300	4,000	4
145,901-164,200	82,101-92,400	52,501-59,100	37,901-42,700	23,301-26,300	4,250	
164,201-183,400	92,401-103,100	59,101-66,000	42,701-47,700	26,301-29,300	4,500	
183,401-203,700	103,101-114,600	66,001-73,300	47,701-53,000	29,301-32,600	4,750	
203,701-225,200	114,601-126,700	73,301-81,100	53,001-58,600	32,601-36,000	5,000	
225,201-247,700	126,701-139,400	81,101-89,200	58,601-65,400	36,001-39,600	5,250	
247,701-271,200	139,401-152,600	89,201-97,700	65,401-70,600	39,601-43,400	5,500	
271,201-295,900	152,601-166,500	97,701-106,500	70,601-77,000	43,401-47,400	5,750	
295,901-Greater	166,501-Greater	106,501-115,800	77,001-83,700	47,401-51,500	6,000	
-	-	115,801-125,500	83,701-90,600	51,501-55,700	6,250	
-	-	125,501-135,500	90,601-97,900	55,701-60,200	6,500	
-	-	135,501-145,800	97,901-106,800	60,201-64,800	6,750	
-	-	145,801-156,700	106,801-113,200	64,801-69,600	7,000	
-	-	156,701-167,900	113,201-121,300	69,601-74,600	7,250	
-	-	167,901-179,400	121,301-129,600	74,601-79,800	7,500	
-	-	179,401-191,400	129,601-138,300	79,801-85,100	7,750	
-	-	191,401-Greater	138,301-Greater	85,101-Greater	8,000	

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Section 2

NFPA Automatic Sprinkler Reduction:

Automatic Sprinklers: Yes ___ No ___ If yes, subtract 75% from the required fire flow GPM calculated in step 1.

The required fire flow shall be reduced by 75 percent when the building is protected throughout by an approved automatic sprinkler system. The resulting fire flow shall not be less than 1000 gpm (3785 L/min).

Subtotal _____ GPM

Section 3

Permitted Fire Flow Reduction for Building Separation:

Separation distance Between Buildings on a Single Lot:

>30 ft and \leq 50 ft _____ > 50 ft _____ Permitted Fire Flow Reduction: 25%

Separation Distance to Lot Line or Easement^a:

>15 ft and \leq 25 ft _____ >25 ft _____ Permitted Fire Flow Reduction: 40%

^a See 18.4.5.1.4.3.

18.4.5.1.4.3

Where a building is contiguous to a public right of way or no-build easement, the separation distance shall be the distance between the building to the opposite side of the right of way or no-build easement.

Final Fire Flow Required _____ GPM