

STOCKTON FIRE DEPARTMENT RAPID RULE CHART

LIVELINE: 200' WITH LOW PRESSURE NOZZLE

| PDP | 150 PSI | 175 PSI | 200 PSI |
|-----------------------|---------|---------|---------|
| 1 3/4" (55 PSI NP) | 160 GPM | 185 GPM | 200 GPM |
| 1 1/2" (50 PSI NP) | 145 GPM | 160 GPM | 175 GPM |

2 1/2" ATTACK LINE: COMBINATION NOZZLE

| NP | GPM | FL PER 100' OF 2 1/2" |
|----|-----|-----------------------|
| 75 | 250 | 15 PSI |

2 1/2" ATTACK LINE: 1 1/8" SMOOTHBORE

| NP | GPM | FL PER 100' OF 2 1/2" |
|----|-----|-----------------------|
| 50 | 266 | 15 PSI |

LEAD-LINE PACK: 100' OF 1 3/4" WITH BREAK AWAY NOZZLE

| NOZZLE TYPE | GPM | NP |
|-------------------------------------|-----|----|
| 15/16" SMOOTHBORE "SLUG TIP" NOZZLE | 185 | 50 |

FL PER 100' OF 1 3/4" @ 185 GPM: **55 PSI** EXTENDED OFF 1 3/4" LIVELINE: **PDP: 215 PSI**

1 HIGH RISE PACK EXTENDED OFF 2 1/2": **PDP: 105 PSI + 6 PSI PER 100' OF 2 1/2"**

2 HIGH RISE PACKS EXTENDED OFF 2 1/2": **PDP: 105 PSI + 27 PSI PER 100' OF 2 1/2"**

BOOSTER LINE

200'-1" **150 PSI PDP** 40 GPM

BUMPER LINE

100- 1 1/2" **110 PSI PDP** 165 GPM

MAXIMUM PDP FOR 5" HOSE: 200 PSI

| GPM | FRICION LOSS CHART: PER 100' | | | | | | |
|------|------------------------------|--------|--------|----|-------------|----|--|
| | 1 1/2" | 1 3/4" | 2 1/2" | 3" | 2 1/2" & 3" | 5" | |
| 80 | 15 | | | | | | |
| 90 | 20 | | | | | | |
| 100 | 25 | 15 | | 1 | | | |
| 125 | 40 | 25 | | | | | |
| 150 | 55 | 35 | 5 | 2 | | | |
| 175 | 75 | 50 | 6 | | | | |
| 200 | | 65 | 10 | 3 | 1 | | |
| 250 | | | 15 | | 2 | | |
| 300 | | | 20 | 7 | 3 | | |
| 400 | | | 35 | 13 | 5 | 1 | |
| 500 | | | 50 | 20 | 7 | 2 | |
| 600 | | | | 30 | 11 | 3 | |
| 700 | | | | 40 | 15 | 4 | |
| 800 | | | | 51 | 19 | 5 | |
| 900 | | | | | 24 | 6 | |
| 1000 | | | | | 30 | 8 | |
| 1200 | | | | | 43 | 15 | |

CLASS B FIRES

HYDRO-CARBON: 3% POLAR SOLVENT: 6%
USE FOAM JET ON END OF NOZZLE

USE 200' 1 3/4" HOSE WHEN USING EXTER-
NAL FOAM EDUCTOR

63 GPM @ 200 PSI PDP WITH EDUCTOR

STANDPIPE CONNECTION

PDP: 150 PSI

ADD 5 PSI/FLOOR ABOVE GROUND LEVEL

ADD 25 PSI OVER 250 GPM

DO NOT EXCEED 200 PSI

ESTIMATING HYDRANT POTENTIAL

LESS THAN 10% DROP = 3 LIKE LINES

LESS THAN 15% DROP = 2 LIKE LINES

LESS THAN 25% DROP = 1 LIKE LINE

DECK GUN

| NOZZLE | PDP | GPM | NP |
|--------|---------|------|-----|
| COMBO | 170 PSI | 1000 | 100 |
| 2" | 110 | 1000 | 80 |
| 1 3/4" | 105 | 800 | 80 |
| 1 1/2" | 100 | 600 | 80 |
| 1 3/8" | 90 | 500 | 80 |

WATER TOWER

PDP: 200 PSI

LEGEND

FL = FRICTION LOSS

GPM = GALLONS PER MINUTE

NP = NOZZLE PRESSURE

PDP = PUMP DISCHARGE PRESSURE

PSI = POUNDS PER SQUARE INCH

= IMPORTANT INFORMATION

CLASS A FIRES

WETTING AGENT: 0.25%
FINISHED FOAM: 0.5%

APPLIANCE FRICTION LOSS

ADD 10 PSI PER APPLIANCE FOR FLOWS
OVER 350 GPM

ADD 25 PSI FOR MASTER STREAM DEVICE

ADD 5 PSI PER FLOOR

SPRINKLER SYSTEM SUPPORT

PDP: 150 PSI

FIRST ENGINE MAY, SECOND ENGINE
MUST

RELAY PUMPING

CONSIDER RELAY PUMPING WHEN 400' OF
SUPPLY LINE IS ON THE GROUND

PUT PUMPER ON HYDRANT FOR
COMMERCIAL FIRES

PUT PUMPER ON HYDRANT FOR
WATER TOWER OPERATIONS

WHEN SUPPLYING SECOND PUMPER,
START WITH 50 PSI THEN ADJUST FOR
GPM FLOW. RECEIVING PUMPER WILL
ADVISE IF MORE PRESSURE IS NEEDED

GROUND MONITOR

COMBINATION NOZZLE PRESSURE: 100 PSI

SMOOTHBORE NOZZLE PRESSURE: 80 PSI

ADD 25 PSI FL FOR APPLIANCE

ADD FL FOR SUPPLY LINE

FUEL

CONSIDER ORDERING FUEL TO THE FIREGROUND
FOR EXTENDED PUMP OPERATIONS