EXHAUST FAN SCHEDULE				
SYMBOL	EF-1 / EF-2	EF-3 / EF-4		
STWIDOL				
MANUF. & MODEL	TWIN CITY FAN TL 300V	TWIN CITY FAN DSI 080A		
TYPE	DIRECT DRIVE IN-LINE VENTILATOR	DIRECT DRIVE IN-LINE VENTILATOR		
SERVICE	FIELD HOUSE EXHAUST	REST ROOM EXHAUST		
CFM/ESP	300/0.25" WG	100/0.25" WG		
DRIVE/FAN RPM	DIRECT / 926	DIRECT / 553		
FAN H.P.	1/2	1/8		
ELECTRICAL	120/1/60	120/1/60		
SONES	3.8	1.3		

<u>REMARKS</u>:

- 1. PROVIDE WITH ELECTRICAL DISCONNECT AND VARIABLE SPEED MOTOR
- 2. THE EXHAUST FAN SHALL BE UL LISTED.
- 3. PROVIDE WITH INTEGRAL BACKDRAFT DAMPER AND ALUMINUM CEILING
- 4. APPROVED MANUFACTURERS: TWIN CITY, GREENHECK, PENN, COOK, AND

LOUVER SCHEDULE					
GENERAL					
SYMBOL	L-1	L-2			
MANUF. & MODEL	GREENHECK ESD-603	GREENHECK 174			
SERVICE	OUTSIDE AIR	ATTIC VENT			
DEPTH	6"	4"			
CONSTRUCTION	ALUMINUM	ALUMINUM			
PHYSICAL SIZE	24"W X 16"H	16"W X 8"H			
FREE AREA (MIN)	0.98 SQ. FT.	45.79 SQ. IN.			
CFM	800	N/A			
ACCESSORIES					
FINISH	KYNAR	KYNAR			
COLOR	BY ARCHITECT	BY ARCHITECT			
INSECT SCREEN	NO	YES			
BIRD SCREEN	YES	NO			
DRAINABLE BLADE	YES	NO			

ARCHITECT'S SAMPLE.

1. FREE AREA LISTED IS MINIMUM ACCEPTABLE. ALTERNATE LOUVER MANUFACTURERS SHALL MEET OR EXCEED AREA LISTED. 2. ALL LOUVERS SHALL BE PROVIDED WITH CUSTOM PAINT COLOR TO MATCH

3. ALL LOUVERS SHALL BE EXTRUDED ALUMINUM, CHANNEL FRAME WITH CONCEALED MULLIONS.

4. PROVIDE L-2 LOUVERS WITH SHEET METAL SLEEVE EXTENSIONS THROUGH

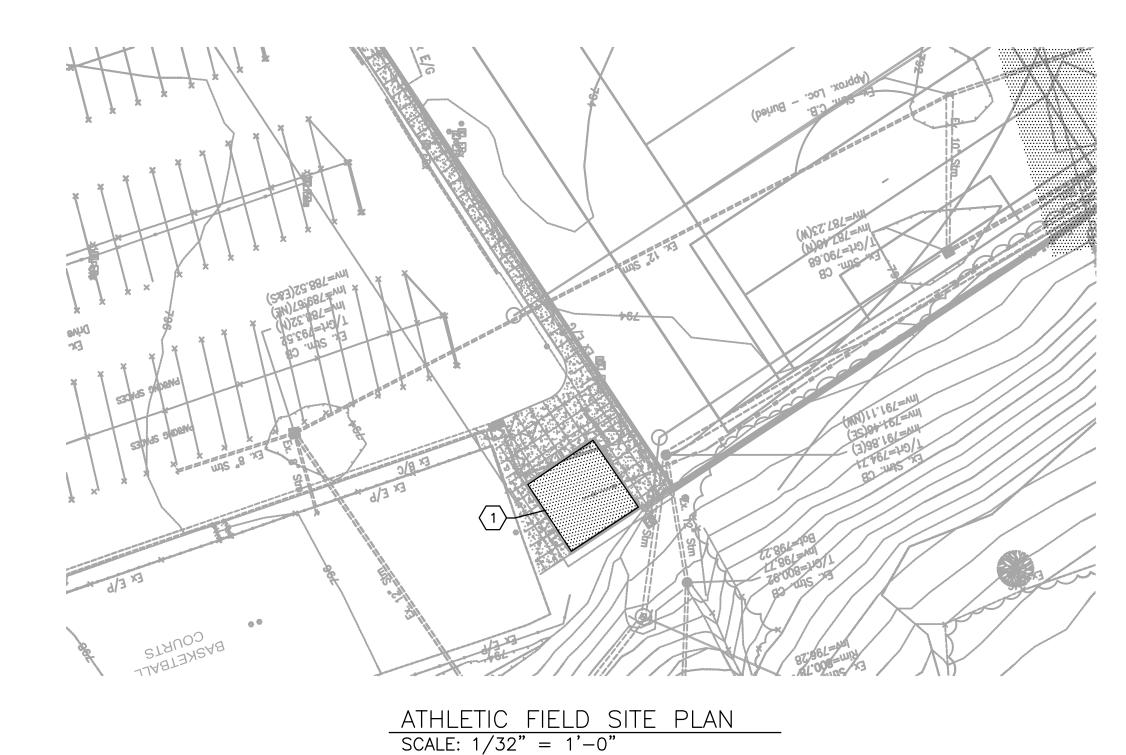
5. APPROVED MANUFACTURERS: ARROW, GREENHECK, RUSKIN.

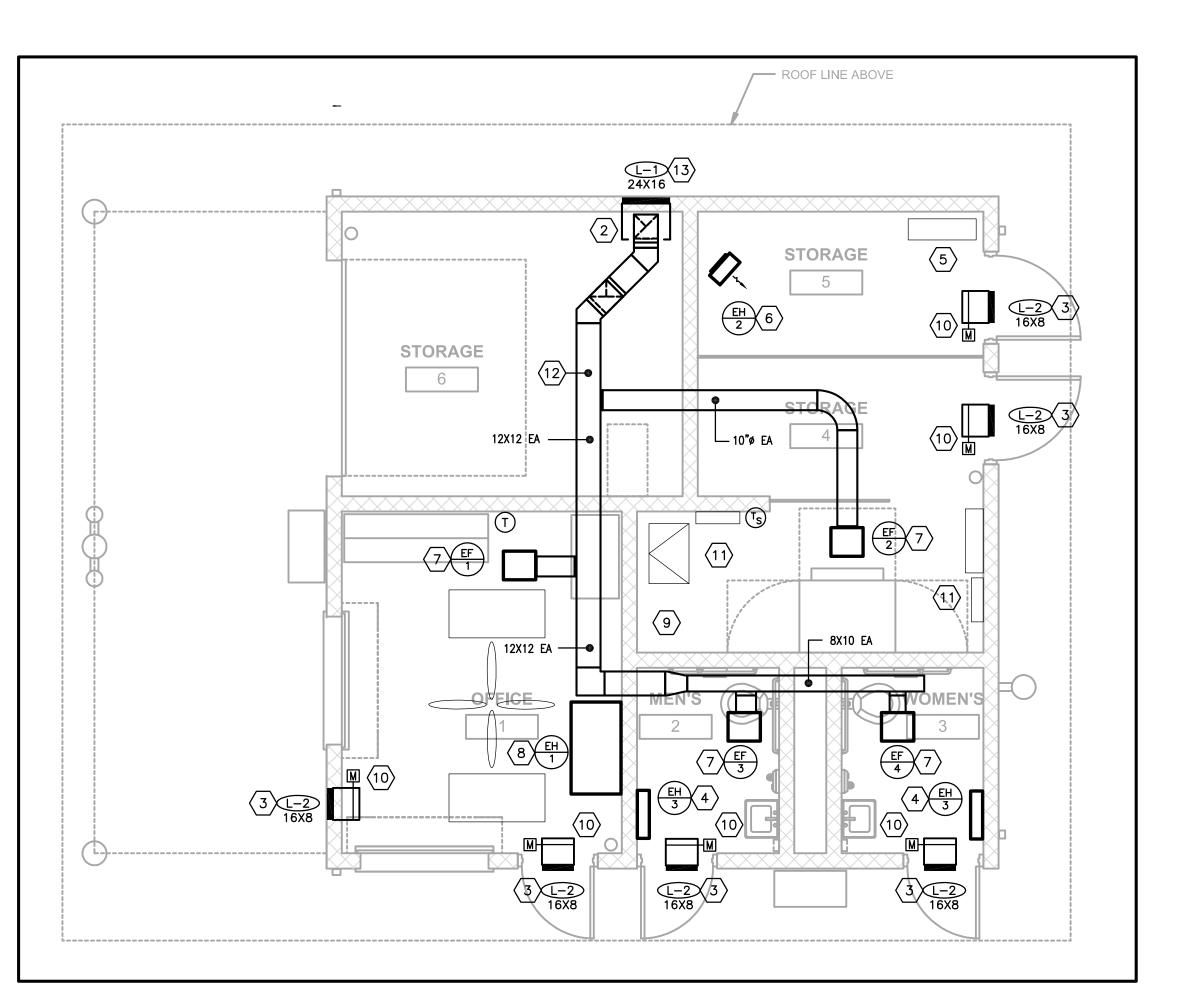
SYMBOL	EH-1	EH-2	EH-3
MANUF. & MODEL	MARKEL 6300 SERIES	MARKEL 5100 SERIES	MARKEL 3420 SERIES
TYPE	CEILING-SURFACE MOUNT (ELECTRIC)	FAN-FORCED UNIT HEATER (ELECTRIC)	FAN-FORCED WALL HEATER (ELECTRIC)
SERVICE	OFFICE AREA	STORAGE AREA	RESTROOMS
FAN AIRFLOW (CFM)	500	700	175
HEATER POWER (KW)	10.0	10.0	3.0
ELECTRIC CONNECTION (VOLTS/PHASE/HZ)	480/3ø/60	480/3ø/60	277/1ø/60
DISCONNECT SWITCH	YES	YES	YES
THERMOSTAT TYPE	REMOTE	REMOTE	UNIT-MOUNTED
MOUNTING TYPE	CEILING	SUPPORTED	WALL
PHYSICAL SIZE	4'W X 2'-2"D X 10"H	15"L X 18"H X 7"D	20"H X 14"W X 4 1/4"[
REMARKS	1, 2, 3, 4, 5, 7, 8, 9	1, 7, 8, 9	6, 7, 8, 9

- 1. PROVIDE WITH PRE-WIRED FACTORY DISCONNECT AND REMOTE TEMPERATURE SENSOR.
- 2. FACTORY CONTROL PANEL WITH SINGLE POINT CONNECTION AND FAN TRANSFORMER.
- 3. SEALED ACCESS PANELS, PSC MOTOR AND ACOUSTICALLY LINED RETURN.
- TAMPERPROOF LOCKS. 2 STAGE ELECTRIC HEAT.
- 6. PROVIDE WITH PRE-WIRED FACTORY DISCONNECT AND IN-UNIT TEMPERATURE CONTROL THERMOSTAT BY TCC. SET TEMP AT 50° F.

4. MODEL D CABINET WITH FRONT SUPPLY BAR GRILLE AND BOTTOM RETURN LOUVER. PROVIDE WITH

- 7. THERMAL OVERHEAT PROTECTION.
- 8. WHITE POWDER COATED FINISH ON HEAVY GAUGE STEEL HOUSING.
- 9. APPROVED MANUFACTURERS: MARKEL, TRANE, REZNOR, DAYTON.





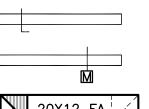
ATHLETIC BUILDING PLAN — MECHANICAL SCALE: 1/4" = 1'-0"

MECHANICAL LEGEND

MECHANICAL EQUIPMENT DESIGNATOR



INDICATES AIR DISTRIBUTION DEVICE SPECIFICATION (L=LOUVER, T=TRANSFER GRILLE, S=SUPPLY DIFFSER OR REGISTER, R=RETURN GRILLE OR REGISTER, E= EXHAUST GRILLE OR REGISTER)



OPPOSED BLADE DAMPER (MOTORIZED)

EXHAUST AIR DUCT - INSIDE DIMENSION -

20X12 EA

(TURNED UP/DOWN)

VOLUME DAMPER (MANUAL)

TEMPERATURE SENSOR

GENERAL NOTES (APPLICABLE TO ALL DRAWINGS):

FREEZING AND/OR THE COLLECTION OF CONDENSATION THEREON.

1. EACH CONTRACTOR, SUPPLIER AND, OR MANUFACTURER SHALL REFER TO ALL DOCUMENTS PERTAINING TO THIS PROJECT AND COORDINATE ACCORDINGLY SO AS TO ENSURE ADEQUACY OF FIT, COMPLIANCE WITH SPECIFICATIONS, PROPER VOLTAGE AND CURRENT CHARACTERISTICS AND AVOID CONFLICT WITH ANY OTHER BUILDINGS SYSTEMS. VERIFY SAME WITH SHOP DRAWINGS.

THERMOSTAT

2. ALL OFFSETS, TURNS, FITTINGS, TRIM, DETAIL, ETC., MAY NOT BE INDICATED, BUT SHALL BE PROVIDED AS REQUIRED. ADDITIONAL ALLOWANCES SHALL BE INCLUDED FOR SAME AT EACH PROPOSERS' DISCRETION. 3. INSTALL NO PIPING, CONDUIT, DUCTWORK, ETC., IN A LOCATION OR IN A MANNER WHICH WILL ALLOW

4. OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS (CITY, COUNTY, LOCAL, STATE, FEDERAL, MUNICIPALITY, UTILITY COMPANY, OSHA, ETC.).

5. ALL SYSTEMS, EQUIPMENT AND MATERIALS ARE TO BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. WORK NOT DONE SO SHALL BE REMOVED AND REINSTALLED SATISFACTORILY.

6. WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEERS BEFORE INSTALLATION. REFER ALSO TO ARCHITECTURAL WALL INTERIOR AND EXTERIOR WALL ELEVATIONS, CEILING HEIGHTS AND OTHER DETAIL OF THESE DOCUMENTS.

7. DO NOT SCALE FROM DRAWINGS, PRINTING DISTORTS SCALE. WORK SHALL BE LAID OUT FROM DIMENSIONED DRAWINGS, OR DIMENSIONS SUPPLIED TO THE CONTRACTOR.

8. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED FOR HIS WORK. ALL CUTTING AND PATCHING SHALL MATCH EXISTING ADJACENT SURFACES. 9. TURNING VANES SHALL BE INSTALLED IN DUCTWORK ELBOWS.

10. THESE DRAWINGS ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE, HOWEVER LOCATIONS, DEPTHS, ELEVATIONS AND SIZES WERE TAKEN FROM DIFFERENT SOURCES AND ARE SUBJECT TO DEVIATION. THE CONTRACTOR SHALL ASSUME SOME DEVIATIONS AND INCLUDE OFFSETS, ADDITIONAL PIPING, ETC AT THE TIME

11. WHERE PENETRATING ROOFING MEMBRANE OR OTHER MATERIALS USED FOR WEATHERPROOFING THE BUILDING, MAKE SUCH PENETRATIONS IN A WAY THAT WILL NOT VOID OR DIMINISH THE ROOFING WARRANTY OR

INTEGRITY IN ANY WAY. COORDINATE ALL SUCH PENETRATIONS WITH THE ROOFING INSTALLER. ADVISE THE ENGINEERS OF ANY CONFLICTS, ERRORS, OMISSIONS, ETC. AT LEAST TEN DAYS PRIOR TO BID DATE, TO ALLOW CLARIFICATION BY WRITTEN ADDENDUM.

13. DEVIATION FROM SPECIFICATIONS OR PLANS REQUIRES PRIOR WRITTEN APPROVAL FROM THE ENGINEERS AND MUST BE SUBMITTED IN WRITING NO LATER THAN TEN DAYS PRIOR TO THE BID DATE.

14. COORDINATE THE LOCATION OF DRAINS, ELECTRICAL OUTLETS, ETC. WITH ALL MECHANICAL EQUIPMENT, ETC. PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE RESPONSIBLE CONTRACTOR(S).

15. THE PURPOSE AND INTENT OF ALL THE DOCUMENTS PERTAINING TO THIS PROJECT IS TO PROVIDE A COMPLETE, FUNCTIONAL, SAFE, LIKE NEW FACILITY. ANYTHING LESS SHALL BE UNACCEPTABLE.

16. ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTOR'S EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR INSTALLATION'S ACCEPTABILITY SHALL BE THAT OF THE

17. INSTALL EQUIPMENT, MATERIALS, ETC. IN STRICT ACCORD WITH MANUFACTURER'S RECOMMENDATIONS AND DIRECTIONS. IF IN CONFLICT WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS, ADVISE THE ENGINEERS PRIOR TO INSTALLATION FOR CLARIFICATION.

18. ALL SUPPORTS FOR EQUIPMENT, DEVICES OR FIXTURES SHALL BE UNIQUE, FROM THE BUILDING STRUCTURE. DO NOT SUPPORT WORK FROM OTHER TRADES, EQUIPMENT OR SUPPORTS WITHOUT WRITTEN PERMISSION FROM THE ENGINEER AND CONSENT OF THE OTHER TRADE, IN WRITING. DO NOT SUPPORT EQUIPMENT FROM WALLS OR PARTITIONS

19. DEVIATIONS IN SIZE, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT PRIME SPECIFIED SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ENGINEERS OR NOT, SHALL BE THE RESPONSIBILITY OF THE

20. THE GENERAL CONTRACTOR FOR THIS CONSTRUCTION IS RESPONSIBLE FOR THE COORDINATION, APPEARANCE, SCHEDULING AND TIMELINESS OF THE WORK OF ALL TRADES, CONTRACTORS, SUPPLIERS, INSTALLERS, ETC. EACH TRADE SHALL COORDINATE THEIR WORK WITH OTHER TRADES AND THE GENERAL

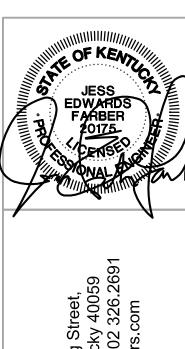
CONTRACTOR. 21. VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM SHALL NOT BE LOCATED ABOVE A HARD CEILING. IF THIS IS NOT POSSIBLE, THEN AN APPROPRIATELY SIZED ACCESS DOOR SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND ADJUSTMENT.

22. ENSURE PROPER COORDINATION BETWEEN ALL TRADES SUCH THAT CONDUITS, PIPING, DUCTWORK, ETC. DO NOT BLOCK ACCESS TO VALVES, EQUIPMENT, DUCT ACCESS DOORS, ETC. ITEMS THAT HAVE BEEN INSTALLED WHERE ACCESS IS COMPROMISED SHALL BE RELOCATED AT THE CONTRACTOR'S EXPENSE.

23. ALLOWANCE SHALL BE PROVIDED FOR TEMPERATURE CONTROLS. SEE SPECIFICATIONS.

TAG NOTES:

- REFER TO THE ENLARGED PLAN ON THIS DRAWING FOR WORK IN THIS AREA.
- CONSTRUCT A 24" DEEP 20 GAUGE SHEET METAL PLENUM FULL SIZE OF THE LOUVER. CONNECT THE 12X12 DUCT TO THE TOP OF THE PLENUM AS SHOWN.
- BRICK VENT FOR SPACE MAKE-UP AIR. MOUNT TIGHT TO THE BOTTOM OF THE BOND BEAM. COORDINATE WITH CMU COARSING.
- MOUNT BOTTOM OF THE WALL MOUNTED ELECTRIC HEATER AT 24" A.F.F.
- DOMESTIC WATER ENTRY. REFER TO DRAWING PO101 FOR MORE INFORMATION. MOUNT THE TOP OF THE ELECTRIC UNIT HEATER 6" BELOW THE CEILING.
- CEILING EXHAUST FAN TO BE MOUNTED IN THE TRUSS SPACE. COORDINATE THE FINAL LOCATION WITH STRUCTURAL FRAMING AND LIGHTS. MOUNT THE HORIZONTAL ELECTRIC HEATER FLUSH TO THE CEILING. SUPPORT FROM
- SUMP PUMP. REFER TO DRAWING PO101 FOR MORE INFORMATION.
- O. CONSTRUCT A 12" DEEP SHEET METAL SLEEVE FULL SIZE OF THE LOUVER FOR MOUNTING THE MOTORIZED DAMPER. EXTERNALLY INSULATE WITH 1" RIGID INSULATION. MOUNT THE DAMPER ACTUATOR DIRECTLY TO THE DAMPER SHAFT. . ELECTRICAL/IT EQUIPMENT SHOWN FOR COORDINATION. REFER TO THE ELECTRICAL
- DRAWINGS FOR MORE INFORMATION. 12. ROUTE ALL DUCTWORK IN THE TRUSS SPACE. COORDINATE WITH STRUCTURAL
- 3. MOUNT TOP OF THE LOUVER TIGHT TO THE BOTTOM OF THE BOND BEAM AT THE ROOF LINE. COORDINATE LOCATION WITH CMU COARSING.





pport

5

T

O

O

- 0 8 4 G 9 F 8