

UNIT TAG	SERVING	MANUFACTURER	MODEL	NOM. TONS	COOLING					HEATING		CAPABLE OF O.A. (CFM)	DRY BULB ECONOMIZER	FILTER EFFICIENCY	UNIT VOLT/PH	UNIT MCA	UNIT MOCP	UNIT WEIGHT	
					TOTAL CAPACITY NET (MBH)	SENSIBLE CAPACITY NET (MBH)	SUPPLY AIRFLOW (CFM)	MIXED AIR EAT (°F)		EFFICIENCY EER/SEER	INPUT (MBH)								OUTPUT (MBH)
RTU-1	LEFT SPACE	TRANE	YSC120	10	115	115	4030	86.8	61.9	11.2/	200/140	160/112	1620	YES	MERV-13	208/3	49	60	1355
RTU-2	LEFT SPACE	TRANE	4YCC4024	2	24	-	775	84.3	61.8	12/14	60	48	400	YES	MERV-13	208/3	19.1	30	625
RTU-3	RIGHT SPACE	TRANE	YSC048G3	4	47	47	1400	87.8	61.9	12/14	100/70	81/56.7	780	YES	MERV-13	208/3	26	35	760
RTU-4	RIGHT SPACE	TRANE	YSJ072A3	6	74	74	2105	88.2	61.9	11.0/7	120/84	97.2/68	1210	YES	MERV-13	208/3	38	50	1275

CAPACITIES BASED ON 95° F AMBIENT AND 5275' ELEVATION
 GENERAL NOTES:
 STANDARD FEATURES:
 MEETS ASHRAE STANDARD 90.1
 HIGH AND LOW PRESSURE REFRIGERANT CONTROLS
 R-410A REFRIGERANT

OPTIONS TO BE INCLUDED WITH NEW UNITS:
 MEDIUM STATIC BLOWER
 BAROMETRIC RELIEF DAMPER
 WIFI THERMOSTAT CONTROLS WITH FROSTAT PROTECTION
 HONEYWELL VISION PRO 8000 WITH LOCKABLE PROTECTIVE COVER
 ECONOMIZER W/DB CONTROL AND MODULATING O.A. DAMPERS SET TO 55°F
 DISCONNECT SWITCH
 CURB ADAPTOR RATED FOR LOCAL WIND LOADS THAT PROVIDE 8" CLEARANCE FROM FINISHED ROOF TO UNIT

COMPOSITE CONDENSATE DRAIN PAN
 OPTIONS TO BE INCLUDED WITH NEW UNITS (CONT.):
 THROUGH THE BASE CONNECTIONS
 C.C. / E.C. TO PROVIDE AND INSTALL POWERED CONVENIENCE OUTLET (120V)
 1ST YEAR LABOR WARRANTY
 M.C. TO PROVIDE AND INSTALL RETURN AIR SMOKE DETECTORS

UNIT TAG	MANUFACTURER	MODEL	DESCRIPTION	VOLTS/PH	EXHAUST CFM	WEIGHT LBS	ESP IN. W.C.
1	BROAN	XB80	CEILING CABINET	115/1	75	10	0.40
2	BROAN	XB80	CEILING CABINET	115/1	75	10	0.40
3	BROAN	XB80	CEILING CABINET	115/1	75	10	0.40
4	GREENHECK	G-120-VG	ROOF EXHAUST	115/1	1180	48	0.75
5	GREENHECK	G-099-VG	ROOF EXHAUST	115/1	550	38	0.75
6	GREENHECK	G-099-VG	ROOF EXHAUST	115/1	525	38	0.75
7	GREENHECK	G-120-VG	ROOF EXHAUST	115/1	1485	48	0.75

ADDITIONAL INFORMATION:
 EF-4, EF-5, EF-6, EF-7
 ALUMINUM BRIDGEMAN
 ALUMINUM SUB BASE
 WEATHER-TIGHT DISCONNECT ON GRAVITY BACKDRIFT DAMPER
 18" HIGH ROOF CURB
 HIGH EFFICIENCY MOTOR WITH THERMAL OVERLOAD PROTECTION
 SHALL BE DIRECT DRIVE WITH AN ECM MOTOR
 SHALL RUN AT A MINIMUM OF THE EXHAUST VALUE SHOWN IN THE TABLE ABOVE. FANS MAY RAMP UP DURING ECONOMIZER AND WILL BE CONTROLLED OFF OF SPACE PRESSURE SETPOINT OF 0.03".
 SPACE PRESSURE SENSOR SHALL BE MOUNTED BELOW THE CEILING

- ### MECHANICAL LEGEND
- Ⓡ REMOTE TEMPERATURE SENSOR @ 48" A.F.F. U.N.O.
 - Ⓢ THERMOSTAT ASSOCIATED WITH REMOTE TEMP. SENSOR
 - Ⓣ DUCT SMOKE DETECTOR
 - Ⓤ SCAVENGER SYSTEM DROP LOCATION
 - Ⓥ SUPPLY AIR GRILLE
 - Ⓦ RETURN / EXHAUST AIR GRILLE
 - Ⓧ FLEXIBLE DUCT
 - Ⓨ VOLUME DAMPER AT EACH SUPPLY DIFFUSER
 - Ⓩ O2 DROP LOCATION - SHOWN FOR REFERENCE ONLY SEE PLUMBING PLANS
 - ⓐ ROOM PRESSURE SENSOR

UNIT TAG	MANUFACTURER	MODEL	DESCRIPTION	VOLTS/PH	FLA (AMPS)	WEIGHT LBS
1	SUPERA	EVC3000	ACTIVE EVACUATION SYSTEM	115/1	0.3	10

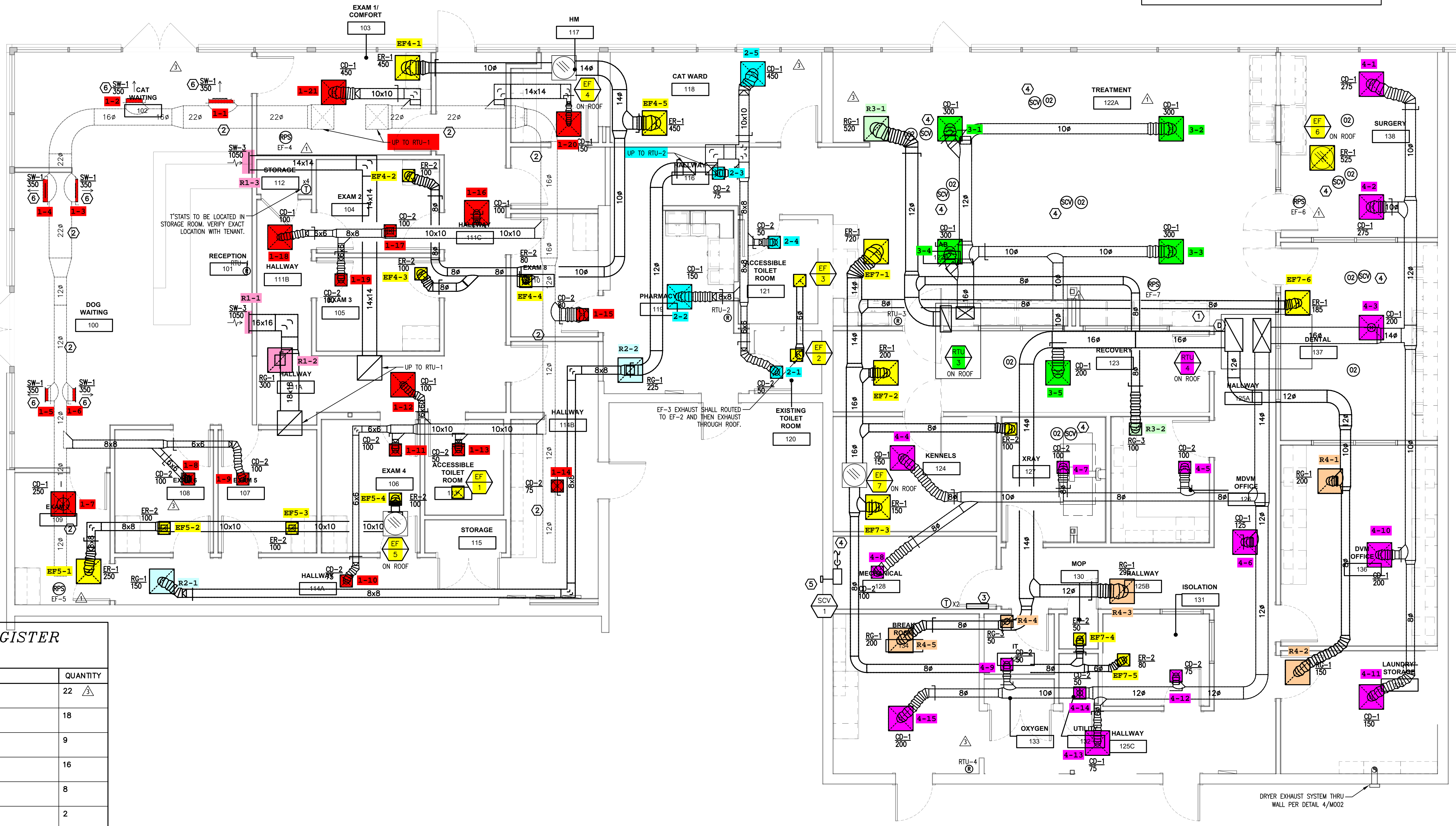
ADDITIONAL INFORMATION:
 CONTROLLED BY LIGHTED WALL SWITCH
 OUTLETS TO BE EXCISED WHERE SHOWN
 NOTE SEE INTERFERE TO BE EXCISED AT EACH ANESTHESIA MACHINE SUPPLIED BY OWNER. INSTALLED BY G.C.

- ### KEYED NOTES
- DUCT SMOKE DETECTOR ACTIVATION SHALL RESULT IN THE IMMEDIATE LOSS OF POWER TO THE AIR MOVING EQUIPMENT. AIR MOVING EQUIPMENT SERVING THE SAME SPACE SHALL BE INTERCONNECTED FOR GLOBAL SHUTDOWN.
 - (E) DUCTWORK SHOWN IN LIGHT LINE-TYPE. M.C. TO FIELD VERIFY THE QUANTITY AND CONDITION OF (E) DUCTWORK PRIOR TO BID.
 - KEYED REMOTE TEST SWITCHES WITH LED LIGHT INDICATORS ARE TO BE PROVIDED ON THE WALL AT NO GREATER THAN 6' A.F.F. FOR ALL SMOKE DETECTORS.
 - ROUTE WASTE GAS SCAVENGER SYSTEM PIPING ABOVE CEILING TO DROP LOCATIONS SHOWN. PIPING TYPICALLY 2" PVC PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - ROUTE SCAVENGER EXHAUST THRU WALL TO EXTERIOR.
 - SUPPLY DIFFUSER MAY BE EXISTING TO BE REUSED. M.C. TO FIELD VERIFY THE QUANTITY AND CONDITION PRIOR TO BID.

ROOFTOP UNITS PURCHASED AND INSTALLED BY LANDLORD UNDER SEPARATE PERMIT. ALSO BY LANDLORD UNDER SEPARATE PERMIT IS EXTERIOR DUCTWORK AND DUCT DROPS INTO THE BUILDING AT LOCATIONS SHOWN ON THIS PLAN. INTERIOR DUCTWORK TO BE PROVIDED AND INSTALLED BY TENANT UNDER THIS PERMIT.

- ### WAG SCAVENGER SYSTEM
- INSTALLED BY LICENSED MEDICAL GAS CONTRACTOR. FOLLOW MANUFACTURER INSTRUCTIONS.
 - INSTALLATION AND TESTING MUST COMPLY WITH NFPA 99 STANDARDS.
 - SCAVENGER SYSTEM AND OUTLETS ARE PROVIDED BY OWNER AND INSTALLED BY THE CONTRACTOR.
 - CONTRACTOR TO PROVIDE AND REMOTE LIGHTED SWITCH IN THE TREATMENT AREA TO CONTROL THE SCAVENGER SYSTEM.
 - TEST SYSTEM WITH PROVIDED TEST DEVICE. PROVIDED THE HOSPITAL MANAGER THE TEST DEVICE AT THE END OF CONSTRUCTION.

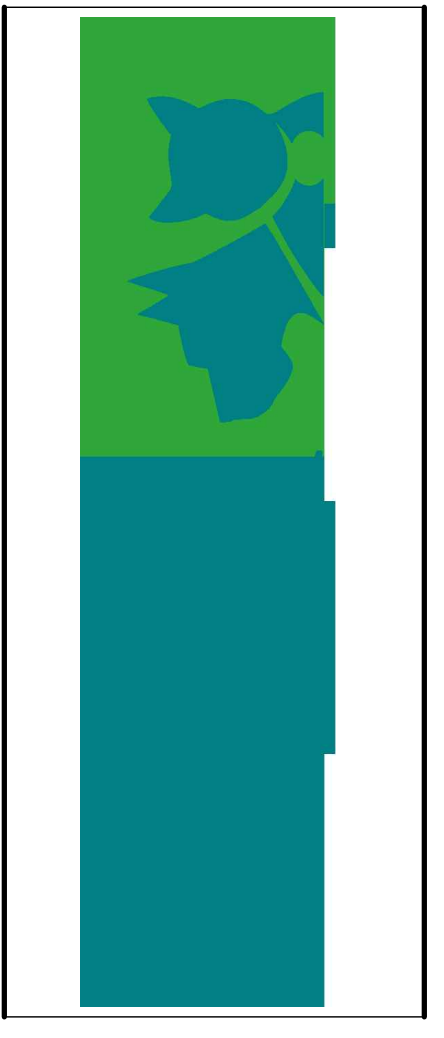
- ### NOTES
- INSTALLATION MUST CONFORM TO FEDERAL, STATE AND LOCAL CODES AND AUTHORITIES HAVING JURISDICTION.
 - M.C. SHALL FURNISH AND PROVIDE A FULLY FUNCTIONAL HVAC SYSTEM PER THESE PLANS. THE HVAC SYSTEM SHALL INCLUDE PACKAGED ROOF TOP EQUIPMENT, CONTROLS, DUCTED AIR DISTRIBUTION, ALL PIPING, AND POWER TO UNITS.
 - EXHAUST AIR SYSTEMS INCLUDING EXHAUST FANS ON ROOF PROVIDED BY M.C.
 - M.C. TO MAKE DUCT CONNECTIONS TO ROOF TOP EQUIPMENT. COORDINATE LOCATIONS WITH OWNER.
 - MOUNT DUCTWORK AS HIGH AS POSSIBLE.
 - TRANSITION DUCTWORK CONNECTIONS TO EQUIPMENT AS REQUIRED.
 - TEST AND BALANCE AIR SYSTEMS. PROVIDE REPORT TO G.C. AND OWNER.
 - INSULATE SUPPLY AIR DUCTWORK IN ALL CONCEALED SPACES.
 - COORDINATE ROUTING OF DUCTWORK AND DIFFUSER LOCATIONS WITH EXISTING CONDITIONS. VERIFY PRIOR TO FABRICATION AND INSTALLATION.
 - NOT USED.
 - PROVIDE DUCT MOUNTED SMOKE DETECTORS ON ALL UNITS PER CODE (IF NOT EXISTING).
 - CONDENSATE TO BE ROUTED TO APPROVED RECEPTOR. EXPECTED TO RE-USE EXISTING CONDENSATE PIPING.
 - ALL EXPOSED ROUND DUCTWORK SHALL BE INTERNALLY LINED. ALL DUCTWORK DIMENSIONS ARE INSIDE CLEAR.
 - IF APPLICABLE, EGG CRATE TO BE PROVIDED AND INSTALLED BY G.C.
 - ALL LIGHTING, DUCTWORK, SOFFITS AND CEILING COMPONENT HEIGHTS ARE TO BE COORDINATED WITH THE ARCHITECT.
 - HVAC UNIT LOCATIONS AND DUCT DROP LOCATIONS ARE DIAGRAMMATIC. IT IS EXPECTED THAT THE CONTRACTOR WILL MAKE SLIGHT ADJUSTMENTS IN THE FIELD TO ACCOUNT FOR THINGS SUCH AS JOIST LOCATIONS, SPRINKLER MAINS, ACTUAL SUPPLY AND RETURN DROP LOCATIONS, ETC. AS NEEDED.
 - THE MEP PLANS ARE NOT STRUCTURAL ENGINEERING PLANS. STRUCTURAL ENGINEERING, WHERE REQUIRED BY OTHERS.
 - FINAL PLACEMENT OF T-STATS AND SENSORS SHALL BE DETERMINED BY THE OWNER'S REP., AS RECOMMENDED BY HVAC CONTRACTOR. WIFI T-STATS TO BE EITHER VISION PRO 8000 WITH REDLINK OR HONEYWELL 8000.
 - DUCTWORK IN CONCEALED AREAS MAY BE RECTANGULAR WITH EQUIVALENT CROSS SECTIONAL FLOW AREA.
 - ALL DUCT SYSTEMS SHALL BE INSTALLED PER CMC 602, 603, 604 AND SMACNA HVAC DUCT CONSTRUCTIONS STANDARDS.
 - ROOFTOP EQUIPMENT SHALL BE PERMANENTLY IDENTIFIED AS TO THE AREA OR SPACE SERVED BY THE EQUIPMENT PER CMC 303.6.
 - DUCT SMOKE DETECTOR ACTIVATION SHALL RESULT IN THE IMMEDIATE LOSS OF POWER TO THE AIR MOVING EQUIPMENT. AIR MOVING EQUIPMENT SERVING THE SAME SPACE SHALL BE INTERCONNECTED FOR GLOBAL SHUTDOWN.



DIFFUSER, GRILLE, AND REGISTER SCHEDULE

CALLOUT	DESCRIPTION	MODEL	QUANTITY
CD-1	Krueger Louvered Face	Krueger/1400	22
CD-2	Krueger Louvered Face	Krueger/1400	18
ER-1	Krueger Perforated Return	Krueger/S80P	9
ER-2	Krueger Perforated Face	Krueger/S80	16
RG-1	Krueger Double Deflection Return	Krueger/S80	8
RG-3	Krueger Double Deflection Return	Krueger/S80	2
SW-1	Krueger Sidewall	Krueger/880	6
SW-3	Full Size Wire Mesh Return	Krueger/880	2

1 MECHANICAL PLAN
 1/4" = 1'-0"



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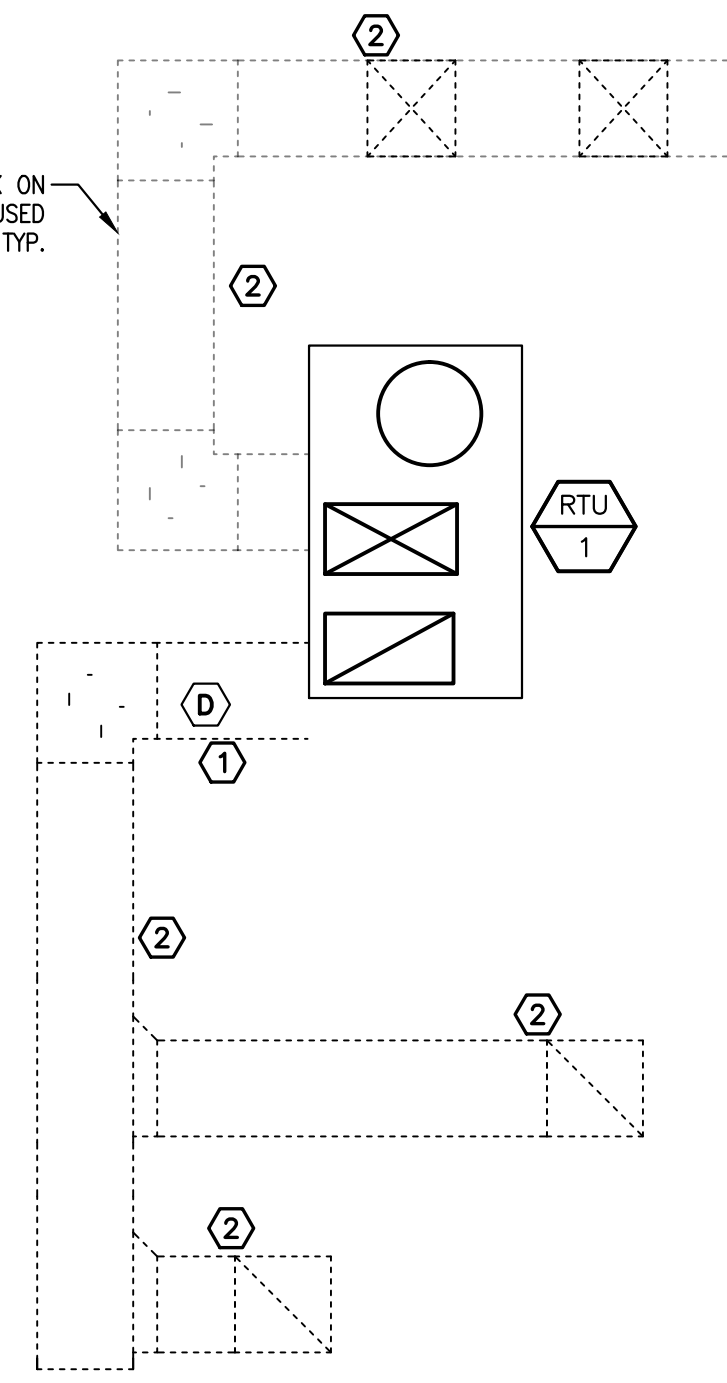
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2	07/18/23	"BD Comments"
3	09/18/23	"Field Revisions"
4	10/27/23	"Field Revisions"
5	11/17/23	"Field Revisions"

Client Review Set: 12/29/2022
 Final Set Issue: -
 Permit Issue: -

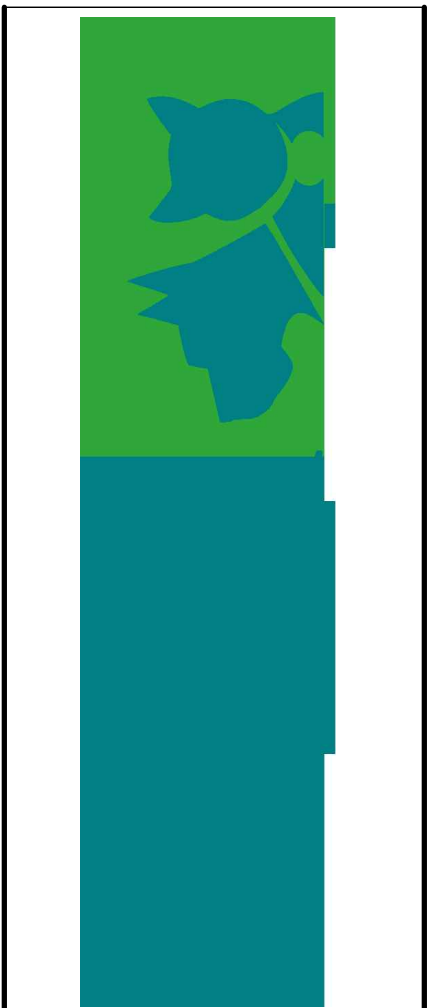
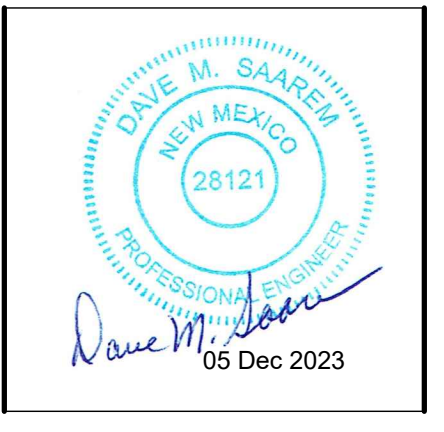
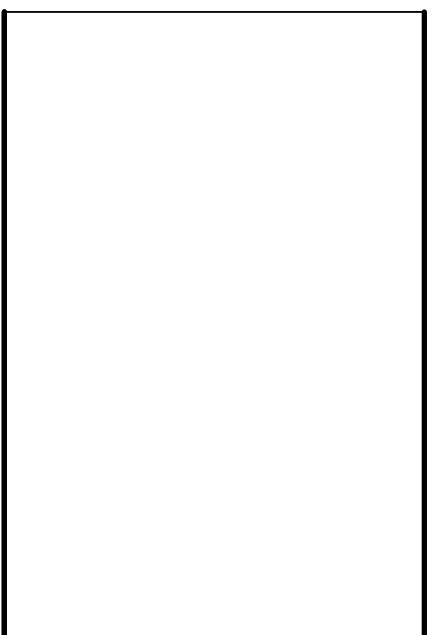
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MECHANICAL PLAN
 Comm. Number 28-2012
 Date 12/29/2022
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 Checked By DMS

M001

EXISTING DUCTWORK ON ROOF TO BE REUSED WHERE POSSIBLE. TYP.



1 MECHANICAL ROOF PLAN
1/4" = 1'-0"



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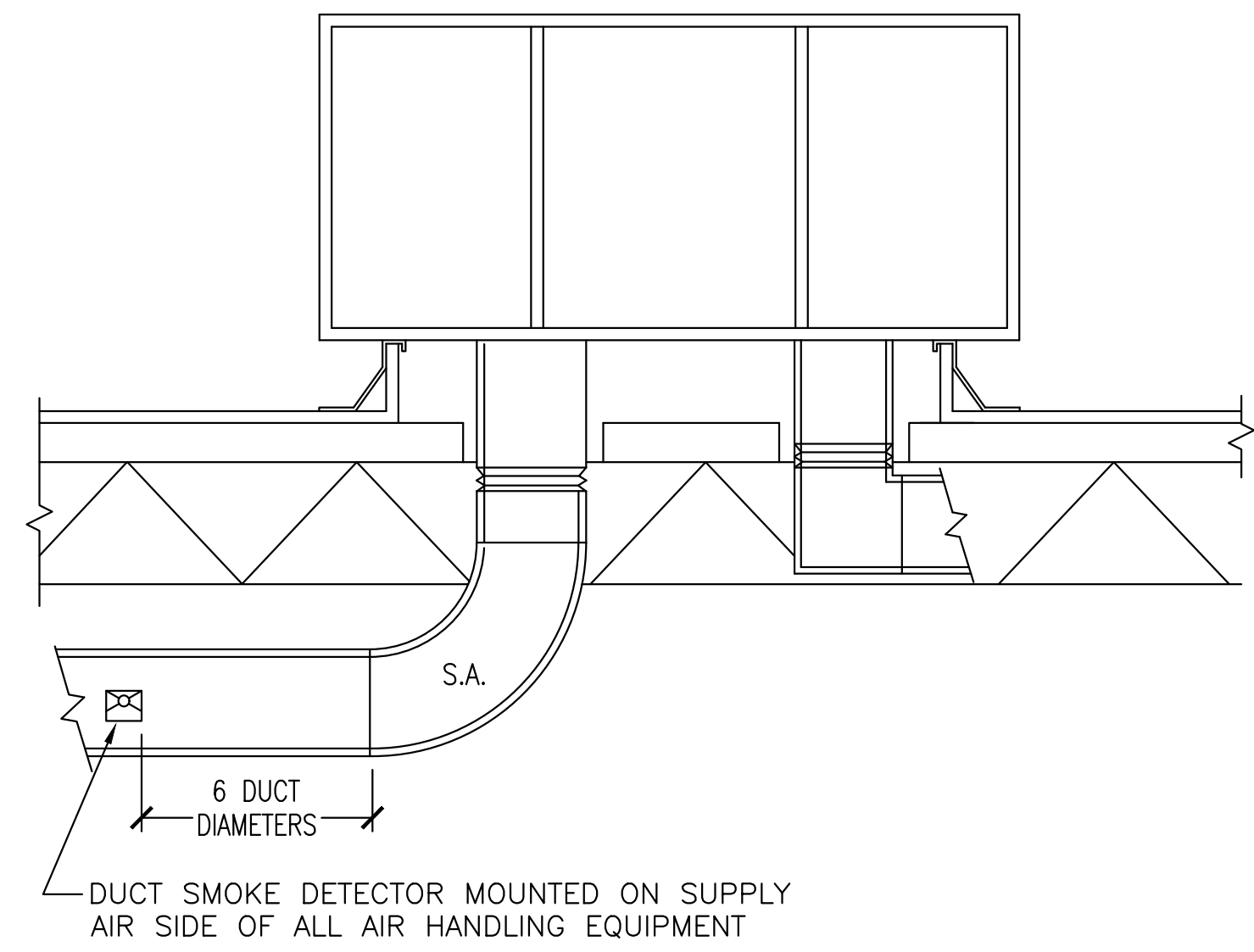
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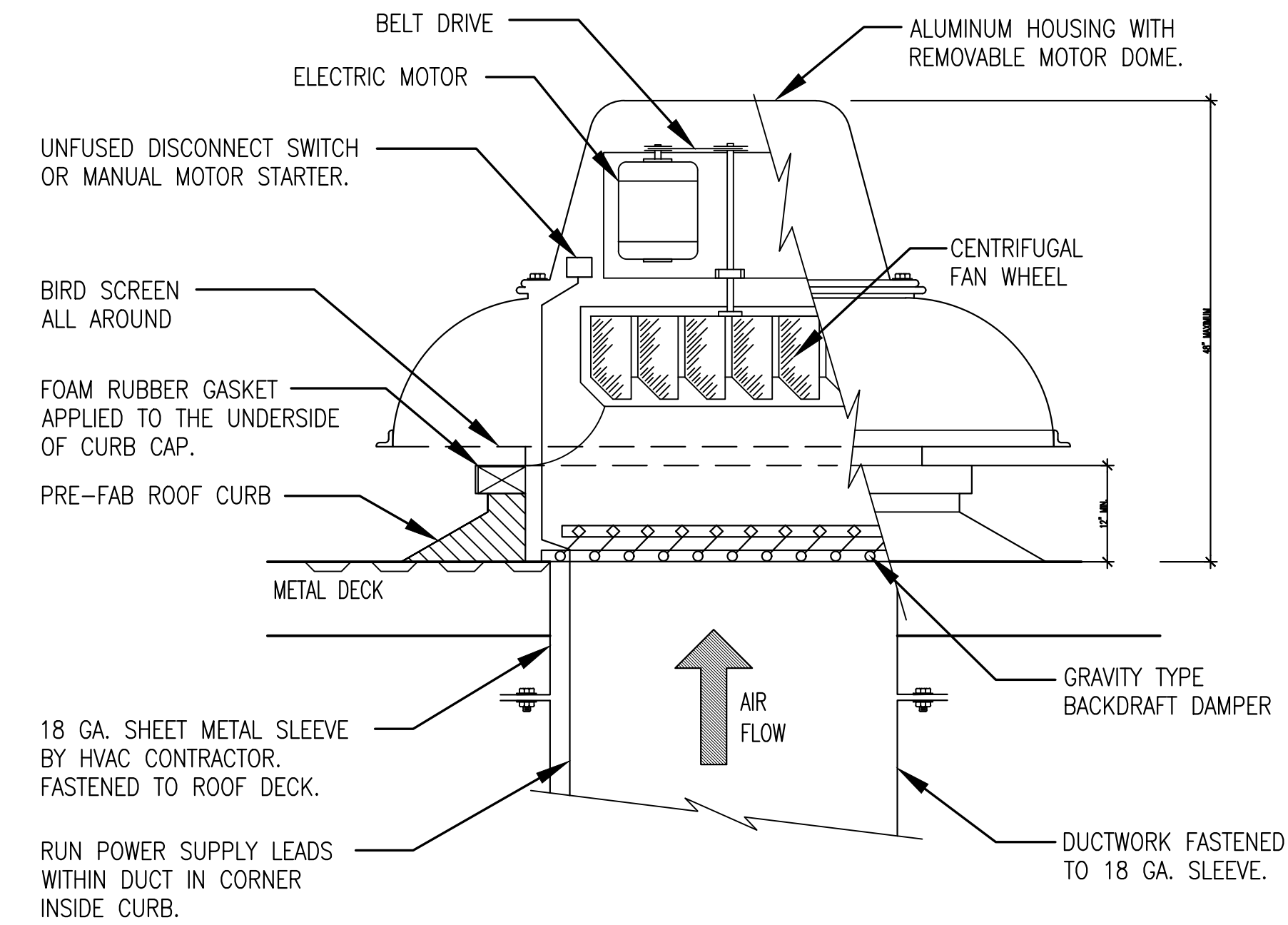
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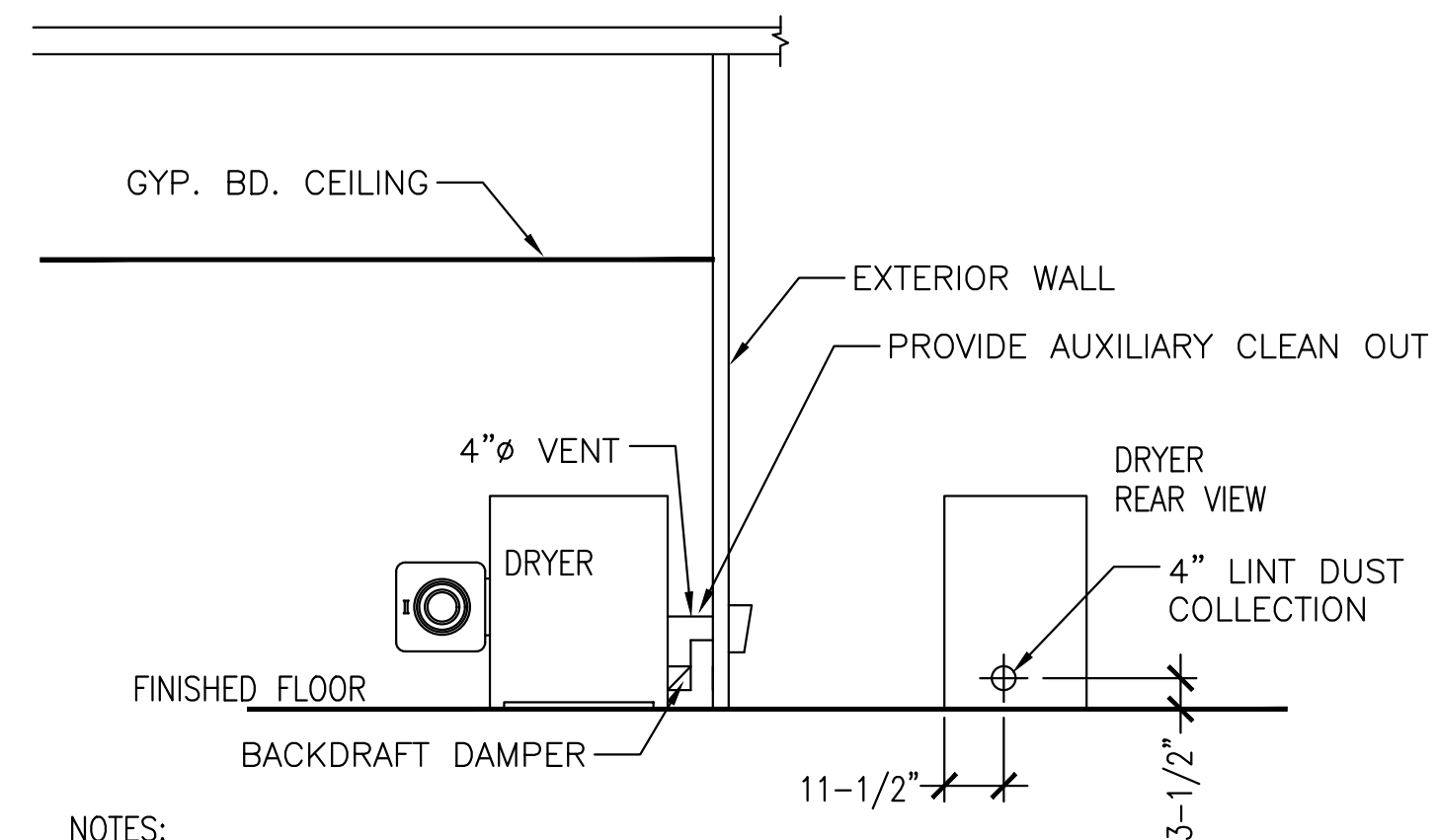
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03 DUCT MOUNTED SMOKE DETECTOR LOCATION
SCALE: NOT TO SCALE

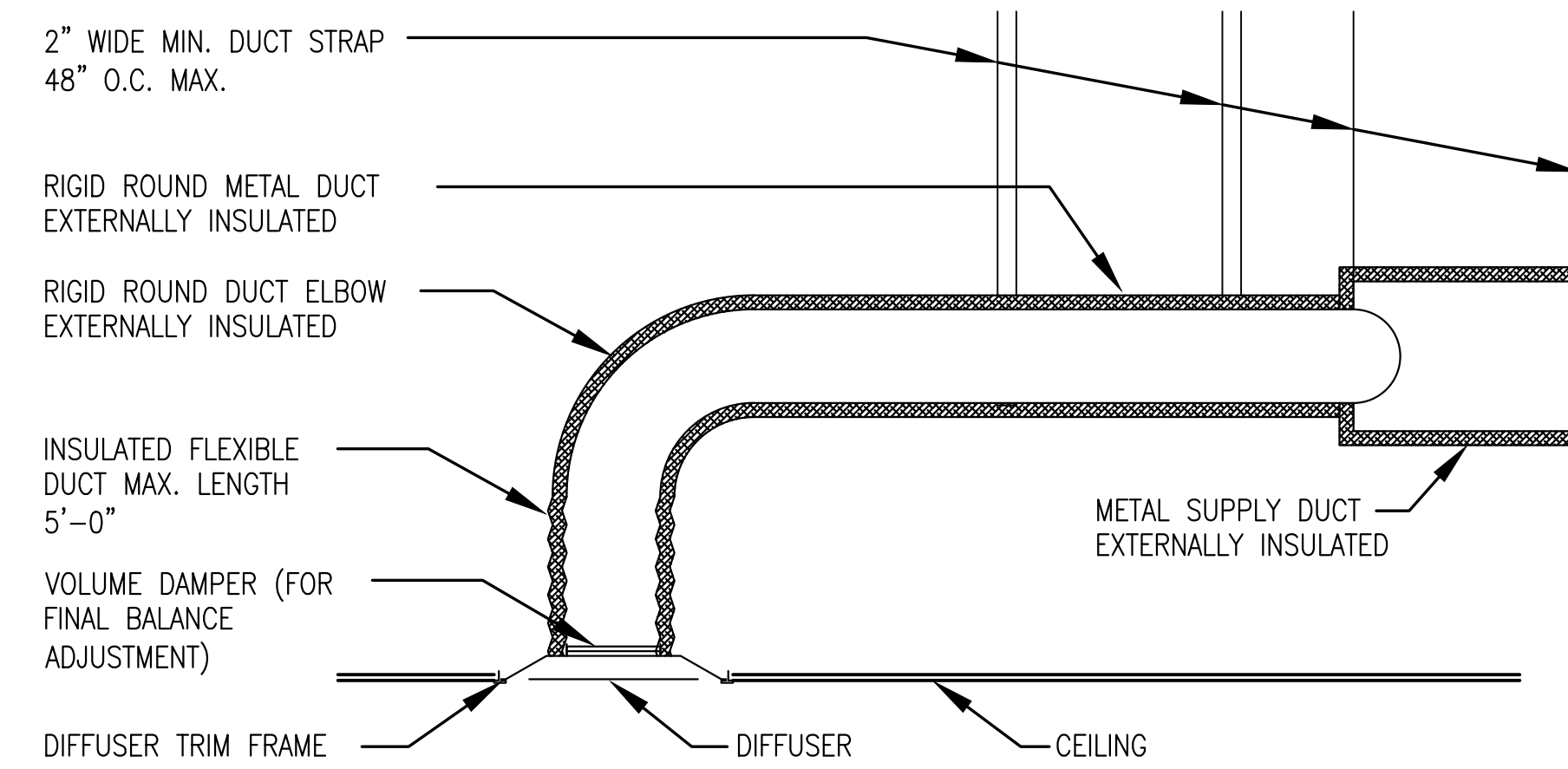


02 EXHAUST FAN DETAIL
SCALE: NOT TO SCALE



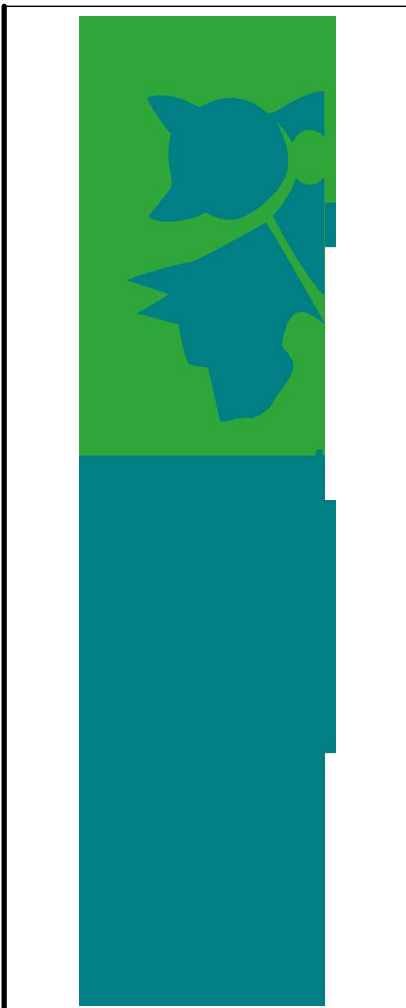
- NOTES:
1. DRYER VENT DUCTWORK SHALL BE ALUMINUM JOINED WITH DUCT TAPE.
 2. VENT EACH DRYER SEPARATELY UP THRU ROOF.
 3. TWO ELBOWS MAX ALLOWED PER SYSTEM.

04 DRYER VENT SYSTEM THRU WALL
SCALE: NOT TO SCALE



SUPPORT AND INSULATE DUCTWORK PER SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE

01 DUCT DETAIL
SCALE: NOT TO SCALE



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SHEET TITLE
MECHANICAL
DETAILS & NOTES

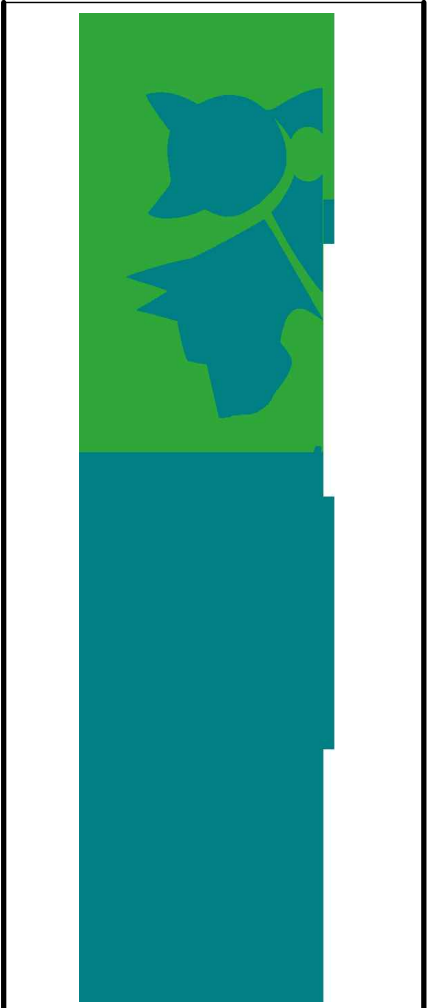
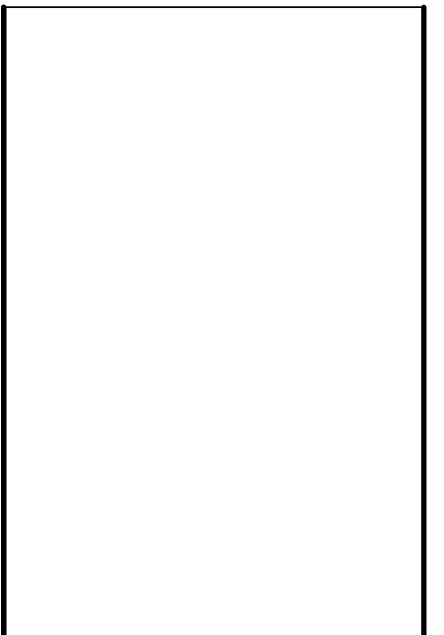
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Permit Issue:	-

SHEET TITLE	
MEP	
SPECIFICATIONS	
Comm. Number	28-2012
Date	12/29/2022
Drawn By	TMR
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MEP001	



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PLUMBING	FLUSHING	RECEPTABLES	FIRE ALARM																																
<p>1. TENANT'S PLUMBING SHALL NOT BE CHASED OR CUT INTO OR THROUGH THE CEILING WALLS (SEPARATING TENANT'S LEASE SPACE FROM ADJOINING TENANT SPACES, ETC.) OR EXTERIOR WALLS.</p> <p>2. VENTS SHALL NOT BE LOCATED WITHIN 25'0" OF AN EXTERIOR WALL. ROOF FLASHING SLEEVES MUST BE INSTALLED AS PER LANDLORD REQUIREMENTS. (EXISTING VENT)</p> <p>3. LANDLORD FURNISHED SANITARY OUTLET BELOW SLAB: LOCATION SHOWN ON PLUMBING SHEETS.</p> <p>4. LANDLORD INSTALLED COLD WATER LINE: LOCATION SHOWN ON PLUMBING SHEETS.</p> <p>5. PLUMBING CONTRACTOR IS RESPONSIBLE TO VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND REPORT ALL DISCREPANCIES TO THE TENANT'S REPRESENTATIVE.</p> <p>6. PROVIDE MINIMUM 1" INSULATION ON ALL HOT AND COLD WATER PIPING.</p> <p>7. HOT/COLD WATER PIPING AND WASTE LINE BELOW LAVATORY SHALL BE INSULATED AS REQUIRED BY LOCAL CODE. HOT WATER PIPE INSULATION SHALL HAVE A MINIMUM THICKNESS OF NOT LESS THAN THE DIAMETER OF THE PIPE FOR PIPES UP TO 2" DIAMETER INSULATION WALL THICKNESS SHALL NOT BE LESS THAN 2" FOR PIPES 2" OR LARGER PER 2021 U.P.C. 609.12.2.</p> <p>8. ALL PIPE INSULATION SHALL BE NONCOMBUSTIBLE MATERIALS AS REQUIRED BY LOCAL CODE.</p> <p>9. WATER METER IF REQUIRED SHALL HAVE SHUT-OFF VALVES ON BOTH SIDES OF METER.</p> <p>10. GAS LINES AND REFRIGERATION LINES ON ROOF SHALL BE SUPPORTED BY TREATED WOOD BLOCKS ON ROOF PADS BY LANDLORD. ROUTING OF LINES SHALL BE COORDINATED WITH LANDLORD'S PROJECT MANAGER.</p> <p>11. FOR ADDITIONAL PLUMBING INFORMATION, REFER TO SPECIFICATIONS AND DETAILS ON PLUMBING DRAWINGS.</p> <p>12. FIXTURES SHALL BE AS SCHEDULED ON SHEET A3.0 & P1.0. REPORT ANY DISCREPANCIES TO ARCHITECT PRIOR TO BID.</p> <p>13. MATERIALS</p> <p>A. SANITARY SEWER - CAST IRON OR COPPER PIPING MAY BE USED EXCEPT THAT ALL PIPING BELOW GRADE SHALL BE CAST IRON. VENTS TWO (2") INCHES IN SIZE AND SMALLER MAY BE EITHER SCHEDULE 40 GALVANIZED STEEL OR COPPER PIPING. PVC IS ALLOWED FOR WASTE / VENT WHERE APPROVED BY A.H.J.</p> <p>B. DOMESTIC WATER AND HOT WATER PIPING SHALL BE COPPER TYPE 1/2" WITH WROUGHT COPPER FITTINGS. HOT WATER PIPE INSULATION SHALL HAVE A MINIMUM THICKNESS OF NOT LESS THAN THE DIAMETER OF THE PIPE FOR PIPES UP TO 2" DIAMETER INSULATION WALL THICKNESS SHALL NOT BE LESS THAN 2" FOR PIPES 2" OR LARGER PER 2021 U.P.C. 609.12.2.</p> <p>C. GAS PIPING SHALL BE BLACK STEEL SCHEDULE 40 WITH SCREWED FITTINGS.</p> <p>D. CHILLED WATER SUPPLY AND RETURN PIPING SHALL BE GALVANIZED STEEL PIPE (STANDARD WALL) OR TYPE "M" HARD COPPER TUBING. ALL PIPING SHALL BE INSULATED WITH 1" THICK OWENS CORNING FIBERGLASS 25 AS/SSL OR EQUAL.</p> <p>14. MAKING UP PIPE</p> <p>A. SCREWED PIPE SHALL BE MADE WITH PIPE COMPOUND APPLIED TO THE MALE THREAD WITH NOT MORE THAN TWO THREADS LEFT EXPOSED. PIPE SHALL BE REAMED AFTER THREADING.</p> <p>B. BELOW GRADE SANITARY PIPE THAT IS CAST IRON SHALL BE MADE UP WITH ONE THIRD OF THE HUB CAULKED WITH FIRST QUALITY CAULK, AND THE REMAINDER FILLED WITH FIRST QUALITY CAULKING IN EACH POURING AND CAULKED TIGHT.</p> <p>C. COPPER JOINTS SHALL BE MADE UP WITH 95-5 SOLDER.</p> <p>15. HANGERS AND SUPPORTS</p> <p>HORIZONTAL PIPING SHALL BE SUPPORTED AT INTERVALS NOT TO EXCEED 10'0" FOR PIPE SIZES 2" AND LARGER, AND 6'0" FOR PIPE SIZES 1-1/2" AND SMALLER WITH SWIVEL SPLIT PIPE HANGERS EQUAL TO CRANE NO. 199F OR CRINKELL NO. 104. VERTICAL PIPING SHALL BE SUPPORTED BY MEANS OF WROUGHT IRON CLAMPS SUSPENDED FROM THE UNDERSIDE OF STRUCTURE WITH HANGER RODS.</p> <p>16. CLEANOUTS</p> <p>CLEANOUTS SHALL BE MANUFACTURED BY TYLER, MILWAUKEE, OR EQUAL AND SHALL BE INSTALLED AT ALL BENDS, ANGLES, AND ENDS OF ALL WASTE AND SEWER LINES AS CALLED FOR ON THE DRAWINGS AND AS REQUIRED BY LOCAL CODES. ALL CLEANOUTS SHALL BE BROUGHT TO GRADE, AND IN ALL CASES, SHALL BE PROVIDED WITH SUFFICIENT SPACE FOR RODDING.</p> <p>HEATING, VENTILATING AND AIR CONDITIONING</p> <p>1. ALL HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS MUST BE DESIGNED AND INSTALLED IN CONFORMANCE WITH STATE AND LOCAL BUILDING CODES, LOCAL FIRE DEPARTMENT REGULATIONS, AND THE LATEST EDITION OF SMACNA AND ASHRAE STANDARDS.</p> <p>2. DUCTWORK AND ALL OTHER HVAC CONSTRUCTION MUST BE DESIGNED TO CLEAR ANY INTERIOR ROOF LEADERS, DOWNSPOUTS, GAS LINES, OR OTHER EXISTING CONSTRUCTION THAT OCCURS IN TENANT'S LEASED SPACE.</p> <p>3. EXHAUST DUCT, PLUMBING VENTS AND FLUES SHALL NOT BE LOCATED WITHIN 10'-0" OF ANY EXTERIOR WALL. WHEREVER POSSIBLE EXHAUSTS SHALL BE A MINIMUM OF 10'-0" FROM ANY FRESH AIR INTAKES FOR HVAC EQUIPMENT; NOTE THAT THIS LIMIT ALSO APPLIES TO DISTANCE BETWEEN ADJOINING TENANT'S ROOF WORK. THAT SUCH COORDINATION MUST BE DONE THROUGH THE LANDLORD'S REPRESENTATIVE.</p> <p>4. ALL ROOF WORK SHALL BE COORDINATED WITH THE LANDLORD'S FIELD REPRESENTATIVE. THE HVAC CONTRACTOR IS REQUIRED TO USE LANDLORD'S ROOFING CONTRACTOR FOR ALL ROOF WORK. THE HVAC CONTRACTOR SHALL INCLUDE THE COST OF SAME IN HIS BID.</p> <p>5. HVAC CONTRACTOR WILL PROVIDE PERMANENT IDENTIFICATION OF THE STORE NAME ON ROOF TOP EQUIPMENT FOR THE CONVENIENCE OF MAINTENANCE AND REPAIR WORK. ALL NEW ROOFTOP EQUIPMENT SHALL BE PAINTED AS PER LANDLORD REQUIREMENTS.</p> <p>6. HVAC CONTRACTOR SHALL PAY ALL FEES, OBTAIN ALL PERMITS AND INSPECTIONS AS REQUIRED FOR THIS PORTION OF THE WORK.</p> <p>7. HVAC CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE FULL EXTENT OF HIS WORK. ANY DISCREPANCIES WITH PLANS TO BE REPORTED TO TENANT'S REPRESENTATIVE PRIOR TO THE SUBMISSION OF A BID.</p> <p>8. ALL NEW MATERIALS, EQUIPMENT AND WORK SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FOLLOWING DATE OF ACCEPTANCE BY TENANT, EXCEPT WHERE A LONGER WARRANTY PERIOD IS PROVIDED BY THE MANUFACTURERS OF EQUIPMENT OR COMPONENTS.</p> <p>9. PRIOR TO THE START UP OF HVAC SYSTEM, THE HVAC CONTRACTOR SHALL CLEAN ALL DUCTWORK AND EQUIPMENT TO REMOVE ANY DIRT, RUBBISH OR DEBRIS.</p> <p>10. THE COMPLETE HVAC SYSTEM SHALL BE TESTED AND BALANCED BY THE OWNER WITH THE ASSISTANCE OF THE G.C. AND M.C. HVAC CONTRACTOR TO INSURE PROPER AIR FLOW TO ALL AREAS. THE GENERAL CONTRACTOR SHALL CONTRACT WITH AN INDEPENDENT TESTING ASSOCIATION TO VERIFY ALL AIR FLOW. A COPY SHALL BE FURNISHED TO THE OWNER. REPORT SHALL INCLUDE MINIMUM OUTSIDE AIR CFM READING. SUBMIT COPY OF REPORT TO LANDLORD.</p> <p>11. ALL ROOF TOP EQUIPMENT SHALL BE CONVEYED VIA A RUNWAY OF 3/4" PLYWOOD SHEETS 2" X 10" RUNNERS AND A RUBBER Tired CONVEYANCE VEHICLE AND/OR AS APPROVED BY LANDLORD THE HVAC CONTRACTOR IS RESPONSIBLE TO VERIFY APPROVED METHOD AND INCLUDE THIS IN HIS BID.</p> <p>12. SPLASH PANS OR BLOCKS ARE REQUIRED ON THE ROOF AT ALL ROOF TOP UNIT CONDENSATES, OR AS DIRECTED BY LANDLORD.</p> <p>13. FOR ADDITIONAL HVAC INFORMATION REFER TO MECHANICAL DETAILS AND DRAWINGS.</p> <p>14. ALL DUCT WORK SHALL BE METAL. FIBERGLASS SHALL NOT BE USED IN ANY SITUATION. REFER TO NOTE 18.</p> <p>15. HANGERS AND SUPPORTS</p> <p>A. ALL HORIZONTAL DUCTS HAVING A DIMENSION OF 40 INCHES AND LESS SHALL BE SUPPORTED BY MEANS OF BAND IRON HANGERS OF NO. 18 U.S. GAUGE ATTACHED TO THE DUCT BY MEANS OF RIVETS, SCREWS, OR CLAMPS, AND FASTENED TO STRUCTURE ABOVE BY TOGGLE BOLTS OR OTHER MEANS. EACH SECTION OF DUCTWORK SHALL HAVE AT LEAST ONE PAIR OF SUPPORTS. VERTICAL DUCTS SHALL BE SUPPORTED WITH 1-1/4" X 1-1/4" X 1/4" ANGLES WHERE THEY PASS THROUGH THE FLOOR LINES.</p> <p>B. ALL HORIZONTAL DUCTS HAVING A DIMENSION OF 40 INCHES AND MORE SHALL BE SUPPORTED BY MEANS OF ANGLE IRON TRAPEZE HANGERS. EACH SECTION OF DUCTWORK SHALL HAVE AT LEAST ONE PAIR OF SUPPORTS.</p>	<p>16. FLUSHING</p> <p>A. CONTRACTOR WILL PROVIDE WATER TIGHT 24 GAUGE SHEET METAL FLASHING AT ALL EXTERIOR WALLS AND ROOF PENETRATIONS.</p> <p>B. ALL CUTTING OF ROOF OPENINGS, SUPPORTS FOR THE ROOF OPENINGS, PITCH PANS, ROOF CURBS, FLASHINGS, COUNTER FLASHINGS, REPAIR TO ROOF, ETC., ASSOCIATED WITH HVAC SUBCONTRACTOR SHALL BE THE RESPONSIBILITY OF HVAC CONTRACTOR. HE SHALL EMPLOY LANDLORD'S ROOFERS FOR THIS WORK SO AS TO MAINTAIN LANDLORD'S ROOF BOND.</p> <p>17. TOILET EXHAUST SHALL HAVE BACKDRAFT DAMPER</p> <p>18. DUCTWORK (PROVIDE R-VALUE PER CODE (VERIFY))</p> <p>A. SQUARE AND RECTANGULAR DUCTWORK SHALL BE CONSTRUCTED OF NEW GALVANIZED PRIME SHEET STEEL OF THE FOLLOWING GAUGES:</p> <table border="1"> <tr> <th>DUCT SIZE</th> <th>GUAGE</th> </tr> <tr> <td>12" AND LESS</td> <td>NO. 26 U.S.</td> </tr> <tr> <td>13" TO 30"</td> <td>NO. 24 U.S.</td> </tr> <tr> <td>31" TO 54"</td> <td>NO. 22 U.S.</td> </tr> <tr> <td>55" TO 84"</td> <td>NO. 20 U.S.</td> </tr> <tr> <td>85" AND OVER</td> <td>NO. 18 U.S.</td> </tr> </table> <p>B. SQUARE AND RECTANGULAR DUCTWORK SHALL BE CONSTRUCTED AS FOLLOWS:</p> <table border="1"> <tr> <th>DUCT SIZE</th> <th>METHOD</th> </tr> <tr> <td>17" AND LESS</td> <td>5" AND DRIVE CLEATS</td> </tr> <tr> <td>18" TO 30"</td> <td>1" STANDING SEAMS ON 3/16" CENTERS</td> </tr> <tr> <td>31" TO 54"</td> <td>1-1/4" STANDING SEAMS ON 3/16" CENTERS</td> </tr> </table> <p>ROUND DUCTWORK SHALL BE CONSTRUCTED OF NEW GALVANIZED PRIME GRADE SHEET STEEL OF THE FOLLOWING GAUGES:</p> <table border="1"> <tr> <th>DUCT SIZE (DIAMETER)</th> <th>DUCTS</th> <th>FITTING</th> </tr> <tr> <td>8" AND LESS</td> <td>24</td> <td>22</td> </tr> <tr> <td>9" TO 18"</td> <td>22</td> <td>20</td> </tr> <tr> <td>19" TO 30"</td> <td>20</td> <td>18</td> </tr> </table> <p>ALL 90 ELBOWS FOR ROUND DUCTWORK SHALL BE FIVE (5) PIECE. ALL LONGITUDINAL SEAMS SHALL BE FORMED BY PITTSBURGH LOCKS. JOINTS SHALL BE SWAGGED WITH ON-HALF INCH (1/2") OVERLAP.</p> <p>C. ALL DUCTWORK SHALL BE MADE AIR TIGHT WITH MASTIC AND PRESSURE SENSITIVE TAPE.</p> <p>D. ALL SUPPLY, RETURN AND OUTSIDE AIR DUCTWORK LOCATED WITHIN THE BUILDING SHALL BE INSULATED WITH ONE AND ONE-HALF (1-1/2") THICK FOIL-FACED FIBERGLASS INSULATION, WHERE EXPOSED, DUCTWORK SHALL BE INTERNALLY LINED.</p> <p>E. ALSO SUPPLY AND RETURN, AIR DUCTS LOCATED OUTSIDE OF BUILDING OR EXPOSED TO WEATHER SHALL HAVE ONE AND ONE-HALF INCH (1-1/2") RIGID INSULATION ON INTERIOR OF DUCT.</p> <p>F. CONTRACTOR WILL INSTALL INSECT SCREENS ON ALL DUCT OPENINGS WHICH LEAD TO OR ARE OUTDOORS. INSECT SCREENS SHALL HAVE REMOVABLE GALVANIZED STEEL FRAMES.</p> <p>19. DAMPERS</p> <p>A. SPLITTER DAMPERS SHALL BE FABRICATED OF SHEET STEEL NOT LESS THAN NO. 16 U.S. GAUGE WITH THE LEADING EDGE HEMMED. EACH DAMPER SHALL BE LARGE ENOUGH TO COVER THE SMALLER OF THE TWO OPENINGS IT CONTROLS. DAMPERS SHALL BE CONTROLLED AS FOLLOWS:</p> <p>EXPOSED OR ACCESSIBLE DUCTWORK - LOCKING QUADRANTS EQUAL TO YOUNG REGULATOR NO. 1 WITH DAMPER ROD END BEARINGS ON OPPOSITE END.</p> <p>CONCEALED OR INACCESSIBLE DUCTWORK - LOCKING QUADRANT EQUAL TO YOUNG REGULATOR NO. 315 (CHROMIUM PLATED WITH DAMPER ROD END BEARINGS ON BOTH ENDS).</p> <p>B. VOLUME DAMPERS SHALL BE OF THE OPPOSED INTERLOCKING TYPE AS MANUFACTURED BY AMERICAN FOUNDRY AND FURNACES CO. (AFFCO) OR EQUAL. BLADES SHALL BE OF NO. 18 GAUGE SHEET METAL AND SHALL NOT EXCEED 48" IN LENGTH OR 12" IN WIDTH. BLADES SHALL BE ON ONE-HALF INCH (1/2") DIAMETER RUSTPROOF AXLE. BEARINGS SHALL BE OF THE SELF-LUBRICATING FERRULE TYPE.</p> <p>C. DOUBLE THICKNESS TURNING VANES SHALL BE IN SQUARE ELBOWS. PROVIDE AND INSTALL BARBER-COLMAN AIRTURNS OR EQUAL. TURNING VANES SHALL BE OF THE SAME GAUGE METAL AS THE DUCT IN WHICH THEY ARE INSTALLED. RADIUS ELBOWS SHALL HAVE A CENTERLINE RADIUS OF ONE AND ONE-HALF (1-1/2) TIMES THE DUCT WIDTH.</p> <p>20. DUCTWORK - EXCEPTIONS</p> <p>DUCTWORK FOR EXHAUSTING AIR OR OUTSIDE SUPPLY AIR SHALL BE ALL METAL AND CONSTRUCTION ACCORDING TO RECOMMENDED PRACTICES AS FOUND IN THE LATEST ISSUE OF ASHRAE.</p> <p>21. SUPPORT OF DUCT SYSTEM</p> <p>DUCTWORK SHALL BE SUPPORTED AT ALL TURNS AND TRANSITIONS PLUS NOT MORE THAN 8'-0" O.C. FOR STRAIGHT DUCTS UP TO 35" TO 59" MAXIMUM DIMENSIONS, 6' O.C. AND DUCTS OVER 60" MAXIMUM DIMENSION, 4' O.C.</p> <p>HANGER DESIGN SHALL BE AS DESCRIBED IN THE LATEST EDITION OF THE "SMACNA" MANUAL. REINFORCEMENT MEMBERS MAY BE USED TO SUPPORT THE DUCT SYSTEM PROVIDED DETAILS OUTLINED IN THE FOREMENTIONED DOCUMENTS ARE ADHERED TO.</p> <p>22. REINFORCEMENT</p> <p>ALL DUCTS REQUIRING REINFORCEMENT SHALL BE REINFORCED ACCORDING TO THE LATEST EDITION OF THE "SMACNA" MANUAL AS OUTLINED ON PAGES 8 AND 9 OF THE MANUAL.</p> <p>MATERIALS FOR REINFORCEMENT MEMBERS SHALL BE GALVANIZED STEEL. ALL SCREWS AND WISHERS SHALL BE PLATED OR GALVANIZED.</p> <p>23. ACCESSORY ITEMS</p> <p>ALL MANUAL DAMPERS, FIRE DAMPERS, TURNING VANES, REGISTER CONNECTIONS, ACCESS DOORS OR OTHER ASSOCIATED ACCESSORIES SHALL BE INSTALLED ACCORDING TO THE LATEST PUBLICATION OF "SMACNA" MANUAL.</p> <p>24. SEQUENCE OF OPERATION</p> <p>THE FAN SHALL BE ENABLED TO RUN CONTINUOUSLY AND THE SINGLE STAGE GAS HEATING SECTION AND THE SINGLE STAGE DX COOLING SHALL BE ENABLED/MODULATED IN SEQUENCE TO MAINTAIN THE ROOM TEMPERATURE SETPOINT (75°F, WITH A 3°F DEADBAND, COOLING ON AT 75°F AND HEATING ON AT 72°F). BOTH SETPOINT AND DEADBAND SHALL BE ADJUSTABLE. THE ECONOMIZER SHALL BE CONTROLLED BY THE INTERNAL ROOFTOP UNIT CONTROLS. THERE SHALL BE THE ABILITY TO SET THE INDOOR FAN FOR EITHER CONTINUOUS OR INTERMITTENT OPERATION.</p>	DUCT SIZE	GUAGE	12" AND LESS	NO. 26 U.S.	13" TO 30"	NO. 24 U.S.	31" TO 54"	NO. 22 U.S.	55" TO 84"	NO. 20 U.S.	85" AND OVER	NO. 18 U.S.	DUCT SIZE	METHOD	17" AND LESS	5" AND DRIVE CLEATS	18" TO 30"	1" STANDING SEAMS ON 3/16" CENTERS	31" TO 54"	1-1/4" STANDING SEAMS ON 3/16" CENTERS	DUCT SIZE (DIAMETER)	DUCTS	FITTING	8" AND LESS	24	22	9" TO 18"	22	20	19" TO 30"	20	18	<p>24. PIPING</p> <p>A. PIPING AND FITTINGS SHALL BE OF THE WEIGHTS AND TYPES SHOWN ON THE DRAWINGS. SIZES SHOWN ON THE DRAWINGS ARE NOMINAL PIPE SIZES.</p> <p>B. ALL PIPES SHALL BE INSTALLED PARALLEL TO, OR AT RIGHT ANGLES WITH THE BUILDING WALLS AND PARTITIONS AND SHALL BE INSTALLED WITH THE PROPER PITCH.</p> <p>C. ALL PIPING SHALL BE UPENDED AND POUNDED TO REMOVE ANY FOREIGN MATTER PRESENT AND SHALL BE SWABBED IF NECESSARY.</p> <p>D. REFRIGERANT PIPING SHALL BE COPPER TYPE "L" WITH WROUGHT COPPER FITTINGS. JOINTS SHALL BE MADE USING SILFOS OR 95-5 SOLDER.</p> <p>E. REFRIGERANT SUCTION LINES SHALL BE INSULATED WITH ONE INCH (1") THICK INSULATION. PROVIDE A CONTINUOUS VAPOR SEAL.</p> <p>25. ELECTRICAL</p> <p>1. FOR ADDITIONAL ELECTRIC INFORMATION SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS.</p> <p>2. ELECTRICAL CONTRACTOR TO PROVIDE ALL BREAKERS TO BE BOLT DOWN TYPE.</p> <p>3. ELECTRICAL CONTRACTOR SHALL PROVIDE PULL WIRE IN AN EMPTY CONDUIT FOR TELEPHONE OR AS REQUIRED BY LOCAL PHONE COMPANY.</p> <p>4. ALL CONDUCTORS, GROUNDS, BUS BARS AND WINDINGS SHALL BE COPPER. PRIMARY AND SECONDARY SERVICE FEEDERS MAY BE SUBSTITUTED ALUMINUM WHERE APPROVED BY OWNER AND LOCAL A.H.J. SIZE EQUIVALENT PER NEC.</p> <p>5. THE ELECTRICAL CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE PLANS (ARCHITECTURAL, M.P.E., LANDLORD DRAWINGS AND DETAILS, ETC.) AND SHALL VERIFY EXISTING CONDITIONS AT THE JOB SITE.</p> <p>6. ENTIRE INSTALLATION SHALL BE PREPARED IN A FIRST-CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEMS SHALL BE FULLY OPERATIONAL. ACCEPTANCE BY OWNER SHALL BE A CONDITION OF THE CONTRACT. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES IN ORDER TO AVOID INTERFERENCES OR DISPUTES AMONG RESPECTIVE TRADES.</p> <p>7. ALL NEW MATERIALS, WORKMANSHIP, AND EQUIPMENT SHALL BE GUARANTEED FOR ONE YEAR AFTER SYSTEM ACCEPTANCE.</p> <p>8. ALL WIRING SHALL BE IN CONDUIT AS REQUIRED BY LOCAL CODE AND SHALL BE CONCEALED WHERE POSSIBLE. WHERE EXPOSED, RUN IN STRAIGHT LINES PARALLEL AND/OR PERPENDICULAR TO BUILDING LINES.</p> <p>9. ELECTRICAL CONTRACTOR SHALL INCLUDE ALL MISCELLANEOUS ITEMS REQUIRED TO COMPLETE THE WORK.</p> <p>10. ELECTRICAL CONTRACTOR SHALL NOT SCALE DRAWINGS FOR DIMENSIONS BUT SHALL CONTACT THE OWNERS REPRESENTATIVE REGARDING ANY DIMENSIONAL DATA REQUIRED AND SHALL VERIFY EXACT LOCATION AND MOUNTING HEIGHTS OF ALL FIXTURES, NOT SPECIFIED ON DRAWINGS OR DETAILS WITH TENANT'S REPRESENTATIVE PRIOR TO INSTALLATION.</p> <p>11. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL FIXTURES, LAMPS AND REPLACEMENTS WORK THAT ARE NOT INDICATED ON DRAWINGS OR FURNISHED BY TENANT. TENANT TYPICALLY SUPPLIES ALL LIGHTING FIXTURES, EXIT SIGNS AND LAMPS. REFER TO ELECTRICAL DRAWINGS AND SCHEDULES. ALL SUCH INSTALLATIONS AND HOOK-UPS ARE BY ELECTRICAL CONTRACTOR.</p> <p>12. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL OR REMOVE AND REPLACE AS NECESSARY ALL DAMAGED LIGHT FIXTURES LENSES, LOUVERS, BAFFLES, HOUSINGS, ETC., RECEIVED ON JOB IN DAMAGED OR DEFECTIVE CONDITION, WITH REPLACEMENT UNITS.</p> <p>13. THE ELECTRICAL CONTRACTOR'S CONTRACT, ALONG WITH THE PREVIOUS LISTED ITEMS, SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING: WIRING, PANEL BOXES, TRANSFORMERS, SWITCHES, DUPLEX RECEPTABLES, SIGN TIME CLOCK, JUNCTION BOXES, AND LABOR.</p> <p>14. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ANY AND ALL ITEMS NECESSARY TO COMPLETE THIS PROJECT AS DRAWN.</p> <p>15. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ELECTRICAL EQUIPMENT AND WIRING IN ACCEPTANCE WITH LANDLORD'S DESIGN CRITERIA.</p> <p>16. ELECTRICAL CONTRACTOR TO PROVIDE CIRCUIT "LOCK-ON" CLIPS AND INSTALL SAME ON THE FOLLOWING CIRCUITS:</p> <ul style="list-style-type: none"> - CASH-WRAP RECEPTABLES - WATER HEATER - STOREFRONT SIGN TIME CLOCK - NIGHT/EMERGENCY LIGHTING CIRCUIT - PHONE - SENSORIATIC <p>17. EQUIPMENT IDENTIFICATION</p> <p>A. IDENTIFY ALL EQUIPMENT AND APPARATUS WITH ENGRAVED SWAGLE NAMEPLATE OR IMPRESSED, PLASTIC, STRIP. REFER TO NOTE 22.</p> <p>18. ELECTRICAL CONTRACTOR SHALL BALANCE THE LOADS ACROSS ALL PHASES AND SHALL PROVIDE A CIRCUIT DIRECTORY WITH TYPED CIRCUIT DESIGNATION CARD UNDER PLASTIC COVER ON THE INSIDE OF EACH PANEL DOOR. ELECTRICAL CONTRACTOR SHALL ALSO FURNISH AND INSTALL NAMEPLATE ON ALL DISCONNECT SWITCHES AND PANELS. ALL NEW ELECTRICAL MATERIALS, PRODUCTS AND EQUIPMENT (INCLUDING ALL COMPONENTS THEREOF) SHALL BEAR THE UNDERWRITER'S LABORATORIES LABEL AND MEET THE APPROPRIATE ASTM, NEC AND NEMA STANDARDS.</p> <p>19. ONLY U.L. APPROVED CUT-OUTS WILL BE PERMITTED IN DEMISING AND OTHER FIRE RATED PARTITIONS FOR ELECTRICAL CIRCUITS/SWITCHES, AND FOR ALL UTILITY PENETRATIONS.</p> <p>20. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE A TEMPORARY LIGHTING AND POWER SYSTEM FOR THE WORK OF ALL TRADES DURING CONSTRUCTION, AND SHALL REMOVE THE SAME PRIOR TO THE COMPLETION OF THE PROJECT.</p> <p>21. TENANT'S ELECTRICAL CONTRACTOR SHALL BE REQUIRED TO PROVIDE TEMPORARY POWER WITH GROUND FAULT PROTECTION FOR ALL POWER EQUIPMENT USED IN THE PREMISES, AND SHALL REMOVE THE SAME PRIOR TO THE COMPLETION OF THE PROJECT.</p> <p>22. ELECTRICAL WORK (RECESSED DUPLEX OUTLETS, ETC) IS ALLOWED IN THE DIVIDING PARTITIONS BETWEEN TENANTS WHERE (1) NO WORK CONFLICTS WITH OR DAMAGES WORK PREVIOUSLY INSTALLED BY AN ADJOINING TENANT, AND (2) CODES AND BUILDING DEPARTMENT DO NOT RESTRICT PROPOSED WORK.</p> <p>23. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ANY AND ALL BLOCKING, CHAINS, HANGERS, ETC., AS NECESSARY TO SUPPORT LIGHTING SYSTEMS.</p> <p>24. BUZZERS/CHIMES/PUSH BUTTONS</p> <p>A. BUZZERS, CHIMES, AND PUSH BUTTONS SHALL BE EQUAL TO THOSE MANUFACTURED BY EDWARDS AND SHALL OPERATE FROM A 24 VOLT TRANSFORMER ON THE STOCKROOM RECEPTACLE CIRCUIT.</p> <p>B. WHEN USED IN AN EXTERIOR CONDITION, THE PUSH BUTTON SHALL MEET NEMA STANDARDS FOR EXTERIOR OPERATION.</p> <p>C. CHIMES AND BUZZERS SHALL BE MOUNTED ABOVE THE CEILING GRID.</p> <p>D. SIGNAL CONDUCTORS WIRING FOR ANNUNCIATOR DEVICES AND BETWEEN MULTIPLE DEVICES AND THEIR ACTUATORS, SHALL BE ROUTED AND SHEILED ACCORDING TO PREVAILING ORDINANCES.</p>	<p>25. RECEPTABLES</p> <p>A. ALL CONVENIENCE DUPLEX RECEPTABLES SWITCH PLATES SHALL BE LOCATED 18" A.F.F. UNLESS OTHERWISE NOTED ON PLANS.</p> <p>B. GROUND FAULT INTERRUPTER RECEPTABLES SHALL BE AS FOLLOWS:</p> <ol style="list-style-type: none"> FOR INTERIOR APPLICATIONS: INSTALL GFI RECEPTACLE DESIGNED TO TRIP AT 5 MA IN 1/30TH OF A SECOND RATED AT 115VAC/20A WITH FACE AND STAINLESS STEEL COVER. PLATE AS MANUFACTURED BY PASS AND SEYMOUR OR EQUAL. FOR EXTERIOR APPLICATIONS: INSTALL GFI RECEPTACLE AS DESIGNED FOR TRIP AND RATING ABOVE. RECEPTACLE SHALL BE MOUNTED IN A BOX RATED NEMA 3R AND SHALL COVER PLATE AS MANUFACTURED BY PASS AND SEYMOUR OR EQUAL. <p>C. NO CONVENIENCE DUPLEX RECEPTABLES SHALL BE LOCATED ON CERAMIC TILE OR A MIRRORRED SURFACE UNLESS SPECIFICALLY REQUIRED BY CITY CODE.</p> <p>26. LIGHT SWITCH BOXES</p> <p>ENCLOSURE BOXES TO SERVE AS RECEIVE FOR VARIOUS LIGHT CONTROL SWITCHES (PER PLANS) MEET SAME CRITERIA AS FOR OUTLET/BOXES (ABOVE). ALL BOXES SHALL (AS A MINIMUM STANDARD) BE RATED FOR THE VOLTAGE AND AMPERAGE OF THE CIRCUIT. BEING SWITCHED AND/OR TO MEET LOCAL CODES AND ORDINANCES.</p> <p>27. LIGHT SWITCHES</p> <p>A. GENERAL-USE SNAP SWITCHES AS INDICATED ON PLANS ARE AS MANUFACTURED BY LEVITON, PASS AND SEYMOUR OR EQUAL AND SHALL BE RATED AT 20A/125VAC. THE SWITCH FACE AND COVER PLATE SHALL BE OF HIGH-IMPACT NYLON UNLESS NOTED OTHERWISE. MOUNT AT 48" AFF.</p> <p>B. SNAP-SWITCHES USED TO CONTROL OUTLETS/RECEPTABLES SHALL BE OF THE HEAVY-DUTY TYPE RATED AT THE VOLTAGE/AMPERAGE INDICATED ON PLANS AND DRAWINGS AND SHALL BE FURTHER QUALIFIED TO CONTROL MOTOR LOADS UP TO 2 H.P., UNLESS NOTED OTHERWISE, AS MANUFACTURED BY PASS AND SEYMOUR OR EQUAL. (BODY AND COVER PLATE).</p> <p>28. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO WIRE INDIVIDUAL FIXTURES INSIDE TENANT FURNISHED LIGHT BOXES. FINAL HOME RUNS, CONNECTIONS, AND LAMPING SHALL ALSO BE INCLUDED.</p> <p>29. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO WIRE INDIVIDUAL FIXTURES INSIDE TENANT FURNISHED LIGHT BOXES. FINAL HOME RUNS, CONNECTIONS, AND LAMPING SHALL ALSO BE INCLUDED.</p> <p>30. NOT USED.</p> <p>31. GENERAL</p> <p>ALL WIRING SHALL CONFORM TO THE STANDARDS OF THE NATIONAL ELECTRICAL CODE AND MEET ALL LOCAL REGULATIONS.</p> <p>32. LIGHTING AND POWER PANELS</p> <p>A. ALL LIGHT AND POWER PANELS SHALL BE GENERAL ELECTRIC, WESTINGHOUSE, OR I-T-E; UTILIZING BOLTED BREAKERS WITH INTEGRAL MAIN BREAKER (SIZE PER PLANS).</p> <p>33. PROVIDE LITHONIA "SPAK" LIGHTING CONTROL RELAY WITH INTEGRAL TIME CLOCK. LIGHTING CONTROL RELAY SHALL CONTROL LIGHTING CONTACTORS FOR GENERAL LIGHTING BUILDING SHUTOFF SYSTEM AS REQUIRED PER CODE. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL SEVEN (7) DAY 24-HOUR TIME CLOCK FOR STOREFRONT SIGNAGE & NON-GENERAL LIGHTING. TIME CLOCK SHALL BE AMF PARAGON ECT000 SERIES 7-DAY TIME CONTROL WITH MANUAL HAND TRIP OR EQUAL. REFER TO LIGHTING CONTROLS DETAIL FOR FURTHER INFORMATION.</p> <p>34. STEP DOWN TRANSFORMERS</p> <p>A. STEP DOWN TRANSFORMERS SHALL BE EQUAL TO GE OR WESTINGHOUSE 600 VOLT CLASS "DRI" TYPE SINGLE OR THREE PHASE PER PLANS CLASS "R" INSULATION WITH MULTIPLE TAPS ABOVE AND BELOW RATED VOLTAGE.</p> <p>35. CONDUIT (COMPRESSION FITTINGS REQUIRED)</p> <p>A. ALL CONDUIT SHALL BE CONCEALED, IN FINISHED AREAS. ALL CONDUIT UNDER GROUND OR IN CONCRETE SLAB SHALL BE RIGID CONDUIT. ALL OTHER CONDUIT MAY BE ELECTRICAL METALLIC TUBING (E.M.T.). ALL OUTLETS SHALL BE FLUSH MOUNTED. ALL CONDUITS SHALL BE RUN PARALLEL WITH AND AT RIGHT ANGLES TO THE BUILDING CONSTRUCTION AND SHALL BE LEVEL. FLEXIBLE METALLIC TUBING (F.M.T.) MAY BE USED WHERE PERMITTED (BY N.E.C. ARTICLE 549 OR LOCAL RESTRICTIONS).</p> <p>B. CONTRACTOR WILL PROVIDE NECESSARY CABLES, JUMPERS, ETC., TO INSURE CONTINUOUS GROUND IN CONDUIT SYSTEM.</p> <p>C. EDC(S) REQUIRE TRUE THREE WIRE DEDICATED LINES. THIS IS A TRUE GROUND NOT A NEUTRAL. CONDUIT MUST NOT BE USED AS THE ONLY GROUNDING MEANS.</p> <p>D. THE CONDUITS REQUIRED FOR MECHANICAL CONTROLS SHALL BE SUPPLIED BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL WIRING FOR THE MECHANICAL CONTROLS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR. ALL UNITS SHALL BE PROVIDED WITH INDIVIDUAL DISCONNECTS AT EACH UNIT IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.</p> <p>E. WHERE STORE IS ON ANY LEVEL BUT GROUND LEVEL, THE TENANT'S GENERAL CONTRACTOR SHALL RUN ALL CONDUIT FOR ELECTRICAL FLOOR OUTLETS AND TELEPHONE FLOOR OUTLETS, TIGHT AGAINST THE UNDERSIDE OF THE SECOND FLOOR LEVEL. THE SECOND FLOOR STRUCTURAL SLAB SHALL BE CORED AS REQUIRED TO INSTALL THESE ITEMS AT THE LOCATIONS SHOWN ON THE PLANS.</p> <p>F. ALL TELEPHONE WIRE SHALL BE INSTALLED IN CONDUIT. ALL WIRES SHALL BE COPPER.</p>
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