

ENGINEERING DATA

SPLIT SYSTEM HEAT PUMPS

HP-I THRU 3: CARRIER MODEL FE4ANFOO2LOO AIR HANDLERS. FANS TO DELIVER 800 CFM AGAINST .5" S.P. TOTAL COOLING CAPACITY OF 23.28 MBH, SENSIBLE COOLING CAPACITY OF 18.08 MBH. HEATING CAPACITY OF 38.09 MBH. POWER SUPPLY TO BE 208-1-60, FAN MOTOR 1/2 HP, 4.3 AMPS. ACCESSORY ELECTRIC HEATER MODEL KFCEH290INO9, 9 KW, 32.8 A. HEATER \$ FAN MOTOR 49.5 A. 50 A. MOCP. OUTDOOR HEAT PUMP UNIT CARRIER MODEL 25VNA424A003, NOMINAL 2 TONS, 14.00 EER, SEER OF 22.0, COP €47 F - 3.78, COP € 17F - 2.62, 12.0 HSPF. POWER SUPPLY TO BE 208-1-60, 16.4 MCA, 25 A. MAX FUSE, COMPRESSOR RLA - 12.4 A.

HP-4 THRU 6: CARRIER MODEL FE4ANFOO3LOO AIR HANDLERS. FANS TO DELIVER 1200 CFM AGAINST .5" S.P. TOTAL COOLING CAPACITY OF 32.17 MBH, SENSIBLE COOLING CAPACITY OF 23.97 MBH. HEATING CAPACITY OF 34.8 MBH. POWER SUPPLY TO BE 208-1-60, FAN MOTOR 1/2 HP, 4.3 AMPS. ACCESSORY ELECTRIC HEATER MODEL KFCEH290INO9, 9 KW, 32.8 A. HEATER FAN MOTOR 49.5 A. 50 A. MOCP. OUTDOOR HEAT PUMP UNIT CARRIER MODEL 25 VNA 436 AOO3, NOMINAL 3 TONS, 13.00 EER, SEER OF 21.0, COP @47 F - 3.56, COP @ 17F - 2.38, 10.5 HSPF. POWER SUPPLY TO BE 208-1-60, 18 MCA, 30 A. MAX FUSE, COMPRESSOR RLA - 13.7 A.

HP-7: CARRIER MODEL FE4ANFOO5LOO AIR HANDLERS. FANS TO DELIVER 1600 CFM AGAINST .5" S.P. TOTAL COOLING CAPACITY OF 45.83 MBH, SENSIBLE COOLING CAPACITY OF 34.73 MBH. HEATING CAPACITY OF 45.24 MBH. POWER SUPPLY TO BE 208-1-60, FAN MOTOR 1/2 HP, 4.3 AMPS. ACCESSORY ELECTRIC HEATER MODEL KFCEH3001F15, 15 KW, 54.2 A. HEATER & FAN MOTOR 76.3 A., 80 A. MOCP. OUTDOOR HEAT PUMP UNIT CARRIER MODEL 25VNA448A003, NOMINAL 4 TONS, 13.00 EER, SEER OF 22.0, COP ●47 F - 3.40, COP ● ITF - 2.48, IO.5 HSPF. POWER SUPPLY TO BE 208-1-60, 27.4 MCA, 40 A. MAX FUSE, COMPRESSOR RLA - 21.2 A.

EXHAUST FAN DATA

EF-I: GREENHECK DIRECT DRIVE "VARI-GREEN" MODEL 6-133-V6-3/4 B-1/6. FAN IS TO EXHAUST 1340 CFM AGAINST 3/8" S.P. FAN SPEED 1140 RPM. POWER SUPPLY TO BE 120V - 60HZ - 1PH. FAN IS TO BE PROVIDED WITH ROOF CURB, BACK DRAFT [DAMPER AND BIRD SCREEN. FAN IS TO BE CONTROLLED BY TIME CLOCK.TIME CLOCK IS BY ELECTRICIAN.

EF-2: GREENHECK DIRECT DRIVE "VARI-GREEN" MODEL G-163-VG-1-B-1/2. FAN IS TO EXHAUST 2005 CFM AGAINST .5" S.P. FAN SPEED TO BE 945 RPM. POWER SUPPLY TO BE 208V-60HZ - I PH. FAN IS TO BE PROVIDED WITH ROOF CURB, BACKDRAFT DAMPER, BIRD SCREEN AND NEMA 3R MOTOR STARTER. FAN IS TO BE CONTROLLED BY TIME CLOCK. TIME ELECTRIC.

EF-3: GREENHECK DIRECT DRIVE "VARI-GREEN" MODEL SQ-80-VG/4/A. FAN IS TO EXHAUST 294 CFM AGAINST .5" S.P. POWER SUPPLY TO BE 120V-60HZ-1PH. FAN IS TO BE CONTROLLED BY TIME CLOCK. TIME CLOCK BY ELECTRIC.

EF-4: GREENHECK DIRECT DRIVE "VARI-GREEN" MODEL SQ-80-VG/4/A. FAN IS TO EXHAUST 404 CFM AGAINST .25" S.P. POWER SUPPLY TO BE 120V-60HZ-1PH. FAN IS TO BE CONTROLLED BY LINE VOLTAGE COOLING THERMOSTAT.

EF-5: GREENHECK DIRECT DRIVE "VARI-GREEN" MODEL SQ-60-VG/6/A. FAN IS TO EXHAUST I36 CFM AGAINST .25" S.P. POWER SUPPLY TO BE 120V-60HZ-1PH. FAN IS TO BE CONTROLLED BY TIME CLOCK. TIME CLOCK BY ELECTRIC. EF-6: GREENHECK DIRECT DRIVE "VARI-GREEN" MODEL

SQ-80-VG/4/A. FAN IS TO EXHAUST 404 CFM AGAINST .25" S.P. POWER SUPPLY TO BE 120V-60HZ-1PH. FAN IS TO BE CONTROLLED BY LINE VOLTAGE COOLING THERMOSTAT.

FV-0511VK2. EXHAUST RATE AS INDICATED ON THE DRAWING. BATHROOM FANS TO BE CONTROLLED BY LIGHT SWITCH, ELECTROOM BY COOLING THERMOSTAT. POWER SUPPLY TO BE 120V - 60HZ - 1PH.

DUCTLESS SPLIT UNITS

CC-I: FUJITSU SYSTEM # IBRLFCC, CEILING CASSETTE DUCTLESS HEAT PUMP MODEL AUUIBRLF. COOLING CAPACITY OF 18,000 BTU WITH 400 CFM AT HIGH SPEED. HEATING CAPACITY OF 21,600 BTU. INDOOR UNIT POWER .19 A. POWER SUPPLY IS OUTDOOR UNIT. OUTDOOR HEAT PUMP MODEL AOUIBRLFC. UNIT SEER 20.1, EER 11.2, HSPF 11.5, COP 3.95. POWER SUPPLY IS 208-1-60, 17.4 MCA, 20A WDS-I: IT ROOM - FUJITSU WALL MOUNTED DUCTLESS SPLIT SYSTEM #12LMASI, WALL MOUNTED HEAT PUMP MODEL ASUGI2LMAS. COOLING CAPACITY OF 12,000 BTU WITH 453 CFM AT HIGH SPEED. HEATING CAPACITY OF 16,000 BTU. INDOOR UNIT POWERED FROM OUTDOOR UNIT - 1.28 A OUTDOOR HEAT PUMP UNIT MODEL AOUGI2LMASI. UNIT SEER 23, EER 12.5, HSPF 12.5, COP 12.5. POWER SUPPLY IS 208-1-60, 11.5 MCA, 15 A. MAX. C.B.

GAS FIRED UNIT HEATERS

UH-I & 2: REZNOR MODEL UDX-200. HEATING CAPACITY TO BE 200,000 BTU INPUT, 166,000 BTU OUTPUT, 83% EFF. UNIT FULL LOAD AMPS - 4.6. HEATER TO DELIVER 2562 CFM. FAN MOTOR TO BE 1/6 HP, 1050 RPM. POWER SUPPLY

ELECTRIC WALL HEATERS

115V-1**-60**.

EWH-I, 2, 3, 4 \$(5:) MARLEY ARCHITECTURAL HEAVY DUTY WALL HEATER MODEL AWH4408F, 4000 WALL WALL HEATER. POWER SUPPLY TO BE 208-1-60, 19.2 AMPS. HEATERS TO HAVE THERMOSTAT.

ELECTRIC RADIANT COVE HEATERS

ECH-A: QMARK MODEL RCC4508C. HEATERS TO BE 450 WATT (1536 BTU), 208V-60-1, 2.2 AMP. PROVIDE MODEL RCCT, INTEGRAL THERMOSTAT.

ELECTRIC UNIT HEATER

EUH-A: MARLEY MODEL MUHO321. HEATER TO BE 2.2 KW 350 CFM, 208V-60-I, II AMP. PROVIDED WITH THERMOSTAT.

THERMO CYCLER UNITS

TRG-I: THERMO CYCLER MODEL GTR4807-E4S WITH 3-WAY DISCHARGE TOP. HEATING CAPACITY OF 720 MBH INPUT, 590 MBH OUTPUT WITH NATURAL GAS AT 7" W.C. TO 14" W.C. FAN MOTOR TO BE 2 HP. POWER SUPPLY TO BE 460-3-60, 9.8 MCA, 15 A. MAX. C.B.

TRG-2: THERMO CYCLER MODEL GTR4807-E45 WITH 3-WAY DISCHARGE TOPAND 6' EXTENSION SECTION. HEATING CAPACITY OF 720 MBHINPUT, 590 MBH OUTPUT WITH NATURAL GAS AT 7" W.C. TOI4" W.C. FAN MOTOR TO BE 2 HP. POWER SUPPLY TO BE 460-3-60, 9.8 MCA, 15 A.

TRA-I THERMO CYCLER MODEL TCA480X-E4S WITH 3-WAY DISCHARGE TOP W/ GTR4800BE4 CONTROLS. FAN MOTOR TO BE 2 HP. POWER SUPPLY TO BE 460-3-60.

TRA-2 THERMO CYCLER MODEL TCA480X-E45 WITH 3-WAY DISCHARGE TOP W/ GTR4800BE4 CONTROLS. FAN MOTOR TO BE 2 HP. POWER SUPPLY TO BE 460-3-60.

AS / RS WAREHOUSE:

TRG-3: THERMO CYCLER MODEL GTR4807-E45 WITH 3-WAY & UP DISCHARGE TOP AND 6' EXTENSION SECTION. HEATING CAPACITY OF 720 MBHINPUT, 590 MBH OUTPUT WITH NATURAL GAS AT 7" W.C. TO 14" W.C. FAN MOTOR TO BE 2 HP. POWER SUPPLY TO BE 460-3-60, 9.8 MCA, 15 A.

TRG-4: THERMO CYCLER MODEL GTR4807-E4S WITH 3-WAY DISCHARGE TOPAND 6' EXTENSION SECTION. HEATING CAPACITY OF 720 MBHINPUT. 590 MBH OUTPUT WITH NATURAL GAS AT 7" W.C. TO 14" W.C. FAN MOTOR TO BE 2 HP. POWER SUPPLY TO BE 460-3-60, 9.8 MCA, 15 A. MAX. C.B.

TRA-3 THERMO CYCLER MODEL TCA480X-E4S WITH 2-WAY **\$UP DISCHARGE TOP \$ 6' EXTENSION SECTION WITH** GTR4800BE4 CONTROLS. WITH 2 HP FAN MOTOR. POWER SUPPLY TO BE 460-3-60.

TRA-4 THERMO CYCLER MODEL TCA480X-E45 WITH 2-WAY **\$UP DISCHARGE TOP \$ 6' EXTENSION SECTION WITH** GTR4800BE4 CONTROLS. WITH 2 HP FAN MOTOR. POWER SUPPLY TO BE 460-3-60.

 $\sim\sim\sim\sim\sim$ TMI-2: THERMO CYCLER MODEL TMS3600E4R COMPLETE WITH WALL HOOD & CONTROLS. I HP FAN MOTOR, POWER 460-3-60.

TRG-5: THERMO CYCLER MODEL GTR4807-E4S WITH 3-WAY DISCHARGE TOP AND 4' EXTENSION SECTION. HEATING CAPACITY OF 720 MBHINPUT, 590 MBH OUTPUT WITH NATURAL GAS AT 7" W.C. TO 14" W.C. FAN MOTOR TO BE 2 HP. POWER SUPPLY TO BE 460-3-60, 9.8 MCA, 15 A.

TRA-5 THERMO CYCLER MODEL TCA480X-E45 WITH 2-WAY **\$UP DISCHARGE TOP \$ 4' EXTENSION SECTION WITH** GTR4800BE4 CONTROLS. WITH 2 HP FAN MOTOR. POWER, SUPPLY TO BE 460-3-60.

3	8/24/22	GENERAL REVISION
2	7/12/22	ISSUED FOR CONSTRUCTION
	6/14/22	ADDED EXHAUST FANS AND ELECTRIC HEATERS
ISSUE	DATE:	DESCRIPTION
PRU IECT		MANUATTAN REED DIGTDIRITORG

MANHATTAN BEER DISTRIBUTORS 20 DUNNIGAN DRIVE SUFFERN, NEW YORK

DRAWING TITLE

PROPOSED FIRST MEZZANINE LEVEL HVAC PLAN



DRAWN BY: JLS SCALE: 1/8"=1'-0" Heating Air Conditioning DATE: **4/15/22** 39 FIELDS LANE, NORTH SALEM, NY 10560

DRAWING NO.