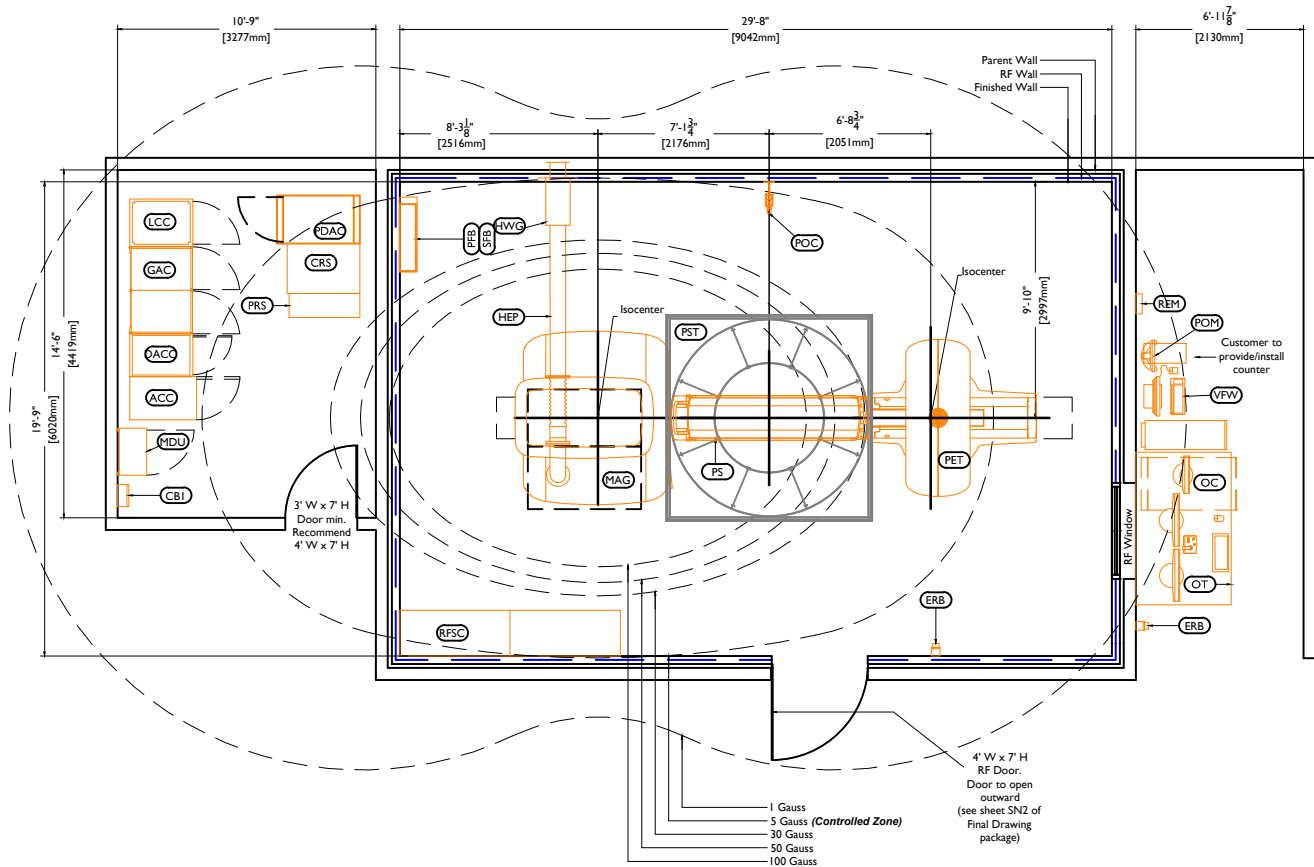


Ingenuity TF PET/MR

Preferred Room Layout

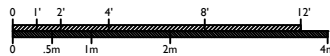
The layout shown below is based upon a typical equipment configuration and should be considered as a general design guideline. Site conditions, application requirements, customer preferences, and/or equipment configuration may significantly impact suite design and equipment layout. It is recommended to request site-specific drawings from a Philips representative early in the design process.



Equipment Layout

Ceiling Height Guide

Equipment Room:	10' - 6"	(3200 mm) Recommended
	9' - 2"	(2795 mm) Minimum
Exam Room Suspended Ceiling:	8' - 3 3/16"	(2520mm) Required
Exam Room RF Ceiling:		
Helium Waveguide Through RF Wall:	10' - 6"	(3200 mm) Minimum
Helium Waveguide Through RF Ceiling:	11' - 2 1/4"	(3410mm) Minimum
Control Room:	9' - 10"	(3000 mm) Recommended
	7' - 3"	(2200mm) Minimum



Disclaimer:

The data given in this document related to the future equipment configuration release Ingenuity TF PET/MR is for preliminary planning purposes only. It reflects the information available at the time this document is issued and may not be complete or final. Some of these requirements may still change as development is finalized. Philips does not take any liability for any additional cost occurring to customers because decisions based on the information provided in this document.

PHILIPS

Equipment Legend

- A Furnished and installed by Philips
- B Furnished by customer/contractor and installed by customer/contractor
- C Installed by customer/contractor
- D Furnished by Philips and installed by contractor
- E Existing
- F Future
- G Optional item furnished by Philips
- H Furnished by RF Enclosure Supplier and installed by RF Enclosure Supplier
- J Furnished by Philips and Installed by Rigging Company

Equipment Designation

		Description	Max. Gauss	Weight lbs [kg]	Heat Load Btu/hr [W]
A	(OC)	Operator's Console	30	474 [215]	4197 [1230]
G	(OT)	Operator's Table	---	220	0
A	(VFW)	Viewforum Workstation	10	125 [57]	1000 [293]
D	(ERB)	Emergency Run-Down Button (Qty. = 2)	---	3 [1]	0
J	(MAG)	Magnet Assembly	---	12850 [5830]	6800 [1993]
A	(PS)	Patient Support (MT)	---	365 [165]	1025 [300]
A	(PST)	Patient Support Turntable Assembly	---	686 [312]	1025 [300]
A	(HEP)	Helium Gas Exhaust Pipe (exam room only)	---	4/ft [6/m]	0
C	(HWG)	Helium Gas Exhaust Wave Guide	---	10 [5]	0
A	(GAC)	Gradient Amplifier 787 Double Cabinet	150	2015 [914]	27900 [8177]
A	(DACC)	Data Acquisition and Control Cabinet	50	585 [265]	23900 [7004]
A	(ACC)	Additional Components Cabinet (TX)	50	660 [300]	6800 [1991]
D	(LCC)	Liquid Cooling Cabinet	150	660 [300]	3400 [996]
D	(MDU)	Mains Distribution Unit	150	605 [275]	1700 [498]
A	(SFB)	System Filter Box with Covers	70	175 [80]	3400 [995]
G	(RFSC)	RF Coil Storage Cabinet	---	1320 [600]	0
B	(CB1)	Circuit Breaker (for system)	50	t.b.d.	t.b.d.
B	(CB2)	Circuit Breaker (for Chiller) [not shown]	50	t.b.d.	t.b.d.
D	(CH)	Dimplex MEDKOOL 15000 AC Chiller [not shown]	10	2600 [1180]	188000 [55097]
D	(REM)	Chiller Remote Controller	10	1 [0.5]	0
A	(SACU)	System Air Cooling Unit	50	55 [25]	340 [100]
D	(PV)	Patient Ventilation	50	56 [25]	170 [50]
A	(PFB)	PET Filter Box	70	80 [35]	3400 [997]
A	(PET)	PET Gantry	30	2954 [1340]	6005 [1760]
A	(CRS)	CIRS Cabinet	50	335 [150]	5300 [1554]
A	(PRS)	PET Recon Cabinet	50	110 [50]	990 [290]
A	(PDAC)	PET Data Acquisition Cabinet	50	500 [225]	5016 [1470]
D	(POC)	Patient Observation Camera	150	3 [1]	0
D	(POM)	Patient Observation Monitor	10	9 [4.2]	340 [100]

Environmental Requirements for General Equipment Locations

Heating, ventilation, air conditioning requirements concern all rooms (equipment room, magnet room, and control room) and must be maintained 24 hours a day, 7 days a week.

Examination Room:

Temperature: 68° to 75° F (20° to 24° C)

Preferred for patient comfort: 21° C

Maximum Temperature Rate of Change: 9° F (5° C) per 10 minutes

Humidity: 40% to 70%, non-condensing

Air Conditioning Capacity: **9200 BTU / hr (2.7 kW)**

- Energy dissipated in the examination room will be removed from the room by an additional air exhaust system.
- Gradient coil heat dissipation (3400 to 51200 BTU / hr [1 to 15 kW]) will be removed via liquid cooling of the gradient coil.

Equipment Room:

Temperature: 59° to 75° F (15° to 24° C)

Maximum Temperature Rate of Change: 9° F (5° C) per 10 minutes

Humidity: 30% to 70%, non-condensing

Air Conditioning Capacity:

- At Standby: 31100 BTU / hr (9.1 kW)
- Peak Dissipation Scanning: **65200 BTU / hr (19.1 kW)**

Control Room:

Temperature: 64° to 75° F (18° to 24° C)

Maximum Temperature Rate of Change: 9° F (5° C) per 10 minutes

Humidity: 30% to 70%, non-condensing

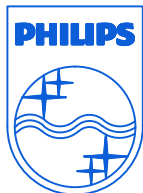
Air Conditioning Capacity: **4100 BTU / hr (1.2 kW)**

Power Requirements

Supply Configuration:	3 phase, 3 wire power and ground.
Nominal Line Voltage:	400 VAC, 50/60 Hz or 480 VAC, 60 Hz
Branch Power Requirement:	88 kVA
Circuit Breaker:	3 pole, 125 A (@480 V)

Remote Service Diagnostics

Medical Imaging equipment to be installed by Philips is equipped with a service diagnostic feature which allows for remote and on-site service diagnostics. To establish this feature, a RJ45 type Ethernet 10/100/1000 Mbit network connector must be installed. Access to customer's network via their remote access server is needed for Remote Service Network (RSN) connectivity. All costs with this feature are the responsibility of the customer.



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