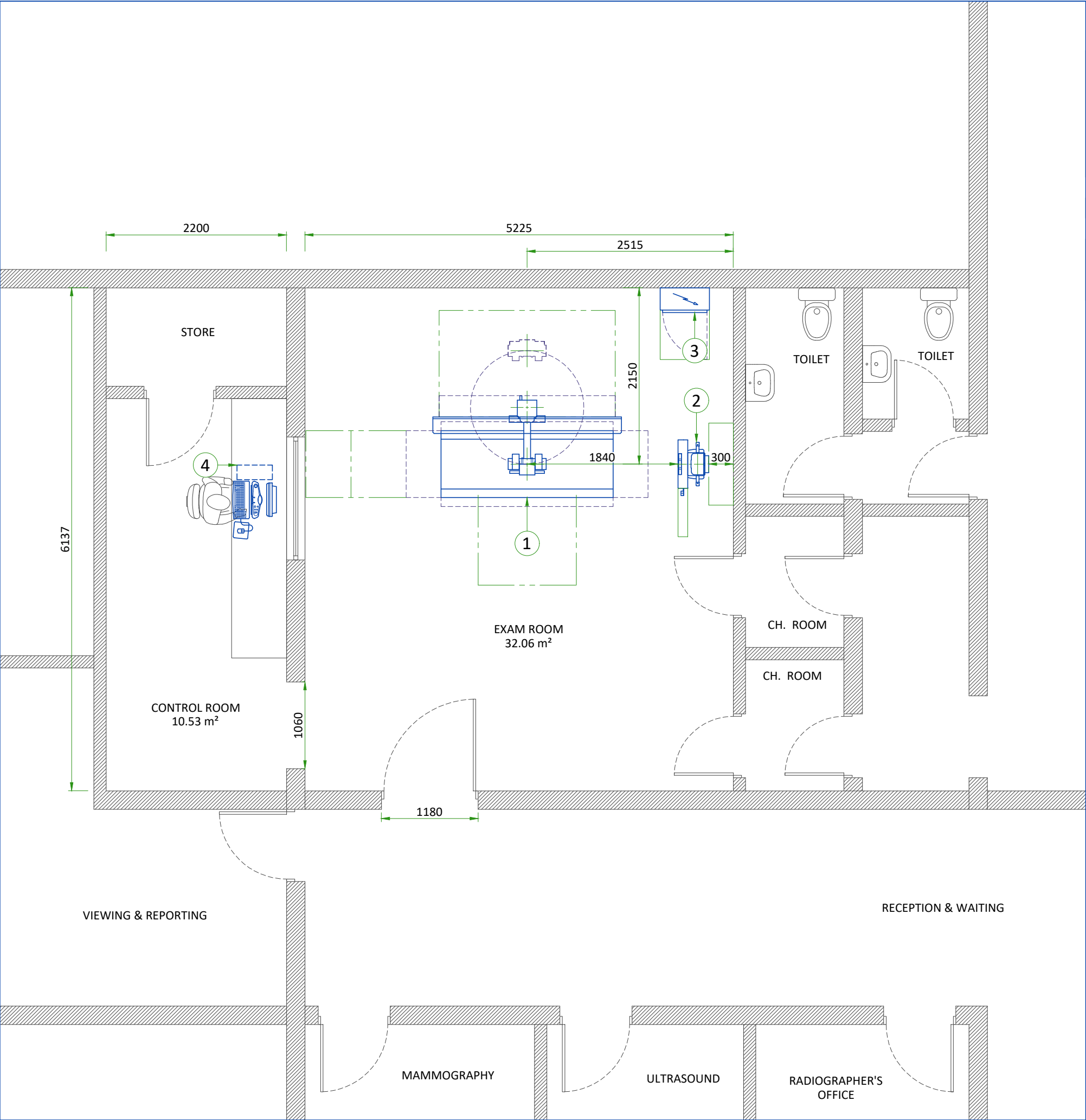
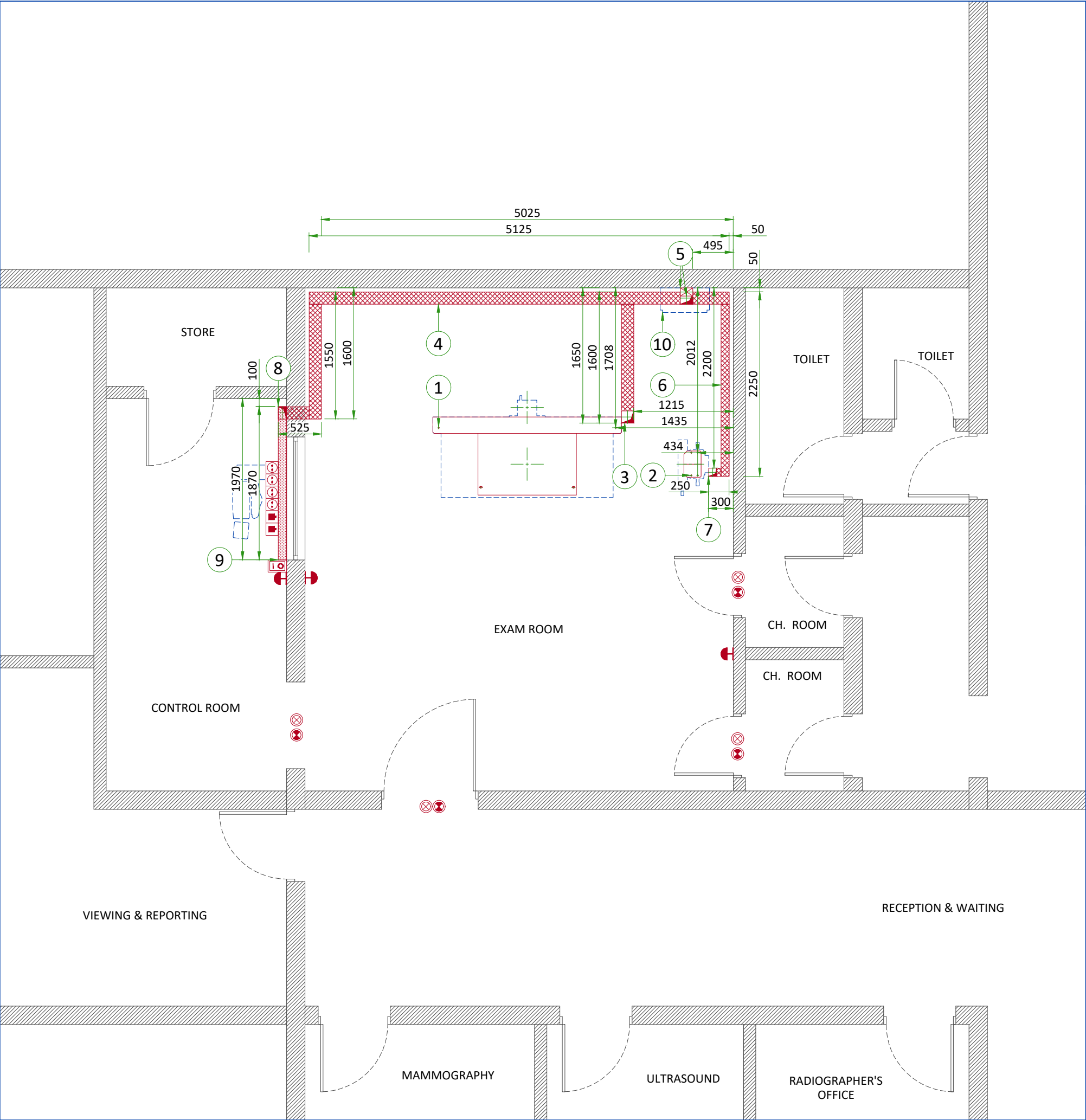


			<div>SITE NAME</div> <div>CITY</div> <div>COUNTRY</div>					
A	11/SEP/2020	Initial release as per revision 11						
REV	DATE	MODIFICATIONS						
01 - Cover Sheet 02 - Equipment Layout 03 - Floor - Electrical Layout 04 - Floor Structural Details 05 - Power Requirements 06 - HVAC - Environment - Connectivity 07 - Equipment Dimensions - Clearance 08 - Interconnections - Delivery 09 - Disclaimer - Site Readiness						<div> <b>GE Healthcare</b></div> <div>GE CONTACT NAME PHONE NUMBER EMAIL ADDRESS</div>		
<div>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: <a href="http://www.gehealthcare.com/siteplanning">www.gehealthcare.com/siteplanning</a></div> <div>GE 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 drawing. GE cannot accept responsibility for any damage due to the partial use of GE final issue drawings, however caused. All dimensions are in millimeters unless otherwise specified. Do not scale from printed pdf files. GE accepts no responsibility or liability for defective work due to scaling from these drawings.</div>		<div>BRIVO DRF</div> <div>TYPICAL STUDY</div>						
		Drawn by	Verified by	Concession	S.O. (GON)	PIM Manual	Rev	
		-	-	-	-	5265603-1EN	11	
		Format	Scale	File Name		Date	Sheet	
A3	1:50	EN-RAD-TYP-BRIVO_DRF.DWG		03/DEC/2020	01/09			



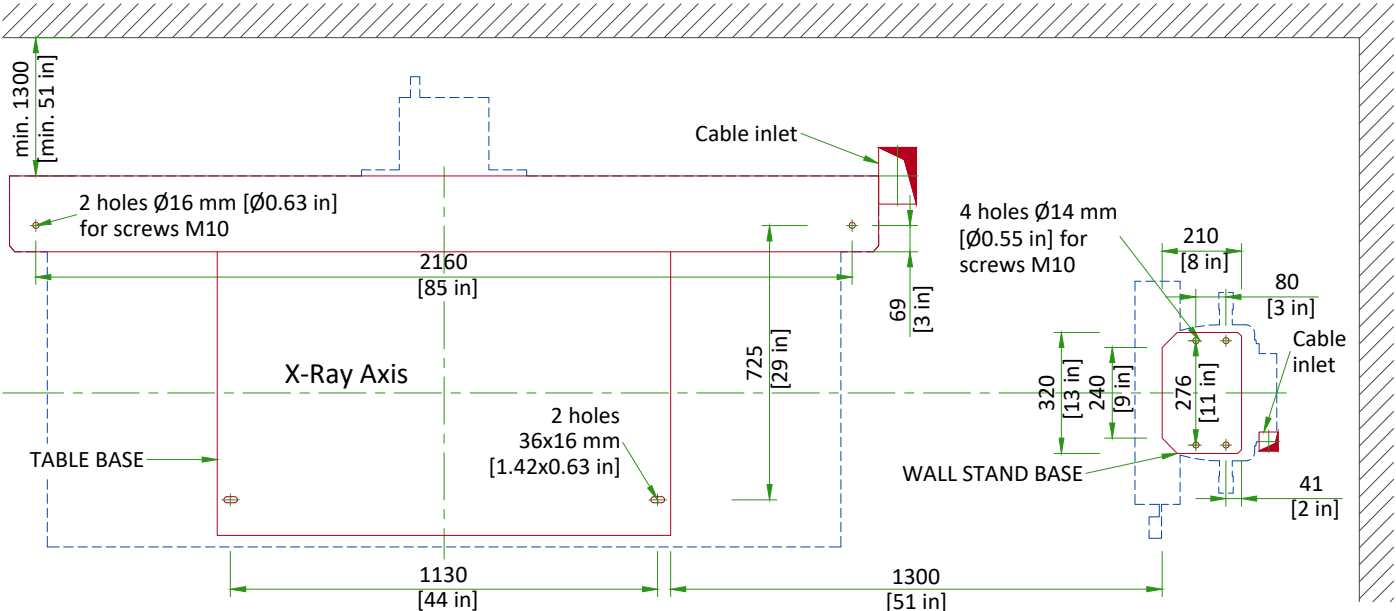
EQUIPMENT LAYOUT			
ITEM	DESCRIPTION	DIMENSIONS LxWxH (mm)	WEIGHT (kg)
1	PATIENT TABLE	2300x1335x2240	632
2	WALL STAND	651x285x2060	185
3	POWER DISTRIBUTION BOX (PDB)	800x600x300	42
4	OPERATOR CONSOLE	-	24.2
WALL - ACCORDING TO RECEIVED DRAWING			
EXAM ROOM HEIGHT			
FINISHED FLOOR TO SLAB HEIGHT			-
FALSE CEILING HEIGHT			min. 2.40 m



FLOOR - ELECTRICAL LAYOUT		
ITEM	QTY	DESCRIPTION
1		Table anchoring (see Floor Structural Details)
2		Wall Stand anchoring (see Floor Structural Details)
3		150x150 opening in the floor
4		150x70 flush floor duct
5		150x150 opening in the floor and 150X100 vertical cable duct for PDB (h= 1.1m)
6		100x70 flush floor duct
7		100x100 opening in the floor
8		150x100 opening in the floor
9		200x100 horizontal wall duct
10		Power distribution box (PDB)
Basic system		
	4	Electrical outlet 10/16A 230V + G
	2	RJ 45 network socket
	1	System remote control (Y), locked when power OFF "ON" and "OFF" impulse buttons with indicator lamps red=ON / green=OFF located at 1.50m above floor
	3	System emergency off (SEO), (recommended height 1.50m-1.85m above floor)
	4	System ON light (L) - 24V
	4	X-Ray ON lamp (L1) - 24V
	Flush floor duct	
	Wall duct	

FLOOR MOUNTING

WALLSTAND AT FOOT END WITH 180° TUBE ROTATION

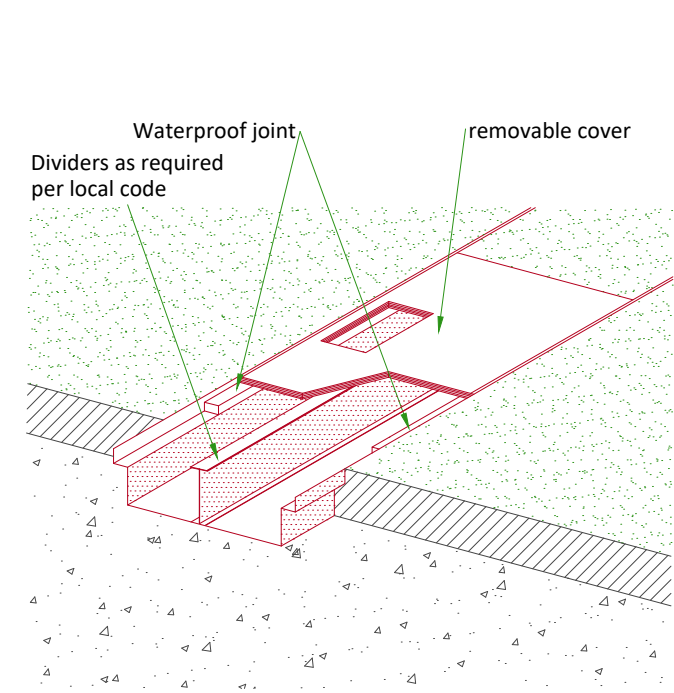


- The supplied anchors require a minimum embedment of 55 mm [2.2 in] into the concrete. If the floor thickness is less than 75 mm [3 in], it is recommended that the unit be secured using a through-bolt method with a reinforcement plate on the back side.
- The ground surface must be flat and leveled.
- Anchors supplied by GE.

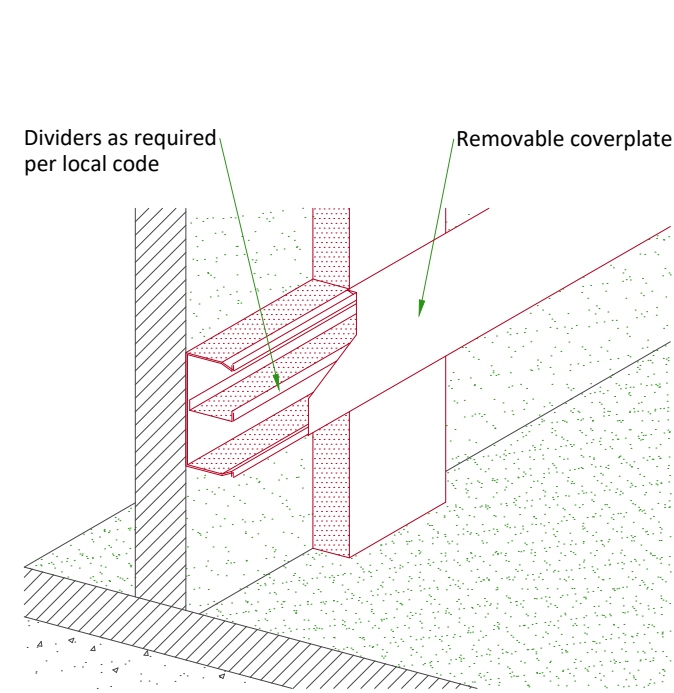
SCALE 1:20

TYPICAL CABLE MANAGEMENT

FLUSH FLOOR DUCT



WALL DUCT



NOT TO SCALE

POWER REQUIREMENTS

POWER SUPPLY	3 PHASES+G 380/400/440/480V ±10%
FREQUENCIES	50/60Hz ± 0.5Hz
MAXIMUM INPUT POWER (0.1 sec max)	70 kVA
MAXIMUM LINE RESISTANCE PER 2 PHASES WIRES (Ohm)	380V : 0.15 Ohm / 400V : 0.16 Ohm 440V : 0.20 Ohm / 480V : 0.24 Ohm

- TNC neutral point connection must not be used.
- Line supply should come into a power distribution box (PDB) containing the protective units and controls.
- 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

- 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

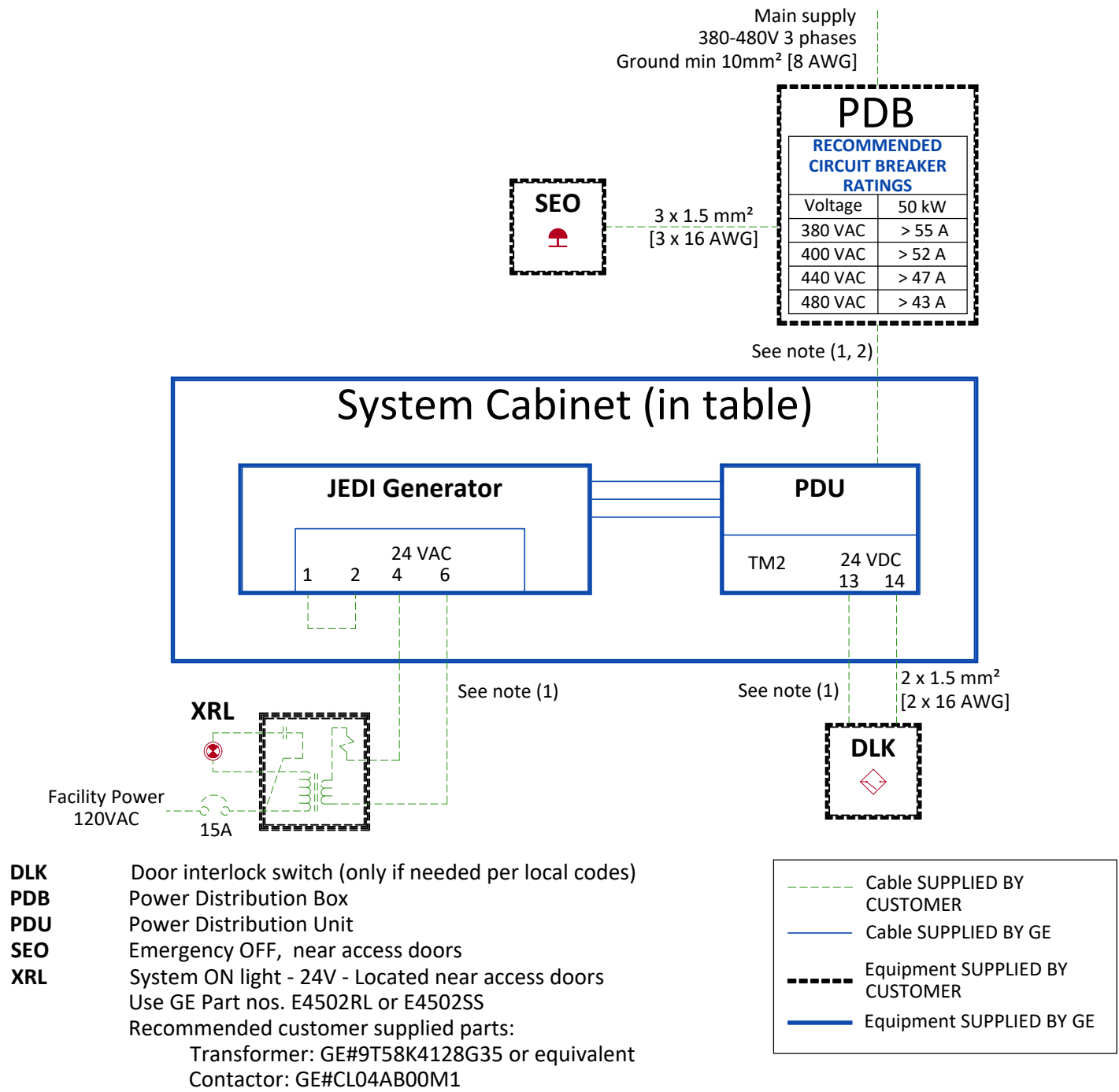
- Power and cable installation must comply with the distribution diagram below.
- All cables must be isolated and flexible, cable color codes must comply with standards for electrical installation.
- Case PDB furnished by GE: The cables for signals and remote control (Y, SEO, L...) will go to PDB with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



TEMPERATURE AND HUMIDITY SPECIFICATIONS

IN-USE CONDITIONS

Temperature	EXAM ROOM		CONTROL ROOM	
	Min	Max	Min	Max
	10 °C [50 °F]	30 °C [86 °F]	10 °C [50 °F]	30 °C [86 °F]
Temperature gradient	< 10°C/h [< 50°F/h]		< 10°C/h [< 50°F/h]	
Relative humidity (1)	30% to 80%		30% to 80%	
Humidity gradient	< 30%/h		< 30%/h	
System heat dissipation	Stand by	Max	Stand by	Max
	1.5 kW	3.1 kW	0.125 kW	0.275 kW
	5118 BTU/hr	10577 BTU/hr	426 BTU/hr	939 BTU/hr

STORAGE CONDITIONS

Temperature	0 °C [32 °F] to 50 °C [122 °F]
Relative humidity (1)	10% to 90%
Temperature gradient	< 20°C/h [< 68°F/h]
Humidity gradient	< 30%/h

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.

CONNECTIVITY REQUIREMENTS

Broadband Connections are necessary during the installation process and going forward to ensure full support from the Engineering Teams for the customers system. Maximum performance and availability for the customers system is maintained and closely monitored during the lifetime of the system. Proactive and reactive maintenance is available utilising the wide range of digital tools using the connectivity solutions listed below:

- Site-to-Site VPN/GE Solution
- Site-to-Site VPN/Customer Solution
- Connection through Dedicated Service Network
- Internet Access - connectivity for InSite 2.0

The requirements for these connectivity solutions are explained in the broadband solutions catalogue (separate document).

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 [3.28 ft] from any point in system.

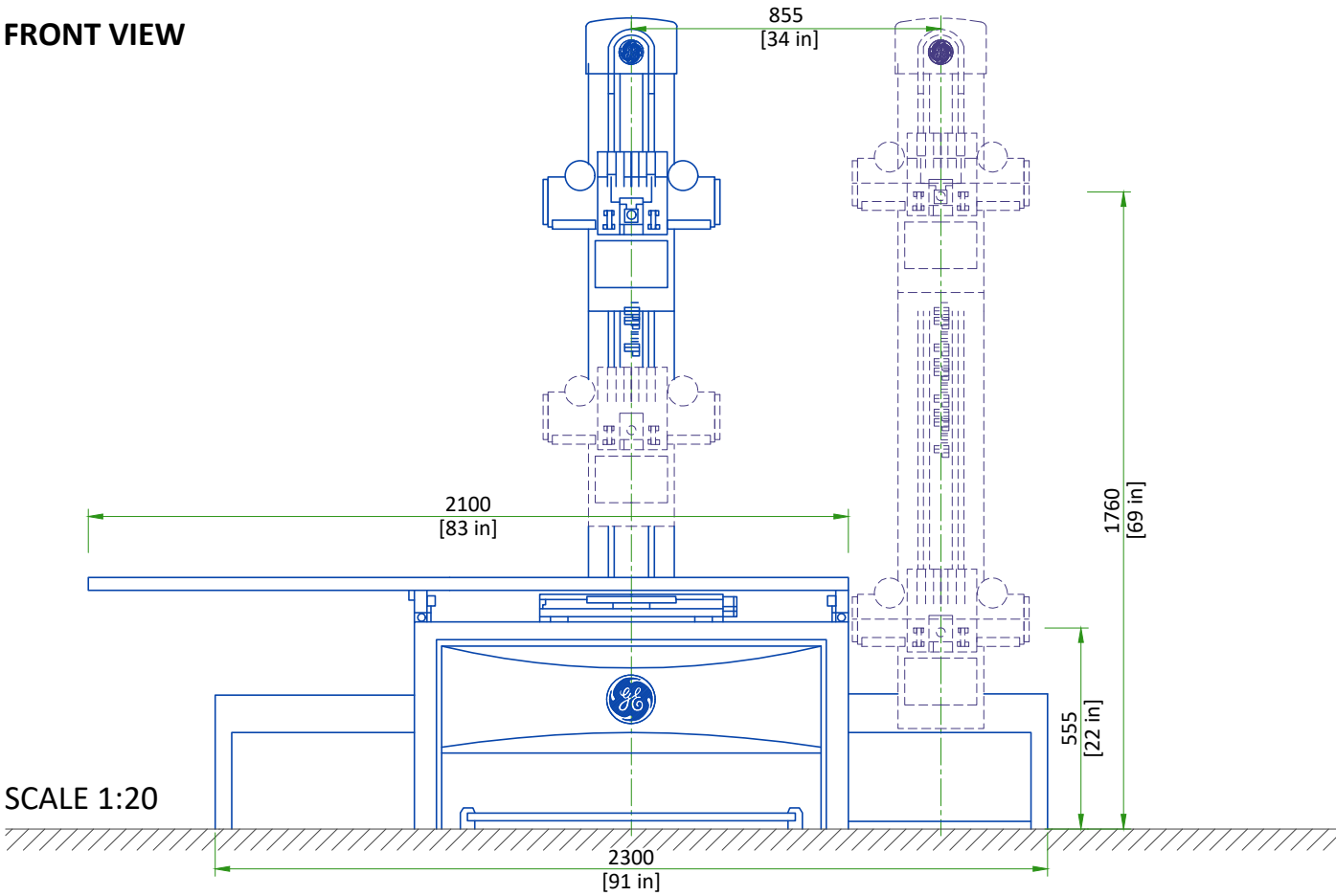
In-use: less than 60 dBA

Stand-by: less than 55 dBA



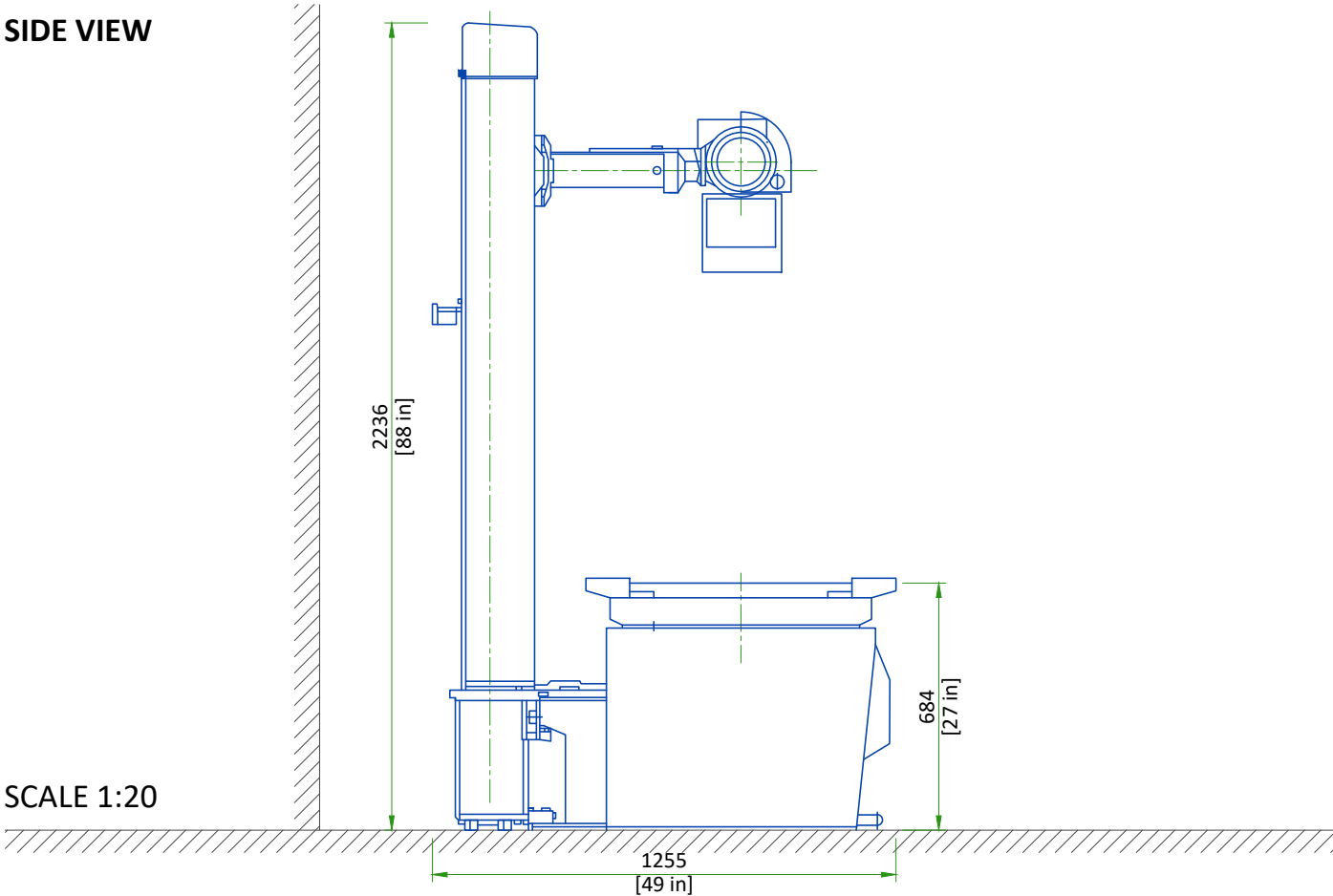
INTEGRATED TABLE

FRONT VIEW



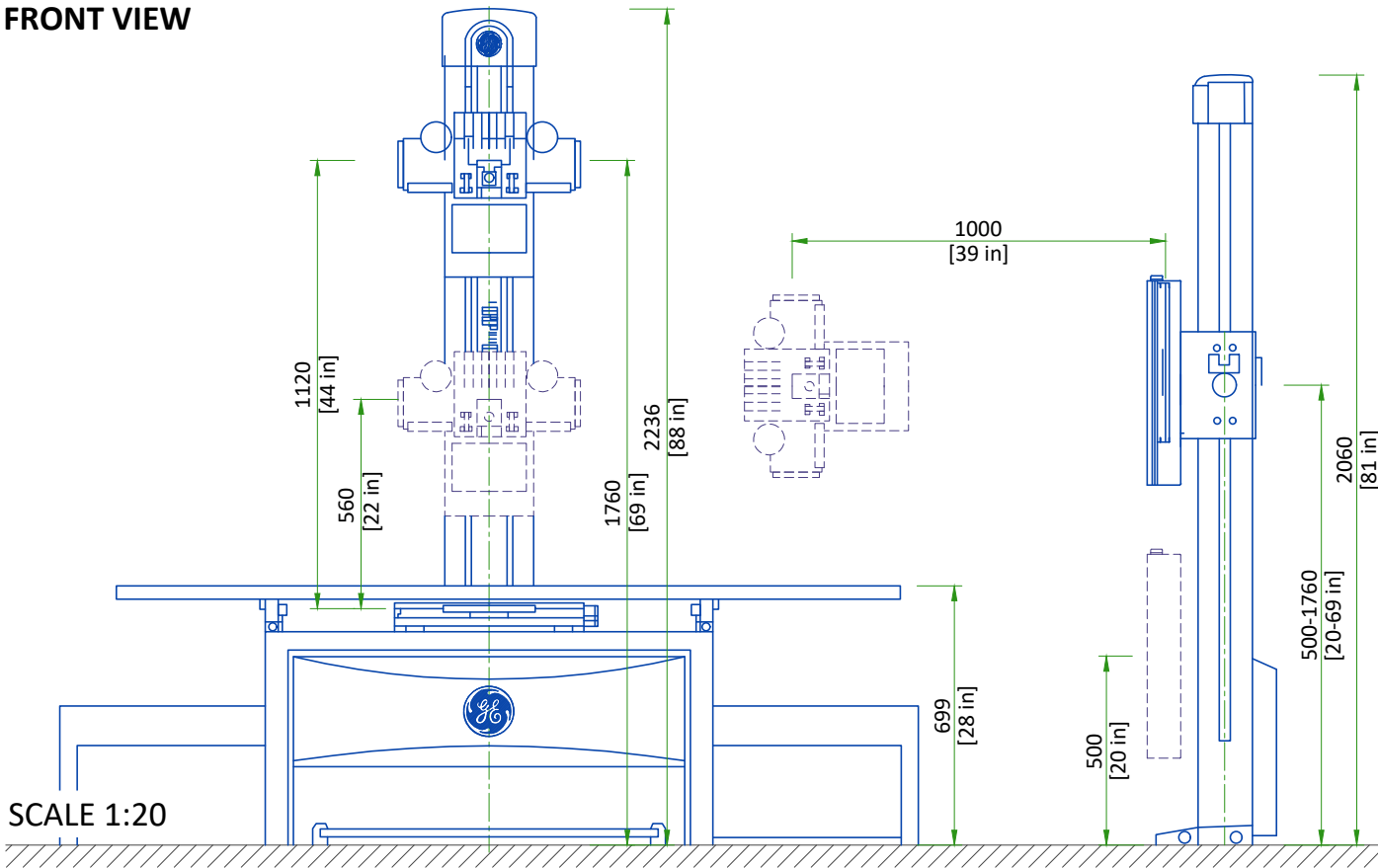
INTEGRATED TABLE

SIDE VIEW

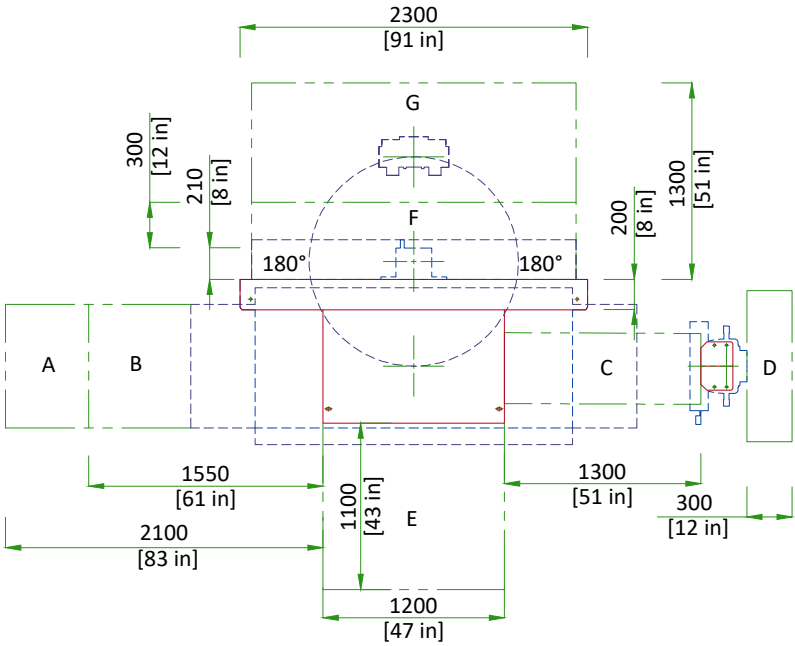


INTEGRATED TABLE WITH WALL STAND

FRONT VIEW



EXAM ROOM CLEARANCE AREAS

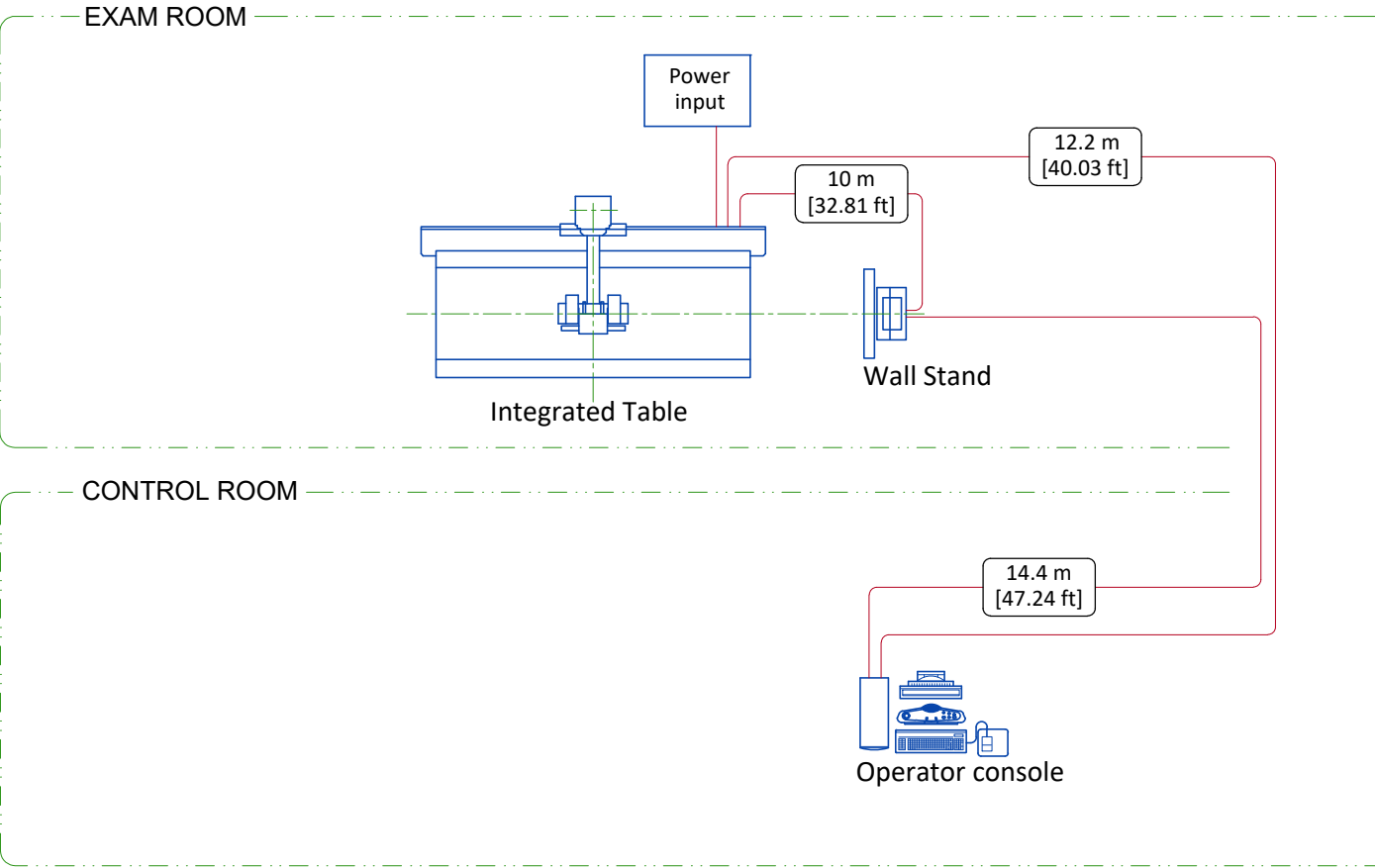


- A: SERVICE AREA:  
The least area to allow you to pull the table top out
- B: SERVICE AREA:  
The least area to allow you to draw the table top out to open a service area for detector housing
- C: AREA to ensure the SID 1 m [3.28 ft]
- D: SERVICE AREA
- E: SERVICE AREA:  
Used to allow the PDU pull out
- F: SERVICE AREA
- G: OPERATION AREA:  
Used when tube rotates 180 degree

Note: if the WS is on the left side, areas A and B will be on the right side

SCALE 1:50

INTERCONNECTIONS



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.

DIMENSIONS

	TABLE	COLUMN	WALL STAND	CONSOLE	DETECTOR
LENGTH (mm)	2500	2300	2250	750	1020
WIDTH (mm)	1280	200	860	1000	800
HEIGHT (mm)	1200	370	610	1150	440
WEIGHT (kg)	650	215	250	70	40
LENGTH (in)	98.4	90.6	88.6	29.5	40.2
WIDTH (in)	50.4	7.9	33.9	39.4	31.5
HEIGHT (in)	47.2	14.6	24.0	45.3	17.3
WEIGHT (lb)	1433	474	551	154	88



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

GLOBAL SITE READINESS CHECKLIST (DI)

DOC1809666 Rev. 7

Site Ready Checks at Installation
EHS Site Requirements
Overall access route to the scan room free from obstruction / high hazards.
Enough space to store tools, equipment, parts, install waste and the general area free from obstruction and trip hazards.
Enough necessary facilities for the GE employees available.
No 3rd parties working in the area that may affect the safety of the installation activity.
Area free from any chemical, gas, dust, welding fume exposure and has painting been completed and dry.
All emergency routes identified, signed and clear from obstruction.
Accessible single source lockable panel that LOTO can be applied to for GE equipment installation (MDP and/or PDU).
There are no other conditions or hazards that you have observed or have been made aware of by the customer or contractors on site.
Required for Mechanical Install start
Room dimensions, including ceiling height, for all Exam, Equipment/Technical & Control rooms meets GE specifications.
Ceiling support structure, if indicated on the GE drawing, is in the correct location and at the correct height according to the Original Equipment Manufacturer specifications.
Levelness and spacing has been measured, and is ready for the installation of any GE supplied components.
Overhead support Structure (unistrut) has been confirmed with customer/contractor to meet required GE provided criteria.
Finished ceiling is installed. If applicable ceiling tiles installed per PMI discretion.
Floor levelness/flatness is measured and within tolerance, and there are no visible defects per GEHC specifications.
Entry door threshold meets PIM requirement.
Rooms that will contain equipment, including staging areas if applicable, are construction debris free. Precautions must be taken to prevent debris from entering rooms containing equipment.
Cable ways (floor/wall/ceiling/Access Flooring) are available for installation of GE cables are of correct length and diameter.
Cable ways routes per GE Final drawings and cable access openings areas installed at a time determined by GEHC PM. Surface floor duct can be installed at time of system installation.
Adequate room illumination installed and working.
Customer supplied countertops where GE equipment will be installed are in place.
Required for Calibration Start
HVAC systems Installed, and the site meets minimum environmental operational system requirements.
System power & grounding (PDB/MDP) is available as per GE specifications.
System power & grounding (PDB/MDP) is installed at point of final connection and ready to use. Lock Out Tag Out is available.
PMI to confirm all feeder wires and breaker are size appropriately. EPO installed if needed.
PMI to confirm with electrician all power and signal cables are well terminated ensuring there are no loose connections.
Network outlets installed.
Computer network available and working.
Lead doors and windows complete or scheduled to be installed. If applicable, radiation protection (shielding) finished & radioprotection regulatory approval for installation obtained.

Note: The details shown here are only an extract from DOC1809666. For the complete document please contact your PMI.