

Summary of required Fire Flow

1. Site Data

Structure	Bldg Area	Fire Flow Area
Building A		
Exist. Warehouse Building	8,000	8,000 SF (Max. with 1 hr rated fire wall separation)
Structure	Bldg Area	Fire Flow Area
Building B		
Warehouse Building	6,630	6,630 SF (Max. with 1 hr rated fire wall separation)
Structure	Bldg Area	Fire Flow Area
Building C		
Warehouse Building	6,630	6,630 SF (Max. with 1 hr rated fire wall separation)

Building A, B, & C

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) =

2,000 gpm@ 20 PSI per NFPA 1 Ch 18 table 18.4.5.1.2

Duration =

2 Hours

Building B

Required Fire Flow (RFF) =

1,750 gpm@ 20 PSI per NFPA 1 Ch 18 table 18.4.5.1.2

Duration =

2 Hours

Building C

Required Fire Flow (RFF) =

1,750 gpm@ 20 PSI per NFPA 1 Ch 18 table 18.4.5.1.2

Duration =

2 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 RFFby 75% =

500 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 RFFby 75% =

437.5 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 C

Sprinkled Bldg Required Fire Flow reduce RFFby 75% =

437.5 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

Total Required Fire Flow 1,000.00 gpm

4. Determine Available Flow from Flow Test

Total Flow at 20 psi using test data Residual Pressure

FH

4,329 gpm

Total Available Flow @ 20 psi

4,329 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

2,639 gpm

Total Available Flow @ 50 psi Static

2,639 gpm Exceeds Sprinkled Bldg RFF

Available flow exceeds Required Fire Flow for sprinkled Building