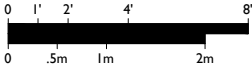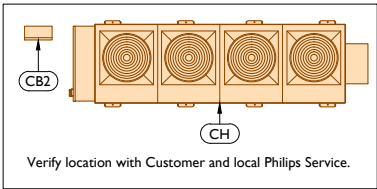# Achieva 3.0T Quasar Dual

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.
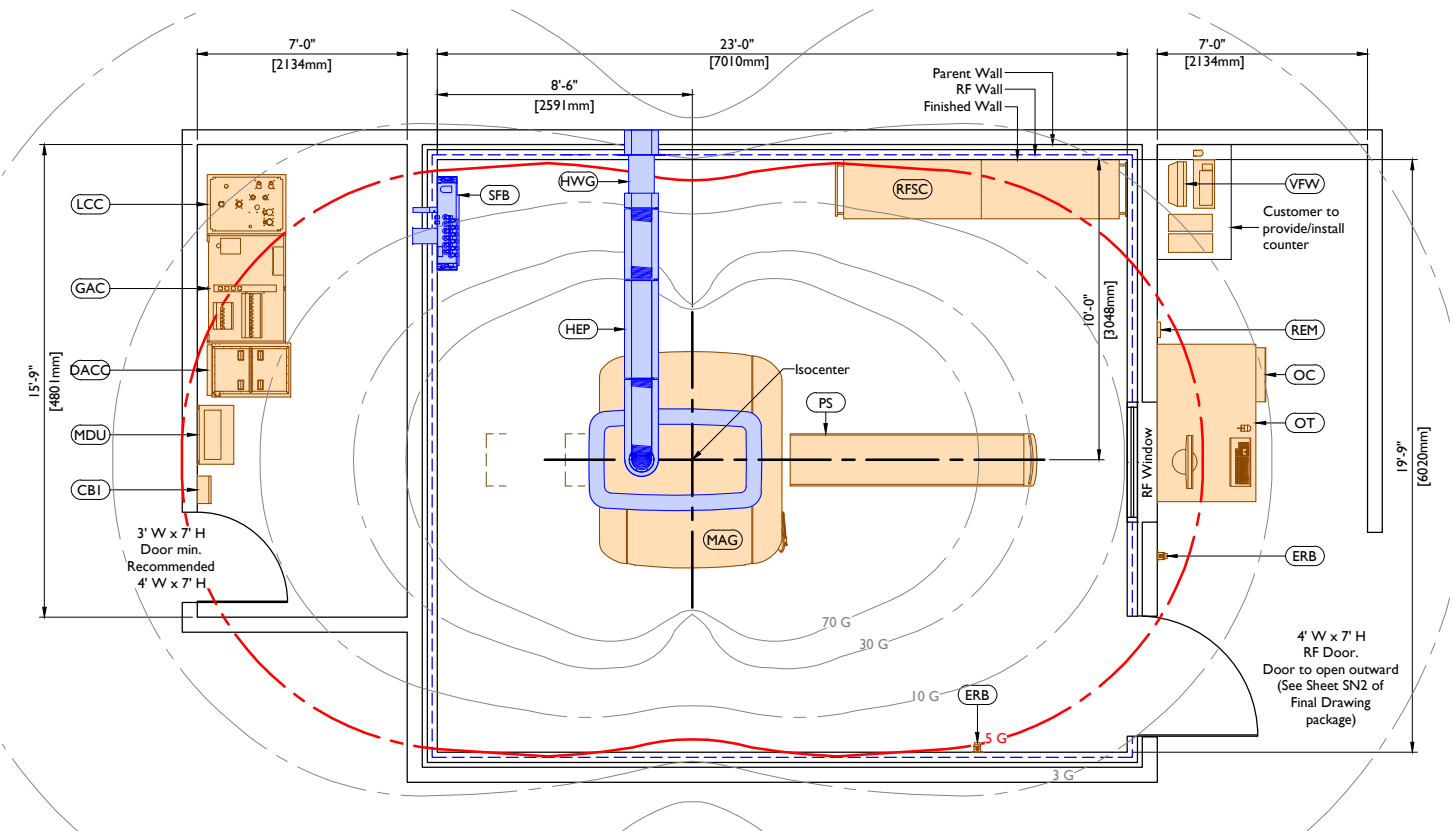
Equipment Layout

Ceiling Height Guide

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

* Ceiling Heights outside the minimum dimensions may be possible. These Ceiling Heights must be reviewed and approved.

Verify location with Customer and local Philips Service.

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Equipment Legend

Equipment Designation

		Description	Weight lbs [kg]	Heat Load Btu/hr [W]
A	OC	Operator's Console	145 [65]	1700 [498]
A	OT	Operator's Table	220 [100]	-
D	ERB	Emergency Run-Down Button (Qty. = 2)	3 [1]	-
J	MAG	Magnet Assembly	12850 [5830]	6800 [1993]
A	PS	Patient Support (MT)	365 [165]	-
A	HEP	Helium Gas Exhaust Pipe (exam room only)	4/ft [6/m]	-
C	HWG	Helium Gas Exhaust Wave Guide	10 [5]	-
A	GAC	Gradient Amplifier 787 Double Cabinet	2015 [914]	27900 [8177]
A	DACC	Data Acquisition and Control Cabinet	585 [265]	23900 [7004]
D	LCC	Liquid Cooling Cabinet	660 [300]	3400 [996]
D	MDU	Mains Distribution Unit	605 [275]	1700 [498]
A	SFB	System Filter Box with Covers	175 [79]	3400 [996]
B	CB1	Circuit Breaker (for system)	t.b.d.	t.b.d.
B	CB2	Circuit Breaker (for Chiller) [not shown]	t.b.d.	t.b.d.
D	CH	Dimplex MEDKOOL 15000 AC Chiller [not shown]	2600 [1180]	188000 [55097]
D	REM	Chiller Remote Controller	1 [0.5]	-
G	VFW	Viewforum Workstation	125 [57]	1000 [293]
G	RFSC	RF Coil Storage Cabinet	1320 [600]	-

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: 65° to 71° (18° to 22° C)
    - The temperature of the conditioned air that enters the room must not be less than 42° F (6° C) below the mean room temperature
- Maximum Temperature Rate of Change: 9° F (5° C) per 10 minutes
- Humidity: 40% to 70%, non-condensing
- Air Conditioning Capacity: **6800 BTU / hr (2 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.)
    - Exam room temperature and humidity specifications are critical for the MR and must be met at all times. No exceptions are allowed.

Equipment Room:
- Temperature: 59° to 75° (15° to 24° C)
    - The temperature of the conditioned air that enters the room must not be less than 42° F (6° C) below the mean room temperature
- Maximum Temperature Rate of Change: 9° F (5° C) per 10 minutes
- Humidity: 30% to 70%, non-condensing
- Air Conditioning Capacity:
    - At Standby: 6800 BTU / hr (2 kW)
    - Peak Dissipation Scanning: **27300 BTU / hr (8 kW)**

Control Room:
- Temperature: 64° to 75° (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: **1700 BTU / hr (0.5 kW)**

Power Requirements

Supply Configuration:	3 phase, 3 wire power, unity ground, and bonded ground
Nominal Line Voltage:	400VAC, 50/60 Hz or 480 VAC, 60 Hz
Branch Power Requirement:	80 kVA
Circuit Breaker:	3 pole, 100 Amps (480 VAC)

Remote Service Diagnostics

Remote Service Diagnostics - Medical imaging equipment to be installed by Philips Medical is equipped with a service diagnostic feature which allows for remote and on site service diagnostics. To establish this feature, a RJ35 type ethernet 10/100/1000 Mbit network connector must be installed as shown on plan. Access to customer's network via their remote access server is needed for Remote Service Network (RSN) connectivity. All cost with this feature are the responsibility of the customer.