Heat Recovery Units

AIR HANDLING UNIT No.	**HRU-5 & 6**			
SERVICE AREA	Maintenance and Repair Building - East High Bay			
MANUFACTURER	Tempeff			
MODEL	RG 15000			
SUPPLY FILTER TYPE	**2" Merv-10**			
EXHAUST FILTER TYPE	**None**			
BALANCED AIRFLOW CONDITION				
SUPPLY FAN - SIZE/TYPE	ANPA 22			
AIRFLOW RATE (cfm) (l/s)	**18190**		8585	
TOTAL STATIC REQUIRED (in.H_2O) (Pa)	**2.85**		712.50	
EXTERNAL STATIC REQUIRED (in.H2O) (Pa)	**1.50**		375.00	
MOTOR (Bhp/Hp) (bkW/kW)	**7.31**	**10.00**	5.45	7.46
SPEED (rpm)	1617			
EXHAUST FAN - SIZE/TYPE	ANPA 22			
AIRFLOW RATE (cfm) (l/s)	**18051**		8519	
TOTAL STATIC REQUIRED (in.H_2O) (Pa)	**2.80**		700.00	
EXTERNAL STATIC REQUIRED (in.H2O) (Pa)	**2.00**		500.00	
MOTOR (Bhp/Hp) (bkW/kW)	**7.19**	**10.00**	5.36	7.46
SPEED (rpm)	1604			
HEAT RECOVERY SECTION				
SUPPLY AIRFLOW (cfm) (l/s)	**18051**		8519	
EXHAUST AIRFLOW (cfm) (l/s)	**18051**		8519	
WINTER ENERGY RECOVERY (MBH) (kW)	**1682.71**		493.2	
WINTER RECOVERY FACTOR (%)	**86.30**			
WINTER SUPPLY AIR TEMP. AFTER UNIT (°F) (°C)	**56.31**		13.51	
HEATING EXCHANGER				
MAX GAS HEATING INPUT (MBH)	**1200**			
MAX GAS HEATING OUTPUT (MBH)	**960**			
ENTERING AIR TEMP (°F) (°C)	**55.70**		13.17	
LEAVING AIR TEMP (°F) (°C)	**104.30**		40.17	
INBALANCED AIRFLOW CONDITION (TAILPIPE EXHAUST SYSTEM FULL OPERATION)				
SUPPLY FAN - SIZE/TYPE	ANPA 22			
AIRFLOW RATE (cfm) (l/s)	**18190**		8585	
TOTAL STATIC REQUIRED (in.H_2O) (Pa)	**2.65**		662.50	
EXTERNAL STATIC REQUIRED (in.H2O) (Pa)	**1.50**		375.00	
MOTOR (Bhp/Hp) (bkW/kW)	**7.31**	**10.00**	5.45	7.46
SPEED (rpm)	1617			
EXHAUST FAN - SIZE/TYPE	ANPA 22			
AIRFLOW RATE (cfm) (l/s)	**11731**		5536	
TOTAL STATIC REQUIRED (in.H_2O) (Pa)	**2.42**		605.00	
EXTERNAL STATIC REQUIRED (in.H2O) (Pa)	**2.00**		500.00	
MOTOR (Bhp/Hp) (bkW/kW)	**7.19**	**10.00**	5.36	7.46
SPEED (rpm)	1604			
HEAT RECOVERY SECTION				
SUPPLY AIRFLOW (cfm) (l/s)	**14650**		6914	
EXHAUST AIRFLOW (cfm) (l/s)	**11731**		5536	
WINTER ENERGY RECOVERY (MBH) (kW)	**1200.31**		351.8	

WINTER RECOVERY FACTOR (%)	**75.90**	
WINTER SUPPLY AIR TEMP. AFTER UNIT (°F) (°C)	**45.86**	7.70
BYPASS AIRFLOW (cfm) (l/s)	**3540**	1671
HEATING EXCHANGER		
MAX GAS HEATING INPUT (MBH)	**1200**	
MAX GAS HEATING OUTPUT (MBH)	**960**	
ENTERING AIR TEMP (°F) (°C)	**28.30**	-2.06
LEAVING AIR TEMP (°F) (°C)	**76.30**	24.61
UNIT TOTAL LENGTH (in.) (mm)	**357.25**	9074.15
UNIT TOTAL WIDTH (in.) (mm)	**114.13**	2898.78
UNIT TOTAL HEIGHT (in.) (mm)	**106.25**	2698.75
UNIT WEIGHT (lbs) (kg)	**21930**	9947

Notes:	**2" Foam Injected Panels**
	All Sections c/w Hinged Access Doors and Locking Latches
	Multi-Damper Switchover Section c/w Actuators
	SS Drain Pans under Heat Exchanger(s) w/ 1" NPT Connections
	Galvanized Heat Exchanger Frames
	Galvanized Damper Blades, Damper Rods and Axles
	Exterior/ Interior Casing: 24 Ga G90 Galv
	10 HP WEG ODP Premium Eff. 4 Pole 215T Frame
	SA Drive: ACH580-022A-6; RA Drive: ACH580-01-022A-6
	1in. Seismic Spring Isolation; Single Point Power 600V/3ø; Low Limit;
	SA Pre-Filter: Dafco Merv 10 (2") 400 HC; Quick Connect;
	Heatco HDB-HPP-400-1200 Indirect Gas Burner 15:1 Turndown;
	8" 10 Ga Baseframe; Dwyer DH3 Digihelic
	Dwyer Magnehelic 605 Series (4-20mA Out)
	External Enclosure w/ Hood; Enclosure Dampers w/ Actuators
	Enclosure Temperature Controls; Enclosure Transformer
	Enclosure Cooler; Enclosure Heater
	SA Insulated Bypass Dampers with Modulate Belimo Actuator
	Units shall be manufactured and delivered within thirteen (13) weeks
	following approval of shop drawings.

SMS Engineering

Heat Recovery Unit Schedule

Project:	**Transit Maintenance and Repair Building Mechanical Upgrade - East High Bay**		
File:	25-330-01	Designer:	AJ
Date:	Jan-26	Sheet:	**MS-1-R0**