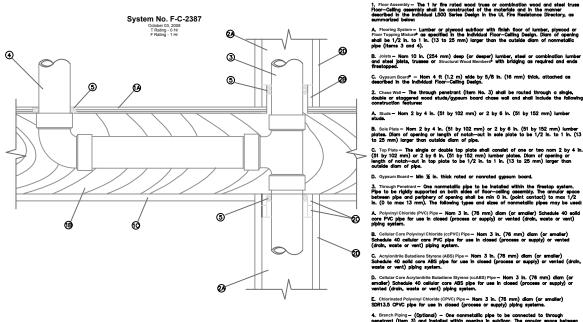


SIXTH FLOOR - AMENITY SCALE: 1/8" = 1'-0"PIPING TO BE SCH. 10 BLACK STEEL PIPE

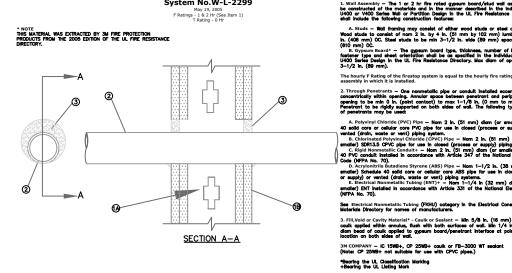
6TH FLOOR DECK (TOD) ABOVE @ 62'-61/2" 6TH FLOOR (TOD) = 19'-10" ABOVE 5TH FLOOR

	SPRINKLER HEAD SPACING CHART		
AREAS	SPRINKLER HEAD	MAX. SPACING	MAX. DISTANCE OFF WALI
RESIDENTIAL - CORRIDOR	TYCO EC-8 8.0K RECESSED PENDENT	16' x 16' = 256 SQ. FT.	8'-0"
RESIDENTIAL - MECHANICAL / ELECTRIC (ALL FLOORS)	TYCO EC-8 8.0K RECESSED PENDENT	16' x 16' = 256 SQ. FT.	8'-0"
RESIDENTIAL - UNITS LEVELS 1 - 5 (ROOMS)	TYCO SERIES LFII 5.8K RESIDENTIAL PENDENT	18' x 18' = 324 SQ. FT.	9'-0"
RESIDENTIAL - UNITS LEVELS 1 - 5 (EXTERIOR BALCONY)	GLOBE GL - 1" NPT 5.6K RESIDENTIAL DRY SIDEWALL	18' x 18' = 324 SQ. FT.	9'-0"
RESIDENTIAL - INTERSTITIAL SPACES (ALL FLOORS)	TYCO TY-FRB 5.6K PENDENT	16' x 16' = 256 SQ. FT.	8'-0"



B. Joists – Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members<sup>9</sup> with bridging as required and ende firestopped. C. Gypsum Board\* — Nom 4 ft (1.2 m) wide by 5/8 in. (16 mm) thick, attached as described in the individual Floor-Ceiling Design. Chase Wall — The through penetront (Item No. 3) shall be routed through a single, double or staggered wood studs/gypsum board chase wall and shall include the following construction features: A. Studs - Nom 2 by 4 in. (51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber studs. B. Sole Plate – Nom 2 by 4 in. (51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber pictes. Diam of opening or length of notch—out in sole picte to be 1/2 in. to 1 in. (13 to 25 mm) larger than outside diam of pipe. C. Top Plate — The single or double top plots shall consist of one or two norn 2 by 4 in.

(51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber plotes. Diam of opening or length of notch—out in top plots to be 1/2 in. to 1 in. (13 to 25 mm) larger than outside diam of pips. D. Gypsum Board - Min ½ in. thick rated or nonrated gypsum board. A. Polyvinyl Chloride (PVC) Pipe - Nom 3 in. (78 mm) diam (or smaller) Schedule 40 solid core PVC Pipe for use in closed (process or supply) or vented (drain, waste or vent) pibling system. B. Cellular Core Polyvinyl Chloride (ccPVC) Pipe — Nom 3 in. (76 mm) dilom (or smaller) Schedule 40 cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system. C. Acylonitria Butadiene Syrene (ABS) Pipe – Nom 3 in. (76 mm) diam (or emailer)
Schedule 40 solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system. D. Celtular Core Acrylonitrile Butadiene Styrene (ccABS) Pipe – Nom 3 In. (76 mm) diom (or smoller) Schedule 40 cellulor core ABS pipe for use in closed (process or supply) or vented (dradule, waste or vent) piping system. E. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 3 in. (76 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems. 4. Branch Piping — (Optional) — One nonmetallic pipe to be connected to through penetront (Item 3) and installed within opening in subfloor. The annular space between pipe and perphery of opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm). The following types and sizes of nonmetallic pipes may be used: A. Polyvinyl Chloride (PVC) Pipe — Nom 3 in, (76 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) pibing system. B. Cellular Core Polyvinyl Chloride (ccPVC) Pipe — Nom 3 in. (76 mm) diam (or smaller) Schedule 40 cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system. C. Acrylonitrile Butadiece Styrene (ABS) Pipe — Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or want) piping systems. D. Cellular Core Acrylonitrile Butadiene Styrene (ccABS) Pipe — Nom 3 in. (76 mm) diam (or smoller) Schedule 40 cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.



 Well Assembly — The 1 or 2 hr fire roted gipsum boord/stud well assembly shall be constructed of the materials and in the manner described in the individual USOO, U400 or V400 Series Well or Portition Design in the UL Fire Resistance Directory and shall include the following construction features: A. Studs — Wall framing may consist of either wood stude or steel channel stude. Wood stude to consist of nom 2 in. by 4 in. (51 mm by 102 mm) lumber spaced 15 in. (405 mm) 0C. Steel stude to be min 3–1/2 in. wide (59 mm) spaced max 24 in. (610 mm) 0C. 8. System Sourd\* — The gipsum board type, thickness, number of layers, featener type and sheet orientation shall be as specified in the individual USOO or U400 Series Design in the UL Fire Resistance Directory. Now dism The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed. of penetronts may be used:

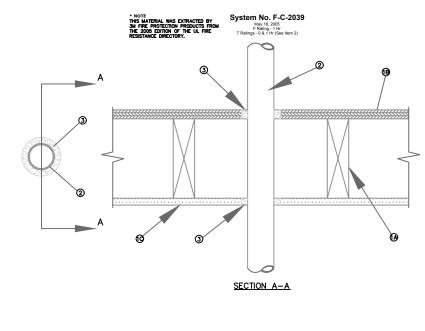
A. Polyvinyt Chloride (PVC) Pipe — Norn 2 ln. (51 mm) diam (or smaller) Schedule
40 solid core or callular core PVC pipe for use in closed (process or supply) or
wheted (chrin, wester or west) piping system.

B. Chlorinated Polyvinyt Chloride (CPVC) Pipe — Norn 2 ln. (51 mm) diam (or
smaller) SSR13.5 CPVC) pipe for use in closed (process or supply) piping systems.

C. Rigid Normetallic Conduits — Norn 2 ln. (51 mm) diam (or smaller) Schedule
40 code (NPFA No. 70).

D. Acrytonitritie Stutadiens Styrene (ABS) Pipe — Norn 1—1/2 ln. (33 mm) diam (or
smaller) Schedule 40 solid core or callular ore ABS Pipe for use in closed (process
or supply) or vented (drain, works or vent) piping systems.

STATE TO STATE (STATE CONTINUE CON See Electrical Nonmetallic Tubing (FKHU) category in the Electrical Construction Materials Directory for names of manufacturers. Fill, Vold or Cavity Material\* - Caulk or Sealant — Min 5/8 in. (16 mm) thickness of coulk applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6 mm) dam boad of coulk applies to gapeum board/penetrant interface at point contact location on both ables of wall.



 Floor Assembly — The 1 hr fire rated wood truss or combination wood and steel truss Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual LSOO Series Design in the UL Fire Resistance Directory, as summarized below: A Joists — Nom 10 in. (24 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members' with bridging or required and ends firestopped.

8. Rooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Minture' as specified in the Individual Floor—Calling Design. Disneter of opening shall be 5/5 in. (16 mm) larger than the outside common state of the common s 1.1 Chase Wall (Optiond, not shown) — The through perstronts (Item 2) may be routed through a 1 hr fire-roted shops, double or stoggered mood stud/gogener wollboard chase well constructed of the materials and in the monner specified in the Individual USOD Series Wall and Partition Designs in the UI. Fire Resistance Directory and shall include the following construction features: and incuse the following construction features:

A. Stude — Norm 2 in. by 6 in. (51 mm by 152 mm) or double norm 2 in. by 4 in. (51 mm by 102 mm) lumber stude.

Sole Plate — Norm 2 in. by 6 in. (51 mm by 152 mm) or peraflel 2 in. by 4 in. (51 mm by 102 mm) lumber plates, tightly butted.

C. Top Plate — The double top plate shall consist of two norm 2 in. by 6 in. (51 mm by 152 mm) or two sets of peraflel 2 in. by 4 in. (51 mm by 102 mm) lumber plates, tightly butted. Dismeter of opening shall be 5/8 in. (16 mm) lorger than outside diem of normatching pipe or confiled by the confiled in individual Woll and Portition Design. of floor-ceiling casembly. The following types and stress of nonmetallic phase, tubing or conduit may be used:

A Polymyl Chioride (PVC) Pips — Norn 1-1/2 in. (38 mm) diam (or emailer) Schedule 40 solid core PVC pipe for use in closed (process or supply) or wrented (drait), waste or vert) piping system.

B. Rigid kometallic Conduiter — Norn 1-1/2 in. (38 mm) diam (or emailer) Schedule 40 solid core PVC conduit (Conduiter) and the process of supply) piping system.

C. Controlled Polymyling (Conduiter) — Norn 1-1/2 in. (38 mm) diam (or emailer) SCH3.5 CPVC pipe for use in closed (process or supply) piping system.

D. Ceilust core Polymyl (Indired (cPVC) Pips — Norn 1-1/2 in. (38 mm) diam (or emailer) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drait), waste or vent) piping system.

E. Acytonitria Businders Syrene (ASS) Pips — Norn 1-1/2 in. (38 mm) diam (or emailer) Schedule 40 solid core ASS pipe in use in closed (process or supply) or vented (drait), waste or vent) piping system.

ASS pips for use in closed (process or supply) or vented (drait), waste or vent) piping system.

C. Crosslink Polymylane (POX) Tube — Norn 1-1/2 in. (38 mm) diam (or emailer) Schedule 40 solid core cellular or once ASS pips for use in closed (process or supply) provented (drait), waste or vent) piping system.

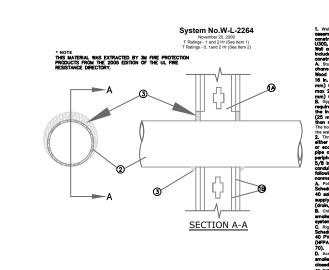
C. Crosslink Polymylane (POX) Tube — Norn 1 in. (25 mm) diam (or emailer) SDR 9 PEX tube for use in closed (process or supply) provented (drait), waste or vent) piping system.

H. Electrical Nonmetallic (ENT) Tubing — Norn 1-1/4 in. (32 mm) diam (or emailer) SDR 9 PEX tube for use in closed (process or supply) provented (drait), waste or vent) piping system.

H. Electrical Nonmetallic (ENT) Tubing — Norn 1-1/4 in. (32 mm) diam (or emailer) SDR 0 PEX tube for use in closed (process or supply) provented (drait), waste or vent) piping system.

The hourty Talling is 11 two pipes pipes demailer encourse as specified in the Notional Electrical Code.

The hourty Talling is 14 two pipes pipes demaile



SM COMPANY - OP 25884-10 (15884-couldt, FB-3000 WT sedient or MP+ Stix putty (Note: OP 25884-not suitable for use with OPVC pipes.)

\*\*Booring the U. Classification Marking ++Dearing the U. Listing Mark Wall Assembly — The 1 and 2 hr fire roted gypsum boord/stud well assemblies shell be notoride and in the monner specified in the individual construction of Well-Wolf Series little and Portition Designs in the UL Fire Resistance Directory and shall include the follows: e the following uction features: ds — Wall framing may consist of either wood studs or steel  $\operatorname{ard}^*$  — Thickness, type, number of layers and fasteners as al Wall and Partition Design. Diam of opening shall be 1 in. the wall assembly in which it is installed.

2. Through Penetrains — One nonmetallic pipe or conduit to be installed either concentrically or eccentrically within the firestop system The annular space between the pipe or conduit and pipe or conduit and personnel shall be min of 0 in. (0 mm, point contact) to max personnel shall be min of 0 in. (0 mm, point contact) to max conduit to an rigidification of the min of the min of the conduits of the min of the mi dule oild core or cellular core PVC pipe for use in closed (process or in) or useful supply) or vented (circh, waste or vent) piping systems.

B. Chlorinsted Polyviny (Chlorids (CPVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) SRR13, OPVC) pip for use in closed (process or supply) piping systems.

SRR14 SR 70).

D, Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 2 in. (51 mm) diom (or smaller). Schedule 40 solid core or cellular core ABS pipe for use in closed (process or supply) or wented (droin, waste or vent) piping systems. The hourly TRating of the firestop system in 61 hr when pipes are used in vented (drain, waste or vent) piping systems. The hourly TRating of the firestop system is equal to the hourly fire rating of the west assembly in which it is 3. Fill, Void or Cavity Materials\* - Caulic or Sealant— With thickness of 5/8 h. (16 mm) of coalised applied within connulus between pipe or conduit and periphery of both surfaces of well assembly. At the point contact location between pipe or conduit and gypsum board, a min 1/2 in. (13 mm) diam bead of coulk or putty shall be applied at the pipe or conduit gypsum board interface on both surfaces of well assembly. Sealant of the pipe or conduit gypsum board interface on both surfaces of well assembly. Sealant (Notes Caulic of FB—3000 WT sealant. (Notes Caulic of FB—5000 WT sealant. (Notes Caulic of FB—5000 WT sealant.)

Swankon Fire Protection	2220 COUNTY RD. 210 WEST SUITE NO.108-139

Bishopgat

ville

Riv

DESCRIPTION

P
TYCO EC-8 QR EC WHITE REC. PENDENT

TYCO FRB QR SC BRASS UPRIGHT

TYCO LFII QR EC WHITE RESIDENTIAL. REC. PEN.

TYCO LFII QR EC WHITE RESIDENTIAL REC. PEN.

CLOBE 1" QR EC WHITE RESIDENTIAL REC. PEN.

TYCO CC3 QR EC BRASS CONC. SPACE UPRIGHT 155° 155° 155° 175° 155° 155° 

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

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