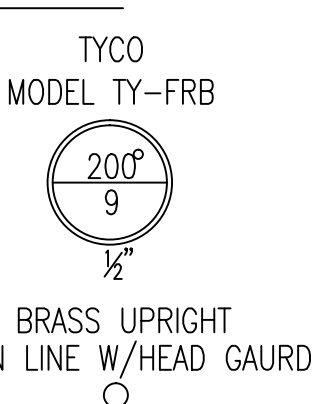


FIRE SPRINKLER PLAN - BASEMENT

SCALE: 1/4"=1'-0"
 AREA PROTECTED: 940 SQ.FT.
 FINISH FLOOR ELEVATION : 93'-2"
 COLOR CODE:



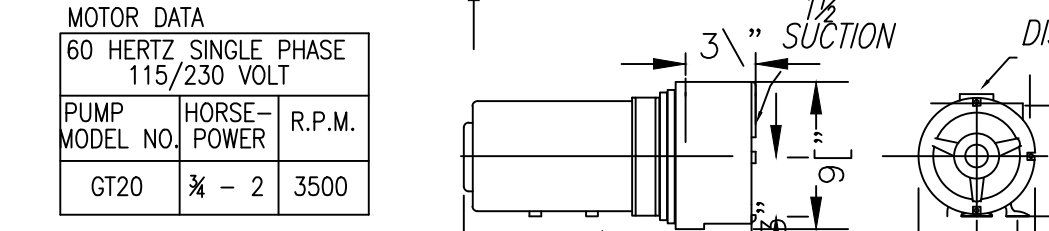
TYCO MODEL TY-FRB

BRASS UPRIGHT ON LINE W/HEAD GUARD

K=5.6 (SIN#TY313)

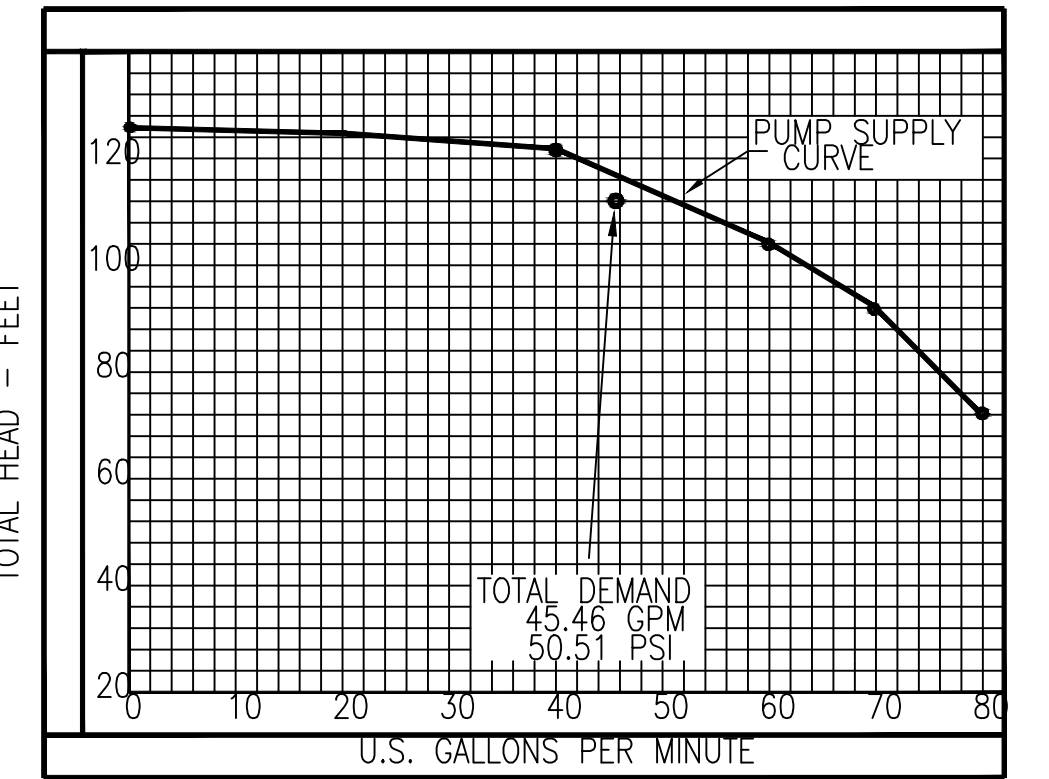
DIMENSIONS AND MOTOR DATA

MODEL NO.	G107	G110	G115	G120	G130	G133	G1033	G1153	G1203	G1303
HP	1	1 1/2	2	3	3 1/2	4	1	1 1/2	2	3
LENGTH	19	3/16	19	1/8	2/16	2/16	11/16	19	19	20
WIDTH	9/16									
HEIGHT	9/16									
WT. (LBS.)	48	52	60	65	76	49	52	55	69	71
PHASE	SINGLE									
	THREE									



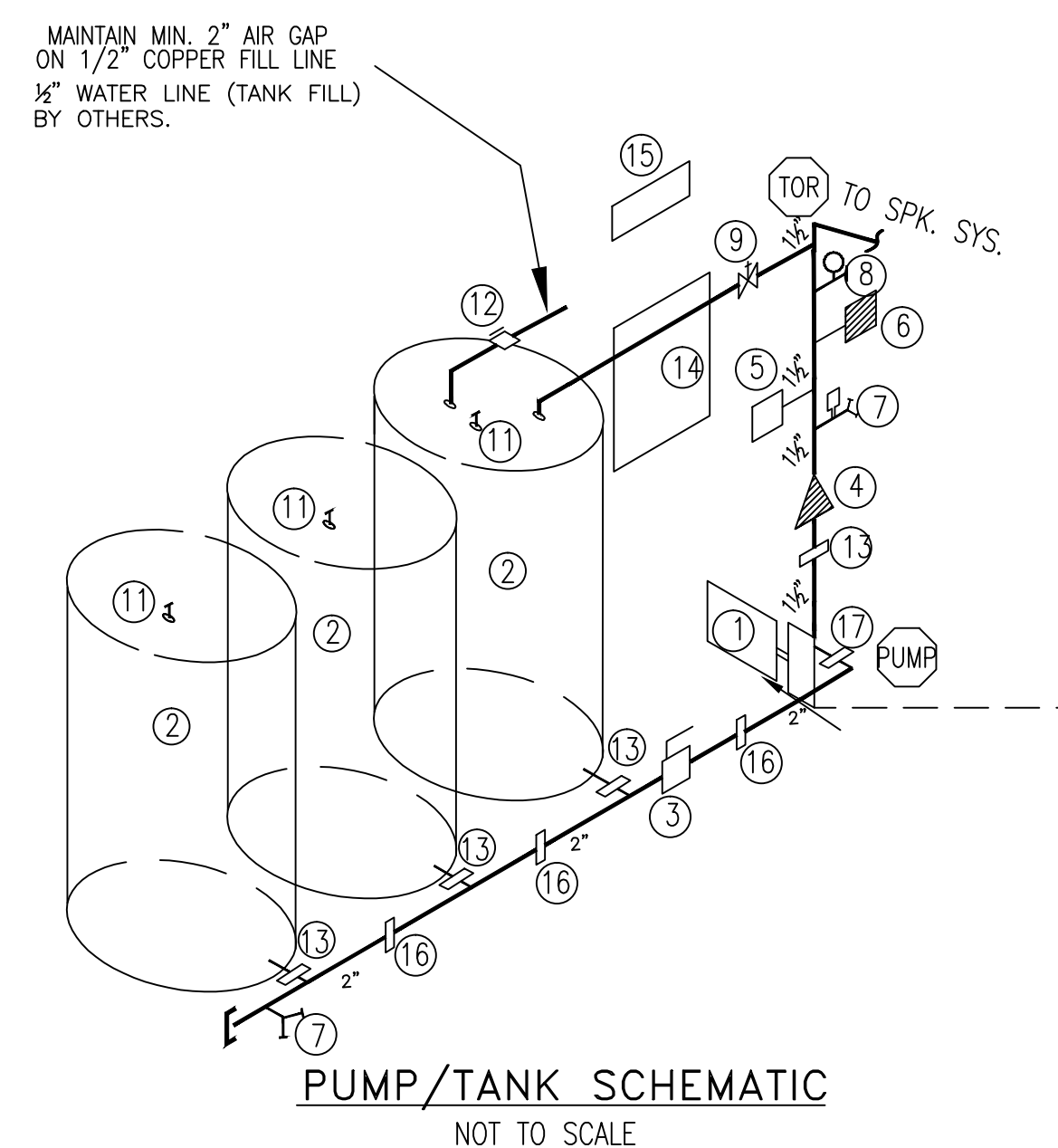
60 HERTZ SINGLE PHASE
 115/230 VOLT
 PUMP HORSE-POWER R.P.M.
 MODEL NO. POWER
 GT20 3 2500

TO CONVERT TOTAL HEAD- FEET INTO P.S.I.
 (MULTIPLY .433 x TOTAL HEAD FEET)
 GOULDS GT 20 PUMP CURVE



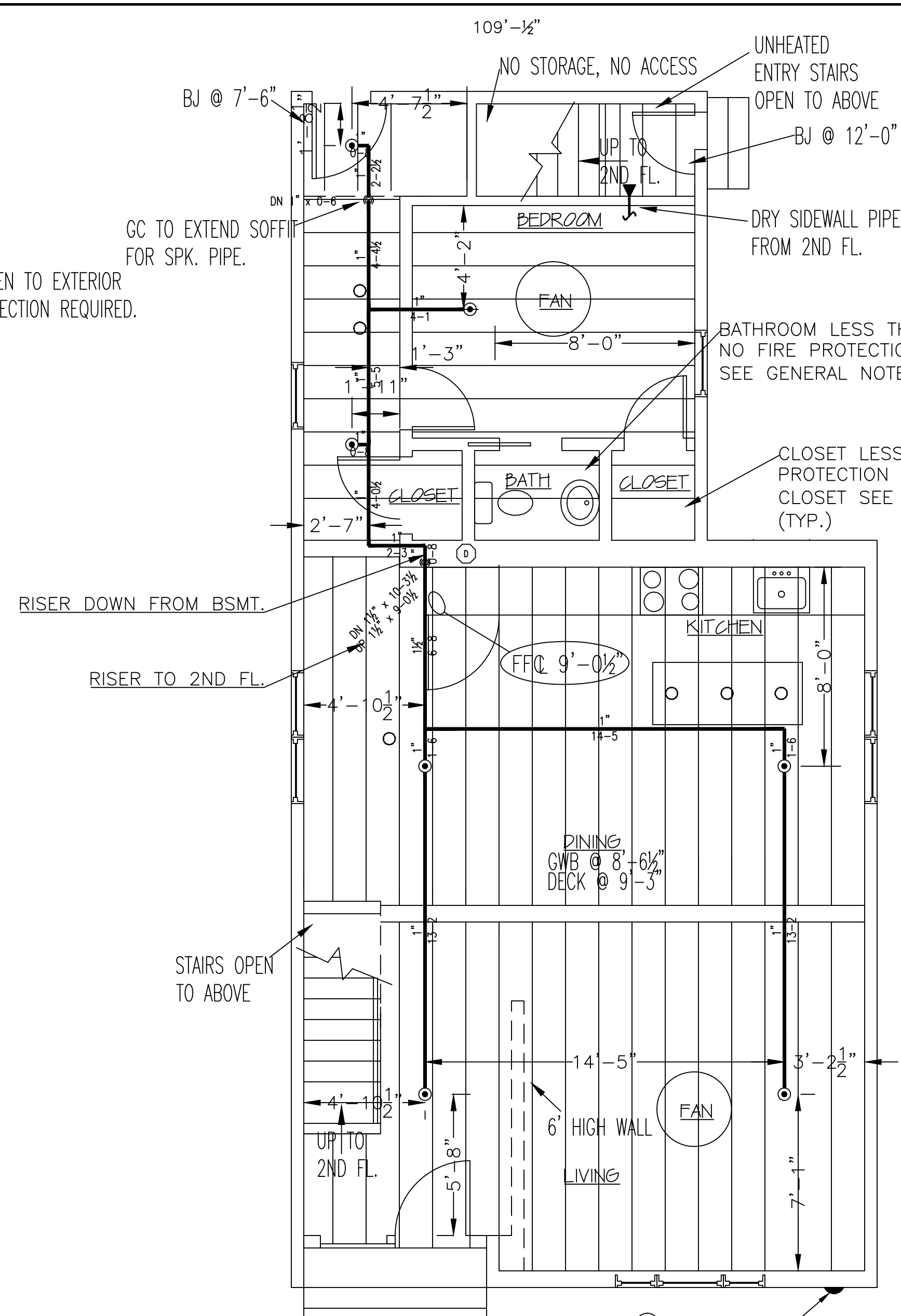
0 GPM = 54.99 PSI 30 GPM = 53.69 PSI 70 GPM = 38.87 PSI
 10 GPM = 54.56 PSI 40 GPM = 52.39 PSI 80 GPM = 32.04 PSI
 20 GPM = 54.13 PSI 60 GPM = 45.03 PSI

NOTE
 A)-ALL ELECTRICAL WIRING, PAINTING, AND INSULATING TO BE DONE BY OTHERS
 B)-SYSTEM TANK SIZE EQUALS GPM DEMAND (45.46) FOR TWO HEADS TIMES TEN MINUTES = 454.6 GALLONS
 C)-TOTAL STORED WATER SUPPLY: 525 GALLONS



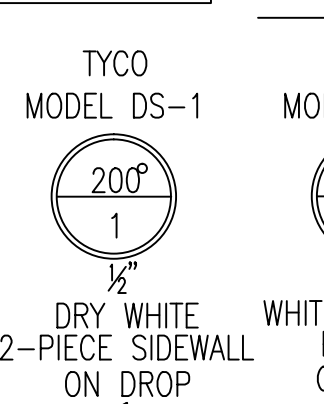
PUMP/TANK SCHEMATIC NOT TO SCALE

- LEGEND FOR NFPA 13D SPRINKLER SYSTEM
- GOULDS GT-20, 2 H.P., 30 GPM @ 53.69 PSI PUMP 230/1/60
 - 175 PLASTIC GALLON WATER STORAGE TANK (3) (31"x61")
 - 1 1/2" BALL VALVE (NORMALLY OPEN WITH LOCK)
 - 1 1/2" SWING CHECK VALVE
 - 30-50 PUMP CONTROL SWITCH (230 VOLTS)
 - 1 1/2" IPT POTTER VSR-SF FLOW SWITCH
 - BOILER DRAIN VALVE (AUX. DRAIN)
 - 3/4" PRESSURE GAUGE W/ 1/4" 3-WAY GLOBE VALVE
 - 1" MAIN DRAIN & ALARM TEST VALVE
 - ELECTRIC BELL (LOCATION TO BE APPROVED BY OWNER)(SEE FIRST FL. PLAN)
 - 1 1/2" VENT CAP
 - 1 1/2" COPPER BALL VALVE FOR TANK FILL LINE (NORMALLY CLOSED)
 - 1 1/2" GROOVED COUPLING
 - NFPA 13D PUMP CONTROL PANEL
 - SPARE HEAD BOX
 - 2" GROOVED COUPLING
 - 2"x1 1/2" THREADED REDUCING COUPLING
- ALL WIRING TO BE DONE BY OTHERS



FIRE SPRINKLER PLAN - FIRST FLOOR

SCALE: 1/4"=1'-0"
 AREA PROTECTED: 940 SQ.FT.
 FINISH FLOOR ELEVATION : 100'-0"
 COLOR CODE:



TYCO MODEL DS-1

DRY WHITE 2-PIECE SIDEWALL ON DROP

K=5.6 (SIN#TY335)

TYCO MODEL LF-II

WHITE CONCEALED PENDENT ON DROP

K=4.9 (SIN#TY2524)

TYCO LF II

LF II RESIDENTIAL CONCEALED SPRINKLER DESIGN REQUIREMENTS FOR WET SYSTEM

MODEL	COVERAGE AREA		MINIMUM DESIGN FLOW (PRESSURE)
	MAX. SPACING BETWEEN SPRINKLERS	MAXIMUM SPACING	
LF II	12 x 12	12	13GPM(7.0psi)
CONCEALED PENDENT	14 x 14	14	13GPM(7.0psi)
	16 x 16	16	13GPM(7.0psi)
	18 x 18	18	17GPM(12.0psi)
	20 x 20	20	20GPM(16.7psi)

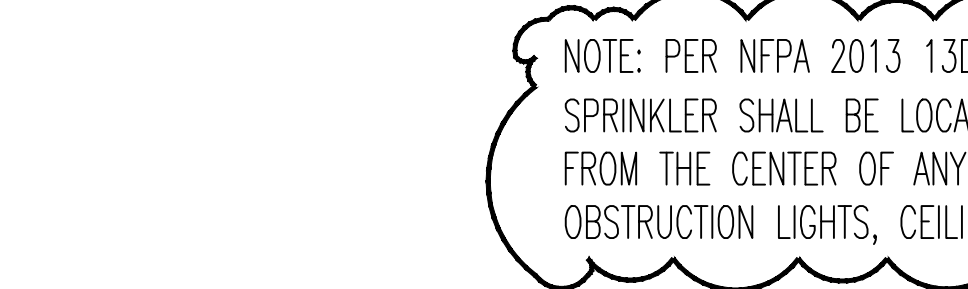
K-FACTOR = 4.9, 1/2" N.P.T.
 MAXIMUM SPACING FROM WALL 8'-0"
 MAXIMUM SPACING BETWEEN HEADS 16'-0"
 MINIMUM SPACING BETWEEN HEADS 8'-0"

TYCO LF II

LF II HORIZONTAL SIDEWALL SPRINKLER DESIGN REQUIREMENTS FOR WET SYSTEM

MODEL	COVERAGE AREA		MINIMUM DESIGN FLOW (PRESSURE)	
	MAX. SPACING BETWEEN SPRINKLERS	MAXIMUM SPACING	TOP OF DEFLECTOR TO CEILING 4 TO 6 INCHES	TOP OF DEFLECTOR 6 TO 12 INCHES
LF II	12 x 12	12	155F/68C	175F/68C
HORIZONTAL SIDEWALL	14 x 14	14	13GPM(8.7psi)	13GPM(8.7psi)
	16 x 16	16	14GPM(10.1psi)	14GPM(10.1psi)
	18 x 18	18	16GPM(13.2psi)	16GPM(13.2psi)
	20 x 20	20	19GPM(18.6psi)	19GPM(18.6psi)
	16 x 20	16	23GPM(27.3psi)	23GPM(27.3psi)
	18 x 20	18	23GPM(27.3psi)	23GPM(27.3psi)
	20 x 20	20	26GPM(34.9psi)	26GPM(34.9psi)

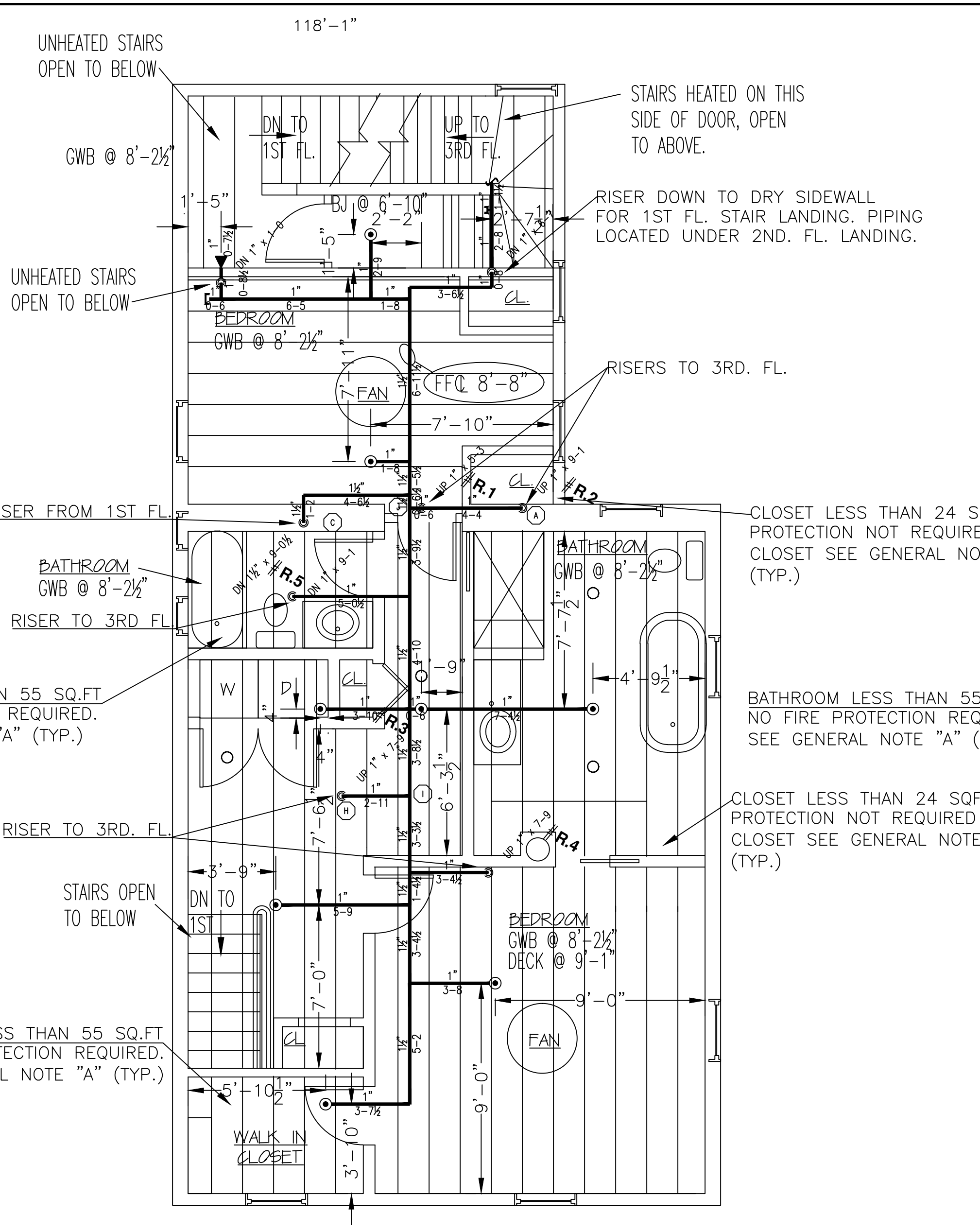
K-FACTOR = 4.4, 1/2" N.P.T.
 MAXIMUM SPACING FROM WALL 8'-0"
 MAXIMUM SPACING BETWEEN HEADS 16'-0"
 MINIMUM SPACING BETWEEN HEADS 8'-0"
 MAXIMUM THROW 16'-0"



DRY RECESSED HORIZONTAL SIDEWALL SYMBOL = ◀

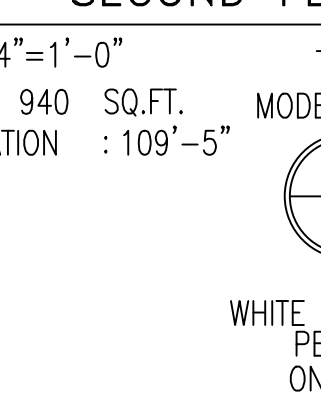
DRY WHITE HORIZONTAL SIDEWALL SYMBOL = ▶

CONCEALED WHITE PENDENT SYMBOL = ⊙



FIRE SPRINKLER PLAN - SECOND FLOOR

SCALE: 1/4"=1'-0"
 AREA PROTECTED: 940 SQ.FT.
 FINISH FLOOR ELEVATION : 109'-5"
 COLOR CODE:



TYCO MODEL LF-II

WHITE CONCEALED PENDENT ON DROP

K=4.9 (SIN#TY2524)

TYCO MODEL DS-1

DRY WHITE 2-PIECE SIDEWALL ON DROP

K=5.6 (SIN#TY335)

TYCO LF II

LF II RESIDENTIAL CONCEALED SPRINKLER DESIGN REQUIREMENTS FOR WET SYSTEM

MODEL	COVERAGE AREA		MINIMUM DESIGN FLOW (PRESSURE)
	MAX. SPACING BETWEEN SPRINKLERS	MAXIMUM SPACING	
LF II	12 x 12	12	13GPM(7.0psi)
CONCEALED PENDENT	14 x 14	14	13GPM(7.0psi)
	16 x 16	16	13GPM(7.0psi)
	18 x 18	18	17GPM(12.0psi)
	20 x 20	20	20GPM(16.7psi)

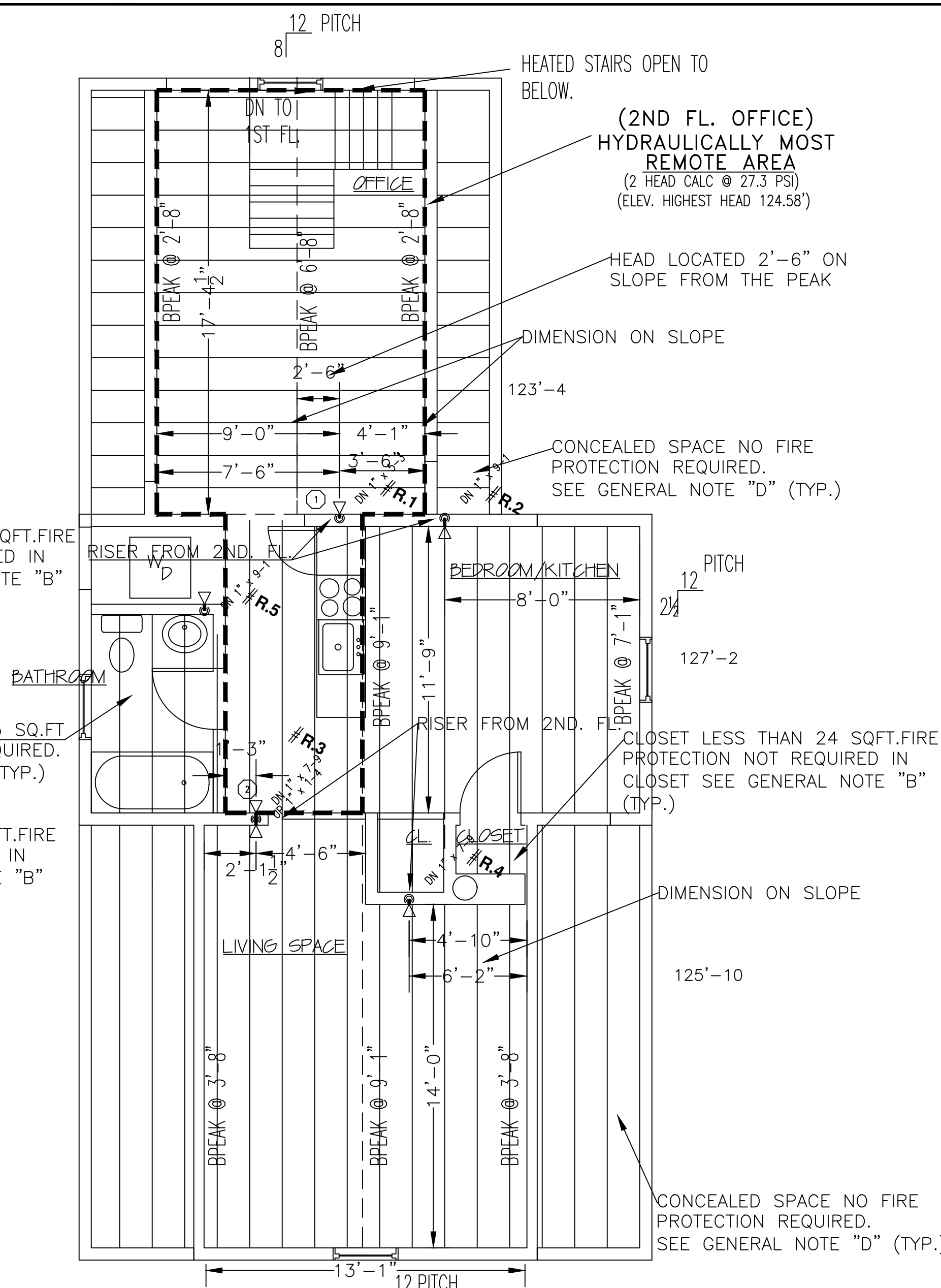
K-FACTOR = 4.9, 1/2" N.P.T.
 MAXIMUM SPACING FROM WALL 8'-0"
 MAXIMUM SPACING BETWEEN HEADS 16'-0"
 MINIMUM SPACING BETWEEN HEADS 8'-0"



DRY RECESSED HORIZONTAL SIDEWALL SYMBOL = ◀

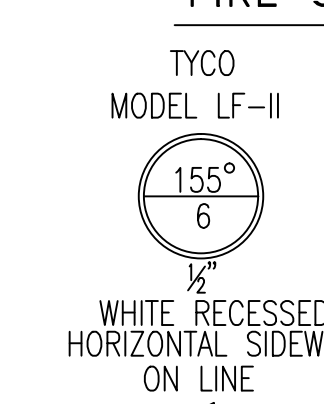
DRY WHITE HORIZONTAL SIDEWALL SYMBOL = ▶

CONCEALED WHITE PENDENT SYMBOL = ⊙



FIRE SPRINKLER PLAN - THIRD FLOOR

SCALE: 1/4"=1'-0"
 AREA PROTECTED: 645 SQ.FT.
 FINISH FLOOR ELEVATION : 118'-7"
 COLOR CODE:



TYCO MODEL LF-II

WHITE RECESSED HORIZONTAL SIDEWALL ON LINE

K=4.4 (SIN#TY2334)

TYCO MODEL DS-1

DRY WHITE 2-PIECE SIDEWALL ON DROP

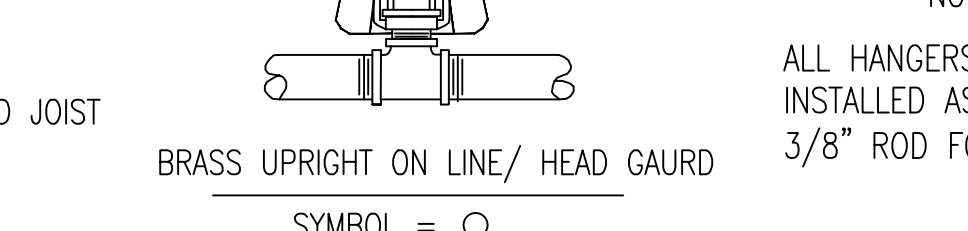
K=5.6 (SIN#TY335)

TYCO LF II

LF II RESIDENTIAL CONCEALED SPRINKLER DESIGN REQUIREMENTS FOR WET SYSTEM

MODEL	COVERAGE AREA		MINIMUM DESIGN FLOW (PRESSURE)
	MAX. SPACING BETWEEN SPRINKLERS	MAXIMUM SPACING	
LF II	12 x 12	12	13GPM(7.0psi)
CONCEALED PENDENT	14 x 14	14	13GPM(7.0psi)
	16 x 16	16	13GPM(7.0psi)
	18 x 18	18	17GPM(12.0psi)
	20 x 20	20	20GPM(16.7psi)

K-FACTOR = 4.4, 1/2" N.P.T.
 MAXIMUM SPACING FROM WALL 8'-0"
 MAXIMUM SPACING BETWEEN HEADS 16'-0"
 MINIMUM SPACING BETWEEN HEADS 8'-0"

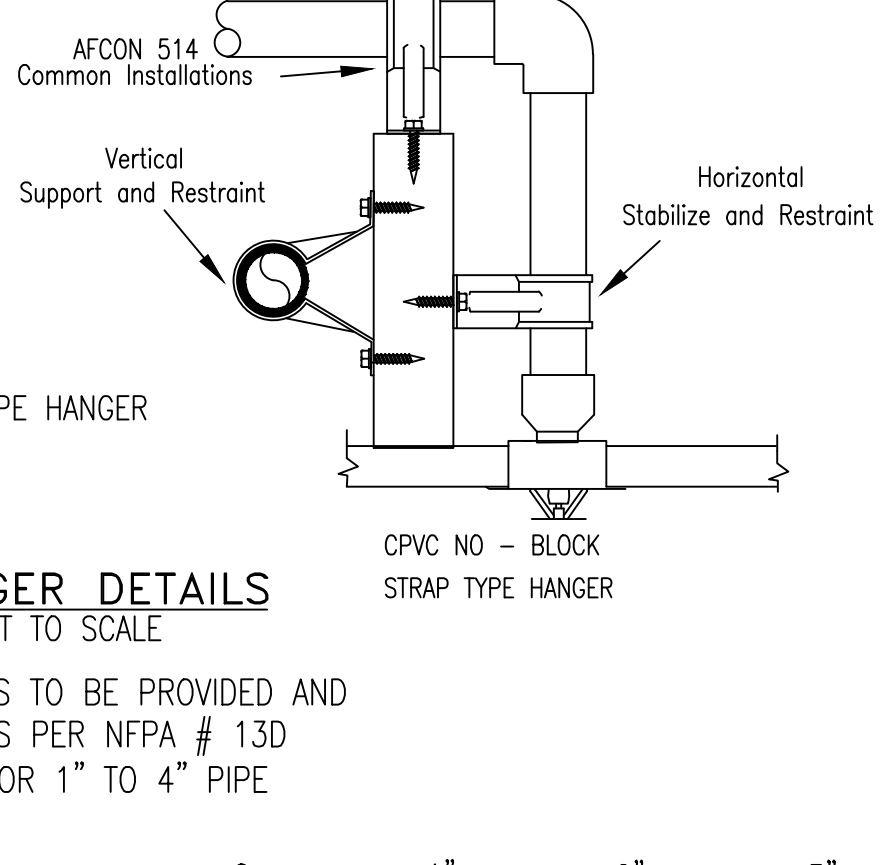


WHITE RECESSED HORIZONTAL SIDEWALL SYMBOL = ◀

DRY WHITE HORIZONTAL SIDEWALL SYMBOL = ▶

CONCEALED WHITE PENDENT SYMBOL = ⊙

HANGER DETAILS



HANGER DETAILS NOT TO SCALE

ALL HANGERS TO BE PROVIDED AND INSTALLED AS PER NFPA # 13D 3/8" ROD FOR 1" TO 4" PIPE

1/4"=1'-0" GRAPHIC SCALE

GENERAL NFPA #13D NOTES

SPRINKLER SYSTEM INSTALLATION TO COMPLY WITH NFPA PAMPHLET # 13D (2013 EDITION)
 EXPOSED BSMT. PIPING TO BE BLACK SCHEDULE 40 JOINED BY THREADED DUCTILE IRON FITTINGS (C=120)
 CONCEALED PIPING (1ST, 2ND, 3RD) TO BE CPVC PLASTIC PIPE (C=150) JOINED WITH GLOUED CPVC PLASTIC FITTINGS.
 OWNER TO PROVIDE SUFFICIENT HEAT THROUGHOUT BUILDING TO PREVENT FREEZING OF WATER FILLED SPRINKLER PIPING AND EQUIPMENT. (40' F)

SPRINKLERS ARE NOT REQUIRED IN THE FOLLOWING AREAS AS PER NFPA 13D (2013):
 A. BATHROOMS NOT EXCEEDING 55 SQ. FT.
 B. SMALL CLOSETS LESS THAN 24 SQ. FT. IN AREA WITH THE LEAST DIMENSION NOT EXCEEDING 3'0"
 C. GARAGES, OPEN ATTACHED PORCHES, CARPORTS, AND SIMILAR STRUCTURES.
 D. ATTICS WITH OR WITHOUT STORAGE, PENTHOUSE RM., CONTRACTOR MACHINE RM., CRAWL SPACES & CONCEALED SPACES NOT INTENDED FOR LIVING PURPOSES

E. COVERED, UNHEATED PORTIONS OF THE BUILDING AT ENTRANCE/EXITS AS LONG AS THE DWELLING UNIT HAS ANOTHER MEANS OF EGRESS.
 F. CLOSETS IN GARAGES AND EXTERIOR CLOSETS (REGARDLESS OF SIZE) LOCATED ON EXTERIOR BALCONIES, EXTERIOR BREZZEWAYS/CORRIDORS WHERE THE CLOSET DOES NOT HAVE DOORS OR UNPROTECTED PENETRATIONS DIRECTLY INTO THE DWELLING UNIT.

DATE	REVISIONS	REQUIRED APPROVALS
		OWNER / ARCHITECT STATE FIRE MARSHAL PORTLAND FIRE DEPARTMENT
		DRAWN BY RJP NICET LEVEL CERT.#
		CHECKED BY WAF NICET LEVEL III CERT.# 095574
		CONTRACTOR LICENSE # 101
		CONTRACTOR RMS # 368

33 ATLANTIC AVE.
 TWO FAMILY DWELLING
 PORTLAND, ME

FIRE SPRINKLER PLANS & DETAILS
 DWG. NO. 1 OF 1
 JOB NUMBER AU-5088-13
 SCALE AS NOTED
 DATE 10/29/2013

CONTRACT WITH: MUNJOY HILL HOLMES

EASTERN FIRE PROTECTION
 AUBURN/LEWISTON INDUSTRIAL AIRPARK, AUBURN, MAINE 04210

NOTE: PER NFPA 2013 13D PENDENT SPRINKLER SHALL BE LOCATED AT LEAST 3' FROM THE CENTER OF ANY SURFACE MOUNTED OBSTRUCTION LIGHTS, CEILING FANS, ETC..