

Typical			
MODIFICATIONS	MODIFICATIONS	DATE	REV

01 - C1 - Cover Sheet

02 - C2 - Disclaimer - Site Readiness

03 - A1 - General Notes

04 - A2 - Equipment Layout

05 - A3 - Section Views

06 - A4 - Equipment Details

07 - A5 - Equipment Details & Delivery (2)

08 - S1 - Structural Notes

09 - S2 - Structural Layout

10 - S3 - Structural Details (1)

11 - M1 - HVAC

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13 - E2 - Electrical Layout

14 - E3 - Electrical Elevations

15 - E4 - Details-Interconnections

16 - E5 - Power Requirements



DISCOVERY RF180 FINAL STUDY

A mandatory component of this drawing set is the GE HealthCare Pre Installation manual. Failure to reference the Pre Installation 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: https://www.gehealthcare.com/support/manuals

GE HealthCare does not take responsibility for any damages resulting from changes on drawings made by others. Errors may occur by not referring to the complete set of final issue drawings. GE HealthCare cannot accept responsibility for any damage due to the partial use of GE HealthCare final issue drawings, however caused. All dimensions are in millimeters unless otherwise specified. Do not scale from printed pdf files. GE HealthCare accepts no responsibility or liability for defective work due to scaling from these drawings.

Dra	wn by	Verified by Concession		GON/Quote	PIM Manual	Rev
	SSP	PMM		-	5793724-1EN	10
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А3	1/4"=1'-0"	EN-RF-TYP-DISCOVERY_RF180-NF.DWG			13/Jun/2025	01/16

DISCLAIMER

GENERAL SPECIFICATIONS

- GE is not responsible for the installation of developers and associated equipment, lighting, cassette trays and protective screens or derivatives not mentioned in the order.
- The final study contains recommendations for the location of GE equipment and associated devices, electrical wiring and room arrangements. When preparing the study, every effort has been made to consider every aspect of the actual equipment expected to be installed.
- The layout of the equipment offered by GE, the dimensions given for the premises, the details provided for the pre-installation work and electrical power supply are given according to the information noted during on-site study and the wishes expressed by the customer.
- The room dimensions used to create the equipment layout may originate from a previous layout and may not be accurate as they may not have been verified on site. GE cannot take any responsibility for errors due to lack of information.
- Dimensions apply to finished surfaces of the room.
- Actual configuration may differ from options presented in some typical views or tables.
- If this set of final drawings has been approved by the customer, any subsequent modification of the site must be subject to further investigation by GE about the feasibility of installing the equipment. Any reservations must be noted.
- The equipment layout indicates the placement and interconnection of the indicated equipment components. There may be local requirements that could impact the placement of these components. It remains the customer's responsibility to ensure that the site and final equipment placement complies with all applicable local requirements.
- All work required to install GE equipment must be carried out in compliance with the building regulations and the safety standards of legal force in the country concerned.
- These drawings are not to be used for actual construction purposes. The company cannot take responsibility for any damage resulting therefrom.

CUSTOMER RESPONSIBILITIES

- It is the responsibility of the customer to prepare the site in accordance with the specifications stated in the final study. A detailed site readiness checklist is provided by GE. It is the responsibility of the customer to ensure all requirements are fulfilled and that the site conforms to all specifications defined in the checklist and final study. The GE Project Manager of Installation (PMI) will work in cooperation with the customer to follow up and ensure that actions in the checklist are complete, and if necessary, will aid in the rescheduling of the delivery and installation date.
- Prior to installation, a structural engineer of record must ensure that the floor and ceiling is designed in such a
 way that the loads of the installed system can be securely borne and transferred. The layout of additional
 structural elements, dimensioning and the selection of appropriate installation methods are the sole
 responsibility of the structural engineer. Execution of load bearing structures supporting equipment on the
 ceiling, floor or walls are the customer's responsibility.

RADIO-PROTECTION

• Suitable radiological protection must be determined by a qualified radiological physicist in conformation with local regulations. GE does not take responsibility for the specification or provision of radio-protection.

THE UNDERSIGNED, HEREBY CERTIFIES THAT I HAVE READ AND APPROVED THE PLANS IN THIS DOCUMENT.				
DATE NAME SIGNATURE				

CUSTOMER SITE READINESS REQUIREMENTS

REQUIRED MANUALS FOR SYSTEM PRE-INSTALLATION			
Description	Document Number*		
Product specific Pre-installation Manual Refer to cover page			
*documents can be accessed in multiple languages at https://www.gehealthcare.com/support/manuals			

- A mandatory component of this drawing set is the GE HealthCare Pre-installation manual. Failure to reference the Pre-installation manual will result in incomplete documentation required for site design and preparation.
- The items on the GE HealthCare Site Readiness Checklists listed below are REQUIRED to facilitate equipment delivery to the site. Equipment will not be delivered if these requirements are not satisfied.

REQUIRED SITE-READINESS CHECKLISTS FOR SYSTEM PRE-INSTALLATION					
Modality	Document Number*				
Computerized Tomography	DOC2949059				
Radiology, Radiology and Fluouroscopy, Mammography, Bone Mass Densitometry DOC2949063					
All modality Customer/Contractor Worksheet DOC2949068					
*documents can be accessed in multiple languages at https://www.gehealthcare.com/support/manuals					

- Any deviation from these drawings must be communicated in writing to and reviewed by your local CI
- 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,
 - Restrooms.
- Provide for refuse removal and disposal (e.g. crates, cartons, packing)
- For CT systems it is required to minimize vibrations within the scan room. It is the customer's responsibility to contract a vibration consultant/engineer to implement site design modifications to meet the GE vibration specification. Refer to the system Pre-installation manual for vibration specifications.

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ENVIRONMENTAL SPECIFICATIONS

MAGNETIC INTERFERENCE

To guarantee specified imaging performance :

X-ray tubes and control console equipment must be located in ambient static field of less than 10 gauss.

ACOUSTIC OUTPUT

Measured 1 m from any point in system.

In-use: less than 65 dBA Stand-by: less than 45 dBA

ALTITUDE AND ATMOSPHERIC PRESSURE

Operating atmospheric pressure: 800-1013 hPa

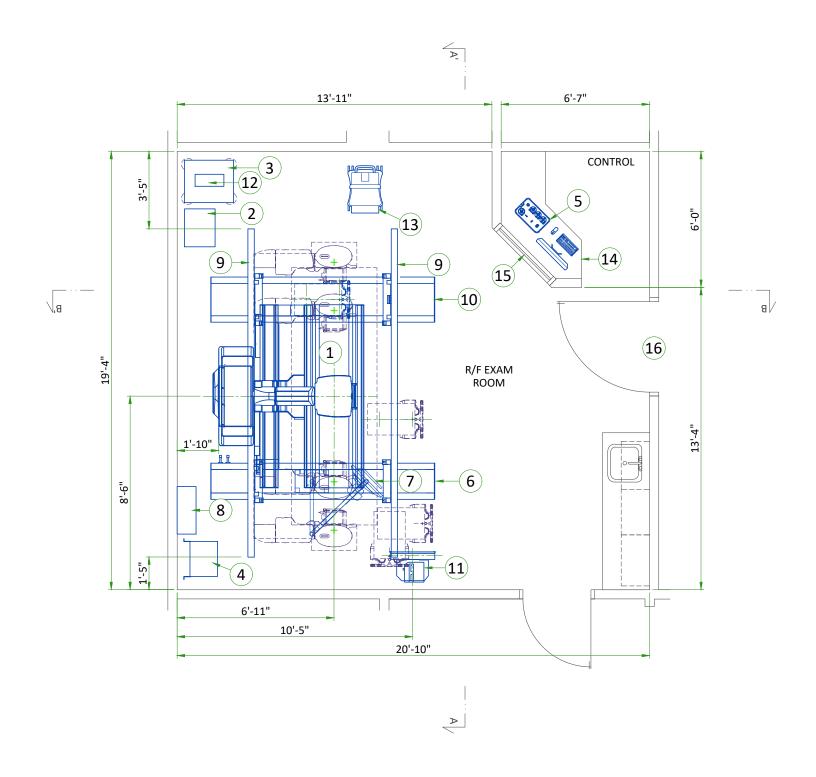
Operating altitude: +1949m to 0m [+6394 ft to 0 ft]

Storage atmospheric pressure: 800-1013 hPa

Storage altitude: +1949m to -50m [+6394 ft to -164 ft]

Refer to the Pre-installation Manual for detailed information about individual components.

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		LEGEND)				
Α	GE SU	GE SUPPLIED			ILABLE FROM	1 GE	
В	GE SU	GE SUPPLIED/CONTRACTOR INSTALLED			IPMENT EXIS	TING IN ROC	DM
С	CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED		*		1 TO BE REIN OTHER SITE	STALLED FRO	DM
ву	ITEM	TEM DESCRIPTION		AX AT PUT J/h)	WEIGHT (lbs)	MAX HEAT OUTPUT (W)	WEIGHT (kg)
Α	1	TABLE WITH OVERFLOOR PLATE	238	89	3197	700	1450
Α	2	GENERATOR CABINET	350	01	201	1026	91
Α	3	DIGITAL SYSTEM CABINET	1092		243	320	110
В	4	15kVA STEP-DOWN TRANSFORMER	-		209	-	95
Α	5	OPERATOR CONSOLE	194		18	57	8
Α	6	MONITOR SUSPENSION BRIDGE	-		-	-	-
Α	7	SINGLE MONITOR SUSPENSION	194		202	57	91.6
В	8	POWER DISTRIBUTION BOX	-		176	-	80
Α	9	4410 mm LONG RAILS	-		-	-	-
Α	10	OTS WITH 3 m BRIDGE	119	94	833	350	378
Α	11	NON-TILTING WALLSTAND	-		377	-	171
Α	12	UPS	-		33	-	14.8
Α	13	TIMMS 2000 ON CART (TPC)	781 55 229		25		
С	14	COUNTER TOP FOR EQUIPMENT- PROVIDE GROMMETED OPENINGS AS REQUIRED TO ROUTE CABLES					
С	15	CONTROL WALL TO CEILING WITH LEAD GLASS VIEWING WINDOW					
С	16	MINIMUM OPENING FOR EQUIPMENT DELIVERY IS 1200 mm x 1890 mm [47 in x74 in], CONTINGENT ON A 2600 mm [102 in] CORRIDOR WIDTH					
	·						

EXAM ROOM HEIGHT	
FINISHED FLOOR TO SLAB HEIGHT	TBD
FALSE CEILING HEIGHT	9'-10"

PLEASE NOTE THAT YOUR DISCOVERY RF180 INSTALLATION IN THE SELECTED ROOM DOES NOT MEET THE FOLLOWING MINIMAL REQUIREMENT:

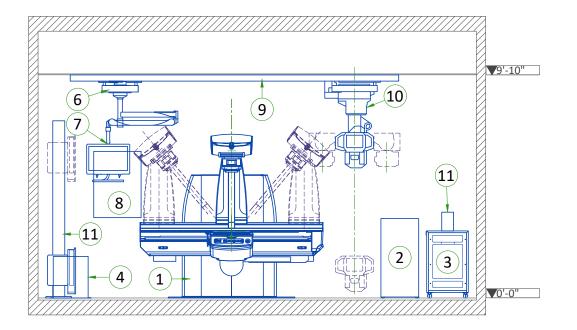
- 530 mm REQUIRED DISTANCE BETWEEN THE TUBE HEAD AND ANY STATIONARY OBJECT.

THEREFORE WE MUST APPLY A WARNING LABEL ON BOTH TUBE HEAD SIDES TO REMIND THE OPERATOR ABOUT ENTRAPMENT HAZARD DURING GANTRY MOTIONS.

For Accessory Sales: (866) 281-7545 Options 1, 2, 1, 2 or mail to: gehcaccessorysales@ge.com

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FRONT VIEW A-A'



EXAM ROOM CEILING HEIGHTS

CONFIGURATION	SPECIFICATION	CEILING	HEIGHT
CONFIGURATION	SPECIFICATION	mm	ft
Table	Minimum	2600	8'-6"
	Recommended	3000	9'-10'
Overhead Tube Suspension	Minimum	2600	8'-6"
	Recommended	2920	9'-7"
Monitor Suspension	Minimum	2600	8'-6"
Tilting Wall Stand*	Minimum	2600	8'-6"
	Recommended	2650	8'-8"
Non-tilting Wall Stand	Minimum	2400	7'-8"
	Recommended	2800	9'-2"

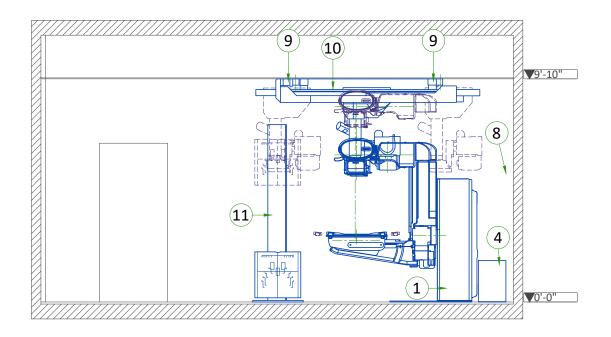
A3 - Section Views

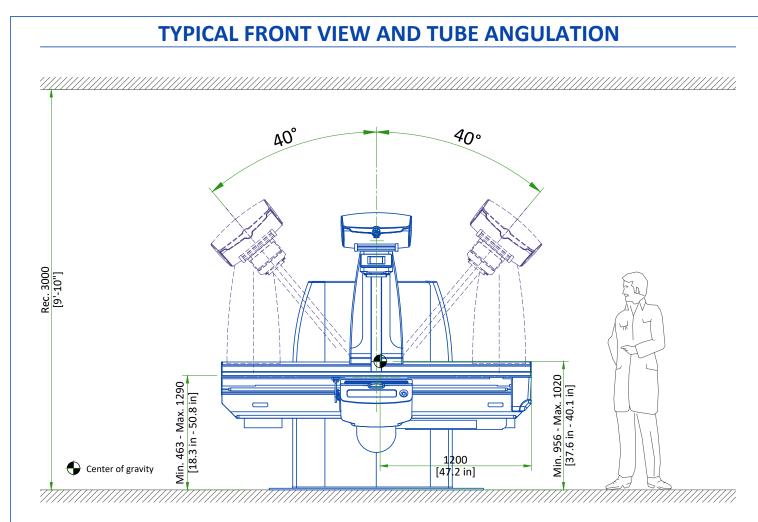
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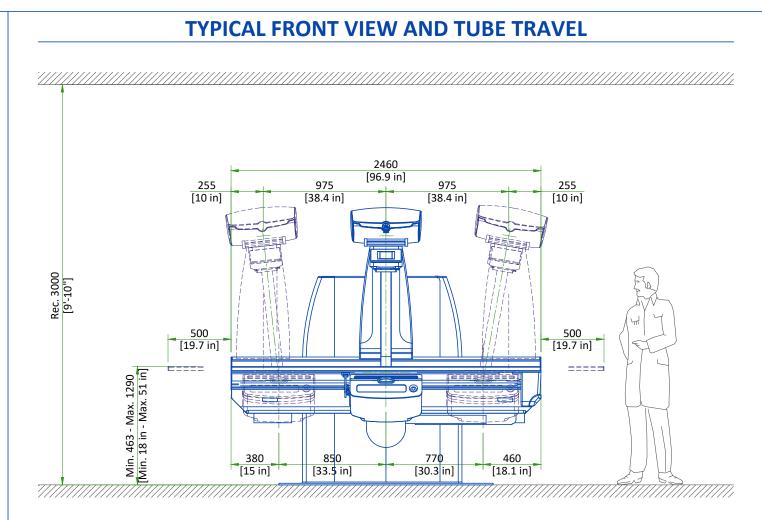
Note: Minimum room height for the table must take into consideration the most protruding object from the ceiling that is in the system area (for example the rails for OTS).

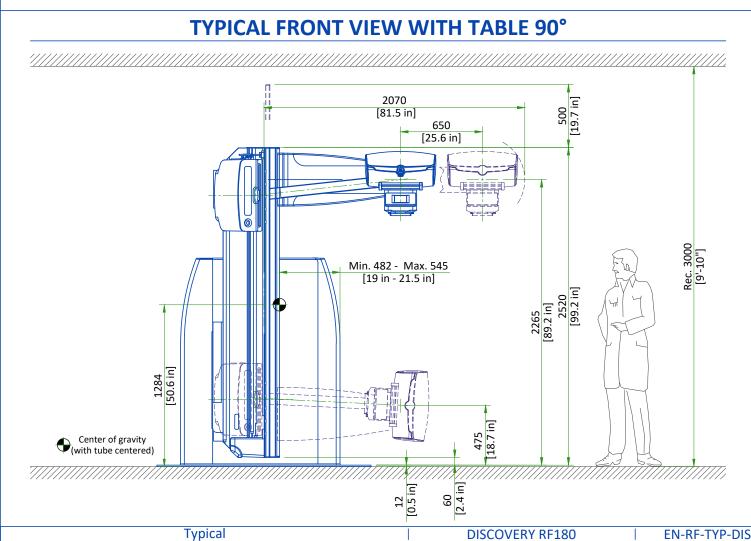
*Not available in USA

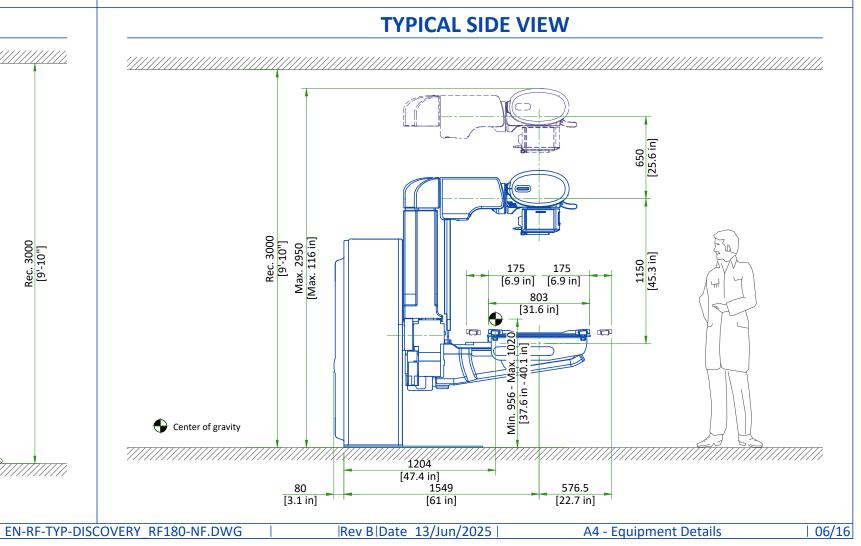
SIDE VIEW B-B'





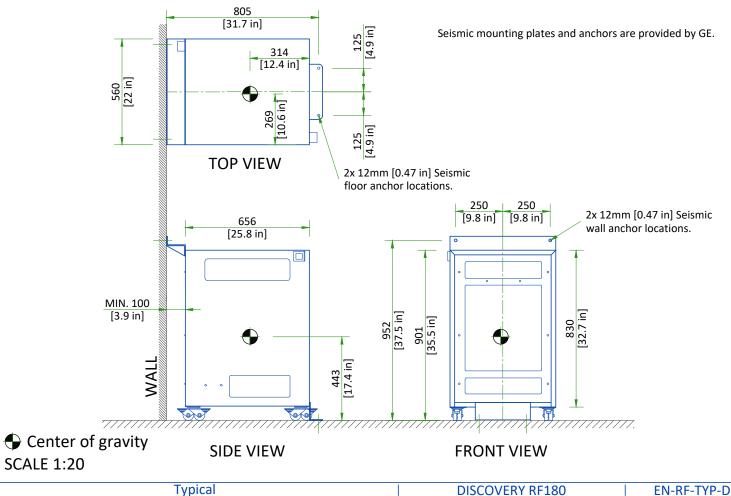






GENERATOR 4x 13mm [0.5 in] Seismic 295 [11.6 in] anchor locations. [18.1 in] **BOTTOM VIEW** Seismic mounting plate and anchors are provided by GE. 410 [16.1 in] [20 in] Wiring access 240 [9.4 in] High tension cable access 476 [18.7 in] AC input and DIN rail access • Center of gravity **FRONT VIEW** SIDE VIEW **SCALE 1:20**

DIGITAL SYSTEM CABINET



DELIVERY

THE CUSTOMER/CONTRACTOR SHOULD:

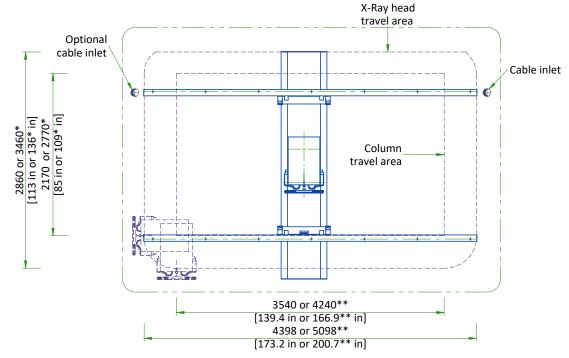
- Provide an area adjacent to the installation site for delivery and unloading of the GE equipment.
- Ensure that the dimensions of all doors, corridors, ceiling heights are sufficient to accommodate the movement of GE equipment from the delivery area into the definitive installation room.
- Ensure that access routes for equipment will accommodate the weights of the equipment and any transportation, lifting and rigging equipment.
- Ensure that all necessary arrangements for stopping and unloading on public or private property not belonging to the customer have been made.

The unit (table main frame and body) can be shipped through a 1200 mm [47 in] door width and 1200 mm [47 in] minimum hallway width. The unit can be divided and the major assemblies can be maneuvered through a 1020 mm [40 in] doorway and 1300 mm [51 in] hallway width (Order has to be placed accordingly, table is shipped in one piece by default). The OTS can be shipped through a 900 mm [35 in] door width and 2600 mm [102.4 in] minimum hallway width or through a 1400 mm [55 in] door width and 1800 mm [71 in] minimum hallway width.

DIMENSIONS OF DELIVERY WITH DOLLY TRANSPORT EQUIPMENT						
MAJOR ASSEMBLIES	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	WEIGHT (kg)		
Table main frame and body	2460 [97 in]	1064 [41.9 in]	1859 [73.2 in]	-		
Table main frame	2460 [97 in]	650 [25.6]	1859 [73.2 in]	350 [772 lb]		
Table body	1269 [50 in]	1005 [39.6 in]	1633 [64.3 in]	620 [1367 lb]		
OTS (Optional)	3010 [118.5 in]	744.2 [29.3 in]	-	328 [723 lb]		
Monitor Suspension (Optional)	3010 [118.5 in]	744.2 [29.3 in]	-	328 [723 lb]		

FOCAL SPOT TRAVEL

KALOS SUSPENSION



^{*}Distance depends on bridge length

SCALE 1:50

^{**}If equipped with 700 mm rail extension option.

STRUCTURAL NOTES

- Methods of support for the steelwork that will permit attachment to structural steel or through bolts in concrete construction should be favored. Do not use concrete or masonry anchors in direct tension.
- All units that are wall mounted or wall supported are to be provided with supports where necessary. Wall supports are to be supplied and installed by the customer or his contractors. See plan for suggested locations.
- Control walls shall be constructed to minimum 2130mm (7'-0") high.
- Dimensions are to finished surfaces of room.
- Customers contractor must provide all penetrations in post tension floors.
- Customers contractor must provide and install any non-standard anchoring. Documents for standard anchoring methods are included with GE equipment drawings for geographic areas that require such documentation.
- Customers contractor must provide and install hardware for "through the floor" anchoring and/or any bracing under access floors. This contractor must also provide floor drilling that cannot be completed because of an obstruction encountered while drilling by the GE installer such as rebar etc.
- It is the customer's responsibility to perform any floor or wall penetrations that may be required. The customer is also responsible for ensuring that no subsurface utilities (e.g., electrical or any other form of wiring, conduits, piping, duct work or structural supports (i.e. post tension cables or rebar)) will interfere or come in contact with subsurface penetration operations (e.g. drilling and installation of anchors/screws) performed during the installation process. To ensure worker safety, GE installers will perform surface penetration operations only after the customer's validation and completion of the "GE surface penetration permit".
- Different anchor types are used to install the components of the system. Refer to Structural Requirements Section(s) of the Pre-Installation Manual for each anchor requirement.
- Refer to the Structural Requirements Section for the required minimum embedment.
- The ground surface must be flat and leveled, maximum tolerance for leveling is ±1.5 mm per 1 m (0.2 in per 10 feet). A grout pad provided by the contractor is required to meet this specification. The maximum pad thickness is 6.3 mm (0.25 in).

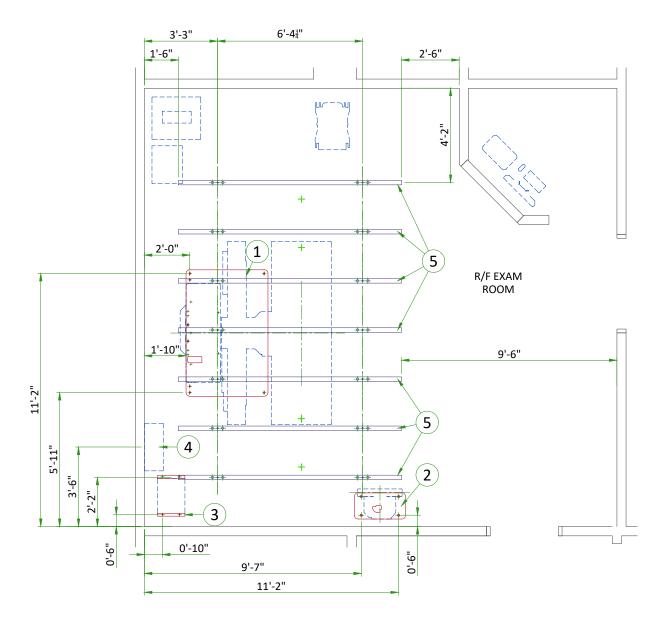
CEILING REQUIREMENTS

The construction and load capability of the ceiling must be sufficient for the installation of the OTS unit. It is the responsibility of the customer or structural engineer to evaluate the best fixation system to be used for the ceiling rails/mounting systems as described in the following layout example under consideration of the options to be installed.

A good ceiling levelness is required. For OTS, a maximum of 7 mm height displacement along the ceiling longitudinal rails is allowed and can be corrected with the use of shims to ensure the rails are as close to perfect level as possible.

It is recommended that sprinkler heads not be placed between the stationary rails. All sprinkler heads should be mounted so they do not extend downward more than 6.35 mm from the ceiling while in the 'resting' position.

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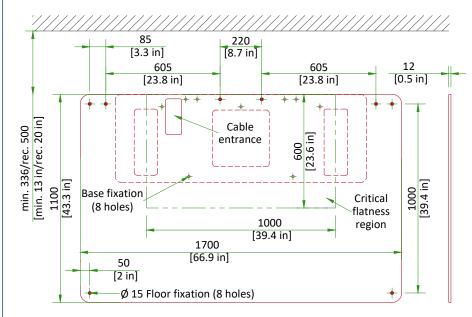
	ITEM	DESCRIPTION					
ľ	(GE SUPPLIED / CONTRACTOR INSTALLED)						
	1	Area occupied by GE supplied table baseplate					
	2	Area occupied by GE supplied wall stand baseplate					
	3	Area occupied by GE supplied transformer					
	(CONTRACTOR SUPPLIED & INSTALLED)						
	4 Support backing, locate as shown.						
	5	Structural support in ceiling for fastening ceiling supported equipment. Supports to run continuous with no fittings extending below face of channel, run wall to wall, be parallel, square, and in the same horizontal plane, flush with the finished ceiling. Rails are mounted to these supports every 26.0" (660mm) and require 452 lbs. (205 kg) per bolt load. Methods of support that permit attachment to structural steel or through bolts in concrete should be favored. Do not use screw anchors in direct tension.					

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TABLE FLOOR MOUNTING

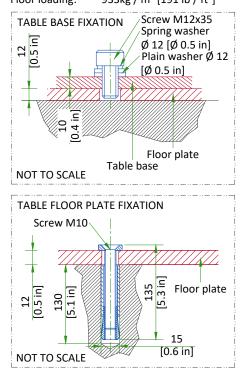
OVERFLOOR PLATE



- -Floor plate, M10 screws and washers are delivered with the system.
- -The floor thickness must be at least 200 mm [7.9 in].
- -Critical flatness region must be flat and level, with deviations of no more than 1.5mm [1/16 in]
- shims may be used along perimeter of baseplate to improve surface contact

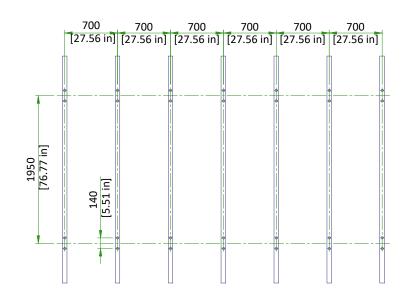
SCALE 1:20

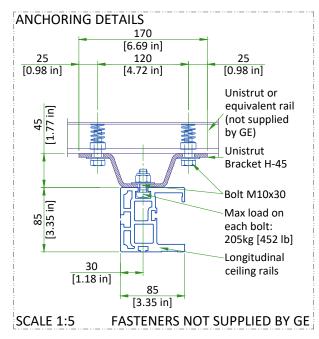
Unit weight: 1275 kg [2811 lb] Plate weight: 175 kg [386 lb] Total load: 1450 kg [3197 lb] Loading area: 1.90 m² [20.5 ft²] Floor loading: 933kg / m² [191 lb / ft²]



SUSPENSION RAILS MOUNTING SPECIFICATIONS

STRUCTURAL RAILS PERPENDICULAR TO SUSPENSION RAILS



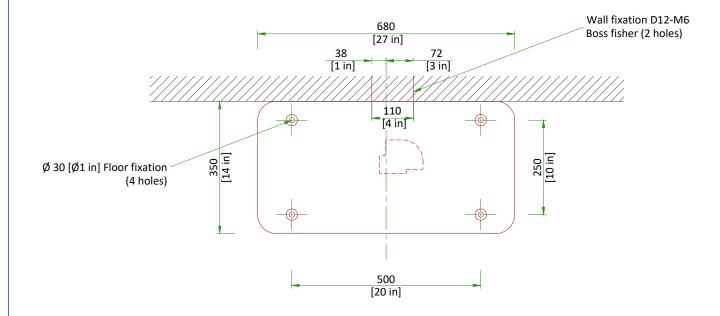


- Rail extremities must be separated from the wall by a 150mm [6in] distance.
- Fire sprinklers, lights, air conditioning returns located in the suspension area must not be below the false ceiling.
- Unistrut or equivalent structural support must be fixed perfectly parallel and on the same plane.
- 660mm [26 in] steps are also possible.
- A good ceiling levelness is required. For OTS, a maximum of 7mm [0.27 in] height displacement along the ceiling longitudinal rails is allowed and can be corrected with the use of shims to ensure the rails are as close to perfect level as possible.

SCALE 1:50

WALL STAND FLOOR MOUNTING

WALL STAND BASE PLATE



SCALE 1:10

TEMPERATURE AND HUMIDITY SPECIFICATIONS

IN-USE CONDITIONS

	EXAM ROOM			(CONTROL ROOM	/
	Min	Recommended	Max	Min	Recommended	Max
Temperature	15°C [59°F]	23°C [73°F]	35°C [95°F]	15°C [59°F]	23°C [73°F]	35°C [95°F]
Relative humidity (1)	75%				75%	
Heat dissipation	max 2.5 kW [8490 BTU/hr]			0.	41 kW [1399 BTU/h	nr]

STORAGE CONDITIONS

Temperature	-10°C [14°F] to 50°C [122°F]
Relative humidity (1)	10% to 80%

Material should not be stored for more than 90 days. (1) non-condensing

AIR RENEWAL

According to local standards.

NOTE

In case of using air conditioning systems that have a risk of water leakage it is recommended not to install it above electric equipment or to take measures to protect the equipment from dropping water.

HEAT DISSIPATION DETAILS

ROOM	DESCRIPTION	STANDBY (kW)	IN-USE (kW)	STANDBY (BTU/hr)	IN-USE (BTU/hr)
	Table	0.700	0.700	2388	2388
	Generator	0.022	1.026	75	3500
	Digital Systems Cabinet	0.320	0.320	1092	1092
Exam Room	Partial UPS	0.050	0.050	N/A	N/A
	Monitor (single)	0.057	0.057	149	149
	Advantech Monitor (single)	0.065	0.065	222	222
	OTS	0.350	0.350	1190	1190

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CONNECTIVITY REQUIREMENTS

All Digital systems are equipped with Broadband fast Ethernet hardware for Service Diagnostics. The systems equipped with Digital Imaging are capable of placing electronic images on the Hospital image Ethernet Network (DICOM).

The Digital PC (part of the Digital subsystem) is the connectivity point between the system and the hospital. For a Broadband connection, it is the purchaser's responsibility to provide the connection at the Ethernet port on the Digital PC via a Cat 5 Ethernet cable and the hospital Ethernet connection.

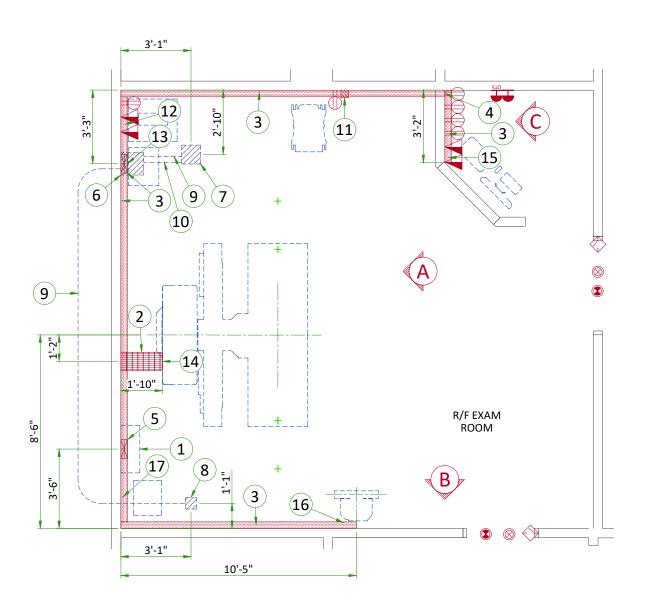
Note: System hardware is rated at 100/1000Mbs transfer rate. Hospital connections must be rated for 100/1000Mbs for optimal performance. One RJ45 Ethernet plus should be present in the room.

ELECTRICAL NOTES

- . Aluminum or solid wires are not allowed.
- 2. Wire sizes given are for use of equipment. Larger sizes may be required by local codes.
- 3. It is recommended that all wires be color coded, as required in accordance with national and local electrical codes.
- 4. Conduit sizes shall be verified by the architect, electrical engineer or contractor, in accordance with local or national codes.
- 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 distribution unit and one on each wall of the procedure room. Use hospital approved outlet or equivalent.
- 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.
- 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).
- 8. Conduit turns to have large, sweeping bends with minimum radius in accordance with national and local electrical codes.
- 9. In some cases GEHC will specify ground wires to be sized larger than code. In these situations, the GEHC specification must be followed.
- 10. 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.
- 11. The maximum point to point distances illustrated on this drawing must not be exceeded.
- 12. Physical connection of primary power to GEHC equipment is to be made by customers electrical contractor with the supervision of a GEHC representative. The GEHC representative would be required to identify the physical connection location, and insure proper handling of GEHC equipment.
- 13. GEHC conducts power audits to verify quality of power being delivered to the system. The customer's electrical contractor is required to be available to support this activity.
- 14. Every installation is unique. The electrical contractor will be required to support the installation of the GEHC equipment by providing knockouts, grommeted openings, bushings, etc. as required. All power connections to be performed by the electrician.

- All junction boxes, conduit, duct, duct dividers, switches, circuit breakers, cable tray, etc., are to be supplied and installed by customers electrical contractor. All junction boxes shall be provided with covers.
- Conduit and duct runs shall have gradual sweep radius bends.
- Conduits and duct above ceiling or below finished floor must be installed as near to ceiling or floor as possible to reduce run length.
- Ceiling mounted junction boxes illustrated on this plan must be installed flush with finished ceiling.
- All ductwork must meet the following requirements:
 - 1.Ductwork shall be metal with dividers and have removable, accessible covers.
 - 2. Ductwork shall be certified/rated for electrical power purposes.
 - 3. Ductwork shall be electrically and mechanically bonded together in an approved manner.
 - 4. PVC as a substitute must be used in accordance with all local and national codes.
- All openings in raceway and access flooring are to be cut out and finished off with grommet material by the customers contractor.
- Electrical contractor to provide measured pull strings in all conduit and raceway runs.
- Provide 10 foot pigtails at all junction points.
- Grounding is critical to equipment function and patient safety. Site must conform to wiring specifications shown on this plan.

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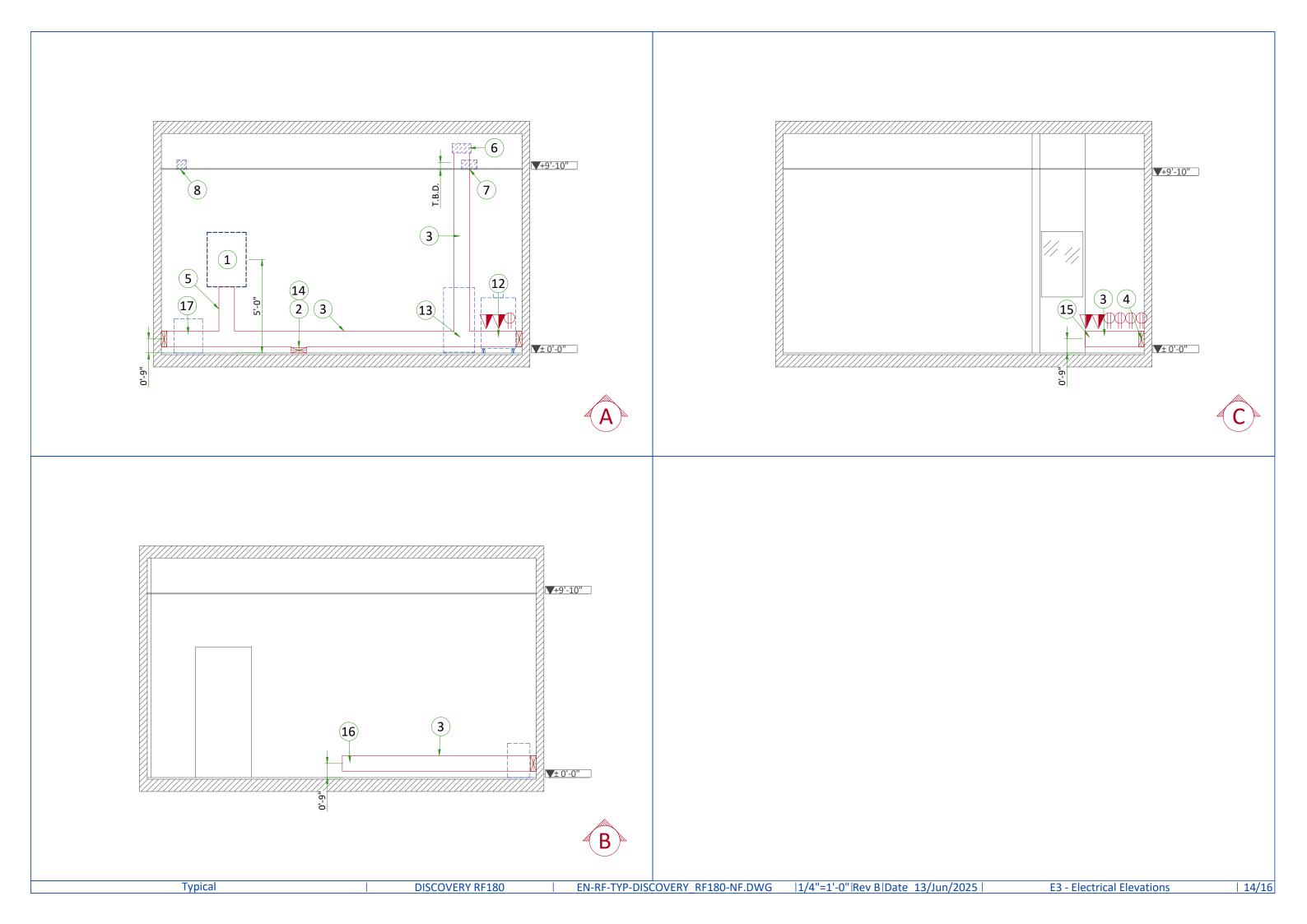
Item	Electrical Layout Item List
1	Power Distribution Box (PDB)
2	10" x 3 1/2" [250 x 100] Surface floor duct with minimum 2 dividers
3	10" x 3 1/2" [250 x 100] Surface wall duct with minimum 2 dividers
4	10" x 3 1/2" [250 x 100] duct thru wall with minimum 2 dividers
5	10" x 3 1/2" [250 x 100] Surface wall duct to bottom of PDB with minimum 2 dividers
6	Box above ceiling - size per local code
7	Box flush in ceiling - size per local code (OTS)
8	Box flush in ceiling - size per local code (Monitor)
9	2 1/2" [64] Conduit above ceiling
10	3 1/2" [89] Conduit above ceiling
11	4" x 4" x 4" [100 x 100 x 100] Box attached to duct (TIMS Readiness Kit)
12	Grommeted opening (Digital Systems Cabinet)
13	Grommeted opening (Generator Cabinet)
14	Grommeted opening (Table)
15	Grommeted opening (Console)
16	Grommeted opening (Wall Stand)
17	Grommeted opening (Transformer)

ITEM	QTY	Electrical Outlet Legend Customer/contractor supplied and installed items unless otherwise specified. Height above floor determined by local codes unless otherwise specified.
1		System emergency off (SEO), (recommended height 1.2m [48"] above floor)
\otimes		X-Ray room warning light control panel
		X-Ray ON lamp (L1) - 24V
\Diamond		Door interlock switch (needed only if required by state/local codes)
Ф		Duplex hospital grade, dedicated wall outlet 120-v, single phase power
lack		Network outlet
OTS		OTS on/off switch, (recommended height 1.2m [48"] above floor)

Additional Conduit Runs (Contractor Supplied and Installed)

From (Bubble # / Item)		To (Bubble # / Item)		Qty	Size	
				Qty	In.	mm
	3 phase power	_	Power Distribution Box	1	As req'd	As req'd
16	Transformer	1		1	As req'd	As req'd
1 Power Distribution Box			Emergency off	1	1/2	16
	Power Distribution Box		OTS On/off switch	1	1/2	16
		6	Generator	1	As req'd	As req'd
		6	Transformer	1	As req'd	As req'd
	Warning light			1	1/2	16
	1 phase power		Warning light control	1	As req'd	As req'd
6 Generator			1	1/2	16	
	Generator		Door Switch	1	1/2	16
Rev B	ev B Date 13/Jun/2025 E2 - Electrical Layout 13/16					

Typical DISCOVERY RF180 EN-RF-TYP-DISCOVERY_RF180-NF.DWG |1/4"=1'-0"|R



INTERCONNECTION

CONFIGURATION WITH OTS AND WALL STAND

LEGEND

DIG Digital System

Cabinet

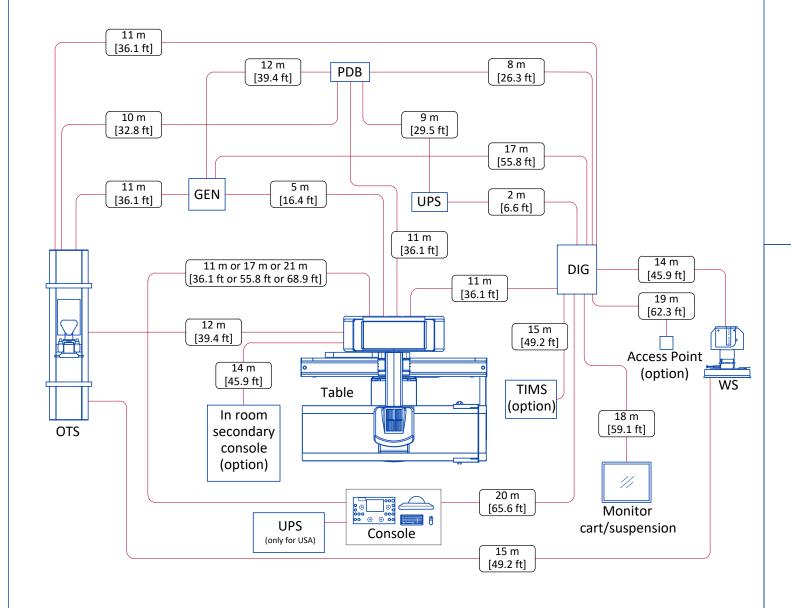
GEN Generator Cabinet

OTS Overhead Tube Suspension

PDB Power Distribution

UPS Uninterruptible

Power Supple WS Wall Stand

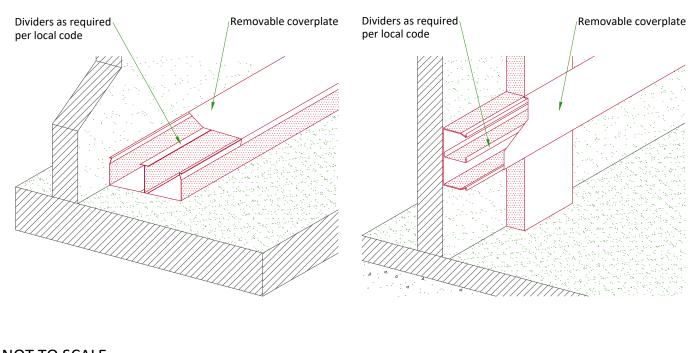


TYPICAL CABLE MANAGEMENT

DUCT ON THE FLOOR

WALL DUCT

15/16



NOT TO SCALE

EN-RF-TYP-DISCOVERY RF180-NF.DWG Typical **DISCOVERY RF180** |Rev B|Date 13/Jun/2025 | E4 - Details-Interconnections

POWER REQUIREMENTS

GENERATOR TYPE	65 kW	80 kW		
POWER SUPPLY	Wye 3 PHASE + G 480V ±10%			
MAINS FREQUENCY	50/60 Hz ± 2%			
LINE INPUT REACTIVE POWER (PEAK)	95 kVA	119 kVA		
LINE INPUT ACTIVE POWER	65 kW	80 kW		

- Line supply should come into a power distribution box (PDB) containing the protective units and controls. The PDB does not require a neutral line.
- The section of the supply cable should be calculated in accordance with its length and the maximum permissible voltage drops.
- There must be discrimination between supply cable protective device at the beginning of the installation (main low-voltage transformer side) and the protective devices in the PDB.

SUPPLY CHARACTERISTICS

- Power input must be separated from any others which may generate transients (elevators, air conditioning, radiology rooms equipped with high speed film changers...)
- All equipment (lighting, power outlets, etc...) installed with GE system components must be powered separately.

GROUND SYSTEM

- Ground resistance lower than 2 Ohms is suggested.
- Equipotential: the equipotential link will be by means of an equipotential bar. This equipotential bar should be connected to the protective earth conductors in the ducts of the non GE cableways and to additional equipotential connections linking up all the conducting units in the rooms where GE units are located.

CABLES

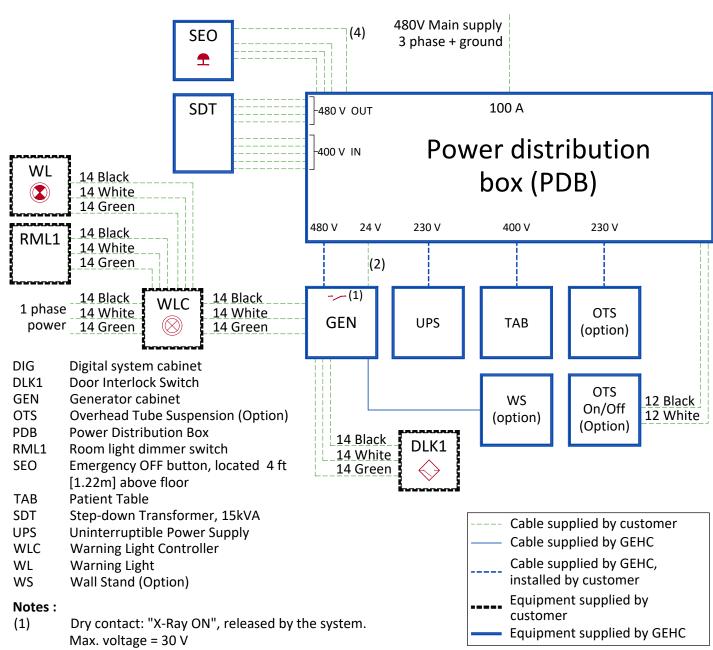
- Power and cable installation must comply with the distribution diagram below.
- All cables must be isolated and flexible, cable color codes must comply with standards for electrical installation.
- Case PDB furnished by GE: The cables for signals and remote control (Y, SEO, L...) will go to PDB with a pigtail length of 1.5m, and will be connected during installation. Each conductor will be identified and isolated (screw connector).

CABLEWAYS

The general rules for laying cableways should meet the conditions laid down in current standards and regulations, with regard to:

- Protecting cables against water (cableways should be waterproof)
- Protecting cables against abnormal temperatures (proximity to heating pipes or ducts)
- Protecting cables against temperature shocks
- Replacing cables (cableways should be large enough for cables to be replaced)
- Metal cableways should be grounded.

POWER DISTRIBUTION



(2) H07RN-F cable with 6.56 ft (2m) extra length on the floor behind the back of generator cabinet (only if required per local requirements)

- (3) Max lug size 8 AWG
- (4)Fourth wire only needed with UPS option for USA

FEEDER TABLE								
MINIMUM FEEDER WIRE SIZE IN mm² AND (AWG)								
INPUT VOLTAGE	MINIMUM FEEDER WIRE LENGTH							
	15m (50')	30m (100')	46m (150')	61m (200')	77m (250')	92m (300')	107m (350')	122m (400')
480 VAC	*35 (3)	*35 (3)	*35 (3)	*35 (3)	35 (2)	50 (1)	70 (1/0)	70 (1/0)
* MINIMUM WIRE SIZE FOR CIRCUIT BREAKER, BASED ON RECOMMENDED OVERCURRENT PROTECTION								

GENERAL NOTES

In all cases qualified personnel must verify that the feeder (at the point of take-off) and the run to the Radiology system meet all the requirements stated in the PIM.

For a single unit installation, the minimum transformer size is 112.5kva, synthesized power feed is not acceptable. Maximum allowable transient voltage excursions are 2.5% of rated line voltage at a maximum duration of 5 cycles and frequency of 10 times per hour.

Ground wire will be same size as power cable. Ground will run from the equipment back to the power source/main grounding point and always travel in the same conduit with the feeders and neutral. Neutral must be terminated inside the main disconnect panel and not at any GF cabinet

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