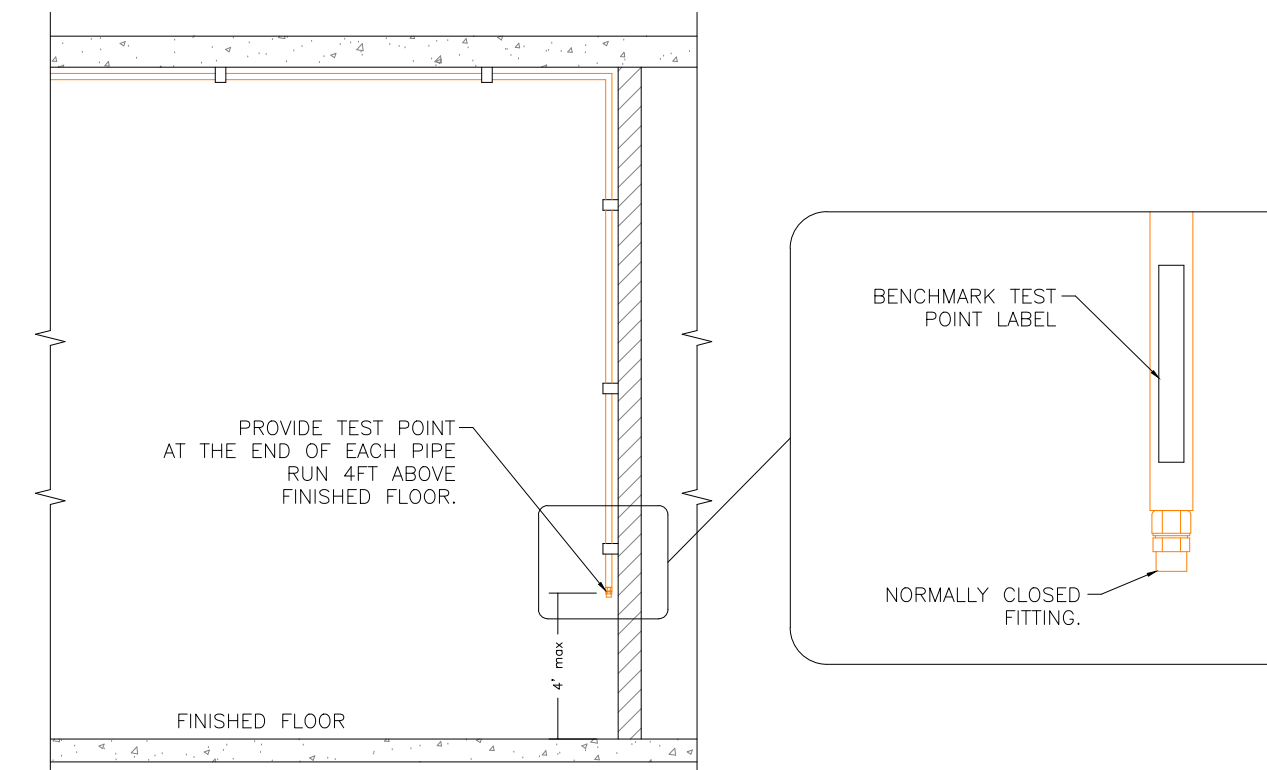


1 TYPICAL DETECTOR MOUNTING DETAIL
DIAGRAMMATIC

NOTES:

- ASSD APPARATUS SHALL BE MOUNTED TO A WALL IN THE PROTECTED ROOM AT A HEIGHT OF APPROXIMATELY 48" TO 60" (1200 mm TO 1500 mm) TO TOP OF APPARATUS MEASURED ABOVE FINISHED FLOOR.
- MOUNTING LOCATION SHALL BE A FULLY ACCESSIBLE AND IN A VISIBLE LOCATION.
- MOUNTING OR ATTACHMENT TO SITE EQUIPMENT, CABLE TRAYS, MOVABLE WALLS, OTHER EQUIPMENT OR EQUIPMENT SUPPORTS IS NOT PERMITTED.
- PIPING NETWORK INSERTION INTO THE DETECTOR INLET SHALL NOT BE GLUED.
- FLEXIBLE TUBING FOR TERMINATION OF THE SAMPLING PIPE NETWORK INTO DETECTOR INLET IS NOT PERMITTED.
- AIR SAMPLING SMOKE DETECTOR ASSEMBLY SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS, THE MANUFACTURER'S INSTALLATION AND INSTRUCTION MANUALS.
- INSTALLATION TECHNIQUES SHALL BE IN COMPLIANCE WITH THE GEOGRAPHICAL SEISMIC ZONE REQUIREMENTS IN SEISMIC ZONES PER THE AHJ.



3 TYPICAL BENCHMARK TEST POINT MOUNTING DETAIL
DIAGRAMMATIC

NOTE:

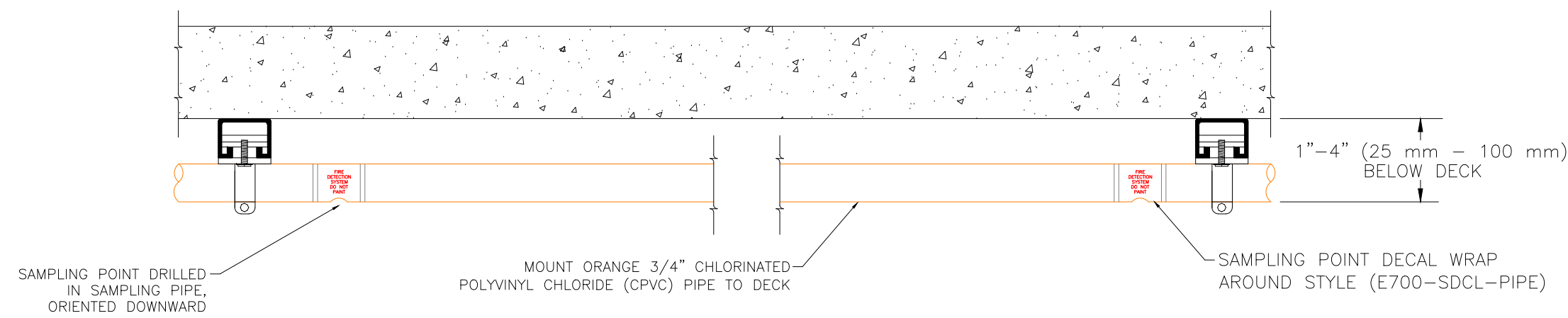
- BENCHMARK TEST POINT SHALL BE PROVIDED AT THE FURTHEST END OF EACH PIPE RUN, OPPOSITE END OF THE ASSD APPARATUS.
- PROVISIONS SHALL BE MADE SO THAT THIS TEST POINT CAN BE LOCATED WITHIN 48" (1200 mm) ABOVE FINISHED FLOOR.
- THE TEST POINT SHALL BE CONSTRUCTED USING A NORMALLY CLOSED REMOVABLE END CAP WHEREBY A REPLACEMENT END CAP WITH PRE-CALIBRATED 1/8" (3.0 mm) HOLE IS TEMPORARILY FITTED TO FACILITATE BENCHMARK PERFORMANCE VERIFICATION AS INDICATED IN THEY SPECIFICATIONS AND ON THESE DRAWINGS.
- THIS REMOTE TEST POINT IS INTENDED TO BENCHMARK SYSTEM PERFORMANCE AT TIME OF INITIAL COMMISSIONING AND DURING ROUTINE TEST AND INSPECTION.
- THE TEST POINT SHALL BE LABELED DOCUMENTING BENCHMARK SYSTEM PERFORMANCE AT TIME OF COMMISSIONING USING MANUFACTURER'S SUPPLIED LABELS INTENDED FOR THIS PURPOSE.
- BENCHMARK LABELS SHALL BE PLACED CLOSE TO TEST POINTS AND BE POSITIONED SO THAT THEY ARE VISIBLE WITHOUT OBSTRUCTION.
- PROVIDE A DETAIL OF THIS TEST POINT ALONG WITH SIGNAGE INFORMATION FOR APPROVAL.

FLAG NOTES

BASIS OF DESIGN IS XTRALIS, INC VESDA AIR SAMPLING SMOKE DETECTION APPARATUS.

- PROVIDE NECESSARY UNIT(S) AND PIPING TO SAMPLE AREAS INDICATED ON THE DRAWINGS. PROVIDE THE FOLLOWING MONITORING PER AIR SAMPLING SMOKE DETECTION APPARATUS AS A MINIMUM TO THE FIRE ALARM CONTROL PANEL: POWER SUPERVISION, FAULT, PRE-ALARM AND ALARM CONDITIONS. PROVIDE ADDITIONAL MONITORING AS REQUIRED BASED ON THE MANUFACTURER'S RECOMMENDATIONS. MOUNT AIR SAMPLING SMOKE DETECTION APPARATUS 48" TO 60" (1200 mm TO 1500 mm) TO TOP OF DETECTOR MEASURED ABOVE FINISHED FLOOR. REFER TO VESDA INSTALLATION DETAIL #1.
- PROVIDE LISTED AND APPROVED REGULATED POWER SUPPLY OF NOMINALLY 24VDC. POWER SUPPLY SHALL BE PROVIDED WITH APPROPRIATELY SIZED/RATED BATTERIES TO ACCOMMODATE THE SYSTEM(S) POWER REQUIREMENTS FOR A DURATION OF TIME REQUIRED BY THE LOCAL AHJ IN THE EVENT MAIN AC POWER IS INTERRUPTED.
- AIR SAMPLING PIPE DISTRIBUTION NETWORKS SHALL BE CONSTRUCTED USING RIGID PIPE MOUNTED TO THE UNDERSIDE OF THE STRUCTURAL CEILING. REFER TO VESDA INSTALLATION DETAIL #2.
- SAMPLING POINTS SHALL BE DRILLED DIRECTLY INTO THE AIR SAMPLING PIPE DISTRIBUTION NETWORK, BE ORIENTED DOWNWARD AND BE WITHIN 1" TO 4" (25 mm TO 100 mm) BELOW THE UNDERSIDE OF THE STRUCTURAL CEILING/ FALSE FLOOR. REFER TO VESDA INSTALLATION DETAIL #2 AND #5. FOR STRUCTURAL CEILINGS THAT HAVE BEAMS, GIRDERS, SOLID JOIST OR A WAFFLE-LIKE CONSTRUCTION, ETC, AIR SAMPLING PIPE DISTRIBUTION NETWORKS SHALL MOUNT TO THE UNDERSIDE OF STRUCTURAL BEAMS WITH STANCHIONS HAVING SAMPLING POINT EXTEND UP INTO EACH BEAM POCKET AT LOCATIONS WHERE SAMPLING POINTS ARE REQUIRED. REFER TO VESDA INSTALLATION DETAIL #3 WHERE DROP CEILINGS ARE PRESENT SAMPLING POINTS SHALL BE REMOTELY MOUNTED TO THE UNDERSIDE OF THE DROP CEILING, BE ORIENTED DOWNWARD AND BE WITHIN 1" TO 4" (25 mm TO 100 mm) BELOW UNDERSIDE OF THE DROP CEILING. REFER TO VESDA INSTALLATION DETAIL #4. SAMPLING POINTS SHALL BE A MINIMUM OF 48" (1200 mm) AWAY FROM AIR SUPPLY DIFFUSERS AND BE INSTALLED IN AN AREA ON THE CEILING THAT IS FREE FROM OBSTRUCTIONS FOR A MINIMUM OF 18" (450 mm) ON ALL SIDES AS POSSIBLE. PLACEMENT OF SAMPLING POINTS NEAREST TO WALLS SHALL BE GREATER THAN 12" (300 mm) AND NOT EXCEED 7'-0" (2150 mm).
- AIR SAMPLING PIPE DISTRIBUTION NETWORKS SHALL BE CONSTRUCTED USING RIGID PIPE MOUNTED TO FACE OF RETURN AIR GRILLES PRIOR TO FILTRATION IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES. SAMPLING POINTS SHALL BE DRILLED DIRECTLY INTO THE AIR SAMPLING PIPE DISTRIBUTION NETWORK, BE ORIENTED DOWNWARD 33° TO 45° TOWARDS THE INCOMING AIRFLOW AND SHALL NOT BE PLACED OUTSIDE OF GRILLE AREA. REFER TO VESDA INSTALLATION DETAIL #6. SAMPLE POINT SPACING FOR RETURN AIR GRILLE DETECTION SHALL BE BASED UPON SAMPLING POINT DISTRIBUTION OF A MAXIMUM OF ONE (1) SAMPLE POINT PER EVERY 4 SQ. FT. (0.40 SQ. M) OF GRILLE AREA. SAMPLING POINTS COVERING RETURN AIR GRILLES SHALL STANDOFF 3" TO 6" (75 mm TO 150 mm) FROM THE GRILLE IN ORDER TO AVOID THE LOW OR NEGATIVE PRESSURE POINT DIRECTLY AT THE GRILLE SURFACE. A MEANS TO DISCONNECT THE SAMPLING PIPE FROM RETURN AIR GRILLES SHALL BE PROVIDED AND BASED ON MANUFACTURER'S GUIDELINES. MECHANICAL STANDOFF FASTENERS USED TO SUPPORT THE SAMPLING PIPE NETWORK SHALL BE FIT FOR PURPOSE. PLASTIC ZIP TIES ARE NOT PERMITTED. REFER TO VESDA INSTALLATION DETAIL #7.
- A BENCHMARK TEST POINT SHALL BE PROVIDED AT THE FURTHEST END OF EACH PIPE RUN, OPPOSITE END OF THE ASSD APPARATUS. PROVISIONS SHALL BE MADE SO THAT THE TEST POINT CAN BE LOCATED WITHIN 48" (1200 mm) ABOVE FINISHED FLOOR. THE TEST POINT SHALL BE CONSTRUCTED USING A NORMALLY CLOSED INDUSTRIAL QUICK CONNECT FITTING WITH AN ORIFICE OF NOMINAL 1/8" (3.0 mm) WHEN OPEN TO FACILITATE BENCHMARK PERFORMANCE VERIFICATION. THIS REMOTE TEST POINT IS INTENDED TO BENCHMARK SYSTEM PERFORMANCE AT TIME OF INITIAL COMMISSIONING AND DURING ROUTINE TEST AND INSPECTION. THE TEST POINT SHALL BE LABELED DOCUMENTING BENCHMARK SYSTEM PERFORMANCE AT TIME OF COMMISSIONING USING MANUFACTURER SUPPLIED LABELS INTENDED FOR THIS PURPOSE. BENCHMARK LABELS SHALL BE PLACED JUST ABOVE TEST POINTS AND BE POSITIONED SO THAT THEY ARE VISIBLE WITHOUT OBSTRUCTION. REFER TO VESDA INSTALLATION DETAIL #10.

2 SINGLE-LEVEL COVERAGE CEILING LEVEL ONLY COVERAGE
DIAGRAMMATIC



NOTES:

- SAMPLING POINT SHALL BE PROVIDED AS INDICATED ON THE DRAWINGS.
- WHERE THE STRUCTURAL CEILING IS OPEN TO THE FINISHED FLOOR, SAMPLING POINTS SHALL BE DRILLED DIRECTLY INTO THE AIR SAMPLING PIPE DISTRIBUTION NETWORK.
- WHERE A DROP CEILING IS USED BELOW THE STRUCTURAL CEILING, SAMPLING POINTS SHALL BE CONSTRUCTED USING REMOTE SAMPLING POINTS MOUNTED TO THE UNDERSIDE OF THE DROP CEILING INTERCONNECTING WITH AIR SAMPLING PIPE DISTRIBUTION NETWORK VIA USE OF FLEXIBLE MANUFACTURER'S SUPPLIED "CAPILLARY" TUBING.
- SAMPLING POINTS SHALL BE WITHIN 1" TO 4" (25 mm TO 100 mm) BELOW THE UNDERSIDE OF THE CEILING WHERE THE CEILING IS SMOOTH. FOR CEILINGS THAT HAVE BEAMS, GIRDERS, SOLID JOIST OR A WAFFLE-LIKE CONSTRUCTION, ETC. PLACE SAMPLING POINTS IN ACCORDANCE WITH THE SPECIAL PROVISIONS IN NFPA-72.
- SAMPLING POINTS SHALL BE INSTALLED IN AN AREA ON THE CEILING THAT IS FREE FROM OBSTRUCTIONS FOR A MINIMUM OF 18" (450 mm) ON ALL SIDES AS POSSIBLE.

TITLE: FIRE ALARM SYSTEM PLAN

SYSTEMS SPECIALISTS ONI
432 US Hwy 72 Suite 3, Collierville, TN 38017
(901)854-0510
TN-C1472/QA-0358

This Fire Alarm System shall be installed in compliance with: NFPA72, 2013 ed, and all wiring shall comply with NFPA70, Article 760.

LAST REVISION:
2/18/2021

BY: RGG

CHECKED BY: PEH

FA-5

Sheet 5 of 7