

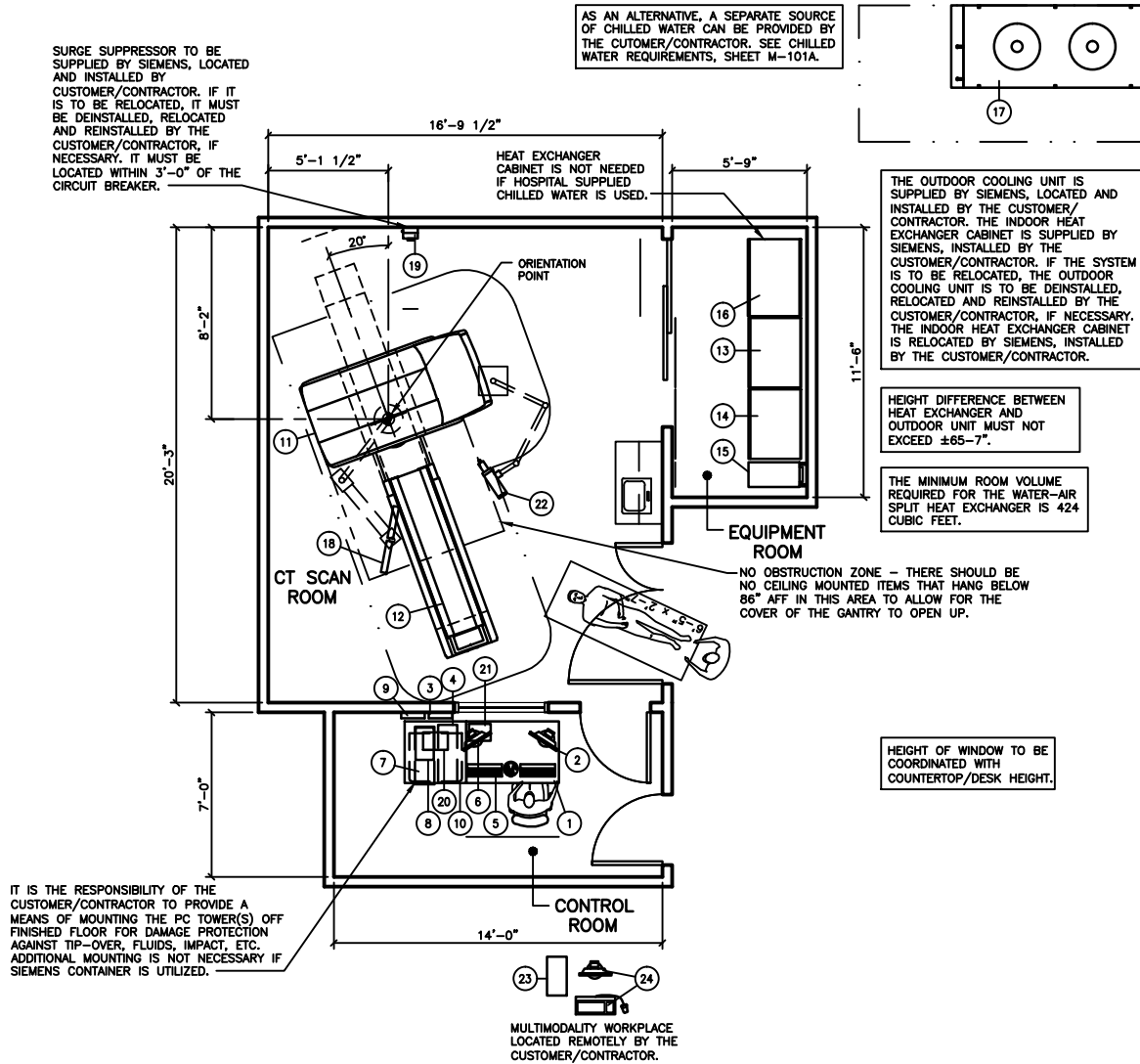
SIEMENS

SOMATOM DEFINITION TYPICAL ROOM PLAN



The intended use for this Cut Sheet is to communicate the spatial requirements as well as the basic architectural, electrical, structural, and mechanical requirements for this piece of imaging equipment. The information provided in this document is for reference only, during the pre-planning stage, and therefore does not contain any site specific detailed requirements. This information is subject to change without notice. Federal, state and/or local requirements may impact the final placement of the components. It is the customer's responsibility to ensure that the final layout and placement of the equipment complies with all applicable requirements.

SOMATOM DEFINITION TYPICAL ROOM PLAN



TYPICAL PLAN

SCALE: 1/8" = 1'-0"

SOMATOM DEFINITION SPECIFICATIONS

EQUIPMENT LEGEND								
NO	DESCRIPTION	SMS SYM	WEIGHT (LBS)	BTU/HR TO AIR	DIMENSIONS (INCHES)			REMARKS
					W	D	H	
①	OPERATING CONSOLE W/KEYBOARD AND CONTROL BOX	⊖	132	43	47 1/4	31 1/2	29 1/4	
②	19" FLAT SCREEN MONITOR ICS	⊖	20	256	16 9/16	8 1/4	16 1/16	ON CONSOLE/COUNTER
③	POWER CONNECTION TERMINAL – ICS	⊖	---	---	---	---	---	WALL MOUNTED
④	SYNGO ACQUISITION WORKPLACE	⊖	<66	1,706	9 13/16	29 1/2	18 1/2	OFF FLOOR/IN CONTAINER
⑤	IMAGE EVALUATION KEYBOARD (OPTION)	⊖	-	---	---	---	---	ON CUSTOMER'S COUNTER
⑥	19" FLAT SCREEN MONITOR FOR IES (OPTION)	⊖	20	256	16 9/16	8 1/4	16 1/16	ON CONSOLE/COUNTER
⑦	SYNGO CT WORKPLACE (OPTION)	⊖	<66	1,706	9 13/16	29 1/2	18 1/2	OFF FLOOR/IN CONTAINER
⑧	UPS FOR IES (OPTION)	⊖	36	171	9 3/16	16 7/16	5 13/16	
⑨	POWER CONNECTION TERMINAL – IES (OPTION)	⊖	---	---	---	---	---	WALL MOUNTED
⑩	CONTAINER FOR ICS/IES (OPTION)	⊖	77	---	31 1/2	31 1/2	29 1/4	HOUSING FOR ICS/IES
⑪	SOMATOM DEFINITION GANTRY	⊖	5,578	3,412*	91 1/8	47 3/8	78	*ADDITIONAL HEAT DISSIPATED TO WATER
⑫	PATIENT TABLE	⊖	1,103	1,024	29 1/2	95 11/16	33 7/16	
⑬	POWER DISTRIBUTION CABINET "A"	⊖	1,213	13,649**	35 7/16	27 1/4	76 3/4	UPS LOCATED INSIDE OF PDCA
⑭	POWER DISTRIBUTION CABINET "B"	⊖	882	**	35 7/16	27 1/4	76 3/4	**PDCA & PDCB COMBINED
⑮	IMAGE RECONSTRUCTION SYSTEM	⊖	<287	5,118	23 5/8	29 5/16	33 3/16	
⑯	HEAT EXCHANGER CABINET – WATER/AIR SPLIT (OPTION)	⊖	910	3,412	39 3/8	27 1/4	77	
⑰	OUTDOOR UNIT – WATER/AIR SPLIT (OPTION)	⊖	410	119,504	100 3/4	42 1/8	45 5/16	
⑱	CARE VISION DUAL MONITOR (OPTION)	⊖	174	---	---	---	---	CEILING MOUNTED
⑲	EATON SURGE PROTECTIVE DEVICE PANEL (OPTION)	⊖	13.5	---	7 1/2	6 11/16	12	WALL MOUNTED
⑳	MEDRAD DISPLAY CONTROL UNIT (OPTION)	⊖	8	---	12 1/2	9	13 1/2	HEIGHT WITH SCREEN UP
㉑	MEDRAD BASE UNIT (OPTION)	⊖	14	---	11	8 3/4	11 1/2	UNDER COUNTER ON SHELF
㉒	CEILING MOUNTED MEDRAD INJECTOR (OPTION)	⊖	106	---	---	---	---	SEE MFG SPECIFICATIONS
㉓	MULTIMODALITY WORKPLACE COMPUTER (OPTION)	⊖	55	---	19 3/4	10	23 5/8	ON CUSTOMER'S COUNTER
㉔	MULTIMODALITY WORKPLACE KEYBOARD AND MONITOR (OPTION)	⊖	-	---	---	---	---	ON CUSTOMER'S COUNTER

FINISHED ROOM HEIGHT

FOR CT GANTRY ONLY	MINIMUM 7'-2 5/8"
CAREVISION MONITOR/CEILING MOUNT	MIN. 8'-6 3/8" MAX. 12'-1 1/16"

REMOTE SYSTEM DIAGNOSTICS

SIEMENS REMOTE SERVICES (SRS) REQUIRES A CONNECTION BETWEEN THE SRS REMOTE SERVER AND SIEMENS SYSTEMS VIA REMOTE LOCAL AREA NETWORK ACCESS, TO ENSURE THE UPTIME OF YOUR SYSTEM. A CUSTOMER VPN CAPABLE FIREWALL OR OTHER VPN APPLIANCE IS PREFERRED.

SOMATOM DEFINITION SPECIFICATIONS

POWER REQUIREMENTS				
SYSTEM	SUPPLY VOLTAGE (VOLTS)	POWER CONSUMPTION (kVA)	SUPPLY IMPEDANCE (mΩ)	AUTOMATIC CIRCUIT BREAKERS (AMPS)
SOMATOM DEFINITION	3φ 480±10%	SEE BELOW	≤ 85	(2) 125
<p>POWER CONSUMPTION (WITH STANDARD WATER/WATER HEAT EXCHANGER) OPERATING FOR 2 SEC – 240 kVA OPERATING FOR 100 SEC – 54 kVA SYSTEM ON (STAND-BY) – 6 kVA SYSTEM ON (COMP ON) – 3 kVA GANTRY OFF (EVA ON) – 1 kVA</p> <p>POWER CONSUMPTION (WITH OPTIONAL WATER/AIR SPLIT COOLING SYSTEM) OPERATING FOR 2 SEC – 240 kVA OPERATING FOR 100 SEC – 54 kVA SYSTEM ON (STAND-BY) – 6 kVA SYSTEM ON (COMP ON) – 3 kVA GANTRY OFF (EVA ON) – 1 kVA COOLING SYSTEM – 10kVA COOLING SYSTEM FLOW HEATER (OPTIONAL) – 12kVA</p> <p>IF AN ON-SITE TRANSFORMER IS REQUIRED TO OBTAIN CT OPERATING VOLTAGE, IT MUST BE OF SUFFICIENT CAPACITY AND CHARACTERISTICS TO MAINTAIN SUPPLY VOLTAGE AND IMPEDENCE REQUIREMENTS (TRANSFORMER AND CONDUCTORS).</p> <p>ALL STANDARD COMPONENTS AND ADD-ONS ARE SUPPLIED VIA THE POWER DISTRIBUTION SYSTEM.</p> <p>DO NOT CONNECT NON-SIEMENS COMPONENTS SUCH AS LASER CAMERAS OR FILM PROCESSORS TO THE SIEMENS POWER DISTRIBUTION SYSTEM (PDS).</p> <p>THE EXAMINATION ROOM SHOULD BE EQUIPPED WITH AT LEAST ONE EMERGENCY POWER OFF (PANIC) BUTTON.</p> <p>TO ENSURE SATISFACTORY SYSTEM OPERATION THE PDS MUST HAVE A DEDICATED PROTECTIVE GROUND CONDUCTOR.</p>				

CASEWORK & ACCESSORY NOTES
<p>1) ALL CASEWORK IS EITHER EXISTING OR IS TO BE DESIGNED, DETAILED, FURNISHED AND INSTALLED BY THE CUSTOMER AND/OR CONTRACTOR. FOLLOW DESIGN RECOMMENDATIONS INCLUDED HEREWITH, AS THEY ARE ESSENTIAL FOR THE SUCCESSFUL INSTALLATION & OPERATION OF THE SIEMENS EQUIPMENT.</p> <p>2) ALL FURNITURE (CHAIRS, ETC.) FOR THE CONTROL ROOM ARE TO BE PROVIDED BY THE CUSTOMER.</p>

ENVIRONMENTAL REQUIREMENTS	
TEMPERATURE (°F)	
<p>TEMPERATURE, HUMIDITY, DUST, AIR CONTAMINATION: REFER TO THE CLIMATOGRAM ABOVE FOR THE PERMITTED CLIMATE RANGE. THE MAXIMUM TEMPERATURE GRADIENT IS 6 K/HR. THE ENVIRONMENTAL REQUIREMENTS FOR THE OPERATOR AND THE SYSTEM IS 64 TO 82 °F WITH A RELATIVE HUMIDITY OF 20-75% AND A BAROMETRIC PRESSURE OF 11.6 TO 15.4 PSI. EXTERIOR AIR VENTS SHOULD BE EQUIPPED WITH A FILTRATION SYSTEM OF THE FILTER CLASS MERV 8 TO FILTER DUST PARTICLES >10 μm. THE ROOM AIR SHOULD BE PROTECTED AGAINST CONTAMINATION BY HYDROGEN SULPHIDE, EVEN IN SMALL AMOUNTS. IF A DANGER OF SUCH CONTAMINATION EXISTS, CORRECTIVE ACTIONS HAVE TO BE TAKEN. E.G., EXTRACTOR FANS, SIPHON, MODIFICATION OF VENTILATION INTAKE, ETC..</p>	

WATER/AIR SPLIT GANTRY COOLING
<p>THE GANTRY IS COOLED WITH CHILLED WATER IN A CLOSED LOOP CONNECTION FROM THE HEAT EXCHANGER. THE HEAT EXCHANGER CABINET IS COOLED WITH CHILLED WATER IN A CLOSED LOOP CONNECTION FROM AN OUTDOOR COOLING UNIT. THE AMBIENT AIR TEMPERATURE RANGE REQUIRED FOR THE OUTDOOR COOLING UNIT IS -22' TO 122' (-40' TO 122' WITH FLOW HEATER OPTION). BTU/HR TO AIR (EXHAUST) IS 119,425.</p>

HOSPITAL WATER CHILLED WATER
<p>THE GANTRY IS COOLED WITH CHILLED WATER IN A CLOSED LOOP CONNECTION FROM THE ON-SITE CHILLED WATER SUPPLY. AN ON-SITE CONNECTION TO THE CHILLED WATER SUPPLY MUST BE AVAILABLE TO SUPPLY THE HEAT EXCHANGER LOCATED INSIDE THE GANTRY. THE REQUIRED WATER TEMPERATURE IS 39.2 TO 53.6°F. THE NOMINAL OPERATING PRESSURE IS 29 TO 87 PSI, (MAX. 145 PSI). THE MINIMUM FLOW RATE DEPENDS ON THE WATER TEMPERATURE. DIFFERENTIAL PRESSURE AS RELATES TO WATER CIRCULATION. HEAT DISSIPATION INTO THE WATER IS 51,182 BTU/HR.</p>

SOMATOM DEFINITION SPECIFICATIONS

DELIVERY

TRANSPORTING INFORMATION:

TOTAL GANTRY TRANSPORT WEIGHT: 6,206 LBS.

GANTRY WITHOUT TRANSPORT DEVICE: 5,578 LBS.
TRANSPORT DEVICE: 628 LBS.

NORMAL TRANSPORT REQUIREMENTS:

DURING THE MOVEMENT OF THE GANTRY THROUGH CORRIDORS THE TRANSPORT CASTERS ARE SWIVELED OUT FOR STABILITY. THE MAXIMUM WIDTH IS 5'-7 1/8", MAXIMUM LENGTH IS 8'-7 9/16" AND MAXIMUM HEIGHT IS 6'-6 1/16" WHEN CASTERS ARE SWIVELED OUT.

NARROW SPACE TRANSPORT REQUIREMENTS:

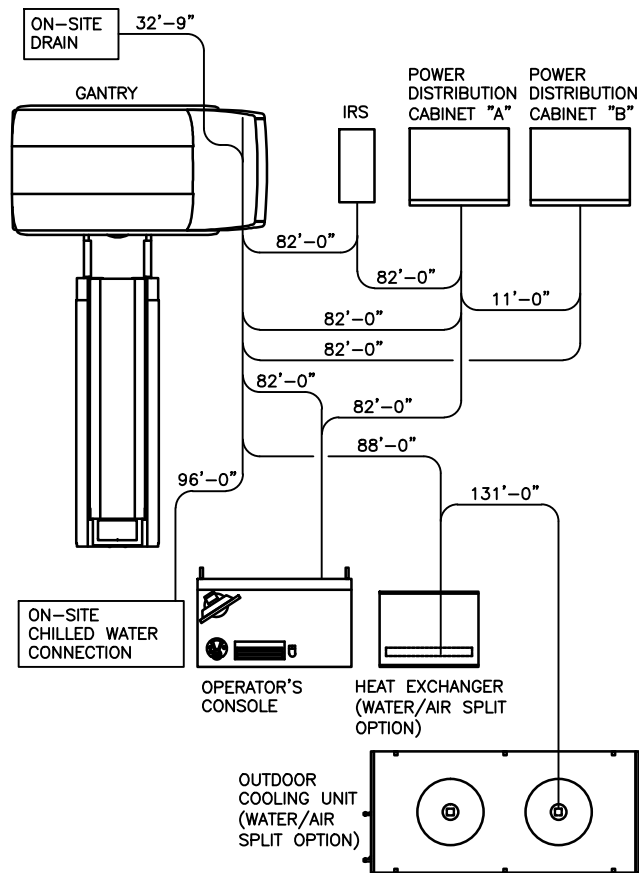
WHEN TRANSPORTING THE GANTRY THROUGH A NARROW SPACE OR DOORWAY, THE TRANSPORT CASTERS ARE SWIVELED IN. THE MAXIMUM WIDTH IS 3'-11 3/8", MAXIMUM LENGTH 10'-8 3/8" AND MAXIMUM HEIGHT IS 6'-6 1/16" WHEN CASTERS ARE SWIVELED IN.

NOISE LEVEL

SYSTEM COMPONENT	DECIBEL LEVEL (AT 3'-3" DISTANCE)
GANTRY	<70
PATIENT TABLE	<60
PDCA CABINET	≤55
PDCB CABINET	≤55
IRS TOWER	≤55
HEAT EXCHANGER - WATER/AIR SPLIT	<60

MAXIMUM DISTANCES

THE MAXIMUM DISTANCE BETWEEN COMPONENTS IS CALCULATED AS THE DISTANCE FROM CABLE OUTLET TO CABLE OUTLET. VARIOUS ARRANGEMENTS OF COMPONENTS ARE POSSIBLE AS LONG AS THE DISTANCES SHOWN BELOW ARE NOT EXCEEDED AND THE REQUIRED MINIMUM SAFETY DISTANCES ARE MAINTAINED.



TO AVOID INTERFERENCE, THE FOLLOWING MINIMUM DISTANCES HAVE TO BE MAINTAINED:

- PDC A / B <--> CRT MONITOR: MINIMUM 3'-3"
- GANTRY <--> ECG-WORKSTATION: MINIMUM 16'-5" (1)
- GANTRY <--> EEG-WORKSTATION: MINIMUM 19'-8" (1)

1) MINIMUM DISTANCE BETWEEN THE LINE VOLTAGE CABLES = 19'-8"

