

| CABINET UNIT HEATER SCHEDULE | | | | | | | | | |
|------------------------------|-----------------|-----|----------|------------------|------|------------|-----------------|---------|-------------------|
| NO. | LOCATION | CFM | CAPACITY | TYPE | AMPS | ELECTRICAL | BASIS OF DESIGN | | REMARKS |
| | | | KW | | | V/ø/HZ | MANUFACTURER | MODEL | |
| CUH-1 | ENTRY #E02 | 200 | 2.0 | CEILING RECESSED | 9.6 | 208/1/60 | QMARK | CDF-548 | 1, 2, 3, 4, 5, 6. |
| CUH-2 | ENTRY #E03 | 200 | 2.0 | CEILING RECESSED | 9.6 | 208/1/60 | QMARK | CDF-548 | 1, 2, 3, 4, 5, 6. |
| CUH-3 | CAFETORIUM #102 | 300 | 3.0 | CEILING RECESSED | 14.4 | 208/1/60 | QMARK | CDF-548 | 1, 2, 3, 4, 5, 6. |
| CUH-4 | CAFETORIUM #102 | 300 | 3.0 | CEILING RECESSED | 14.4 | 208/1/60 | QMARK | CDF-548 | 1, 2, 3, 4, 5, 6. |

NOTES:
1. VERTICAL DISCHARGE UNIT.
2. PROVIDE RECESS MOUNTING WITH TRIM RING.
3. PROVIDE DISCONNECT SWITCH.
4. PROVIDE MOTOR WITH THERMAL OVERLOAD PROTECTION.
5. PROVIDE INTEGRAL THERMOSTAT SET AT 70.0°F (ADJUSTABLE.)
6. PROVIDE 24V PRIMARY TRANSFORMER.

| EXHAUST AIR FAN SCHEDULE | | | | | | | | | | | | | |
|--------------------------|-----------------------|---------------|--------------------|-------|------------|-------|------------|-------------------|-----------------------|------------------|--------------------|---------------------|-------------------|
| NO. | LOCATION | SERVICE FLOOR | FAN | | | MOTOR | | | REQUIRED ROOF OPENING | BASIS OF DESIGN | | CONTROL INTERLOCK | REMARKS |
| | | | TYPE | CFM | ESP IN.WG. | RPM | HP (WATTS) | ELECTRICAL V/ø/HZ | | MANUFACTURER | MODEL | | |
| EF-B1 | BOILER ROOM | BASEMENT | CABINET | 3,500 | 0.375 | 530 | 1 | 460/3/60 | — | PENN VENTILATION | ZEPHYR ZC15 | THERMOSTAT | 1, 3, 6. |
| EF-B2 | CHILLER ROOM | BASEMENT | PROPELLER | 6,000 | 0.150 | 1050 | 3/4 | 120/1/60 | — | PENN VENTILATION | BREESEWAY P24VA | CHILLER RM. CONTROL | 1, 3, 7. |
| EF-B3 | CHILLER ROOM | BASEMENT | PROPELLER | 6,000 | 0.150 | 1050 | 3/4 | 120/1/60 | — | PENN VENTILATION | BREESEWAY P24VA | CHILLER RM. CONTROL | 1, 3, 7. |
| EF-B4 | FIRE PUMP ROOM | BASEMENT | CABINET | 812 | 0.250 | 1050 | (260) | 120/1/60 | — | PENN VENTILATION | ZEPHYRS Z12S | THERMOSTAT | 1, 2, 3. |
| EF-B5 | ELEVATOR MACHINE ROOM | BASEMENT | CABINET | 812 | 0.250 | 1050 | (260) | 120/1/60 | — | PENN VENTILATION | ZEPHYRS Z12S | THERMOSTAT | 1, 2, 3. |
| KEF-1 | MECHANICAL AREA #X44 | FIRST FLOOR | UTILITY SET V-BELT | 3,375 | 2.000 | 1320 | 2 | 208/3/60 | 22"x16" | PENN VENTILATION | DYNAMO-D-18 | KITCHEN HOOD | 1, 2, 3, 4, 5, 8. |
| EF-1 | CORRIDOR #C12 | FIRST FLOOR | CENTRIFUGAL INLINE | 550 | 0.375 | 2450 | (196) | 120/1/60 | — | PENN VENTILATION | CENTREX JR-REX12J | ROOM LIGHT SWITCH | 1, 2, 3. |
| EF-2 | CORRIDOR #C13 | FIRST FLOOR | CENTRIFUGAL INLINE | 500 | 0.250 | 2460 | (242) | 120/1/60 | — | PENN VENTILATION | CENTREX JR-REX10JX | ROOM LIGHT SWITCH | 1, 2, 3. |
| EF-3 | CORRIDOR #C13 | FIRST FLOOR | CENTRIFUGAL INLINE | 600 | 0.250 | 2450 | (196) | 120/1/60 | — | PENN VENTILATION | CENTREX JR-REX12J | ROOM LIGHT SWITCH | 1, 2, 3. |
| EF-4 | ELECTRICAL #217 | SECOND FLOOR | CENTRIFUGAL INLINE | 550 | 0.375 | 2450 | (196) | 120/1/60 | — | PENN VENTILATION | CENTREX JR-REX12J | ROOM LIGHT SWITCH | 1, 2, 3. |
| EF-5 | PE STORAGW #225G | SECOND FLOOR | CENTRIFUGAL INLINE | 450 | 0.250 | 2930 | (147) | 120/1/60 | — | PENN VENTILATION | CENTREX JR-REX08JX | ROOM LIGHT SWITCH | 1, 2, 3. |
| EF-6 | ELECTRICAL #317 | THIRD FLOOR | CENTRIFUGAL INLINE | 550 | 0.250 | 2460 | (242) | 120/1/60 | — | PENN VENTILATION | CENTREX JR-REX10JX | ROOM LIGHT SWITCH | 1, 2, 3. |
| EF-7 | ELECTRICAL #326 | THIRD FLOOR | CENTRIFUGAL INLINE | 450 | 0.250 | 2930 | (147) | 120/1/60 | — | PENN VENTILATION | CENTREX JR-REX08JX | ROOM LIGHT SWITCH | 1, 2, 3. |
| EF-8 | CORRIDOR #C41 | FOURTH FLOOR | CENTRIFUGAL INLINE | 600 | 0.250 | 2450 | (196) | 120/1/60 | — | PENN VENTILATION | CENTREX JR-REX12J | ROOM LIGHT SWITCH | 1, 2, 3. |

NOTES:
1. PROVIDE MOTOR WITH THERMAL OVERLOAD PROTECTION.
2. PROVIDE BACKDRAFT DAMPER.
3. PROVIDE DISCONNECT SWITCH.
4. PROVIDE 12" ROOF CURB.
5. PROVIDE INLET DUCT COMPANION FLANGE AND DISCHARGE DUCT FLANGE.
6. PROVIDE FILTER SECTION.
7. PROVIDE WALL SLEEVE AND SHUTTER.
8. PROVIDE FAN STARTER SWITCH.

| WALL MOUNTED CABINET UNIT HEATER SCHEDULE | | | | | | | | | | | | | | |
|---|------------|---------------|-----|------|------|------------------------|--------|--------|-------|------------|-----------------|--------------|------------|-------------|
| NO. | LOCATION | TYPE | FAN | | | HEATING HOT WATER COIL | | | | ELECTRICAL | BASIS OF DESIGN | | REMARKS | |
| | | | CFM | HP | AMPS | CAPACITY MBH | EAT °F | EWI °F | TD °F | GPM | V/ø/HZ | MANUFACTURER | | MODEL |
| WH-1 | STAIR #S03 | WALL RECESSED | 450 | 1/10 | 1.6 | 24.0 | 30 | 190 | 30 | 1.8 | 208/1/60 | STERLING | RW-1120-04 | 1, 2, 3, 4. |
| WH-2 | STAIR #S02 | WALL RECESSED | 450 | 1/10 | 1.6 | 24.0 | 30 | 190 | 30 | 1.8 | 208/1/60 | STERLING | RW-1120-04 | 1, 2, 3, 4. |

NOTES:
1. PROVIDE MOTOR WITH THERMAL OVERLOAD PROTECTION.
2. PROVIDE DISCONNECT SWITCH.
3. PROVIDE RETURN AIR TEMPERATURE CONTROL. SET THERMOSTAT AT 70.0°F (ADJUSTABLE.)
4. PROVIDE FULLY RECESSED WALL SEAL ASSEMBLY.

| ELECTRICAL UNIT HEATER SCHEDULE | | | | | | | | | |
|---------------------------------|----------|-----|----------|--------------------|------|------------|-----------------|----------|-------------------|
| NO. | LOCATION | CFM | CAPACITY | TYPE | AMPS | ELECTRICAL | BASIS OF DESIGN | | REMARKS |
| | | | KW | | | V/ø/HZ | MANUFACTURER | MODEL | |
| UH-B1 | BASEMENT | 350 | 3.0 | HORIZONTAL MOUNTED | 14.5 | 208/1/60 | QMARK | MUH03-81 | 1, 2, 3, 4, 5, 6. |

NOTES:
1. HORIZONTAL DISCHARGE UNIT.
2. PROVIDE DISCONNECT SWITCH.
3. PROVIDE MOTOR WITH THERMAL OVERLOAD PROTECTION.
4. PROVIDE INTEGRAL THERMOSTAT SET AT 68.0°F (ADJUSTABLE.)
5. PROVIDE 24V PRIMARY TRANSFORMER.
6. TYPICAL FOR A TOTAL OF SEVEN (7) UNIT HEATERS

| DUCTWORK TAKE-OFFS | |
|--------------------|-----------------|
| CFM RANGE | ROUND DUCT SIZE |
| 50-100 | 6"ø |
| 101-200 | 8"ø |
| 201-400 | 10"ø |
| 401-600 | 12"ø |
| 601-900 | 14"ø |
| 901-1100 | 15"ø |

| CONDENSATE DRAIN PUMP | | | | | |
|-----------------------|----------|-------|-----------------|-----------------|----------|
| NO. | GPH @15' | MOTOR | | BASIS OF DESIGN | |
| | | HP | ELECTRIC V/ø/HZ | MANUFACTURER | MODEL |
| CDP-1 | 33 | 1/30 | 115/1/60 | BECKETT | CL20-1UL |
| CDP-2 | 33 | 1/30 | 115/1/60 | BECKETT | CL20-1UL |
| CDP-3 | 33 | 1/30 | 115/1/60 | BECKETT | CL20-1UL |
| CDP-4 | 33 | 1/30 | 115/1/60 | BECKETT | CL20-1UL |

| CVU UNITS DUCTWORK | |
|--------------------|-----------|
| CFM RANGE | DUCT SIZE |
| 40-100 | 6"ø |
| 101-180 | 8"x6" |
| 181-310 | 12"x6" |
| 311-430 | 16"x6" |

| HEATING HOT WATER UNIT HEATER SCHEDULE | | | | | | | | | | | | | |
|--|------------|-----|------|------|------------------------|--------|--------|-------|------------|-----------------|--------------|---------|-------------|
| | TYPE | FAN | | | HEATING HOT WATER COIL | | | | ELECTRICAL | BASIS OF DESIGN | | REMARKS | |
| | | CFM | HP | AMPS | CAPACITY MBH | EAT °F | EWI °F | TD °F | GPM | V/ø/HZ | MANUFACTURER | | MODEL |
| 1 | HORIZONTAL | 750 | 1/20 | 1.3 | 32.0 | 30 | 190 | 30 | 2.6 | 115/1/60 | STERLING | HS-48 | 1, 2, 3, 4. |
| 1 | HORIZONTAL | 750 | 1/20 | 1.3 | 32.0 | 30 | 190 | 30 | 2.6 | 115/1/60 | STERLING | HS-48 | 1, 2, 3, 4. |
| | HORIZONTAL | 750 | 1/20 | 1.3 | 32.0 | 30 | 190 | 30 | 2.6 | 115/1/60 | STERLING | HS-48 | 1, 2, 3, 4. |

NOTES:
1. PROVIDE MOTOR WITH THERMAL OVERLOAD PROTECTION.
2. PROVIDE DISCONNECT SWITCH.
3. PROVIDE WALL-MOUNTED THERMOSTAT SET AT 70.0°F (ADJUSTABLE.)
4. PROVIDE 24V PRIMARY TRANSFORMER.

| AIR OUTLET & INLET SCHEDULE | | | | |
|-----------------------------|--|--------------------|-----------------|-------|
| NO. | DAMPER TYPE | DIRECTION OF THROW | BASIS OF DESIGN | |
| | | | MANUFACTURER | MODEL |
| EG | — | — | TITUS | 50F |
| LSD | O.B.D. | 1-WAY | TITUS | ML37 |
| PD | O.B.D. | 4-WAY | TITUS | PDS |
| RD | O.B.D. | 1-WAY | TITUS | TMRA |
| RR | O.B.D. | — | TITUS | 50F |
| SD | O.B.D. | 4-WAY | TITUS | TMS |
| TG | O.B.D. | 1-WAY | TITUS | 33RL |
| REMARKS | | | | |
| EG | 24x24 CEILING MOUNTED EXHAUST AIR GRILLE, UNLESS OTHERWISE NOTED. ½"x½"x½" EGGCRATE DESIGN | | | |
| LSD | 48" LONG CEILING MOUNTED SUPPLY AIR LINEAR SLOT DIFFUSER. VERTICAL DISCHARGE WITH ½" SLOT SPACING. PROVIDE INSULATED MODULINEAR PLENUM MODEL MPI37 WITH 6"ø AND 8"ø INLETS PROVIDE DAMPER | | | |
| PD | 24x24 PERFORATED CEILING MOUNTED SUPPLY AIR DIFFUSER. FULL FACE PLAQUE WITH ROUND NECK WITH R-6 FOIL-BACKED INSULATION. PROVIDE DAMPER ACCESS BY UNLATCHING AND DROPPING PERFORATED FACE | | | |
| RD | 32" DIAMETER DUCT MOUNTED ROUND SUPPLY AIR DIFFUSER. ADJUSTABLE DISCHARGE. PROVIDE DAMPER WITH OPERATOR ACCESSIBLE FROM FACE | | | |
| RR | 24x12 CEILING AND DUCT MOUNTED RETURN AIR REGISTER, UNLESS OTHERWISE NOTED. ½"x½"x½" EGGCRATE DESIGN. PROVIDE DAMPER | | | |
| SD | 24x24 CEILING MOUNTED SUPPLY AIR DIFFUSER, UNLESS OTHERWISE NOTED. FULL FACE PLAQUE DESIGN WITH ROUND NECK. PROVIDE DAMPER MOUNTED ON DIFFUSER'S NECK WITH OPERATOR ACCESSIBLE FROM FACE | | | |
| TG | 24x8 WALL MOUNTED TRANSFER AIR GRILLES, UNLESS OTHERWISE NOTED. 38" DEFLECTION DESIGN WITH BLADES SPACED AT ½". PROVIDE DAMPER MOUNTED ON GRILLE'S NECK WITH OPERATOR ACCESSIBLE FROM FACE | | | |


NOTE:
FOR THE EXACT LOCATION OF CEILING MOUNTED DIFFUSERS, REGISTERS AND GRILLES, SEE ARCHITECTURAL REFLECTED CEILING PLAN.

| EXPANSION TANK SCHEDULE | | | | | | |
|-------------------------|----------------|----------|------------------|-----------------|-------|-----------------------------|
| NO. | LOCATION | CAPACITY | WORKING PRESSURE | BASIS OF DESIGN | | REMARKS |
| | | GALLONS | PSI | MANUFACTURER | MODEL | |
| EXT-1 | PRIMARY PUMP | 135 | 150 | BELL & GOSSETT | 135 | ATFL AIRTROL TANK FITTING |
| EXT-2 | SECONDARY PUMP | 80 | 150 | BELL & GOSSETT | 80 | ATF-20 AIRTROL TANK FITTING |

| AIR SEPARATOR SCHEDULE | | | | | | |
|------------------------|----------------|------------|----------|------------------|-----------------|------------|
| NO. | LOCATION | CONNECTION | CAPACITY | WORKING PRESSURE | BASIS OF DESIGN | |
| | | INCHES | GALLONS | PSI | MANUFACTURER | MODEL |
| AS-1 | PRIMARY PUMP | 6 | 700 | 150 | SPIROLTHERM | VSR-600-FL |
| AS-2 | SECONDARY PUMP | 3 | 190 | 150 | SPIROLTHERM | VSR-300-MT |

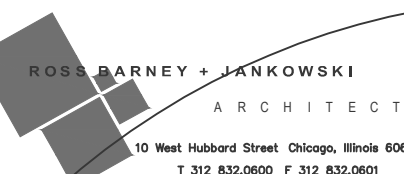
| CONDENSER WATER (PULSE POWER) TREATMENT UNIT SCHEDULE | | | | | | |
|---|--------------------------|-----------|------------|-------------------------|----------------------------|----------------|
| NO. | LOCATION | PIPE SIZE | ELECTRICAL | BASIS OF DESIGN | | REMARKS |
| | | | V/ø/HZ | MANUFACTURER | MODEL | |
| WT-1 | CONDENSER PUMP DISCHARGE | 8" | 208/1/60 | CLEARWATER SYSTEM CORP. | DOLPHIN PULSE POWER SYSTEM | 1, 2, 3, 4, 5. |

NOTES:
1. THE SYSTEM SHALL CONSIST OF ALTERNATING CURRENT PULSE POWER TRANSFORMER PANEL AND COIL PIPE ASSEMBLY.
2. TRANSFORMER PANEL SHALL HAVE FUSED PRIMARY AND SECONDARY ON 208/1/60 ELECTRICITY.
3. PROVIDE REMOTE ON/OFF SWITCH.
4. PROVIDE BUILT IN THERMAL COIL PROTECTION.
5. PROVIDE BAS INTERFACE.




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HVAC SCHEDULES 2

APPROVED BY

SCHOOL DISTRICT OF PHILADELPHIA
THE SCHOOL REFORM COMMISSION

DEPARTMENT OF DESIGN AND CONSTRUCTION SERVICES

JAN BRACK STREET
PHILADELPHIA PA 19130
(215) 400-0730 FAX (215) 400-0731

CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | | | | | | | | |

NO. DATE REVISION

SPEC NO. B-840C of 2005/06

DATE 12/29/06

SCALE NONE

LOCATION NO. 120

DRAWN BY KHL

TYPE NO. -

CHECKED BY MMT

FILE NO. -

DRAWING NO.

M501