WORK SHEET:	AREA U - ADMINISTRATION BUILDING - FURNACE SPECIFICATIONS		
DESIGNED BY:	DD/JC	CHECKED BY: AG, REV1: JC/DD	
DESIGN DATE:	2010-06-10	CHECK DATE: 11/30/2010, REV1: 01/24/2011	
CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT		
JOB NAME:	WEWPCC HVAC REPLACEMENT		
JOB NO.:	CW-10-M660-1		
TAG:	U700 - REV1		

UNIT TYPE:	FORCED AIR FURNACE	UNIT MODEL NO.:	CARRIER 58MCB, ENGA XE OR
			APPROVED EQUAL IN ACCORDANCE
			WITH B6
MOUNTING:	INDOOR BASE MOUNTED (Heated	SERVICE ACCESS:	FRONT SIDE, 0.76 mm THICK
	Space)		REMOVABLE ACCESS PANEL
APPROX. SHIPPING WEIGHT:	kg	NO. OF PIECES:	1
MAXIMUM DIMENSIONS:	724 L x 445 W x 1029 H		
CASING:	0.76 mm THICKNESS MINIMUM,	INSULATION:	FOIL FACED INSULATION IN HEAT
	PRE-PAINTED GALVANIZED STEEL		EXCHANGER SECTION
APPROVALS:	CSA 2 3 CETL ETLAND REQUIREME	ENTS OF LOCAL AHL (DOL M	ECHANICAL & ENGINEERING BRANCH)

SUPPLY AIR DATA

AIR FLOW (NORMAL):	556 L/s	ESP:	187 Pa (0.75 inch W.C.)
FAN SIZE:		QTY:	1
FAN TYPE:	CENTRIFUGAL	RPM:	
MOUNTING:	INTERNALLY SOFT MOUNTED	TSP:	Ра
MAX. SOUND POWER LEVEL:	dba		
HOUSING CONST.:	STEEL	WHEEL CONST.:	GALVANIZED STEEL
MOTOR SIZE:	0.37 kW	TYPE:	PSC TYPE
ВНР:	kW	DRIVE:	MULTI SPEED, DIRECT DRIVE, SF OF DRIVE 1.5
AIR OPENINGS	LOCATION	DAMPER TYPE	OPERATION
SUPPLY AIR	ТОР		
RETURN AIR	RIGHT SIDE		
OUTSIDE AIR	RETURN AIR DUCT		
EXHAUST AIR			
PROFILE PLATE			

QTY/SIZE/TYPE:		406 x 635 x 19 WASHABLE	ТҮРЕ	
TOTAL GROSS AREA:	m²	FACE VELOCITY (MAX/ACT	TUAL): 2.23 m/s (MAX)/	m/s (ACT)
FRAME:		ORIENTATION:	FLAT	
SPARES:				

MIXED AIR SECTION BAFFLING:	NO	ACCESS SIDE:	N/A	
RELIEF:	NO	RELIEF AIR DAMPER:	NO	
OUTDOOR AIR DAMPER:	NO	RETURN AIR DAMPER:	NO	
OUTDOOR AIR REQUIREMENT:	10%			

HEATING SECTION DATA

TYPE:	INDIRECT-FIRED	BURNER TURNDOWN:	
GAS SUPPLY:	NATURAL GAS	HEAT INPUT:	17.6 kW (60,000 Btuh)
INLET PRESSURE:	3,487 Pa	HEAT OUTPUT:	16.4 kW (56,000 Btuh)
FIELD CONNECTION SIZE:	mm	TEMPERATURE RISE:	25°C

PRIMARY MATERIAL:	ALUMINIZED STEEL
SECONDARY MATERIAL:	ALUMINIZED STEEL
DRAIN PAN:	ALUMINIZED STEEL

DES	IGNED BY: DD/JC	CHECKED BY: AG, REV1: JC/DD	
DES	IGN DATE: 2010-06-10	CHECK DATE: 11/30/2010, REV1: 01/24/2011	
CUSTOMER:	CITY OF WINNIPEG, WATER AND W	VASTE DEPARTMENT	
JOB NAME:	WEWPCC HVAC REPLACEMENT		
JOB NO.:	CW 10 M660 1	CW-10-M660-1	

	UNIT MODEL NO.:	CARRIER 24ABB3 OR APPROVED
		EQUAL IN ACCORDANCE WITH B6
14	CABINET:	GALVANIZED STEEL, BONDERIZED, POWDERCOATED
Kg	CAPACITY:	10.6 KW (3 tons of refrigeration)
R-410A	REGRIGERANT CHARGE:	2.4 KG
SCROLL	COIL:	MECHANICALLY BONDED
		ALUMINUM FINS TO COPPER TUBES
m²	FINS PER INCH:	
	CIRCUITS:	
PROPELLER TYPE, DIRECT DRIVE	AIRFLOW:	1,394 L/s
0.19 Kw	AIR DISCHARGE:	VERTICAL
RPM	ELECTRICAL:	208 VOLTS 1 PHASE 60 HZ
	Kg R-410A SCROLL m ² PROPELLER TYPE, DIRECT DRIVE 0.19 Kw	Kg CAPACITY: R-410A REGRIGERANT CHARGE: SCROLL COIL: m ² FINS PER INCH: CIRCUITS: CIRCUITS: PROPELLER TYPE, DIRECT DRIVE AIRFLOW: 0.19 Kw AIR DISCHARGE:

COOLING COIL			
UNIT TYPE:	DX, VERTICAL N-TYPE	UNIT MODEL NO.:	CARRIER CNPVU OR APPROVED
			EQUAL IN ACCORDANCE WITH B6
CABINET:	UNCASED	TUBE MATERIAL:	COPPER
CAPACITY:	10.6 KW (3 tons of refrigeration)	REFRIGERANT:	R-410A
ELECTICAL DATA			
UNIT POWER SUPPLY:	115 VOLTS 1 PHASE 60 HZ	CONTROL CIRCUIT:	AMPS
SUPPLY MOTOR F.L.A.:	AMPS	MAX. FUSE (D.E.):	AMPS
MAIN FEEDER AMPACITY:	AMPS	MAX. BREAKER:	AMPS
DISCONNECT SWITCH:	NON FUSED - BY OTHERS		

CONTROL DATA

Applicable Documents:

WORK SHEET:	AREA U - ADMINISTRATION BUILDING - FURNACE SPECIFICATIONS		
DESIGNED BY	DD/JC	CHECKED BY: AG, REV1: JC/DD	
DESIGN DATE:	2010-06-10	CHECK DATE: 11/30/2010, REV1: 01/24/2011	
CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT		
JOB NAME:	WEWPCC HVAC REPLACEMENT		
JOB NO.:	CW-10-M660-1		
TAG:	U705 - REV1		
TAG.	6703 - REVI		

UNIT TYPE:	FORCED AIR FURNACE	UNIT MODEL NO.:	CARRIER 58MCB, ENGA XE OR
			APPROVED EQUAL IN ACCORDANCE
			WITH B6
MOUNTING:	INDOOR BASE MOUNTED (Heated	SERVICE ACCESS:	FRONT SIDE, 0.76 mm THICK
	Space)		REMOVABLE ACCESS PANEL
APPROX. SHIPPING WEIGHT:	kg	NO. OF PIECES:	1
MAXIMUM DIMENSIONS:	724 L x 533 W x 1029 H		
CASING:	0.76 mm THICKNESS MINIMUM,	INSULATION:	FOIL FACED INSULATION IN HEAT
	PRE-PAINTED GALVANIZED STEEL		EXCHANGER SECTION
APPROVALS:	CSA 2.3, CETL, ETL AND REQUIREM	ENTS OF LOCAL AHJ (DOL ME	CHANICAL & ENGINEERING BRANCH)

SUPPLY AIR DATA

PROFILE PLATE

AIR FLOW (NORMAL):	755 L/s	ESP:	187 Pa (0.75 inch W.C.)
FAN SIZE:		QTY:	1
FAN TYPE:	CENTRIFUGAL	RPM:	
MOUNTING:	INTERNALLY SOFT MOUNTED	TSP:	Ра
MAX. SOUND POWER LEVE	EL: dba		
HOUSING CONST.:	STEEL	WHEEL CONST .:	GALVANIZED STEEL
MOTOR SIZE:	0.56 kW	TYPE:	PSC TYPE
BHP:	kW	DRIVE:	MULTI SPEED, DIRECT DRIVE, SF OF DRIVE 1.5
AIR OPENINGS	LOCATION	DAMPER TYPE	OPERATION
SUPPLY AIR	ТОР		
RETURN AIR	LEFT SIDE		
OUTSIDE AIR	RETURN AIR DUCT		
EXHAUST AIR			

QTY/SIZE/TYPE:		508 x 635 x 19 WASHABLE TYPE		
TOTAL GROSS AREA:	m²	FACE VELOCITY (MAX/ACTUAL): 2.23 m/s	(MAX)/ m/s (ACT)	
FRAME:		ORIENTATION: FLAT		
SPARES:				

MIXED AIR SECTION				
BAFFLING:	NO	ACCESS SIDE:	N/A	
RELIEF:	NO	RELIEF AIR DAMPER:	NO	
OUTDOOR AIR DAMPER:	NO	RETURN AIR DAMPER:	NO	
OUTDOOR AIR REQUIREMENT:	10%			

HEATING SECTION DATA

TYPE:	INDIRECT-FIRED	BURNER TURNDOWN:	
GAS SUPPLY:	NATURAL GAS	HEAT INPUT:	23.4 kW (80,000 Btuh)
INLET PRESSURE:	3,487 Pa	HEAT OUTPUT:	21.7 kW (74,000 Btuh)
FIELD CONNECTION SIZE:	mm	TEMPERATURE RISE:	24°C

PRIMARY MATERIAL:	ALUMINIZED STEEL
SECONDARY MATERIAL:	ALUMINIZED STEEL
DRAIN PAN:	ALUMINIZED STEEL

WORK SHEET: DESIG	GNED BY: DD/JC	N BUILDING - FURNACE SPECIFICATIONS CHECKED BY: AG, REV1: JC/DD
DESIG	SN DATE: 2010-06-10	CHECK DATE: 11/30/2010, REV1: 01/24/2011
CUSTOMER:	CITY OF WINNIPEG, WATER AND W	/ASTE DEPARTMENT
JOB NAME:	WEWPCC HVAC REPLACEMENT	
	CW-10-M660-1	

UNIT TYPE:	AIR COOLED	UNIT MODEL NO.:	CARRIER 24ABB3 OR APPROVED
			EQUAL IN ACCORDANCE WITH B6
SEER (MAXIMUM):	14	CABINET:	GALVANIZED STEEL, BONDERIZED, POWDERCOATED
OPERATING WEIGHT:	Kg	CAPACITY:	14 KW (4 tons of refrigeration)
REFRIGERANT:	R-410A	REGRIGERANT CHARGE:	3.2 KG
COMPRESSOR TYPE:	SCROLL	COIL:	MECHANICALLY BONDED
			ALUMINUM FINS TO COPPER TUBES
FACE AREA:	m²	FINS PER INCH:	
ROWS:		CIRCUITS:	
COOLING FAN:	PROPELLER TYPE, DIRECT DRIVE	AIRFLOW:	1,588 L/s
MOTOR SIZE:	0.19 Kw	AIR DISCHARGE:	VERTICAL
MOTOR SPEED:	RPM	ELECTRICAL:	208 VOLTS 1 PHASE 60 HZ

COOLING COIL			
UNIT TYPE:	DX, VERTICAL N-TYPE	UNIT MODEL NO.:	CARRIER CNPVU OR APPROVED
			EQUAL IN ACCORDANCE WITH B6
CABINET:	UNCASED	TUBE MATERIAL:	COPPER
CAPACITY:	14 KW (4 tons of refrigeration)	REFRIGERANT:	R-410A
ELECTICAL DATA			
UNIT POWER SUPPLY:	115 VOLTS 1 PHASE 60 HZ	CONTROL CIRCUIT:	AMPS
SUPPLY MOTOR F.L.A.:	AMPS	MAX. FUSE (D.E.):	AMPS
MAIN FEEDER AMPACITY:	AMPS	MAX. BREAKER:	AMPS
DISCONNECT SWITCH:	NON FUSED - BY OTHERS		

CONTROL DATA

Applicable Documents:

AREA U - ADMINISTRATIO	AREA U - ADMINISTRATION BUILDING - FURNACE SPECIFICATIONS		
NED BY: DD/JC	CHECKED BY: AG, REV1: JC/DD		
N DATE: 2010-06-10	CHECK DATE: 11/30/2010, REV1: 01/24/2011		
CITY OF WINNIPEG, WATER AND	WASTE DEPARTMENT		
WEWPCC HVAC REPLACEMENT			
CW-10-M660-1			
U710 - REV1			
	NED BY: DD/JC N DATE: 2010-06-10 CITY OF WINNIPEG, WATER AND WEWPCC HVAC REPLACEMENT CW-10-M660-1		

UNIT TYPE:	FORCED AIR FURNACE	UNIT MODEL NO .:	CARRIER 58MCB, ENGA XE OR
			APPROVED EQUAL IN ACCORDANCE
			WITH B6
MOUNTING:	INDOOR BASE MOUNTED (Heated	SERVICE ACCESS:	FRONT SIDE, 0.76 mm THICK
	Space)		REMOVABLE ACCESS PANEL
APPROX. SHIPPING WEIGHT:	kg	NO. OF PIECES:	1
MAXIMUM DIMENSIONS:	724 L x 622 W x 1029 H		
CASING:	0.76 mm THICKNESS MINIMUM,	INSULATION:	FOIL FACED INSULATION IN HEAT
	PRE-PAINTED GALVANIZED STEEL		EXCHANGER SECTION
APPROVALS:	CSA 2.3, CETL, ETL AND REQUIREM	ENTS OF LOCAL AHJ (DOL M	ECHANICAL & ENGINEERING BRANCH)

SUPPLY AIR DATA

AIR FLOW (NORMAL):	944 L/s	ESP:	187 Pa (0.75 inch W.C.)
FAN SIZE:		QTY:	1
FAN TYPE:	CENTRIFUGAL	RPM:	
MOUNTING:	INTERNALLY SOFT MOUNTED	TSP:	Pa
MAX. SOUND POWER LEVEL:	dba		
HOUSING CONST.:	STEEL	WHEEL CONST .:	GALVANIZED STEEL
MOTOR SIZE:	0.56 kW	TYPE:	PSC TYPE
ВНР:	kW	DRIVE:	MULTI SPEED, DIRECT DRIVE, SF OF DRIVE 1.5
AIR OPENINGS	LOCATION	DAMPER TYPE	OPERATION
SUPPLY AIR	BOTTOM		
RETURN AIR	ТОР		
OUTSIDE AIR	RETURN AIR DUCT		
EXHAUST AIR			
PROFILE PLATE			

QTY/SIZE/TYPE:		2 - 406 x 635 x 19 WASHABLE TYPE		
TOTAL GROSS AREA:	m²	FACE VELOCITY (MAX/AC	TUAL): 2.23 m/s (MAX)/	m/s (ACT)
FRAME:		ORIENTATION:	FLAT	
SPARES:				

MIXED AIR SECTION BAFFLING:	NO	ACCESS SIDE:	N/A	
RELIEF:	NO	RELIEF AIR DAMPER:	NO	
OUTDOOR AIR DAMPER:	NO	RETURN AIR DAMPER:	NO	
OUTDOOR AIR REQUIREMENT:	35%			

HEATING SECTION DATA

TYPE:	INDIRECT-FIRED	BURNER TURNDOWN:	
GAS SUPPLY:	NATURAL GAS	HEAT INPUT:	35.1 kW (120,000 Btuh)
INLET PRESSURE:	3,487 Pa	HEAT OUTPUT:	32.8 kW (112,000 Btuh)
FIELD CONNECTION SIZE:	mm	TEMPERATURE RISE:	29°C

PRIMARY MATERIAL:	ALUMINIZED STEEL
SECONDARY MATERIAL:	ALUMINIZED STEEL
DRAIN PAN:	ALUMINIZED STEEL

WORK SHEET:	CHECKED BY: AG, REV1: JC/DD			
	IGNED BY: DD/JC IGN DATE: 2010-06-10	CHECK DATE: 11/30/2010, REV1: 01/24/2011		
		CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT		
CUSTOMER:	CITY OF WINNIPEG, WATER AND V	WASTE DEPARTMENT		
CUSTOMER: JOB NAME:	CITY OF WINNIPEG, WATER AND V WEWPCC HVAC REPLACEMENT	NASTE DEPARTMENT		

UNIT TYPE:	AIR COOLED	UNIT MODEL NO.:	CARRIER 24ABB3 OR APPROVED
			EQUAL IN ACCORDANCE WITH B6
SEER (MAXIMUM):	13.5	CABINET:	GALVANIZED STEEL, BONDERIZED, POWDERCOATED
OPERATING WEIGHT:	Kg	CAPACITY:	17.6 KW (5 tons of refrigeration)
REFRIGERANT:	R-410A	REGRIGERANT CHARGE:	3.7 KG
COMPRESSOR TYPE:	SCROLL	COIL:	MECHANICALLY BONDED
			ALUMINUM FINS TO COPPER TUBES
FACE AREA:	m²	FINS PER INCH:	
ROWS:		CIRCUITS:	
COOLING FAN:	PROPELLER TYPE, DIRECT DRIVE	AIRFLOW:	1,588 L/s
MOTOR SIZE:	0.19 Kw	AIR DISCHARGE:	VERTICAL
MOTOR SPEED:	RPM	ELECTRICAL:	208 VOLTS 1 PHASE 60 HZ

UNIT TYPE:	DX, VERTICAL N-TYPE	UNIT MODEL NO.:	CARRIER CNPVU OR APPROVED
			EQUAL IN ACCORDANCE WITH B6
CABINET:	UNCASED	TUBE MATERIAL:	COPPER
CAPACITY:	17.6 KW (5 tons of refrigeration)	REFRIGERANT:	R-410A
ELECTICAL DATA			
UNIT POWER SUPPLY:	115 VOLTS 1 PHASE 60 HZ	CONTROL CIRCUIT:	AMPS
SUPPLY MOTOR F.L.A.:	AMPS	MAX. FUSE (D.E.):	AMPS
MAIN FEEDER AMPACITY:	AMPS	MAX. BREAKER:	AMPS
DISCONNECT SWITCH:	NON FUSED - BY OTHERS		

CONTROL DATA Applicable Documents:

WORK SHEET:	AREA U - ADMINISTRATION BUILDING - FURNACE SPECIFICATIONS			
DESIGNED BY:	DD/JC	CHECKED BY: AG, REV1: JC/DD		
DESIGN DATE:	2010-06-10	CHECK DATE: 11/30/2010, REV1: 01/24/2011		
CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT			
JOB NAME:	WEWPCC HVAC REPLACEMENT			
JOB NO.:	CW-10-M660-1			
TAG:	U780 - REV1			
140.	0780-11211			

UNIT TYPE:	FORCED AIR FURNACE	UNIT MODEL NO.:	CARRIER 58MCB, ENGA XE OR
			APPROVED EQUAL IN ACCORDANCE
			WITH B6
MOUNTING:	INDOOR BASE MOUNTED (Heated	SERVICE ACCESS:	FRONT SIDE, 0.76 mm THICK
	Space)		REMOVABLE ACCESS PANEL
APPROX. SHIPPING WEIGHT:	kg	NO. OF PIECES:	1
MAXIMUM DIMENSIONS:	724 L x 445 W x 1029 H		
CASING:	0.76 mm THICKNESS MINIMUM,	INSULATION:	FOIL FACED INSULATION IN HEAT
	PRE-PAINTED GALVANIZED STEEL		EXCHANGER SECTION
APPROVALS:	CSA 2 3 CETL ETLAND REQUIREME	ENTS OF LOCAL AHL (DOL M	ECHANICAL & ENGINEERING BRANCH)

SUPPLY AIR DATA

PROFILE PLATE

AIR FLOW (NORMAL):	378 L/s	ESP:	187 Pa (0.75 inch W.C.)
FAN SIZE:		QTY:	1
FAN TYPE:	CENTRIFUGAL	RPM:	
MOUNTING:	INTERNALLY SOFT MOUNTED	TSP:	Ра
MAX. SOUND POWER LEVEL	.: dba		
HOUSING CONST.:	STEEL	WHEEL CONST .:	GALVANIZED STEEL
MOTOR SIZE:	0.25 kW	TYPE:	PSC TYPE
BHP:	kW	DRIVE:	MULTI SPEED, DIRECT DRIVE, SF OF DRIVE 1.5
AIR OPENINGS	LOCATION	DAMPER TYPE	OPERATION
SUPPLY AIR	ТОР		
RETURN AIR	RIGHT SIDE		
OUTSIDE AIR	RETURN AIR DUCT		
EXHAUST AIR			

QTY/SIZE/TYPE: 1 - 406 x 635 x 19 WASHABLE TYPE				
TOTAL GROSS AREA:	m²	FACE VELOCITY (MAX/ACTUAL)	2.23 m/s (MAX)/	m/s (ACT)
FRAME:		ORIENTATION:	FLAT	
SPARES:				

MIXED AIR SECTION				
BAFFLING:	NO	ACCESS SIDE:	N/A	
RELIEF:	NO	RELIEF AIR DAMPER:	NO	
OUTDOOR AIR DAMPER:	NO	RETURN AIR DAMPER:	NO	
OUTDOOR AIR REQUIREMENT:	10%			

HEATING SECTION DATA

TYPE:	INDIRECT-FIRED	BURNER TURNDOWN:	
GAS SUPPLY:	NATURAL GAS	HEAT INPUT:	11.7 kW (40,000 Btuh)
INLET PRESSURE:	3,487 Pa	HEAT OUTPUT:	10.8 kW (37,000 Btuh)
FIELD CONNECTION SIZE:	mm	TEMPERATURE RISE:	24°C

PRIMARY MATERIAL:	ALUMINIZED STEEL
THUR ANT WOATEROAE.	ALONINITIZED STELLE
SECONDARY MATERIAL:	ALUMINIZED STEEL
SECONDAILT MATERIAL	ALOWINGZED STELL
DRAIN PAN:	ALUMINIZED STEEL
510 111 1 111	

WORK SHEET: DESIG	GNED BY: DD/JC	N BUILDING - FURNACE SPECIFICATIONS CHECKED BY: AG, REV1: JC/DD	
DESIG	GN DATE: 2010-06-10	CHECK DATE: 11/30/2010, REV1: 01/24/2011	
CUSTOMER:	CITY OF WINNIPEG, WATER AND W	/ASTE DEPARTMENT	
JOB NAME:	WEWPCC HVAC REPLACEMENT		
		CW-10-M660-1	

UNIT TYPE:	AIR COOLED	UNIT MODEL NO.:	CARRIER 24ABB3 OR APPROVED
			EQUAL IN ACCORDANCE WITH B6
SEER (MAXIMUM):	14.25	CABINET:	GALVANIZED STEEL, BONDERIZED, POWDERCOATED
OPERATING WEIGHT:	Kg	CAPACITY:	7 KW (2 tons of refrigeration)
REFRIGERANT:	R-410A	REGRIGERANT CHARGE:	1.7 KG
COMPRESSOR TYPE:	SCROLL	COIL:	MECHANICALLY BONDED
			ALUMINUM FINS TO COPPER TUBES
FACE AREA:	m ²	FINS PER INCH:	
ROWS:		CIRCUITS:	
COOLING FAN:	PROPELLER TYPE, DIRECT DRIVE	AIRFLOW:	1,047 L/s
MOTOR SIZE:	0.075 Kw	AIR DISCHARGE:	VERTICAL
MOTOR SPEED:	RPM	ELECTRICAL:	208 VOLTS 1 PHASE 60 HZ

COOLING COIL			
UNIT TYPE:	DX, VERTICAL N-TYPE	UNIT MODEL NO.:	CARRIER CNPVU OR APPROVED
			EQUAL IN ACCORDANCE WITH B6
CABINET:	UNCASED	TUBE MATERIAL:	COPPER
CAPACITY:	7 KW (2 tons of refrigeration)	REFRIGERANT:	R-410A
ELECTICAL DATA			
UNIT POWER SUPPLY:	115 VOLTS 1 PHASE 60 HZ	CONTROL CIRCUIT:	AMPS
SUPPLY MOTOR F.L.A.:	AMPS	MAX. FUSE (D.E.):	AMPS
MAIN FEEDER AMPACITY:	AMPS	MAX. BREAKER:	AMPS
DISCONNECT SWITCH:	NON FUSED - BY OTHERS		

CONTROL DATA

Applicable Documents:

WORK SHEET:	AREA U - ADMINISTRATION BUILDING - FURNACE SPECIFICATIONS		
DESIGNED BY	DD/JC	CHECKED BY: AG, REV1: JC/DD	
DESIGN DATE	2010-06-10	CHECK DATE: 11/30/2010, REV1: 01/24/2011	
CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT		
JOB NAME:	WEWPCC HVAC REPLACEMENT		
JOB NO.:	CW-10-M660-1		
TAG:	U785 - REV1		

UNIT TYPE:	FORCED AIR FURNACE	UNIT MODEL NO.:	CARRIER 58MCB, ENGA XE OR APPROVED EQUAL IN ACCORDANCE WITH B6
MOUNTING:	INDOOR BASE MOUNTED (Heated Space)	SERVICE ACCESS:	1 mm THICK REMOVABLE ACCESS PANEL
APPROX. SHIPPING WEIGHT:	kg	NO. OF PIECES:	1
MAXIMUM DIMENSIONS:	775 L x 400 W x 1425 H		
CASING:	1 mm THICKNESS MINIMUM, SATIN COATED SHEET METAL WITH BAKED POWDER COATED ENAMEL FINISH		13 mm FOIL BACKED FIBERGLASS INSULATION
APPROVALS:	CSA 2.3, CETL, ETL AND REQUIREME	NTS OF LOCAL AHJ (DOL MI	ECHANICAL & ENGINEERING BRANCH)

SUPPLY AIR DATA			
AIR FLOW (NORMAL):	283 L/s	ESP:	187 Pa (0.75 inch W.C.)
FAN SIZE:		QTY:	1
FAN TYPE:	CENTRIFUGAL	RPM:	
MOUNTING:	RUBBER MOUNTED	TSP:	Ра
MAX. SOUND POWER LEVEL:	dba		
HOUSING CONST.:	STEEL	WHEEL CONST.:	STEEL
MOTOR SIZE:	0.19 kW	TYPE:	
BHP:	kW	DRIVE:	BELT DRIVE, SF OF DRIVE 1.5
AIR OPENINGS	LOCATION	DAMPER TYPE	OPERATION
SUPPLY AIR	TOP		
RETURN AIR			
OUTSIDE AIR	LEFT SIDE		
EXHAUST AIR			
PROFILE PLATE			

QTY/SIZE/TYPE:		1 - x x 25 WASHABLE TYPE		
TOTAL GROSS AREA:	m²	FACE VELOCITY (MAX/ACTUAL)	: 2.23 m/s (MAX)/	m/s (ACT)
FRAME:		ORIENTATION:	FLAT	
SPARES:				

MIXED AIR SECTION				
BAFFLING:	NO	ACCESS SIDE:	N/A	
RELIEF:	NO	RELIEF AIR DAMPER:	NO	
OUTDOOR AIR DAMPER:	NO	RETURN AIR DAMPER:	NO	
OUTDOOR AIR REQUIREMENT:	100%			

HEATING SECTION DATA

TYPE:	INDIRECT-FIRED	BURNER TURNDOWN:	
GAS SUPPLY:	NATURAL GAS	HEAT INPUT:	19 kW (65,000 Btuh)
INLET PRESSURE:	3,487 Pa	HEAT OUTPUT:	15.2 kW (52,000 Btuh)
FIELD CONNECTION SIZE:	mm	TEMPERATURE RISE:	45°C

PRIMARY MATERIAL:	STAINLESS STEEL
SECONDARY MATERIAL:	STAINLESS STEEL
DRAIN PAN:	STAINLESS STEEL

WORK SHEET:	AREA U - ADMINISTRATION	BUILDING - FURNACE	SPECIFICATIONS		
DESIGNED E	: DD/JC CHECKED BY: AG, REV1: JC/DD				
DESIGN DAT	TE: 2010-06-10	CHECK D/	ATE: 11/30/2010, REV1: 01/24/2011		
CUSTOMER:	CITY OF WINNIPEG, WATER AND W	ASTE DEPARTMENT			
JOB NAME:	WEWPCC HVAC REPLACEMENT	WEWPCC HVAC REPLACEMENT			
JOB NO.:	CW-10-M660-1				
TAG:	U785 - REV1				
CONDENSER					
UNIT TYPE:	AIR COOLED	UNIT MODEL NO.:	CARRIER 24ABB3 OR APPROVED EQUAL IN ACCORDANCE WITH B6		
SEER (MAXIMUM):	14.5	CABINET:	GALVANIZED STEEL, BONDERIZED, POWDERCOATED		
OPERATING WEIGHT:	Kg	CAPACITY:	5.3 KW (1.5 tons of refrigeration)		
REFRIGERANT:	R-410A	REGRIGERANT CHARGE:	1.6 KG		
COMPRESSOR TYPE:	SCROLL	COIL:	MECHANICALLY BONDED ALUMINUM FINS TO COPPER TUBES		
FACE AREA:	m²	FINS PER INCH:			
ROWS:		CIRCUITS:			
COOLING FAN:	PROPELLER TYPE, DIRECT DRIVE	AIRFLOW:	846 L/s		
MOTOR SIZE:	0.062 Kw	AIR DISCHARGE:	VERTICAL		
MOTOR SPEED:	RPM	ELECTRICAL:	208 VOLTS 1 PHASE 60 HZ		
UNIT TYPE:	DX, VERTICAL N-TYPE	UNIT MODEL NO.:	CARRIER CNPVU OR APPROVED EQUAL IN ACCORDANCE WITH B6		
CABINET:	UNCASED	TUBE MATERIAL:	COPPER		
CAPACITY:	5.3 KW (1.5 tons of refrigeration)	REFRIGERANT:	R-410A		
ELECTICAL DATA					
UNIT POWER SUPPLY:	115 VOLTS 1 PHASE 60 HZ	CONTROL CIRCUIT:	AMPS		
SUPPLY MOTOR F.L.A.:	AMPS	MAX. FUSE (D.E.):	AMPS		
MAIN FEEDER AMPACITY:	AMPS	MAX. BREAKER:	AMPS		
DISCONNECT SWITCH:	NON FUSED - BY OTHERS				
CONTROL DATA					
Applicable Documents:	Specification 23 54 16				

WORK SHEET:	ORK SHEET: AREA U - ADMINISTRATION BUILDING - FURNACE SPECIFICATIONS		
DESIGNED BY: DD/JC CHECKED BY: AG, REV1: JC/DD		CHECKED BY: AG, REV1: JC/DD	
DESIGN	DATE: 2010-06-10	CHECK DATE: 11/30/2010, REV1: 01/24/2011	
CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT		
JOB NAME:	WEWPCC HVAC REPLACEMENT		
JOB NO.:	CW-10-M660-1		
TAG:	U787 - REV1		

UNIT TYPE:	FORCED AIR FURNACE	UNIT MODEL NO.:	CARRIER 58MCB, ENGA XE OR APPROVED EQUAL IN ACCORDANCE WITH B6
MOUNTING:	INDOOR BASE MOUNTED (Heated Space)	SERVICE ACCESS:	1 mm THICK REMOVABLE ACCESS PANEL
APPROX. SHIPPING WEIGHT:	kg	NO. OF PIECES:	1
MAXIMUM DIMENSIONS:	775 L x 813 W x 1500 H		
CASING:	1 mm THICKNESS MINIMUM, SATIN COATED SHEET METAL WITH BAKED POWDER COATED ENAMEL FINISH		13 mm FOIL BACKED FIBERGLASS INSULATION
APPROVALS:	CSA 2.3, CETL, ETL AND REQUIREME	NTS OF LOCAL AHJ (DOL ME	CHANICAL & ENGINEERING BRANCH)

SUPPLY AIR DATA			
AIR FLOW (NORMAL):	788 L/s	ESP:	187 Pa (0.75 inch W.C.)
FAN SIZE:		QTY:	1
FAN TYPE:	CENTRIFUGAL	RPM:	
MOUNTING:	RUBBER MOUNTED	TSP:	Ра
MAX. SOUND POWER LEVEL:	dba		
HOUSING CONST.:	STEEL	WHEEL CONST.:	STEEL
MOTOR SIZE:	0.56 kW	TYPE:	
BHP:	kW	DRIVE:	BELT DRIVE, SF OF DRIVE 1.5
AIR OPENINGS	LOCATION	DAMPER TYPE	OPERATION
SUPPLY AIR	ТОР		
RETURN AIR			
OUTSIDE AIR	LEFT SIDE		
EXHAUST AIR			
PROFILE PLATE			

QTY/SIZE/TYPE:		1 - x x 25 WASHABLE TYPE		
TOTAL GROSS AREA:	m²	FACE VELOCITY (MAX/ACTUAL):	2.23 m/s (MAX)/	m/s (ACT)
FRAME:		ORIENTATION:	FLAT	
SPARES:				

BAFFLING:	NO	ACCESS SIDE:	N/A
RELIEF:	NO	RELIEF AIR DAMPER:	NO
OUTDOOR AIR DAMPER:	NO	RETURN AIR DAMPER:	NO
OUTDOOR AIR REQUIREMENT:	100%		

HEATING SECTION DATA

TYPE:	INDIRECT-FIRED	BURNER TURNDOWN:	
GAS SUPPLY:	NATURAL GAS	HEAT INPUT:	65.9 kW (225,000 Btuh)
INLET PRESSURE:	3,487 Pa	HEAT OUTPUT:	52.8 kW (180,000 Btuh)
FIELD CONNECTION SIZE:	mm	TEMPERATURE RISE:	56°C

FIXED PLATE HEAT EXCHANGER PRIMARY MATERIAL: STAINLESS STEEL

FRIMART MATERIAL.	STAINLESS STELL
SECONDARY MATERIAL:	STAINLESS STEEL
DRAIN PAN:	STAINLESS STEEL

DESIGNED BY: DD/JC		CHECKED BY: AG, REV1: JC/DD	
DES	GN DATE: 2010-06-10	CHECK DATE: 11/30/2010, REV1: 01/24/2011	
CUSTOMER:	CITY OF WINNIPEG, WATER AND W	VASTE DEPARTMENT	
JOB NAME:	WEWPCC HVAC REPLACEMENT	WEWPCC HVAC REPLACEMENT	
JOB NO.:	CW-10-M660-1		

UNIT TYPE:	AIR COOLED	UNIT MODEL NO.:	CARRIER 24ABB3 OR APPROVED
			EQUAL IN ACCORDANCE WITH B6
SEER (MAXIMUM):	14	CABINET:	GALVANIZED STEEL, BONDERIZED, POWDERCOATED
OPERATING WEIGHT:	Kg	CAPACITY:	14 KW (4 tons of refrigeration)
REFRIGERANT:	R-410A	REGRIGERANT CHARGE:	3.2 KG
COMPRESSOR TYPE:	SCROLL	COIL:	MECHANICALLY BONDED ALUMINUM FINS TO COPPER TUBES
FACE AREA:	m²	FINS PER INCH:	
ROWS:		CIRCUITS:	
COOLING FAN:	PROPELLER TYPE, DIRECT DRIVE	AIRFLOW:	1,588 L/s
MOTOR SIZE:	0.19 Kw	AIR DISCHARGE:	VERTICAL
MOTOR SPEED:	RPM	ELECTRICAL:	208 VOLTS 1 PHASE 60 HZ

COOLING COIL			
UNIT TYPE:	DX, VERTICAL N-TYPE	UNIT MODEL NO.:	CARRIER CNPVU OR APPROVED
			EQUAL IN ACCORDANCE WITH B6
CABINET:	UNCASED	TUBE MATERIAL:	COPPER
CAPACITY:	14 KW (4 tons of refrigeration)	REFRIGERANT:	R-410A
ELECTICAL DATA			
UNIT POWER SUPPLY:	115 VOLTS 1 PHASE 60 HZ	CONTROL CIRCUIT:	AMPS
SUPPLY MOTOR F.L.A.:	AMPS	MAX. FUSE (D.E.):	AMPS
MAIN FEEDER AMPACITY:	AMPS	MAX. BREAKER:	AMPS
DISCONNECT SWITCH:	NON FUSED - BY OTHERS		

CONTROL DATA

Applicable Documents: