

PACKAGED GAS/ELECTRIC ROOFTOP SCHEDULE																											
GENERAL DATA																							UNIT POWER CONNECTION				REMARKS
ID	LOCATION	AREA AND/OR BLDG SERVED	TYPE	MANU.	MODEL NO.	TOTAL SUPPLY AIR FLOW	MIN. OUTSIDE AIR FLOW	EXT. STATIC PRESSURE	BLOWER STATIC PRESSURE	COOLING DATA			NUMBER OF STAGES	HEATING DATA			AFUE	FUEL TYPE	OPERATIONAL WEIGHT W/ ACCESSORIES	OPERATIONAL SOUND LEVEL	VOLTAGE	PHASE	MCA	MOCP			
										TOTAL CAPACITY	EER	SEER		STAGE 1 INPUT/OUTPUT	STAGE 2 INPUT/OUTPUT	TEMPERATURE RISE											
RTU-1	MAIN OFFICE ROOF	KITCHEN	PACKAGED ROOFTOP	CARRIER	48GCDM04A3A5-2W0C0	1050 CFM	231	0.29" WC	1.4" WC	35.14 MBH	12	16	2	50 MBH / 40 MBH	67 MBH / 54 MBH	25 F - 55 F	81%	NATURAL GAS	678 LBS.	79 dBA	208	3	24	30	SEE NOTES		

- NOTES:**
- AFUE COLUMN REPRESENTS ANNUAL FUEL UTILIZATION EFFICIENCY.
 - RTU-1 SHALL BE INTEGRATED INTO THE EXISTING BUILDING MANAGEMENT SYSTEM. PROVIDE ALL APPURTENANCES REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. COORDINATE WITH GREENWOOD LAKE CONTROLS CONTRACTOR FOR ALL REQUIREMENTS.
 - PROVIDE UNIT WITH A HIGH STATIC BLOWER.
 - PROVIDE UNIT WITH A ECONOMIZER.
 - PROVIDE UNIT WITH HINGED PANELS.
 - PROVIDE UNIT WITH A 2" THICK MERV 13 THROWAWAY FILTER.
 - PROVIDE UNIT WITH A MANUFACTURER APPROVED ROOF CURB. ROOF CURB MUST BE A MIN. OF 14" OVERALL HEIGHT.

EXHAUST FAN SCHEDULE														
GENERAL DATA												ELECTRICAL DATA		REMARKS
I.D.	MANUFACTURER	MODEL NO.	AIRFLOW	TOTAL EXTERNAL S.P.	FAN RPM	POWER USAGE		MOTOR SIZE	SONES	SOUND LEVEL	WEIGHT	VOLTAGE/PHASE	FLA	
						START UP	OPERATING							
E-1	GREENHECK	G-097-VG	100 CFM	0.50 "WG	1,135	0.03 BHP	0.03 BHP	1/4 HP	4.6	47 dBA	38 LBS.	115/1	2.85	SEE NOTES

- NOTES:**
- PROVIDE UNIT WITH A BACKDRAFT DAMPER, MOTOR STARTER, AND BIRDSCREEN.
 - PROVIDE UNIT WITH A 24 HOUR / 7 DAY TIME CLOCK.

REGISTER & GRILLE SCHEDULE									
I.D.	MANUFACTURER	MODEL NO.	AIRFLOW (CFM)	FRAME TYPE	NOMINAL FACE SIZE	BLADE DEFLECTION	BLADE SPACING	FINISH	REMARKS
SG-1	TITUS	271FS	200-220	DUCT MOUNTED	10" x 6"	DOUBLE	3/4"	WHITE	SEE NOTES
SG-2	HART/COOLEY	SVH-3-12X4-W-8	170	DUCT MOUNTED	12" X 4"	DOUBLE	3/4"	WHITE ENAMEL	SEE NOTES
SG-3	HART/COOLEY	SVH-3-10X4-W-10	125	DUCT MOUNTED	10" X 4"	DOUBLE	3/4"	WHITE ENAMEL	SEE NOTES
SG-4	HART/COOLEY	SVH-3-10X4-W-8	125	DUCT MOUNTED	10" X 4"	DOUBLE	3/4"	WHITE ENAMEL	SEE NOTES
SG-5	HART/COOLEY	USVH-3-14X3-W	105	DUCT MOUNTED	14" X 3"	DOUBLE	3/4"	WHITE	SEE NOTES
RG-1	TITUS	56FL	1050	SURFACE MOUNTED	30" x 6"	SINGLE	3/4"	WHITE	SEE NOTES
EG-1	TITUS	56FL	50	SURFACE MOUNTED	6" x 6"	SINGLE	3/4"	WHITE	SEE NOTES

- NOTE:**
- ALL FINAL MOUNTING LOCATIONS FOR ALL GRILLES, REGISTERS & DIFFUSERS CAN BE SEEN ON THE ARCHITECTURAL PLANS. ALL LOCATIONS SHOWN ON THE MECHANICAL PLAN ARE TENTATIVE.

INSULATION SCHEDULE			*KNAUF* AS STANDARD OR APPROVED EQUAL
INSIDE BUILDING THERMAL ENVELOPE		FIBERGLASS FLEXIBLE BLANKET, 1.0 LB/CF R=8.0 (INSTALLED @ 25% COMPRESSION)	
SERVICE	FACING	MINIMUM THICKNESS TO MEET ASHRAE 90.1 REQUIREMENTS	
SUPPLY/RETURN AIR	FSK	2"	
OUTDOOR AIR	FSK	2"	
EXHAUST AIR	—	NONE	
OUTSIDE BUILDING THERMAL ENVELOPE		FIBERGLASS FLEXIBLE BLANKET, 1.0 LB/CF R=12.0	
SERVICE	FACING	THICKNESS TO EXCEED ASHRAE 90.1 REQUIREMENTS	
SUPPLY/RETURN AIR	ASJ	4"	

* FLEXIBLE ELASTOMERIC FOAM INSULATION (ARMACELL OR EQUIVALENT)

- NOTES:**
- ALL EDGES SHALL BE CLEAN CUT.
 - ALL SEAMS AND BUTT JOINTS SHALL BE ADHERED AND SEALED USING ARMAFLEX 520 ADHESIVE. HORIZONTAL JOINTS SHALL BE AT BOTTOM OF DUCTS & PIPES.
 - ALL EXPOSED END CUTS SHALL BE COATED WITH ARMAFLEX 520 ADHESIVE.
 - INSULATION AT HIGH END OF PIPING RUNS SHALL BE ADHERED DIRECTLY TO THE PIPING USING A 1" STRIP OF 520 ADHESIVE ON THE I.D. OF THE INSULATION AND ON THE PIPE.
 - FOR ALL OUTDOOR EXPOSED DUCTWORK, THE HORIZONTAL SURFACE SHALL BE SLOPED TP PREVENT POUNDING ON SURFACE OF COATED INSULATION (2" MIN.).
 - THE "ARMA TUFF" PLUS SYSTEM MAY BE USED IN LIEU OF EXTERIOR DUCT INSULATION/WEATHER RESISTANT SYSTEM DESCRIBED IN SCHEDULE ABOVE.

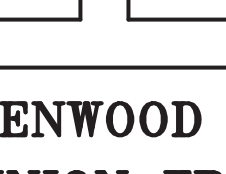
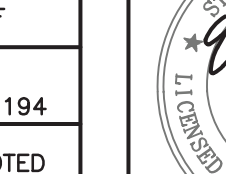
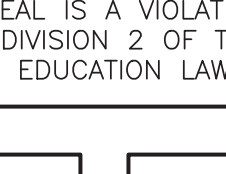
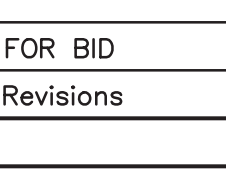
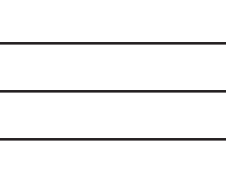
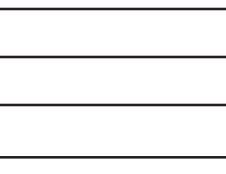
MINIMUM DUCT INSULATION COMMERCIAL
ALL SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH A MINIMUM OF R-6 INSULATION WHEN LOCATED IN UNCONDITIONED SPACES AND WITH A MINIMUM OF R-8 INSULATION WHEN LOCATED OUTSIDE THE BUILDING ENVELOPE. WHEN LOCATED WITHIN A BUILDING ENVELOPE ASSEMBLY, THE DUCT OR PLENUM SHALL BE SEPARATED FROM THE BUILDING EXTERIOR OR UNCONDITIONED OR EXEMPT SPACES BY A MINIMUM OF R-6 INSULATION.
EXCEPTIONS:
1. WHEN LOCATED WITHIN EQUIPMENT.
2. WHEN THE DESIGN TEMPERATURE DIFFERENCE BETWEEN THE INTERIOR AND EXTERIOR OF THE DUCT OR PLENUM DOES NOT EXCEED 15°F (8°C).
ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS, AND CONNECTIONS IN DUCTWORK, SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS (ADHESIVES), MASTIC-PLUS- EMBEDDED FABRIC SYSTEMS OR TAPES. TAPES AND MASTICS USED TO SEAL DUCTWORK SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A OR UL 181B. DUCT CONNECTIONS TO FLANGES OF AIR DISTRIBUTION SYSTEM EQUIPMENT SHALL BE SEALED AND MECHANICALLY FASTENED. UNLISTED DUCT TAPE IS NOT PERMITTED AS A SEALANT ON ANY METAL DUCTS.

GREENWOOD LAKE
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SED PROJECT NUMBER

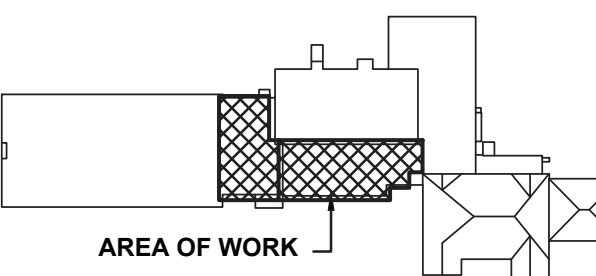
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CAPITAL IMPROVEMENTS



GREENWOOD LAKE
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GREENWOOD LAKE ELEMENTARY SCHOOL



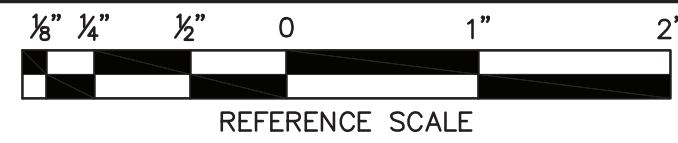
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REFERENCE SCALE

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Drawing No.

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