

**FIRE FLOW REQUIREMENT WORK SHEET**

<b>DATE:</b> _____	<b>CONTACT PHONE#:</b> _____
<b>NAME OF PROJECT:</b> _____	
<b>OWNER/DEVELOPER:</b> _____	
<b>TOTAL BUILDING SQ.FT.:</b> _____	
<b>TYPE OF CONSTRUCTION (2003 IBC):</b> _____	
<b>OCCUPANCY CLASSIFICATION (2003 IBC):</b> _____	
<b>BUILDING SPRINKLERED/UNSPRINKLERED:</b> _____	

<b>FIRE FLOW DEMAND (GPM):</b> _____	<b>DURATION (HRS):</b> _____
<b>MIN. # OF HYDRANTS:</b> _____	<b>AVERAGE SPACING (FT.):</b> _____
<b>MAX.DISTANCE FROM HYD.TO STREET OR ROAD:</b> _____	
(Please attach a vicinity map illustrating approx. location & distances to existing fire hydrants.)	
<b>NOTES:</b> _____	
_____	
_____	

USE TABLES ON FOLLOWING PAGE TO OBTAIN INFORMATION REQUIRED ABOVE.

QUESTIONS REGARDING THE ABOVE INFORMATION MAY BE DIRECTED TO THE FIRE DEPARTMENT AT 871-8216

TABLES BELOW TAKEN FROM 2003 INTERNATIONAL FIRE CODE

**TABLE B105.1: MINIMUM REQUIRED FIRE FLOW AND FLOW DURATION FOR BUILDINGS (a)**

FIRE FLOW CALCULATION AREA (square feet)					FIRE FLOW (gallons per minute) <sup>□</sup>	FLOW DURATION (hours)
x 0.0929 for m <sup>2</sup>						
Type IA and IB (b)	Type IIA and IIIA (b)	Type IV and V-A (b)	Type IIB and IIIB (b)	Type V-B (b)	x3.785 for L/min.	
Up to 22,700	Up to 12,700	Up to 8,200	Up to 5,900	Up to 3,600	1,500	2
30,200	17,000	10,900	7,900	4,800	1,750	
38,700	21,800	12,900	9,800	6,200	2,000	
48,300	24,200	17,400	12,600	7,700	2,250	
59,000	33,200	21,300	15,400	9,400	2,500	
70,900	39,700	25,500	18,400	11,300	2,750	
83,700	47,100	30,100	21,800	13,400	3,000	3
97,700	54,900	35,200	25,900	15,600	3,250	
112,700	63,400	40,600	29,300	18,000	3,500	
128,700	72,400	46,400	33,500	20,600	3,750	
145,900	82,100	52,500	37,900	23,300	4,000	4
164,200	92,400	59,100	42,700	26,300	4,250	
183,400	130,100	66,000	47,700	29,300	4,500	
203,700	114,600	73,300	53,000	32,600	4,750	
225,200	126,700	81,100	58,600	36,000	5,000	
247,700	139,400	89,200	65,400	39,600	5,250	
271,200	152,600	97,700	70,600	43,400	5,500	
295,900	166,500	106,500	77,000	47,400	5,750	
Greater	Greater	115,800	83,700	51,500	6,000	
"	"	125,500	90,600	55,700	6,250	
"	"	135,500	97,900	60,200	6,500	
"	"	145,800	106,800	64,800	6,750	
"	"	156,700	113,200	69,600	7,000	
"	"	167,900	121,300	74,600	7,250	
"	"	179,400	129,600	79,800	7,500	
"	"	191,400	138,300	85,100	7,750	
"	"	Greater	Greater	Greater	8,000	

- (a) The minimum required fire flow shall be permitted to be reduced by 25% for Use Group R.
- (b) Types of construction are based on the International Building Code.
- (c) Measured at 20 psi

**TABLE C105.1: NUMBER AND DISTRIBUTION OF FIRE HYDRANTS**

FIRE-FLOW REQUIREMENT (gpm)	MINIMUM NO. OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS (a,b,c) (feet)	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT (d)
x 3.785 FOR L/min.		x 304.8 for mm	
1,750 or less	1	500	250
2,000-2,250	2	450	225
2,500	3	450	225
3,000	3	400	225
3,500-4,000	4	350	210
4,500-5,000	5	300	180
5,500	6	300	180
6,000	6	250	150
6,500-7,000	7	250	150
7,500 or more	8 or more (e)	200	120

- (a) Reduce by 100 feet (30480 mm) for dead-end streets or roads.
- (b) Where streets are provided with median dividers which can be crossed by firefighters pulling hose lines, or arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet (152.4m) on each side of the street and be arranged on an alternating basis up to a fire-flow requirement of 7,000 gallons per minute (26495 L/min.) and 400 feet (122m) for higher fire-flow requirements.
- (c) Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at not less than 1,000-foot (305m) spacing to provide for transportation hazards.
- (d) Reduce by 50 feet (15240mm) for dead-end streets or roads.
- (e) One hydrant for each 1,000 gallons per minute (3785 L/min.) or fraction thereof.

**REQUEST FOR FIRE FLOW AVAILABILITY FORM**

PROJECT  
NAME: \_\_\_\_\_  
PROPERTY  
LOCATION: \_\_\_\_\_  
LEGAL  
DESCRIPTION: \_\_\_\_\_  
(ATTACH SKETCH PLAN)  
OWNER OR DEVELOPER'S  
NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
CONTACT  
PHONE: \_\_\_\_\_

INFORMATION IN THE FOLLOWING BOX MUST BE COMPLETED BY AN AUTHORIZED REPRESENTATIVE OF STEAMBOAT SPRINGS WATER DISTRICT.

FIRE FLOW DEMAND FOR PROJECTS IN GALLONS PER MINUTE IS: \_\_\_\_\_  
(ATTACH COMPUTATION SHEET)  
THE AVAILABLE FIRE FLOW IS: \_\_\_\_\_ G.P.M. AS DETERMINED BY  
(METHOD): \_\_\_\_\_  
\_\_\_\_\_  
BY: \_\_\_\_\_, \_\_\_\_\_  
\_\_\_\_\_  
DATE  
(Must be signed by representative from City Utility Dept. or Mt. Werner Water & Sanitation, whichever is applicable.)

I the undersigned request the available fire flow at said project and agree to pay all costs associated with obtaining such information.

Costs are based on time and materials for obtaining such information from available records and performing actual field tests for computation of flows in G.P.M. at a residual of 20 P.S.I.

\_\_\_\_\_ SIGNATURE

TITLE

DATE \_\_\_\_\_