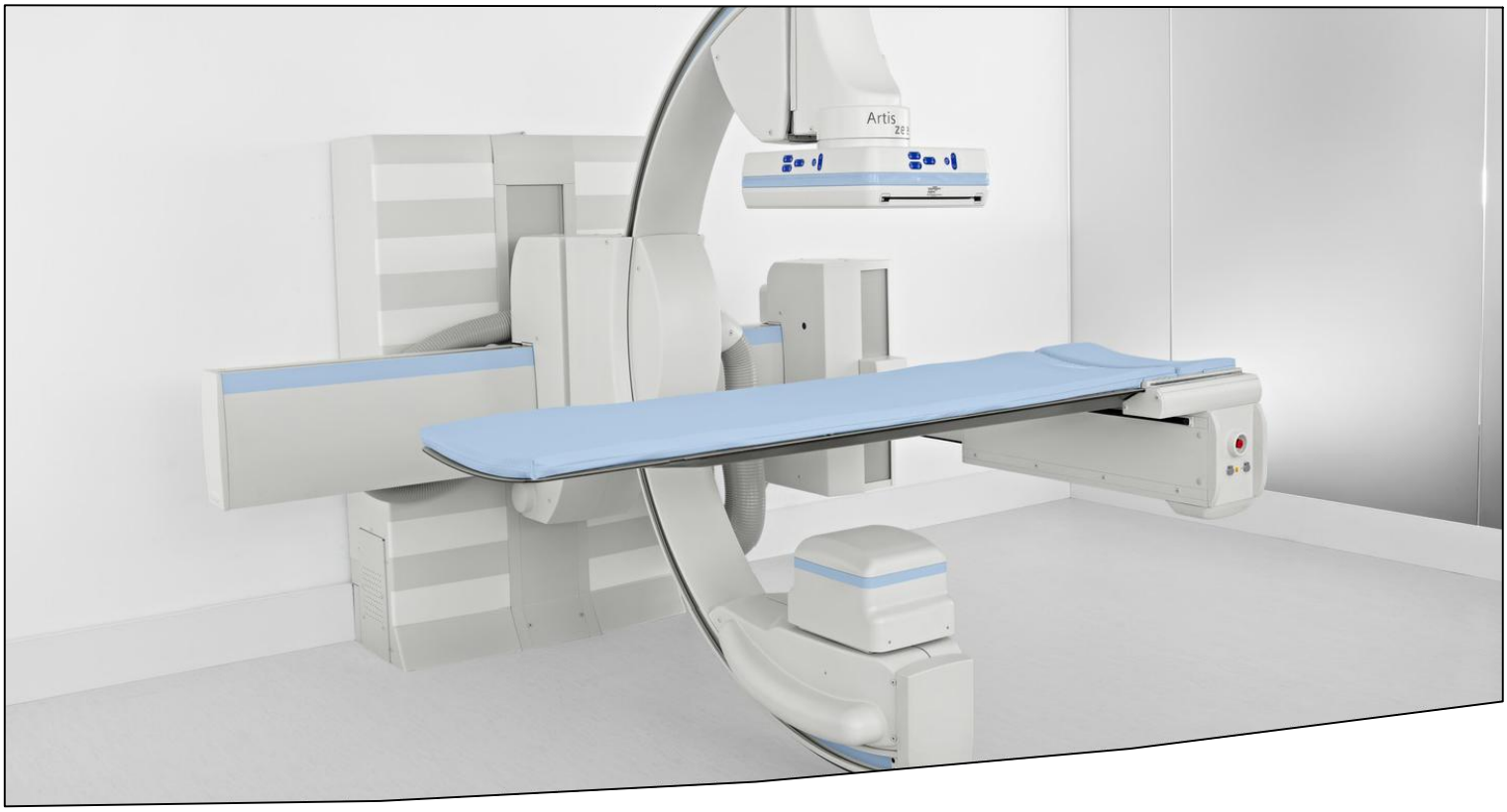


Artis zee multipurpose

Basic Planning Information

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SIEMENS Healthineers

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Room Dimensioning	5
Statics and Transport	6
Environment	9
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Legend

- Motion area / Swivelling range / Minimal room size / Safety distance
- Service area
- Additional equipment
- Ceiling mounted
- Wall mounted
- Floor mounted
- New construction
- Demolition

Dimensioning

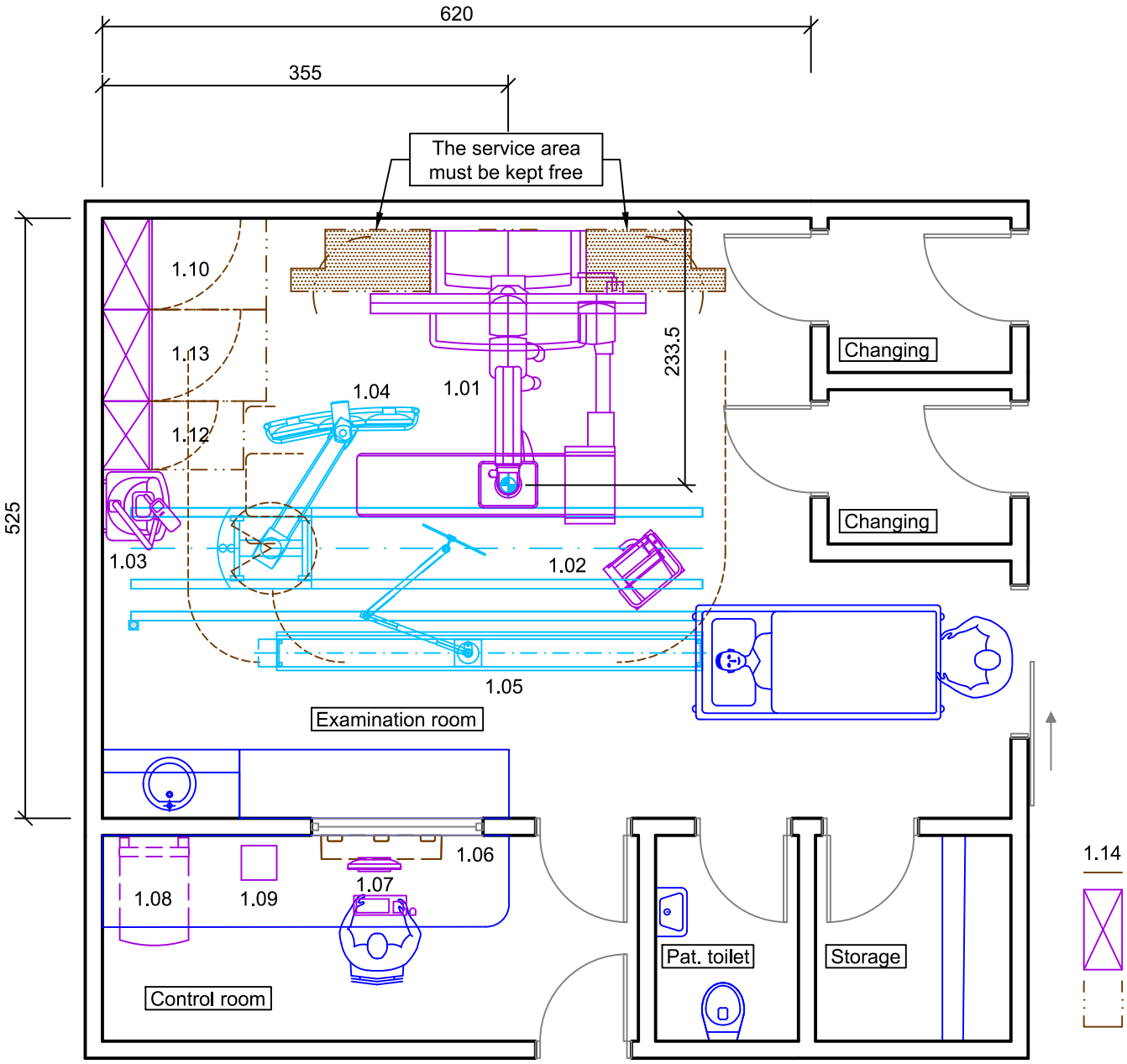
All installation measurements apply to finished wall/floor/ceiling and are to be checked prior to assembling the unit.

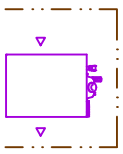


Orientation point = reference point of the Siemens Healthineers unit for planning and installation

Please note: The drawing parts in this document are not to scale!

Planning Example





Remarks Regarding Setup of the Cooling Unit :

Do not set up cooling unit in the examination room (due to noise and heat generation)
The maximum permitted height difference to the cooling unit is 10 m.

The cooling water hoses may be installed only in frost-free rooms. Length of the hoses max. 26 m.

Artis zee multipurpose – Equipment Legend				
		Weight (kg), Heat dissipation to the air (W)		
Pos.	Description	kg	W	Remark
1.01	Floor stand with Patient table	2027	400	#1; right-site table suspension
1.02	Control console and ECC I on trolley	26		
1.03	ANGIOMAT Injector Pedestal	73	100	
1.04	Ceiling stand DCS 3	251	225	#2
1.05	Upper body radiation shield, moveable	71		optional
1.06	Control room distributor	29	100	
1.07	Workplace Display with keyboard	10	75	
1.08	AXIS image system	150	1270	
1.09	Archive Console Extension (ACE)	6		
1.10	Generator POLYDOROS A100 Plus	300	1000	
1.11	Cooling unit - SMC one4all	28	2400	
1.12	System control cabinet	270	1600	
1.13	Cable cabinet	120		optional
1.14	UPS Powerware 15kVA (CE) EATON incl. battery	253	600	optional, #14 / #16
	#1 weight inclusive montage plate #2 weight inclusive 4,25 m longitudinal rails and system cable #14 total heat dissipation of 0.6 kW at a full load #16 in emergency mode			

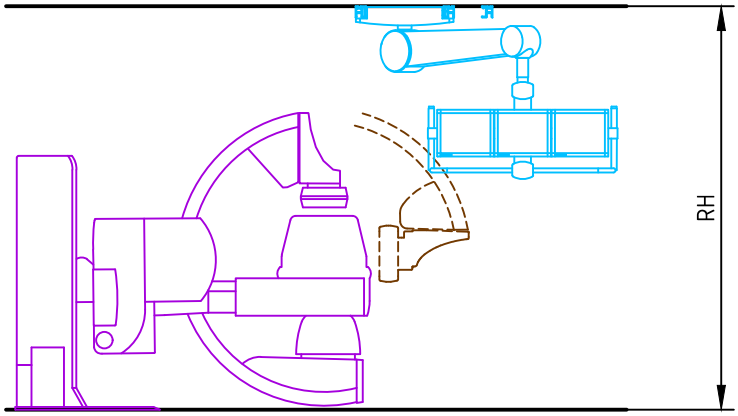
Room Dimensioning

Room dimensioning

The indicated room dimensions have to be checked on site. The planning department has to be informed about possible deviations. Otherwise we cannot assume any guarantee for the accurate implementation of the dimensions indicated in the planning documents.

Room height

not to scale



RH = RoomHeight, measured from the highest point of the finished floor (with covering) to the lowest point of the ceiling substructure.

Maximum room height 3200 mm with DCS; no height restriction > 3200 mm with monitor trolley.
For rooms with height < 2750 mm a monitor trolley is recommended.
Moving the unit upright is possible with room heights from 2670 to 2750 mm, but the tilting movement will not be continuous.
For installation plates with installation on solid concrete/screed floors, the minimum room height is 2670 mm.

Rooms < 2650 mm high cannot be used.

UPS - Notes

In case of a power failure no moving of the system and motorized table is possible. For all Artis systems with Artis table with tilting function, Artis OR table or Artis zee Multipurpose an UPS is mandatory.

Minimum 15 kVA UPS for system and table movement e.g. Eaton Powerware 15 kVA. If customer already has an on-site Full Power UPS, this can be used, if it fulfills this requirement.

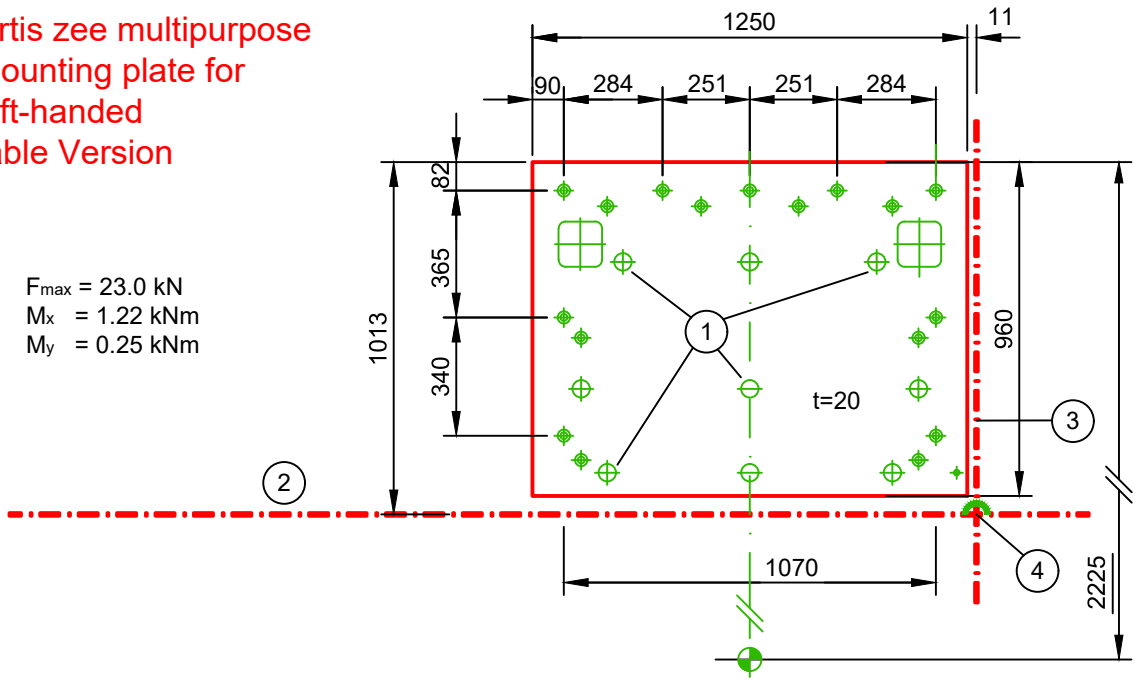
Statics and Transport

Statics

not to scale

Artis zee multipurpose
Mounting plate for
left-handed
table Version

F_{max} = 23.0 kN
M_x = 1.22 kNm
M_y = 0.25 kNm



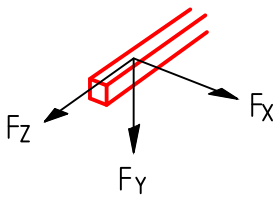
1 9 holes for poured mortar	2 X-Axis	3 Y-Axis	4 Mass center (Fmax)

The dimensoned holes are fastening holes. The non-dimensioned holes are alternate holes.
The installation plate is anchored using 9 Hilti heavy duty expansion bolts in reinforced concrete.
Min. concrete quality: C 20/25.

Max. pull forces for all mounting points: 4.3 kN., This maximum value is not exerted at the same time at all mounting points. The pull forces depend on the working position and the unit movement.

DCS-Stand

- ceiling mounted for Displays (DCS PRO, DCS Large Display)
  $F_{Y\,max}$ = 3,6 kN vertical ceiling load, floating single load
  dynamic load per mounting point
  (2 screws; the screws are subject to different loads, max. 4.2 kN per screw)
- ceiling mounted for Displays (DCS extended)
  $F_{Y\,max}$ = 5,4 kN vertical ceiling load, floating single load
  dynamic load per mounting point
  (2 screws; the screws are subject to different loads, max. 4.2 kN per screw)



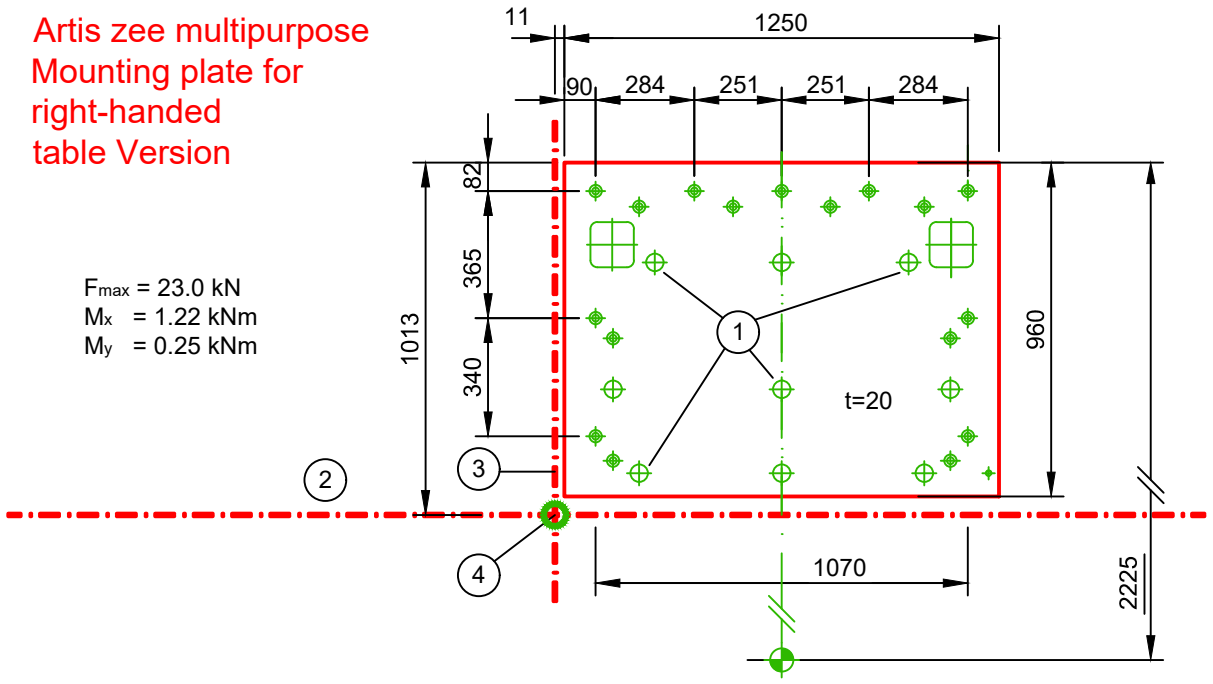
All specified load values are without safety loading.

Statics

not to scale

Artis zee multipurpose
Mounting plate for
right-handed
table Version

F_{max} = 23.0 kN
M_x = 1.22 kNm
M_y = 0.25 kNm



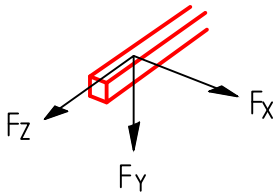
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All specified load values are without safety loading.

Transport			
		System	Lift Column
Largest crate		260 x 122 x 218 cm (LxWxH)	133 x 97 x 195 cm (LxWxH)
Heaviest single part without packaging, with transport carriage		approx. 1132 kg	approx. 910 kg
Heaviest single part without transport carriage		992 kg	850 kg
The transport route needs sufficient dimensions : Door opening = 113 cm ; Corridor width = 230 cm The door must have a final clearance of 125 cm if bed entrance is requested.			
Schocks	max. 10 g / 16 ms	max. 25 g / 6 ms (in original packaging)	
Vibrations	max. 2 g / 58 to 150 Hz	max. 10 g / 58 to 150 Hz (in original packaging)	

Environmental conditions

Environment		
Examination and control room	Temperature range Relative humidity	15 to 30 °C (recommended 22 °C) 20 to 75 % non-condensing
Image system	Temperature range Relative humidity Max. temperature grad. Air flow volume Max. noise generation	10 to 35 °C 20 to 75 % non-condensing 10 °C / h 630 m³/h 53 dB(A)
Generator	Temperature range Relative humidity Max. temperature grad. Air flow volume Max. noise generation	10 to 35 °C 20 to 75 % non-condensing 5 °C / h 160 m³/h 55 dB(A)
System- control cabinet	Temperature range Relative humidity Max. temperature grad. Air flow volume Max.noise generation	15 to 30 °C 20 to 75 % non-condensing 5 °C / h 500 m³/h 48 dB(A)
Cooling set	Cooling air Air flow volume Max. noise generation	5 to 30 °C frost-free room 950 m³/h 55 dB(A) at 50 Hz; 59 dB(A) at 60 Hz
Stand with flat panel detector	Max. temperature gradient Air pressure Schocks Vibrations	5 °C / h 700 to 1040 hPa max. 10 g / 16 ms max. 0.1 g / 10 to 200 Hz
UPS 15 kVA	Temperature range Relative humidity Air change Max. noise generation	0 to 40 °C 20 to 25 °C recommended 5 to 95 % non-condensing 0,18 m³ / h 60 dB(A)
UPS 40 kVA	Temperature range Relative humidity Air change Max. noise generation	0 to 40 °C 20 to 25 °C recommended 5 to 95 % non-condensing 0,35 m³ / h 60 dB(A)

Electrical Installation

Electrical Data

Power line: TN-S 3/N/PE AC 50/60 Hz ± 1%, Line voltage: 400 V ± 10%
Cable cross section is to be determinded by calculation!

Line Impedance: ≤ 135 mΩ , Power Consumption - continuous: 8 kVA, momentary: 160 kVA,
Power load: 34.6 kVA, System control cabinet: Power Consumption - continuous: 14 kVA, Power load: 24.2 kVA

Room lighting

Ambient lighting in rooms with diagnostics or with workstations must comply with the respective local and national regulations.
General requirements like the needed intensity of illumination - adjustable, reproducible, flicker-free or a limitation of dazzlings and reflections etc. have to be observed (EN 12464-1, DIN 5035-7).

General Information

Display screen workstations

For setting up display screen workstations, take account of the guidelines in the Display Screen Workstation directive as well as any national regulations (e.g. EN ISO 9241-5).

Smart Remote Services (SRS)

Smart Remote Services (SRS) is used for remote diagnostics as well as remote service to provide highest system availability. Requirements:
- Broadband connection (minimum 10 Mbit/s down- and upstream, optimum 50 Mbit/s down- and upstream) without time or volume limitations
- The computer hosting of the Teamplay Receiver requires access to the hospital intranet and the internet. It should have a at least 6 Mbits/s upstream to the internet and at least 100 Mbits/s downstream from the internet.
- Router (for exclusive use with SRS)

Data protection and security is defined in the Smart Remote Services security concept.

Network Integration

The Siemens Healthineers components are using TCP/IP Protocol, a 100/1000 Mbit/s switched Ethernet network and static IP addresses.
The required network cabling (min. CAT 5 TP) has to be provided on site. Media converters, which are needed for using fibre optic cabling, are not in scope of delivery.
To prepare the implementation of the new system into the existing network environment, the availability of the needed network data at least two weeks before starting the installation is mandatory.
This is the only way to ensure a seamless integration of the new system into the workflow of the department.

Notes on preparations for installation

Contracts for performing and supervising on-site installation preparations should be concluded with technically competent companies by the customer. The customer is responsible for timely and proper completion and supervision of all preparations for installation at the construction site in observance of all applicable legal regulations (e.g. X-ray regulations, radiation protection regulations) and all applicable general recognized rules of technology (e.g. VDE regulations, DIN standards).
Execution and supervision of installation preparations at the construction site and later observance of the standard operating conditions are not included in our duties. The customer is responsible for checking the static calculations and, where applicable, the air conditioning in the building to be equipped.

Safety distances

Distances from moving parts of the medical device to walls, furniture and other equipment have to be kept to avoid injuries by crushing in compliance with local regulations, e.g. a minimum distance of 50 cm according to EN ISO 13854.

It is the customer's responsibility to ensure the above requirements are followed. This is to avoid the risk of injury.

Radiation protection

The structural radiation protection depends on the location of the unit and the function of the surrounding rooms. By order, the planning departments of Siemens Healthineers prepare radiation protection calculation and radiation protection plan.

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