

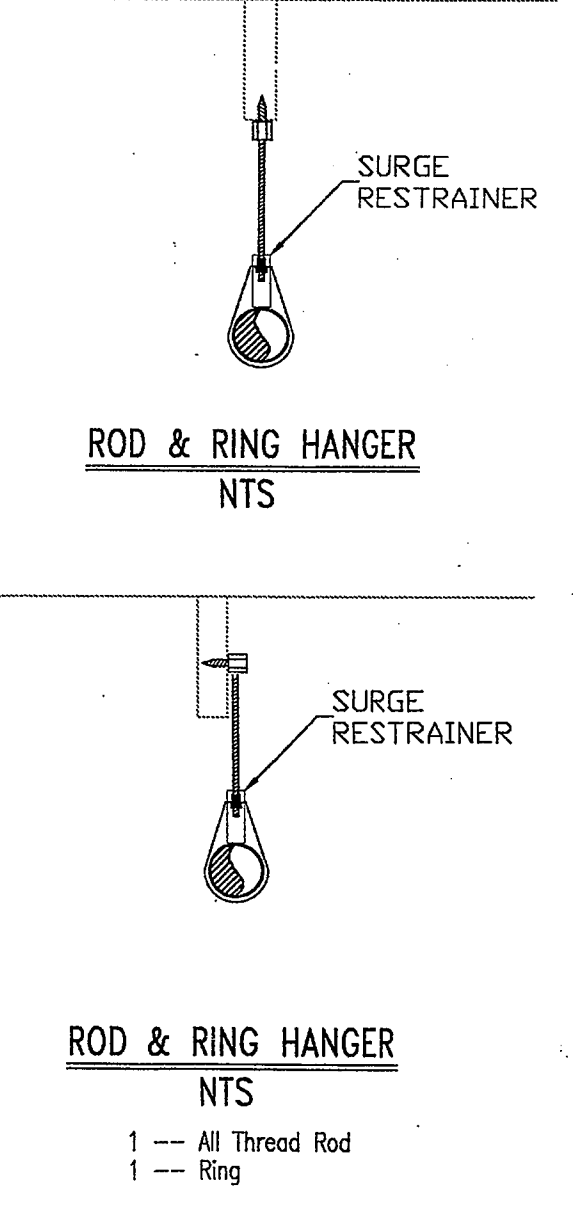
PIPE SIZE	1/4 BEND		1/8 BEND		TEES			CAPS	
	A	B	A	B	A	B	C	D	
6"	16"	10"	9"	10"	8"	8"	10"	12"	10"
8"	22"	13"	12"	13"	8"	10"	13"	16"	12"
10"	26"	17"	14"	17"	10"	13"	16"	20"	14"
12"	28"	21"	16"	21"	11"	16"	16"	24"	16"
14"	35"	24"	19"	24"	12"	20"	22"	27"	18"

HYDRAULIC SYSTEM PLACKARD		HYDRAULIC SYSTEM PLACKARD	
DESIGN DATA:	DESIGN DATA:	DESIGN DATA:	DESIGN DATA:
SERVICE AREA: ECOH-Dry Sidewalks Canopy	SERVICE AREA: Athletic Space	SERVICE AREA: Athletic Space	SERVICE AREA: Athletic Space
OCCUPANCY CLASSIFICATION: Ordinary Hazard	OCCUPANCY CLASSIFICATION: Light Hazard	OCCUPANCY CLASSIFICATION: Light Hazard	OCCUPANCY CLASSIFICATION: Light Hazard
DENSITY: 15 GPM/SQ.FT.	DENSITY: 10 GPM/SQ.FT.	DENSITY: 10 GPM/SQ.FT.	DENSITY: 10 GPM/SQ.FT.
AREA OF APPLICATION: 1200 SQ.FT.	AREA OF APPLICATION: 2019 SQ.FT.	AREA OF APPLICATION: 2019 SQ.FT.	AREA OF APPLICATION: 2019 SQ.FT.
COVERAGE OF SPRINKLER: 320 SQ.FT.	COVERAGE OF SPRINKLER: 120 MAX. SQ.FT.	COVERAGE OF SPRINKLER: 120 MAX. SQ.FT.	COVERAGE OF SPRINKLER: 120 MAX. SQ.FT.
NO. OF SPRINKLERS: 5	NO. OF SPRINKLERS: 28	NO. OF SPRINKLERS: 28	NO. OF SPRINKLERS: 28
SYSTEM DEMAND: 75 GPM	SYSTEM DEMAND: 280 GPM	SYSTEM DEMAND: 280 GPM	SYSTEM DEMAND: 280 GPM
WATER FLOW RATE: 483.155 GPM	WATER FLOW RATE: 623.164 GPM	WATER FLOW RATE: 623.164 GPM	WATER FLOW RATE: 623.164 GPM
RESIDUAL PRESSURE AT THE BASE OF THE RISER: 41.519 PSI	RESIDUAL PRESSURE AT THE BASE OF THE RISER: 42.692 PSI	RESIDUAL PRESSURE AT THE BASE OF THE RISER: 42.692 PSI	RESIDUAL PRESSURE AT THE BASE OF THE RISER: 42.692 PSI
HOSE STREAMS: 250 GPM	HOSE STREAMS: 100 GPM	HOSE STREAMS: 100 GPM	HOSE STREAMS: 100 GPM
STATIC FACTOR: 11.45 PSI	STATIC FACTOR: 14.69 PSI	STATIC FACTOR: 14.69 PSI	STATIC FACTOR: 14.69 PSI

UNDERGROUND NOTES

1. ALL UNDERGROUND PIPING AND MATERIALS TO BE INSTALLED PER NFPA 24 FIRE CODE
2. ALL THRUST BLOCKS SHALL BE INSTALLED AND SIZED TO NFPA 24
3. ALL PIPING TO BE PVC/C-900 AND STAINLESS STEEL SPIGOTS
4. BACK FILL SHALL BE IN ACCORDANCE WITH CITY REQUIREMENTS
5. MINIMUM BURY OF ALL PIPING SHALL BE OF 3FT. 6 INCHES
6. ALL PIPING TESTED AT 200PSI FOR 2 HOURS
7. INSPECTION TO BE BY CITY OF ADDISON FIRE DEPARTMENT

FIRE SPRINKLER UNDERGROUND PLAN



ROD & RING HANGERS UTILIZE FOR HORIZONTAL PIPING BELOW WOOD JOIST SUPPLYING PENDENT SPRINKLERS IN ACoustICAL TILE CEILING. INSTALL SURGE RESTRAINER AT HANGER CLOSEST TO DROP TO PREVENT UPWARD MOVEMENT.

NOMINAL PIPE SIZE (in.)	MAXIMUM DISTANCE BETWEEN HANGERS											
	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
THREADED LIGHTWALL STEEL PIPE	N/A	12-0	12-0	12-0	12-0	12-0	12-0	N/A	N/A	N/A	N/A	N/A
COPPER TUBE	8-0	8-0	10-0	10-0	12-0	12-0	12-0	15-0	15-0	15-0	15-0	15-0
CPVC	5-6	6-0	6-6	7-0	8-0	9-0	12-0	N/A	N/A	N/A	N/A	N/A
POLYBUTYLENE (IPS)	N/A	3-9	4-7	5-0	5-11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
POLYBUTYLENE (CTS)	2-11	3-4	3-11	4-5	5-5	N/A	N/A	N/A	N/A	N/A	N/A	N/A

REVISIONS		SPRINKLER DESCRIPTIONS												
NO.	DESCRIPTION:	DATE	BY:	SYMBOL	MAKE	SIN	MODEL	FINISH	STYLE	ORIFICE	TEMP	ESCH.	K-FACTOR	TOTAL
1	POWER WOOD CANOPY 1-1-12			⊙	TYCO	TY3255	DS-1	Chrome	Dry SSP	1/2	155	CHR	5.6	1
2				◀	TYCO	TY5339	DS-3	Chrome	Dry HSW	1/2	155	CHR	11.2	5
3				⊙	TYCO	TY3231	TY-FRB	Chrome	SSP	1/2	155	CHR	5.6	29
4				○	TYCO	TY3131	TY-FRB	Brass	SSU	1/2	200	none	5.6	55
TOTAL SPRINKLERS REQUIRED ON THIS SHEET:													85	
TOTAL SPRINKLERS REQUIRED ON THIS CONTRACT:													85	

Rescom Fire Systems, Inc.
 P.O. Box 630886
 Irving, Texas 75063
 PE (214) 350-1755

PROJECT: Tim Jackson Custom Homes
 16400 Addison Road
 Addison, Texas

Date: 12/05/2011
 Scale: See Drawing
 Job No:
 Drawn By: SH
 Sheet: FP-1 of 1

For Hydro Test
 Replace one remote head with a pressure gauge.

Addison!

FIRE DEPARTMENT
 Reviewed on: 12-8-11
 Signature: [Signature]
 Final approval is subject to completion of inspections and/or tests as required by the Fire Department.
 872.450.7201

FINAL APPROVAL IS SUBJECT TO SATISFACTORY COMPLETION OF AN ACCEPTANCE TEST WITNESSED BY THE ADDISON FIRE DEPARTMENT
 CALL 972-450-7229 AT LEAST THREE DAYS IN ADVANCE TO SCHEDULE TEST

SCOPE OF WORK
 INSTALL NEW WET PIPE SPRINKLER SYSTEM FOR OFFICE FINISH PLAN (3,595 SQ.FT.)
 RESCOM FIRE SYSTEMS WILL INSTALL (1) ONE WET PIPE FIRE SPRINKLER SYSTEM TO PROTECT THE ENTIRE SPACE OF THE OFFICE, SERVICE AREAS AND GENERAL USE ROOMS. RESCOM WILL ALSO PROVIDE PROTECTION FOR COMBUSTIBLE SPACES PER NFPA 13.

GENERAL NOTES

1. SYSTEM DESIGN BASED ON N.F.P.A. 13 : 2007 EDITION, 2006 INTERNATIONAL FIRE CODE, AS ADOPTED AND AMENDED BY THE CITY OF ADDISON, OR DETERMINATIONS AND POSITIONS OF THE FIRE MARSHAL
 1. ALL PIPE 1 1/2" AND SMALLER TO BE SCHEDULE 40 BLACK AND ALL PIPE 2" AND LARGER TO BE SCHEDULE 10 BLACK WITH ROLL GROOVED ENDS. THIS TYPE IS LISTED FOR SPRINKLER SYSTEM USAGE AS PER NFPA 13 CHAPTER 6 SECTION 6.3, TABLE 6.3.1.1.
 2. JOINING OF GROOVED SCHEDULE 10 BRANCH LINES AND MAINS SHALL BE PER NFPA 13 CHAPTER 6 SECTION 6.4 "FITTINGS". THREADED SCHEDULE 40 BRANCH LINE FITTINGS TO BE OF BLACK CAST IRON FITTINGS CLASS 125. BRANCH LINE PIPES TO BE THREADED PIPE TO MEET ANSI/ASME B1.20.1 STANDARDS.
 3. HANGERS SHALL BE PER NFPA 13 CHAPTER 9 TO SUSPEND SPRINKLER SYSTEM FROM THE STRUCTURE OF THE BUILDING, UTILIZING A LISTED COMBINATION OF WOOD SCREWS, MACHINE THREADED ROD, AND NOMINAL SIZED PIPE HANGER RINGS. SEE HANGER DETAILS ON THIS SHEET.
 4. THIS IS A WET PIPE FIRE SPRINKLER SYSTEM WITH QUICK COVERAGE SPRINKLER HEADS. INSTALLATION BASED ON SPRINKLER SYSTEM FOR MIXED OCCUPANCIES, LIGHT HAZARD AREA ARE LIMITED TO THE GENERAL USE AND OFFICE AREAS WITH HEADS SPACED 225" MAX. ORDINARY HAZARD AREAS LOCATED IN SERVICE, MECHANICAL AND STORAGE AREAS. HEADS IN THESE AREAS SPACED NO MORE THAN 130" MAX. COMBUSTIBLE ATTIC AREAS AREA LIGHT HAZARD OCCUPANCIES WITH HEADS SPACED 120" MAX.
 5. BUILDING STRUCTURE: COMBUSTIBLE, WOOD BEAMS AND JOISTS WITH CONCRETE FLOOR LOCATED AT THE FLOOR LEVEL.
- SYSTEM REQUIREMENTS**
- 1a. ATTIC AREA OF SCHOOL FOR LIGHT HAZARD OCCUPANCY AT 10/1950 + 100 GPM WITH SPRINKLERS SPACED NO MORE THAN 120 SQUARE FEET MAX. AREA INCREASED 30% FOR ROOF PITCH.
 - 1b. CANOPY AREA FOR ORDINARY HAZARD 1 OCCUPANCY AT 15/5 HEADS + 250 GPM WITH SPRINKLERS SPACED NO MORE THAN 300 SQUARE FEET MAX.
 2. ALL INTERIOR PIPING AND APPURTENANCES SUBJECT TO SYSTEM WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200 PSI AND SHALL MAINTAIN THAT PRESSURE FOR 2 HOURS. CITY FIRE DEPARTMENT SHALL BE WITNESS TO TEST FOR APPROVAL AND SIGNATURE ON CONTRACTORS MATERIAL AND TEST CERTIFICATES.
 3. SPACE SHALL MAINTAIN ADEQUATE HEAT TO PREVENT PIPE FROM BEING SUBJECTED TO FREEZING.

16400 Addison Fire Sys. 12/8/11