RIO HONDO COLLEGE

EMERGENCY GENERATOR AND DATA CENTER HVAC UPGRADES

GENERAL PROJECT SCOPE

1. DEMOLISHING TIMES SHALL INCLUDE COMPLETION OF ELECTRICAL PANELS, WALLS, CEILINGS, AND CEILING PANELS TO ALLOW THE EMERGENCY GENERATOR TO SERVE THE ADMINISTRATION BUILDING.

2. DEMOLISHING TIMES SHALL INCLUDE COMPLETION OF ELECTRICAL PANELS, WALLS, CEILINGS, AND CEILING PANELS TO ALLOW THE EMERGENCY GENERATOR TO SERVE THE BUILDING.

3. INSTALLATION OF NEW EMERGENCY GENERATOR IN THE PARKING LOT AREA NORTH EAST OF THE ADMINISTRATION BUILDING.

4. INSTALLATION OF NEW EMERGENCY PANELBOARDS AND BUILDING.

5. INSTALLATION OF NEW EMERGENCY PANELBOARDS AND BUILDING.

6. INSTALLATION OF NEW EMERGENCY PANELBOARDS AND BUILDING.

GENERAL COORDINATION AND WORK SITE MAINTENANCE NOTES

1. COORDINATE INSTALLATION OF AT LEAST (3) 120 VAC PANELS AND (2) 208 VAC PANELS TO SERVICE THE CAMPUS BUILDINGS.

2. COORDINATE INSTALLATION OF AT LEAST (6) 480 VAC PANELS TO SERVICE THE GENERATOR BUILDING.

3. COORDINATE INSTALLATION OF AT LEAST (3) 480 VAC PANELS TO SERVICE THE DEMOLISHED ITEMS.

4. COORDINATE INSTALLATION OF AT LEAST (3) 480 VAC PANELS TO SERVICE THE DEMOLISHED ITEMS.

5. COORDINATE INSTALLATION OF AT LEAST (3) 480 VAC PANELS TO SERVICE THE DEMOLISHED ITEMS.

6. COORDINATE INSTALLATION OF AT LEAST (3) 480 VAC PANELS TO SERVICE THE DEMOLISHED ITEMS.

7. COORDINATE INSTALLATION OF AT LEAST (3) 480 VAC PANELS TO SERVICE THE DEMOLISHED ITEMS.

8. COORDINATE INSTALLATION OF AT LEAST (3) 480 VAC PANELS TO SERVICE THE DEMOLISHED ITEMS.

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10. COORDINATE INSTALLATION OF AT LEAST (3) 480 VAC PANELS TO SERVICE THE DEMOLISHED ITEMS.

11. COORDINATE INSTALLATION OF AT LEAST (3) 480 VAC PANELS TO SERVICE THE DEMOLISHED ITEMS.

PROJECT COVER SHEET

11/06/15
RIO HONDO COLLEGE
3600 WORKMAN MILL RD., WHITTIER, CA 90601

PROJECT SHEET

SHEET TITLE INDEX

T001
EMERGENCY GENERATOR AND DATA CENTER HVAC UPGRADES
RIO HONDO COLLEGE
3600 WORKMAN MILL RD., WHITTIER, CA 90601

## Electrical Panel Schedules Data Center

### Panel and Device Minimum AIC Rating: Bus Rating: 100 A
- **Main Breaker:** 100 A
- **Mounting:** Surface

### Panel:
- **Panel #1**
  - **Location:** Computer Center
  - **Voltage:** 120/208

### Load Classification
- **Connected (VA) X Demand Factor = Demand (VA)**
  - **φC:** 115 VA
  - **φB:** 200 VA
  - **φA:** 360 VA

### Total (Amps) 46 A
- **Total (VA):** 38010 VA

### Motor - Largest
- 0 VA X 0.00% = 0 VA

### Receptacle
- 0 VA X 0.00% = 0 VA

### L.C.L.
- 0 VA X 0.00% = 0 VA

### N.C.L.
- 38010 VA X 100.00% = 38010 VA

### Locations
- **LTG REC MIS BKR CKT A B C A B C CKT BKR MIS REC LTG LOCATION**

### Revisions
- **Number**
  - 1
  - 2

### Description
- 50% SD SET
- 100% CD SET

### Date
- 12/04/2015
- 05/23/2016

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**EXISTING TO REMAIN**

### Locations
- **LTG REC MIS BKR CKT A B C A B C CKT BKR MIS REC LTG LOCATION**

### Panel and Device Minimum AIC Rating: Bus Rating: 500 A
- **Main Breaker:** 200 A
- **Mounting:** Surface

### Panel:
- **KILN/DOCK CONTROL PANEL**
  - **Location:** KILN
  - **Voltage:** 277/480V 3Ø, 4W

### Revisions
- **Number**
  - 1

### Description
- 50% SD SET

### Date
- 12/04/2015
EMERGENCY GENERATOR AND DATA CENTER HVAC UPGRADES
RIO HONDO COLLEGE
3600 WORKMAN MILL RD., WHITTIER, CA 90601

ELECTRICAL DEMOLITION PLAN - DATA CENTER

KEYED NOTES THIS SHEET:
1. HATCHED PATTERN INDICATES ITEMS TO BE DEMOLISHED.
2. REMOVE (2) <E> SERVERS SHOWN INCLUDING ALL CONDUCTORS AND CONDUITS BACK TO SOURCE.
3. CAMPUS SHALL HAVE FIRST RIGHT OF REFUSAL OF ALL EQUIPMENT REMOVED AND DEMOLISHED.

GENERAL NOTES THIS SHEET:
1. REMOVE <E> MECHANICAL EQUIPMENT INCLUDING ALL CONDUCTORS AND CONDUITS BACK TO SOURCE.
2. CAMPUS SHALL HAVE FIRST RIGHT OF REFUSAL OF ALL EQUIPMENT REMOVED AND DEMOLISHED.

KEY PLAN:
1/4" = 1'-0"

ELECTRICAL DEMOLITION PLAN - DATA CENTER
ED101
15-104
ED101.DWG
SM
11/19/15
SM
PF
11/06/2015

REVISIONS
NUMBER DESCRIPTION DATE
1 50% SD SET 12/04/2015
2 100% CD SET 05/23/2016
1. HATCHED PATTERN INDICATES ITEMS TO BE DEMOLISHED. COMPLETELY REMOVE AND DEMOLISH <E> GENERATOR, INCLUDING EXISTING CIRCUIT BREAKER AND ASSOCIATED CONDUIT/WIRING BACK TO POINT OF DISTRIBUTION.

2. COMPLETELY REMOVE AND DEMOLISH <E> CONDUCTORS AND CONDUIT BACK TO SOURCE PANEL FOR ALL <E> TO REMAIN RECEPTACLES LOCATED IN THIS AREA. PREPARE <E> TO REMAIN RECEPTACLES FOR POWERING VIA <N> CONDUCTORS AND CONDUIT.

2. CAMPUS SHALL HAVE FIRST RIGHT OF REFUSAL OF ALL EQUIPMENT REMOVED AND DEMOLISHED.

3. TRANSFERED CIRCUITS SHALL NOT BE REUTILIZED ON <E> PANELS AND SHALL BE BLOCKED OFF FROM <E> BREAKERS. SPARE PLATE SHALL BE INSTALLED TO CIRCUIT BREAKERS WITH THE LAMENATED AFFIXED LABEL: "DO NOT USE OR CONNECT".

REVISIONS

1 50% SD SET 12/04/2015
2 100% CD SET 05/23/2016
1. HATCHED PATTERN INDICATES ITEMS TO BE DEMOLISHED.

2. CAMPUS SHALL HAVE FIRST RIGHT OF REFUSAL OF ALL EQUIPMENT REMOVED AND DEMOLISHED.

LUMINOUS CEILING WITH EXISTING NORMAL AND EMERGENCY LIGHTING AND CIRCUITS.
EMERGENCY GENERATOR AND DATA CENTER HVAC UPGRADES
RIO HONDO COLLEGE
3600 WORKMAN MILL RD., WHITTIER, CA 90601

ALL <E> AND <N> CONDUIT WHICH PASSES THROUGH A FIRE RATED PARTITION SHALL BE PROVIDED WITH A FIRESTOP SYSTEM WHICH MAINTAINS THE FIRE RATING OF THE PARTITION. ALL <E> CONDUIT WHICH DO NOT CURRENTLY HAVE A CODE COMPLIANT FIRESTOP SYSTEM INSTALLED SHALL BE REPAIRED TO A CONDITION SUCH THAT THE FIRE RATING OF THE PARTITION IS MAINTAINED.
1. **ALL <E> AND <N> CONDUIT WHICH PASSES THROUGH A FIRE-RATED PARTITION SHALL BE PROVIDED WITH A FIRESTOP SYSTEM WHICH MAINTAINS THE FIRE RATING OF THE PARTITION. ALL <E> CONDUIT WHICH DO NOT CURRENTLY HAVE A CODE COMPLIANT FIRESTOP SYSTEM INSTALLED SHALL BE REPAIRED TO A CONDITION SUCH THAT THE FIRE RATING OF THE PARTITION IS MAINTAINED.**

2. SEE SHEET E002 FOR ELECTRICAL SCHEDULES.

3. PROVIDE NEW REMOVABLE TRAFFIC BOLLARD WITH PADLOCK. SEE DETAIL 1 SHEET E502 FOR FURTHER DETAILS. (TYP. 4)

4. PROVIDE VAULT FOR GENERATOR CONDUIT. SEE DETAIL 5 SHEET E502 FOR FURTHER DETAILS. (TYP. 4)

5. CONTROL SINGALLING BETWEEN <N> GENERATOR AND GENERATOR CONTROL BOARD SHALL BE INSTALLED THROUGH 2" C WITHIN 21" CONCRETE ENCASEMENT. SEE DETAIL 9 SHEET E501 FOR FURTHER DETAILS.

6. ELEVATION LINES BASED ON SHEET E100 DETAIL 2.

7. VERIFY ALL EXISTING UTILITIES PRIOR TO EXCAVATION OF NEW CONDUIT CONCRETE ENCASED ROUTING.

8. PERFORM (25) POTHOLE SOIL INVESTIGATIONS TO ASCERTAIN NO CONFLICT W/ OTHER EXISTING UTILITIES.

9. DEVIATE FROM EXISTING UTILITIES BY FORMING 4' MIN. RADIUS DEVIATIONS IN CONCRETE ENCASED DUCTWORK AT NO ADDITIONAL COST TO CAMPUS.

10. OUTLINE OF MINIMAL BARRICADE REGION. BARRICADE AND PROVIDE PHYSICAL PROTECTION AT ALL TIMES DURING THE SITE INVESTIGATION, POTHOLING, EXCAVATION, PLACEMENT OF CASE ENCLOSED CONDUIT, AND REFINISHING OF SURFACES TO CAMPUS FINISHINGS.

11. MAINTENANCE OF BARRICADE SHALL REQUIRE PERMANENT (2) PERSON SUPERVISION TO REDIRECT VEHICULAR AND PEDESTRIAN TRAFFIC.

12. DEVIATE FROM ANY UNDERGROUND UTILITY THAT MAY COME WITHIN A PROXIMITY OF 2' FROM THE NEW ENCASED CONDUIT ROUTING. SUCH DEVIATIONS SHALL MAINTAIN A 4' RADIUS MINIMUM OF THE INNER CONCRETE ENCASED DIAMETER.

13. NOTIFY DIGALERT (811) BEFORE STARTING EXCAVATION WORK AND UNDERGROUND CONDUIT ROUTING.

**GENERAL NOTES THIS SHEET:**

**1/8" = 1'-0"**

**EMERGENCY GENERATOR CONDUIT ROUTING**

**1.** UNDERGROUND CONDUITS PER SLD ON SHEET E002.

**2.** GROUNDING WELL WITH ROD 1#3/0 TO GENERATOR SET G-BUS Bar. SEE DETAIL 2 SHEET E502 FOR FURTHER DETAILS. (TYP. 3)

**3.** PROVIDE NEW REMOVABLE TRAFFIC BOLLARD WITH PADLOCK. SEE DETAIL 1 SHEET E502 FOR FURTHER DETAILS. (TYP. 4)

**4.** 3 2-1/2" C - 4 #4/0 + #4/0 GND & 2 2" C - 4 #2/0 + #6 GND

**5.** CONTROL SINGALLING BETWEEN <N> GENERATOR AND GENERATOR CONTROL BOARD SHALL BE INSTALLED THROUGH 2" C WITHIN 21" CONCRETE ENCASEMENT. SEE DETAIL 9 SHEET E501 FOR FURTHER DETAILS.

**6.** VERIFY ALL EXISTING UTILITIES PRIOR TO EXCAVATION OF NEW CONDUIT CONCRETE ENCASED ROUTING.

**7.** PERFORM (25) POTHOLE SOIL INVESTIGATIONS TO ASCERTAIN NO CONFLICT W/ OTHER EXISTING UTILITIES.

**8.** DEVIATE FROM EXISTING UTILITIES BY FORMING 4' MIN. RADIUS DEVIATIONS IN CONCRETE ENCASED DUCTWORK AT NO ADDITIONAL COST TO CAMPUS.

**9.** OUTLINE OF MINIMAL BARRICADE REGION. BARRICADE AND PROVIDE PHYSICAL PROTECTION AT ALL TIMES DURING THE SITE INVESTIGATION, POTHOLING, EXCAVATION, PLACEMENT OF CASE ENCLOSED CONDUIT, AND REFINISHING OF SURFACES TO CAMPUS FINISHINGS.

**10.** MAINTENANCE OF BARRICADE SHALL REQUIRE PERMANENT (2) PERSON SUPERVISION TO REDIRECT VEHICULAR AND PEDESTRIAN TRAFFIC.

**11.** DEVIATE FROM ANY UNDERGROUND UTILITY THAT MAY COME WITHIN A PROXIMITY OF 2' FROM THE NEW ENCASED CONDUIT ROUTING. SUCH DEVIATIONS SHALL MAINTAIN A 4' RADIUS MINIMUM OF THE INNER CONCRETE ENCASED DIAMETER.

**12.** NOTIFY DIGALERT (811) BEFORE STARTING EXCAVATION WORK AND UNDERGROUND CONDUIT ROUTING.
1. **ALL <E> AND <N> CONDUIT WHICH PASSES THROUGH A FIRE RATED PARTITION SHALL BE PROVIDED WITH A FIRESTOP SYSTEM WHICH MAINTAINS THE FIRE RATING OF THE PARTITION. ALL <E> CONDUIT WHICH DO NOT CURRENTLY HAVE A CODE COMPLIANT FIRESTOP SYSTEM INSTALLED SHALL BE REPAIRED TO A CONDITION SUCH THAT THE FIRE RATING OF THE PARTITION IS MAINTAINED.**

2. **<N> RECEPTACLE AND LIGHTING SHALL BE REWIRED TO THE NEW EMERGENCY POWER DISTRIBUTION ROOM IN THE EOC REMODEL PROJECT.**
### Notes:

- **CAC 2** Liebert PX018DA 2,800 0.5 56,300 BTU/H 75°F DB, 45% RH 14.9 17.6 25 4.2 460/3/60 2 MERV 8 - IS-UNITY-DP 670 LBS 2/M 501 SEE NOTES BELOW THIS SCHEDULE

### Provisions:

- Provide with integral Liebert smoke and high-temperature, air and compressor sensors, and devices per Mfr recommendations and requirements.
- Provide with integral Liebert condensate pump and 12" Mfr seismic floor stand with field installed skirt around exposed area above raised floor.
- Air discharge shall be downflow into the raised floor system.

### Mfr Model

- **TC 1** **TRANE** 4TVB0009B100NB 3/4 9500 BTU/h 25 350 R410A .17 208/1/60 27 LBS - CEILING RECESSED CASSETTE UNIT. INSTALL PER MFR REQUIREMENTS. PROVIDE WITH BUILT-IN CONDENSATE PUMP.
- **TC 2** **TRANE** 4TVB0009B100NB 3/4 9500 BTU/h 25 350 R410A .17 208/1/60 27 LBS - CEILING RECESSED CASSETTE UNIT. INSTALL PER MFR REQUIREMENTS. PROVIDE WITH BUILT-IN CONDENSATE PUMP.
- **TC 3** **TRANE** 4TVB0009B100NB 3/4 9500 BTU/h 25 350 R410A .17 208/1/60 27 LBS - CEILING RECESSED CASSETTE UNIT. INSTALL PER MFR REQUIREMENTS. PROVIDE WITH BUILT-IN CONDENSATE PUMP.
- **TC 5** **TRANE** 4TVB0009B100NB 3/4 9500 BTU/h 25 350 R410A .17 208/1/60 27 LBS - CEILING RECESSED CASSETTE UNIT. INSTALL PER MFR REQUIREMENTS. PROVIDE WITH BUILT-IN CONDENSATE PUMP.
- **TC 8** **TRANE** 4TVB0009B100NB 3/4 9500 BTU/h 35 350 R410A .17 208/1/60 27 LBS - CEILING RECESSED CASSETTE UNIT. INSTALL PER MFR REQUIREMENTS. PROVIDE WITH BUILT-IN CONDENSATE PUMP.

### Mark

- Provide each indoor mini-VRF unit with a Mfr wireless remote for individual fan speed control.

### Notes:

- **CCU 2** Liebert MCM040 CAC-2 2,700 105°F R-410A - 1.4 1.9 15 460/3/60 291 LBS 2/M 503 INSTALL PER MFR REQUIREMENTS UTILIZING EXISTING LOADING DOCK.

### Verify Refrigerant pipe sizes with the Mfr and submit to Project Mechanical Engineer of Record for review.

### MCU

- **MCU 1** **TRANE** 4MCUCUY6NCE000 TC-4, TC-5, TC-6, TC-7, TC-8 R410A 208/1/60 55 W 60 LBS - INSTALL PER MFR REQUIREMENTS. PROVIDE TRANE 4YDK2512B0138A Y-JOINT.
- **MCU 2** **TRANE** 4MCUCUY4NCE000 WC-1, TC-1, TC-2, TC-3 R410A 208/1/60 55 W 53 LBS - INSTALL PER MFR REQUIREMENTS. PROVIDE TRANE 4YDK1500B0080A Y-JOINT.

### E.S.P. In.

- **MCU 1** **TRANE** 4MCUCUY6NCE000 TC-4, TC-5, TC-6, TC-7, TC-8 R410A 208/1/60 55 W 60 LBS - INSTALL PER MFR REQUIREMENTS. PROVIDE TRANE 4YDK2512B0138A Y-JOINT.

### CFM

- **SF 1** **GREENHECK** SQ-90-D 350 CFM DIRECT 1,550 0.5 IN. WG. BACKWARD.

### Electrical Filter

- **MCU 1** **TRANE** 4MCUCUY6NCE000 TC-4, TC-5, TC-6, TC-7, TC-8 R410A 208/1/60 55 W 60 LBS - INSTALL PER MFR REQUIREMENTS. PROVIDE TRANE 4YDK2512B0138A Y-JOINT.

### Power

- **INCLINED WHEEL** TYPE MOTOR 1/10 HP 115/60/1 80 LBS 8/M 502 PROVIDE WITH MFR SLOPED FILTER BOX, 2IN. PLEATED FILTERS, 24x24 PERFORATED RAISED FLOOR TILES/PANELS TO MATCH EXISTING RAISED FLOOR.

### Make-Up Air Supply Fan

- **DIFFUSER & GRILLE** SCHEDULE.

### Computer Room (CRAC) Condensing Unit

- **CAPACITY CFM** ELECTRICAL REFRIGERANT OPERATING ENVIRONMENT.

### Indoor VRF Fan Coil Unit Equivalents

- **TYPE FAN RPM** ELECTRICAL REFRIGERANT OPERATING ENVIRONMENT.

### Outdoor VRF Condensing Unit Schedule

- **TOTAL STATIC PRESSURE** ELECTRICAL REFRIGERANT OPERATING ENVIRONMENT.

### VRF Mode Control Unit Schedule

- **TOTAL STATIC PRESSURE** ELECTRICAL REFRIGERANT OPERATING ENVIRONMENT.

### General

- **ANCHORAGE** TYPE.

### Details

- **DATE DRAWN** CHECKED BY DRAWN BY AGENCY APPROVAL SHEET NUMBER SHEET TITLE (IF NOT 2"-SCALE ACCORDINGLY)

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**EMERGENCY GENERATOR AND DATA CENTER HVAC UPGRADES**

**PRO HONDO COLLEGE**

3600 WORMAN MILL RD., WHITTIER, CA 90601

**MECHANICAL SCHEDULES**
1. REMOVE <E> MECHANICAL EQUIPMENT AND DEMOLISH ALL ASSOCIATED DUCTWORK, DUCT ACCESSORIES, PIPING, AND PIPING ACCESSORIES UP TO THEIR SOURCE EQUIPMENT.

2. DEMOLISH ALL EXISTING DUCTWORK, DUCT SUPPORTS, DUCT ACCESSORIES, DUCT FITTINGS, DIFFUSERS, HYDRONIC PIPING AND ACCESSORIES, AND ALL OTHER ASSOCIATED MECHANICAL ITEMS SERVING THIS AREA AND REMOVE BACK TO THEIR SOURCE EQUIPMENT.

3. BLANK OFF ALL UNDERFLOOR SYSTEM DIFFUSERS IN THIS AREA WITH PANELS TO MATCH EXISTING FLOOR SYSTEM. AREA WILL BE CONDITIONED FROM NEW CEILING VRF UNIT.

4. DEMOLISH CONDENSATE UP TO P.O.R. AS INDICATED. PREPARE FOR CONNECTION OF <N> CONDENSATE LINE.

5. THE EXISTING MOVINCOOL UNIT MAY BE UTILIZED TO AUGMENT CONTRACTOR MEANS AND METHODS TO MAINTAIN DATA CENTER FRONT OF IT RACKS AT 72°F AT ALL TIMES.

6. THE DATA CENTER SHALL REMAIN OPERABLE THROUGHOUT RENOVATION BY MEANS AND METHODS PROVIDED BY THE CONTRACTOR. AT THE VERY LEAST, (1) CRAC UNIT SHALL REMAIN OPERATIONAL UP AND UNTIL A SECOND UNIT IS FULLY OPERATIONAL.

7. REMOVE ALL DUCTWORK AND ACCESSORIES OF SUSPENDED AC UNITS. THIS SHALL INCLUDE DUCTWORK FROM AC UNITS AND ALL IN CEILING DUCTWORK.

8. THE DATA CENTER SHALL REMAIN OPERABLE THROUGHOUT RENOVATION BY MEANS AND METHODS PROVIDED BY THE CONTRACTOR. AT THE VERY LEAST, (1) CRAC UNIT SHALL REMAIN OPERATIONAL UP AND UNTIL A SECOND UNIT IS FULLY OPERATIONAL.
1. HATCHED PATTERN INDICATES ITEMS TO BE DEMOLISHED.

2. CAMPUS SHALL HAVE FIRST RIGHT OF REFUSAL OF ALL EQUIPMENT REMOVED AND DEMOLISHED.

3. CAP OR INSTALL PLUG ON NATURAL GAS CONNECTION TO LOCATION OUTSIDE BUILDING. SEAL PENETRATION IN BUILDING.
GENERAL NOTES THIS SHEET:

1. THIS SHEET INDICATES APPROXIMATE LOCATION OF VCU-1, CCU-1 AND CCU-2 AT THE BUSINESS FACILITY AND
   LOADING DOCK.
ABOVE SEE SPECIFICATIONS FOR THREADED ROD TO STRUCTURAL ROD SIZING AND DETAIL THIS

1. N.T.S. 5 TYP. PIPE HANGER 2" AND LARGER
2. N.T.S. 3 TYP. ROUND DUCT SEISMIC BRACING

NOTES:

3. SEE TABLE BELOW FOR SMACNA TABLES.
4. PIPE LINES 2" AND LARGER.
5. PIPE HANGER INSTALLATION SHALL BE IN ACCORDANCE WITH SMACNA GUIDELINES.
6. TRANSVERSE BRACING SHALL BE SPACED AT 30 FT AND LONGITUDINAL BRACING SHALL BE AT 60 FT.
7. MINIMUM EMBEDMENT DEPTH PER ICBC 4627 3.
8. PIPE orient to supporting member tightening and 9/16" NUT.
9. PROVIDE AND INSTALL SUPPORT HANGERS AT ALL FITTINGS.
10. SPACE HANGERS AT A MAXIMUM OF 6'-0" ON CENTER.
11. INSTALL ALL DUCTWORK PER SMACNA GUIDELINES.

<table>
<thead>
<tr>
<th>DUCT SIZE</th>
<th>46&quot;</th>
<th>49&quot;</th>
<th>50&quot;</th>
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<tr>
<td>STRAP (MIN.)</td>
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<td>WIRE DIAMETER</td>
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<td>&quot;EPIC WEDGE NUT&quot; (TYP.)</td>
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<td>THREADED ROD TO EXTEND</td>
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<td>PIPE HANGER ROD SIZE</td>
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<td>C BOLTS= L 3/8&quot;</td>
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<td>ANCHORS DIFFER DUE TO METAL DECK MFR.S</td>
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<td>BLOCK = APPROVED EQUAL &quot;TOLCO&quot; 2F OR BLOCK</td>
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<td>PROTECTION SHIELD OR RIGID INSULATION IF PIPE IS INSULATED, USE APPROPRIATE</td>
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<td>SHOULDER SCREWS EMBED. MIN. 1&quot; X 22 GA</td>
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Tape moisture detectors to slab in data room underfloor system. Moisture detectors shall form a 2x3 grid with extremities at 10' from perimeter of data center floor. 200-1,000 PPM (transmitted as 0-10V signal).