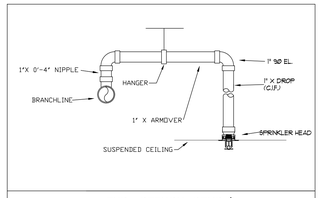
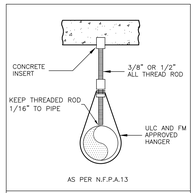
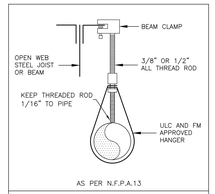



TYP. RETURN BEND/
END SPRINKLER ON BRANCHLINE DETAIL




HANGER DETAIL
N.T.S.




HANGER DETAIL
N.T.S.

GENERAL NOTES - NFPA 13:

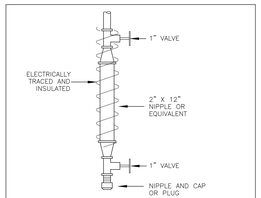
1. SPRINKLER PIPE TO BE CONCEALED BY OTHERS.
2. IT IS UNDERSTOOD THAT THE ROOF RATING HAS NOT BEEN WAIVED IN LIEU OF SPRINKLERS
3. SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS THAT ARE LOCATED WITHIN DWELLING UNITS THAT DO NOT EXCEED 55FT² IN AREA, AND THAT HAVE WALLS AND CEILINGS OF NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIALS WITH A 15-MINUTE THERMAL BARRIER RATING, INCLUDING THE WALLS AND CEILINGS BEHIND ANY SHOWER ENCLOSURE OR TUB.
4. SPRINKLERS SHALL NOT BE REQUIRED IN CLOSETS LESS THAN 12FT² IN AREA, CLOSETS THAT CONTAIN EQUIPMENT SUCH AS WASHERS, DRYERS, FURNACES, OR WATER HEATERS SHALL BE SPRINKLERED REGARDLESS OF SIZE.
5. ALL NEW BULKHEADS CONCEALING SPRINKLER PIPING TO BE MAXIMUM 8" WIDE
6. ALL BULKHEADS ARE TO BE MAXIMUM 12" DEEP

NOTES - RESIDENTIAL SIDEWALL SPRINKLERS:

1. MAXIMUM COVERAGE FOR RESIDENTIAL SIDEWALL SPRINKLERS NOT TO EXCEED 14' x 18.
2. MINIMUM DISTANCE BETWEEN SPRINKLERS TO BE 8'-0".
3. MAXIMUM DISTANCE FROM ANY SIDE WALL TO SPRINKLER NOT TO EXCEED 6'-0".
4. SIDEWALL SPRINKLERS SHALL BE LOCATED AT LEAST 5'-0" FROM OBSTRUCTIONS SUCH AS CEILING FANS AND LIGHT FIXTURES.
5. SEE OBSTRUCTION TABLE ON DRAWING SP2

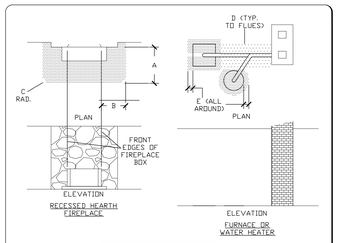
NOTES - RESIDENTIAL PENDENT SPRINKLERS:

1. MAXIMUM COVERAGE FOR RESIDENTIAL PENDENT SPRINKLERS NOT TO EXCEED 336FT².
2. MINIMUM DISTANCE BETWEEN SPRINKLERS TO BE 8'-0".
3. MAXIMUM DISTANCE FROM ANY SIDE WALL TO SPRINKLER NOT TO EXCEED 10'-0".
4. PENDENT SPRINKLERS SHALL BE LOCATED AT LEAST 3'-0" FROM OBSTRUCTIONS SUCH AS CEILING FANS AND LIGHT FIXTURES.
5. SEE OBSTRUCTION TABLE ON SP2




WHERE THE CAPACITY OF TRAPPED SECTIONS OF PIPE IS LESS THAN 5 GALLONS, THE AUXILLARY DRAIN SHALL CONSIST OF A VALVE NOT SMALLER THAN 1/2 IN. AND A PLUG OR A NIPPLE AND CAP.
WHERE THE CAPACITY OF ISOLATED TRAPPED SECTIONS OF SYSTEM PIPING IS MORE THAN 5 GALLONS, THE AUXILLARY DRAIN SHALL CONSIST OF TWO 1 IN. VALVES AND ONE 2 IN. BY 12 IN. CONDENSATE NIPPLE OR EQUIVALENT, ACCESSIBLY LOCATED.

DRUM DRIP DETAIL
N.T.S.

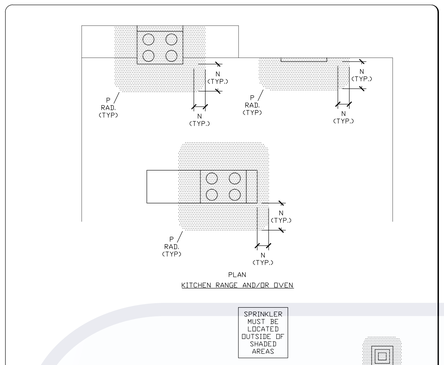



RECESSED HEARTH FIREPLACE

FURNACE OR WATER HEATER

| Dim. | Sprinkler Temperature Classification | |
|---|---|---|
| | Ordinary | Intermediate |
| A | 5'-0" | 3'-0" |
| B | 3'-0" | 1'-0" |
| C | 2'-0" | 1'-0" |
| D | 1'-6" | 0'-9" |
| E | 0'-6" | 0'-3" |

SPRINKLER MUST BE LOCATED OUTSIDE OF SHADED AREAS

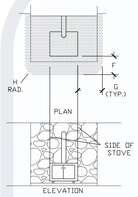



KITCHEN RANGE AND/OR OVEN

SPRINKLER MUST BE LOCATED OUTSIDE OF SHADED AREAS

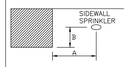
CEILING MOUNTED HOT AIR DIFFUSER

WALL MOUNTED HOT AIR DIFFUSER




COAL OR WOOD BURNING STOVE

| Dim. | Sprinkler Temperature Classification | |
|---|---|---|
| | Ordinary | Intermediate |
| F | 3'-6" | 1'-0" |
| G | 3'-6" | 1'-0" |
| H | 3'-6" | 1'-0" |
| J | 2'-0" | 1'-0" |
| K | 2'-0" | 1'-0" |
| L | 3'-0" | 1'-6" |
| M | 2'-0" | 1'-0" |
| N | 1'-6" | 0'-9" |
| P | 1'-6" | 0'-9" |




| Distance from sprinklers to Side of Obstruction (A) | Maximum allowable Distance of Deflector above bottom of Obstruction (in.) (B) |
|---|---|
| Less than 1 ft 6in. | 0 |
| 1ft 6in to less than 3ft | 1 |
| 3ft to less than 4ft | 3 |
| 4ft to less than 4ft 6in. | 5 |
| 4ft 6in to less than 6ft | 7 |
| 6ft to less than 6ft 6in. | 9 |
| 6ft 6in to less than 7ft | 11 |
| 7ft to less than 7ft 6in. | 14 |

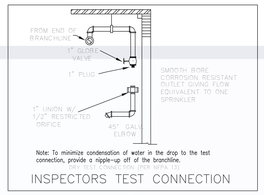
DISTANCE "H" TO OBSTRUCTION

OBSTRUCTION TABLE FOR RESIDENTIAL SPRINKLER HEADS

RESIDENTIAL SPRINKLER REQUIREMENTS
N.T.S.

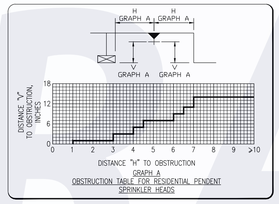
Table 9.2.2.1(a) Maximum Distance Between Hangers (Ft-in) 2007 EDITION

| | Nominal Pipe Size (in.) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ¾ | 1 | 1¼ | 1½ | 2 | 2½ | 3 | 3½ | 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 | 10-0 | N/A | N/A | N/A | N/A | N/A |
| Ductile iron pipe | N/A | N/A | N/A | N/A | N/A | N/A | 15-0 | N/A | 15-0 | N/A | 15-0 | 15-0 |




Note: To minimize condensation of water in the drop to the test connection, provide a nipple-up off of the branchline.
CONTACT TRIDEL BUILT FOR LIFE FOR DETAILS

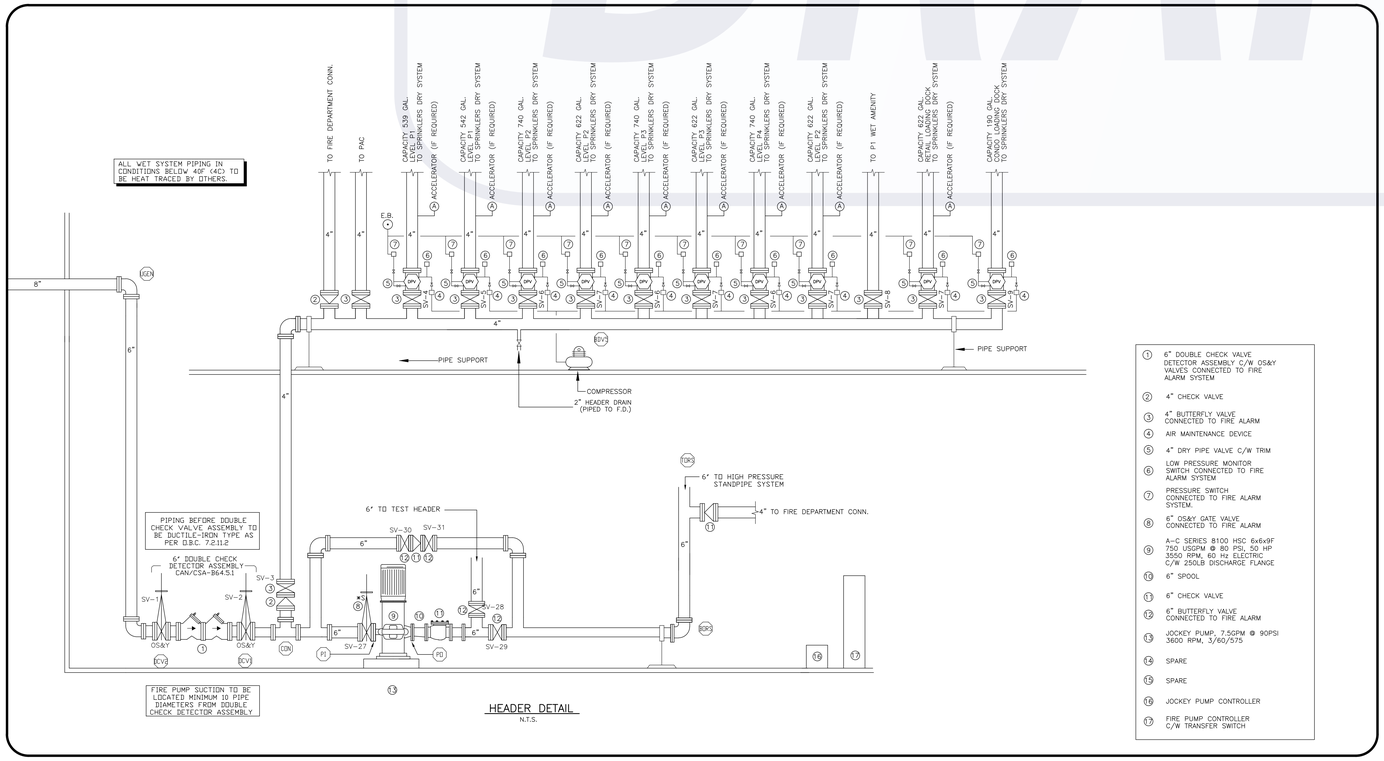
INSPECTORS TEST CONNECTION




GRAPH A
OBSTRUCTION TABLE FOR RESIDENTIAL PENDENT SPRINKLER HEADS

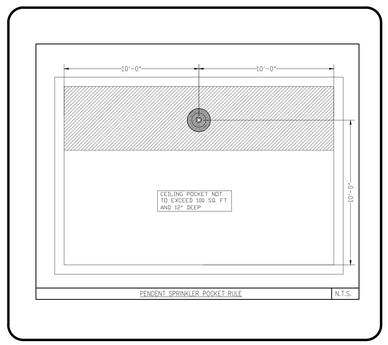
PUMP SCHEDULE

| ZONE | FUNCTION | LOCATION | MANUFACTURER MODEL NO. | PUMP | | MOTOR | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | GPM | HEAD | RPM | HP | ELECT. | |
| P-1 | FIRE PUMP | P1- PARKING SPRINKLER RM. | A-C FIRE MODEL 6X6X9F HSC FIRE PUMP | 750 | 80PSI | 3550 | 50 | 575/3/60 | |
| P-2 | JOCKEY PUMP | P1- PARKING SPRINKLER RM. | JOCKEY PUMP | 7.5 | 90PSI | 3600 | 3 | 575/3/60 | C/W AUTO STARTER |
| C-1 | COMPRESSOR | P1- PARKING SPRINKLER RM. | GENERAL AIR PRODUCTS LT SERIES TANK MOUNTED MODEL T.B.D. OR EQ. | T.B.D. CFM | | | TBD | 120/1/60 | C/W TANK & AIR MAINT. DEVICE |




HEADER DETAIL
N.T.S.

1. 6" DOUBLE CHECK VALVE DETECTOR ASSEMBLY C/W OS&Y VALVES CONNECTED TO FIRE ALARM SYSTEM
2. 4" CHECK VALVE
3. 4" BUTTERFLY VALVE CONNECTED TO FIRE ALARM
4. AIR MAINTENANCE DEVICE
5. 4" DRY PIPE VALVE C/W TRIM
6. LOW PRESSURE MONITOR SWITCH CONNECTED TO FIRE ALARM SYSTEM
7. PRESSURE SWITCH CONNECTED TO FIRE ALARM SYSTEM.
8. 6" OS&Y GATE VALVE CONNECTED TO FIRE ALARM
9. A-C SERIES 8100 HSC 6x6x9F 750 USGPM @ 80 PSI, 50 HP 3550 RPM, 60 Hz ELECTRIC C/W 250LB DISCHARGE FLANGE
10. 6" SPOOL
11. 6" CHECK VALVE
12. 6" BUTTERFLY VALVE CONNECTED TO FIRE ALARM
13. JOCKEY PUMP, 7.5GPM @ 90PSI 3600 RPM, 3/60/575
14. SPARE
15. SPARE
16. JOCKEY PUMP CONTROLLER
17. FIRE PUMP CONTROLLER C/W TRANSFER SWITCH




PENDENT SPRINKLER POCKET RULE
N.T.S.

DRAFT

## REVISIONS

| | | |
|---|---|---|
| 1.0 | ISSUED FOR TENDER ADDENDUM #1 | 10/23/15 |
| 2.0 | ISSUED FOR CONSTRUCTION | 11/27/15 |

## NOTES

TRIDEL BUILT FOR LIFE
4800 Dufferin St
Toronto, Ontario M3H 5S9
(tel): 416-661-9290

MIRENDA INCORPORATED
15171 Yonge Street Suite 202
Aurora Ontario L4G 1M1
(tel): 905-727-0092
(fax): 905-727-5517

NORTH

STAMP

LICENSED PROFESSIONAL ENGINEER
RAFFI VERINI
NOV 27/2015
PROVINCE OF ONTARIO

PROJECT
AQUAVISTA
MERCHANTS WHARF
TORONTO, ONTARIO

DWG TITLE
DETAILS

| | |
|---|---|
| DATE 11/27/2015 | PROJECT NO. 15-678 |
| SCALE 1/8"=1'-0" | |
| DWN BY JL | DWG NO. SP21 |
| ISSUED FOR REVISION NO. 2.0 | OF SP21 |