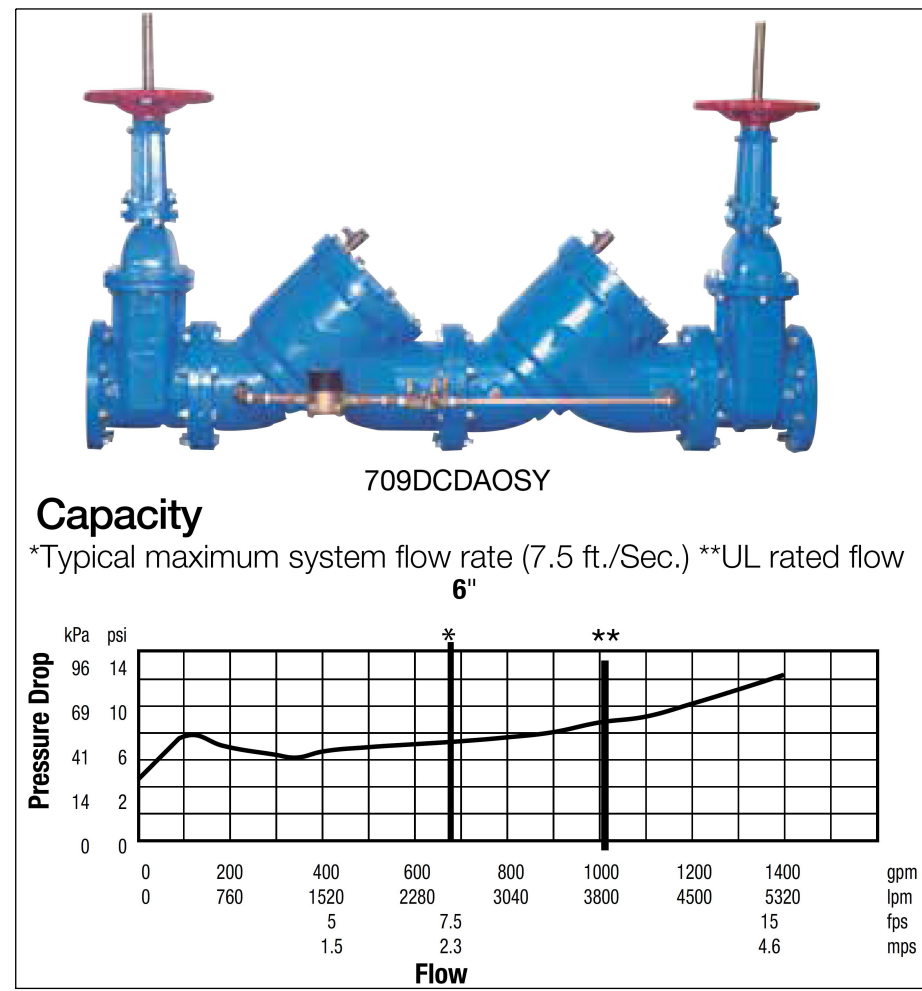


HOME 2 SUITES BY HILTON 4-STORY HOTEL CONSTRUCTION FIRE PROTECTION

475 Hospitality Blvd, Greenwood, SC 29649



2
FF-01
6" WATTS 709DCDAOSY BACKFLOW
SCALE: N.T.S.
LOCATED AT VAULT - (BY OTHERS) FOR HYDRAULIC REFERENCE ONLY

DRAWING INDEX	
SHEET NO.	SHEET TITLE
FP-01	SITE PLAN & DESIGN NOTES
FP-02	SEISMIC & GENERAL NOTES
FP-03	FIRE PUMP DETAILS
FP-04	FIRE SUPPRESSION PLAN - FIRST FLOOR
FP-05	FIRE SUPPRESSION PLAN - SECOND FLOOR
FP-06	FIRE SUPPRESSION PLAN - THIRD FLOOR
FP-07	FIRE SUPPRESSION PLAN - FOURTH FLOOR
FP-08	STANDPIPE HYDRAULIC CALCULATION REFERENCE

OVERALL FIRE SPRINKLER DESIGN CRITERIA					
SYMBOL	OCCUPANCY	TYPE	DENSITY (GPM/FT²)	REMOTE AREA (SQFT)	HOSE ALLOWANCE
LH	LIGHT HAZARD RESIDENTIAL	WET	0.10	REMOTE 4 HEADS	100
LH	LIGHT HAZARD OTHERS	WET	0.10	1500	100
OH-1	ORDINARY HAZARD GROUP I	WET	0.15	1500	250
OH-1D	ORDINARY HAZARD GROUP I	DRY	0.15	387 ENTIRE CANOPY	250
MAX COVERAGE PER SPRINKLER (SF)					
LIGHT HAZARD			225 STANDARD COVERAGE / 400 EXT COVERAGE		
ORDINARY HAZARD GROUP I			130		
RESIDENTIAL SPRINKLERS			400 **		

* AREA REDUCTIONS ALLOWED FOR QUICK-RESPONSE SPRINKLERS PER NFPA 13 19.3.3.2.3.1
OR USE ROOM DESIGN METHOD PER NFPA 13 19.3.3.3 WHERE APPLICABLE
** OR PER LISTING OF RESIDENTIAL HEAD

FIRE SPRINKLER DESIGN CRITERIA	
SYSTEM TYPE	WET & DRY SYSTEMS
AREA OF APPLICATION	1500 SQ. FT. (AREA REDUCTIONS ALLOWED PER NFPA 13)
HOSE ALLOWANCE	100 GPM FOR LIGHT HAZARD / 250 FOR ORDINARY HAZARD
RESIDENTIAL AREA OF APPLICATION	HOT REMOTE COMPARTMENT (UP TO 4 HEADS)
RESIDENTIAL HOSE ALLOWANCE	100 GPM
FACILITY USAGE	RESIDENTIAL

CODE SUMMARY	
NFPA 13	2019
NFPA 24	2019
NFPA 20	2019
NFPA 24 (UNDERGROUND BY OTHERS)	2019
NFPA 72	2019
NFPA 25	2020
NFPA 101	2021
INTERNATIONAL BUILDING CODE W/ SC AMENDMENTS	2021
INTERNATIONAL FIRE CODE W/ SC AMENDMENTS	2021

USE GROUP & CONSTRUCTION	
CONSTRUCTION TYPE:	V-A
OCCUPANCY GROUP:	PRIMARY R-1 W/ A2, A3 & B
BUILDING HEIGHT IN FEET:	4-STORY
NUMBER OF STORIES:	4-STORIES
SPRINKLER SYSTEM:	NFPA 13 WET & DRY
STANDPIPE SYSTEM:	YES (WET/DRY/CLASS 2)

ZONE AREA OF PROTECTION		
ZONE NUMBER	LOCATION	TOTAL SQFT
ZONE P	PUMP ROOM	232 SQFT
ZONE 1	1ST FLOOR	14,372 SQFT
ZONE 1D	FRONT CANOPY	387 SQFT
ZONE 2	2ND FLOOR	14,564 SQFT
ZONE 3	3RD FLOOR	14,564 SQFT
ZONE 4	4TH FLOOR	14,564 SQFT
PROJECT TOTAL		58,683 SQFT

- SEISMIC NOTES**
- PIPES GOING THRU BLOCK WALLS OR FLOORS TO HAVE FLEXIBLE COUPLINGS ON EACH SIDE OF THE WALLS/FLOORS OR PROVIDE OVERSIZED HOLES PER NFPA 13 18.4.2.
 - 1" - 3/4" PIPE THE OVERSIZED HOLE SHALL BE 2" LARGER THAN THE DIAMETER.
 - A LARGER PIPE THE OVERSIZED HOLE SHALL BE 4" LARGER THAN THE DIAMETER.
 - RISER NIPPLES BETWEEN 3'-0" AND 7'-0" IN LENGTH TO HAVE ONE FLEXIBLE COUPLING WITHIN 24" OF THE TOP OR BOTTOM OF THE RISER NIPPLE.
 - BRANCH LINES SUPPORTED BY RODS LESS THAN 6" LONG SHALL NOT REQUIRE ADDITIONAL RESTRAINT PER NFPA 13 18.6.5.
 - ALL RISERS OVER 3' LONG TO HAVE A 4-WAY BRACE.
 - CRISERS DO NOT INCLUDE RISER NIPPLES AS DEFINED IN NFPA 13.
 - RETAINING STRAPS TO BE INSTALLED ON ALL C- TYPE CLAMPS.

SEISMIC DESIGN INFORMATION	
REFERENCE USED:	IBC-2021 / ASCE 7-16 (REFERENCE 5-001 GENERAL NOTES)
SITE CLASS:	D
SEISMIC DESIGN CATEGORY (a):	C
SEISMIC OCCUPANCY CATEGORY (b):	III
SEISMIC RISK CATEGORY (c):	II
SEISMIC COEFFICIENT (S _s = 0.30) / C _p = 0.35	

OWNERS RESPONSIBILITY

PROVIDE ADEQUATE WATER VOLUME AND PRESSURE TO THE SPRINKLER SYSTEM.

PROVIDE BUILDING STRUCTURE CAPABLE OF HANDLING ALL REQUIRED LIVE LOADS AND SEISMIC LOADS AS REQUIRED BY CODE.

NOTIFY SPRINKLER CONTRACTOR IN WRITING OF PROJECT SCHEDULE, CHANGES TO SCHEDULE, CHANGES TO SITE CONDITIONS AND STRUCTURE THAT COULD IMPACT OUR DESIGN AND INSTALLATION.

OWNER SHALL MAINTAIN BUILDING TEMPERATURES ABOVE 40 DEGREES FAHRENHEIT WHERE WET PIPE SYSTEMS ARE INSTALLED TO PREVENT FREEZING OF PIPE.

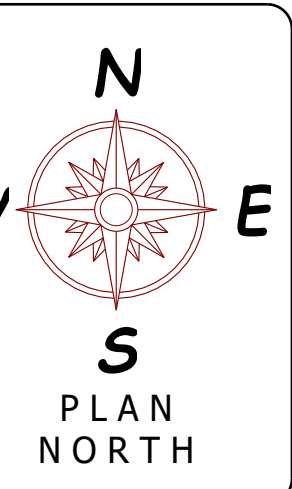
CONTRACT RESPONSIBILITIES		
ITEM	HILLER	EXIST/OTHERS
STREET WATER CONNECTION	<input type="checkbox"/>	<input checked="" type="checkbox"/>
UNDERGROUND WATER MAINS TO 5'-0" OUTSIDE	<input type="checkbox"/>	<input checked="" type="checkbox"/>
AT STUB-UP 1'-0" ABOVE FINISHED FLOOR	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WIRING	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PIPE IDENTIFICATION MARKERS OR PAINTING	<input type="checkbox"/>	<input checked="" type="checkbox"/>
FIRE EXTINGUISHERS AND/OR HOSE RACKS	<input type="checkbox"/>	<input checked="" type="checkbox"/>
FIRE DEPARTMENT CONNECTION	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CUTTING & PATCHING OF CEILINGS	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBMITTALS

TOR NAME:	Home 2 Suites 475 Hospitality Blvd. Greenwood, SC 29649
CONTRACT WITH:	John M. Campbell Company 102 Winchester Avenue Monroe, NC 28110
PHONE: (704) 254-3214	
DRAWING NAME: SITE PLAN & DESIGN NOTES	
DRAWN BY: TWH	
AHJ: LLR / Greenwood FM	
DATE: 12/18/25	
SCALE: AS NOTED	
CONTRACT NO.: CFS888	

FP-01 of 08

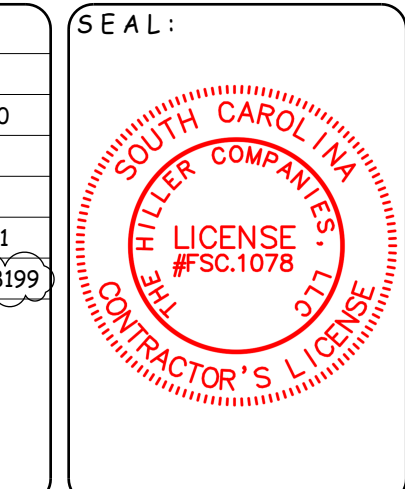
It is the sole responsibility of owner and owners representative to insure that this building/buildings has proper heat and insulation to prevent fire sprinkler pipe, fittings and devices from freezing.



GENERAL NOTES:

- SYSTEMS ARE DESIGNED AND INSTALLED PER NFPA 13 (2019 EDITION)
- RESIDENTIAL SYSTEM PIPING 2" AND SMALLER TO BE CPVC WITH CPVC FITTINGS. CONVERT TO BLACK STEEL PIPE AND FITTINGS WHERE EXPOSED.
- STEEL SYSTEM PIPING 2" AND SMALLER TO BE SCH. 40 BLACK STEEL PIPE AND FITTINGS ARE THREADED / GROOVED / FLANGED / WELDED.
- STEEL SYSTEM PIPING 2 1/2" OR LARGER TO BE SCH. 10 BLACK STEEL PIPE AND FITTINGS ARE GROOVED / FLANGED / WELDED.
- ALL HANGERS ARE TO MEET THE CRITERIA SET FORTH BY NFPA 13 (2019 EDITION) AND SPACED ACCORDING TO MANUFACTURER SPECIFICATIONS.
- THE HILLER COMPANIES TO START 1'-0" ABOVE FINISHED FLOOR.
- PAINTINGS OF PIPE OR COMPONENTS SHALL BE BY OTHERS.
- HYDRANT LOCATIONS TO BE IDENTIFIED BY OTHERS.
- ALL UNDERGROUND PIPING BY OTHERS.
- SPRINKLERS LOCATED 7'-6" OR LESS FROM FLOOR TO BE PROTECTED WITH APPROVED GUARDS.

WATER SUPPLY INFORMATION			
STATIC PRESSURE	53	FIRE PUMP	YES
RESIDUAL PRESSURE	51	SIZE GPM @ PSI	300 @ 60
FLOW G.P.M.	1160	TYPE OF DRIVER	VIP
DATE OF TEST	09/30/2025	ELECTRICAL REQ.S	208V
HYDRANT LOCATION	@ TEST NODE (SEE SITE PLAN)		
TEST TAKEN BY	GREENWOOD CPW	NODE #1	(864) 942-8199



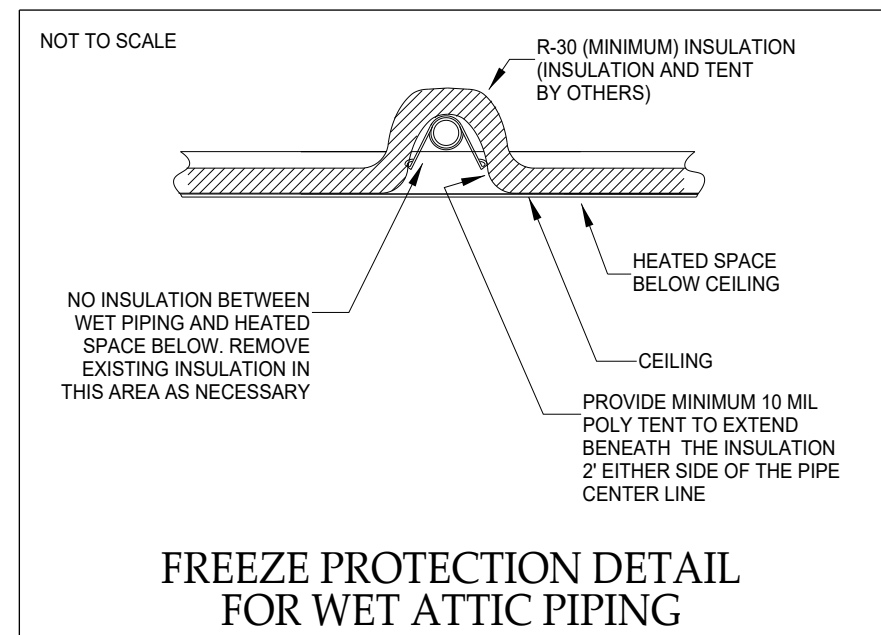
NICET REVIEW STAMP

JUAN OCHOA
NICET #0194445
LEVEL IV
WATER BASED SYSTEMS LAYOUT

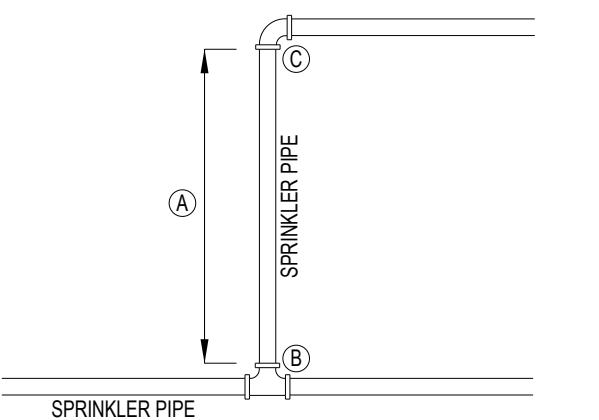
SIGNED: *[Signature]*
VALID THROUGH 01/01/2027

Sprinkler Legend - Total Project											
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note
⊗	Viking	VK360	Microfast	9	5.6	Upright	1/2"	Quick	Brass	200°F	Exposed
⊗	Viking	VK4621	Concealed	55	5.6	Concealed Pendant	1/2"	Quick	Brass	155°F	White Coverplate
⊗	Viking	VK362	Microfast	33	5.6	Pendent	1/2"	Quick	Chrome	200°F	Chrome Res Esc
⊗	Viking	VK4621	Concealed	1	5.6	Concealed Pendant	1/2"	Quick	Brass	200°F	White Coverplate
⊗	Viking	VK484	Freedom	59	4.9	Concealed Pendant	1/2"	Fast	Brass	155°F	White Coverplate
⊗	Generic	MFO	Chute Head	4	5.6	Horizontal Sidewall	1/2"	Quick	Brass	155°F	Connect Chute Head
⊗	Viking	VK365	Microfast	3	5.6	Horizontal Sidewall	1/2"	Quick	Chrome	200°F	Chrome Res Esc
⊗	Viking	VK460	Freedom	104	5.8	Horizontal Sidewall	1/2"	Fast	Chrome	155°F	Chrome Res Esc
⊗	Viking	VK482	Dry	7	5.6	Pendent	1"	Quick	White Polyester	205°F	White Flat Esc
⊗	Viking	VK468	Freedom	208	4.9	Pendent	1/2"	Fast	Chrome	155°F	Chrome Res Esc
Total = 483											

SITE PLAN GENERAL NOTES			
1.	ALL US PIPING AND UNDERGROUND APPURTENANCES BY OTHERS. THE HILLER COMPANIES TO START 1'-0" ABOVE FINISHED FLOOR.		
2.	UNDERGROUND PIPE, INCLUDING FIRE SPRINKLER FLANGED SPIGOT PIPE, SHALL BE HYDROSTATICALLY TESTED FOR TWO HOURS AT 200 PSI OR 50 PSI IN EXCESS OF NORMAL WORKING PRESSURE WHEN NORMAL WORKING PRESSURE EXCEEDS 150 PSI PER NFPA 24: 10.10.2.2 AND FLUSHED PER 24: 10.10.2.1 PRIOR TO CONNECTION TO SPRINKLER RISER. (TEST CONDUCTED BY OTHERS)		

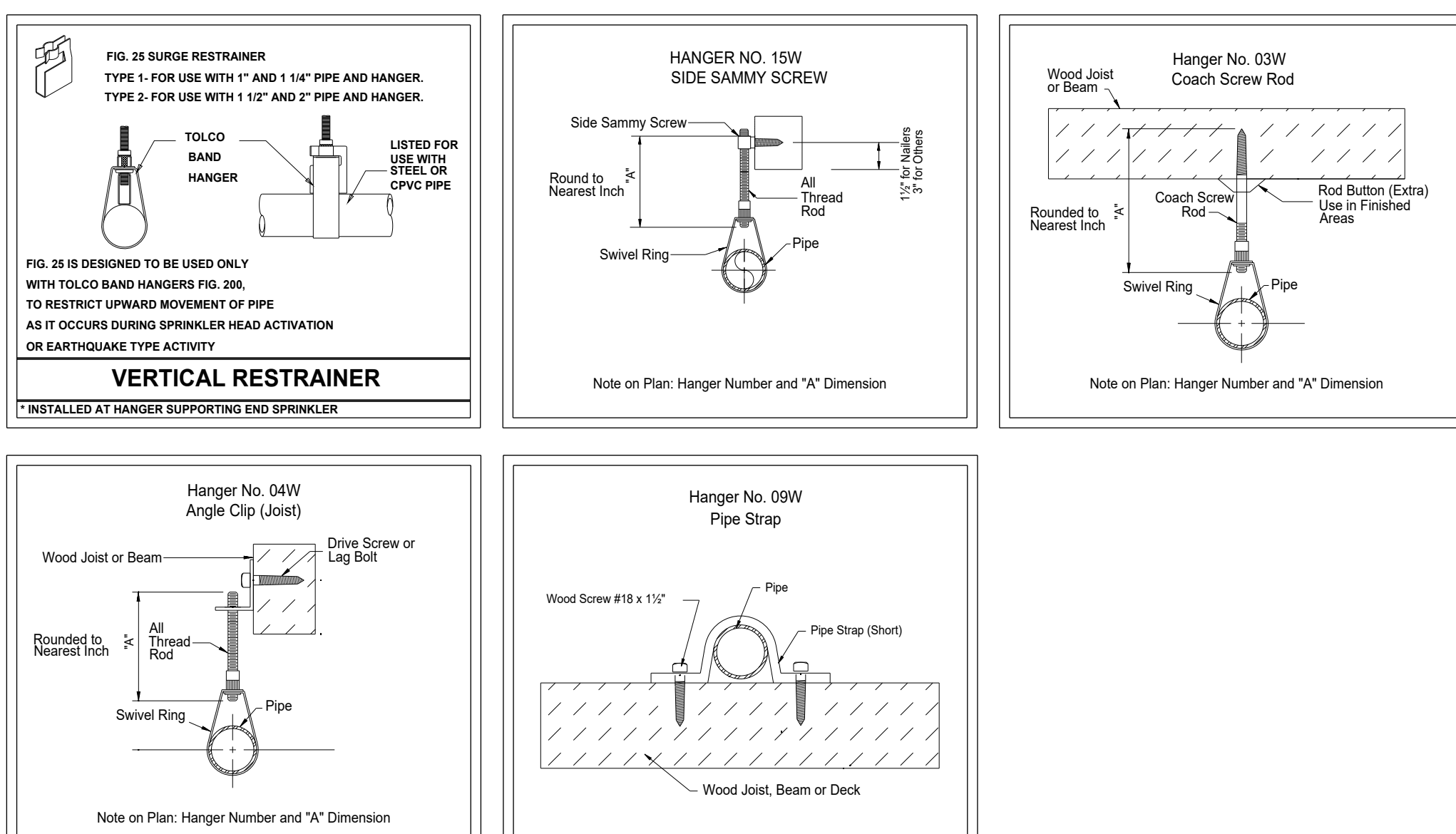


FLEXIBLE COUPLINGS



- FLEXIBLE COUPLING NOTES:**
1. INSTALL WITHIN 12" ABOVE AND WITHIN 24" BELOW THE FLOOR IN MULTISTORY BUILDINGS.
 2. INSTALL ON BOTH SIDES OF MASONRY OR CONCRETE WALL WITHIN 12" OF THE WALL SURFACE UNLESS CLEARANCE HAS BEEN PROVIDED.
 3. INSTALL WITHIN 24" OF BUILDING EXPANSION JOINTS.
 4. LENGTHS OF PIPE WITH MORE FLEXIBLE COUPLINGS THAN REQUIRED SHALL HAVE ADDITIONAL SWAY BRACING INSTALLED.
 5. COUPLINGS SHALL BE RIGID UNLESS OTHERWISE REQUIRED.
 6. SYMBOL DENOTES FLEXIBLE COUPLING.
- FLEXIBLE COUPLINGS TO BE INSTALLED ON ALL VERTICAL PIPES 2 1/2" AND LARGER AS FOLLOWS:**
- WHEN "X" IS LESS THAN 3'-0": NO COUPLINGS REQUIRED.
 - WHEN "X" IS MORE THAN 3'-0" BUT LESS THAN 7'-0": INSTALL FLEXIBLE COUPLING AT "B".
 - WHEN "X" IS GREATER THAN 7'-0": INSTALL FLEXIBLE COUPLINGS AT "B" AND "C".

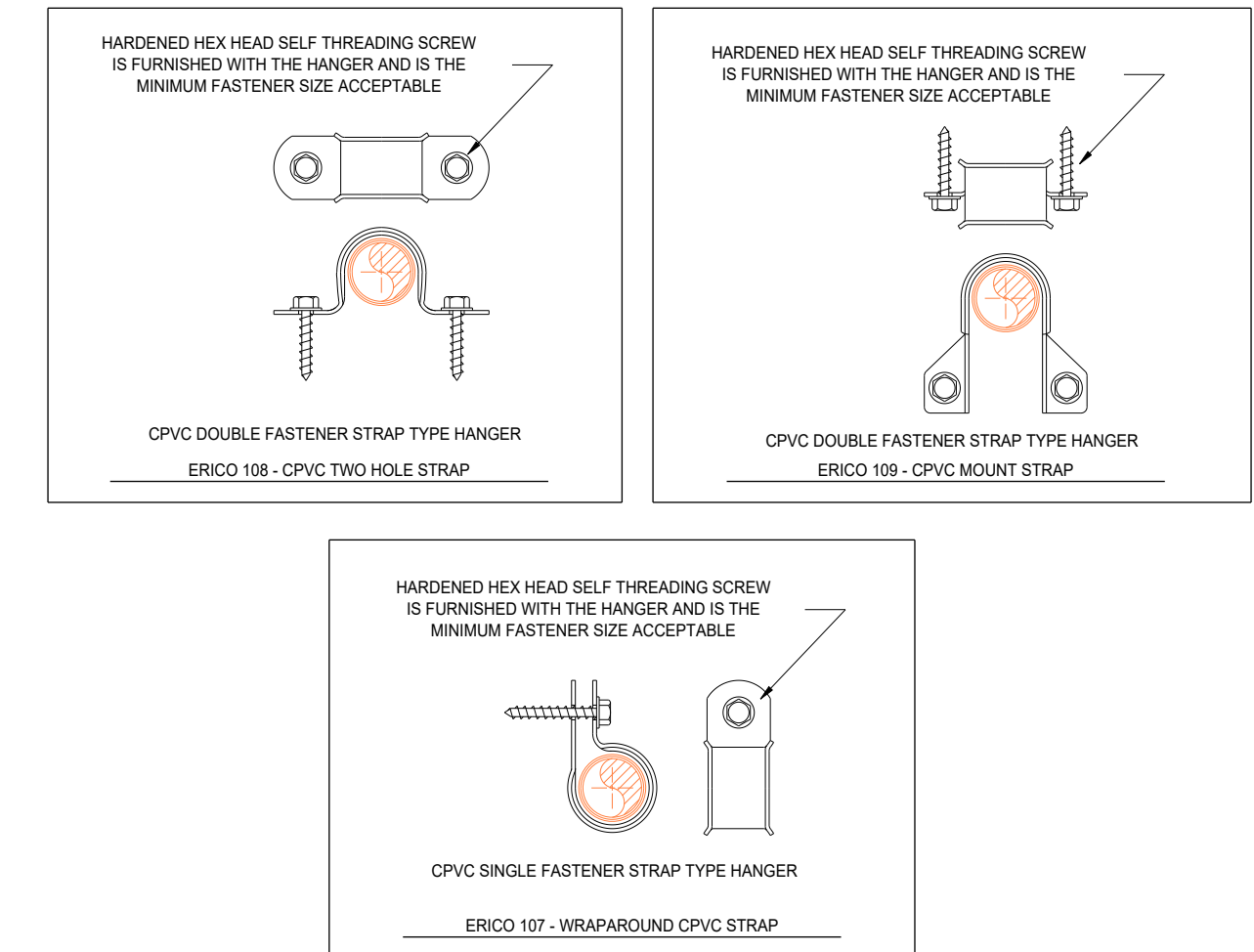
CONCRETE & WOOD HANGER DETAILS



MAXIMUM DISTANCE BETWEEN HANGERS (ft.-in.)

NOMINAL PIPE SIZE (in.)	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	5"	6"	8"
STEEL PIPE EXCEPT THREADED LIGHTWALL	N/A	12'-0"	12'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"
CPVC	5'-0"	6'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	N/A	N/A	N/A	N/A	N/A

CPVC PLASTIC HANGER DETAILS



SPECIAL FIRE PROTECTION MATERIAL NOTES

1. ALL SYSTEM COMPONENTS AND HARDWARE SHALL BE IN COMPLIANCE WITH NFPA 13.
2. ALL MATERIAL & EQUIPMENT USED SHALL BE UL LISTED.
3. WHERE NON-METALLIC PIPE IS USED IN COMBINATION SYSTEMS UTILIZING STEEL PIPE, CUTTING OILS AND LUBRICANTS USED FOR FABRICATION OF THE STEEL PIPING SHALL BE COMPATIBLE WITH THE NON-METALLIC PIPE MATERIALS.
4. WHERE NON-METALLIC PIPE IS USED IN COMBINATION SYSTEMS UTILIZING STEEL PIPE, CUTTING OILS AND LUBRICANTS USED FOR FABRICATION OF THE STEEL PIPING SHALL BE COMPATIBLE WITH THE NON-METALLIC PIPE MATERIALS.
5. POWER DRIVEN ANCHORS SHALL NOT BE USED. REFER TO THE STRUCTURAL PLANS AND DETAILS FOR ACCEPTABLE LOCATIONS TO ATTACH HANGERS AND SUPPORTS TO THE BUILDING STRUCTURE. HANGERS SHALL NOT ATTACH TO THE ROOF DECK.
6. SPRINKLER PIPE PASSING THROUGH SMOKE/FIRE BARRIERS (INCLUDING WALLS, FLOORS & CEILINGS) SHALL BE FIRESTOPPED TO MAINTAIN THE INTEGRITY OF THAT BARRIER. PROVIDE ESCUTCHEON PLATES AT EACH SIDE OF PENETRATIONS IN FINISHED AREAS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS. ALL SMOKE/FIRE BARRIERS, ALL NON-RATED FLOOR PENETRATIONS SHALL BE SEALED WATER TIGHT WITH A FLEXIBLE SEALANT.
7. PIPE AND FITTINGS:
 - CPVC PIPE AND CPVC FITTINGS WHERE ALLOWED BY NFPA 13 AND MFG DATA SHEETS.
 - BLACK SCH. 40 PIPE WITH WELDED OUTLETS AND GROOVED FITTINGS.
 - BLACK SCH. 40 PIPE WITH THREADED DUCTILE IRON FITTINGS.

FIRE PROTECTION GENERAL NOTES

1. THE HILLER COMPANIES STARTS 1'-0" ABOVE FINISHED FLOOR, ALL UNDERGROUND PIPING BY OTHERS.
2. SPRIGS 4 FT (1.2M) OR LONGER SHALL BE RESTRAINED AGAINST LATERAL MOVEMENT.
3. SYSTEM DRAINS SHALL BE INSTALLED AS REQUIRED PER NFPA 13 AND EXTENDED OUTSIDE THE BUILDING.
4. ALL CORRIDOR CEILING HEIGHTS AT 8'-6" AND UNIT CEILING HEIGHTS AT 10'-0" UNLESS NOTED OTHERWISE.
5. FIRE SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS THAT ARE LESS 55 FT² IN AREA IN ACCORDANCE WITH NFPA 13. 9.2.4.1.3.
6. FIRE SPRINKLERS ARE NOT REQUIRED PER NFPA 13. 9.2.4.2. IN CLOSETS, LINEN CLOSETS AND PANTRIES WITH DWELLING UNITS THAT MEET ALL THE FOLLOWING CONDITIONS:
 - THE AREA OF THE SPACE DOES NOT EXCEED 24 FT².
 - THE WALLS AND CEILING ARE SURFACED WITH NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIALS AS DEFINED BY NFPA 220.
7. THE ATTIC AND INTERSTITIAL SPACES ARE TO BE FILLED WITH NONCOMBUSTIBLE INSULATION. FIRE SPRINKLERS ARE NOT REQUIRED FOR THIS CONCEALED SPACE WITH THE REQUIREMENTS OF NFPA 13. 9.2.4.1.3.
8. CPVC USED ABOVE CEILINGS IN ALL RESIDENTIAL AREAS, EXCEPT PIPING TO STEEL IN EXPOSED AREAS AND ROOMS OF ORDINARY HAZARD OCCUPANCIES, CONVEYING 450 FT³.
9. SPRINKLERS SHALL BE INSTALLED AT THE TOP OF COMBUSTIBLE STAIR SHAMTS, UNDER THE LANDINGS AT EACH FLOOR LEVEL AND BENEATH THE LOWEST INTERMEDIATE LANDING PER NFPA 13. 9.3.4.1.
10. ALL PIPING VALVES AND APPURTENANCES SHALL BE INSTALLED SUCH AS NOT TO OBSTRUCT ANY PORTION OF WINDOWS, DOORWAYS, STAIRS, PASSAGEWAYS OR ACCESS TO EQUIPMENT.

RESIDENTIAL AREA NOTES PER NFPA 13 2019:

- 19.4 SPECIAL DESIGN APPROACHES.**
- 19.4.1 RESIDENTIAL SPRINKLERS.**
- 19.4.1.1* THE DESIGN AREA SHALL BE THE AREA THAT INCLUDES THE FOUR ADJACENT SPRINKLERS THAT PRODUCE THE GREATEST HYDRAULIC DEMAND.
- 19.4.1.3 UNLESS THE REQUIREMENTS OF 19.4.1 ARE MET, THE MINIMUM REQUIRED DISCHARGE FROM EACH DESIGN AREA SPRINKLER SHALL BE THE GREATER OF THE FOLLOWING:
- (1) IN ACCORDANCE WITH MINIMUM FLOW RATES INDICATED IN THE SPRINKLER LISTINGS
 - (2) IN ROOMS OR COMPARTMENTS GREATER THAN 800 FT² (74 M²) CALCULATED BASED ON DELIVERING A MINIMUM OF 0.1 GPM/FT² (4.1 L/MIN) OVER THE DESIGN AREA IN ACCORDANCE WITH THE PROVISIONS OF 9.5.2.1
 - (3) IN ROOMS OR COMPARTMENTS 800 FT² (74 M²) OR LESS CALCULATED BASED ON DELIVERING A MINIMUM OF 0.1 GPM/FT² (4.1 L/MIN) OVER THE ROOM OR THE COMPARTMENT USING THE AREA OF THE ROOM DIVIDED BY THE NUMBER OF SPRINKLERS IN THE ROOM
- DESIGN CRITERIA DETERMINATION**
SMALL ROOM METHOD
COMPARTMENT AREA = 484 FT² (KING ONE BEDROOM 429)
484 FT² x 121 FT³ x 10 = 12.1 GPM
PER MANUFACTURE CUT SHEET, THIS IS LESS DEMANDING
USE TABLE BELOW FOR VK468 RES PENDENT DESIGN CRITERIA.

CALCULATIONS USED
MAX SPACING 16 x 16
17 GPM @ 12.0 PSI

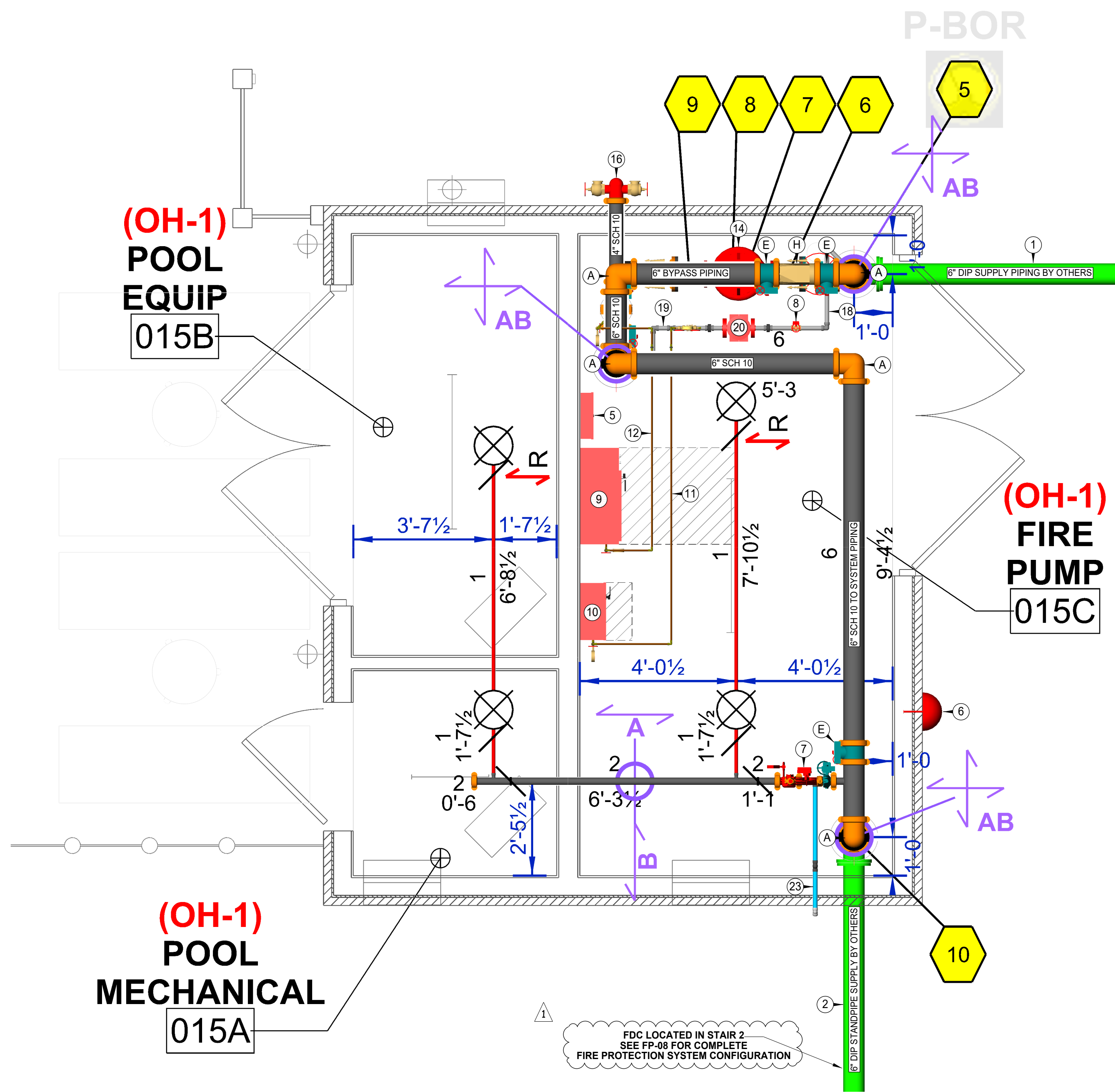
Approval Chart Viking VK468, 4.9 K-Factor Residential Pendent Sprinkler For systems designed to NFPA 13D or NFPA 13R. For systems designed to NFPA 13, refer to the design criteria. For ceiling types refer to current editions of NFPA 13, 13R or 13D.									
Sprinkler Base Part Number ¹	SIN	NPT Thread Size		Nominal K-Factor	Maximum Water Working Pressure	Overall Length		Listings and Approvals ⁵	Minimum Spacing Ft. (m)
		Inches	mm			Inches	mm		
13637	VK468	1/2	15	4.9	70.8	175 psi (12 bar)	2-1/4	58	
Max. Coverage Area ² Fl. X Ft. (m x m)	Ordinary Temp Rating (155°F/68°C)	Pressure ³ GPM (L/min)	Pressure ³ PSI (bar)	Deflector to Ceiling	Installation Type	Listings and Approvals ⁵			
12 x 12 (3.7 x 3.7)	13	7.0	13	7.0					
14 x 14 (4.3 x 4.3)	(49.2)	(0.48)	(49.2)	(0.48)					
16 x 16 (4.9 x 4.9)	(49.2)	(0.48)	(49.2)	(0.48)					
18 x 18 (5.5 x 5.5)	17	12.0	17	12.0					
20 x 20 (6.1 x 6.1)	20	16.7	20	16.7					

Footnotes

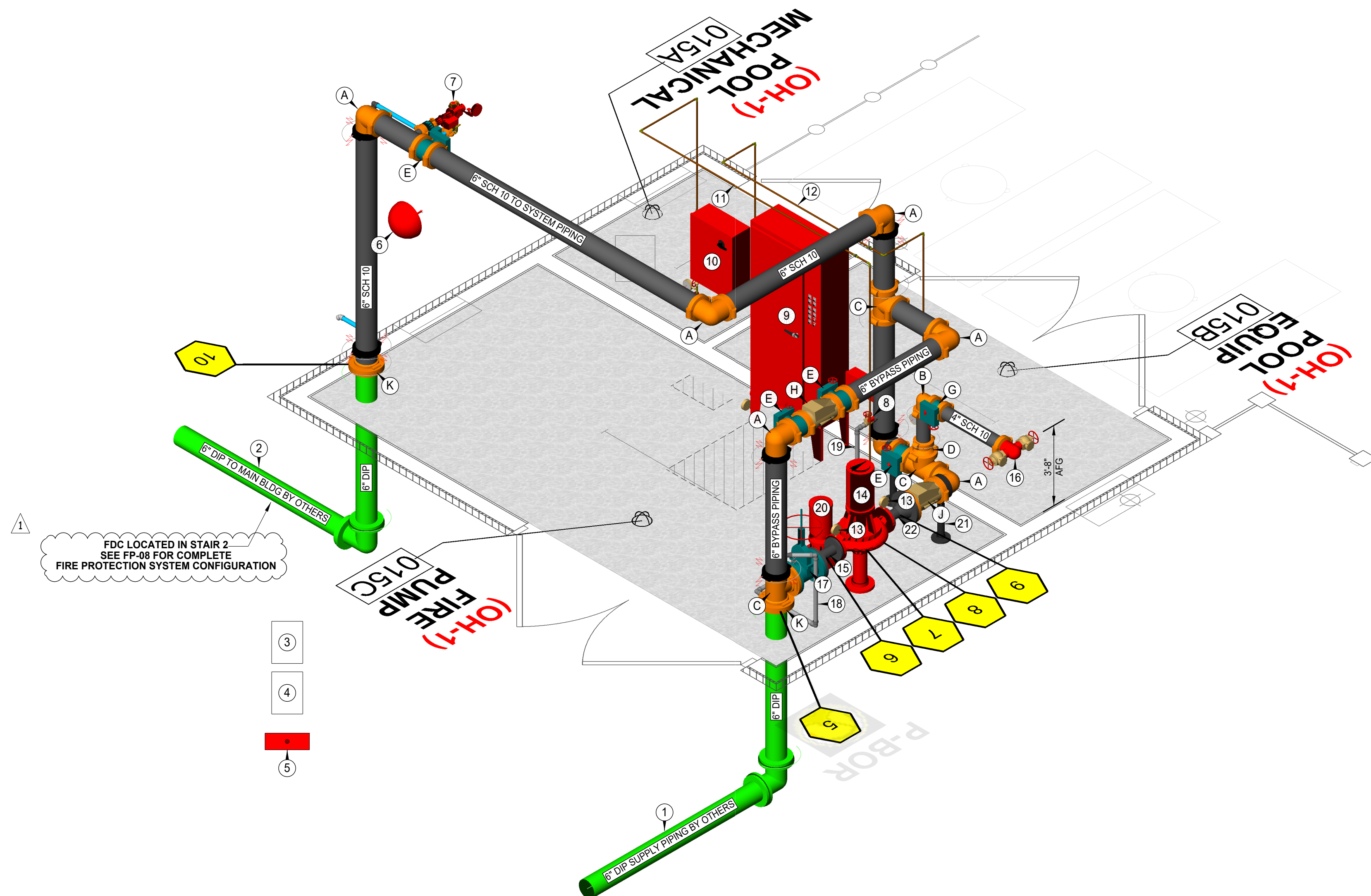
1. Part number shown is the base part number. For complete part numbers refer to Viking's current price schedule.
2. Metric K-factor measurement shown is when pressure is measured in bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.
3. This chart shows the listings and approvals available at the time of printing. Other approvals may be in process. Check with the manufacturer for any additional approvals. Refer also to Design Criteria.
4. For areas of coverage smaller than shown, use the "Flow" and "Pressure" for the next larger area listed. Flows and pressures listed are per sprinkler. The distance from sprinklers to walls shall not exceed one-half the sprinkler spacing indicated for the minimum "Flow" and "Pressure" used.
5. Listed by Underwriters Laboratories, Inc. for use in the U.S., Canada, and European Union.
6. Approved Finishes are: Brass, Chrome, White Polyester, and Black Polyester. Other point colors are available on request with the same C-UL-US-EU listings as the standard finish colors.
7. UL Classified to: NSF/ANSI Standard 61, Drinking Water System Components (NSF/ANSI 372 (MH48034)).
8. Approved finish is Electroless Nickel PTFE (ENT). Sprinkler body finishes are C-UL-US-EU Listed as corrosion-resistant. ENT is available with standard surface-mounted escutcheons or the Micromatic Model E-1 Recessed Escutcheon.

- DESIGN CRITERIA DETERMINATION**
SMALL ROOM METHOD
COMPARTMENT AREA = 484 FT² (KING ONE BEDROOM 429)
484 FT² x 121 FT³ x 10 = 12.1 GPM
PER MANUFACTURE CUT SHEET, THIS IS LESS DEMANDING
USE TABLE BELOW FOR VK468 HSW DESIGN CRITERIA.
- CALCULATIONS USED**
MAX SPACING 16 x 16
20 GPM @ 11.9 PSI

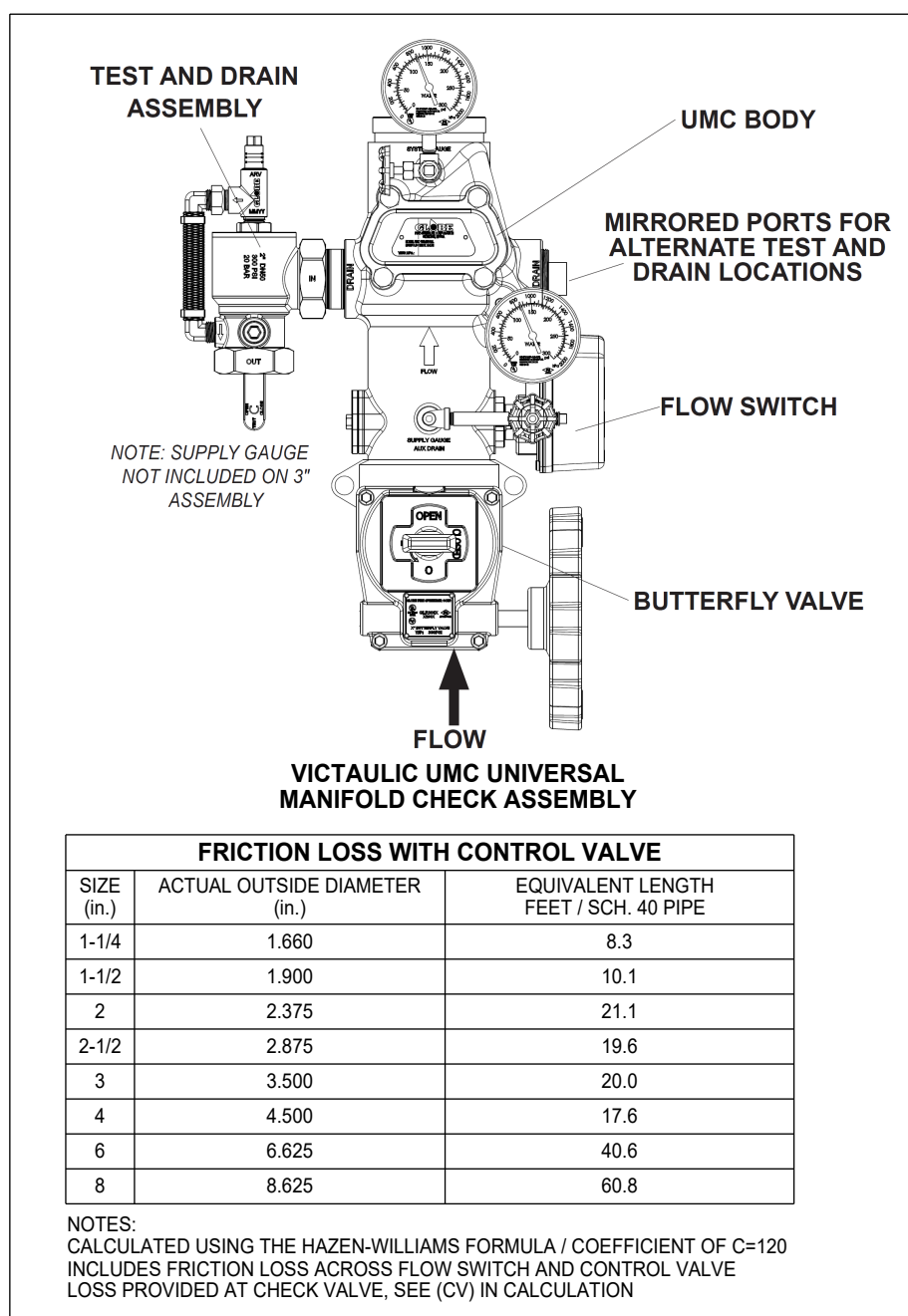
Approval Chart									
Viking VK460, 5.8 K-Factor Residential Horizontal Sidewall Sprinkler									
For systems designed to NFPA 13D or NFPA 13R. For systems designed to NFPA 13, refer to the design criteria. For Ceiling types refer to current editions of NFPA 13, 13R or 13D.									
Sprinkler Base Part Number ¹	SIN	NPT Thread Size		Nominal K-Factor	Maximum Water Working Pressure	Overall Length			
		Inches	mm			Inches	mm		
13033	VK460	1/2	15	5.8	83.6	175 psi (12 bar)	2-1/2	63.5	
Max. Coverage Area ²	Max. Spacing Ft. (m)	Ordinary Temp Rating (155°F/68°C)	Pressure PSI (bar)	Flow ⁴ GPM (L/min)	Pressure PSI (bar)	Top of Deflector to Ceiling	Installation Type	Listings and Approvals ⁵	Minimum Spacing Ft. (m)
Width X Length Fl. X Ft. (m x m)								C-UL- US-ES	
12 x 12 (3.7 x 3.7)	12 (3.7)	16 (60.6)	7.6 (0.52)	16 (60.6)	7.6 (0.52)	4 to 6 inches	Standard surface-mounted escutcheons or recessed with the Microformal Model EZ-6 Recessed Escutcheons or G-1 Adjustable Escutcheon	See Foot note 7	See Foot note 8
14 x 14 (4.3 x 4.3)	14 (4.3)	16 (60.6)	7.6 (0.52)	16 (60.6)	7.6 (0.52)			See Foot note 7	See Foot note 8
16 x 16 (4.9 x 4.9)	16 (4.9)	20 (75.7)	11.9 (0.82)	21 (79.5)	13.1 (0.90)			See Foot note 7	See Foot note 8
18 x 18 (5.5 x 5.5)	18 (5.5)	22 (83.3)	14.4 (0.99)	22 (83.3)	14.4 (0.99)			See Foot note 7	See Foot note 8
20 x 20 (6.1 x 6.1)	20 (6.1)	24 (91.4)	17.0 (1.21)	24 (91.4)	17.0 (1.21)			See Foot note 7	See Foot note 8
22 x 22 (6.7 x 6.7)	22 (6.7)	26 (101.6)	19.0 (1.36)	26 (101.6)	19.0 (1.36)			See Foot note 7	See Foot note 8
24 x 24 (7.3 x 7.3)	24 (7.3)	28 (111.8)	21.0 (1.51)	28 (111.8)	21.0 (1.51)			See Foot note 7	See Foot note 8
26 x 26 (7.9 x 7.9)	26 (7.9)	30 (117.3)	23.0 (1.65)	30 (117.3)	23.0 (1.65)			See Foot note 7	See Foot note 8
28 x 28 (8.5 x 8.5)	28 (8.5)	32 (124.0)	25.0 (1.77)	32 (124.0)	25.0 (1.77)			See Foot note 7	See Foot note 8
30 x 30 (9.1 x 9.1)	30 (9.1)	34 (132.7)	27.0 (1.93)	34 (132.7)	27.0 (1.93)			See Foot note 7	See Foot note 8
32 x 32 (9.7 x 9.7)	32 (9.7)	36 (141.3)	29.0 (2.08)	36 (141.3)	29.0 (2.08)	See Foot note 7	See Foot note 8		
34 x 34 (10.3 x 10.3)	34 (10.3)	38 (149.3)	31.0 (2.23)	38 (149.3)	31.0 (2.23)	See Foot note 7	See Foot note 8		
36 x 36 (10.9 x 10.9)	36 (10.9)	40 (157.5)	33.0 (2.38)	40 (157.5)	33.0 (2.38)	See Foot note 7	See Foot note 8		
38 x 38 (11.5 x 11.5)	38 (11.5)	42 (165.1)	35.0 (2.53)	42 (165.1)	35.0 (2.53)	See Foot note 7	See Foot note 8		
40 x 40 (12.1 x 12.1)	40 (12.1)	44 (172.7)	37.0 (2.68)	44 (172.7)	37.0 (2.68)	See Foot note 7	See Foot note 8		
42 x 42 (12.7 x 12.7)	42 (12.7)	46 (180.3)	39.0 (2.83)	46 (180.3)	39.0 (2.83)	See Foot note 7	See Foot note 8		
44 x 44 (13.3 x 13.3)	44 (13.3)	48 (187.9)	41.0 (2.98)	48 (187.9)	41.0 (2.98)	See Foot note 7	See Foot note 8		
46 x 46 (13.9 x 13.9)	46 (13.9)	50 (195.5)	43.0 (3.13)	50 (195.5)	43.0 (3.13)	See Foot note 7	See Foot note 8		
48 x 48 (14.5 x 14.5)	48 (14.5)	52 (203.1)	45.0 (3.28)	52 (203.1)	45.0 (3.28)	See Foot note 7	See Foot note 8		
50 x 50 (15.1 x 15.1)	50 (15.1)	54 (210.7)	47.0 (3.43)	54 (210.7)	47.0 (3.43)	See Foot note 7	See Foot note 8		
52 x 52 (15.7 x 15.7)	52 (15.7)	56 (218.3)	49.0 (3.58)	56 (218.3)	49.0 (3.58)	See Foot note 7	See Foot note 8		
54 x 54 (16.3 x 16.3)	54 (16.3)	58 (225.9)	51.0 (3.73)	58 (225.9)	51.0 (3.73)	See Foot note 7	See Foot note 8		
56 x 56 (16.9 x 16.9)	56 (16.9)	60 (233.5)	53.0 (3.88)	60 (233.5)	53.0 (3.88)	See Foot note 7	See Foot note 8		
58 x 58 (17.5 x 17.5)	58 (17.5)	62 (241.1)	55.0 (4.03)	62 (241.1)	55.0 (4.03)	See Foot note 7	See Foot note 8		
60 x 60 (18.1 x 18.1)	60 (18.1)	64 (248.7)	57.0 (4.18)	64 (248.7)	57.0 (4.18)	See Foot note 7	See Foot note 8		
62 x 62 (18.7 x 18.7)	62 (18.7)	66 (256.3)	59.0 (4.33)	66 (256.3)	59.0 (4.33)	See Foot note 7	See Foot note 8		
64 x 64 (19.3 x 19.3)	64 (19.3)	68 (263.9)	61.0 (4.48)	68 (263.9)	61.0 (4.48)	See Foot note 7	See Foot note 8		
66 x 66 (19.9 x 19.9)	66 (19.9)	70 (271.5)	63.0 (4.63)	70 (271.5)	63.0 (4.63)	See Foot note 7	See Foot note 8		
68 x 68 (20.5 x 20.5)	68 (20.5)	72 (279.1)	65.0 (4.78)	72 (279.1)	65.0 (4.78)	See Foot note 7	See Foot note 8		
70 x 70 (21.1 x 21.1)	70 (21.1)	74 (286.7)	67.0 (4.93)	74 (286.7)	67.0 (4.93)	See Foot note 7	See Foot note 8		
72 x 72 (21.7 x 21.7)	72 (21.7)	76 (294.3)	69.0 (5.08)	76 (294.3)	69.0 (5.08)	See Foot note 7	See Foot note 8		
74 x 74 (22.3 x 22.3)	74 (22.3)	78 (301.9)	71.0 (5.23)	78 (301.9)	71.0 (5.23)	See Foot note 7	See Foot note 8		
76 x 76 (22.9 x 22.9)	76 (22.9)	80 (309.5)	73.0 (5.38)	80 (309.5)	73.0 (5.38)	See Foot note 7	See Foot note 8		
78 x 78 (23.5 x 23.5)	78 (23.5)	82 (317.1)	75.0 (5.53)	82 (317.1)	75.0 (5.53)	See Foot note 7	See Foot note 8		
80 x 80 (24.1 x 24.1)	80 (24.1)	84 (324.7)	77.0 (5.68)	84 (324.7)	77.0 (5.68)	See Foot note 7	See Foot note 8		
82 x 82 (24.7 x 24.7)	82 (24.7)	86 (332.3)	79.0 (5.83)	86 (332.3)	79.0 (5.83)	See Foot note 7	See Foot note 8		
84 x 84 (25.3 x 25.3)	84 (25.3)	88 (339.9)	81.0 (5.98)	88 (339.9)	81.0 (5.98)	See Foot note 7	See Foot note 8		
86 x 86 (25.9 x 25.9)	86 (25.9)	90 (347.5)	83.0 (6.13)	90 (347.5)	83.0 (6.13)	See Foot note 7	See Foot note 8		
88 x 88 (26.5 x 26.5)	88 (26.5)	92 (355.1)	85.0 (6.28)	92 (355.1)	85.0 (6.28)	See Foot note 7	See Foot note 8		
90 x 90 (27.1 x 27.1)	90 (27.1)	94 (362.7)	87.0 (6.43)	94 (362.7)	87.0 (6.43)	See Foot note 7	See Foot note 8		
92 x 92 (27.7 x 27.7)	92 (27.7)	96 (370.3)	89.0 (6.58)	96 (370.3)	89.0 (6.58)	See Foot note 7	See Foot note 8		



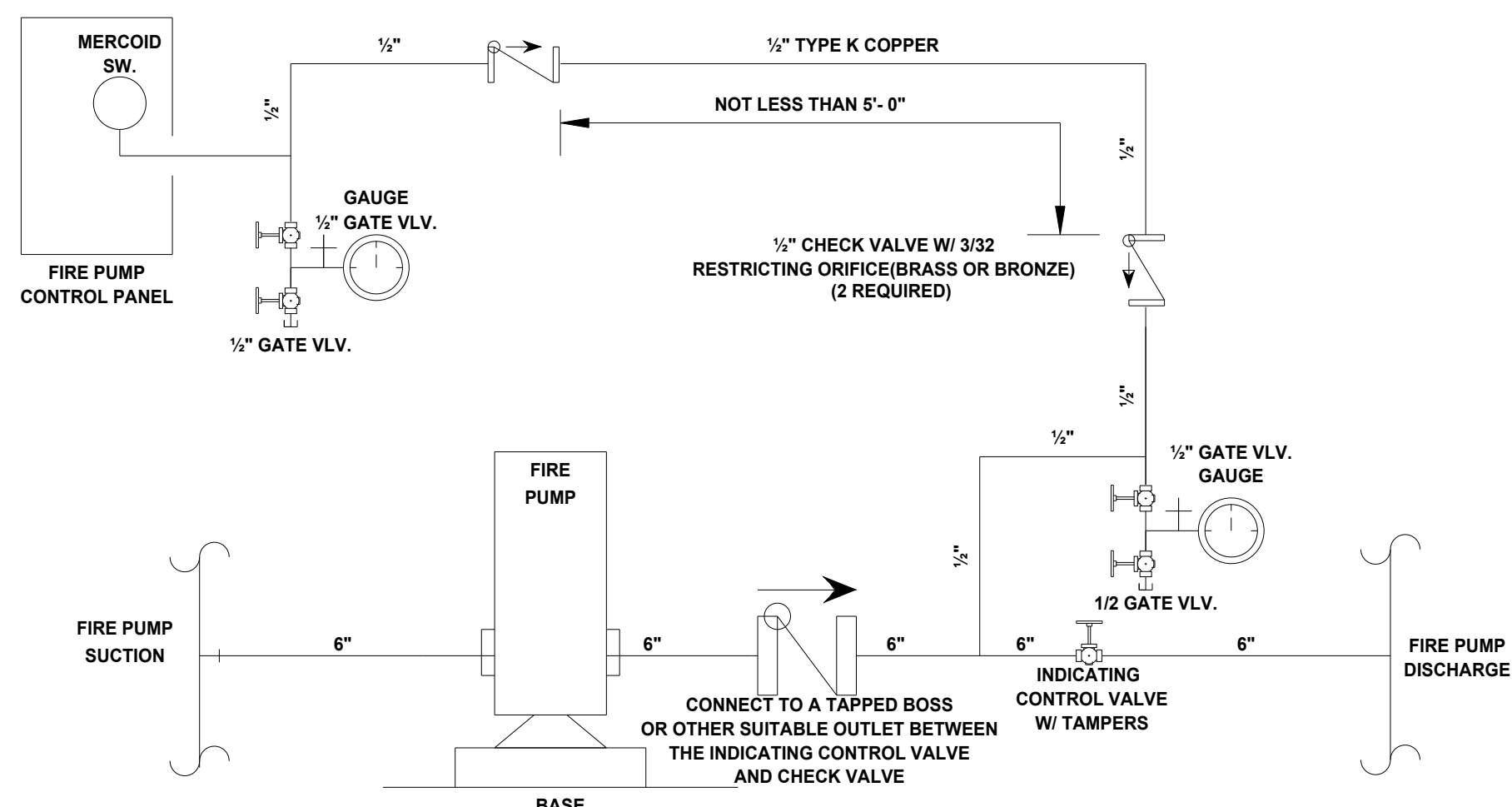
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FP-03
SCALE: 1/2" = 1'-0"



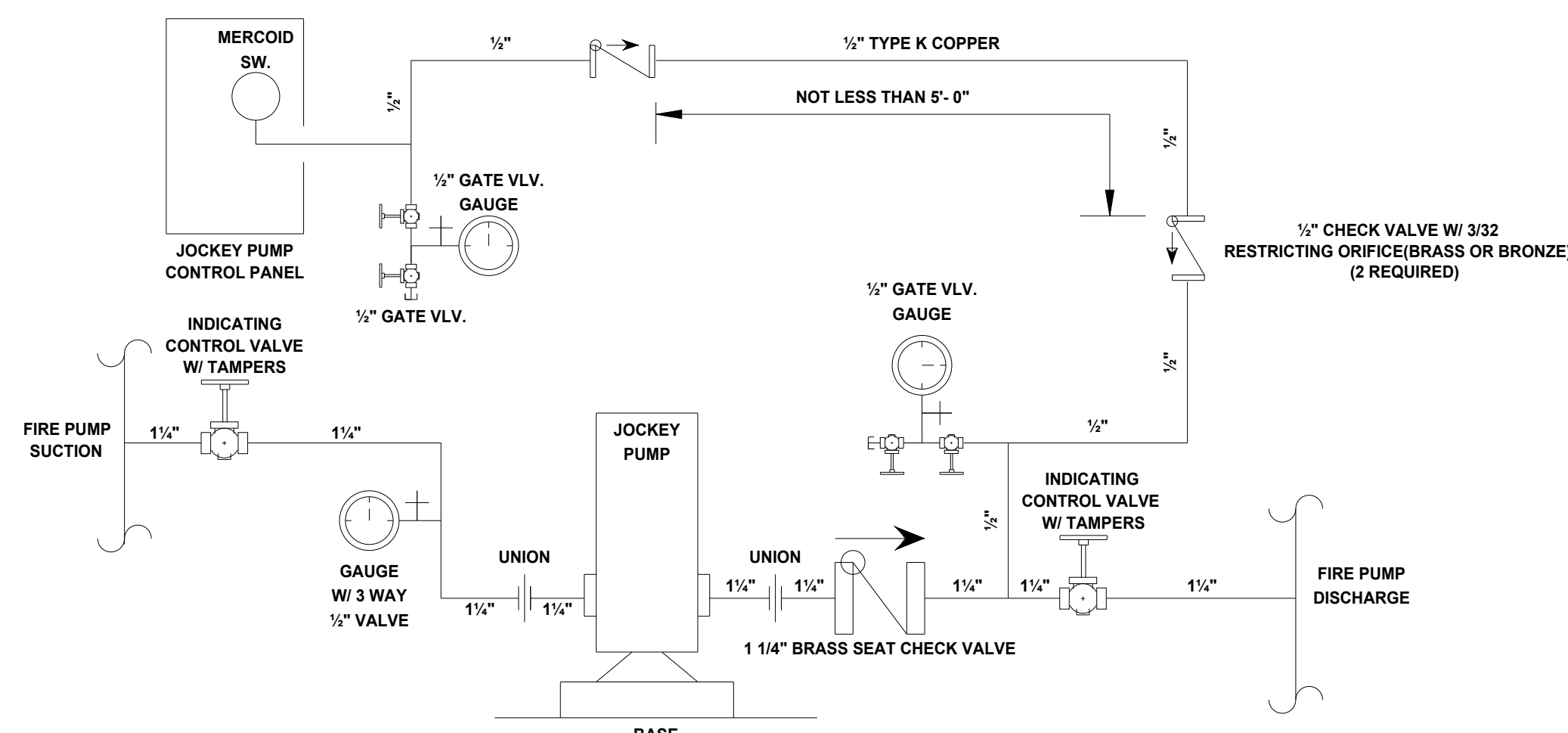
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FP-03
SCALE: 1/2" = 1'-0"



3
FP-03
SCALE: N.T.S.
2" ASSEMBLY USED FOR ZONE P (PUMP ROOM)



4
FP-03
SCALE: N.T.S.



5
FP-03
SCALE: N.T.S.

FIRE PUMP, JOCKEY PUMP AND CONTROLLER INFORMATION:

FIRE PUMP: SYNCRFLO
MODEL: SD08LFX
SIZE: 3" x 3" VERTICAL INLINE
GPM: 300
PSI: 60
MOTOR FRAME: 254JIP
MOTOR: 20 HP, 3600 RPM, 208V/3Ph/60Hz, ODP ENCLOSURE
FIRE PUMP CONTROLLER: FIRETROL
MODEL: FTA1000-AM20H
TYPE: FULL VOLTAGE STARTING
OPERATING VOLTAGE: 208V/3Ph/60Hz
MAXIMUM MOTOR HORSEPOWER: 20 HP
ENCLOSURE TYPE: NEMA 2
PRESSURE SWITCH / TRANSDUCER RANGE: 0-300 PSI
LOAD TERMINALS TO MOTOR: 208-220V, 20HP MAX
AUTOMATIC TRANSFER SWITCH: N/A

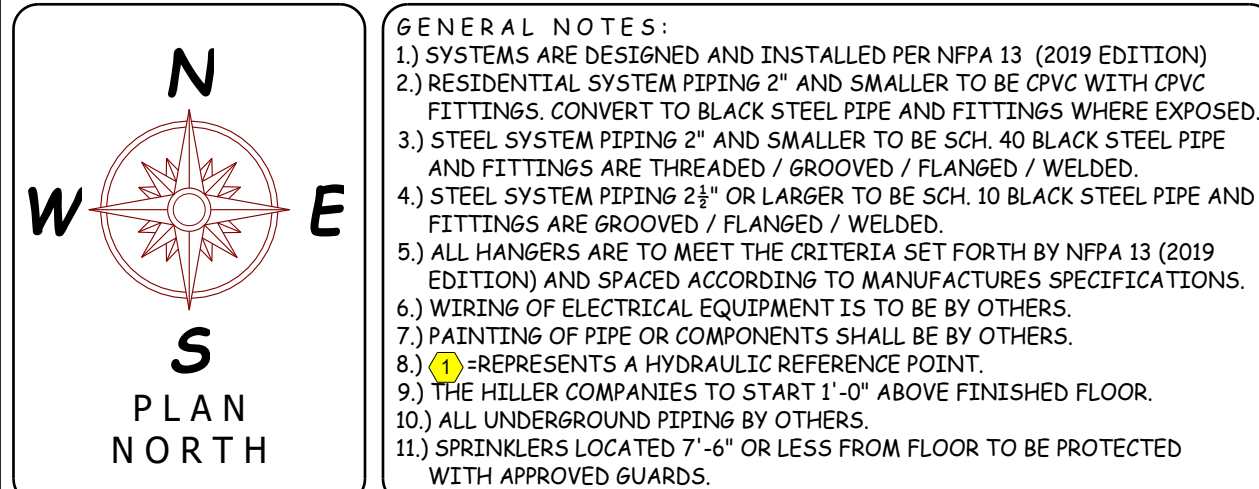
JOCKEY PUMP: WEBTROL
MODEL: NVB87FEST
SIZE: 1 1/2" x 1 1/2"
GPM: 5
PSI: 70
MOTOR: 0.75 HP, 3500 RPM, 220V/3Ph/60Hz
JOCKEY PUMP CONTROLLER: FIRETROL
MODEL: FTA570F-AG034B
TYPE: ACROSS THE LINE
OPERATING VOLTAGE: 208V/3Ph/60Hz
MAXIMUM MOTOR HORSEPOWER: 0.75 HP
ENCLOSURE TYPE: NEMA 2
PRESSURE SWITCH / TRANSDUCER RANGE: 0-300 PSI
LOAD TERMINALS TO MOTOR: 208-220V, 20HP MAX

PUMP ROOM INFORMATION:

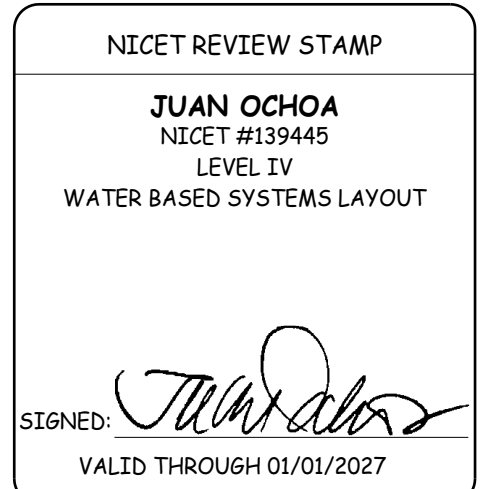
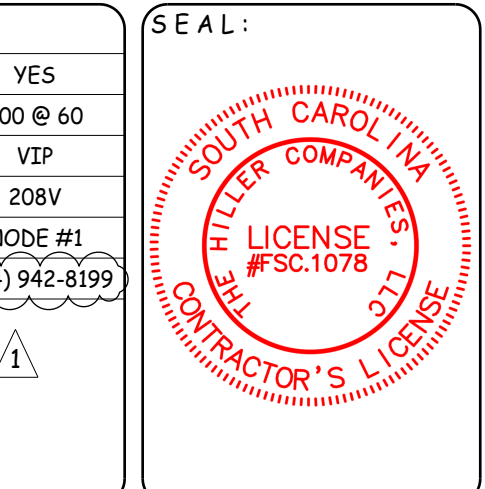
- 6" DUCTILE IRON SUPPLY TO FLANGE 1'-0" AFF. (BY OTHERS, HILLER STARTS 1'-0" AFF)
- 6" DUCTILE IRON FROM FLANGE 1'-0" AFF TO STANDPIPE IN MAIN BLDG
- HYDRAULIC DESIGN INFORMATION SIGN LOCATED AT EACH RISER PER NFPA 13: 25.5.1
- A GENERAL INFORMATION SIGN SHALL BE INSTALLED PER NFPA 13: 25.6.1
- 12 COUNT HEAD BOX
- 6" 120V ELECTRIC BELL MOUNTED OUTSIDE PUMP ROOM
- 2" VICTAULIC UMC CHECK ASSEMBLY FOR ZONE P SYSTEM (SEE DETAIL 3/FP-03)
- 1/2" BUTTERFLY VALVE W/ TAMPER SWITCH
- FIRE PUMP CONTROLLER (SEE NOTES THIS SHEET)
- JOCKEY PUMP CONTROLLER (SEE NOTES THIS SHEET)
- PRESSURE SENSING LINE TO JOCKEY PUMP CONTROLLER (SEE DETAIL THIS SHEET)
- PRESSURE SENSING LINE TO FIRE PUMP CONTROLLER (SEE DETAIL THIS SHEET)
- PUMP SUCTION AND DISCHARGE PRESSURE GAUGE W/ 3-WAY VALVE (TYPICAL)
- VERTICAL INLINE FIRE PUMP RATED AT 300 GPM @ 60 PSI (SEE NOTES THIS SHEET)
- 6" x 3" ECCENTRIC PUMP REDUCER
- CLA-VAL TH SERIES (4" (2) x 2 1/2") GROOVED FIRE PUMP TEST HEAD
- W/ 2 1/2" HOSE ANGLE VALVES, CAPS AND CHAINS (OR EQUAL)
- 6" OS&Y W/ TAMPER
- 1 1/2" LINE TO JOCKEY PUMP
- 1 1/2" LINE FROM JOCKEY PUMP
- JOCKEY PUMP (SEE NOTES THIS SHEET)
- PIPE STANDHANGER SUPPORT (TYPICAL)
- 3" x 6" FLANGED PUMP INCREASER
- PUMP ROOM SYSTEM DRAIN TO DISCHARGE AT 12" AGF.

SUBMITTALS

It is the sole responsibility of owner and owners representative to insure that this building/buildings has proper heat and insulation to prevent fire sprinkler pipe, fittings and devices from freezing.



WATER SUPPLY INFORMATION			
STATIC PRESSURE	53	FIRE PUMP	YES
RESIDUAL PRESSURE	51	SIZE GPM @ PSI	300 @ 60
FLOW G.P.M.	1160	TYPE OF DRIVER	VIP
DATE OF TEST	09/30/2025	ELECTRICAL REQ.	208V
HYDRANT LOCATION	@ TEST NODE (SEE SITE PLAN)		
TEST TAKEN BY	GREENWOOD CPW		
TEST TAKEN BY	(864) 942-8199		



Sprinkler Legend - Total Project										
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature
⊗	Viking	VK4621	Concealed	55	5.6	Concealed Pendant	1/2"	Quick	Brass	155°F
⊗	Viking	VK302	Microfast	33	5.6	Pendent	1/2"	Quick	Chrome	200°F
⊗	Viking	VK4621	Concealed	1	5.6	Concealed Pendant	1/2"	Quick	Brass	200°F
⊗	Viking	VK464	Freedom	59	4.9	Concealed Pendent	1/2"	Fast	Brass	155°F
⊗	Generic	MFG	Chute Head	4	5.6	Horizontal Sidewall	1/2"	Quick	Brass	155°F
⊗	Viking	VK305	Microfast	3	5.6	Horizontal Sidewall	1/2"	Quick	Chrome	200°F
⊗	Viking	VK460	Freedom	104	5.6	Horizontal Sidewall	1/2"	Fast	Chrome	155°F
⊗	Viking	VK482	Dry	7	5.6	Pendent	1"	Quick	White Polyester	205°F
⊗	Viking	VK468	Freedom	308	4.9	Pendent	1/2"	Fast	Chrome	155°F
				Total = 483						

NO.	DATE	REVISION DISCRIPTION	BY
1	12/18/25	ENGINEER'S COMMENTS	TWH

THE Hiller COMPANIES

CONTRACTOR LICENSE NUMBER: NC # 36018 / SC # FSC 1078-B

P O BOX 1090
CONCORD, N.C. 28026

PH: 704-784-4218
FAX: 704-784-4405

P O BOX 458
PORTSMOUTH VA. 23705

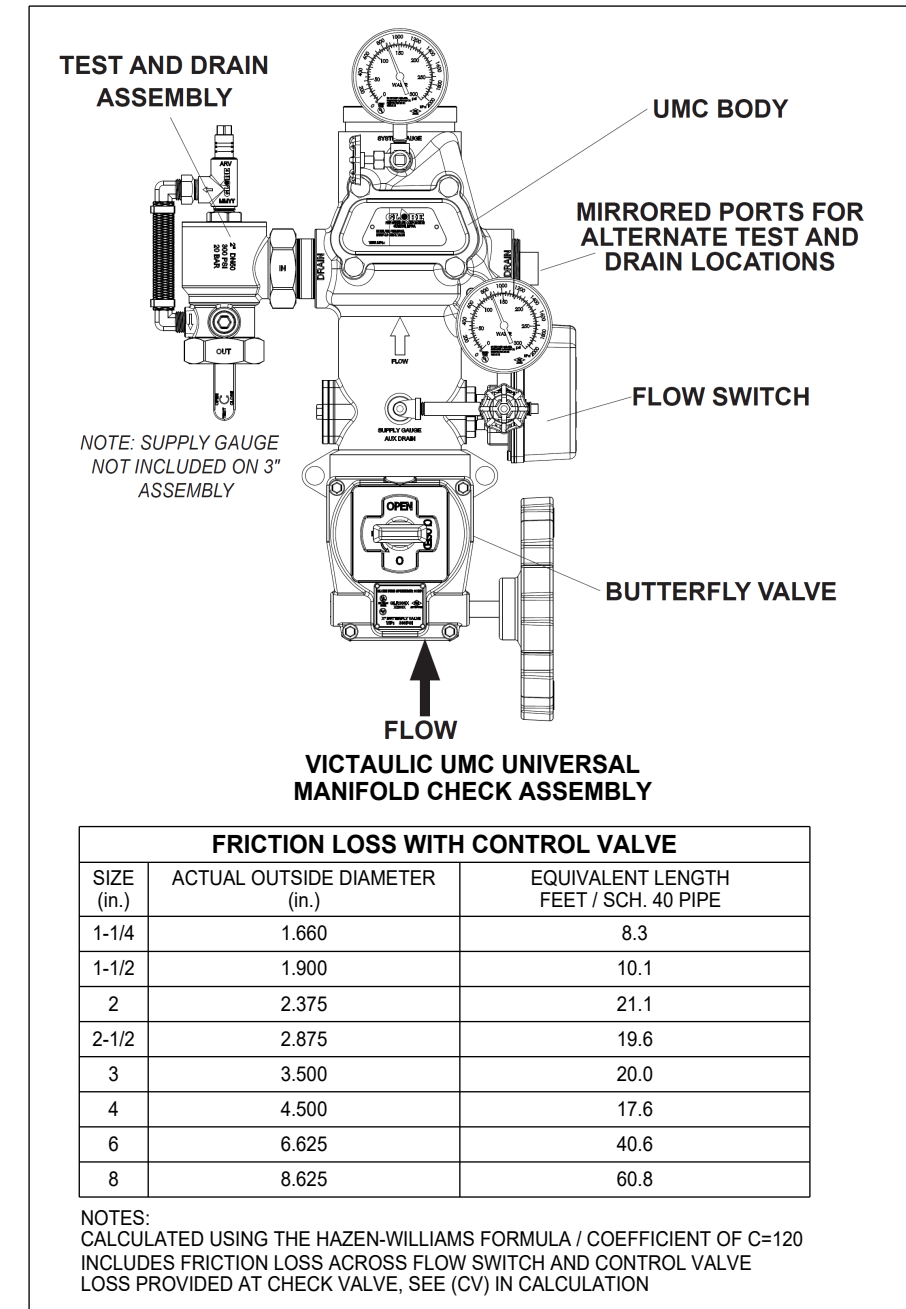
PH: 757-391-0050
FAX: 757-391-0098

TOR NAME: Home 2 Suites
475 Hospitality Blvd.
Greenwood, SC 29649

CONTRACT WITH: John M. Campbell Company
102 Winchester Avenue
Monroe, NC 28110

PHONE: (704) 254-3214
DRAWING NAME: FIRE PUMP DETAILS
DRAWN BY: TWH
AHJ: LLR / Greenwood FM
DATE: 12/18/25
SCALE: AS NOTED
CONTRACT NO.: CP0588

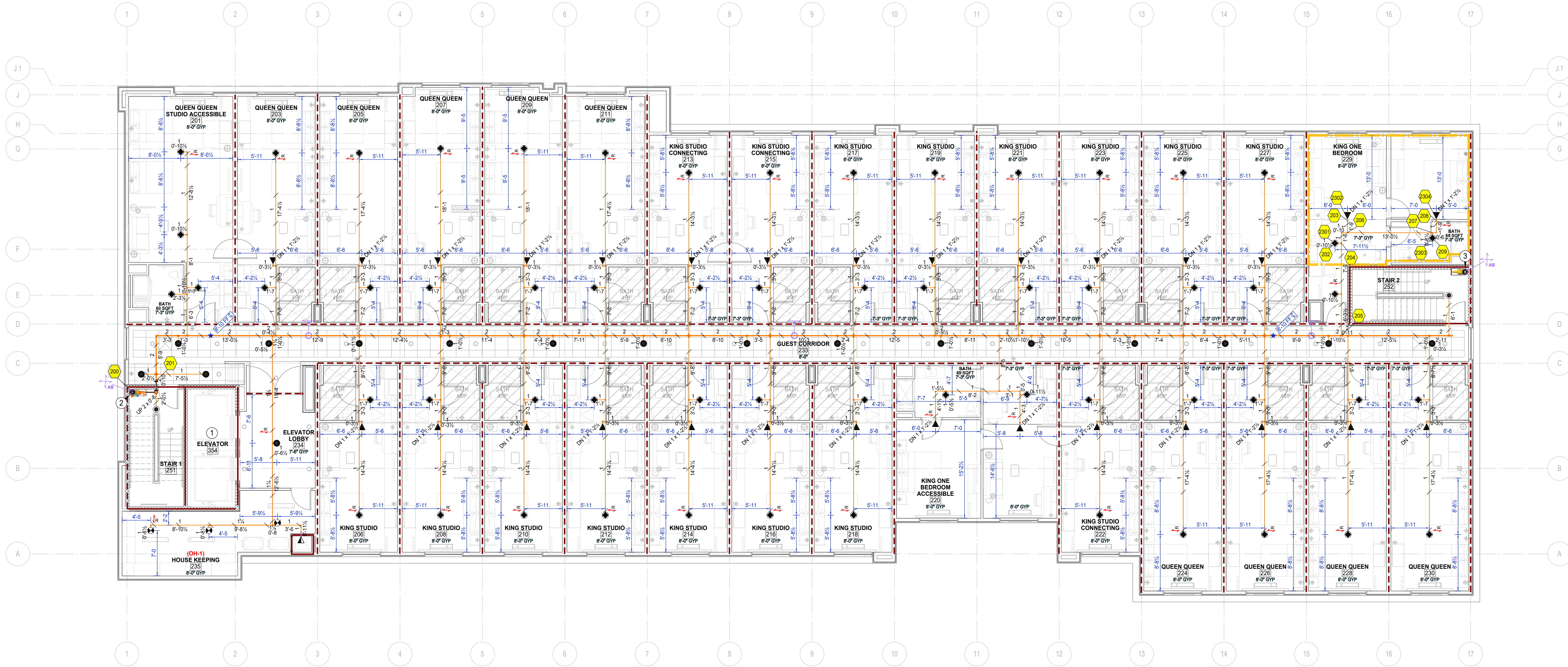
FP-03 of 08



ZONE CONTROL ASSEMBLY DETAIL WITH CONTROL VALVE

2

SCALE: N.T.S.
2" ASSEMBLY USED FOR ZONE 2 (SECOND FLOOR)



SEISMIC AND BRANCHLINE RESTRAIN NOTE







1. WHERE SHORT RODS AND STRAPS ARE USED - NO LATERAL BRACING REQUIRED PER NFPA 13, 18.5.5.10.2.

2. WHERE SHORT RODS AND STRAPS ARE USED - NO BRANCHLINE RESTRAINTS REQUIRED PER NFPA 13, 18.5.5.10.1 AND 18.6.5.

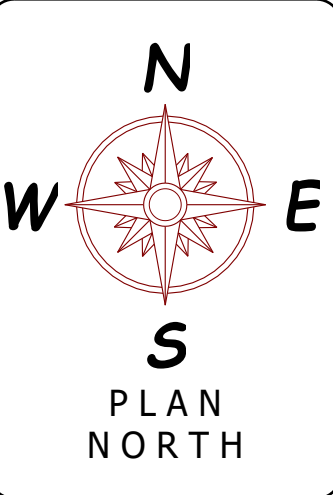
1 FIRE SUPPRESSION PLAN - SECOND FLOOR

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

0 2 4 6 8

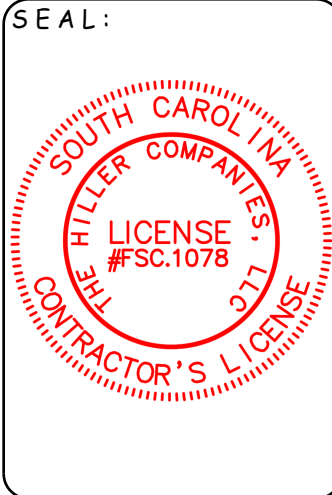
Sprinkler Legend - Total 2nd Floor												
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note	Max Spacing
	Viking	VK468	Freedom	59	4.9	Pendent	1/2	Fast	Chrome	155°F	Chrome Res Esc	18 x 18 / 324ft²
	Viking	VK460	Freedom	29	5.6	Horizontal Sidewall	1/2	Fast	Chrome	155°F	Chrome Res Esc	16 x 16 ft / 256ft²
	Viking	VK302	Microfast	3	5.6	Pendent	1/2	Quick	Chrome	200°F	Chrome Res Esc	130ft² OH / 225ft² LH
	Viking	VK494	Freedom	17	4.9	Concealed Pendent	1/2	Fast	Brass	155°F	White Coverplate	18 x 18 / 324ft²
	Generic	MFG	Chute Head	1	5.6	Horizontal Sidewall	1/2	Quick	Brass	155°F	Connect Chute Head	100ft² OH / 196ft² LH
	Viking	VK4621	Concealed	2	5.6	Concealed Pendent	1/2	Quick	Brass	155°F	White Coverplate	130ft² OH / 225ft² LH
				Total = 111								

It is the sole responsibility of owner and owners representative to insure that this building/buildings has proper heat and insulation to prevent fire sprinkler pipe, fittings and devices from freezing.



GENERAL NOTES:
1. SYSTEMS ARE DESIGNED AND INSTALLED PER NFPA 13 (2019 EDITION)
2. RESIDENTIAL SYSTEM PIPING 2" AND SMALLER TO BE CPVC WITH CPVC FITTINGS. CONVERT TO BLACK STEEL PIPE AND FITTINGS WHERE EXPOSED.
3. STEEL SYSTEM PIPING 2" AND SMALLER TO BE SCH. 40 BLACK STEEL PIPE AND FITTINGS ARE THREADED / GROOVED / FLANGED / WELDED.
4. STEEL SYSTEM PIPING 2 1/2" OR LARGER TO BE SCH. 10 BLACK STEEL PIPE AND FITTINGS ARE GROOVED / FLANGED / WELDED.
5. ALL HANGERS ARE TO MEET THE CRITERIA SET FORTH BY NFPA 13 (2019 EDITION) AND SPACED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
6. WIRING OF ELECTRICAL EQUIPMENT IS TO BE BY OTHERS.
7. PAINTING OF PIPE OR COMPONENTS SHALL BE BY OTHERS.
8. (H-1) REPRESENTS A HYDRAULIC REFERENCE POINT.
9. THE HILLER COMPANIES TO START 1'-0" ABOVE FINISHED FLOOR.
10. ALL UNDERGROUND PIPING BY OTHERS.
11. SPRINKLERS LOCATED 7'-6" OR LESS FROM FLOOR TO BE PROTECTED WITH APPROVED GUARDS.











WATER SUPPLY INFORMATION			
STATIC PRESSURE	53	FIRE PUMP	YES
RESIDUAL PRESSURE	51	SIZE GPM @ PSI	300 @ 60
FLOW G.P.M.	1160	TYPE OF DRIVER	VIP
DATE OF TEST	09/30/2025	ELECTRICAL REQ.	208V
HYDRANT LOCATION	@ TEST NODE (SEE SITE PLAN)		
TEST TAKEN BY	GREENWOOD CPW		
NOTES:	TESTED BY - MIKE PROCTOR WITNESSED BY - RUSSELL HOLLEY CONTACT EMAIL - RHOLLEY@GREENWOODCPW.COM HYDRANT LOCATION - SEE PP-01		



NICET REVIEW STAMP

JUAN OCHOA
NICET #0199445
LEVEL IV
WATER BASED SYSTEMS LAYOUT

SIGNED: *[Signature]*
VALID THROUGH 01/01/2027

Sprinkler Legend - Total Project												
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note	Max Spacing
	Viking	VK300	Microfast	9	5.6	Upright	1/2	Quick	Brass	200°F	Exposed	130ft OH / 225ft LH
	Viking	VK4621	Concealed	55	5.6	Concealed Pendent	1/2	Quick	Brass	155°F	White Coverplate	130ft OH / 225ft LH
	Viking	VK302	Microfast	33	5.6	Pendent	1/2	Quick	Chrome	200°F	Chrome Res Esc	130ft OH / 225ft LH
	Viking	VK4621	Concealed	1	5.6	Concealed Pendent	1/2	Quick	Brass	200°F	White Coverplate	130ft OH / 225ft LH
	Viking	VK494	Freedom	59	4.9	Concealed Pendent	1/2	Fast	Brass	155°F	White Coverplate	16 x 18 / 324ft²
	Generic	MFG	Chute Head	4	5.6	Horizontal Sidewall	1/2	Quick	Brass	155°F	Connect Chute Head	100ft OH / 196ft LH
	Viking	VK305	Microfast	3	5.6	Horizontal Sidewall	1/2	Quick	Chrome	200°F	Chrome Res Esc	100ft OH / 196ft LH
	Viking	VK460	Freedom	104	5.6	Horizontal Sidewall	1/2	Fast	Chrome	155°F	Chrome Res Esc	16 x 16 ft / 256ft²
	Viking	VK482	Dry	7	5.6	Pendent	1	Quick	White Polyester	205°F	White Flat Esc	130ft OH / 225ft LH
	Viking	VK468	Freedom	308	4.9	Pendent	1/2	Fast	Chrome	155°F	Chrome Res Esc	18 x 18 / 324ft²
				Total = 483								

NO.	DATE	REVISION DESCRIPTION	BY
1	12/18/25	ENGINEER'S COMMENTS	TWH

THE Hiller COMPANIES

CONTRACTOR LICENSE NUMBER: NC # 36018 / SC # FSC 1078-B

P O BOX 1090
CONCORD, N.C. 28026

PH: 704-784-4218
FAX: 704-784-4405

P O BOX 458
PORTSMOUTH VA. 23705

PH: 757-391-0050
FAX: 757-391-0098

TOR NAME: Home 2 Suites
475 Hospitality Blvd.
Greenwood, SC 29649

CONTRACT WITH: John M. Campbell Company
102 Winchester Avenue
Monroe, NC 28110

PHONE: (704) 254-3214
DRAWING NAME: FIRE SUPPRESSION PLAN - SECOND FLOOR
DRAWN BY: TWH
DATE: 12/18/25
SCALE: AS NOTED
CONTRACT NO.: CP0588

FP-05 of 08

FIREWALL AND BARRIER NOTES

2-HR FIRE RATED ASSEMBLY

1-HR FIRE RATED ASSEMBLY

GENERAL FIRE RATING NOTES

1. ALL EXTERIOR BEARING WALLS ARE 1-HOUR RATED UNLESS OTHERWISE NOTED.

2. ALL INTERIOR WOOD BEARING WALLS TO BE 1-HOUR RATED.

3. ALL INTERSTITIAL TRUSS CAVITIES SHALL BE COMPLETELY FILLED WITH NON-COMBUSTIBLE BLOWN INSULATION. SPRINKLERS ARE NOT PROVIDED IN THIS AREA.

Hydraulic Information

Remote Area Zone 2 - King One Bedroom 229

OCCUPANCY CLASSIFICATION Residential

DENSITY (gpm/ft²) 0.10 for 484ft² (Actual 484ft²)

TOTAL HOSE STREAMS 100.00

TOTAL HEADS FLOWING 4

K-FACTOR 5.8, 4.9

P-BOR BASE OF RISER (gpm) 86.42

P-BOR BASE OF RISER (psi) 16.991

Zone 2 BASE OF RISER (gpm) 86.42

Zone 2 BASE OF RISER (psi) 76.556

SAFETY MARGIN (psi) +26.278 (49.6%)

HYDRAULIC DESIGN NOTES:

USE OF VK468 RESIDENTIAL PENDENT HEADS

Max Spacing: 18x18

Minimum Flow: 17 GPM

Minimum Pressure: 12.0 PSI

USE OF VK460 RESIDENTIAL SIDEWALL HEADS

Max Spacing: 16x16

Minimum Flow: 20 GPM

Minimum Pressure: 11.9 PSI

FIRE PROTECTION KEY NOTES

1 SPRINKLERS AT TOP AND BOTTOM OF ELEVATOR SHAFT NOT REQUIRED PER ASME A14.1 & NFPA 13, 9.3.6.2

2 EXPOSED 4" MANUAL CLASS-I COMBINATION STANDPIPE W/ 2" FCA (ZONE 1) AND 2 1/2" HOSE ANGLE VALVE.

3 EXPOSED 4" MANUAL CLASS-I STANDPIPE SYSTEM.

FIRE PROTECTION GENERAL NOTES

1. THE HILLER COMPANIES STARTS 1'-0" ABOVE FINISHED FLOOR. ALL UNDERGROUND PIPING BY OTHERS.

2. SPRIGS 4 FT (1.2M) OR LONGER SHALL BE RESTRAINED AGAINST LATERAL MOVEMENT.

3. SYSTEM DRAINS SHALL BE INSTALLED AS REQUIRED PER NFPA 13 AND EXTENDED OUTSIDE THE BUILDING.

4. ALL CORRIDOR CEILING HEIGHTS AT 8'-6" AND UNIT CEILING HEIGHTS AT 10'-0" UNLESS NOTED OTHERWISE.

5. FIRE SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS THAT ARE LESS 55 FT² IN AREA IN ACCORDANCE WITH NFPA 13, 9.2.4.1.3.

6. FIRE SPRINKLERS ARE NOT REQUIRED PER NFPA 13, 9.2.4.2, IN CLOSETS, LINEN CLOSETS AND PANTRIES WITHIN DWELLING UNITS THAT MEET ALL THE FOLLOWING CONDITIONS:

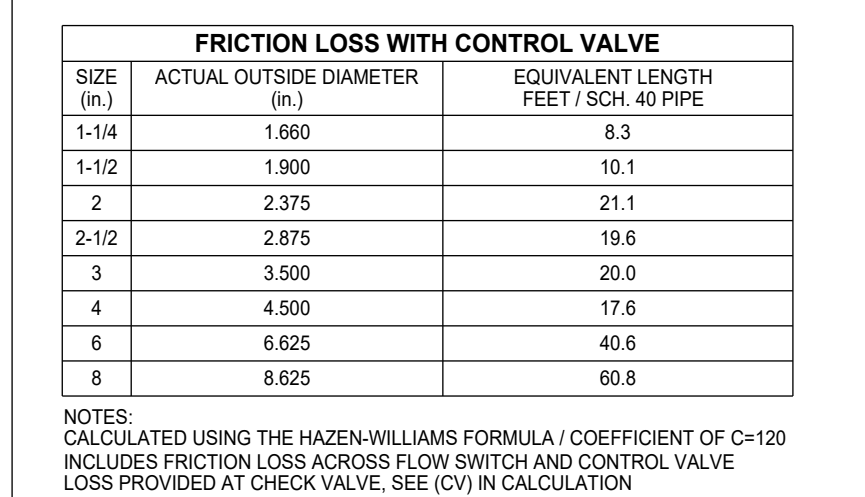
- THE AREA OF THE SPACE DOES NOT EXCEED 54 FT².
- THE WALLS AND CEILINGS ARE SURFACED WITH NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIALS AS DEFINED BY NFPA 220.

7. THE ATTIC AND INTERSTITIAL SPACES ARE TO BE FILLED WITH NONCOMBUSTIBLE INSULATION. FIRE SPRINKLERS ARE NOT REQUIRED FOR THIS CONCEALED SPACE WITH THE REQUIREMENTS OF NFPA 13, 9.2.1.1 BEING MET.

8. CPVC USED ABOVE CEILINGS IN ALL RESIDENTIAL AREAS. CONVERT PIPING TO STEEL IN EXPOSED AREAS AND ROOMS OF ORDINARY HAZARD OCCUPANCIES EXCEEDING 400 FT².

9. SPRINKLERS SHALL BE INSTALLED AT THE TOP OF COMBUSTIBLE STAIR SHAFTS, UNDER THE LANDINGS AT EACH FLOOR LEVEL AND BENEATH THE LOWEST INTERMEDIATE LANDING PER NFPA 13, 9.3.4.1.

10. ALL PIPING VALVES AND APPURTENANCES SHALL BE INSTALLED SUCH AS NOT TO OBSTRUCT ANY PORTION OF WINDOWS, DOORWAYS, STAIRS, PASSAGEWAYS OR ACCESS TO EQUIPMENT.



FP-07 SCALE: N.T.S.
2" ASSEMBLY USED FOR ZONE 2 (FOURTH FLOOR)

FRICTION LOSS WITH CONTROL VALVE		
SIZE (in.)	ACTUAL OUTSIDE DIAMETER (in.)	EQUIVALENT LENGTH FEET / SCH. 40 PIPE
1-1/4	1.660	8.3
1-1/2	1.900	10.1
2	2.375	21.1
2-1/2	2.875	19.6
3	3.500	20.0
4	4.500	17.6
6	6.625	40.6
8	8.625	60.8

NOTES:
CALCULATED USING THE HAZEN-WILLIAMS FORMULA / COEFFICIENT OF C=120
INCLUDES FRICTION LOSS ACROSS FLOW SWITCH AND CONTROL VALVE
LOSS PROVIDED AT CHECK VALVE, SEE (CV) IN CALCULATION



<h2 style="text-align: center;">Hydraulic Information</h2>	
<h3 style="text-align: center;">Remote Area Zone 4 - King One Bedroom 429</h3>	
OCCUPANCY CLASSIFICATION	Residential
DENSITY (gpm/ft²)	0.10 for 484ft ² (Actual 484ft ²)
TOTAL HOSE STREAMS	100.00
TOTAL HEADS FLOWING	4
K-FACTOR	1.5, 4.9
P-BOR BASE OF RISER (gpm)	86.42
P-BOR BASE OF RISER (psi)	26.875
Zone 2 BASE OF RISER (gpm)	86.42
Zone 2 BASE OF RISER (psi)	86.140
Zone 3 BASE OF RISER (gpm)	86.42
Zone 3 BASE OF RISER (psi)	81.348
Zone 4 BASE OF RISER (gpm)	86.42
Zone 4 BASE OF RISER (psi)	76.556
SAFETY MARGIN (psi)	+16.694 (31.5%)
HYDRAULIC DESIGN NOTES: USE OF VK460 RESIDENTIAL PENDENT HEADS Max Spacing: 10.1ft Minimum Flow: 17 GPM Minimum Pressure: 12.0 PSI	
USE OF VK460 RESIDENTIAL SIDEWALL HEADS Max Spacing: 16.1ft Minimum Flow: 20 GPM Minimum Pressure: 11.9 PSI	

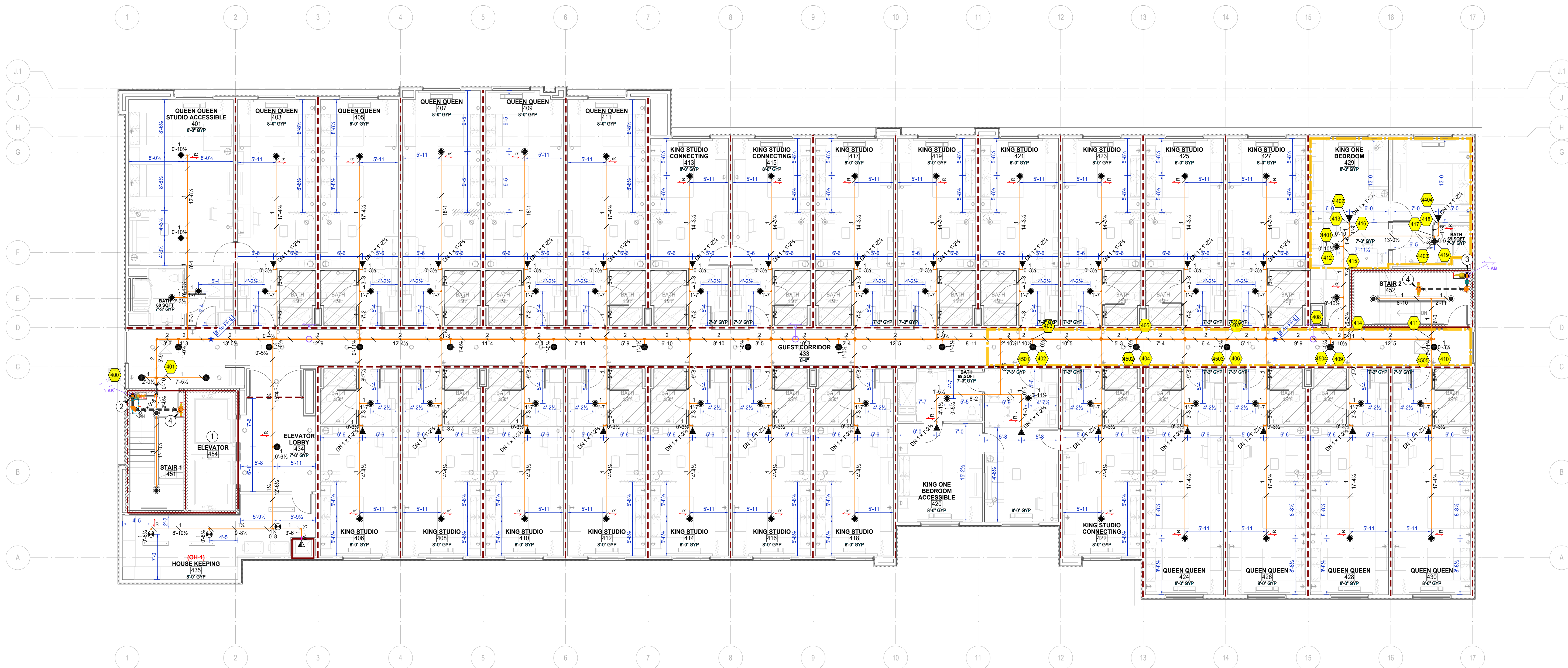
FIREWALL AND BARRIER NOTICES	
BE RATED ASSEMBLY	_____
BE RATED ASSEMBLY	_____
GENERAL FIRE RATING NOTES	
EXTERIOR BEARING WALLS ARE 1-HOUR RATED UNLESS OTHERWISE NOTED.	
INTERIOR MURDER BOARD WALLS WILL BE 1-HOUR RATED.	
INTERSTITIAL TRUSS CAVITIES SHALL BE COMPLETELY FILLED WITH NON-BURNABLE BLOWN INSULATION. SPRINKLERS ARE NOT PROVIDED IN THIS AREA.	
Hydraulic Information	
Remote Area Zone 4 - 4th Floor Corridor	
OCCUPANCY CLASSIFICATION	Residential
DENSITY (gpm/m ²)	0.10 for 411ft ² (Actual 411ft ²)
TOTAL HOSE STREAMS	100.00
TOTAL HEADS FLOWING	5.00
K-FACTOR	4.9
P-BOR BASE OF RISER (gpm)	87.78
P-BOR BASE OF RISER (psi)	200.440
Zone 2 BASE OF RISER (gpm)	87.78
Zone 2 BASE OF RISER (psi)	30.067
Zone 3 BASE OF RISER (gpm)	87.78
Zone 3 BASE OF RISER (psi)	34.294
Zone 4 BASE OF RISER (gpm)	87.78
Zone 4 BASE OF RISER (psi)	29.501
SAFETY MARGIN (psi)	+63.641 (120.2%)
HYDRAULIC DESIGN NOTES:	
DEMANDING 5 CORRIDOR SPRINKLERS	
PER NFPA 13 19.3.3.3.6	
USE OF VK484 RESIDENTIAL PENDENT HEADS	
Max Spacing: 18x18	
Minimum Flow: 17 GPM	
Minimum Pressure: 12.0 PSI	

FIRE PROTECTION KEY NOTES

1. SPRINKLERS AT TOP AND BOTTOM OF ELEVATOR SHAFT NOT REQUIRED PER ASME A11.8 NPS 13, 9.3.2
2. EXPOSED 6" MANUAL CLASS I COMBINATION STANDPIPE W/ 2" FCA (ZONE 1) AND 2½" HOSE ANGLE VALVE
3. EXPOSED 6" MANUAL CLASS II COMBINATION SYSTEM
4. ROOF MANIFOLD ASSEMBLY. SEE DETAIL ON FP-08

FIRE PROTECTION GENERAL NOTES

1. THE FILLER COMPARTMENTS STARTS 1" ABOVE FINISHED FLOOR AND ALL UNDERGROUND PIPING BY OTHERS.
2. SPRING 1" (1.5M) OR LONGER SHALL BE KEPT OPENING AGAINST THE WALLS OF THE UNDERGROUND.
3. SYSTEM DRAINS SHALL BE INSTALLED AS REQUIRED PER NFPA 13 AND EXTENDED OUTSIDE THE BUILDING.
4. ALL CORRIDOR CEILING HEIGHTS AT 6'-6" AND UP CEILING HEIGHTS AT 10'-0" UNLESS NOTED OTHERWISE.
5. FIRE SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS THAT ARE LESS 55 FT² IN AREA IN ACCORDANCE WITH NFPA 13, 9.2.1.3.
6. FIRE SPRINKLERS ARE NOT REQUIRED PER NFPA 13, 9.2.2.2. IN CLOSETS, LINEN CLOSETS AND PANTRIES WITH DUELLING UNITS THAT MEET ALL THE FOLLOWING CONDITIONS:
 - THE AREA OF THE SPACE DOES NOT EXCEED 100 FT²
 - THE WALLS AND CEILING ARE SURFACED WITH NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIALS AS DEFINED BY NFPA 13, 9.2.2.2
7. THE ATTIC AND INTERSTITIAL SPACES ARE TO BE FILLED WITH NONCOMBUSTIBLE INSULATION. FIRE SPRINKLERS ARE NOT REQUIRED FOR THIS CONCEALED SPACE WITH THE REQUIREMENTS OF NFPA 13, 9.2.1.7 (B)(6) MEET.
8. CPVC USED ABOVE CEILING IN ALL RESIDENTIAL AREAS; CONVERT PIPING TO STEEL IN EXPOSED AREAS AND ROOMS OF ORDINARY HAZARD. SEE DETAIL ON FP-08, EXCEEDING 400 FT².
9. SPRINKLERS SHALL BE INSTALLED AT THE TOP OF COMBUSTIBLE STAIR SHAFTS, UNDER THE LANDINGS AT EACH FLOOR LEVEL AND BENEATH THE LOWEST INTERMEDIATE LANDING PER NFPA 13, 9.3.4.1.
10. ALL PIPING VALVES AND APPURTENANCES SHALL BE INSTALLED SUCH AS NOT TO OBSTRUCT ANY PORTION OF THE STAIRS, DOWNWAYS, STAIRS, PASSAGES OR ACCESS TO EQUIPMENT.









SEISMIC AND BRANCHLINE RESTRAIN NOTE	
1.	WHERE SHORT RODS AND STRAPS ARE USED - NO LATERAL BRACING REQUIRED PER NFPA 13; 18.5.5.10.2
2.	WHERE SHORT RODS AND STRAPS ARE USED - NO BRANCHLINE RESTRAINTS REQUIRED PER NFPA 13; 18.5.5.10.1 AND 18.6.5

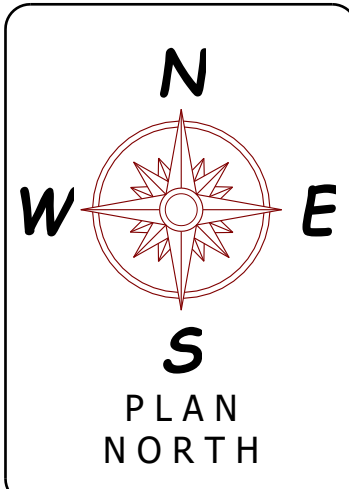
FIRE SUPPRESSION PLAN - FOURTH FLOOR

FP-07 SCALE: 1/8" = 1'-0"



Sprinkler Legend - Total 4th Floor												
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note	Max Spacing
	Viking	VF4600	29	5.3	Horizontal Sidewall	%	Fast	Chrome	155°F		Chrome Res Esc	16 x 16 / 258"
	Generic	VF494	Chute Head	1	5.6	Horizontal Sidewall	%	Quick	Brass	155°F	Connect Chute Head	100"OH / 196" LH
	Viking	VF494	Concealed	17	4.9	Concealed Pendant	%	Fast	Brass	155°F	White Coverplate	18 x 18 / 324"
	Viking	VK4621	Concealed	4	5.6	Concealed Pendant	%	Quick	Brass	155°F	White Coverplate	130"OH / 225" LH
	Viking	VF4600	59	4.9	Pendent	%	Fast	Chrome	155°F		Chrome Res Esc	18 x 18 / 324"
	Viking	VK302	Microfast	3	5.3	Pendent	%	Quick	Chrome	200°F	Chrome Res Esc	130"OH / 225" LH
				Total = 113								

It is the sole responsibility of owner and owners representative to insure that this building/buildings has proper heat and insulation to prevent fire sprinkler pipe, fittings and devices from freezing.



GENERAL NOTES:

- 1) SYSTEMS ARE DESIGNED AND INSTALLED PER NFPA 13 (1919 EDITION)
- 2) STEEL SYSTEM WITH 2" PIPE 2" AND SMALLER TO BE CPVC WITH 2" CPVC FITTINGS, CONVERT TO BLACK STEEL PIPE AND FITTINGS WHERE EXPOSED
- 3) STEEL SYSTEM PIPE 2" AND SMALLER TO BE SCH. 40 BLACK STEEL PIPE AND FITTINGS ARE THREADED / GROOVED / FLANGED / WELDED
- 4) STEEL SYSTEM PIPE 2" AND SMALLER TO BE SCH. 40 BLACK STEEL PIPE AND FITTINGS ARE GROOVED / FLANGED / WELDED
- 5) ALL HANGERS ARE TO MEET THE CRITERIA SET FORTH BY NFPA 13 (1919 EDITION) AND ALL HANGERS ARE TO BE INSTALLED PER NFPA SPECIFICATIONS
- 6) WIRING OF ELECTRICAL EQUIPMENT IS TO BE BY OTHERS
- 7) PAINTING OF PIPE OR COMPONENTS SHALL BE BY OTHERS
- 8) (O) REPRESENTS A HORIZONTAL CONNECTION
- 9) THE HILLER COMPANIES TO START 1'-0" ABOVE FINISHED FLOOR
- 10) ALL UNDERGROUND PIPING BY OTHERS
- 11) PENETRATIONS THROUGH FLOORING ARE TO BE PROTECTED

WITH APPROVED GUARDS.


WATER SUPPLY INFORMATION			
STATIC PRESSURE	53	FIRE PUMP	YES
RESIDUAL PRESSURE	51	SIZE GPM @ PSI	300 @ 60
FLOW G.P.M.	1160	TYPE OF DRIVER	VIP
DATE OF TEST	09/30/2025	ELECTRICAL REQ.5	208V
HYDRANT LOCATION	@ TEST NODE (SEE SITE PLAN)		NODE #1
TEST TAKEN BY	GREENWOOD CPW		(864) 942-8195











NOTES:
TESTED BY - MIKE PROCTOR
WITNESSED BY - RUSSELL HOLLEY
CONTACT EMAIL - RHOLLEY@GREENWOODCPW.COM
HYDRANT LOCATION - SEE FP-01

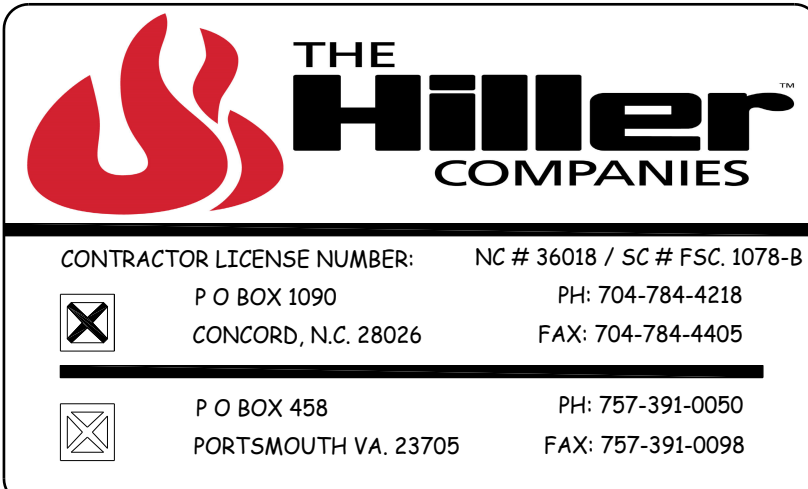


NICET REVIEW STAMP

JUAN OCHOA
NICET #139445
LEVEL IV
WATER BASED SYSTEMS LAYOUT

SIGNED:  VALID THROUGH 01/01/2027

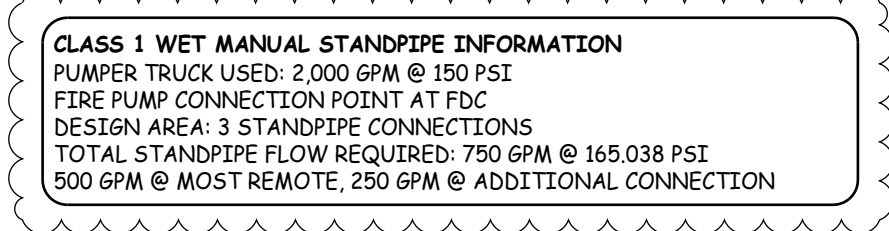
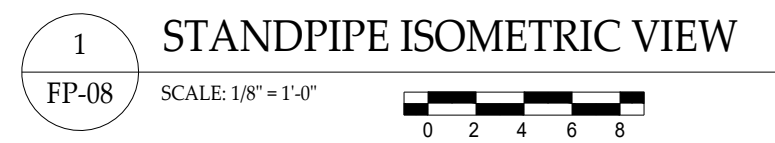
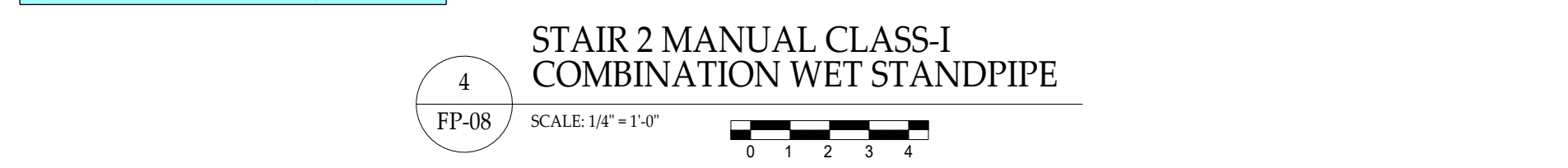
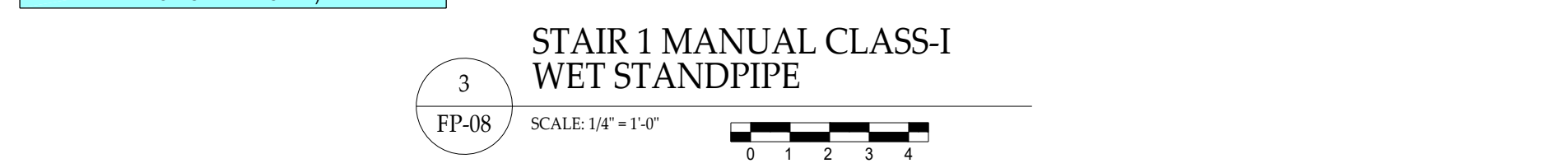
Sprinkler Legend - Total Project												
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note	Max Spacing
	Viking	VK300	Microfast	9	5.6	Upright	1/2"	Quick	Brass	200°F	Exposed	130°F OH / 225°F LH
	Viking	VK4621	Concealed	5	5.6	Concealed Pendant	1/2"	Quick	Brass	155°F	White Coverplate	130°F OH / 225°F LH
	Viking	VK302	Microfast	33	5.6	Pendant	1/2"	Quick	Chrome	200°F	Chrome Res Eac	130°F OH / 225°F LH
	Viking	VK4621	Concealed	3	5.6	Concealed Pendant	1/2"	Quick	Brass	155°F	White Coverplate	130°F OH / 225°F LH
	Viking	VK494	Freezon	59	4.9	Concealed Pendant	1/2"	Fast	Brass	200°F	White Coverplate	18 x 18 / 324"
	Generic	MF0	Chute Head	4	5.6	Horizontal Sidewall	1/2"	Quick	Brass	155°F	Connect Chute Head	100°F OH / 190°F LH
	Viking	VK305	Microfast	3	5.6	Horizontal Sidewall	1/2"	Quick	Chrome	200°F	Chrome Res Eac	100°F OH / 190°F LH
	Viking	VK460	Freezon	104	5.8	Horizontal Sidewall	1/2"	Fast	Chrome	155°F	White Flat Eac	16 x 16 / 256"
	Viking	VK482	Dry	7	5.6	Pendant	1	Quick	White Polyester	205°F	White Flat Eac	130°F OH / 225°F LH
	Viking	VK465	Freezon	205	4.9	Pendant	1"	Fast	Chrome	155°F	Chrome Res Eac	18 x 18 / 324"
				Total = 483								


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JOB NAME:	Home 2 Suites 475 Hospitality Blvd. Greenwood, SC 29649	
CONTRACT WITH:	John M. Campbell Company 102 Winchester Avenue Monroe, NC 28110	
PHONE: (704) 254-3214		
DRAWING NAME: FIRE SUPPRESSION PLAN - FOURTH FLOOR		
DRAWN BY: TWH		
DATE: LLR / Greenwood FM		
DTH: 12/18/25		
SCALE: AS NOTED		
CONTRACT NO.: C09088		

SUBMITTALS

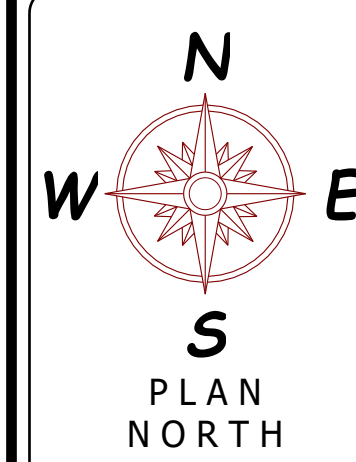
475 Hospitality Blvd, Greenwood, SC 29649



JOB NAME:	 Home 2 Suites 475 Hospitality Blvd. Greenwood, SC 29649
CONTRACT WITH:	John M. Campbell Company 102 Winchester Avenue Monroe, NC 28110

FP-08 of 08

It is the sole responsibility of owner and owners representative to insure that this building/buildings has proper heat and insulation to prevent fire sprinkler pipe, fittings and devices from freezing.

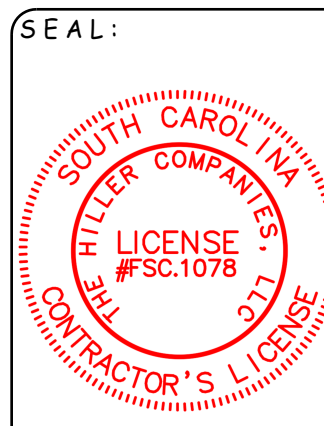


GENERAL NOTES:

- 1) SYSTEMS ARE DESIGNED AND INSTALLED PER NFPA 13 (2019 EDITION)
- 2) RESIDENTIAL SYSTEM PIPING 2" AND SMALLER TO BE CPVC WITH CPVC FITTINGS. COMMERCIAL SYSTEM PIPING 2" AND SMALLER TO BE GALV. STEEL WITH CPVC FITTINGS WHERE EXPOSED.
- 3) STEEL SYSTEM PIPING 2" AND SMALLER TO BE SCH. 40 BLACK STEEL PIPE AND FITTINGS ARE THREADED / GROOVED / FLANGED / WELDED.
- 4) STEEL SYSTEM PIPING 3" AND LARGER TO BE SCH. 10 BLACK STEEL PIPE AND FITTINGS ARE GROOVED / FLANGED / WELDED.
- 5) ALL HANGERS ARE TO MEET THE CRITERIA SET FORTH BY NFPA 13 (2019 EDITION) AND SPACED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
- 6) WRITING OF THE WORD "EQUIVALENT" SHALL BE USED IN THE FIELD WHERE EQUIVALENT MATERIALS ARE USED.
- 7) PAINTING OF PIPE OR COMPONENTS SHALL BE BY OTHERS.
- 8) (A) REPRESENTS A HYDRAULIC REFERENCE POINT
- 9) THE HITTER CANNOT BE PLACED IN ANY LOCATION ABOVE FINISHED FLOOR.
- 10) ALL UNDERGROUND PIPING BY OTHERS.
- 11) SPRINKLERS LOCATED 7'-6" OR LESS FROM FLOOR TO BE PROTECTED TO BE 45 DEGREE.


WATER SUPPLY INFORMATION			
STATIC PRESSURE	53	FIRE PUMP	
RESIDUAL PRESSURE	51	SIZE GPM @ PSI	30
FLOW G.P.M.	1160	TYPE OF DRIVER	
DATE OF TEST	09/30/2025	ELECTRICAL REQ.S	
HYDRANT LOCATION	@ TEST NODE (SEE SITE PLAN)		N
TEST TAKEN BY	GREENWOOD CPW		(864)










NOTES:
 TESTED BY - MIKE PROCTOR
 WITNESSED BY - RUSSELL HOLLEY
 CONTACT EMAIL - RHOLLEY@GREENWOODCPW.COM
 HYDRANT LOCATION - SEE FP-01

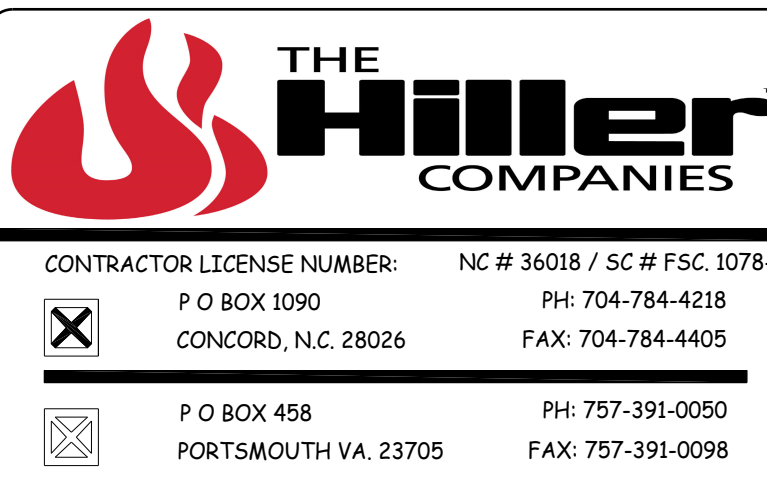


NICET REVIEW STAMP

JUAN OCHOA
NICET #139445
LEVEL IV
WATER BASED SYSTEMS LAYOUT

SIGNED:  VALID THROUGH 01/01/2027

Sprinkler Legend - Total Project												
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note	Max Spacing
	Viking	VK4621	Microfast	9	5.4	Concealed Pendent	1/2"	Quick	Brass	200°F	White Coverplate	130'0" x 225'0" LxH
	Viking	VK302	Microfast	3	5.6	Pendent	1/2"	Quick	Chrome	200°F	Chrome Res Esc	130'0" x 225'0" LxH
	Viking	VK4621	Concealed	1	5.6	Concealed Pendent	1/2"	Quick	Brass	155°F	White Coverplate	130'0" x 225'0" LxH
	Viking	VK484	Freeston	89	4.0	Concealed Pendent	3/4"	Brass	Quick	155°F	White Coverplate	130'0" x 225'0" LxH
	Generic	MFG	Chute Head	4	5.6	Horizontal Sidewall	1/2"	Quick	Brass	155°F	Connect Chute Head	100'0" x 196'0" LxH
	Viking	VK305	Microfast	3	5.6	Horizontal Sidewall	1/2"	Quick	Chrome	200°F	Chrome Res Esc	100'0" x 196'0" LxH
	Viking	VK460	Freeston	104	4.0	Horizontal Sidewall	3/4"	Chrome	Quick	155°F	Chrome Res Esc	18' x 18' / 324" LxH
	Viking	VK462	Dry	7	5.6	Pendent	1"	Quick	White Polyester	205°F	White Flat Esc	130'0" x 225'0" LxH
	Viking	VK468	Freeston	208	4.9	Pendent	1"	Fast	Chrome	155°F	Chrome Res Esc	18' x 18' / 324" LxH

[illegible]

JOB NAME:	Home 2 Suites 475 Hospitality Blvd. Greenwood, SC 29649
CONTRACT WITH:	John M. Campbell Company 102 Winchester Avenue Monroe, NC 28110
PHONE: (704) 254-3214	
DRAWING NAME: STANDPIPE HYDRAULIC CALCULATION REFERENCE	
DRAWN BY: TWH	
AHJ: LLR / Greenwood FM	
DATE: 12/18/25	
SCALE: AS NOTED	