

Table XI-9

**NUMBER OF ENGINE AND LADDER COMPANIES NEEDED  
WITHIN TRAVEL DISTANCE BASED ON REQUIRED FIRE FLOW**

Fire Flow (gallons per minute)	First Due				First Alarm				Maximum Multiple Alarm			
	Engine Company		Ladder Company		Engine Company		Ladder Company		Engine Company		Ladder Company	
	Number	Miles	Number	Miles	Number	Miles	Number	Miles	Number	Miles	Number	Miles
Less than 2,000	1	1.50 <sup>a</sup>	1 <sup>b</sup>	2.0 <sup>c</sup>	2 <sup>d</sup>	4.0	1 <sup>b</sup>	2.0 <sup>c</sup>	2 <sup>d</sup>	4.0	1 <sup>b</sup>	2.0 <sup>c</sup>
2,000	1	1.50	1 <sup>b</sup>	2.0 <sup>c</sup>	2	2.5	1 <sup>b</sup>	2.0 <sup>c</sup>	2	2.5	1 <sup>b</sup>	2.0 <sup>c</sup>
2,500	1	1.50	1 <sup>b</sup>	2.0	2	2.5	1 <sup>b</sup>	2.0	2	2.5	1 <sup>b</sup>	2.0
3,000	1	1.50	1 <sup>b</sup>	2.0	2	2.5	1 <sup>b</sup>	2.0	3	3.0	1 <sup>b</sup>	2.0
3,500	1	1.50	1 <sup>b</sup>	2.0	2	2.5	1 <sup>b</sup>	2.0	3	3.0	1 <sup>b</sup>	2.0
4,000	1	1.50	1	2.0	2	2.5	1	2.0	4	3.5	1	2.0
4,500	1	1.50	1	2.0	2	2.5	1	2.0	4	3.5	1	2.0
5,000	1	1.00	1	1.5	2	2.0	1	1.5	5	3.5	2	2.5
5,500	1	1.00	1	1.5	2	2.0	1	1.5	5	3.5	2	2.5
6,000	1	1.00	1	1.5	2	2.0	1	1.5	6	4.0	2	2.5
6,500	1	1.00	1	1.5	2	2.0	1	1.5	6	4.0	2	2.5
7,500	1	1.00	1	1.5	2	1.5	1	1.5	7	4.0	3	3.5
8,000	1	1.00	1	1.5	2	1.5	1	1.5	8	4.5	3	3.5
8,500	1	1.00	1	1.5	2	1.5	1	1.5	9	4.5	3	3.5
9,000	1	1.00	1	1.5	2	1.5	1	1.5	9	4.5	3	3.5
9,500	1	0.75	1	1.0	3	1.5	2	2.0	10	4.5	4	4.0
10,000	1	0.75	1	1.0	3	1.5	2	2.0	12	5.0	5	4.0
11,000	1	0.75	1	1.0	3	1.5	2	2.0	14	5.0	6	5.0
12,000	1	0.75	1	1.0	3	1.5	2	2.0	15	5.0	7	5.0

<sup>a</sup>May be increased to two miles for residential districts consisting of single- and two-family dwelling units, and to four miles where such dwelling units have an average separation of 100 feet or more.

<sup>b</sup>Where there are less than five buildings of a height corresponding to three or more stories, a ladder company may not be needed to provide ladder service.

<sup>c</sup>May be increased to three miles for residential districts consisting of single- and two-family dwellings, and to four miles where such dwelling units have an average separation of 100 feet or more.

<sup>d</sup>Same as First Due where only one engine company is required in the municipality.

Source: Insurance Services Office.