# Drawing Index

These sheets are a document set and should not be separated. Electrical information and references are contained on all sheets.

SITE READINESS

C1

EQUIPMENT LAYOUT

Α1

(Equipment locations, heat loads, component weights, environmental specs)

STRUCTURAL LAYOUT

S1

(Structural support/mounting locations for floor/wall/ceiling, wall support elevations)

STRUCTURAL DETAILS

S2

(Floor and Ceiling loading information)

ELECTRICAL LAYOUT

E1

(Contractor supplied wiring, interconnect methods, junction point locations and descriptions)

ELECTRICAL SPECIFICATIONS

(Maximum wiring run lengths, interconnect diagram, system power specifications)

ELECTRICAL DETAILS

E3

EQUIPMENT DETAILS

D1

These equipment IS drawings indicate the placement and interconnection of the listed equipment components. These drawings are not construction or site preparation drawings. Customer remains ultimately responsible for preparing the site to accommodate the IS and operation of such equipment in compliance with GE Healthcare's written specifications and all applicable federal, state, and/or local requirements.

# \* REQUIRED REFERENCE \*

# Definium 5000 Pre Installation Manual 5192967-100

A mandatory component of this drawing set is the GE Healthcare Pre Installation manual. Failure to reference the preIS manual will result in incomplete documentation required for site design and preparation.

Pre Installation documents for GE Healthcare products can be accessed on the web at:

www.gehealthcare.com/siteplanning

# GE Healthcare



# RAD Site Planning

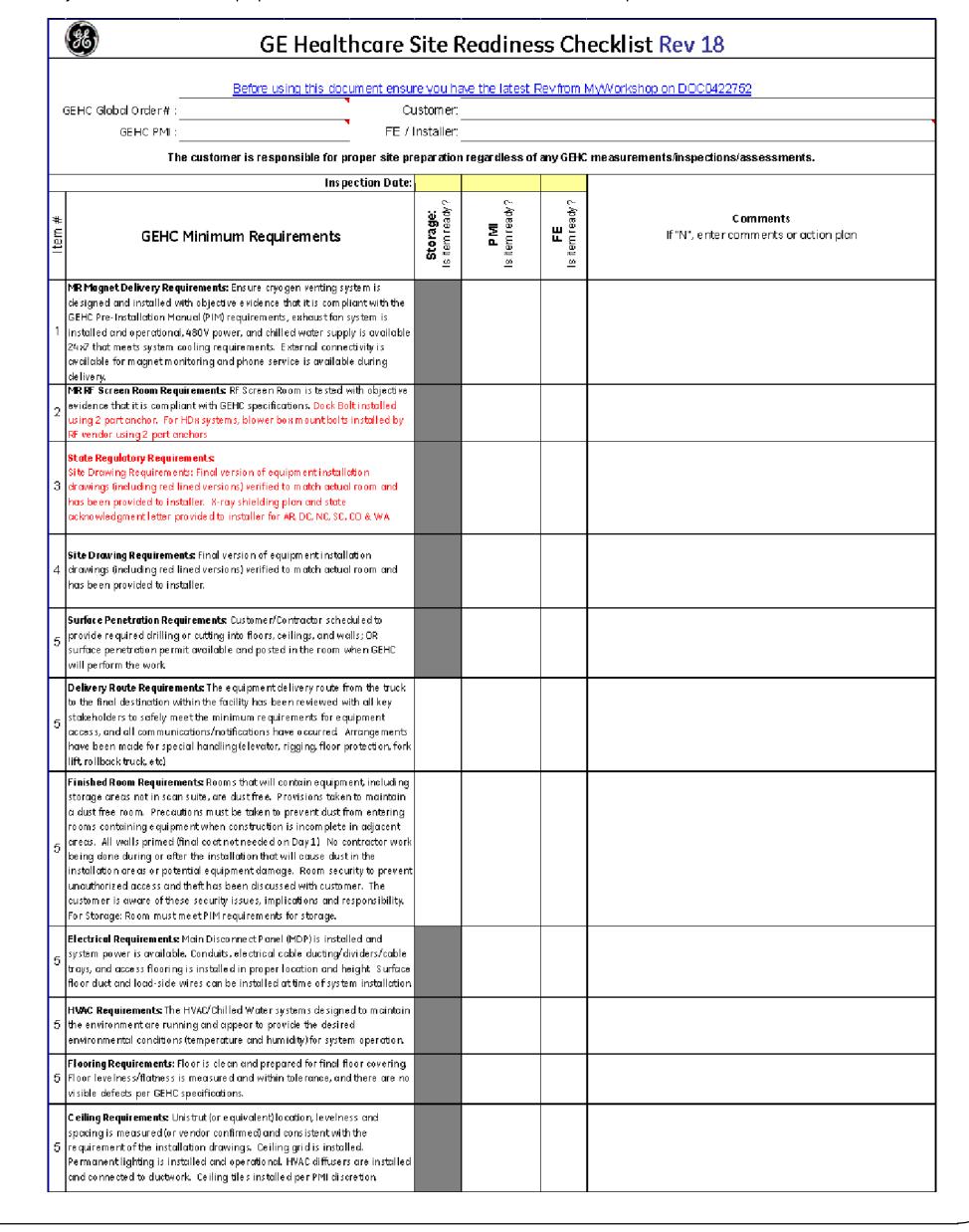


### Customer Site Readiness Requirements

- Any deviation from these drawings must be communicated in writing to and reviewed by your local GE Healthcare Installation Project Manager prior to making changes.
- Make arrangements for any rigging, special handling, or facility modifications that must be made to deliver the equipment to the installation site. If desired, your local GE Healthcare Installation Project Manager can supply a reference list of rigging contractors.
- New construction requires the following; 1. Secure area for equipment,
   2. Power for drills and other test equipment,
   3. Capability for image analysis,
   4. Restrooms.
- Provide for refuse removal and disposal (e.g. crates, cartons, packing)
- Contact a radiation physicist or consultant to specify radiation containment requirements.

### GE Equipment Delivery Requirements

The items on the GE Healthcare Site Readiness Checklist are REQUIRED to facilitate equipment delivery to the IS site. Equipment will not be delivered if these requirements are not satisfied.



GE Healthcar



TED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT ARATUS, ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS T EXPECTED TO BE INSTALLED. IT IS NOT TO BE USED FOIL IN PURPOSES, HOWEVER, AND THE COMPANY CANNOT ACCEPTANCY DAMAGES BESILEDING THE EFFORM

1-136f Typical layout

PROJECT	REVISION
1-136f	03
DATE: DRAWN BY: CHECKED B	18.Apr.11 REK Y: JDR

REVISION HISTORY:



	GF FQUIPMENT LISTING		SCALE: 1/4"	= 1'-0"	FQUIPMENT LAYOUT	RECOMMENDED CEILING HEIGHT =	= 9'-6"
PER:	PMENT ON ORDER FROM GE HEALTHCARE, INSTALLED BY GE HEALTHCARE, : NEITHER A QUOTE OR GON WAS ISSUED AT THE DATE OF THESE DRAWINGS	P = PREAPPROVAL  SEISMIC C = CALCULATIONS/ STATUS PENDING APPROVAL	This equipment layout of these components.	indicates the placement and interconne	ection of the indicated equipment components. There may be f ty for ensuring the site and final equipment placement complies	ederal, state, and/or local requirements that could impact the	e placement
PER : NOTE: BE IN  ITEM NO. 1  1 1  2 1  3 1  4 1  5 1  6 1  7 1	: NEITHER A QUOTE OR GON WAS ISSUED AT THE DATE OF THESE DRAWINGS  : LOCAL CONDITIONS MAY DICTATE THAT ITEMS IDENTIFIED IN THIS CATEGORY INSTALLED BY OTHERS.  QUANTITY ORDERED REFER TO SHEET "D"  (* = EXISTING/REINSTALL)    DEFINIUM POSITIONER   727 lbs 1013 be 1013 be 1013 be 1014 be 1015 be 1016 be	P = PREAPPROVAL SEISMIC C = CALCULATIONS/ PENDING APPROVAL S = SPECIFICATIONS ONLY  THE STATUS  S = SPECIFICATIONS ONLY  STRC FLEC PLAN PLAN  THE PLAN THE P	MOON TO SERVICE STREWHERE)	EQUIPMENT LAYOUT section of the indicated equipment components. There may be if by for ensuring the site and final equipment placement compiles and Exam Room  RAD EXAM ROOM  RAD EXAM ROOM  62  93  63  64  65  65  65  65  65  65  65  65  65	RECOMMENDED CEILING HEIGHT = ederal, state, and/or local requirements that could impact the swith all applicable federal, state, and/or local requirements.	e placement	
TA	THE FOLLOWING ITEMS, WHICH HAVE BEEN ORDERED FROM GE HE ARE TO BE INSTALLED BY THE CUSTOMER OR HIS CONTRACTOR.	ALTHCARE,					

ANCILLARY ITEMS

#### CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS

#### ITEM DESCRIPTION (\* INDICATES EXISTING)

- DOOR LIMIT SWITCH (NEEDED ONLY IF REQUIRED BY STATE/LOCAL CODES) COUNTER TOP FOR EQUIPMENT-MINIMUM DEPTH 24 IN, AND ADDITIONAL SHELVING MAY BE REQUIRED BELOW COUNTER TOP FOR PC TOWER. PROVIDE GROMMETED OPENINGS AS REQUIRED TO ROUTE CABLES.
- CONTROL WALL TO CEILING WITH LEAD GLASS VIEWING WINDOW.
- MINIMUM DOOR OPENING FOR EQUIPMENT DELIVERY IS
  40 IN, W × 80 IN, H [1016mm × 2030mm], CONTINGENT
  ON A 94.5 IN, [2400mm] CORRIDOR WIDTH
  NOTE: IF IMAGE PASTE OPTION IS ORDERED A 82 IN, H
  [2083mm] DOOR OPENING IS REQUIRED
- X-RAY ON WARNING LIGHT AVAILABLE FROM GE SUPPLY Call: 800-200-9760 Ge cat. no. wxiabww-of-xiu

THE FOLLOWING ITEMS ARE AVAILABLE FROM GE HEALTHCARE TECHNOLOGIES. CONTACT YOUR LOCAL GE HEALTHCARE SERVICE REPRESENTATIVE FOR PRICING AND AVAILABILITY.

- X-RAY ROOM WARNING LIGHT CONTROL PANEL REFERENCE JUNCTION POINT 'XRLC' ON SHEET 'E1' FOR DETAILED DESCRIPTION -E4502RL FOR WARNING LIGHT CONTROL ONLY.
  - EMERGENCY OFF SWITCH (needed only if required by state/local codes)
  - MAIN DISCONNECT, REFERENCE JUNCTION POINT 'A' ON SHEET E1 FOR DETAILED DESCRIPTION.
    CAT. No. E4502ST OR WITH AUTO RESTART E4502RP.
    (20 W x 48 H x 6,68 ln. D)

#### GENERAL SPECIFICATIONS

- THE REQUIRED CEILING HEIGHT INDICATED ON THESE PLANS IS TO ENSURE EQUIPMENT FUNCTION IS NOT INHIBITED. CONSULT WITH YOUR LOCAL GEHC IS SPECIALIST REGARDING ACCEPTABILITY OF OTHER CEILING HEIGHTS.
- CHECK ALL DOOR OPENINGS AND HALLWAYS FROM DELIVERY LOCATION TO WHERE EQUIPMENT IS TO BE INSTALLED TO ENSURE THE ROUTE PHYSICALLY AND STRUCTURALLY
- RADIATION PROTECTION REQUIREMENTS ARE NOT INDICATED ON THIS PLAN. WHERE NEEDED PER NATIONAL OR LOCAL CODE THEY SHALL BE SPECIFIED BY A QUALIFIED RADIOLOGICAL PHYSICIST.
- THE DEVELOPMENT OF THE EQUIPMENT LAYOUT, ROOM DIMENSIONS, MECHANICAL AND ELECTRICAL SUGGESTIONS IS PREDICATED UPON THE BEST INFORMATION OBTAINABLE FROM THE SITE, COUPLED WITH THE CUSTOMER'S KNOWN DESIRES. ARCHITECTURAL OR ELECTRICAL CHANGES INCLUDING RELOCATION OF EQUIPMENT ILLUSTRATED ON THIS DRAWING IS ALLOWED ONLY WITH NOTIFICATION, IN WRITING, AND REVIEW BY GEHC SERVICE DEPARTMENT. EQUIPMENT OPERATION, SERVICEABILITY, AND RESTRICTING CABLE LENGTHS, ETC., MAKE THIS ESSENTIAL FOR A PROPER IS. GEHC RESERVES THE RIGHT TO MAKE ON THE JOB CHANGES BECAUSE OF CUSTOMER REQUIREMENTS AND/OR OBSTACLES IN CONSTRUCTION, ETC..
- ALL WORK TO BE IN COMPLIANCE WITH NATIONAL AND LOCAL BUILDING SAFETY CODES.
- DIMENSIONS ARE TO FINISHED SURFACES OF ROOM

WILL ACCOMODATE THE EQUIPMENT AS SHIPPED.

#### SITE ENVIRONMENT SPECIFICATIONS

- AMBIENT OPERATING TEMPERATURE: 59 TO 95 DEGREES (F)
- HUMIDITY: 45 TO 75 PERCENT NON-CONDENSING
- ATMOSPHERIC PRESSURE: MIN.=710hpa MAX.=1025hpa
- THE ENVIRONMENT FOR THE ELECTRONICS CABINET MUST BE CONTROLLED SO THE ABOVE RESTRICTIONS ARE NOT EXCEEDED.
- DO NOT RESTRICT THE AIR INTAKE AT THE LOWER FRONT OR AIR EXHAUST AT THE TOP OF THE ELECTRONICS CABINETS.

#### MAGNETIC INTERFERENCE SPECIFICATIONS

IMAGE INTENSIFIERS MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 1 GAUSS TO GUARANTEE SPECIFIED IMAGING PERFORMANCE. X-RAY TUBES MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 10 GAUSS TO GUARANTEE SPECIFIED PERFORMANCE.

SYSTEM ELECTRONICS MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 10 GAUSS TO GUARANTEE DATA INTEGRITY.

OPERATORS CONSOLE EQUIPMENT MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 10 GAUSS TO OBTAIN SPECIFIED GEOMETRIC LINEARITY.

REVISION HISTORY:

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

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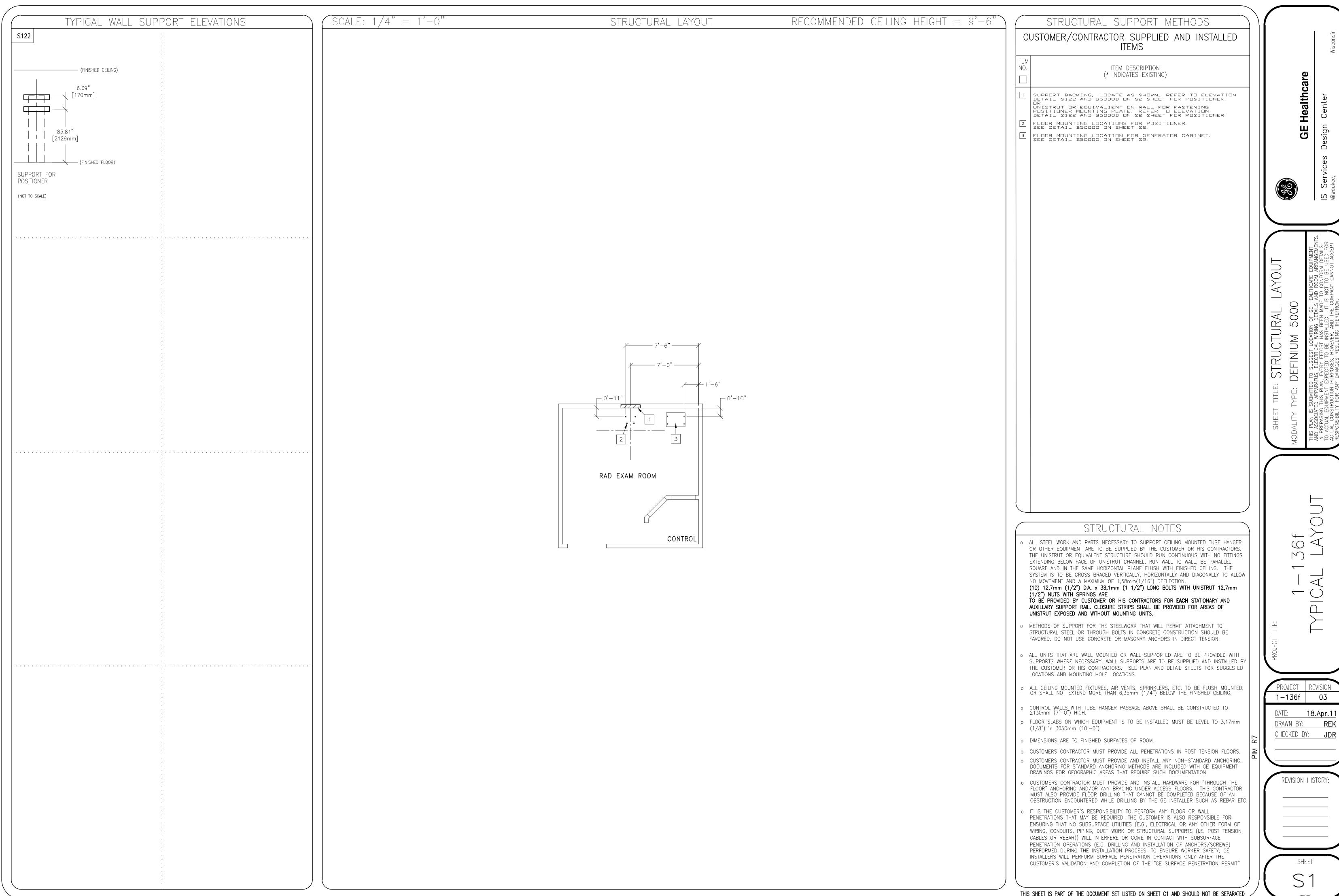
EQUIPMENT LA DEFINIUM 5000

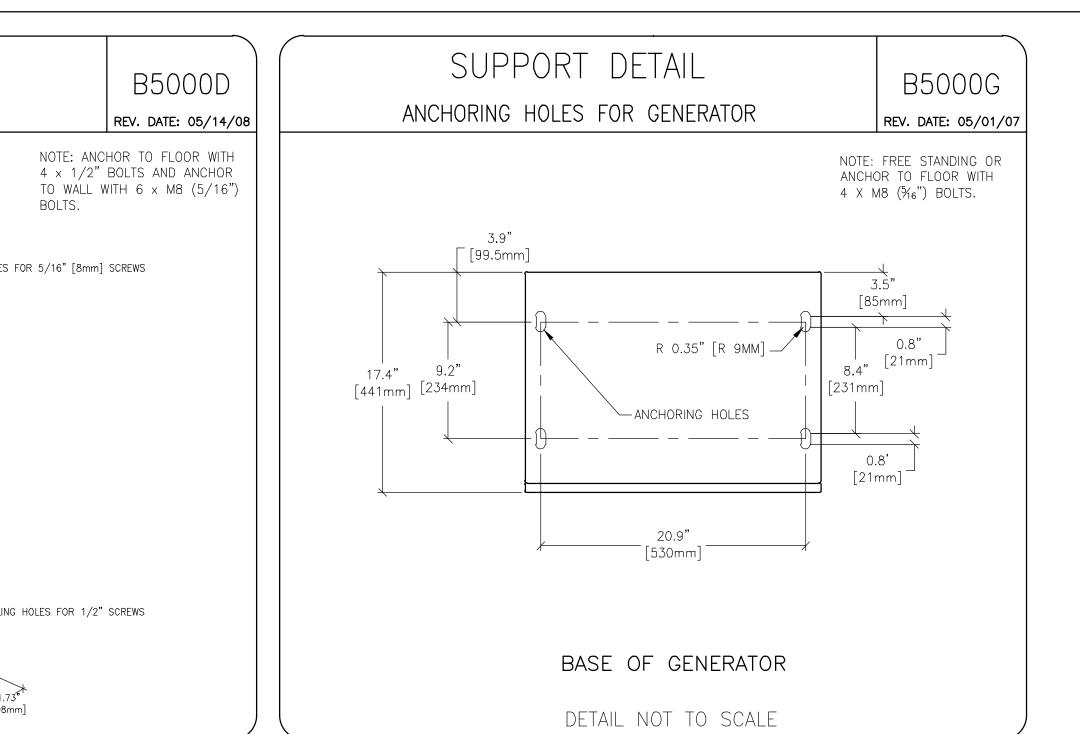
LAYOUT

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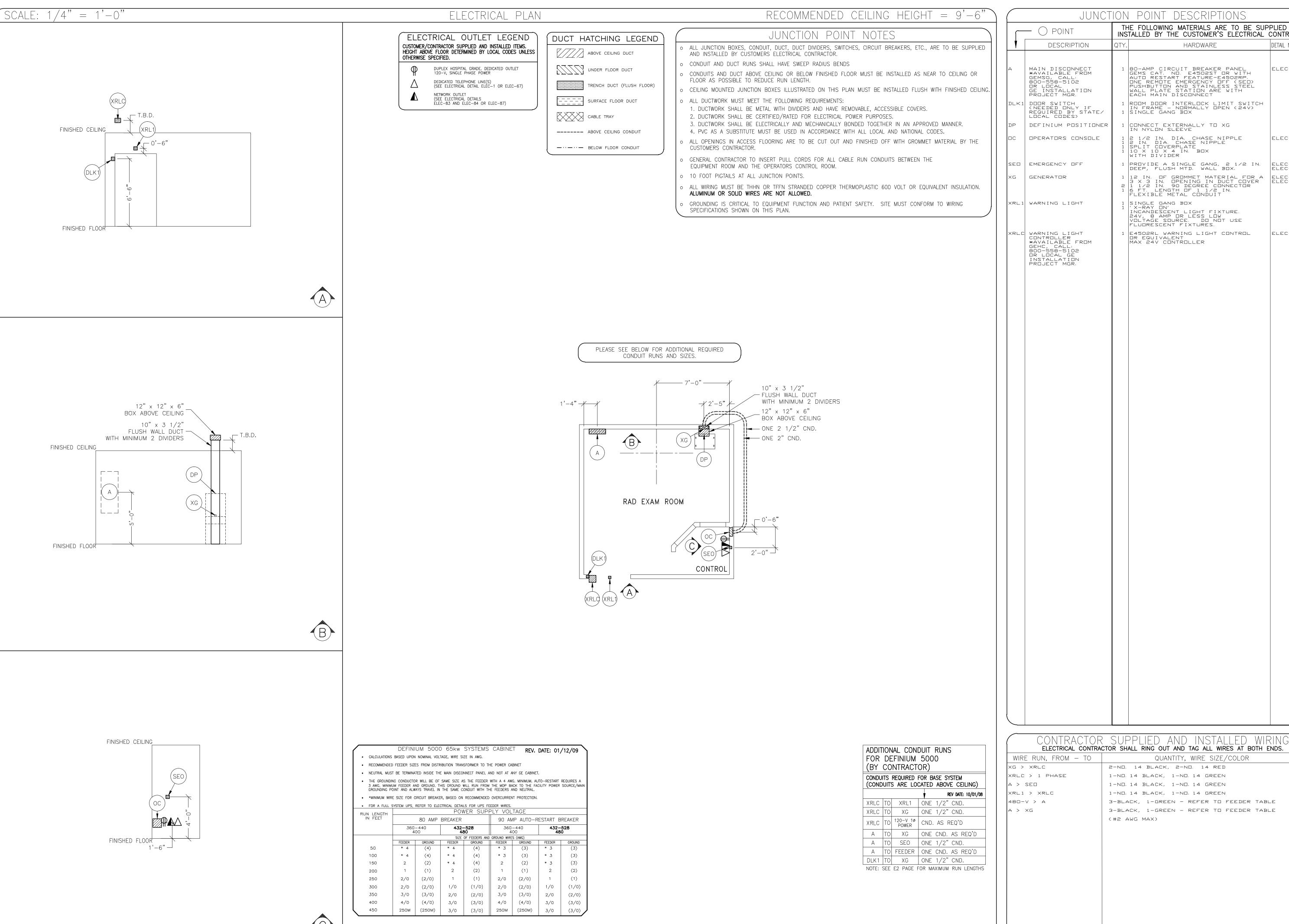
SUPPORT DETAIL ANCHORING HOLES FOR POSITIONER 6.69" [170mm]<sub>></sub> ─6 WALL DRILLING HOLES FOR 5/16" [8mm] SCREWS 83.81" [2129mm] -4 DRILLING HOLES FOR 1/2" SCREWS DETAIL NOT TO SCALE

1-136f 03

REVISION HISTORY:

E: STRUCTURAL DETAILS
: DEFINIUM 5000

**GE Healthcare** 



THE FOLLOWING MATERIALS ARE TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER'S ELECTRICAL CONTRACTOR DETAIL NO., SHT. ELEC-15 ELEC-79 1 PROVIDE A SINGLE GANG, 2 1/2 IN. ELEC-16 DEEP, FLUSH MTD. WALL BOX. ELEC-168 ELEC-72

 $\overline{\mathbb{Q}} \stackrel{\mathbb{R}}{\stackrel{>}{=}}$ 

 $\bigcirc$ LAY

)AL L 5000 ELECTRICA DEFINIUM

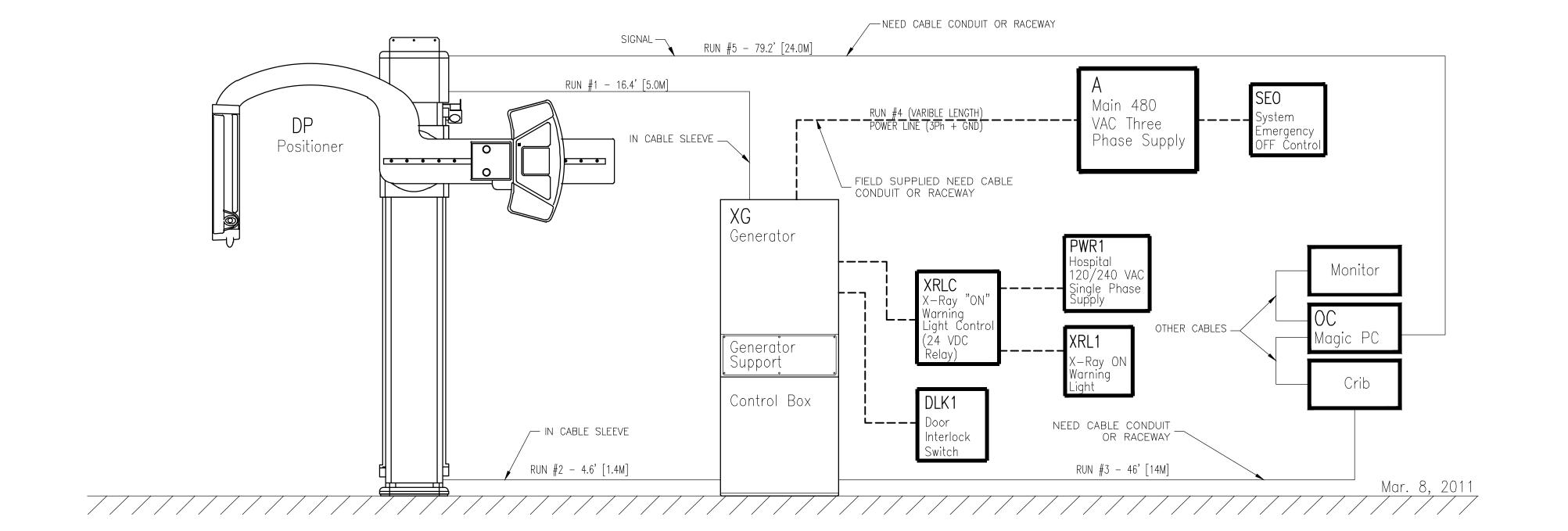
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REVISION HISTORY

#### INTERCONNECT DIAGRAM

#### Definium 5000 System Interconnect Runs



#### POWER SPECIFICATIONS

DEFINIUM 5000 65kw GENERATOR REV. DATE: 03/10/11

PRIMARY SOURCE IS REQUIRED FOR ALL INSTALLATIONS.
RANGE OF LINE VOLTAGES:
NOMINAL LINE VOLTAGE OF 400 OR 480, 3 PHASE, WITHOUT NEUTRAL,
50 OR 60 Hz.

REQUIRED POWER SUPPLY: WYE OR DELTA DISTRIBUTION MAXIMUM DAILY VOLTAGE VARIATION MUST FALL WITHIN ONE OF THE RANGES IN TABLE A.

TABLE A ALLOWABLE INPUT VOLTAGES/ CURRENT

NOTE

PHASE-

POWER

DEMAND

BALANCE.

NOMINAL VOLTAGE	NORMAL RANGE ±10 PERCENT	CURRENT	(AMPS)	MINIMUM STANDARD OVERCURRENT PROTECTION
		MAX. MOMENTARY	CONTINUOUS	
400	360-440	117	6.1	60-A
480	432-528	98	5.1	50-A

#### ALL CALCULATIONS BASED UPON NOMINAL VOLTAGE

LOW LINE CONDITIONS MAY INHIBIT SOME HIGH KVP TECHNIQUES. THE GENERATOR AUTOMATICALLY ESTABLISHES THESE INHIBITS BASED ON ACTUAL LINE CONDITIONS AND SYSTEM REGULATION.

PHASE-TO-PHASE VOLTAGES MUST BE WITHIN +2 PERCENT OF THE LOWEST PHASE-TO-PHASE VOLTAGE. MAXIMUM ALLOWABLE TRANSIENT VOLTAGE EXCURSIONS ARE 2.5 PERCENT OF RATED LINE VOLTAGE AT A MAXIMUM DURATION OF 5 CYCLES AND FREQUENCY OF 10 TIMES PER HOUR.

CONTINUOUS POWER DEMAND = 4.2 KVA. (MAX DEMAND = 81.25 KVA)

TABLE B MAXIMUM MOMENTARY POWER DEMAND.

DEMAND	DEFINIL
kVa * POWER FACTOR AT	81.2 0.73
mA	650
kVp	150

\* DEMAND INCLUDES POWER FOR ENTIRE SYSTEM. LINE VOLTAGE REGULATION AT MAXIMUM POWER DEMAND MUST BE LESS THAN OR EQUAL TO 6 PERCENT.

DISTRI-BUTION TRANS-FORMER FOR A SINGLE UNIT INSTALLATION, THE MINIMUM TRANSFORMER SIZE IS 112.5 KVA.

#### ELECTRICAL NOTES

- NOTE 1: ALL WIRES SPECIFIED SHALL BE COPPER STRANDED, FLEXIBLE, THERMO-PLASTIC, COLOR CODED, CUT 10 FOOT LONG AT OUTLET BOXES. DUCT TERMINATION POINTS OR STUBBED CONDUIT ENDS. ALL CONDUCTORS, POWER, SIGNAL AND GROUND, MUST BE RUN IN A CONDUIT OR DUCT SYSTEM. ELECTRICAL CONTRACTOR SHALL RING OUT AND TAG ALL WIRES AT BOTH ENDS. WIRE RUNS MUST BE CONTINUOUS COPPER STRANDED AND FREE FROM SPLICES, **ALUMINUM OR SOLID WIRES ARE NOT ALLOWED.**
- NOTE 2: WIRE SIZES GIVEN ARE FOR USE OF EQUIPMENT, LARGER SIZES MAY BE REQUIRED BY LOCAL CODES,
- NOTE 3: IT IS RECOMMENDED THAT ALL WIRES BE COLOR CODED, AS REQUIRED IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.
- NOTE 4: CONDUIT SIZES SHALL BE VERIFIED BY THE ARCHITECT, ELECTRICAL ENGINEER OR CONTRACTOR, IN ACCORDANCE WITH LOCAL OR NATIONAL CODES.
- NOTE 5: CONVENIENCE OUTLETS ARE NOT ILLUSTRATED. THEIR NUMBER AND LOCATION ARE TO BE SPECIFIED BY OTHERS. LOCATE AT LEAST ONE CONVENIENCE OUTLET CLOSE TO THE SYSTEM CONTROL, THE POWER DISTRITBUTION UNIT AND ONE ON EACH WALL OF THE PROCEDURE ROOM. USE HOSPITAL APPROVED OUTLET OR EQUIVALENT.
- NOTE 6: GENERAL ROOM ILLUMINATION IS NOT ILLUSTRATED. CAUTION SHOULD BE TAKEN TO AVOID EXCESSIVE HEAT FROM OVERHEAD SPOTLIGHTS. DAMAGE CAN OCCUR TO CEILING MOUNTING COMPONENTS AND WIRING IF HIGH WATTAGE BULBS ARE USED. RECOMMEND LOW WATTAGE BULBS NO HIGHER THAN 75 WATTS AND USE DIMMER CONTROLS (EXCEPT MR). DO NOT MOUNT LIGHTS DIRECTLY ABOVE AREAS WHERE CEILING MOUNTED ACCESSORIES WILL BE PARKED.
- NOTE 7: ROUTING OF CABLE DUCTWORK, CONDUITS, ETC., MUST RUN DIRECT AS POSSIBLE OTHERWISE MAY RESULT IN THE NEED FOR GREATER THAN STANDARD CABLE LENGTHS (REFER TO THE INTERCONNECTION DIAGRAM FOR MAXIMUM USABLE LENGTHS POINT TO POINT).
- NOTE 8: CONDUIT TURNS TO HAVE LARGE, SWEEPING BENDS WITH MINIMUM RADIUS IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.
- NOTE 9: A SPECIAL GROUNDING SYSTEM IS REQUIRED IN ALL PROCEDURE ROOMS BY SOME NATIONAL AND LOCAL CODES. IT IS RECOMMENDED IN AREAS WHERE PATIENTS MIGHT BE EXAMINED OR TREATED UNDER PRESENT, FUTURE, OR EMERGENCY CONDITIONS. CONSULT THE GOVERNING ELECTRICAL CODE AND CONFER WITH APPROPRIATE CUSTOMER ADMINISTRATIVE PERSONNEL TO DETERMINE THE AREAS REQUIRING THIS TYPE OF GROUNDING SYSTEM.
- NOTE 10: THE MAXIMUM POINT TO POINT DISTANCES ILLUSTRATED ON THIS DRAWING MUST NOT BE EXCEEDED.
- NOTE 11: PHYSICAL CONNECTION OF PRIMARY POWER TO GE EQUIPMENT IS TO BE MADE BY CUSTOMERS ELECTRICAL CONTRACTOR WITH THE SUPERVISION OF A GE REPRESENTATIVE. THE GE REPRESENTATIVE WOULD BE REQUIRED TO IDENTIFY THE PHYSICAL CONNECTION LOCATION, AND INSURE PROPER HANDLING OF GE EQUIPMENT.

DIAGRAM KEY

--- CUSTOMER/CONTRACTOR SUPPLIED WIRING. ROUTE IN ADEQUATE CONDUIT OR RACEWAY. - GE FURNISHED CABLE RUNS. ROUTE IN EMPTY

CONDUIT OR RACEWAY. 59' [18M] MAXIMUM RUN LENGTH BETWEEN JUNCTION POINTS. Feet [Meters]

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SPECIFICATIONS

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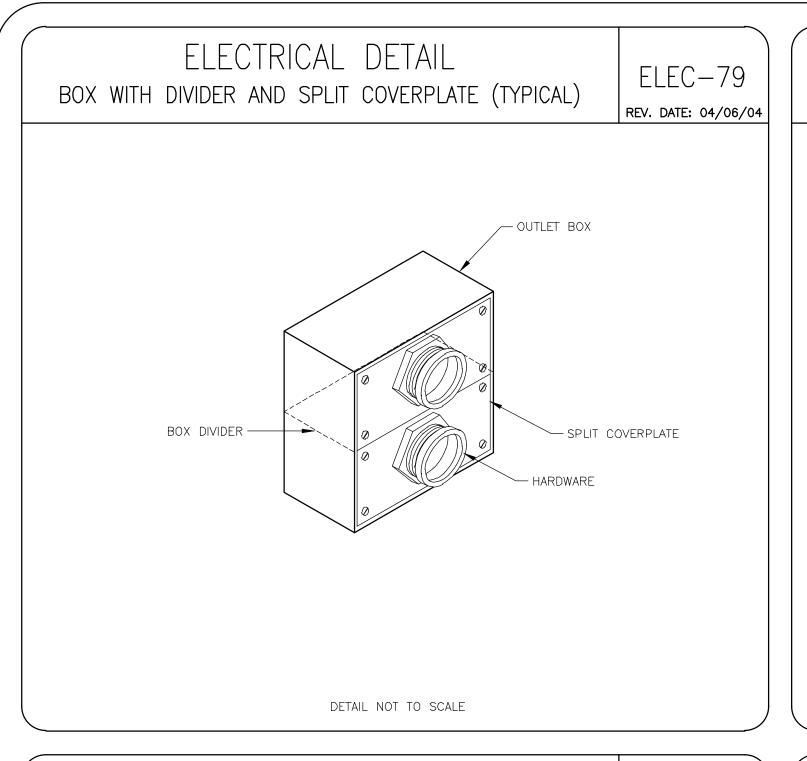
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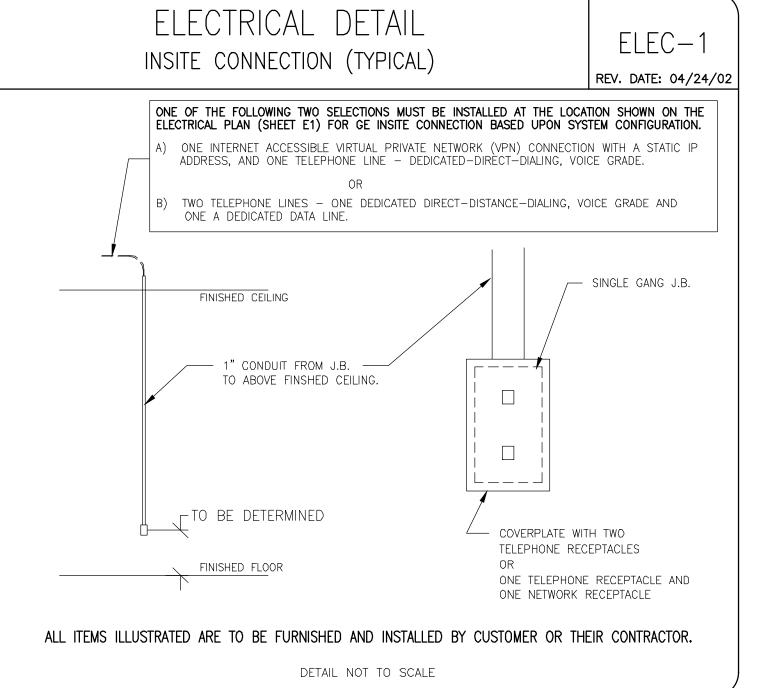
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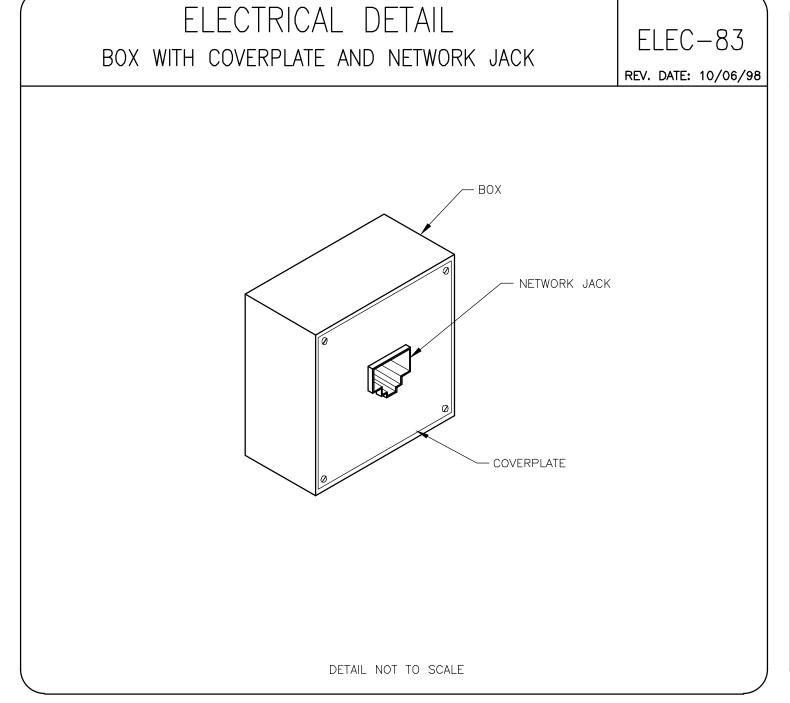
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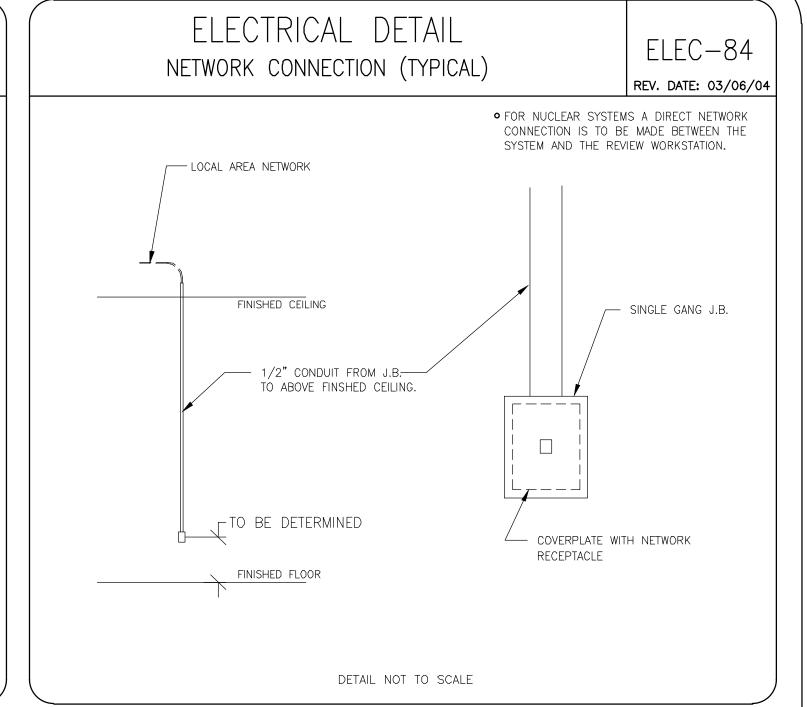
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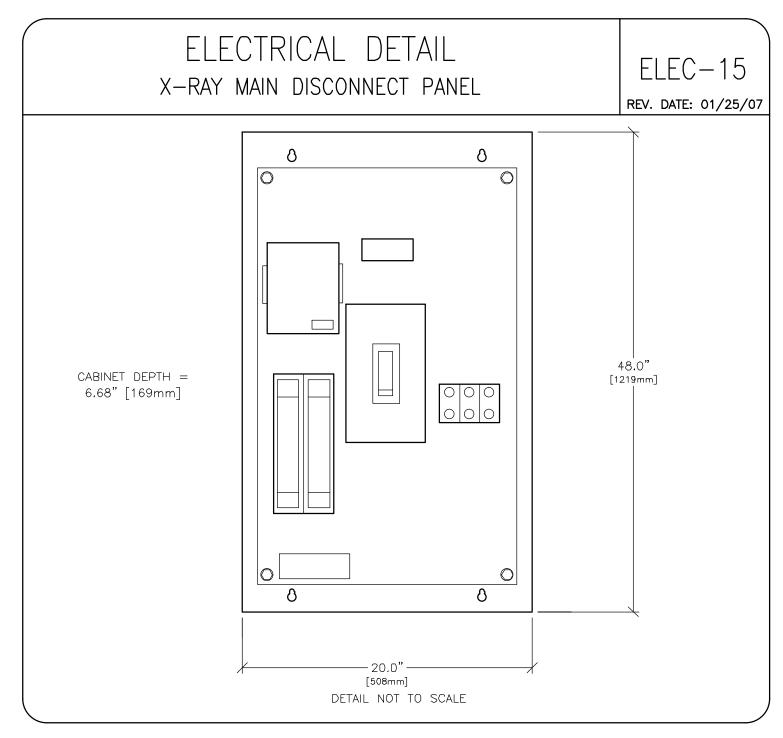
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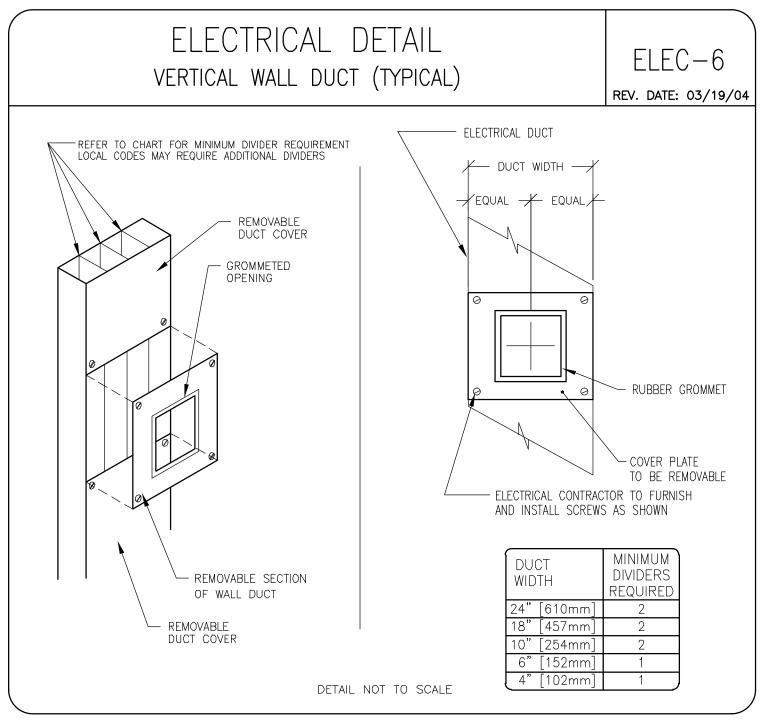


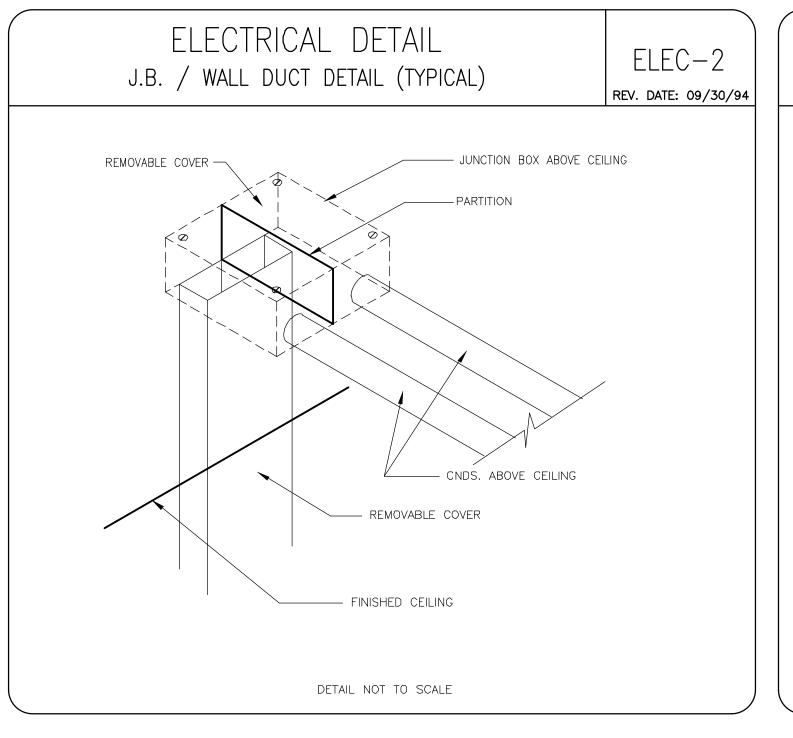


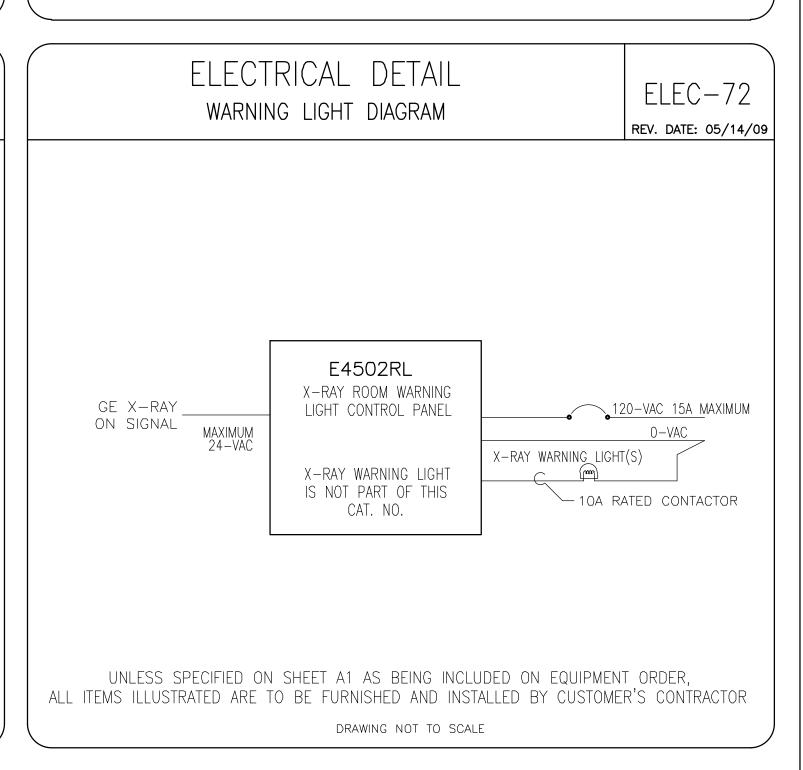


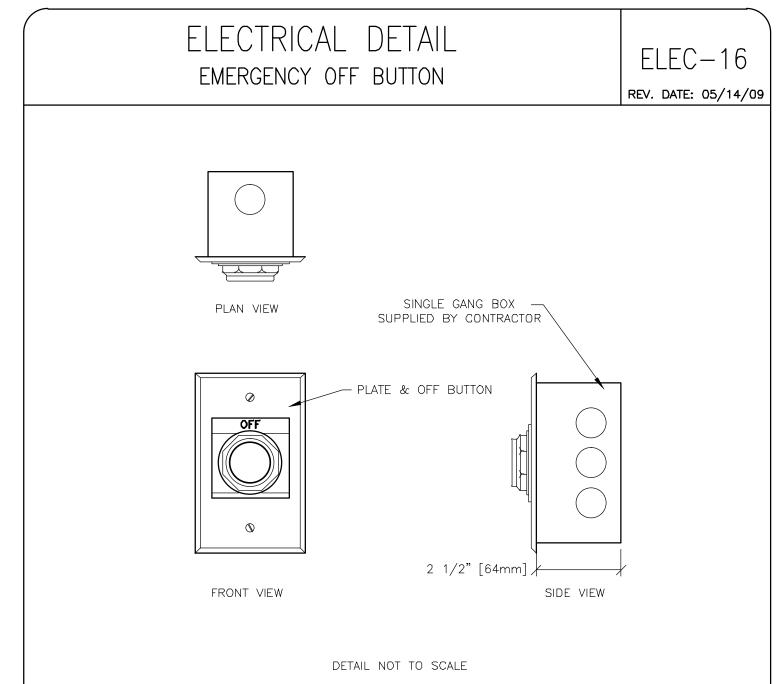


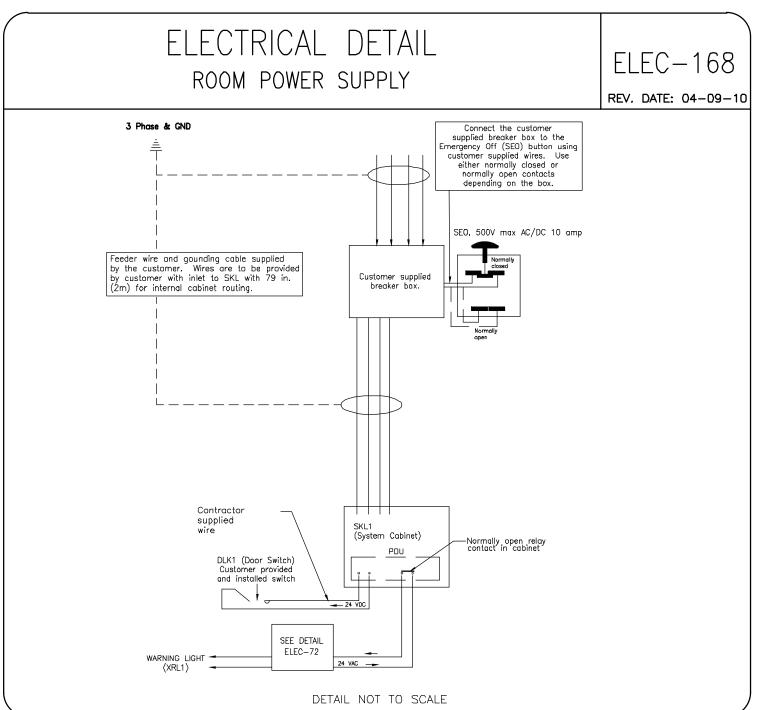


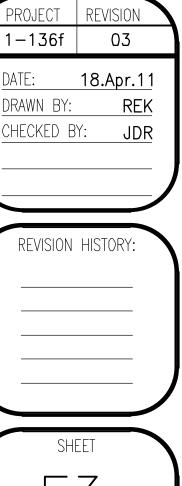










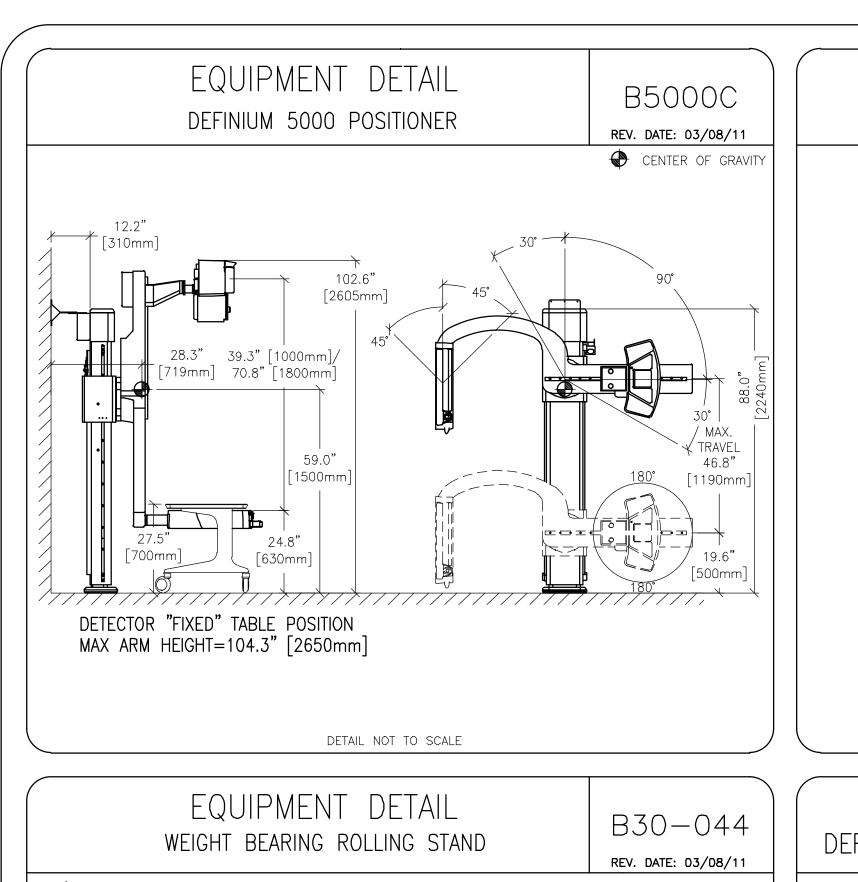


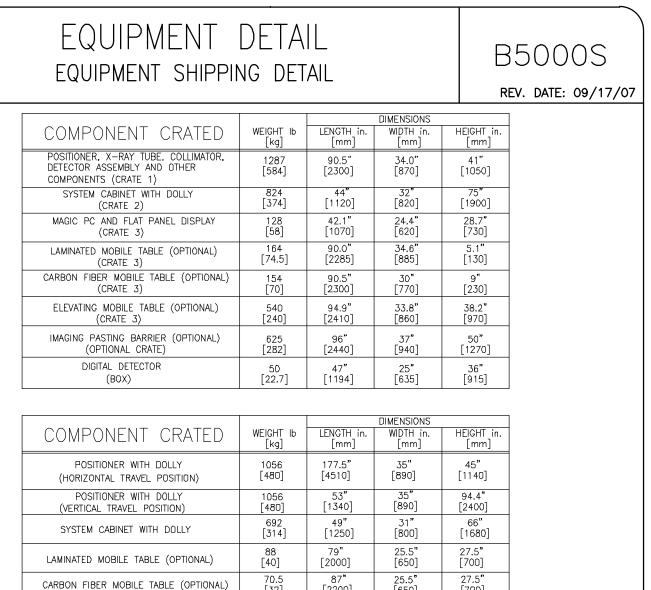
Healthcare

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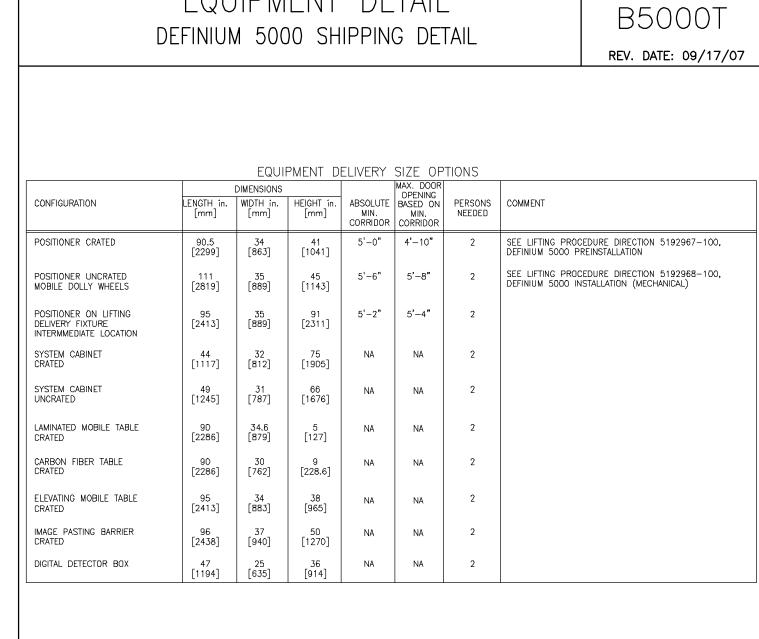
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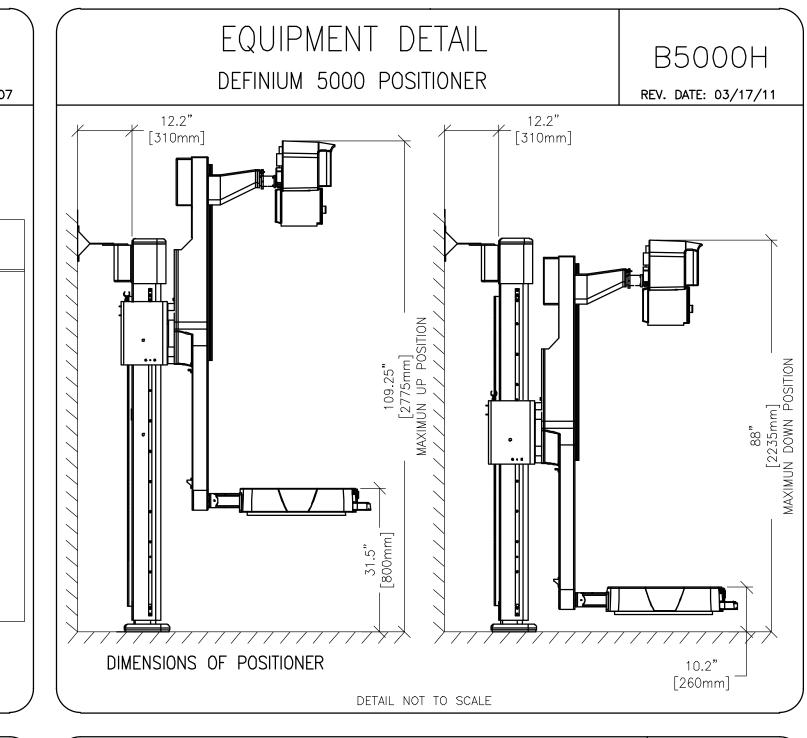


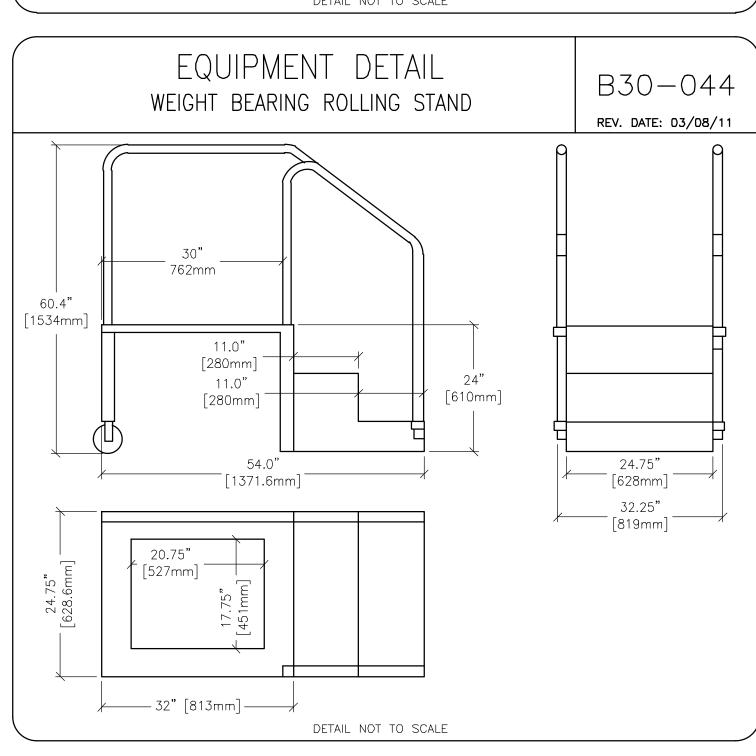


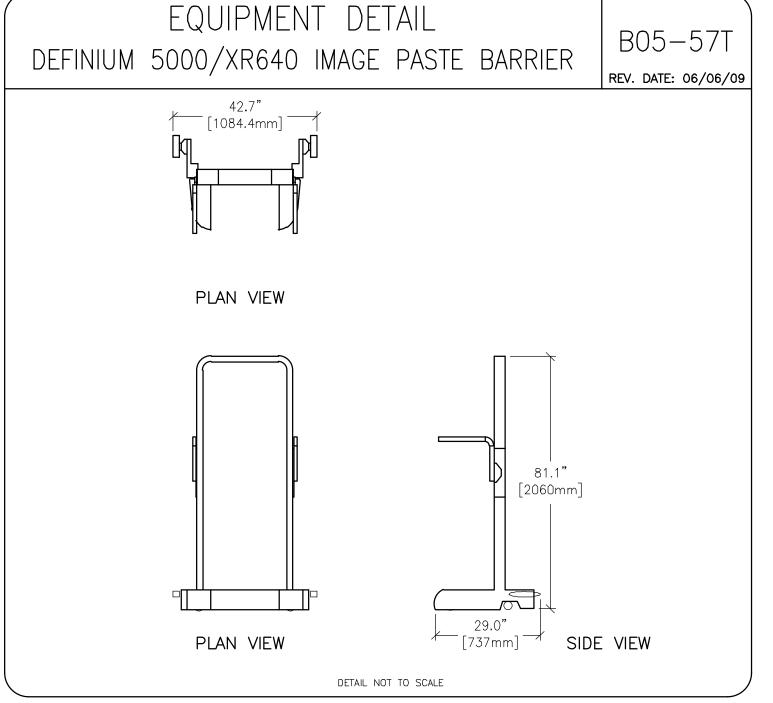
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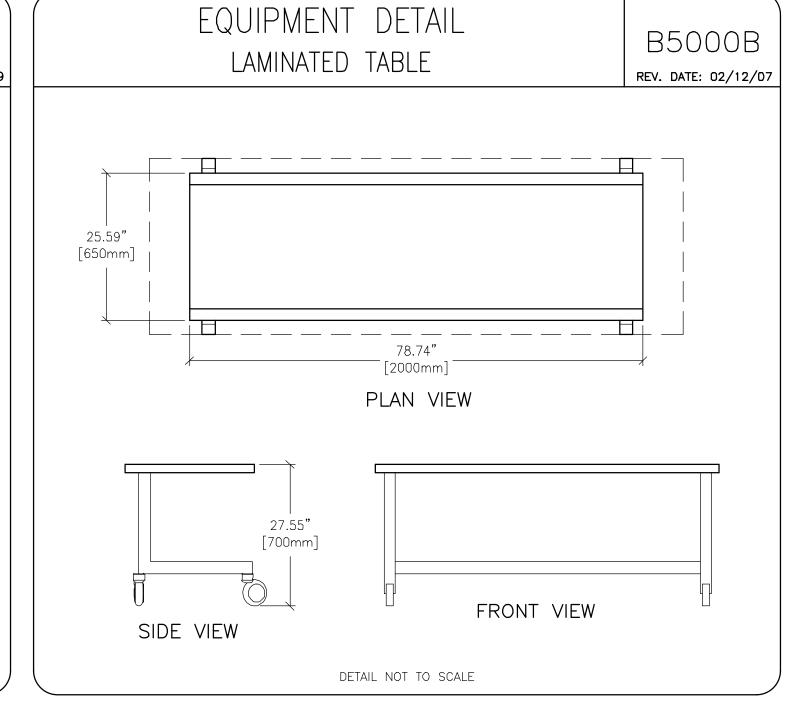


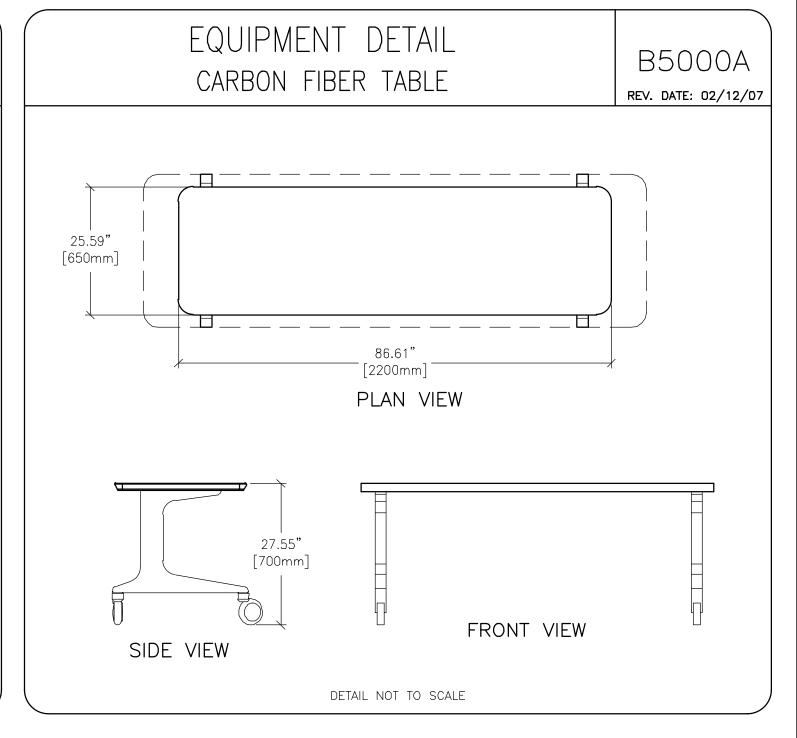
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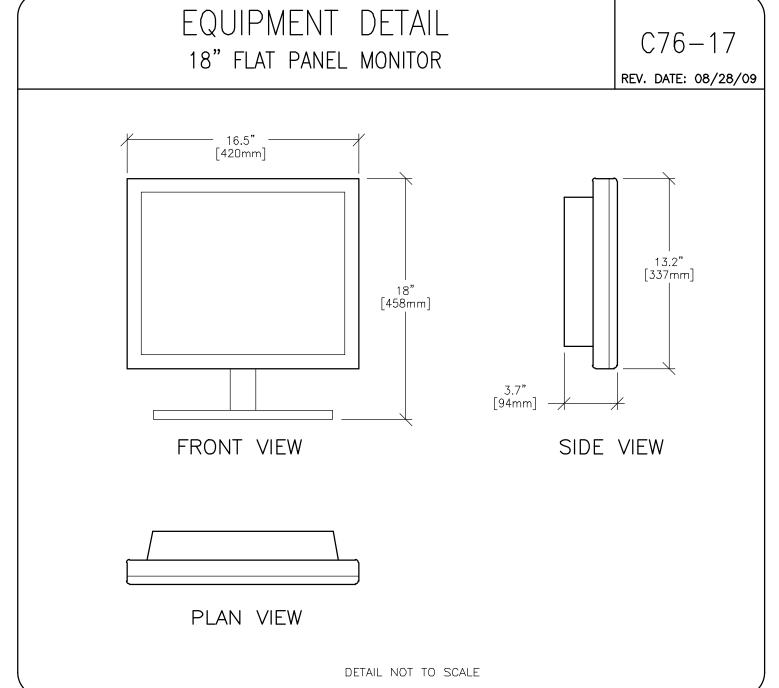


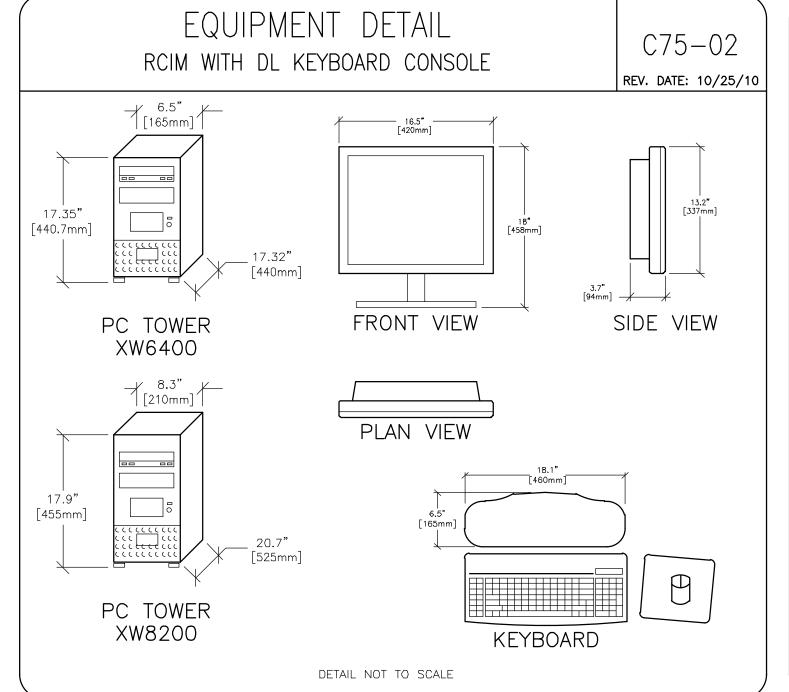


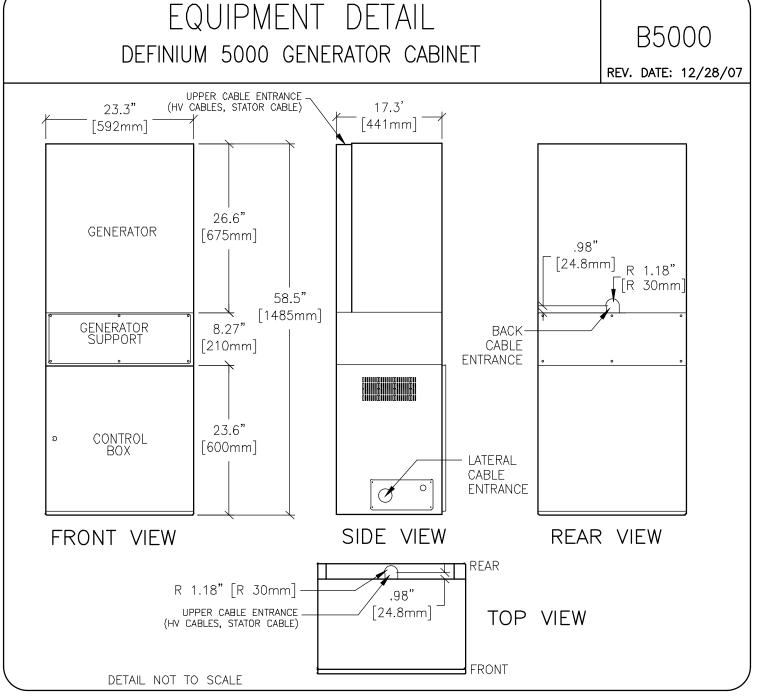














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GE Healthcare

DETAIL

EQUIPMENT

DEFINIUM