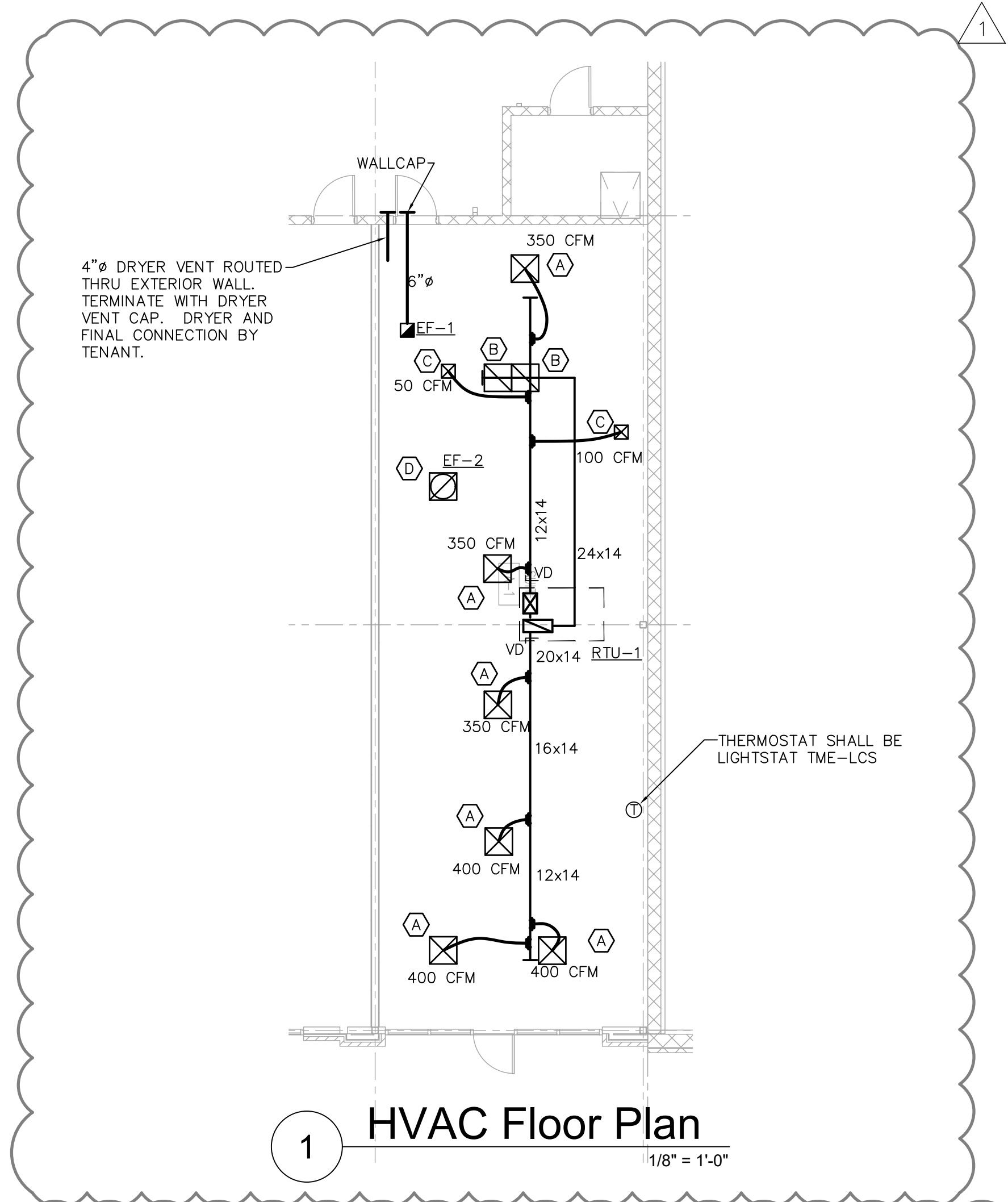


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- MECHANICAL GENERAL NOTES:**
- PRIOR TO SUBMITTING BID, CONTRACTOR SHALL VISIT PROJECT AND REVIEW EXISTING CONDITIONS. NO ADDITIONAL MONIES WILL BE AWARDED FOR "UNFORESEEN PROJECT CONDITIONS." CONTRACTOR SHALL INCLUDE IN HIS BID ALL MONIES REQUIRED FOR THE EXISTING PROJECT CONDITIONS. CONTRACTOR SHALL INFORM ARCHITECT AT TIME OF BID PROJECT CONDITIONS IN WHICH HE HAS DIFFICULTY IN WORKING AROUND.
 - REFER TO ALL OTHER DRAWINGS IN THIS PROJECT, INCLUDING TO BUT NOT LIMITED TO THE ARCHITECTURAL, INTERIOR DESIGN, LIGHTING DESIGN, AND ELECTRICAL AND PERFORM ALL SCOPE ITEMS IDENTIFIED WITHIN THOSE DRAWINGS AS IF THEY ARE DIRECTLY INCORPORATED INTO THE MECHANICAL SET.
 - FURNISH AND INSTALL ALL NECESSARY LABOR AND MATERIALS FOR A COMPLETE SYSTEM. ANY ITEMS AND MATERIALS OBVIOUSLY NECESSARY FOR A COMPLETE WORKING SYSTEM ALTHOUGH NOT SHOWN WITHIN THESE DOCUMENTS SHALL BE PROVIDED AS PART OF THE INITIAL BID.
 - WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
 - OBTAINING PERMIT, INCLUDING LABOR AND FEES SHALL BE PROVIDED AS PART OF THE INITIAL BID.
 - DRAWINGS ARE GENERALLY DIAGRAMMATIC AND DO NOT NECESSARILY SHOW FITTINGS AND OTHER SMALL ITEMS REQUIRED FOR A COMPLETE INSTALLATION. INSTALL DUCTWORK, EQUIPMENT AND CONTROLS IN A MANNER TO MINIMIZE NOISE, PROVIDE APPROPRIATE MAINTENANCE CLEARANCE IN THE SPACE ALLOCATED.
 - MATERIALS AND LABOR SHALL BE WARRANTEED FOR ONE YEAR AFTER TAKEOVER.
 - ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, LATEST EDITIONS.
 - PRIOR TO ORDERING ANY EQUIPMENT, THIS CONTRACTOR SHALL PROVIDE COORDINATION TO THE ELECTRICAL SUBCONTRACTOR AND STRUCTURAL REQUIREMENTS TO THE GENERAL CONTRACTOR. ANY COSTS DIFFERENCES WILL BE WORKED THROUGH THE GENERAL CONTRACTOR AT THIS TIME. PROVIDE TO THE ELECTRICAL SUBCONTRACTOR THE PHASE, AMPERAGE AND VOLTAGE OR EACH PIECE OF EQUIPMENT PRIOR TO ORDERING.
 - CONTRACTOR SHALL REFER TO THE ELECTRICAL DRAWINGS, LIGHTING DESIGN DRAWINGS AND THE REFLECTED CEILING PLAN (RCP) WHEN INSTALLING THE CEILING DIFFUSERS AND RETURN GRILLS.
 - COORDINATE WITH THE ELECTRICAL SUBCONTRACTOR IN REGARDS TO DISCONNECTS, BREAKERS, POWER WIRING, MOTOR CONTROL DEVICES, MECHANICAL CONTRACTOR SHALL PROVIDE STARTERS, TRANSFORMERS, ETC AND COORDINATE THE INSTALLATION WITH THE ELECTRICAL SUBCONTRACTOR.
 - PROVIDE UL LISTED, HEAVY DUTY FIBERGLAS CONNECTOR AT FAN, AIRHANDLERS, FAN COIL UNITS, ROOF TOP UNITS AND OTHER MECHANICAL EQUIPMENT WHERE THEY CONNECT TO SHEET METAL DUCTWORK. THE FIBERGLAS CONNECTOR SHALL BE INSTALLED WITH APPROPRIATE LENGTH TO ALLOW FOR VIBRATION AND NOISE TRANSMISSION.
 - DUCTWORK SHALL BE GALVANIZED SHEET METAL IN ACCORDANCE WITH SMACNA GUIDELINES.
 - ROUND FLEXIBLE CONNECTORS SHALL BE PROVIDED BETWEEN MAIN DUCT AND DIFFUSERS. PROVIDE THERMAFLEX PRO SERIES. UTILIZE SPIN-IN CONNECTORS WITH SCOOP AND ADJUSTABLE DAMPER FOR AIR CONTROL.
 - FLEXIBLE DUCTWORK SHALL BE INSTALLED FREE OF KINKS AND SHALL BE LIMITED TO 8'-0" IN LENGTH. DIAMETER SHALL BE THE SAME AS THE DIFFUSER NECK.
 - ALL PORTIONS OF DUCTWORK VISIBLE THROUGH DIFFUSER AND RETURN GRILL OPENINGS SHALL BE PAINTED FLAT BLACK. ALL PORTIONS EXPOSED IN AREAS WITHOUT CEILING SHALL BE PAINTED PER THE ARCHITECTURAL DRAWINGS.
 - CONTRACTOR SHALL FIELD VERIFY SPACE REQUIREMENTS FOR DUCTWORK PRIOR TO MANUFACTURING. ADJUSTMENTS TO DUCT SIZES IS ACCEPTABLE AS LONG AS THE FOLLOWING FRICTION FACTORS ARE MAINTAINED:
 SUPPLY: 0.08"/100FT
 RETURN: 0.06"/100FT.
 - ALL THERMOSTATS UNLESS OTHERWISE NOTED SHALL BE INSTALLED AT THE SAME HEIGHT AS THE EXISTING THERMOSTATS.
 - ALL DUCT DIMENSIONS SHOWN IN THIS SET REFERS TO CLEAR INSIDE DIMENSION. IF DUCTWORK IS LINED, INTERIOR SHEET METAL SIZE SHALL BE INCREASED TO ACCOUNT FOR THE LINEAR THICKNESS.
 - THE OWNER, OPERATOR, ARCHITECTURAL NOR ENGINEER ARE RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS, MEANS AND METHODS, WORK TECHNIQUES, CONSTRUCTION SEQUENCE OR PROCEDURES REQUIRED TO COMPLETE THE WORK.
 - ALL EXTERIOR WALL, AND ROOF PENETRATIONS SHALL BE SEALED WITH WATERPROOFING.
 - ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS OR BARRIERS SHALL BE SEALED WITH FIREPROOFING.
 - PROVIDE FIRE DAMPERS (FD) IN ALL FIRE RATED WALLS AS IDENTIFIED ON ARCHITECTURALS DRAWINGS. THE RATINGS OF THE FIRE DAMPERS SHALL MEET OR EXCEED THE RATING OF THE WALL IN WHICH IT IS INSTALLED. FIRE DAMPERS SHALL BE UL LISTED AND SHALL BE TYPE B (BLADES OUT OF THE AIR STREAM) OR TYPE C (100% FREE AREA). PROVIDE AND INSTALL DUCT MOUNTED ACCESS PANEL FOR ALL NON-ACCESSIBLE FIRE DAMPERS.
 - ALL ACCESS PANELS REQUIRED FOR EQUIPMENT MAINTENANCE SHALL BE FIELD COORDINATED WITH ARCHITECT. THESE DRAWINGS SHALL APPROXIMATE LOCATIONS, FINAL LOCATIONS SHALL BE COORDINATED IN THE FIELD.
 - AT EACH BRANCH TAKEOFF, PROVIDE MANUAL VOLUME DAMPERS FOR BALANCING. FOR EACH DIFFUSER TAKEOFF, PROVIDE ADJUSTABLE SPIN-IN CONNECTION.
 - PROVIDE DUCT LINER FOR THE FIRST TEN FEET OF SUPPLY AND THE LAST 10 FEET OF RETURN DUCTWORK FROM THE HVAC EQUIPMENT. THE REMAINING DUCTWORK SHALL BE WRAPPED WITH INSULATION.
 - ALL THERMOSTATS SHALL BE PROGRAMMABLE AND HAVE A 4 DEGREE DEADBAND.
 - INSTALL SMOKE DETECTOR IN THE SUPPLY AIR SYSTEM FOR ALL UNITS WITH CAPACITY GREATER THAN 2000 CFM. THE SMOKE DETECTOR SHALL BE INSTALLED DOWNSTREAM OF ANY FILTERS, FAN MOTORS, OUTDOOR AIR CONNECTIONS AND UPSTREAM OF ANY BRANCH CONNECTIONS.
 - ALL MATERIAL INSTALLED WITHIN A RETURN AIR PLENUM SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50.
 - ALL WIRING INSTALLED WITHIN THE PLENUM SHALL BE PLENUM RATED OR INSTALLED WITHIN CONDUIT.
 - ALL EQUIPMENT INSTALLED ABOVE THE CEILING SHALL BE ACCESSIBLE. CONTRACTOR SHALL SUPPLY ACCESS PANELS IN CEILING OR WALL AND SHALL COORDINATE WITH ARCHITECT FOR PROPER LOCATION. ACCESS PANELS IN CEILING SHALL BE A MINIMUM OF 24"x24" WITH HINGES. ACCESS PANELS SHALL HAVE SAME FIRE RATING AS CEILING IN WHICH THEY ARE INSTALLED.
 - EACH PIECE OF EQUIPMENT SHALL BE PERMANENTLY LABELED WITH A NAMEPLATE OF SUFFICIENT SIZE TO CLEARLY INDICATE THE EQUIPMENT DESIGNATION IN ACCORDANCE WITH THE DRAWINGS (IE PIU-1, RTU-1, ETC.). NAMEPLATES TO BE IBKAGED ENAMEL OR ALUMINUM WITH STAMPED LETTERS.
 - EACH DUCT OR PIPE WHICH PENETRATES ANY FIRE OR SMOKE PARTITION SHALL HAVE THE WALL OPENING SEALED WITH HILTI FIRE STOP TO PREVENT THE SPREAD OF SMOKE.
 - ANY EXISTING WALL, FLOOR, OR CEILING SURFACE DISTURBED DURING THE COURSE OF CONSTRUCTION, SHALL BE REPAIRED TO LIKE NEW OR PREVIOUS CONDITION TO THE SATISFACTION OF THE ARCHITECT.
 - RECORD DRAWINGS:
 THE CONTRACTOR SHALL MAINTAIN ON A DAILY BASIS AT THE PROJECT SITE A COMPLETE SET OF "RECORD DRAWINGS" REFLECTING AN ACCURATE DIMENSIONAL RECORD OF ALL BURIED OR CONCEALED WORK. THE "RECORD DRAWINGS" SHALL BE MARKED TO SHOW THE PRECISE LOCATION OF CONCEALED WORK, AND EQUIPMENT INCLUDING CONCEALED OR EMBEDDED PIPING AND VALVES AND ALL CHANGES AND DEVIATIONS FROM THE CONTRACT DOCUMENTS. THIS REQUIREMENT SHALL NOT BE CONSIDERED AS AUTHORIZATION FOR THE CONTRACTOR TO MAKE CHANGES WORK WITHOUT APPROVAL FROM THE ARCHITECT.
 THE "RECORD DRAWINGS" SHALL BE CLEARLY MARKED WITH "RECORD DRAWINGS" INDICATED IN THE LOWER RIGHT CORNER OF THE DRAWINGS.
 - UPON THE COMPLETION OF THE HVAC SYSTEM INSTALLATION, PROVIDE A COMPLETE TEST AND BALANCE. THE TEST AND BALANCE SHALL MEASURE AIR FLOWS FOR EACH PIECE OF EQUIPMENT, DIFFUSER AND RETURN GRILL. SUBMIT TO ARCHITECT TEST AND BALANCE PLAN THREE DAYS PRIOR TO INTENDED START DATE.



RTU SCHEDULE

MARK	CFM	MIN OA CFM	ESP IN WC	HP	COOLING CAP. TOTAL	SEN	MIXED AIR TEMPERATURES	HEATING CAP. INPUT	OUTPUT	BASIS OF DESIGN	SEER EER	NOTES
RTU-1	2400	570	0.6	3.0	76.3	61.6	80°Fdb / 67°Fwb	72.0	59.0	CARRIER 48TCD07	EER-11.2	1

ROUTE CONDENSATE TO SPILL ONTO SPLASH BLOCK. CONDENSATE TO DRAIN INTO STORM SEWER. CONDENSATE SHALL NOT DRAIN INTO SANITARY SEWER.

- PROVIDE ECONOMIZER WITH ENTHALPY CONTROLS, BAROMETRIC RELIEF, SINGLE POINT POWER CONNECTION THRU ROOF CURB, 115V GFI ELECTRICAL CONVENIENCE OUTLET AND PHASE LOSS PROTECTION.
- COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO PLACING ORDER FOR EQUIPMENT.
- PROVIDE FULL PERIMETER 14" HIGH ROOF CURB, AND PROGRAMMABLE THERMOSTAT.
- PROVIDE SMOKE DETECTOR IN THE SUPPLY AIR STREAM DOWNSTREAM OF ANY FILTERS AND OUTSIDE AIR INTAKES AND PRIOR TO ANY BRANCH TAKEOFFS AND IN THE RETURN AIR STREAM PRIOR TO ANY FILTERS OR OUTSIDE AIR INTAKES.
- FLOAT SWITCH IN PRIMARY DRAIN PAN TO SHUTDOWN UNIT UPON DETECTION OF WATER.

FAN SCHEDULE

MARK	CFM	S.P. WG	POWER	TYPE	BASIS OF DESIGN	LOCATION/SERVICE	NOTES
EF-2	75	0.35	800 WHTS	CAPINET	GREENHECK SP-B140	TOLFT ROOM	1
EF-2	570	0.50"	1/8 HP	CENTRIFUGAL	GREENHECK G-095-D	SALON AREA	2

- INTERLOCK WITH ROOM LIGHT SWITCH. PROVIDE INTEGRAL EXHAUST GRILL, DISCONNECT AND VIBRATION ISOLATOR KIT.
- INTERLOCK WITH SALON AREA LIGHTING. PROVIDE CURB-DISCONNECT SWITCH AND FAN SPEED CONTROLLER.

AIR DISTRIBUTION SCHEDULE

MARK	TYPE	SIZE IN INCHES		FINISH	O.B.D.	BASIS OF DESIGN	NOTES
		NECK	FACE				
A	SUPPLY	12"	24"x24"	WHITE	NO	TITUS TDC	1
B	RETURN	22"x22"	24"x24"	WHITE	NO	TITUS 50FF	1, 2
C	SUPPLY	6"	12"x12"	WHITE	NO	TITUS TDC	1
D	EXHAUST	22"x22"	24"x24"	WHITE	NO	TITUS 350FL	1

- DIFFUSERS ARE STEEL. COORDINATE WITH ARCHITECTURALS FOR CEILING TYPE. DIFFUSERS FRAME SHALL MATCH CEILING TYPE.
- PROVIDE FILTER RETURN GRILLS.

REVISION 1
 10-30-18

THE VILLAGE AT MITCHELL RANCH

HAIR CUTTERY

8876 REDEEMER WAY
 NEW PORT RICHEY,
 FLORIDA 34654

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 Print Record
 08/02/2018 ISSUED FOR PERMIT / BID

Revisions
 10/26/2018 Revision #1