

COMPUTING WORKSHEET

Summary of required Fire Flow

1. Site Data

Structure	Bldg Area	Fire Flow Area
Building A		
Industrial Building	137,534 SF	137,534 SF (Max. with 1 hr rated fire wall separation)
Building B		
Industrial Building	177,806 SF	177,806 SF (Max. with 1 hr rated fire wall separation)

Building A & B

Type of Construction - II(000) - from NFPA 220

Type of Construction - II-B - from IBC/IFC

2. Determine Required Fire Flow per Florida Fire Prevention Code (NFPA 1 as amended) (Sprinkled Building)

Building A

Required Fire Flow (RFF) = **7,750 gpm @ 20 PSI** per NFPA 1 Ch 18 table 18.4.5.1.2

Duration = **4** Hours

Building B

Required Fire Flow (RFF) = **8,000 gpm @ 20 PSI** per NFPA 1 Ch 18 table 18.4.5.1.2

Duration = **4** Hours

3. Determine Required Fire Flow per Florida Fire Prevention Code (NFPA 1 as amended) (For NFPA compliant Automatic Sprinkled Building)

Building A

Sprinkled Bldg Required Fire Flow reduce RFF by 75% = **1937.5 gpm @ 20 PSI**

Minimum Required Flow for Sprinkled Bldg = **1000 gpm @ 20 PSI** USE **1,000.00 gpm**

Minimum Required Flow for Quick Response Heads = **600 gpm @ 20 PSI** USE **600 gpm**

Building B

Sprinkled Bldg Required Fire Flow reduce RFF by 75% = **2000 gpm @ 20 PSI**

Minimum Required Flow for Sprinkled Bldg = **1000 gpm @ 20 PSI** USE **1,000.00 gpm**

Minimum Required Flow for Quick Response Heads = **600 gpm @ 20 PSI** USE **600 gpm**

Total Required Fire Flow **2,000.00 gpm**

4. Determine Available Flow from Flow Test

Total Flow at 20 psi using test data Residual Pressure

FH **3,504 gpm**

Total Available Flow @ 20 psi **3,504 gpm** Exceeds Required Fire Flow (RFF)

Available flow exceeds Required Fire Flow sprinkled building

Total Flow at 20 psi with Design System Residual Pressure Adjusted to 50 psi

FH **2,262 gpm**

Total Available Flow @ 50 psi Static **2,262 gpm** Exceeds Sprinkled Bldg RFF

Available flow exceeds Required Fire Flow for sprinkled Building

DRC