

HANGER INSTALLATION REQUIREMENTS

MAXIMUM DISTANCE BETWEEN HANGERS

NOMINAL PIPE SIZE	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"
BLAZEMASTER CPVC	5' 6"	6' 0"	6' 6"	7' 0"	8' 0"	9' 0"	10' 0"	N/A	N/A
THREADABLE LIGHTWALL N/A	12' 0"	12' 0"	12' 0"	12' 0"	12' 0"	12' 0"	12' 0"	N/A	N/A
STEEL PIPE (10/40)	N/A	12' 0"	12' 0"	15' 0"	15' 0"	15' 0"	15' 0"	15' 0"	15' 0"

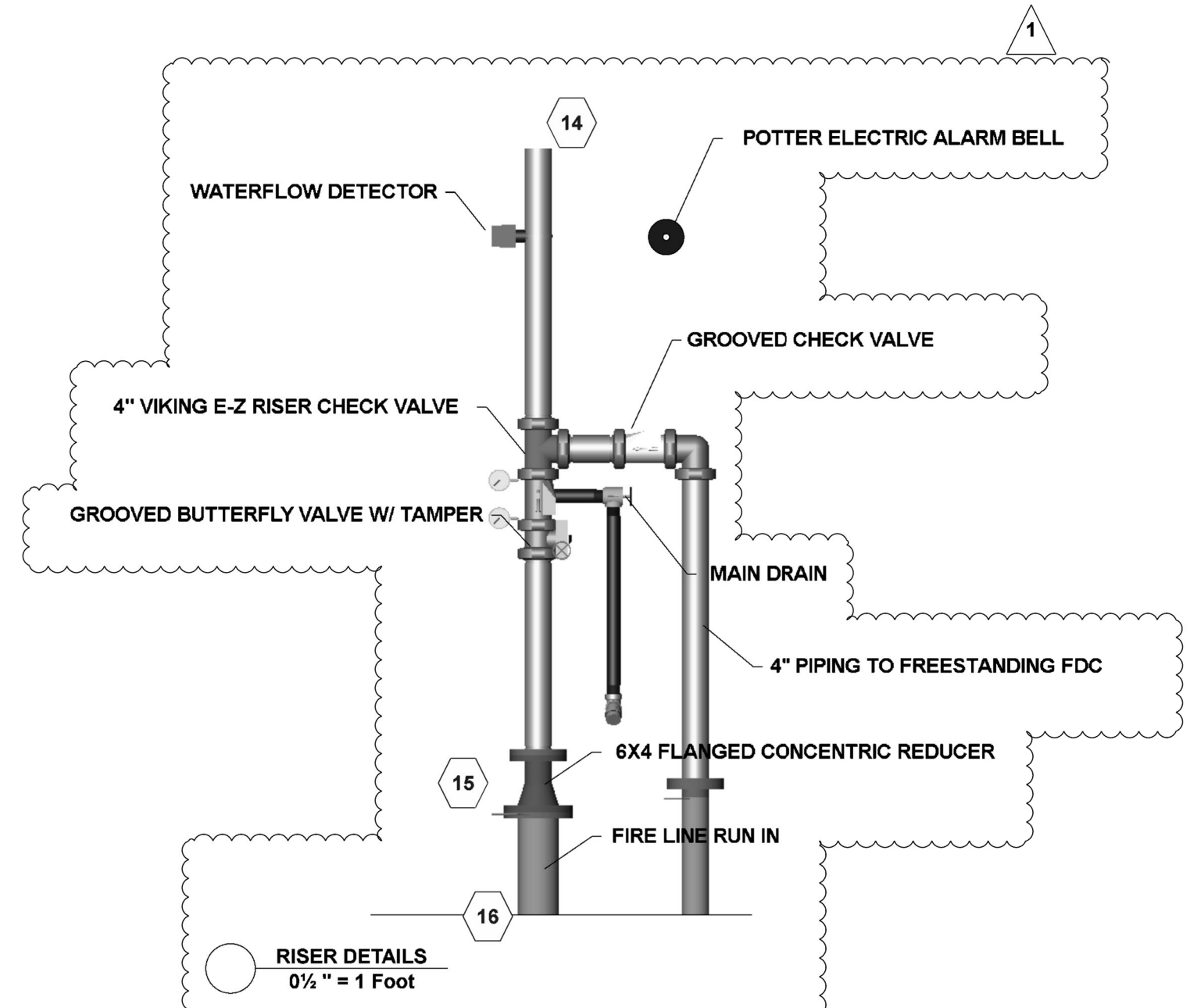
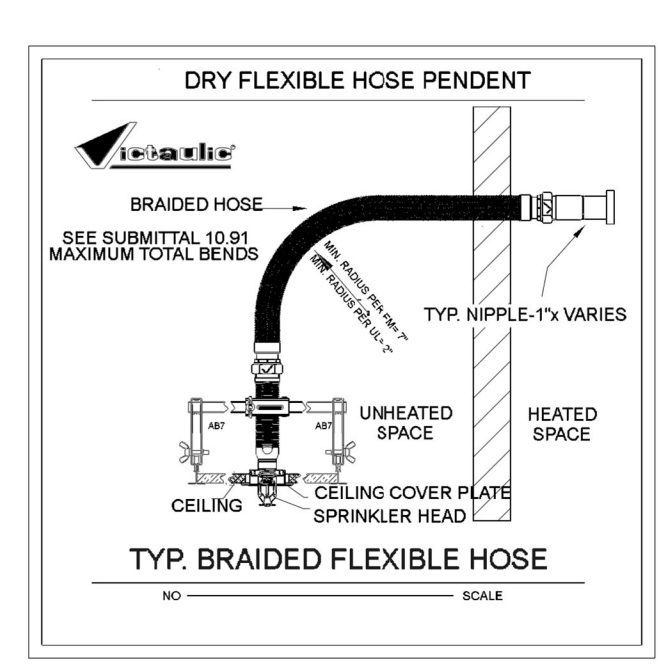
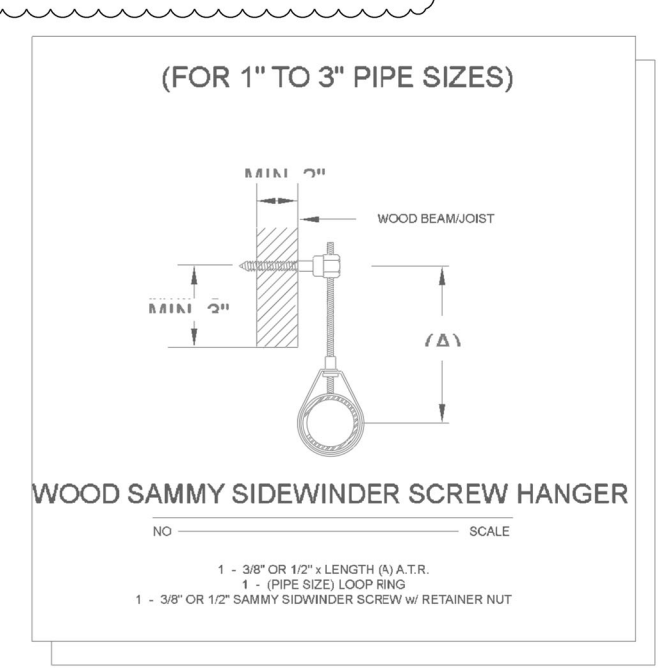
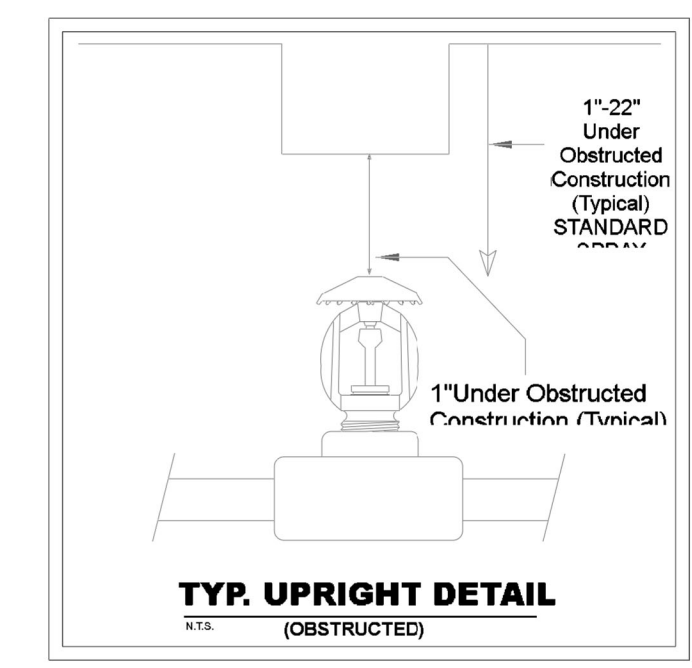
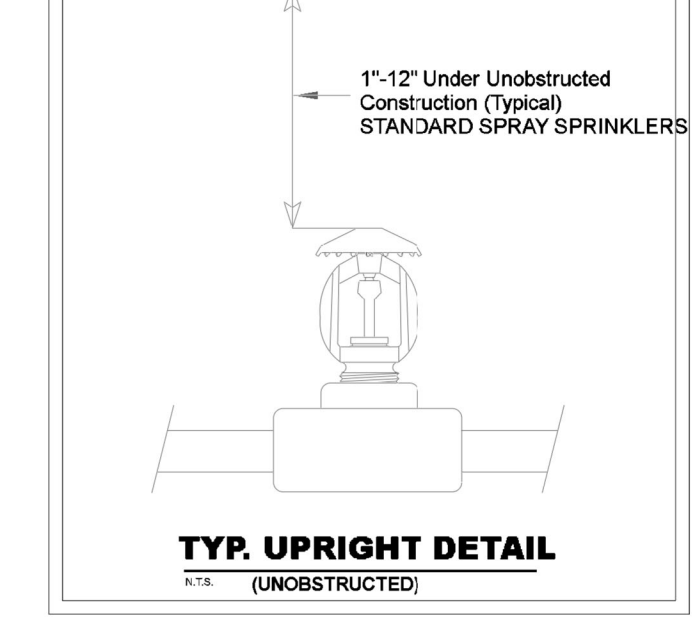
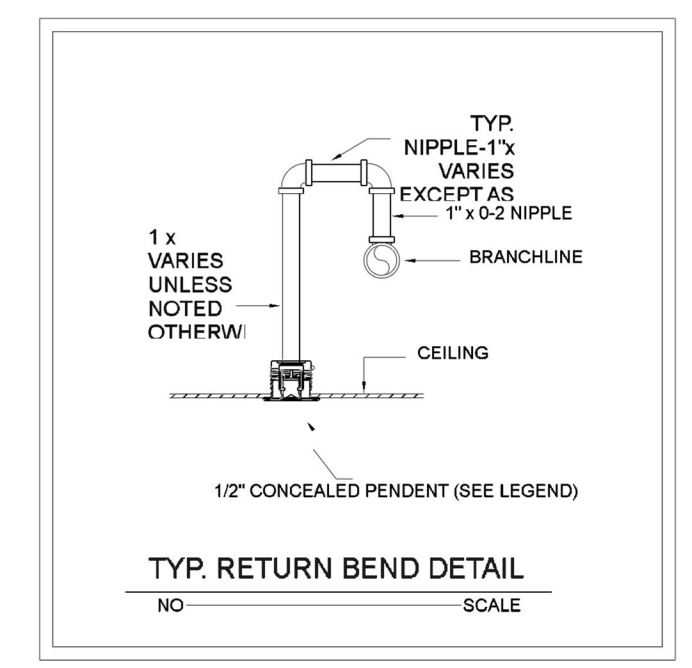
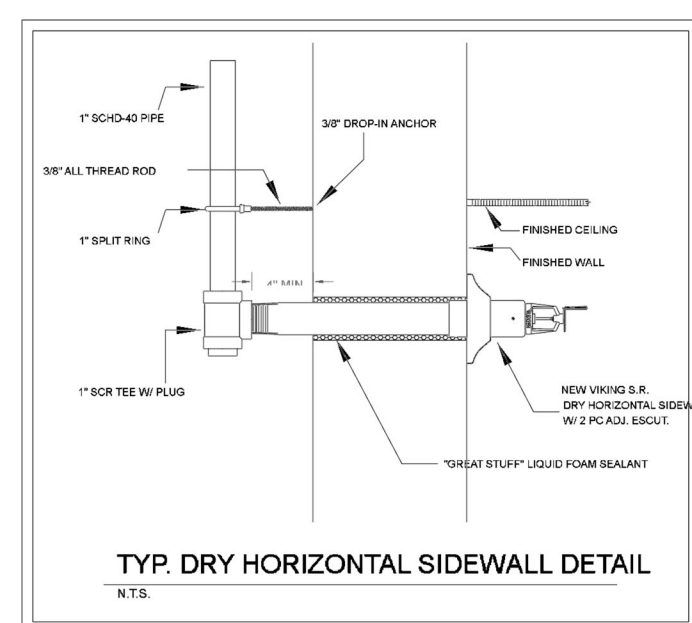
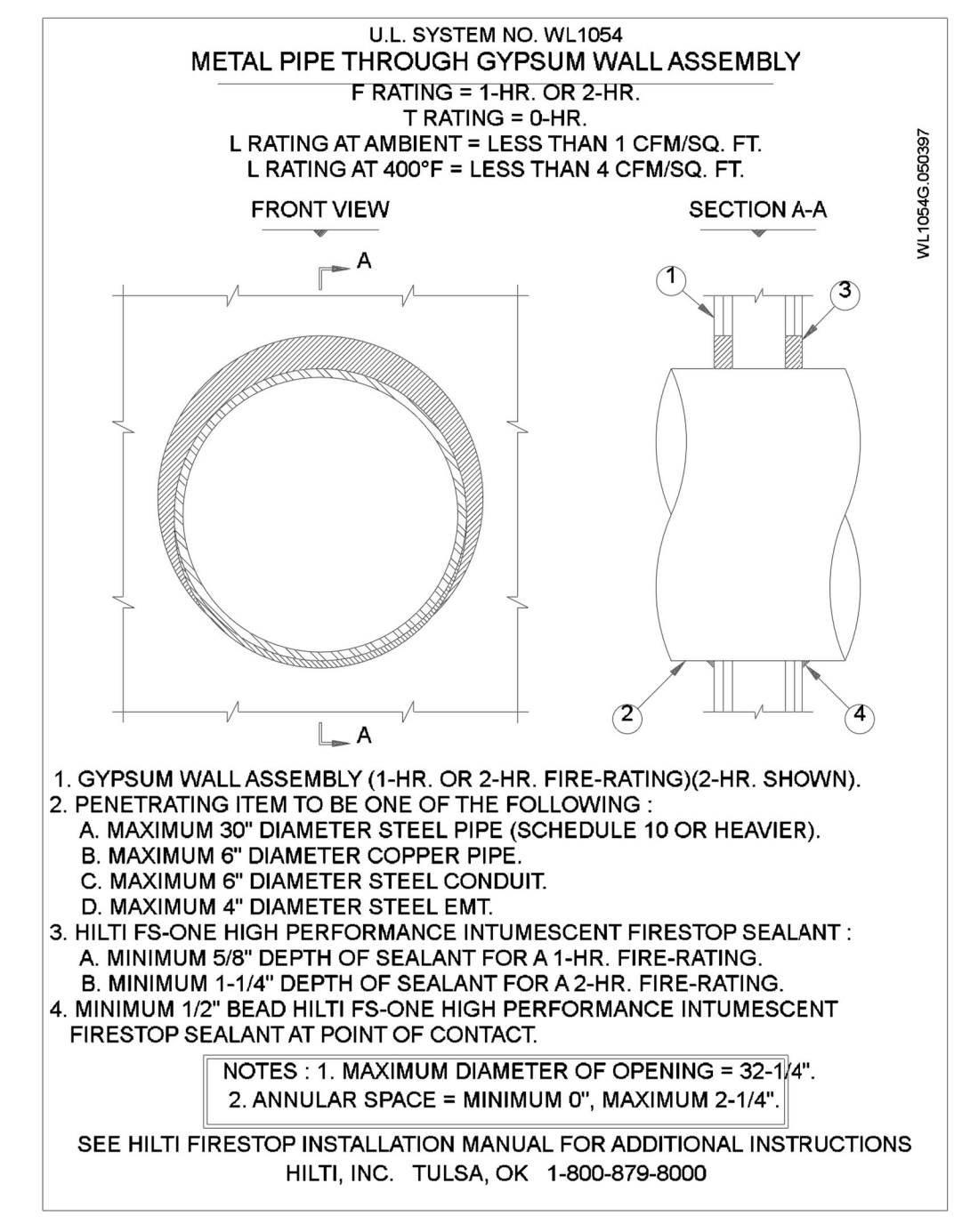
100 PSI STATIC PRESSURE ON SYSTEM REQUIRES UP-LIFT RESTRAINT WITHIN 12 INCHES HORIZONTALLY OF HEAD FOR ARM-OVERS AND END OF BRANCH LINE

THE UNSUPPORTED LENGTH BETWEEN THE END SPRINKLER AND THE LAST HANGER ON THE LINE SHALL NOT EXCEED 36" FOR 1" PIPE, 48" FOR 1 1/4" PIPE AND 60" FOR 1 1/2" PIPE OR LARGER

THE CUMULATIVE HORIZONTAL LENGTH OF AN UNSUPPORTED ARMORER TO A SPRINKLER, SPRINKLER DROP, OR SPRIG-UP SHALL NOT EXCEED 24"

TRAPEZE INSTALLATION REQUIREMENTS

SPAN OF TRAPEZE (Schedule 10)	NOMINAL PIPE SIZE SUPPORTED							
	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"
1 FT. 6 IN.	1"	1"	1"	1"	1"	1"	1-1/4"	1-1/4"
2 FT. 0 IN.	1"	1"	1"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/2"
2 FT. 6 IN.	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/2"	2"
3 FT. 0 IN.	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/2"	1-1/2"	1-1/2"	2"
4 FT. 0 IN.	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"	2"	2-1/2"
5 FT. 0 IN.	2"	2"	2"	2"	2"	2"	2-1/2"	2-1/2"
6 FT. 0 IN.	2"	2"	2"	2"	2-1/2"	2-1/2"	2-1/2"	3"
7 FT. 0 IN.	2"	2"	2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"
8 FT. 0 IN.	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"
9 FT. 0 IN.	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"	4"
10 FT. 0 IN.	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"	3"	4"



GENERAL NOTES:

1. MATERIALS AND INSTALLATION SHALL COMPLY WITH APPLICABLE NFPA CODES, STATE BUILDING CODE, LOCAL AUTHORITY HAVING JURISDICTION, AND INSURANCE UNDERWRITER'S REQUIREMENTS.
2. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, UL LISTED FOR THE INTENDED USE AND SHALL BE INSTALLED IN FULL COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. ALL NEW AND EXISTING SPRINKLER PIPE 1" AND SMALLER IS SCHEDULE-40 BLACK STEEL WITH THREADED ENDS AND FITTINGS. ALL NEW AND EXISTING SPRINKLER PIPE 1 1/2" AND LARGER IS SCHEDULE-10 BLACK STEEL WITH GROOVED ENDS AND FITTINGS.
4. SPRINKLER HEAD SPACING IS BASED ON THE NFPA 13 (2013 EDITION) STANDARDS FOR LIGHT HAZARD OCCUPANCIES (OFFICE) ALLOWING A MAXIMUM HEAD SPACING OF 225 S.F. PER HEAD. SPRINKLER HEAD SPACING IN THE ATTIC IS BASED ON THE NFPA 13 STANDARDS FOR COMBUSTIBLE CONCEALED SPACES IN ACCORDANCE WITH 8.6.4.1.4. ALLOWING A MAXIMUM HEAD SPACING OF 120SF PER HEAD.
5. LOCATIONS OF PIPING AS SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD.
6. THE TENANT SHALL REMOVE ANY COMBUSTIBLE MATERIALS LOCATED ABOVE THE EXISTING CEILINGS.
7. THE SCOPE OF WORK FOR THIS PROJECT IS TO INSTALL A NEW FIRE SPRINKLER SYSTEM IN THE NEW BUILDING SHOWN. J&D SPRINKLER CO SCOPE OF WORK BEGINS AT 1'-0" ABOVE THE FINISHED FLOOR.
8. THE WATER TEST INFORMATION HAS BEEN PROVIDED BY J&D SPRINKLER CO DATED 10/20/2022 INDICATES THE FOLLOWING...

STATIC: 100 PSI
RESIDUAL: 70 PSI
FLOW: 1130 GPM

Sprinkler Design Data

Project Name:	THE SPRINGS OF BALLENTINE	System:	WET
Project Street Address:	40 RAWLS CLUB RD	Sys. Sq. Ft.:	30,930 FT ² +/-
Suite:	-	Floor#:	-
Designed By:	J&D SPRINKLER CO	Phone:	919-553-2356
Occupancy:	NURSING	Hazard:	LIGHT HAZARD
		Ceiling Hgt.:	-
		Total Bldg. Hgt.:	-

Design Summary

	A	B	C	D
Design Method	CALCULATED	CALCULATED	CALCULATED	CALCULATED
Design Area #	A	B	C	D
Location	ACTIVITY ATTIC	ATTIC	ATTIC	UNIT 119-125
Type of System	WET	WET	WET	WET
Hazard Class	LIGHT HAZARD	LIGHT HAZARD	LIGHT HAZARD	LIGHT HAZARD
Criteria From	NFPA 13	NFPA 13	NFPA 13	NFPA 13
Design Area	1,343 SF	5 HEADS	1,998 SF	1,570 SF
Sprinkler Spacing	120 SF MAX	6 X 30'-0"	120 SF MAX	225 SF MAX
Density	.10	.10	.10	.10
K-factor	5.6	5.6	5.6	5.6
Hose Allowance	100 GPM	100 GPM	100 GPM	100 GPM
# Design Sprinklers	18	6	28	16
Special Application Spk.	N/A	B2B ATTIC	N/A	N/A
Requirement @ BASE				
G.P.M. Req'd	302.08	229.88	506.77	337.74
P.S.I. Req'd	45.506	45.499	48.638	50.242
Requirement @ TEST				
GPM Required	402.08	329.88	606.77	437.74
PSI Required	60.001	59.401	65.533	65.080
Safety factor @ Test	+35.564 (37.2%)	+37.523 (38.7%)	+21.972 (27.6%)	+29.730 (31.4%)
Dry Sys. Volume (gal)	-	-	-	-

Water Supply Information

Tested by	J&D SPRINKLER CO	Date/Time	01/20/2022	Pressure Hydrant	-
Hydrant Elevation	-	Flow Hydrant # 1	-	Flow Hydrant #2	-
Static (PSI)	100 PSI	Residual (PSI)	70 PSI	Flow (gpm)	1130 GPM

Copy of Water Test Data Included with Calculation is required

Fire Pump Data

Rated G.P.M.	-	Rated Pressure	-	Horsepower	-
Diesel/Electric	-	Churn Pressure	-	Style of pump	-
Combined Discharge	-	150% Flow (suction)	-	150% Flow (gpm)	-

Certified pump curve required

If Storage is Greater than 12 Feet Complete Commodity Storage Design Information

Commodity Description	Storage Height	Storage Type (Rack, Bin, Pile)		Clearance					
		Open/Close	Wet/Dry System						
Figure #	Curve #	Density	Height Factor	Clear Factor	Array Factor	Dry Penalty	Design	Minimum Design	Final Design
-	-	-	-	-	-	-	-	-	-
Initial	-	-	-	-	-	-	-	-	-
Seco	-	-	-	-	-	-	-	-	-
dary	-	-	-	-	-	-	-	-	-

Is system compliant with Chapter 23 (FPC) - Is storage area layout, rack, and pile plan included?

THE SPRINGS OF BALLENTINE

J & D SPRINKLER CO. INC.
315 W. MAIN ST., CLAYTON, NC 27520
PHONE: (919)553-2356 FAX: (919) 359-0622

40 RAWLS CLUB RD
FUQUAY-VARINA, NC 27526

SHEET TITLE: NOTES AND DETAILS

This fire sprinkler planning and design drawing has been prepared by J & D Sprinkler Co. as a licensed fire sprinkler contractor under Article 2 of Chapter 87 of the General Statutes of North Carolina. The designer must perform any and all installation work and other work performed in reliance on this drawing pursuant to G.S. § 55B-15(a)(2). Installation work or any other work performed by any other person or entity in reliance on this drawing or any copy thereof is strictly prohibited.

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J&D SPRINKLER CO., INC.
100 PROGRESSWAY, SUITE 100
CLAYTON, NC 27520

DANA GRAHAM

NC # 16269FS CERT # 71075
NICET LEVEL III

JASON GRAHAM

NC # 16269FS CERT # 121842
NICET LEVEL III

REVISION:
NO. DATE

1 05/15/2023
2 06/15/2023

Date: 02/13/2022

Scale: 1/8" = 1'-0"

Job Number: F23007

Drawn By: TWC

Sheet Number: FP-1 OF 7

24X36