BOOSTERLINE 1”

150’

50 GPM = 150 EP
70 GPM = 200 EP

JUMPLINE 1 ¾”

100’

95 GPM = 115 EP
125 GPM = 125 EP

CROSSLAY 1 ¾”

200’

95 GPM = 125 EP
125 GPM = 140 EP
150 GPM = 155 EP
200 GPM = 200 EP

CROSSLAY 2 ½”

200’

95 GPM = 105 EP
125 GPM = 110 EP
150 GPM = 110 EP
200 GPM = 120 EP
250 GPM = 125 EP

Max Operating Pressure

1 ¾” HOSE 365 PSI
2 ½” HOSE 365 PSI
5” HOSE 185 PSI

2 ½” w/ 100psi Fog

GPM	100’	200’	300’	400’	500’	600’	700’	800’
95	105	105	105	110	110	110	115	115
125	105	110	110	115	115	120	120	125
150	105	110	115	120	125	130	130	135
200	110	115	125	135	140	150	155	165
250	115	125	140	150	165	175	190	200

HighRise Hose Pack

265 GPM w/SB 1 1/8”
75 psi (50NP+25FL)
150’ of 2 1/2” Hose

2 ½” w/SB

TIP	GPM	100’	200’	300’	400’	500’
1”	210	60	70	80	85	95
1 1/8”	265	65	80	95	110	120
1 ¼”	330	75	95	115	140	160

APARTMENT LOAD

140 PSI min to wye to deploy apartment load properly

PSI 1 line / PSI both (WYED) lines

2 ½” SUPPLY	50’	100’	200’	300’	400’	500’
95 GPM EA	115/115	115/120	115/125	120/135	120/140	120/150
125 GPM EA	120/125	125/135	125/145	130/160	135/170	135/180
150 GPM EA	130/135	135/145	135/165	140/180	145/200	150/220
200 GPM EA	155/175	160/190	165/225	175/255	180/285	190/320

FOAM

Class A Common Combustibles
Fire Attack: 0.3-0.5% Exposures: 1.0% Overhaul: 0.1%

Class B Flammable/Combustible Liquids
Hydrocarbons: 3.0% (petroleum based - float on water) Polar Solvents: 6.0%
(alcohol, acetone, esters mix w/H2O)

Eductor: 95 or 125 GPM (nozzle MUST match educator)
200 psi EP @ inlet; 150’ of 1 ¾” MAX after eductor

ProPak: 12 GPM @ 100 psi

Friction Loss Constants

ELEVATION : ± 5 PSI per floor (-1st)
± .5 PSI per foot
10 PSI Appliances flowing ≥ 350gpm
25 PSI Standpipe System
25 PSI Ground Monitor/Deck Gun
20 PSI Blitzfire Monitor

Pressure Constants

80 PSI NP Master Stream (tip ≥ 1 3/8”)
50 PSI NP SB Handline (tip ≤ 1 ¼”)
100 PSI NP Fog Nozzles
150 PSI Sprinklers w/o pump
200 PSI Max Standpipe w/o Pump
100 PSI Begins Relay Pumping
140 PSI Apt. Load Deploy to WYE
360 PSI Max High Rise Pumping

FL=CQ²L

Coefficient

1 ¾” = 12
2 ½” = 2
Siamese (2) 2 ½” = .5
Triamese (3) 2 ½”= .22
5” = .08

GPM= 29.7d²√NP

EP=NP+FL+SA+/-EL

CCFD Pump Chart

11/2014

AERIAL

Friction Loss Average

T11 (#13583) Fog 70psi or 2½” SB 100psi
T16 (#15708) Fog 65psi
T17 (#13582) Fog 70psi or 2½” SB 100psi
T18 (#12421) Fog 50psi or 2” SB 50psi
T22 (#13579) Fog 65psi

Waterway rated @ 250psi MAX

Portable Ground Monitor

TIP	NP	GPM	FL 100’ 2 1/2” Siamese	FL 100’ of 5”
1 3/8”	80	500	12 PSI	2 PSI
1 ½”	80	600	18 PSI	3 PSI
1 ¾”	80	815	32 PSI	6 PSI
2”	80	1065	56 PSI	9 PSI

Friction Loss 50’&100’

DIA.	GPM	50’	100’
1 ¾”	95	5 PSI	10 PSI
1 ¾”	125	10 PSI	20 PSI
1 ¾”	150	15 PSI	30 PSI
1 ¾”	200	25 PSI	50 PSI
2 ½”	95	1 PSI	2 PSI
2 ½”	125	2 PSI	4 PSI
2 ½”	150	3 PSI	5 PSI
2 ½”	200	5 PSI	10 PSI
2 ½”	250	10 PSI	15 PSI
5”	250		1 PSI
5”	500		2 PSI
5”	750		4 PSI
5”	1000		8 PSI

Static Pressure

Like Volumes

PSI	3	2	1
90	80 psi	75 psi	70 psi
80	75 psi	70 psi	60 psi
70	65 psi	60 psi	55 psi
60	55 psi	50 psi	45 psi
50	45 psi	40 psi	35 psi
40	35 psi	30 psi	25psi