

| HUMIDIFICATION SYSTEM SCHEDULE | | | | | | | | |
|---|------------|--------|----------|------------|--------------|-----------|---------|-------|
| TAG | HUMIDIFIER | | | INLET PSI | DESIGN BASIS | | NOTES | |
| | WIDTH | HEIGHT | LBS/HOUR | | MODEL | MANUF. | | MODEL |
| H1 | 100" | 56" | 255.0 | HUMIDIPACK | 10 | ARMSTRONG | CS-140I | 1, 2 |
| 1. UNIT TO USE DEIONIZED MAKE-UP WATER. 2. ACCESSORIES TO INCLUDE: INVERTED BUCKET TRAP, ELECTRIC OPERATOR, STRAINER, SUPPORT LEGS, AIRFLOW PROVING SWITCH, ELECTRICAL CONTROLLING CONTROL VALVE (ARMSTRONG MODEL ACV-08), CONTROL CABINET, ON-OFF HIGH LIMIT DRY HUMIDISTAT, DRY HUMIDITY TRANSMITTER, INSULATION PACKAGE, TEMPERING TANK, AND LON TALK BUILDING AUTOMATION SYSTEM TIE-IN CAPABILITY. | | | | | | | | |

1. ACCESSORIES TO INCLUDE: FUSED DISCONNECT SWITCH, VFD'S ON SUPPLY AND RETURN FANS, AND SMOKE DETECTORS.
2. AIR HANDLER IS TO BE CONNECTED INTO EXISTING "TRANE TRACER SUMMIT" TEMPERATURE CONTROL SYSTEM.

| ISOLATION ROOM EXHAUST SYSTEM SCHEDULE | | | | | | | | | | | | | | |
|--|-------------------------|-----------|-----------|-------|----------|-----------|------------|----------------|----------|---------------|---------------------|----------|------------|-------|
| TAG | AREA SERVED | FAN | | MOTOR | | PREFILTER | | PRIMARY FILTER | | | DESIGN BASIS | | NOTES | |
| | | TOTAL CFM | ESP IN WG | HP | ELECT. | QUANTITY | SIZE | EFFICIENCY | QUANTITY | SIZE | EFFICIENCY | MANUF. | | MODEL |
| ES1 | ISOLATION RM DECON ROOM | 1000 | 3.0" | 1.5 | 480-3-60 | 1 SET | 24"x24"x2" | 60-65% MERV 11 | 1 SET | 24"x24"x11.5" | HEPA 99.97% MERV 17 | FLANDERS | TB-1000 SC | 1, 2 |

1. STANDARD STEEL CONSTRUCTION, GEL SEAL DESIGN, WITH DIFFERENTIAL PRESSURE GAUGE, BAG-IN/BAG-OUT DESIGN WITH SEPARATE ACCESS DOORS FOR EACH FILTER, ASME & U.L. LISTED.

2. ACCESSORIES TO INCLUDE: WEATHER COVERS, OUTLET SCKACK, INLET ISOLATION DAMPER, AND INLET TRANSITION.

| HEAT RECOVERY COIL SCHEDULE | | | | | | | | | | | | | | |
|-----------------------------|-------------|----------------|--------------------|--------------|-----------------|-----------------|--------------|----------------------|-----------|-----|--------------|--------------|---------|-------|
| TAG | SERVICE | RECOVERY COIL | | | | | | | | | | DESIGN BASIS | | NOTES |
| | | SIZE | | AIR | | | | 40% PROPYLENE GLYCOL | | | | MANUF. | MODEL | |
| | | TOTAL W X H | NUMBER SECTIONS | TOTAL CFM | EAT °F DB\WB | LAT °F DB\WB | APD IN WC | EWT °F | LWT °F | GPM | WPD FT WC | | | |
| HRC1 | EXHAUST | 60 x 38 | 3 | 4700 | 72/53 | 38.0/36.6 | .52 | 31.5 | 38.0 | 60 | 15.0 | TRANE | CSIA010 | 1, 2 |
| HRC2 | OUTSIDE AIR | 80 x 38 | 4 | 4700 | -3.0 | 31.2 | .52 | 38.0 | 31.5 | 60 | 15.0 | TRANE | CSIA010 | 1, 2 |

1. PROVIDE WITH FACE DAMPER, SOLID DOUBLE WALL INSULATED ANGLED FILTER MODULE AND 2" MERV 5, THROW-AWAY TYPE FILTERS, ACCESS SECTION.

2. CAPACITIES BASED ON 40% GLYCOL.

| UNIT HEATER SCHEDULE – HOT WATER | | | | | | | | | | | | | | |
|----------------------------------|----------------------|----------|------|-----------|------|------|------|------|-------|------|----------|--------------|-------|-------|
| TAG | CABINET TYPE | CAPACITY | | HOT WATER | | | | | MOTOR | | | DESIGN BASIS | | NOTES |
| | | CFM | MBH | EAT | EWI | LWT | GPM | WPD | HP | RPM | ELECT. | MANUF. CO. | MODEL | |
| UH1 | HORIZONTAL PROPELLER | 815 | 27.4 | 60" | 180" | 160" | 2.83 | 0.05 | 1/20 | 1550 | 120–1–60 | TRANE CO. | 60–S | 1 |
| UH2 | HORIZONTAL PROPELLER | 815 | 27.4 | 60" | 180" | 160" | 2.83 | 0.05 | 1/20 | 1550 | 120–1–60 | TRANE CO. | 60–S | 1 |
| UH3 | HORIZONTAL PROPELLER | 815 | 27.4 | 60" | 180" | 160" | 2.83 | 0.05 | 1/20 | 1550 | 120–1–60 | TRANE CO. | 60–S | 1 |
| UH4 | HORIZONTAL PROPELLER | 815 | 27.4 | 60" | 180" | 160" | 2.83 | 0.05 | 1/20 | 1550 | 120–1–60 | TRANE CO. | 60–S | 1 |

| PUMP SCHEDULE | | | | | | | | | | |
|---------------|---------|-------------------------|------|------|-------|-----|----------|--------------|-------|-------|
| TAG | TYPE | SERVICE | PUMP | | MOTOR | | | DESIGN BASIS | | NOTES |
| | | | GPM | HEAD | RPM | BHP | ELECT. | MANUF. | MODEL | |
| P1 | IN-LINE | PRE-HEAT COIL-AHU-ED | 120 | 15 | 1750 | 1 | 120-1-60 | TACO | 1635 | |
| P2 | IN-LINE | HEAT RECOVERY | 60 | 50 | 1750 | 1.5 | 120-1-60 | TACO | 1619 | |

| RADIANT PANEL SCHEDULE | | | | | | | | |
|------------------------|-------------------|-----------------------------|------------|------------|-----------|----------|----------|-------|
| ROOM NO. | ROOM NAME | ACTIVE PANEL AREA (SQ. FT.) | FLOW (GPM) | PANEL SIZE | TOTAL MBH | NO. CIR. | MANUF. | NOTES |
| HP1 | PATIENT TOILET | 4 | .50 | 24 x 24 | 0.74 | 1 | STERLING | 1 |
| HP2 | WOMEN'S SHWR/TOIL | 4 | .50 | 24 x 24 | 0.74 | 1 | STERLING | 1 |
| HP3 | ISO. TOILET | 4 | .50 | 24 x 24 | 0.74 | 1 | STERLING | 1 |
| HP4 | SECURE TOILET | 4 | .50 | 24 x 24 | 0.74 | 1 | STERLING | 1 |

1. CAPACITY BASED ON 170°F. AVERAGE ENTERING WATER TEMPERATURE.

| EXHAUST FAN SCHEDULE | | | | | | | | | |
|--|-------------|-----------|----------|---------|-------|----------|--------------|---------|---------|
| TAG | TYPE | FAN | | | MOTOR | | DESIGN BASIS | | NOTES |
| | | TOTAL CFM | SP IN WG | MAX RPM | HP | ELECT. | MANUF. | MODEL | |
| EF1 | UTILITY SET | 4700 | 2.5" | 1485 | 5 | 208-3-60 | TWIN CITY | 200 BCV | 1, 2, 3 |
| 1. ACCESSORIES TO INCLUDE: BELT GUARDS, VIBRATION ISOLATION, FLANGED INLET AND OUTLET, AND ACCESS DOOR. 2. PROVIDE INVERTER DUTY MOTOR FOR VARIABLE SPEED OPERATION. 3. FAN TO HAVE UPBLAST ARRANGEMENT. | | | | | | | | | |

| HYDRONIC SPECIALTIES SCHEDULE | | | | | | | |
|---|----------------------|----------------------|--------------|----------------|--------------|-------|------------|
| TAG | DESCRIPTION | SERVICE | CAPACITY | | DESIGN BASIS | | NOTES |
| | | | TOTAL VOLUME | ACCEPT. VOLUME | MANUF. | MODEL | |
| ET1 | EXPANSION TANK | HEAT RECOVERY SYSTEM | 1.0 | .50 | TACO | CX15 | |
| AS1 | AIR SEPARATOR | HEAT RECOVERY SYSTEM | -- | -- | TACO | ACF | W/STRAINER |
| AV1 | AUTOMATIC AIR VENT | -- | -- | -- | TACO | 409 | |
| GF1 | GLYCOL FILL ASSEMBLY | HEAT RECOVERY SYSTEM | -- | -- | ADVANTAGE | AGF-1 | 1 |
| 1. GLYCOL FEEDER PACKAGE WITH 30 GALLON TANK, TANK SUPPORT STAND, LOW LEVEL SWITCH, POSITIVE DISPLACEMENT PUMP AND CONTROL PANEL. | | | | | | | |

| CABINET HEATER SCHEDULE — HOT WATER | | | | | | | | | | | | | | |
|-------------------------------------|---------------------|----------|------|-----|-----------|------|------|-----|-------|-----|----------|--------------|---------|---------|
| TAG | CABINET TYPE | CAPACITY | | | HOT WATER | | | | MOTOR | | | DESIGN BASIS | | NOTES |
| | | CFM | MBH | EAT | EWL | LWT | GPM | WPD | HP | RPM | ELECT. | MANUF. | MODEL | |
| CH1 | HORIZONTAL RECESSED | 200 | 17.7 | 60" | 180" | 160" | 1.18 | 8.8 | 1/12 | 980 | 120–1–60 | TRANE CO. | FFEB020 | 1, 2, 3 |

1. PROVIDE UNIT WITH BOTTOM INLET AND OUTLET STAMPED LOUVERS.

2. ACCESSORIES TO INCLUDE: DISCONNECT SWITCH, MANUFACTURER'S WALL MOUNTED THERMOSTAT, RECESSING FLANGE, DELUXE PIPING PACKAGE INCLUDING SHUTOFF VALVES, AUTOMATIC CIRCUIT SETTER, UNIONS, AND 3-WAY, TWO-POSITION CONTROL VALVE.

3. COLOR SELECTION BY ARCHITECT.

| AIR DOOR SCHEDULE | | | | | | | | | | | | |
|-------------------|--------------|----------|------|-----------|------|------|-------|--------|--------------|--------|-----------|-------|
| TAG | CABINET TYPE | CAPACITY | | HOT WATER | | | MOTOR | | DESIGN BASIS | | NOTES | |
| | | CFM | MBH | EAT | EWI | LWT | GPM | HP | ELECT. | MANUF. | | MODEL |
| ADR1 | WALL HUNG | 1896 | 43.0 | 70" | 180" | 160" | 4.6 | 2Ø 1/2 | 120-1-60 | BERNER | MK2-2-048 | 1, 2 |
| ADR2 | WALL HUNG | 1896 | 43.0 | 70" | 180" | 160" | 4.6 | 2Ø 1/2 | 120-1-60 | BERNER | MK2-2-048 | 1, 2 |

1. ACCESSORIES TO INCLUDE: HOT WATER COIL, INTEGRAL DISCONNECT SWITCH, AIR VOLUME CONTROL DAMPER, DOOR SWITCH, (SWITCH TO BE COORDINATED WITH DOOR HARDWARE), NOZZLE EXTENSION, FLOOR GRATE W/FRAME ASSEMBLY, WALL BRACKET, AND WALL THERMOSTAT.

2. UNIT TO BE INSTALLED ABOVE T-BAR TYPE CEILING.

| RADIATION SCHEDULE — HOT WATER | | | | | | | | | | | |
|--------------------------------|----------|---------|--------|--------|---------|-----------|--------|-------|--------------|-------|-------|
| TAG | CAPACITY | ELEMENT | | | | ENCLOSURE | | | DESIGN BASIS | | NOTES |
| | MBH | TIERS | LENGTH | TUBE | FINS/FT | STYLE | HEIGHT | DEPTH | MANUF. | MODEL | |
| F1 | 6.56 | 1 | 8'-0" | 1-1/4" | 50 | TOP | 14" | 4" | TRANE CO. | 10T | 1, 2 |
| F2 | 6.56 | 1 | 8'-0" | 1-1/4" | 50 | TOP | 14" | 4" | TRANE CO. | 10T | 1, 2 |
| F3 | 6.56 | 1 | 8'-0" | 1-1/4" | 50 | TOP | 14" | 4" | TRANE CO. | 10T | 1, 2 |

1. BASED ON 170°F. AWT, 20°F. WTD, 65°F. EAT.

2. PROVIDE FIN RADIATION COVER WITH ALL BRACKETS, HARDWARE, ETC. TO MAKE A COMPLETE AND OPERABLE SYSTEM.

| TAG | TYPE | SERVICE | SIZE | | | FREE AREA | DESIGN BASIS | | NOTES |
|-------|------------|-------------|--------|--------|-------|-------------|------------------|--------|-------|
| | | | LENGTH | HEIGHT | DEPTH | SQUARE AREA | MANUF. | MODEL | |
| L01 | STATIONARY | EXHAUST | 96" | 60" | 6" | 22.36 | AMERICAN WARMING | LE-33 | 1 |
| OADD1 | STATIONARY | OUTSIDE AIR | 54" | 20" | --- | --- | AMERICAN WARMING | VC-411 | 2 |
| EADD1 | STATIONARY | EXHAUST | 24" | 24" | --- | --- | AMERICAN WARMING | VC-411 | 2 |

1. ACCESSORIES TO INCLUDE: INSTALLATION FLANGED FRAME, EXTENDED SILL, AND ALUMINUM BIRDSCREEN.
2. DAMPER TO BE ALUMINUM CONSTRUCTION, ACTUATOR, 2-POSITION, SPRING RETURN, 24-VOLT AND MOUNTING HARDWARE.

| RETURN AIR REGISTER AND GRILLE SCHEDULE | | | | | | | | |
|---|---------|----------|----------|------------|-----------|--------------|----------|---------|
| TAG | MAX CFM | MAX P.D. | MAX VEL. | PANEL SIZE | NECK SIZE | DESIGN BASIS | | NOTES |
| | | | | | | MANUF. | MODEL | |
| RR1 | 100 | 0.05 | 500 | 24 x 12 | 6"ø | NAILOR | 6145H | 1, 2, 3 |
| RR2 | 200 | 0.05 | 500 | 24 x 12 | 8"ø | NAILOR | 6145H | 1, 2, 3 |
| RR3 | 400 | 0.05 | 500 | 24 x 24 | 10"ø | NAILOR | 6145H | 1, 2, 3 |
| RR4 | 600 | 0.05 | 500 | 24 x 24 | 12"ø | NAILOR | 6145H | 1, 2, 3 |
| RR5 | 900 | 0.05 | 500 | 24 x 24 | 14"ø | NAILOR | 6145H | 1, 2, 3 |
| RR6 | 350 | 0.05 | 500 | 24 x 24 | 10"ø | NAILOR | 6145H | 1, 2, 4 |
| RR7 | 150 | 0.05 | 500 | 24 x 12 | 8"ø | NAILOR | SG-6145H | 1, 2, 4 |
| RR8 | 1400 | 0.05 | 500 | 30 x 16 | --- | NAILOR | 6145H | 2, 4 |
| RR9 | 100 | 0.05 | 500 | 6 x 6 | --- | NAILOR | 6145H | 2, 4 |
| RR10 | 250 | 0.05 | 500 | 12 x 6 | --- | NAILOR | 6145H | 2, 4 |
| RR11 | 450 | 0.05 | 500 | 14 x 10 | --- | NAILOR | 6145H | 2, 4 |

1. PROVIDE SQUARE TO ROUND ADAPTER.
2. PROVIDE OPPOSED BLADE VOLUME DAMPER.
3. LAY-IN CEILING INSTALLATION.
4. SURFACE MOUNT INSTALLATION.

| SUPPLY AIR DIFFUSER AND GRILLE SCHEDULE | | | | | | | | |
|---|---------|----------|----------|------------|-----------|--------------|---------|------------|
| TAG | MAX CFM | MAX P.D. | MAX VEL. | PANEL SIZE | NECK SIZE | DESIGN BASIS | | NOTES |
| | | | | | | MANUF. | MODEL | |
| SD1 | 100 | 0.05 | 550 | 24 x 24 | 6" | NAILOR | UNI | 1, 2, 3 |
| SD2 | 200 | 0.05 | 550 | 24 x 24 | 8" | NAILOR | UNI | 1, 2, 3 |
| SD3 | 125 | 0.05 | 550 | 24 x 24 | 8" | NAILOR | SG-61DV | 1, 2, 4 |
| SD4 | 250 | 0.05 | 550 | 24 x 24 | 8" | NAILOR | UNI | 1, 2, 4, 5 |
| SD5 | 200 | 0.05 | 550 | 24 x 24 | 8" | NAILOR | AUNI | 1, 2, 4, 5 |
| SR1 | 250 | 0.05 | 550 | 12 x 6 | ---- | NAILOR | 61DH | 2, 4 |
| SR2 | 350 | 0.05 | 550 | 14 x 8 | ---- | NAILOR | 61DH | 2, 4 |
| SR3 | 700 | 0.05 | 550 | 24 x 10 | ---- | NAILOR | 61DH | 2, 4 |
| SR4 | 100 | 0.05 | 550 | 8 x 6 | ---- | NAILOR | 61DH | 2, 4 |
| TG1 | 170 | 0.05 | 550 | 10 x 6 | ---- | NAILOR | 6145H | 4 |
| TG2 | 1000 | 0.05 | 550 | 30 x 10 | ---- | NAILOR | 6145H | 4 |

1. PROVIDE SQUARE TO ROUND ADAPTER.
2. PROVIDE OPPOSED BLADE VOLUME DAMPER.
3. LAY-IN CEILING INSTALLATION.
4. SURFACE MOUNT INSTALLATION.
5. DIFFUSER TO BE ALUMINUM CONSTRUCTION.

| TAG | MAX CFM | MAX PD. | MAX VEL. | PANEL SIZE | NECK SIZE | DESIGN BASIS | | NOTES |
|------|---------|---------|----------|------------|-----------|--------------|----------|------------|
| | | | | | | MANUF. | MODEL | |
| ER1 | 100 | 0.05 | 500 | 24 x 12 | 6"ø | NAILOR | 6145H | 1, 2, 3 |
| ER2 | 230 | 0.05 | 500 | 24 x 12 | 8"ø | NAILOR | 6145H | 1, 2, 3 |
| ER3 | 400 | 0.05 | 500 | 24 x 24 | 10"ø | NAILOR | 6145H | 1, 2, 3 |
| ER4 | 600 | 0.05 | 500 | 24 x 24 | 12"ø | NAILOR | 6145H | 1, 2, 3 |
| ER5 | 200 | 0.05 | 500 | 24 x 12 | 8"ø | NAILOR | 6145H | 1, 2, 4 |
| ER6 | 115 | 0.05 | 500 | 24 x 12 | 6"ø | NAILOR | 5145H | 1, 2, 4, 5 |
| ER7 | 400 | 0.05 | 500 | 24 x 24 | 10"ø | NAILOR | 5145H | 1, 2, 4, 5 |
| ER8 | 850 | 0.05 | 500 | 24 x 24 | 14x14 | NAILOR | 6145H | 2, 3 |
| ER9 | 100 | 0.05 | 500 | 8 x 6 | --- | NAILOR | 6145H | 2, 6 |
| ER10 | 100 | 0.05 | 500 | 6 x 6 | --- | NAILOR | SG-6145H | 1, 2, 4 |
| ER11 | 200 | 0.05 | 500 | 8 x 8 | --- | NAILOR | 6145H | 4 |

1. PROVIDE SQUARE TO ROUND ADAPTER.
2. PROVIDE OPPOSED BLADE VOLUME DAMPER.
3. LAY-IN CEILING INSTALLATION.
4. SURFACE MOUNT INSTALLATION.
5. REGISTER TO BE ALUMINUM CONSTRUCTION.
6. DUCT MOUNTED INSTALLATION.

| ROOF VENTILATOR SCHEDULE | | | | | | | |
|--------------------------|-------------|----------|--------|----------|--------------|------------|-------|
| TAG | SYSTEM TYPE | CAPACITY | | | DESIGN BASIS | | NOTES |
| | | CFM | THROAT | PD IN\WG | MANUF. | MODEL | |
| RV1 | INTAKE | 15000 | 84x42 | 0.05 | GREENHECK | FABRA HOOD | 1, 2 |
| RV2 | INTAKE | 4530 | 48x24 | 0.05 | GREENHECK | FABRA HOOD | 1, 2 |
| RV3 | INTAKE | 10000 | 60x42 | 0.05 | GREENHECK | FABRA HOOD | 1, 2 |

1. PROVIDE A 24" HIGH ROOF CURB.
2. PROVIDE 120 VOLT MOTORIZED INTAKE DAMPER.

1. ALL MECHANICAL WORK UNDER "M" DRAWINGS SHALL BE COMPLETE WORKING SYSTEMS, WHETHER SHOWN OR NOT IN THEIR ENTIRETY.

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Approved: Project Director

| | |
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| Location | Albany, New York |
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Date
JULY 24, 2012

Building Number
95

Drawing Number

M7.1
Dwg. 96 of 11

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A FORM 08-6231

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