

EXHAUST FAN SCHEDULE

DESIGNATION	EF-1	EF-2	EF-3
LOCATION	GOLF CART STORAGE	GOLF CART STORAGE	GOLF CART STORAGE
AREA SERVED	GOLF CART STORAGE	GOLF CART STORAGE	GOLF CART STORAGE
MODEL	SQ-140 (VARI-GREEN)	SQ-140 (VARI-GREEN)	SQ-140 (VARI-GREEN)
CFM	1,800	1,800	1,800
BHP	0.3	0.3	0.3
HP	¾	¾	¾
FAN RPM	1140	1140	1140
SP (IN H ₂ O)	0.375	0.375	0.375
VOLTS/ø/Hz	230/1/60	230/1/60	230/1/60
INTERLOCK	-	-	-

NOTES:
1. FANS BASED ON GREENHECK.
2. ALL MOTORS SHALL BE PREMIUM EFFICIENCY.
3. FURNISH MOTOR STARTERS AND DISCONNECT SWITCHES FOR EACH FAN.
4. FURNISH MOTOR AND BELT GUARD FOR ALL EXTERNAL MOTOR DRIVES.
5. FURNISH RUBBER IN SHEAR OR SPRING VIBRATION ISOLATORS AS PER THE SPECIFICATION.
6. FURNISH WALL MOUNTED SPEED CONTROLLER OR THERMOSTAT AS INDICATED ON PLAN.

ENERGY RECOVERY SCHEDULE

DESIGNATION	ERV-1
LOCATION	STORAGE
AREA SERVED	TOILET/LOCKER ROOM
MANUFACTURER	GREENHECK
MODEL	ERV-20-15L
WEIGHT	779
SUPPLY FAN:	
CFM	1,000
MIN OA CFM	1,000
HP	¾
ESP/TSP	0.75/0.845
EXHAUST FAN:	
CFM	1,000
HP	¾
ESP/TSP	0.75/0.849

ENERGY CONSERVATION WHEEL:(SUMMER OAT 95/75, WINTER OAT 0/0)	
SUMMER SAT DB/WB	78.3/66.2
SUMMER RAT DB/WB	75.0/63.9
SUMMER EAT DB/WB	91.5/73.2
WINTER SAT DB/WB	60.7/48.8
WINTER RAT DB/WB	55.8/35.0
WINTER EAT DB/WB	20.4/19.0

FILTERS DATA:	
QUANTITY/SIZE	8-20x20 (EXHAUST AIR) 8-20x20 (OUTDOOR AIR)
EFFICIENCY	MERV 8

ELECTRICAL DATA:	
VOLTS/ø/Hz	208 / 1 / 60
MCA	18.5
MAX FUSE SIZE	25.0

NOTES:
1. FURNISH THE FOLLOWING OPTIONS AND ACCESSORIES:
•ROOM TEMPERATURE SENSOR.
•PREMIUM EFFICIENCY MOTORS
•ANGLE FILTER SECTIONS WITH MERV-8 FILTERS.
•DIRTY FILTER SENSOR - OUTDOOR AND EXHAUST AIR.
•OUTDOOR AIRFLOW MONITORING.
•ROTATION SENSOR.
•DUCT FLANGE.
•MICROPROCESSOR CONTROLS.
•SPRING VIBRATION ISOLATORS.
•MOTORIZED SUPPLY AND RETURN LOW LEAKAGE DAMPERS.
•FROST CONTROL - MODULATING WHEEL.
3. FURNISH EXTRA DRIVE BELT AND EXTRA FILTER SET.
4. PROVIDE UNIT MOUNTED DISCONNECT SWITCH.
5. UNIT SHALL BE UL LISTED.

EQUIPMENT NOTES:

- 1.) LOUVERS: SHALL BE RUSKIN MODEL ELF375DX DRAINABLE BLADE, 37.5’ BRUSHED ALUMINUM 6063-T5, ANODIZED CUSTOM COLOR TO BE SUBMITTED FOR APPROVAL. FURNISH 1/2” GALVANIZED STEEL BIRD SCREEN. COORDINATE WITH ARCHITECTURAL PLANS.
- 2.) MOTORIZED DAMPER: SHALL BE RUSKIN MODEL CD40. 4” DEEP EXTRUDED ALUMINUM AIRFOIL DAMPER. DAMPER SHALL HAVE OPPOSED BLADES, MOTOR, AND LINKAGE. DAMPER SHALL BE 120V, 3 AMP MAX. DAMPER SHALL BE LOW-LEAKAGE RATED TYPE.
2.1) OUTSIDE AIR INTAKE & EXHAUST DAMPERS SHALL BE CLASS I MOTORIZED DAMPERS WITH MAXIMUM LEAKAGE RATE OF 4 CFM/FT² @ 1.0” W.G.; TESTED IN ACCORDANCE WITH AMCA 500D. DAMPERS SHALL BE CONFIGURED TO CLOSE AUTOMATICALLY WHEN THE SYSTEMS OF SPACE SERVED ARE NOT IN USE.
- 3.) CEILING DIFFUSERS: SHALL BE TITUS MODEL TDC WITH OPPOSED BLADE VOLUME DAMPER. ALL STEEL CONSTRUCTION. FINISH SHALL BE BAKED ON ENAMEL, COLOR SHALL BE WHITE. FRAME SHALL BE SUITABLE FOR LAY IN OR SURFACE MOUNTING. NECK SHALL BE ROUND. REFER TO PLANS FOR MODULE SIZE, NECK SIZE, AND CFM. COORDINATE WITH ARCH PLANS.
- 4.) SUPPLY AIR REGISTERS: SHALL BE TITUS MODEL 300FL, 1/2” SPACING, DOUBLE DEFLECTION, ALL ALUMINUM CONSTRUCTION, AIRFOIL BLADES WITH OPPOSED BLADE VOLUME DAMPER, SIZE AND CFM AS NOTED ON PLANS. FINISH SHALL BE BAKED ON ENAMEL, COLOR SHALL BE WHITE. FRAME SHALL BE SUITABLE FOR SURFACE MOUNT OR LAY IN. COORDINATE WITH ARCH PLANS.
- 5.) RETURN & EXHAUST AIR REGISTERS: SHALL BE TITUS MODEL 355FL, 1/2” SPACING, 35’ FIXED DEFLECTION, ALL ALUMINUM CONSTRUCTION, AIRFOIL BLADES WITH OPPOSED BLADE VOLUME DAMPERS, SIZE AND CFM AS NOTED ON PLANS. FINISH SHALL BE BAKED ON ENAMEL, COLOR SHALL BE WHITE. FRAME SHALL BE SUITABLE FOR SURFACE MOUNT OR LAY IN. COORDINATE WITH ARCH PLANS.
- 8.) HEAVY DUTY SIDEWALL RETURN AIR REGISTERS – FOR USE IN CART STORAGE SHED: SHALL BE TITUS MODEL J3RL, STEEL CONSTRUCTION, WITH 1/2” SPACING, 38’ FIXED DEFLECTION, 16-GAUGE BORDER, 14-GAUGE BLADES, SUPPORT BARS 6” ON CENTER, OPPOSED BLADE VOLUME DAMPER IN NECK, SIZE AND CFM AS NOTED ON PLANS. FINISH SHALL BE BAKED ON ENAMEL. SUBMIT COLOR CHART FOR APPROVAL. FRAME SHALL BE SUITABLE FOR SURFACE MOUNTING. COORDINATE WITH ARCH PLANS.
- 9.) THERMOSTAT GUARDS: PROVIDE LOCKING TAMPER PROOF COVER FOR ALL THERMOSTATS AND CO2 SENSORS. COVER SHALL BE CLEAR ACRYLIC PLASTIC WITH TUMBLER TYPE KEY LOCK. SIMILAR TO HONEYWELL CG-512A.
- 10.) REFRIGERANT PIPE INSULATION: SHALL BE AP ARMAFLEX PIPE INSULATION. 1” THICK UNSLIT, TO BE INSTALLED BEFORE FINAL CONNECTION. FIELD FABRICATE FITTING INSULATION WITH MITER-CUTS. ALL BUTT JOINTS AND SEAMS ARE TO BE SEALED WITH ARMSTRONG 520 ADHESIVE. ALL INSULATION INSTALLED OUTDOORS SHALL BE COATED WITH ARMSTRONG ARMAFLEX FINISH, AS PER THE MANUFACTURERS RECOMMENDATIONS.
- 11.) VERTICAL INDOOR HEAT PUMP (HP-1): SHALL BE 3-TON VERTICAL DUCTED DAIKIN MODEL FTQ36PBVJU RATED AT 36,000 BTUH COOLING / 40,000 BTUH/HEATING; 1,200 CFM @ 0.8” ESP; ⅝”RL & ⅝”HG, R-410A REFRIGERANT. MICROPROCESSOR THERMOSTAT FOR COOLING AND HEATING. ELECTRICAL: 208-230/1/60, 2.8 MCA, 15 MOCP.

OUTDOOR UNIT ACC-1 SHALL BE 3-TON DAIKIN MODEL RZQ36PVJU9 OUTDOOR COMPRESSOR RATED AT 36,000 BTUH COOLING / 40,000 BTUH HEATING; ELECTRICAL: 208-230/1/60, 27 MCA, 30 MOCP.
- 12.) ELECTRIC UNIT HEATER (UH-1 & UH-2): SHALL BE MARKEL MODEL F1FUH05003, RATED AT 400 CFM, 17.1 MBH, 5 kW, 208V/1ø/60Hz, 24 AMPS. PROVIDE THE FOLLOWING OPTIONS: FAN GUARD, AIR DEFLECTION LOUVER, SUMMER FAN SWITCH, HEAT PURGE FAN DELAY SWITCH, DISCONNECT SWITCH, & WALL THERMOSTAT.
- 13.) VIBRATION ISOLATORS: ALL INDOOR AND OUTDOOR HVAC EQUIPMENT SHALL BE MOUNTED ON SPRING VIBRATION ISOLATORS, WITH A RATED STATIC DEFLECTION OF AT LEAST 1”. USE MASON TYPE "SLF" OR "SLFH" FOR FLOOR MOUNTED EQUIPMENT, RATED FOR MACHINE LOAD. USE MASON TYPE "30" OR "W30" FOR EQUIPMENT SUSPENDED FROM CEILING. ASSUMING THE EQUIPMENT IS MOUNTED TO PROVIDE FOR EQUAL LOAD DISTRIBUTION, EACH SPRING SHALL BE RATED FOR 1/4 THE UNIT'S TOTAL WEIGHT. SYSTEMS MUST BE ENGINEERED FOR 95% ISOLATION EFFICIENCY AT THE LOWEST ROTATIONAL SPEED OF THE UNIT.



OLA Consulting Engineers
60 Broadway, Hawthorne,
New York 10632
914.747.2800

8 West 38th Street,
Suite 601
New York, NY 10018
646.849.4110

olaee.com

DBA0006.00



IN CHARGE OF JW
CHECKED BY RG
MADE BY AMB

IT IS A VIOLATION OF NYS LAW FOR ANY PERSON TO ALTER THIS DOCUMENT IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF A DOCUMENT BEARING THE SEAL OF AN ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE DOCUMENT THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.