

**HVAC DUCTWORK SYMBOLS**

SYMBOL	DEFINITION
	SUPPLY DUCT UP
	SUPPLY DUCT UP THROUGH ROOF
	SUPPLY DUCT DOWN
	EXHAUST OR RETURN DUCT UP THROUGH ROOF
	EXHAUST OR RETURN DUCT UP
	EXHAUST OR RETURN DUCT DOWN
	ROUND DUCT UP
	ROUND DUCT UP THRU ROOF
	ROUND DUCT DN
	ADJUSTABLY LINED DUCT
	INSULATED DUCT
	ACCESS DOOR
	ELBOW WITH TURNING VANES
	OFFSET
	FLEXIBLE DUCT
	DUCT MOUNTED COIL
	ACOUSTICALLY LINED DUCT (SINGLE LINE)
	SUPPLY DIFFUSER W/ FLEX DUCT CONNECTION
	EXHAUST OR RETURN AIR GRILLE OR REGISTER
	FIRE DAMPER
	VOLUME DAMPER
	MOTOR-OPERATED DAMPER
	DOOR UNDERCUT
	DOOR LOUVER
	SMOKE DETECTOR
	STATIC PRESSURE CONTROLLER/TRANSDUCER
	THERMOSTAT/TEMP. SENSOR
	CONNECT TO EXISTING
	FLOW DIRECTIONAL ARROW
	PITCH DIRECTIONAL ARROW

**HVAC PIPING ABBREVIATIONS & SYMBOLS**

SYMBOL	DEFINITION
	HOT WATER SUPPLY
	HOT WATER RETURN
	ENERGY RECOVERY SUPPLY
	ENERGY RECOVERY RETURN
	LOW PRESSURE STEAM
	LOW PRESSURE CONDENSATE
	REFRIGERANT RECOVERY
	REFRIGERANT WATER SUPPLY
	REFRIGERANT WATER RETURN
	CHILLED WATER SUPPLY
	CHILLED WATER RETURN
	SHUT-OFF VALVE
	CAPPED PIPE
	FLANGE
	PIPE UP
	PIPE DOWN

**HVAC EQUIPMENT DESIGNATION**

SYMBOL	DEFINITION
	AIR CONDITIONING UNIT
	AIR HANDLING UNIT
	AIR SEPARATOR
	BOILER
	CHILLER
	EXHAUST FAN
	EXPANSION TANK
	FUME EXHAUST HEAT RECOVERY UNIT
	PUMP
	REHEAT COIL
	SOUND ATTENUATOR
	UNIT HEATER

**ENERGY RECOVERY UNIT (ALTERNATE #5)**

BASIS OF DESIGN		REMARKS
SERVICE/LOCATION	TOILET EXHAUST/ROOF	F/N/C
CFM	1125	
ESP (IN. W.G.)	0.5	
FAN RPM	974	
BHP	1/4	
TYPE	CENTR.	
DRIVE ARRANGEMENT	BELT	
ROOF OPENING (IN.)	18.5x18.5	
MANUFACTURER	GREENHECK	
MODEL NO.	GB-16HP-4	
GENERAL EXHAUST/SCIENCE/ROOF/DWG.	18,000	INCLUDE ENERGY RECOVERY UNIT
UPLAST FLOW	N/A	
STROBIC	TS35250012	
DIRCT	8x8	
DIRCT	G-075-D	
BRAMASSED STORAGE	200	
DIRCT	1/25	
DIRCT	115/1/60	
DIRCT	115/1/60	
DIRCT	115/1/60	
DIRCT	115/1/60	
DIRCT	115/1/60	
DIRCT	115/1/60	
DIRCT	115/1/60	

**UNIT HEATER SCHEDULE**

TAG NO.	LOCATION	CAPACITY (MBH)	CFM	PROP. GLYCOL (GPM)	HP	TYPE	REMARKS
UH-1	SEE PLANS	26.0	550	1.75	40%	1/20	115/1/60 RELOCATE UNITS PREVIOUSLY MOUNTED ON 2ND FL., FROM USM STORAGE
UH-2	SEE PLANS	800	-	40%	1/8	115/1/60	INSTALL DUNHAM-BUSH UNITS FROM USM STORAGE (QTY. 4)
UH-3	SEE PLANS	1100	-	-	1/2	115/1/60	INSTALL DUNHAM-BUSH UNITS FROM USM STORAGE (QTY. 2)

**SOUND ATTENUATOR SCHEDULE**

TAG NO.	SERVICE/LOCATION	CFM	SIZE (IN. L) (W x H x L)	MAX. S.P.	DYNAMIC INSERTION LOSS (DB)	REMARKS									
SA-1	PHYSICS LAB	2,350	28x12x40	0.25	3	4	7	15	26	35	21	7	VIBRO-ACOUSTICS	RFL-HV-F9	

