

Engine-Company Equipment and Hose		Needed
Booster tank		300 gallons
Hose		
Booster		200 feet
Extra pre-connected 1-1/2" hose may substitute for booster hose.		
1-1/2" carried		400 feet
spare (may also be carried)		200 feet
2-1/2" spare (may also be carried)		200 feet
Heavy-stream appliance (1,000 G.P.M.)		1
A heavy-stream device is not needed for a Basic Fire Flow of less than 1,500 G.P.M.		
Distributing nozzle		1
Foam nozzle (1-1/2" minimum)		1
Foam		
Carried		10 gallons
Spare (may also be carried)		15 gallons
Nozzles		
2-1/2" straight stream with shutoff		2
2-1/2" combination with shutoff		2
1-1/2" combination with shutoff		2
SCBA equipment (30-minute minimum)		4
Extra cylinders (carried)		4
Salvage covers (12 ft. x 18 ft.)		2
Handlight (4V wet or 6V dry)		2
Hose clamp		1
Hydrant gate (2-1/2")		1
Burst hose jacket (2-1/2")		1
Gated wye (2-1/2" x 1-1/2" x 1-1/2")		1
Radio		
Mounted		1
Portable		1
Ladders		
12-ft. or 14-ft. roof		1
24-ft. extension		1
Annual tests		
Pumper (see Table A, below)		1
Hose (see Table B, below)		1

The fire apparatus should also have supply hose and firefighting hose. For maximum credit, the engine company should carry 1,200 feet of hose. This can be 1,200 feet of 2-1/2" or larger supply hose or a combination of 2", 2-1/2", or 3" hose (up to 400 feet) and 2-1/2" or larger hose (up to 800 feet).

Table A: Pumper Service Tests

Average Interval between 3 Most Recent Tests	Maximum Points Credit
1 year	100
2 years	75
3 years	50
4 years	25
5 years	0

NFPA Standard 1911, *Standard for Service Tests of Fire Pump Systems on Fire Apparatus*, describes pumper service tests. A pumper service test is similar to the certification test described in NFPA Standard 1901, except that the duration is reduced to 20 minutes at 150 psi, 10 minutes at 200 psi, and 10 minutes at 250 psi. The overload test is not a necessary part of the PIAL review.

Table B: Hose Service Tests

Average Interval between 3 Most Recent Tests	Maximum Points Credit		
	250 psi	200 psi	150 psi
1 year	50	37	28
2 years	37	27	18
3 years	25	18	12
4 years	12	9	6
5 years	0	0	0

NFPA Standard 1962, *Care, Maintenance and Use of Fire Hose*, describes fire hose tests.

When the hose-test frequency, pressure, or both vary for 2-1/2" and larger hose and for 1-1/2" hose, PIAL prorates the credit using 65% for the 2-1/2" and larger hose and 35% for the 1-1/2" hose. Large-diameter hose (LDH) in excess of 3" in diameter should be tested in accordance with NFPA 1962. The highest test pressure needed for 3" diameter and smaller hose is 250 psi.

Either the fire department or an independent testing agency can perform the tests. In either case, the tests should conform with the appropriate NFPA standard.

Service-Company Equipment

Here's a list of the items PIAL considers when evaluating a service company. You may substitute equivalent equipment for some of the items listed in the "Fire Suppression Rating Schedule".

Equipment	Needed
Large spray nozzle (500-gpm minimum)	1
SCBA equipment (30-minute minimum)	6
Extra cylinders (carried)	6
Salvage covers (12 ft. x 18 ft.)	10
Electric generator (2,500 watts)	1
Floodlight (500 watts)	3
Smoke ejector	1
Oxyacetylene cutting unit	1
Power saw	1
Handlight (4V wet or 6V dry)	4
Hose roller (equipment hoist)	1
Pike pole (plaster hook)	
6-foot	2
8-foot	2
12-foot	2
Radio	
Mounted	1
Portable	1
Ladder	
10-ft. collapsible	1
14-ft. extension	1

Ladder-Company Equipment

Here's a list of the items PIAL considers when evaluating a ladder company. The equipment listed here is in addition to the needed service company equipment. You may substitute equivalent equipment for some items listed in the "Fire Suppression Rating Schedule".

Equipment	Needed
Ladder	
16-ft. roof	1
20-ft. roof	1
28-ft. extension	1
35-ft. extension	1
40-ft. extension	1
Elevated stream device*	1
Aerial ladder/elevating platform*	1
Annual tests (see Table C)	1

*Of sufficient height to reach the roof of any building or 100 feet, whichever is less. PAIL prorates the credit if existing equipment has insufficient reach.

Aerial Ladder/Elevating Platform Tests

Average Interval between 3 Most Recent Tests	Maximum Points Credit
1 year	50
2 years	37
3 years	25
4 years	12
5 years	0

NFPA Standard 1914, *Testing Fire Department Aerial Devices*, describes tests for aerial ladder and elevating platforms

Pumper Equipment (Table 512.A)

Item	Needed	Equivalencies
Booster tank	300 gallons	300 gallons or larger
Booster hose	200 feet	1-1/2" or 1-3/4" preconnected hose
1-1/2" hose	400 feet	1-3/4" or 2" hose
2-1/2" or larger hose	1,200 feet	The first 400 feet can be 2", 2-1/2" or 3"; the remaining 800 feet must be 2-1/2" or larger hose.
Heavy-stream appliance (1,000 gpm)	1	Not needed when the Basic Fire Flow is less than 1,500 gpm. A mounted, elevated, or portable attack monitor is acceptable. May be prorated in 250-gpm increments.
Distributing nozzle (1-1/2" min.)	1	<ul style="list-style-type: none"> • 1-1/2" or 2-1/2" piercing nozzle • 1-1/2" or 2-1/2" distributing nozzle, cellar nozzle
Foam nozzle (1-1/2" minimum)	1	<ul style="list-style-type: none"> • 1-1/2" or 2-1/2" eductor • Built-in proportioning system • CAFS
Foam	25 gallons, of which 10 gallons is carried on the pumper	<ul style="list-style-type: none"> • Any foam listed in the "UL Fire Protection Equipment Directory" as foam liquid concentrate (GFGV) • Class A foam <p>Wetting agents, emulsifiers, and surfactants are <i>not</i> acceptable for credit as foam.</p>
2-1/2" playpipe with shutoff	2	<ul style="list-style-type: none"> • Portable attack monitor with solid-bore tip
2-1/2" straight stream & spray with shutoff	2	<ul style="list-style-type: none"> • 200-gpm nozzles • 1-3/4" combination vari-nozzle tip nozzles with a 2-1/2" adapter • Portable attack monitor with fog tip
1-1/2" straight stream & spray with shutoff	2	1-3/4" combination nozzle with 1-1/2" coupling
Breathing equipment (SCBA) (30-minute minimum)	4	4 @ 30-minute or longer duration
Spare SCBA cylinders (30-minute minimum)	4	4 @ 30-minute or longer duration Portable air cascade or air filling station is <i>not</i> deemed equivalent.
Salvage covers (12 ft. x 18 ft.)	2	12-ft. x 14-ft. canvas or rip-stop plastic

Handlight (4v wet, 6v dry)	2	Rechargeable 6v handlight
Hose clamp	1	2-1/2", 3", or LDH hose clamp
Hydrant hose gate (2- 1/2")	1	4-way valve, LDH manifold, trimese
Burst hose jacket (2- 1/2")	1	2-1/2", 3", or LDH hose clamp
Gated wye 2-1/2" x 1- 1/2" x 1-1/2"	1	Water thief, 2-1/2" gated wye with 1-1/2" reducers
12- or 14-ft. roof ladder	1	16-ft. roof ladder
24-ft. extension ladder	1	28-, 30-, or 35-ft. extension ladder

Ladder/Service Equipment (Table 544.A and 544.B)

Item	Needed	Equivalencies
Elevated stream device	1	1,000 gpm or larger
Large spray nozzle (500-gpm minimum)	1	500 gpm or larger (may be carried on a pumper)
Breathing equipment (SCBA) (30-minute minimum)	6	6 @ 30-minute or longer duration
Spare SCBA cylinders (30-minute minimum)	6	6 @ 30-minute or longer duration Portable air cascade or air filling station is <i>not</i> equivalent.
Salvage covers (12 ft. x 18 ft.)	10	12-ft. x 14-ft. canvas or rip-stop plastic
Electric generator (2500 watts)	1	<ul style="list-style-type: none"> • PTO driven inverter – prorated based upon its capacity • Mini-generator floodlight – prorated in 500w increments • Mini-generator ventilation fan – prorated in 1,000w increments
Floodlight (500 watts)	3	<ul style="list-style-type: none"> • Tripod floodlight • Mini-generator floodlight
Smoke ejector	1	<ul style="list-style-type: none"> • Positive pressure ventilation (PPV) fan • Mini-generator ventilation fan • Thermal imaging device
Oxyacetylene cutting unit	1	<ul style="list-style-type: none"> • Hydraulic or pneumatic cutting tool • Plasma cutting tool • Oxy-gasoline cutting torch • Circular saw with composite blade • Thermal imaging device
Power saw	1	<ul style="list-style-type: none"> • Chain saw with carbide-tip cutting blades • Thermal imaging device
Handlight (4v wet, 6v dry)	4	Rechargeable 6v handlight
Pike pole (plaster hook)	2 @ 6 ft. 2 @ 8 ft. 2 @ 12 ft.	6 @ various lengths, similar type tool

Ladder 10-ft. collapsible (attic)	1	10-ft. folding
14-ft. extension	1	14-ft. combination
20-ft. roof	1	16-ft. roof (additional)
28-ft. extension	1	24-ft. extension
40-ft. extension	1	35-ft. extension (additional)