

# Healthcare

[www.healthcare.philips.com](http://www.healthcare.philips.com)

[illegible]

# Table of Contents

---

<b>Section A - Equipment Plan</b>	
General Notes -----	AN
Equipment Plan -----	A1
Equipment Details -----	AD1 - AD2
Transport Details -----	AD3
<b>Section S - Support Plan</b>	
Support Notes -----	SN
Support Plan - Floor -----	S1
Support Details -----	SD1 - SD3
<b>Section E - Electrical Plan</b>	
Electrical Notes -----	EN
Electrical Legend -----	EL
Electrical Plan -----	E1 - E2
Electrical Details -----	ED1 - ED2
<b>Section MP - Miscellaneous Details</b>	
Miscellaneous Details -----	MP1 - MP3
Remote Service Network -----	N1
Check List -----	CHK

<b>C1</b>	<b>Project Details</b> Drawing Number <b>N-SRD080008</b> <b>Date Drawn: 7/12/2013</b> Quote: None Order: None	<b>Philips Contacts</b> Project Manager: Contact Number: Email: Drawn By:	<b>Project</b> <b>BrightView XCT</b> <b>Standard Reference Drawing</b> Not Site Specific -
-----------	--	---	--

**PHILIPS**

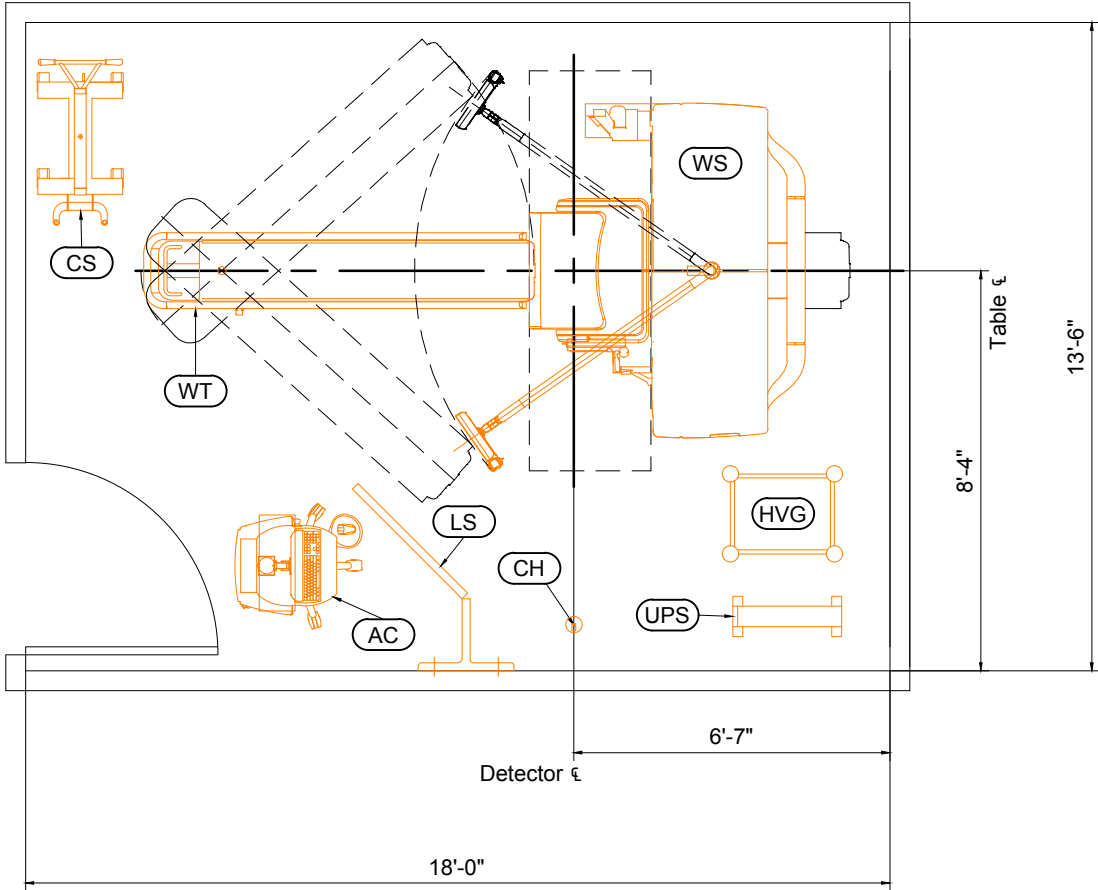
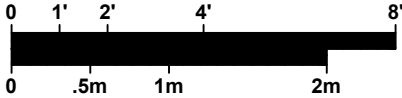
© Koninklijke Philips Electronics N.V. 2008. All rights reserved. Reproduction in whole or in part is prohibited without prior written consent of the copyright holder.

<div><div>General Specifications</div><div><div>1. Responsibility</div><div>The customer shall be solely responsible, at its expense for preparation of site, including any required structural alterations. The site preparation shall be in accordance with plans and specifications provided by Philips. Compliance with all safety, electrical and building codes relevant to the equipment and its installation is the customer's responsibility. Sufficiency of such plans and specifications, specifically including, but not limited to the accuracy of the dimensions described therein, shall be the sole responsibility of customer. The customer shall advise Philips of conditions at or near the site which could adversely affect the carrying out of the installation work and shall ensure that such conditions are corrected and that the site is fully prepared and available to Philips before the installation work is due to begin. The customer shall provide all necessary plumbing, carpentry work, or conduit wiring required to attach and install products ready for use.</div><div>2. Permits</div><div>Customer shall obtain all permits and licenses required by federal, state/provincial or local authorities in connection with the construction, installation and operation of the products and shall bear any expense in obtaining same or in complying with any related rules, regulations, ordinances and statutes.</div><div>3. Radiation Protection</div><div>The customer or his contractor, at his own expense, shall obtain the service of a licensed radiation physicist to specify radiation protection.</div><div>4. Asbestos and Other Toxic Substances</div><div>Philips assumes no hazardous waste (i.e., pcb's in existing transformers) exists at the site. If any hazardous materials are found, it shall be the sole responsibility of the customer to properly remove and dispose of this material at their expense. Any delays caused in the project for this special handling shall result in Philips time period for completion being extended by like period of time. Philips assumes that no asbestos material is involved in this project in any ceilings, walls or floors. If any asbestos material is found anywhere on the site, it shall be the customer's sole responsibility to properly remove and/or make safe this condition, at the customer's sole expense.</div><div>5. Labor</div><div>In the event local labor conditions make it impossible or undesirable to use Philips' regular employees for such installation and connection, such work shall be performed by laborers supplied by the customer, or by an independent contractor chosen by the customer at the customer's expense, and in such case, Philips agrees to furnish adequate engineering supervision for proper completion of the installation.</div><div>6. Schedule</div><div>The general contractor should provide Philips with a schedule of work to assist in the coordination of delivery of Philips supplied products which are to be installed by the contractor and delivery of the primary equipment.</div><div>7. Extended Installation or Turnkey Work by Philips</div><div>Any room preparation requirements for Philips equipment indicated on these drawings are the responsibility of the customer. If an extended installation or turnkey contract exists between Philips and the customer for room preparation work required by the equipment represented on these drawings, some of the responsibilities of the customer as depicted in these drawings may be assumed by Philips. In the event of a conflict between the work described in the turnkey contract workscope and these drawings, the turnkey contract workscope shall govern.</div></div><div>(08.0)</div></div>	<div><div>Customer Minimum Site Preparation Requirements</div><div>A smooth efficient installation is vital to Philips and their customers. Understanding what the minimum site preparation requirements are will help achieve this goal. The following list clearly defines the requirements which must be fulfilled by the customer before the installation can begin.</div><div>1. Walls to be painted or covered, baseboards installed, floors to be tiled and/or covered, ceiling shall have grid tiles, architectural features (such as casework or bulkheads) installed and finished, lighting fixtures installed and operational, light levels for servicing of equipment to be a minimum of 500 lux, and the area in and around the Nuclear Suite must be dust free.</div><div>2. Doors and windows installed and finished with locksets operational.</div><div>3. All electrical convenience outlets, conduit, raceway and junction boxes installed and operational.</div><div>4. Incoming mains power operational and available at outlet for BrightView XCT Gantry.</div><div>5. 120 V convenience outlets operational.</div><div>6. All support structures correctly installed. All channels, pipes, beams and/or other supporting devices should be level, parallel, and free of lateral or longitudinal movements.</div><div>7. All HVAC (heating, ventilating and air conditioning) installed and operational per specifications listed under "HVAC Requirements for General Equipment Locations" on this page.</div><div>8. All plumbing installed and operational (if required).</div><div>9. All door sizes, corridor widths and heights, and elevator sizes/capacities should be checked to ensure that they are adequate for delivery of equipment into exam room. Recommend 4'-0" (1220mm) door. Required minimum clear opening is 3'-8" (1118mm) for 6'-0" (1829mm) or larger adjacent corridor. Required minimum door height shall be 6'-10" (2083mm) clear opening. See AD3 sheet of final drawing package for weights and shipping sizes.</div><div>10. The floor levelness under the BrightView XCT Gantry and the Patient Table meets Philips specifications. If the customer cannot meet these specifications, then contact the local Philips Service Representative to discuss optional solutions.</div><div>11. The structural floor support of the Nuclear Suite and the delivery path is adequate for the weight of the equipment and is validated by the customer's structural engineer prior to delivery of the system.</div><div>12. Internet access is required to be available in the workstation area prior to delivery of the system for Web FSE Access.</div><div>13. Remote Service Diagnostics - Medical imaging equipment to be installed by Philips Healthcare 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 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. See N1 sheet of final drawing package.</div><div>Note Once Philips has moved equipment into the Nuclear Suite and started the installation, the contractor shall schedule his work around the Philips installation team on site. It is suggested that a telephone be provided in the suite to receive telephone calls. This would alleviate facility staff from answering calls for Philips personnel.</div></div> <div>(10.0)</div>	<div><div>Electrical Requirements BrightView XCT Camera</div><div>Supply Configuration: 3 phase Wye, 3 wire power, Earth (L1, L2, L3, PE) Room Disconnect/Circuit Breaker: 40 A Nominal Line Voltage: 400-480 VAC +/- 10%, 47-63 Hz Branch Power Recommended: 25 kVA Maximum Power Required: 12 kVA</div><div>Refer to sheet ED1 of inal drawing package for complete electrical requirements (09.0)</div><div><div>HVAC Requirement for General Equipment Locations</div><div>The camera room HVAC system must maintain the temperature between 60° F (16° C) to 75° F (24° C) with less than 10° F (5° C)] variation per hour. Humidity must be between 20% - 70%. These requirements exist on a 24 hours per day, 7 days per week basis. (10.0)</div></div><div><div>Vibration Specifications</div><div>Nuclear medicine cameras do not have floor vibration specifications. This is because: - image collection durations are long (10-300 seconds, or more) and floor vibration durations are much smaller, - vibrations are typically sinusoidal and, therefore, tend to cancel out, and - the patient table and detector/gantry assemblies are both floor mounted and tend to vibrate together. (07.0)</div></div><div><div>Magnetic Field Limitations</div><div>The external field strength at scanner must be less than 1 gauss (0.1mT) steady state from 10'-0" (3048mm) of the scanner and cannot fluctuate by more than +/- .05 gauss. The external field strength at work station and computer must be less than 1 gauss (0.1mT) when color CRT is provided and less than 5 gauss (0.5mT) at all other times. (09.0)</div></div><div><div>Radioactive Materials</div><div>Procurement of a radioactive materials license or license amendment is often the critical item in the site preparation process. The scanner cannot be installed unless the site is properly licensed.  The application process can be very time-consuming, so the process should begin early. In the United States, the State is the licensing authority for Gd-153, used for SPECT-CT alignment.  The customer must have a license for handling radioactive materials including Gd-153 and Tc-99m. Additionally, during the installation and detector calibration, Gd-153 sources (provided by IPL with the system) and Tc-99m does (provided at customer cost) must be available for the Philips installer.  If the customer is ordering a Co-57 source from Philips, their license must include 10 mCi or 20 mCi of Co-57 (depending on the source being ordered) before Philips can ship the source.  The customer must have the proper license in order for Philips to authorize the source vendor to ship the radioactive sources for the scanner. The scanner cannot be installed until the licenses have been obtained.  Refer to sheet MP1 of final drawing package for additional source information. (07.0)</div></div><div><div>Radiation Considerations</div><div>The isotopes used in the BrightView XCT emit a slightly lower radiation than the isotopes typically used in single photon imaging - 100 keV vs 140 keV for Tc-99m. This means that no extra shielding is needed for the use of the Gd-153 sources in the BrightView XCT suite.  Refer to sheet MP1 of final drawing package for Stray Radiation Dose Map. Shielding is required for Brightview XCT system. Verify with Physicist on record to determine specific shielding requirement. (06.0)</div></div></div>	<div><div>Project BrightView XCT Standard Reference Drawing Not Site Specific</div><div><div>Philips Contacts</div><div>Project Manager: Contact Number: Email: Drawn By:</div></div><div><div>Project Details</div><div>Drawing Number N-SRD080008 Date Drawn: 7/12/2013 Quote: None Order: None</div></div><div>AN</div></div>
---	--	--	--

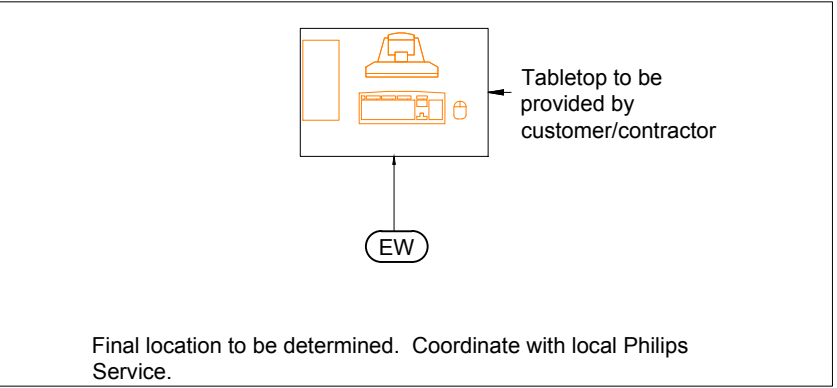
PHILIPS

# Equipment Layout

Minimum Ceiling Height: 8'-0" (2438mm)



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	Option			
	Equipment Designation		Detail Sheet	
	Description	Weight (lbs)	Heat Load (btu/hr)	
A	WS Brightview XCT System	3352		AD1
A	WT Patient Table	550	4393	AD1
A	HVG High Voltage Generator	235	---	AD2
A	AC Acquisition Terminal (on cart) *	53	544	AD2
A	CS Collimator Storage Cart	161	---	AD2
A	CH Calibration Source Holder (Dual Detector)	---	---	---
G	LS In-Room Lead Shield	287	---	AD2
G	EW Extended Nuclear Workspace	90	1000	---
G	UPS 5 kVA Uninterruptible Power Supply	120	1040	AD2
* Acquisition terminal can be either on cart or wall mounted. Customer to determine configuration at time of order acquisition.				



Project

BrightView XCT

Standard Reference Drawing

Not Site Specific

Philips Contacts

Project Manager:

Contact Number:

Email:

Drawn By:

Project Details

Drawing Number

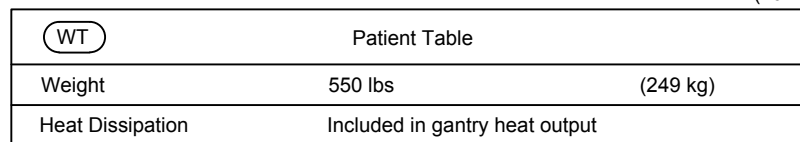
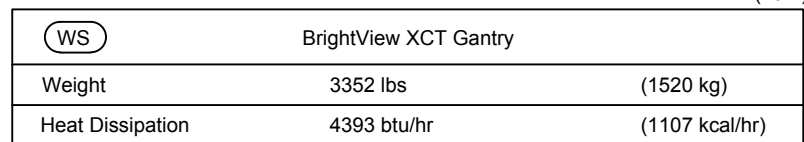
N-SRD080008

Date Drawn: 7/12/2013

Quote: None

Order: None

A1



**A** The room layout must permit the placement of the source holder in the location shown. There must be no metal objects in a 90 degree arc of 30" (762mm) radius in front of the calibration source holder. After performing the daily calibration procedure, technologist will move the source holder to a storage location.

**B** During total body imaging, the distance from the rear end of the table to the wall can be either:

4" (102mm) for patients up to 6'-6 1/2" (2000mm) with HEAD first into the gantry.

20" (508mm) for patients up to 7' - 10 1/2" (2400mm) with FEET first into the gantry.

**C** 77" (1956mm) is required from gantry centerline to wall for calibration of one detector at a time. (Single-Detector Calibration). This will cause an increase in service and calibration time.

90.5" (2299mm) is required from gantry centerline to wall for time-saving calibration of both detectors at the same time (Dual-Detector Calibration).

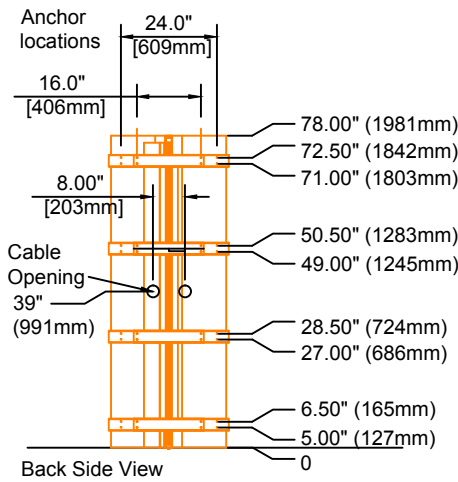
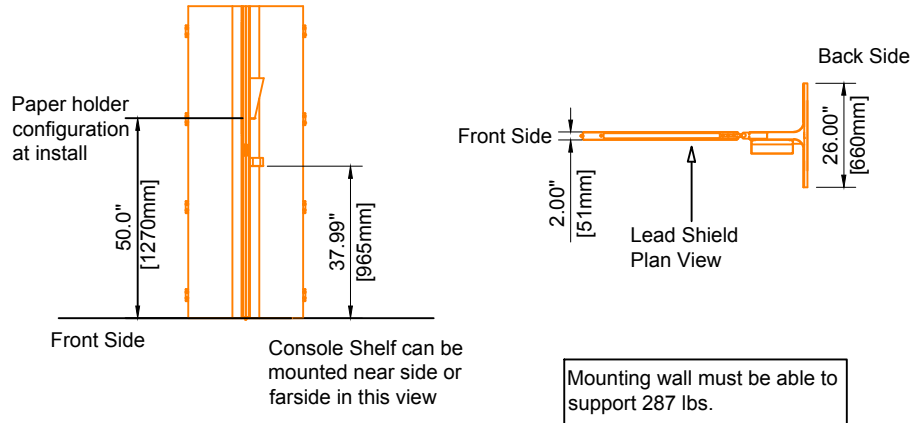
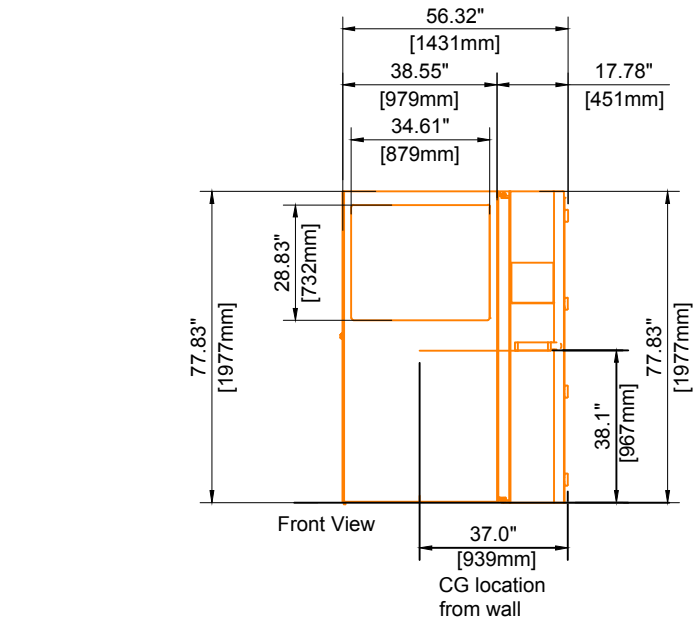
**D** The table is designed to swing both right and left from the gantry centerline. In a specific room the table will only need to swing in one direction.

**E** 2.5" (65mm) is required to install the boom arm.

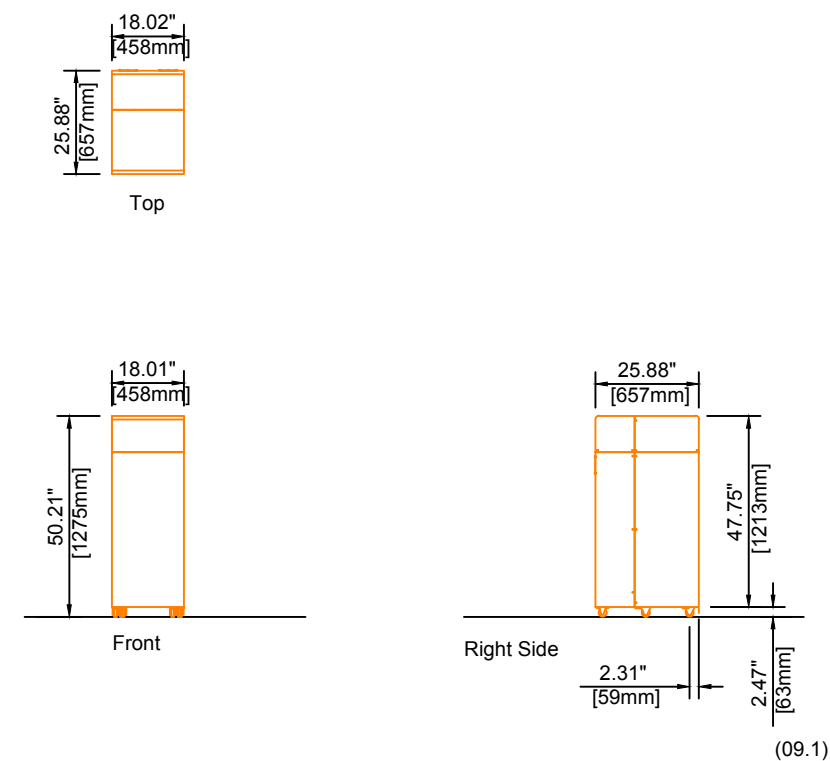
**F** System height is variable +/- 0.5" (13mm).

**G** No obstacles can be located in the minimum clearance area above the boom arm swing less than 96" (2438mm) from the finished floor. Examples such as sprinkler heads, extended light fixtures, etc.

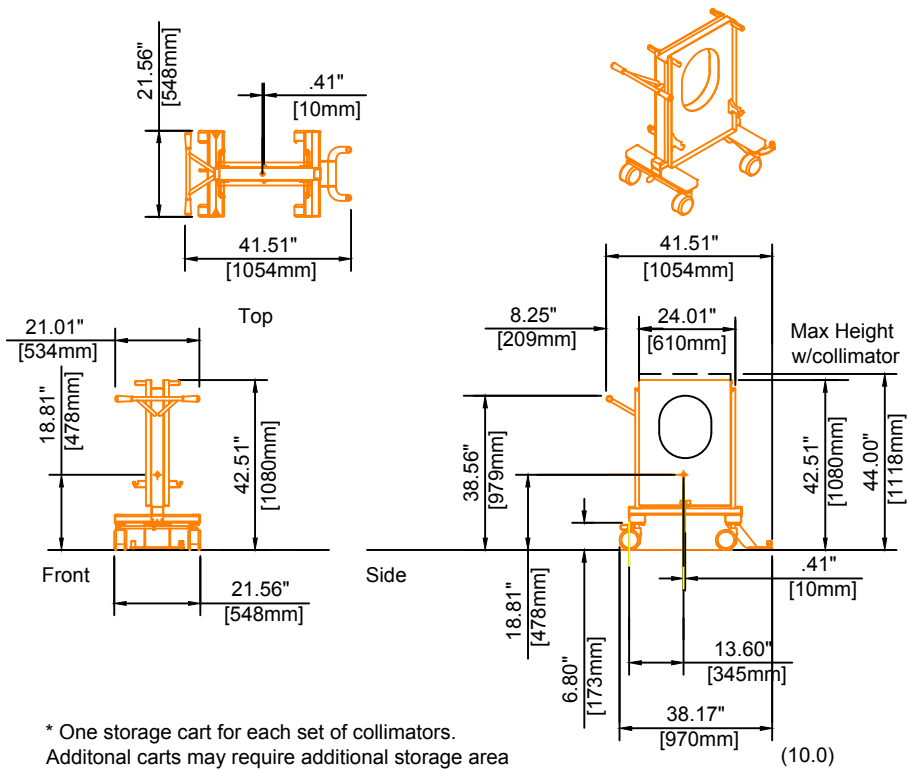
© Koninklijke Philips Electronics N.V. 2008. All rights reserved. Reproduction in whole or in part is prohibited without prior written consent of the copyright holder.



LS	In-Room Lead Shield	
Weight	287 lbs	(130.2 kg)
Heat Dissipation	---	---

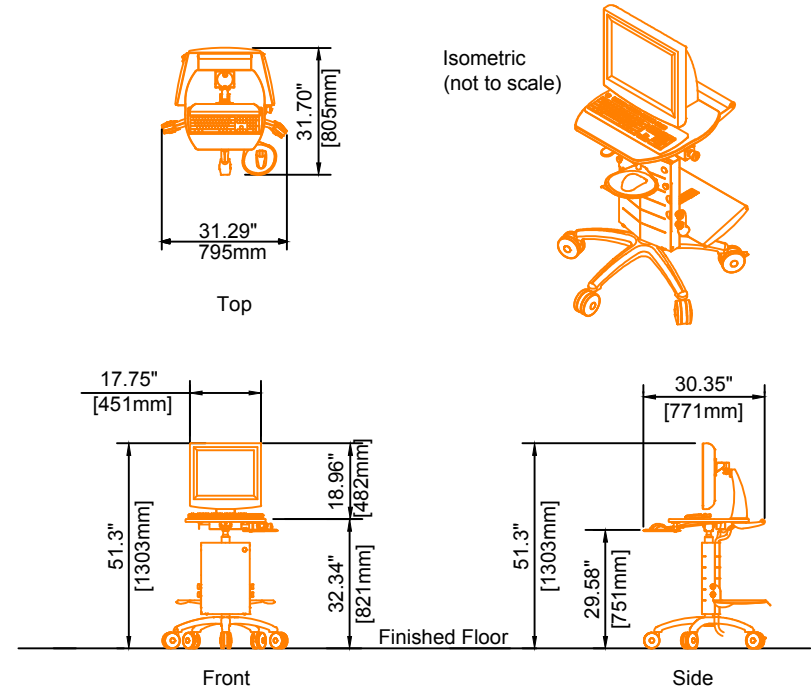


HVG	High Voltage Generator	
Weight	235 lbs	(106.6 kg)
Heat Dissipation	Included in BrightView XCT Heat Output	



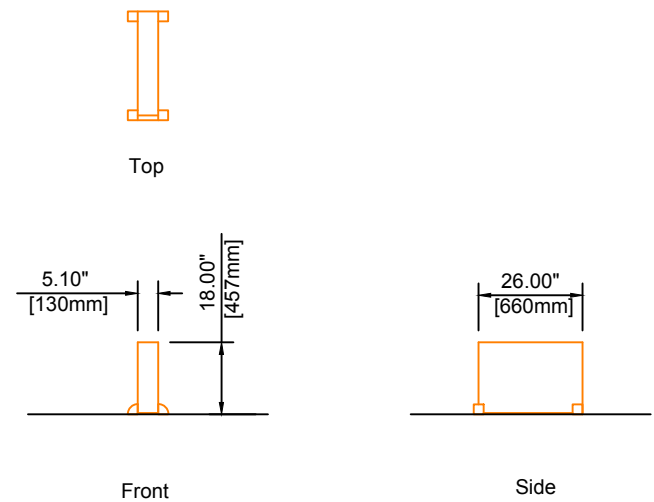
\* One storage cart for each set of collimators.  
Additional carts may require additional storage area

CS	Collimator Server/Storer	
Weight (w/o collimators)	161 lbs	(73 kg)
Heat Dissipation	---	---



\* Weight is for cart only.

AC	Acquisition Terminal and Computer (On Cart)	
Weight	53 lbs *	(24 kg)
Heat Dissipation	544 btu/hr	(137 kcal/hr)



\* Audible Noise: < 55 dBA at 1 meter.

UPS	5 kVA Uninterruptible Power Supply	
Weight	120 lbs	(55 kg)
Heat Dissipation	1040 btu/hr	(262 kcal/hr)

Project Details

Drawing Number  
**N-SRD080008**  
Date Drawn: **7/12/2013**  
Quote: None  
Order: None

Philips Contacts

Project Manager:  
Contact Number:  
Email:  
Drawn By:

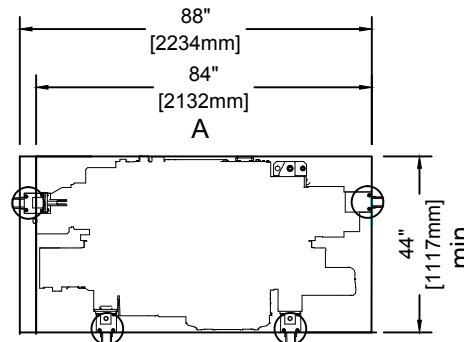
Project

**BrightView XCT**  
Standard Reference Drawing  
Not Site Specific



THE INFORMATION IN THIS PACKAGE IS PROVIDED AS A CUSTOMER CONVENIENCE, AND IS NOT TO BE CONSTRUED AS ARCHITECTURAL DRAWINGS OR CONSTRUCTION DOCUMENTS. Philips assumes no liability nor offers any warranty for the fitness or adequacy of the premises or the utilities available at the premises in which the equipment is to be installed, used, or stored.



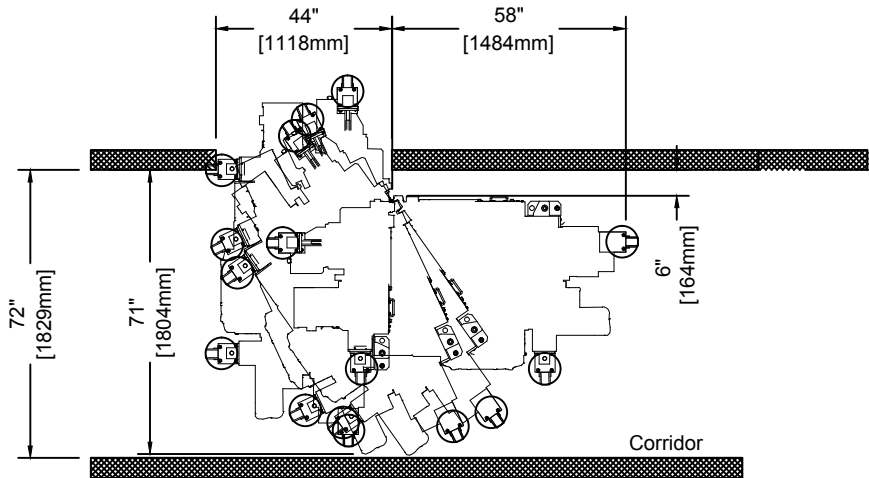


A: Wheels turned Inward

**PLAN VIEW**

Iso-metric View  
Weight = 3936lbs (1785.4kg)

**FRONT ELEVATION VIEW**



**Notes:**

Check all doors, corridors and elevators to ensure adequate clearances for moving of the equipment. Below are the minimum required passage clearances when moving a BrightView XCT System

Door Width = 44" (1118mm)  
Corridor Width = 72" (1829mm)

Door Width = 44" (1118mm)  
Corridor Width = Straight thru delivery

Minimum Door Heights  
Minimum door height required for BrightView XCT Gantry on gantry dollies = 82 (2083mm).

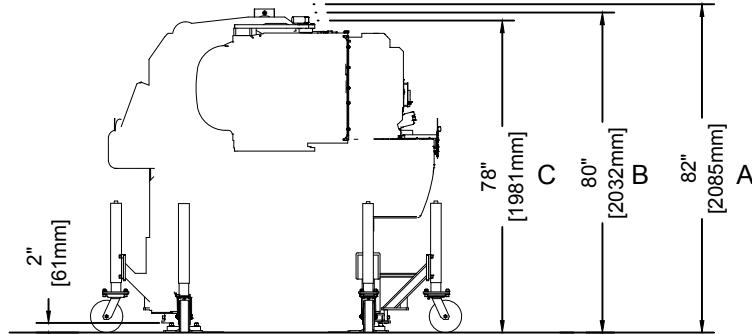
Gantry Transportation Wheels (12NC #4535 608 24131)

**BrightView XCT Gantry Delivery Access**

Not to scale

(10.1)

Remove motor  
control and bracket



A: With Dolly (as is).

B: With motor control and bracket removed.

C: With motor control , bracket, (4) leveling feet and middle support brace removed.

**Shipping Sizes and Weights**

Case	Dimensions			
	Length	Width	Height	Weight (lbs)
<b>Gantry</b>				
Crated (Int.)	55" (1397mm)	91" (2311mm)	91" (2311mm)	4500
Transport (N.A.)	50" (1270mm)	81" (2057mm)	81" (2057mm)	3950
<b>Table</b>				
Crated (Int.)	103" (2616mm)	42" (1067mm)	50" (1270mm)	975
Transport	103" (2616mm)	42" (1067mm)	50" (1270mm)	476
<b>Acquisition Cart</b>				
Crated (Int.)	31" (787mm)	31" (787mm)	44" (1118mm)	100
Transport	30" (762mm)	30" (762mm)	36" (914mm)	50
<b>NM Workstation (EBW)</b>				
Crated (Int.)	31" (787mm)	31" (787mm)	34" (864mm)	151
Transport	22" (559mm)	9" (229mm)	22" (559mm)	120
<b>Recon PC</b>				
Crated (Int.)	37" (940mm)	25" (635mm)	13" (330mm)	55
Transport	26" (660mm)	17" (432mm)	5" (127mm)	50
<b>5kVA APC Smart RT UPS</b>				
Crated (Int.)	29" (737mm)	33" (838mm)	20" (508mm)	125
Transport	29" (737mm)	33" (838mm)	20" (508mm)	125
<b>High Voltage Generator</b>				
Crated (Int.)	38" (965mm)	38" (965mm)	59" (1499mm)	413
Transport	37" (940mm)	38" (965mm)	58" (1473mm)	328
<b>Collimator Storage Cart</b>				
Crated (Int.)	56" (1422mm)	40" (1016mm)	59" (1499mm)	900 wcase using HEGP
Transport	45" (1143mm)	22" (559mm)	44" (1118mm)	635 w/case using HEGP

(9.0)

<b>Project Details</b> Drawing Number <b>N-SRD080008</b> Date Drawn: <b>7/12/2013</b> Quote: None Order: None	<b>Philips Contacts</b> Project Manager: Contact Number: Email: Drawn By:	<b>Project</b> <b>BrightView XCT</b> <b>Standard Reference Drawing</b> Not Site Specific
<b>AD3</b>		

PHILIPS

Equipment Support Information		
<p><b>1. General</b> The customer shall be solely responsible, at its expense, for preparation of the site, including any required structural alterations. The site preparation shall be in accordance with this plan and specifications, the architectural/construction drawings and in compliance with all safety and building codes. The customer shall be solely responsible for obtaining all construction permits from jurisdictional authority.</p> <p><b>2. Equipment Anchorage</b> Philips provides, with this plan and specifications, information relative to equipment size, weight, shape, anchoring hole locations and forces which may be exerted on anchoring fasteners. The customer shall be solely responsible, through the engineer of record for the building, to provide on the architectural/construction drawings, information regarding the approved method of equipment anchoring to floors, wall and/or ceiling of the building. Any anchorage test required by local authority shall be the customer's responsibility. Stud type anchor bolts should not be specified as they hinder equipment removal for service.</p> <p><b>3. Floor Loading and Surface</b> Philips provides, with this plan and specifications, information relative to size, weight and shape of floor mounted equipment. The customer shall be solely responsible, through the engineer of record for the building, to provide on the architectural/construction drawings confirmation of the structural adequacy of the floor upon which the equipment will be placed. Any load test required by local authority, shall be the customer's responsibility. The floor under the four Gantry floor support pads, the floor where the exchanger cart will reside during exchanges (between the Gantry and Patient Table) and the floor under the Patient table must be at the same level within 0.25" (6.4mm). See SD3 sheet for floor levelness information.</p> <p>Non-carpet, anti-static, spill resistant floor material such as tile and vinyl are required.</p> <p><b>4. Ceiling Support Apparatus</b> Philips provides, with this plan and specifications, information relative to size, weight and shape of ceiling supported equipment. The customer shall be solely responsible, through the engineer of record for the building, to provide on the architectural/construction drawings, information regarding the approved method of structural support apparatus, fasteners and anchorage to which Philips will attach equipment. Any anchorage and/or load test required by local authority shall be the customer's responsibility.</p> <p>The structural support apparatus surface to which Philips equipment is to be attached, shall have horizontal equipment attachment surfaces parallel, square and level to within plus or minus 1/16" (2mm).</p> <p>Any drilling and/or tapping of holes required to attach Philips equipment to the structural support apparatus shall be the responsibility of the customer.</p> <p>Fasteners/anchors (i.e., bolts, spring nuts, lock and flat washers) and strip closures shall be provided by the customer.</p> <p><b>5. Lighting</b> Lighting fixtures shall be placed in such a position that they are not obscured by equipment or its movement, nor shall they interfere with Philips ceiling rails and equipment movement or otherwise adversely affect the equipment. Such lighting fixture locations shall be the sole responsibility of the customer.</p> <p><b>6. Ceiling Obstructions</b> There shall be no obstructions that project below the finished ceiling in the area covered by ceiling suspended equipment travel.</p> <p><b>7. Seismic Anchorage (For Seismic Zones Only)</b> All seismic anchorage hardware, including brackets, backing plates, bolts, etc., shall be supplied and installed by the customer/contractor unless otherwise specified within the support legend on this sheet. Installation of electronic cabinets to meet seismic anchorage requirements must be accomplished using flush mounted expansion type anchor/bolt systems to facilitate the removal of a cabinet for maintenance. Do not use threaded rod/adhesive anchor systems.</p>		
(10.0)		

Project Details	Philips Contacts	Project BrightView XCT
Drawing Number <b>N-SRD080008</b>	Project Manager: Contact Number: Email:	<b>Standard Reference Drawing</b> Not Site Specific
Date Drawn: <b>7/12/2013</b> Quote: None Order: None	Drawn By:	

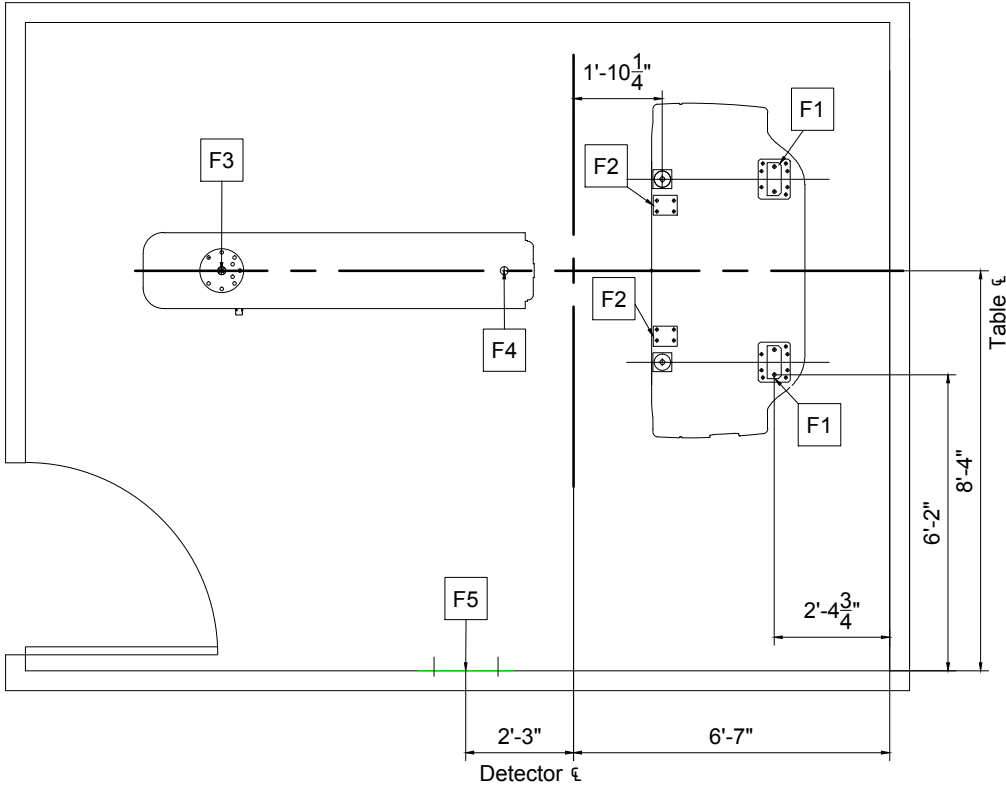
SN

PHILIPS

THE INFORMATION IN THIS PACKAGE IS PROVIDED AS A CUSTOMER CONVENIENCE, AND IS NOT TO BE CONSTRUED AS ARCHITECTURAL DRAWINGS OR CONSTRUCTION DOCUMENTS. Philips assumes no liability nor offers any warranty for the fitness or adequacy of the premises or the utilities available at the premises in which the equipment is to be installed, used, or stored.

# Floor Support Layout

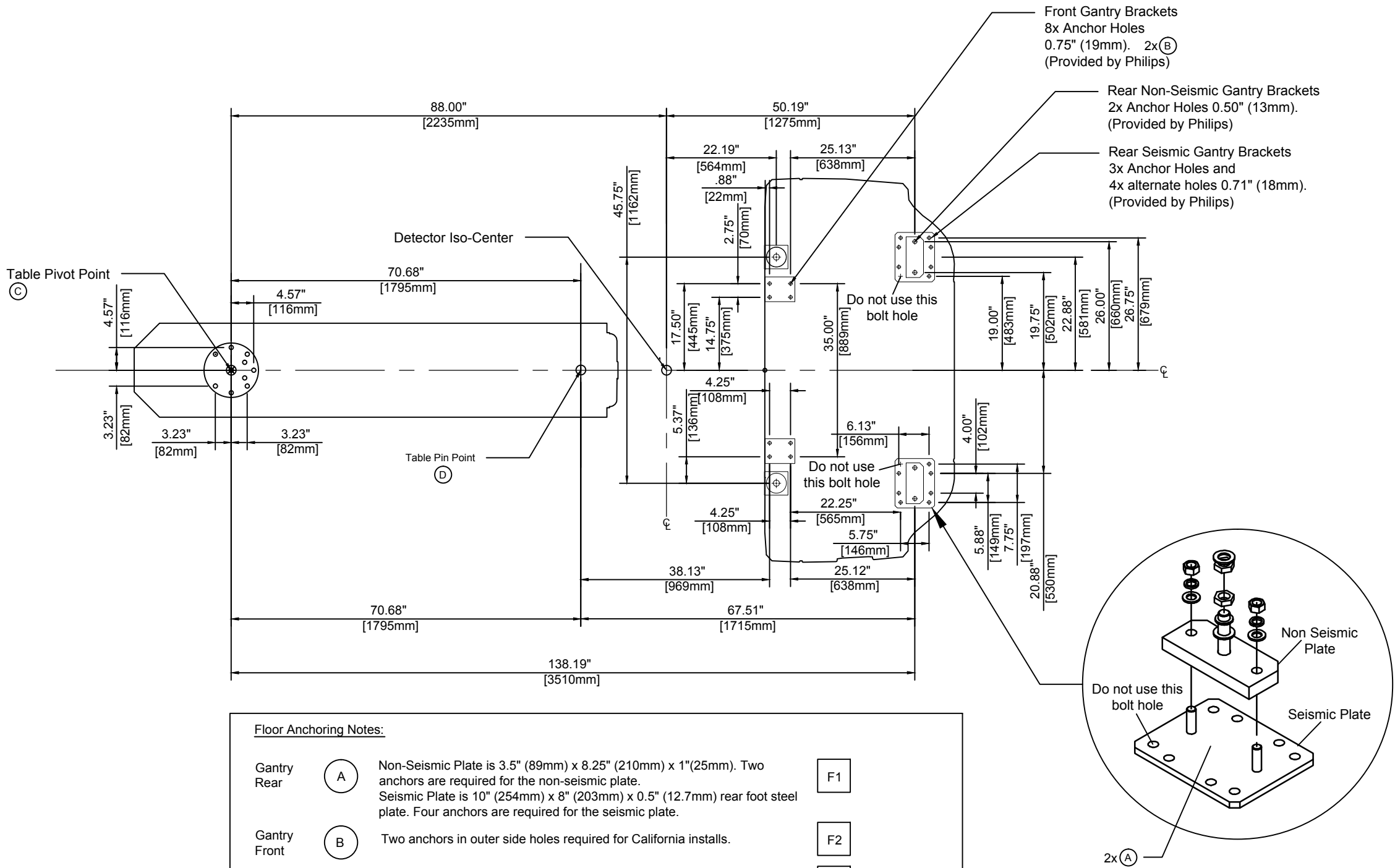
Minimum Ceiling Height: 8'-0" (2438mm)



Support Legend		
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	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 Number		Detail Sheet
Description		
A	F1	Gantry Rear Foot Steel PlateSD1
A	F2	Gantry Front L BracketSD1
A	F3	Table PivotSD1
A	F4	Table Pin HoleSD1
C	F5	In-Room Lead Shield Support (mounting wall must be able to support 287 lbs.)---
All dimensions must be off of the finished wall.		
If a wall is furred out to hide electrical duct or boxes, the dimensions included in this plan must come off of the finished furred wall.		
Notes: <div><div>1.</div><div>2.</div><div>3.</div></div>		

Project Details	Philips Contacts	
	Project Manager: Contact Number: Email: Drawn By:	Project BrightView XCT Standard Reference Drawing Not Site Specific
Drawing Number N-SRD080008 Date Drawn: 7/12/2013 Quote: None Order: None	S1	





Floor Anchoring Notes:

Gantry Rear	<div>A</div>	Non-Seismic Plate is 3.5" (89mm) x 8.25" (210mm) x 1" (25mm). Two anchors are required for the non-seismic plate. Seismic Plate is 10" (254mm) x 8" (203mm) x 0.5" (12.7mm) rear foot steel plate. Four anchors are required for the seismic plate.	<div>F1</div>
Gantry Front	<div>B</div>	Two anchors in outer side holes required for California installs.	<div>F2</div>
Table Pivot	<div>C</div>	Four .472" (12mm) x 4.75" (121mm) HSL - 3 M12/25 Hilti floor anchors for flush mounted pivot bearing.	<div>F3</div>
Table Pin	<div>D</div>	1.5" (38mm) diameter hole for three .25" (6.4mm) masonry screws for flush mounted pin-securing plate.	<div>F4</div>

For non-California, all anchors are 0.50" (13mm) x 5.50" (140mm) Hilti Kwik Bolt III with 3.50" (89mm) concrete embedment. Minimum 1.5" (38mm) projection of the bolt above floor level is needed. Concrete must be a minimum of 4" (102mm) thick.

Note: A licensed structural engineer will need to verify if other types of mounting hardware are required depending on site construction conditions and local building code requirements. The contractor will need to purchase the appropriate installation materials locally.

**Mylar Drill Template 4535 608 25061 A, may be pre-ordered if site wants to drill anchors before starting installation.**

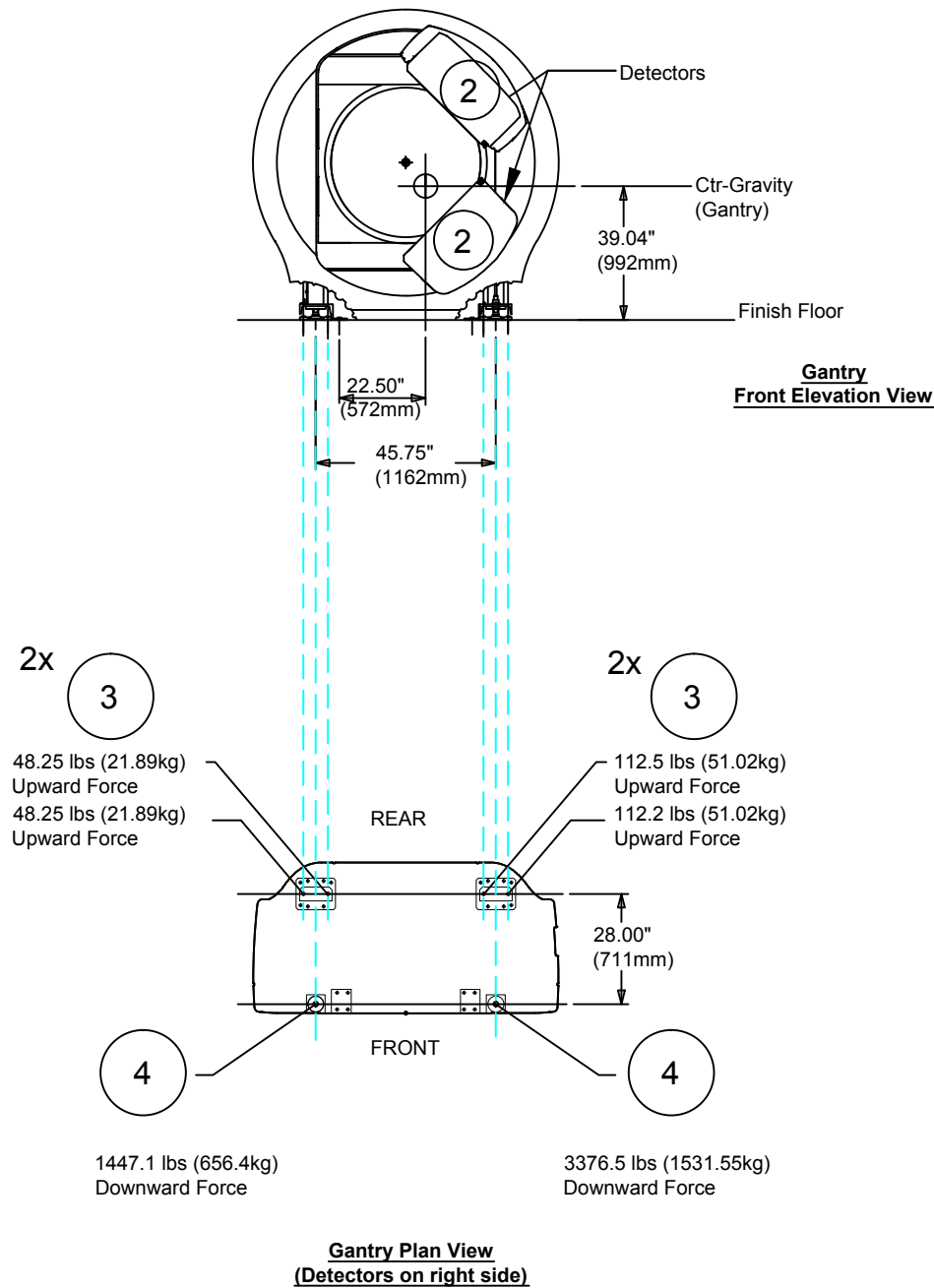
**BrightView XCT System Floor Anchoring Detail**  
Not to scale

(10.4)

<b>Project Details</b> Drawing Number <b>N-SRD080008</b> Date Drawn: <b>7/12/2013</b> Quote: None Order: None	<b>Philips Contacts</b> Project Manager: Contact Number: Email: Drawn By:	<b>Project</b> <b>BrightView XCT</b> <b>Standard Reference Drawing</b> Not Site Specific

**SD1**

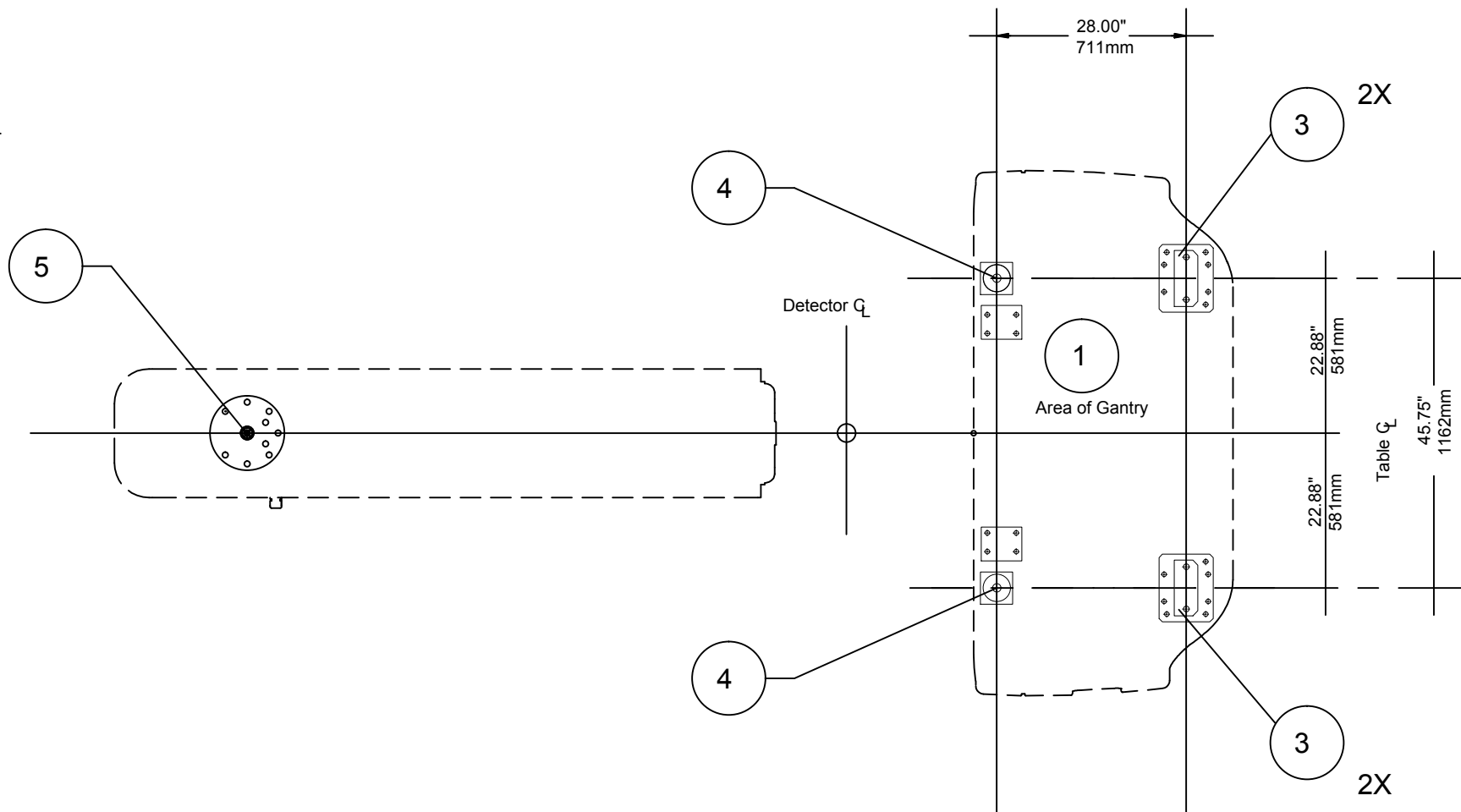
**PHILIPS**



**Floor Loading Notes:**

- 1 Total Gantry Load (Including two HEGP collimators on gantry) is 4500 lbs (2041kg) in a 45.74" (1162mm) x 28" (711mm) area.
- 2 Since the detector heads can rotate around the Center of Gravity, the loads shown on the right side can also be on the left side.
- 3 Rear Gantry Load is upward force of 48.25 lbs (21.89 kg) - 112.5 lbs (51.02 kg) on each of the four rear anchors. Force changes as the detector rotates from the right to left side.
- 4 Front Gantry Load is downward force 1447.1 (656.4 kg) - 3376.5 lbs (1531.55 kg) on each of the two 4" (102mm) dia. front leveling feet. Force changes as the detector rotates from the right to left side.
- 5 Table load (including 450 lbs, 204 kg patient) is 1000 lbs (454 kg) in a 26.25" (669mm) x 65.25" (1657mm) area. The load is equally distributed on four wheels.

Note: A licensed structural engineer will need to verify that floor can support weight.



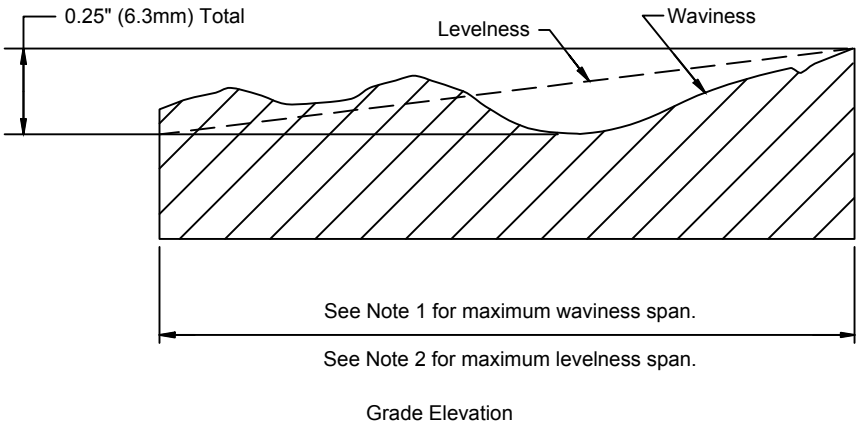
**BrightView XCT Camera Gantry Floor Loading Detail**  
Not to scale

(10.1)

Project		Philips Contacts		Project Details	
BrightView XCT		Project Manager:		Drawing Number	
Standard Reference Drawing		Contact Number:		N-SRD080008	
Not Site Specific		Email:		Date Drawn: 7/12/2013	
		Drawn By:		Quote: None	
				Order: None	

**SD2**

**PHILIPS**

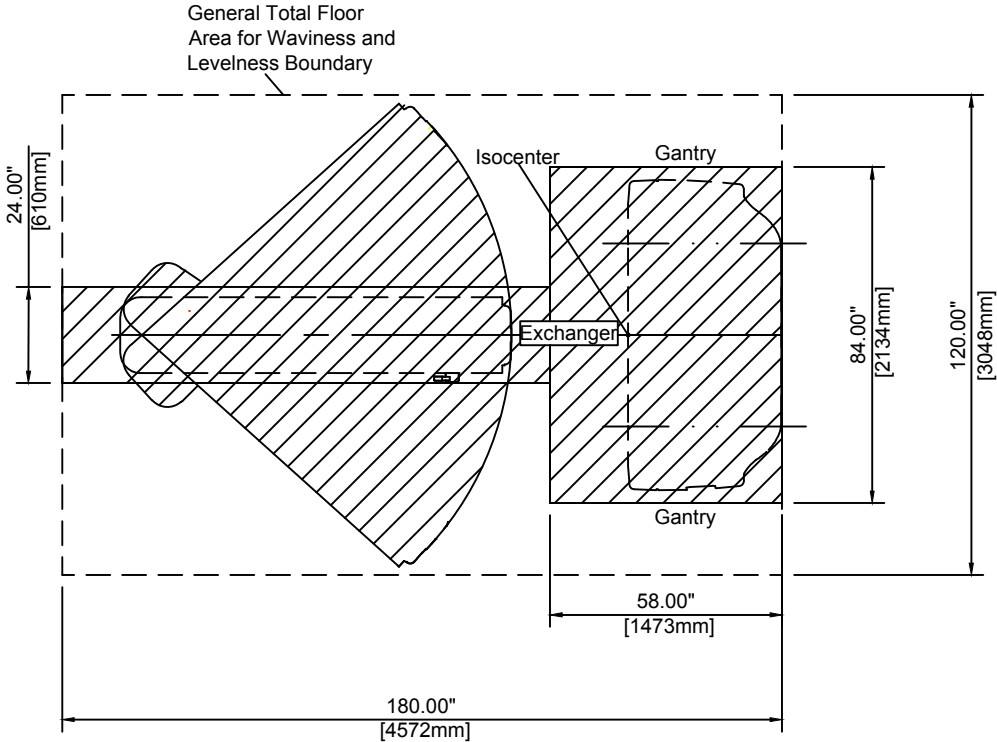


BrightView XCT Floor Levelness/Waviness Detail

(10.1)

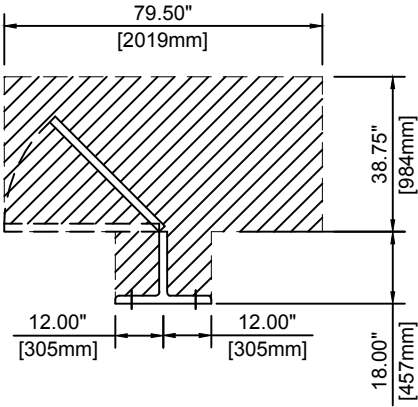
Notes:

1. Floor waviness of exam room shall not exceed .25" (6.3mm) when measured within 12" (300mm) from any point within the shaded area on layout.
2. Floor levelness of exam room shall not exceed .25" (6.3mm) when measured between any two boundary points across the shaded area on layout.
3. Philips recommends that the floor levelness within the entire 180" (4572mm) x 120" (3048mm) area not exceed .25" (6.3mm).
4. The shaded area is where the .25" (6.3mm) specification is mandatory.



Layout View

Floor surface to be flat and level to within 0.25" (6.35mm)



BrightView XCT In-Room Control Lead ShieldFloor Levelness/Waviness Detail

(10.0)

Project		Philips Contacts		Project Details	
BrightView XCT		Project Manager:		Drawing Number	
Standard Reference Drawing		Contact Number:		N-SRD080008	
Not Site Specific		Email:		Date Drawn: 7/12/2013	
		Drawn By:		Quote: None	
				Order: None	

SD3

PHILIPS

**1. General**  
The customer shall be solely responsible, at their expense, for preparation of the site, including any required electrical alterations. The site preparation shall be in accordance with this plan and specifications, the architectural/construction drawings and in compliance with all safety and electrical codes, the customer shall be solely responsible for obtaining all electrical permits from jurisdictional authority.

The customer shall be solely responsible, at its expense, to provide and install all electrical ducts, boxes, conduit, cables, wires, fittings, bushings, etc., as separately specified herein.

Electrical ducts and boxes shall be accessible and have removable covers. Floor ducts and boxes shall have watertight covers. Ducts shall be divided into as many as three separate channels by metal dividers, separately specified herein, to separate wiring and/or cables into groups as follows: Group A, power wiring and/or cables. Group B: signal and/or data and protective ground wiring and/or cables. Group C: x-ray high voltage cables. The use of 90 deg. ells is not acceptable. On ceiling duct and wall duct use 45 deg. bends at all corners. All intersecting points in duct to have cross over tunnels supplied and installed by contractor to maintain separation of cables.

Conduit point-to-point runs shall be as direct as possible. Empty conduit runs used for cables may require pull boxes located along the run. A pull wire or cord shall be installed in each conduit run. All conduits which enter duct prior to their termination point must maintain separation from other cables via use of dividers, cross over tunnels, or flex conduit supplied and installed by contractor from entrance into duct to exit from duct. Maximum conduit lengths shown on these plans are calculated from electrical box entrance to electrical box entrance. Any conduit installed below grade must be water tight.

All conductors, separately specified, shall be 90° C stranded copper, rung out and marked.

A disconnecting means shall be provided as separately specified on sheet ED1.


"X-ray on" warning lights and x-ray termination door switches should be provided at all entrances to x-ray rooms as required by code.

## Electrical Notes

1. The contractor will supply & install all breakers, shunt trips and incoming power to the breakers based on local code requirements and Philips cable requirements on sheet ED1. The exact location of the breakers and shunt trips will be determined by the architect or contractor.
2. The contractor shall supply & install all pull boxes, raceways, conduit runs, steel covers, etc. Conduit/raceways must be free from burrs and sharp edges over its entire length. Electrical raceway shall be installed with removable covers. The raceway should be accessible for the entire length. In case of non-accessible floors, walls and ceilings, an adequate number of access hatches should be supplied to enable installation of cabling. Approved conduits may be substituted. All raceways will be designed in a manner that will not allow cables to fall out of the raceway when the covers are removed. In most cases, this will require above-ceiling raceway to be installed with the covers removable from the top. Raceway system as illustrated on this drawing are based upon length of furnished cables. Any changes in routing of raceway system could exceed maximum allowable length of furnished cables. Conduit or raceway above-ceiling must be kept as near to finished ceiling as possible.
3. All pre-terminated, cut-to-length cables, will be supplied and installed by Philips. All wires through the main disconnect and to the gantry will be supplied and installed by the contractor, subject to local arrangements.
4. Conduit sizes shall be verified by the architect, electrical engineer or contractor, in accordance with Philips, local or national Electrical Codes, whichever requires the largest diameter.
5. Convenience outlets are not illustrated. Their number and location are to be specified by the customer/architect. Locate at least one duplex outlet within 2'-0" (610 mm) of the system rack cabinet (s) and at least three (3) outlets spaced around the control room.
6. All sections of raceway and conduit shall be grounded with an independent #6 a.w.g. green wire that is to be attached using solderless lugs. All ceiling mounted structural support members and ceiling plates shall also be grounded. All grounding connections, terminals, etc. shall be installed in a manner to provide accessibility for inspection, maintenance, repair, etc.

<div>EN</div>	<b>Project Details</b> Drawing Number: <b>N-SRD080008</b> Date Drawn: <b>7/12/2013</b> Quote: None Order: None	<b>Philips Contacts</b> Project Manager: Contact Number: Email: Drawn By:	<b>Project</b> <b>BrightView XCT</b> <b>Standard Reference Drawing</b> Not Site Specific -
---------------	---	---	--

# EN

Electrical Legend			
<div><div>A</div>Furnished and installed by Philips</div>			
<div><div>B</div>Furnished by customer/contractor and installed by customer/contractor</div>			
<div><div>C</div>Installed by customer/contractor</div>			
<div><div>D</div>Furnished by Philips and installed by contractor</div>			
<div><div>E</div>Existing</div>			
<div><div>F</div>Future</div>			
<div><div>G</div>Optional</div>			
Item Number		Detail Sheet	
		Description	
B	A1	400 - 480 V, 40 A circuit breaker. Locate circuit breaker 60" (1524mm) above finished floor to top of circuit breaker. Circuit breaker used shall be UL listed or recognized, rated maximum 40 A; to ensure compliance to IEC 60328, verify that circuit breaker is not marked with a Greek symbol, and look for VDE, TUV, NEMKO, SEMKO, DEMKO or FIMKO certification mark. Location per local code or owner's requirements. Coordinate with Philips.	ED1
B	A2	120 V remote emergency off (EPO), latching type, single mushroom push button, with N.O. dry contacts, and hinged, see-through protective cover. Facility power required to this device. Surface mounted 60" (1524mm) above finished floor to centerline of box. (Optional).	ED1
B	UPS HVG	8" (203mm) W x 4 3/4" (121mm) L grommated cable opening at bottom of cover plate on "WR1". Preferred location behind final location of "UPS" and "HVG".	
B	WS	Grommated cable opening at end of "FR1". Exact size and location to be determined by local Philips Service.	
B	FR1	(2) 8" (203mm) W x 8" (203mm) D (NEMA 1 Gutters; Hoffman or equivalent) surface mounted floor trough side by side. Install barrier strip(s) to separate compartments if necessary.	
B	WR1	(2) 8" (203mm) W x 8" (203mm) D (NEMA 1 Gutters; Hoffman or equivalent) surface mounted wall raceway side by side and stacked with removable steel cover plate, bottom 8" (203mm) above finished floor. Install barrier strip(s) to separate compartments if necessary.	
B	R1	6" (152mm) W x 2" (51mm) D (or equivalent) surface mounted riser with removable steel cover plate. Riser to run from "WR1" up to bottom of "A1" box.	
B	PT	4" (102mm) W x 4" (102mm) L x 4" (102mm) D floor box mounted under floor. Shall contain a field cut opening with grommet located by Philips Service at time of installation. Provide a 3" (77mm) core drill from finished floor to box. Under floor table kit required. Consult with Philips sales.	E2
B	LS	4" (102mm) W x 4" (102mm) L x 4" (102mm) D flush mounted junction box. Removable cover plate shall contain a grommated notch for cable access as required. 37" (940mm) from floor to bottom of box. Preferred location behind final location of In Room Lead Shield. Consult with local Philips Service for exact location of junction box.	E2
B	WL	Warning light above X-ray room door, if required by code or desired by customer. (not shown)	ED1 ED2
B	DS	Door activated switch Square-D cat. # class 9007 type AO (or required), if required by code or desired by customer. Switch located on hinge side of door. (not shown)	ED1 ED2
B	S1	120 VAC / 15 A, single pole general purpose ON/OFF switch red cover. Flush mounted 60" (1524mm) above finished floor to centerline of box. safety switch is required between scanner unit and "WL" for Philips Service, if a warning light is used. Locate next to "A1" if possible. (not shown)	ED1 ED2
B		120 V / 20A dedicated duplex outlet.	
B	N1	RJ45 type ethernet 100/1000 Mbit network connector. Access to customer's network via their remote access server is needed for Remote Service network (RSN) connectivity.	N1
B	N2	RJ45 type ethernet 100/1000 Mbit network connector (1000 Mbit recommended) with access to customer's network. Locate within 10' (3048mm) of network card. network fiber optic and ethernet cabling, connectors, wall boxes, patch panels, etc. are the responsibility of the purchaser. Philips assumes no responsibility for procurement, installation, or maintenance of these components.	N1



Project Details

Drawing Number  
**N-SRD080008**  
Date Drawn: **7/12/2013**  
Quote: None  
Order: None

Philips Contacts

Project Manager:  
Contact Number:  
Email:  
Drawn By:

Project

**BrightView XCT**  
**Standard Reference Drawing**  
Not Site Specific

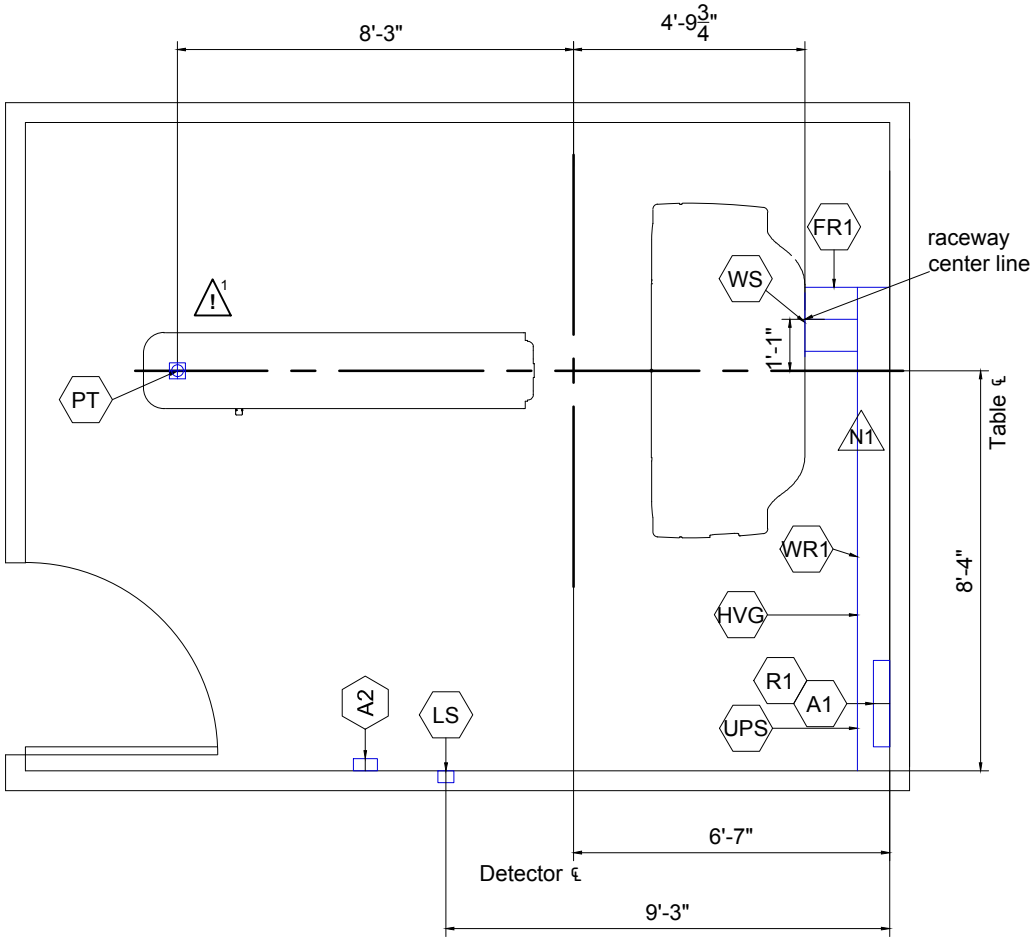
THE INFORMATION IN THIS PACKAGE IS PROVIDED AS A CUSTOMER CONVENIENCE, AND IS NOT TO BE CONSTRUED AS ARCHITECTURAL DRAWINGS OR CONSTRUCTION DOCUMENTS. Philips assumes no liability nor offers any warranty for the fitness or adequacy of the premises or the utilities available at the premises in which the equipment is to be installed, used, or stored.

3.20.13



# Electrical Layout

Minimum Ceiling Height: 8'-0" (2438mm)



## Planning Issues and Considerations

**!** Under floor table kit must be ordered in order to use "PT" box for cable connections between table and gantry as shown. If the under floor table kit is not ordered the cable can be routed on the finished floor. Consult with Philips sales.

## SURFACE RACEWAY AT GANTRY NOTE

Contractor to coordinate with local Philips service representative regarding the adaption of surface mounted floor raceways with sides Scanner Unit. The following must be considered:

1. Raceways to be fitted and installed after the gantry is positioned and bolted in place.
2. Field measure and verify required fittings and size at the time of raceway installation.
3. Metallic raceways and piping must not come in contact with any metallic parts of the gantry.

**!** **N2**  
Electricals for Extended Nuclear Workstation.  
Locate near final location of workstation. Coordinate with local Philips Service.

PHILIPS

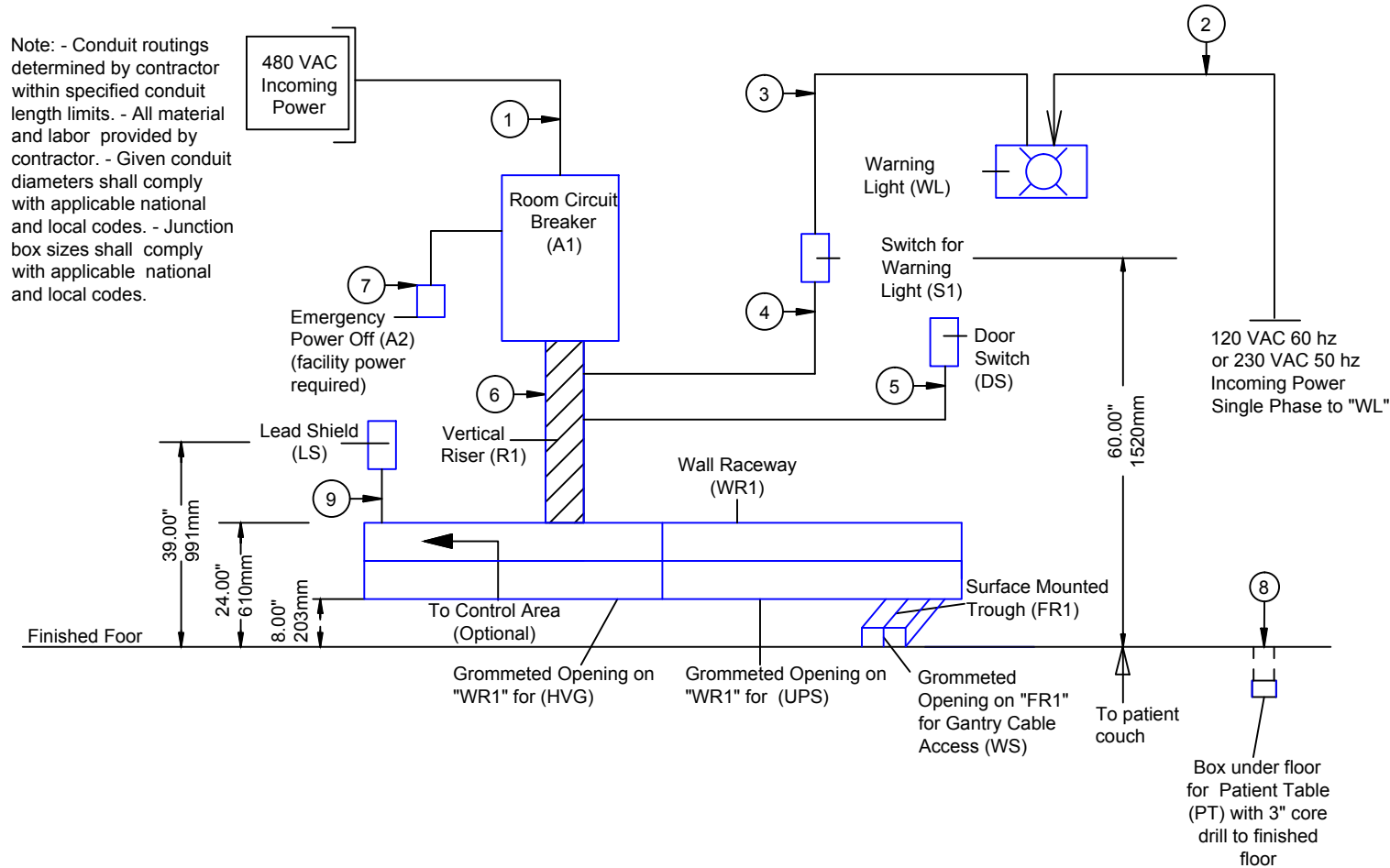
Project  
**BrightView XCT**  
Standard Reference Drawing  
Not Site Specific

Philips Contacts  
Project Manager:  
Contact Number:  
Email:  
Drawn By:

Project Details  
Drawing Number  
**N-SRD080008**  
Date Drawn: 7/12/2013  
Quote: None  
Order: None

E1

Refer to Electrical Legend - Sheet EN  
and Electrical Connections - Sheet E2



**Typical Conduit and Cable Routing**  
Not to scale (12.0)

Refer to Electrical Legend - Sheet EL and  
Electrical Plan - Sheet E1

The use of 90 degree ells is not acceptable  
use 45 degree bends at all raceway corners.  
The use of crossover tunnels at all applicable  
locations is required.

The minimum bend radius of the fiber optic  
cables is 2" (51mm).

## Conduit Required

### General Notes

- All conduit runs must take most direct route point to point.
- All conduit runs must have a pull string.

- A Conduit supplied/installed by contractor - Philips cables installed by Philips
- B Conduit supplied/installed by contractor - Philips cables installed by contractor
- C Conduits and cables supplied and installed by contractor
- D Conduit existing - cables supplied and installed by Philips
- E Conduit existing - cables supplied by Philips, installed by contractor
- F Conduit existing - cables supplied and installed by contractor
- G Optional equipment, verify with local Philips Service

- P Power (AC)
- D Power (DC)
- G Ground
- S Signal
- H High Tension
- C Cooling Hose
- A Air Supply Hose

	Conduit			Conduit Quantity	Cable Type (*)	Minimum Conduit Size	Maximum Conduit Length	Special Requirements
	Run No.	From	To					
C	1	Hosp. Power	A1	Per N.E.C.	(P)	Per N.E.C.	Per N.E.C.	
C	2	Hosp. Power	WL	Per N.E.C.	(P)	Per N.E.C.	Per N.E.C.	
C	3	WL	S1	1	(P)	3/4"	100'	
C	4	S1	R1	1	(P)	3/4"	100'	Conduit run for connection between "WS" and "S1". Cable route continued thru raceway/trough.
C	5	R1	DS	1	(P)	3/4"	200'	Conduit run for connection between "WS" and "DS". Cable route continued thru raceway/trough.
B	6	A1	WS	1	(P)	2"	21'	Cable routed thru raceway/trough.
C	7	A1	A2	1	(P)	3/4"	100'	
A	8	WS	PT	1	(P)	3"	21'	Under floor table kit required. Consult with Philips sales.
A	9	WS	LS	1	(P)	2"	60'	

Project

BrightView XCT

Standard Reference Drawing

Not Site Specific

Philips Contacts

Project Manager:

Contact Number:

Email:

Drawn By:

Project Details

Drawing Number

N-SRD080008

Date Drawn: 7/12/2013

Quote: None

Order: None

E2

**All Wires Shown Below Shall Be Supplied  
and Installed by the Customer / Contractor.**

Note: Wiring and circuit sizes from source supply must meet Philips regulation requirements and be determined by contractor to meet building conditions and local codes.

**C** Copper Wire Size [run from Rear of gantry to the door  
Switch and Lamp:  
(100 feet [29.4m] max listed)  
0.2mm<sup>2</sup> - 4mm<sup>2</sup> (2 #24 - #12) Power 0' - 100' (29.4m)

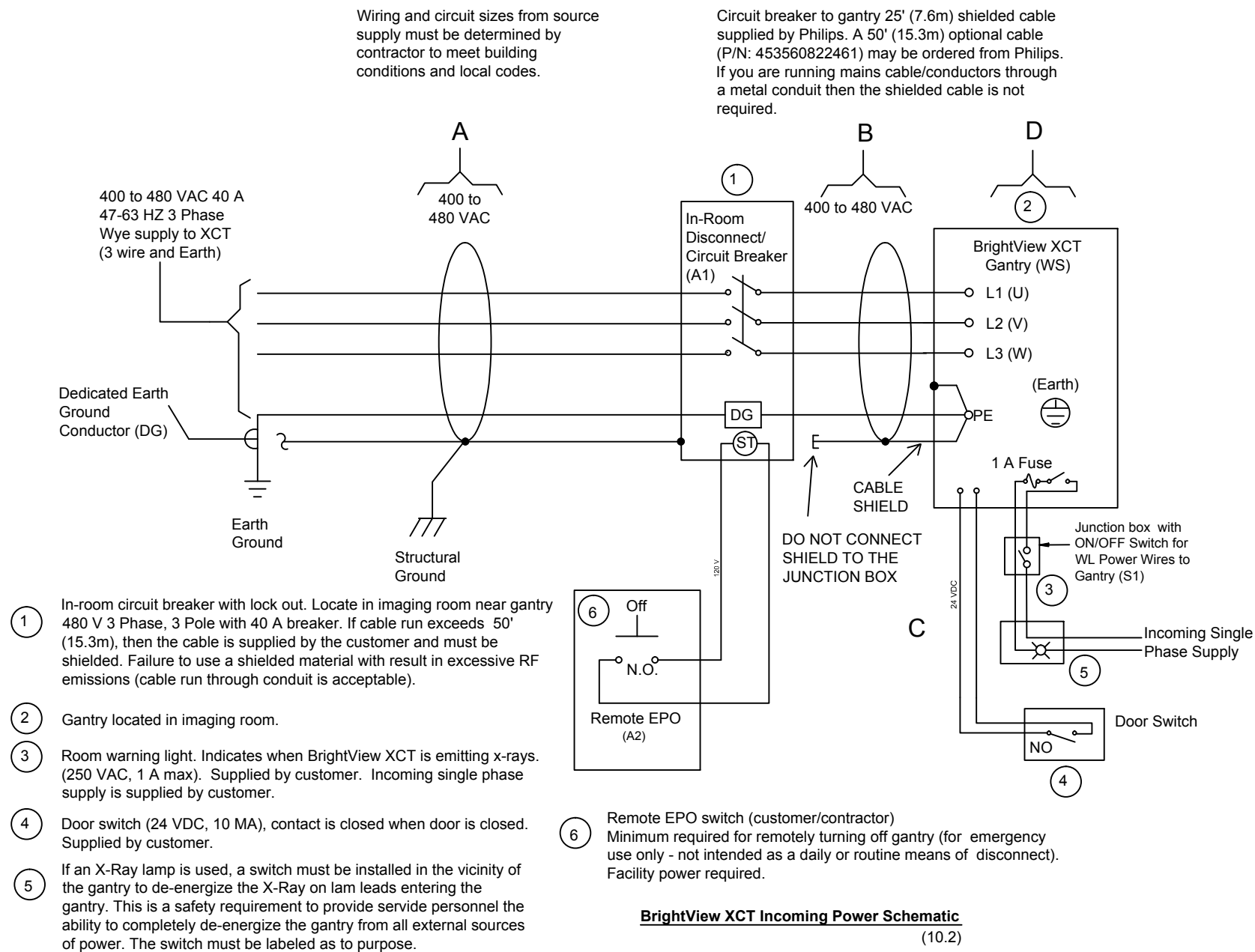
All Wires Shown Above Shall Be Provided by Philips  
and Installed by the Customer / Contractor.

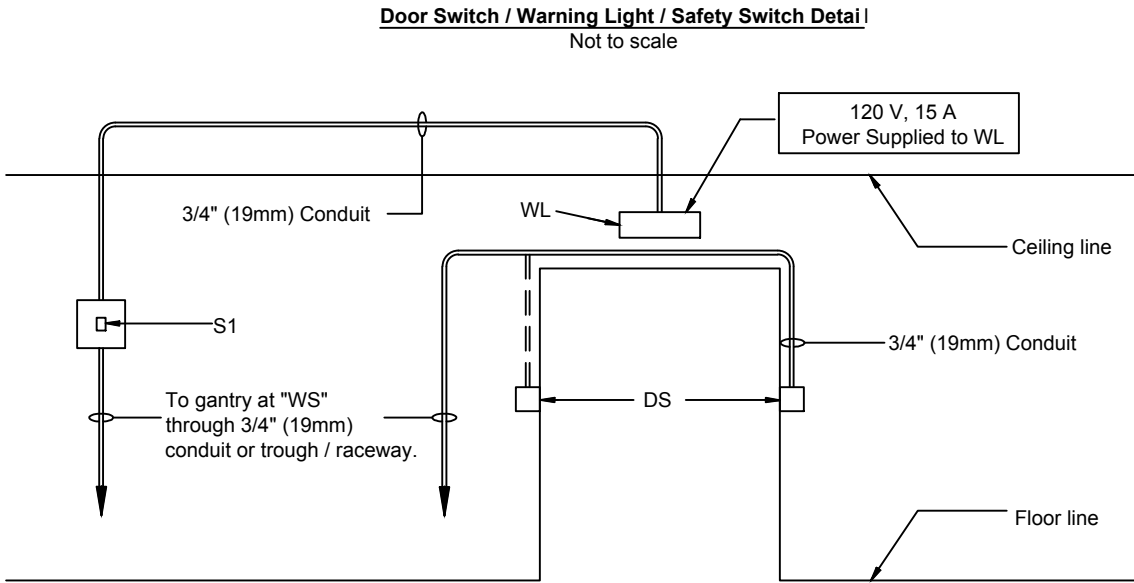
### Mains Supply

Voltage variation:	+10% -10% absolute * limits
Voltage Impulse:	+/- 2 kV per IEC 61000-4-4
Voltage Surge:	+/- 2 kV per IEC 61000-4-5
Static Frequency Variation:	+/- 3%
Harmonic Voltage Distortion: (total)	10% max. Vthd

## Quality System

\* Absolute limits refer to the voltage measured at system connection terminals (power distribution blocks) on gantry. This includes all combination of source voltage variation plus voltage loss for cable run distance and devices such as (transformer).





- Notes:**
- Doorswitch to be located on hinge side of door jamb.
  - In case of a double jamb, a door switch should be located on each hinge side.
  - Maximum 120V/25 watt incandescent bulbs recommended for warning light. Due to lag time in activation, flourescent light not to be used.
  - These items are optional. Consult with local Philips Service.



Project		Philips Contacts		Project Details	
BrightView XCT		Project Manager: Contact Number: Email:		Drawing Number <b>N-SRD080008</b> Date Drawn: <b>7/12/2013</b> Quote: None Order: None	
Standard Reference Drawing		Drawn By:		<b>ED2</b>	
Not Site Specific					
-					

Radiation Considerations

Shielding Calculation Assumptions:

- The scatter dose maps presented are for a large body localization scan and correspond to a 14cm CT field of view (FoV). A SPECT field of view consists of three 14cm X-ray acquisitions at sufficient quality to enable extremity localization of the acquired SPECT data set. The technique used to acquire the maps was as follows:

- The cylindrical CTDI body phantom was imaged. The phantom had a diameter of 32cm and an axial length of 15cm.
- The scatter map was scaled to correspond to a 14cm CT field of view for an extremity localization study.
- The high voltage was set to 120 kVp.

The scatter dose map has an accuracy of +/-20% due to measurement and system variations.

User situations requiring scaling of the dose scatter map for shielding calculation:

- If a site performs a significant portion of the body localization studies by only acquiring a single 14cm CT field of view, then the attached map is applicable.

- If a site performs a significant number of localization CT scans that correspond to multiple SPECT fields of view, then the dose scatter map needs to be increased by the number of SPECT fields of view multiplied by the number of CT scans required to cover a SPECT field of view (3).

- Some sites may only perform cardiac attenuation correction studies. This means that the scatter dose map must be reduced by a factor of 1/8 for the mAs used in the attenuation correction map.

- If a site performs a significant number of whole body attenuation correction exams, the scatter dose map must be reduced by a factor of 3/8 since lower mAs would be used but more CT spins are required

Dose Scatter Map Scaling Summary Table

Study Type	Protocol Scaling Factor	FoV Scaling Factor
14cm CT Body Localization Study	1.0	1.0
CT scans that correspond to multiple SPECT FoV	1.0	Multiply by # of SPECT FoVs * 3
Cardiac attenuation study	0.125 (Factor of 1/8 for the mAs used in the attenuation correction map.	1.0
SPECT field of view body attenuation correction exams	0.125 (Factor of 1/8 for AC mAs)	3 (3 CT FoVs to cover one SPECT FoV)
14cm CT Extremity Localization Study	1.9	1.0

NOTE:

Note that the localization studies are acquired at 80 mA and the attenuation correction studies are acquired at 20 mA. There is not a factor of four difference between the dose for these two procedures due the the pulsing of the 80 mA procedure and some differences in the generator output between pulsed and continuous modes.

(08.1)

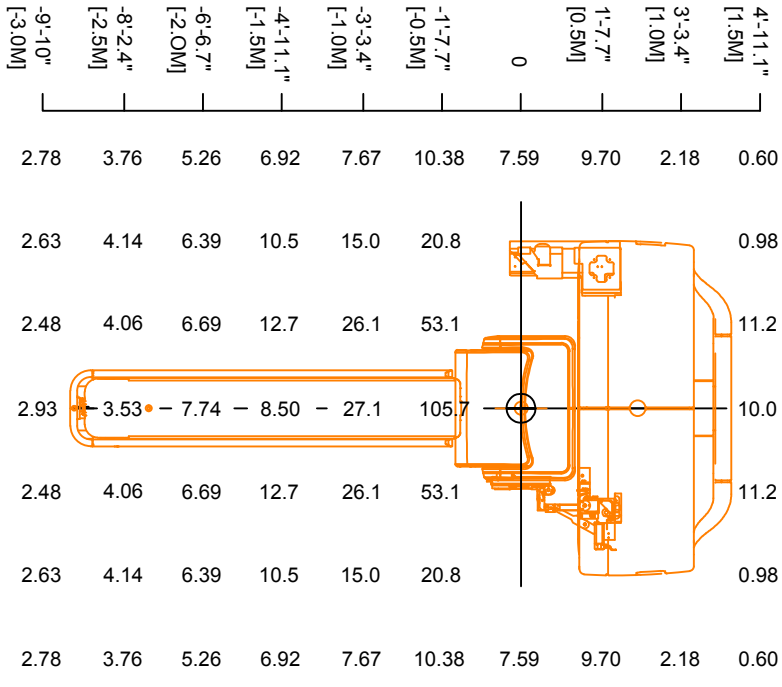
Source Characteristics

Quality	Source Type	Activity (nominal)	Manufacture	Source type	IPL Number	Sealed Source Registry	Philips Number
6	Gd-153	3.7MBq (100uCi)	Isotope Product Laboratories (IPL)	Point	MMS07-153-100U	NUREG-1556 Vol. 3 Section 5.1.1	4535 602 56811

\*IPL Manufacture must register a sealed source # with the state of California for Isotope Product sale.

(10.0)

Meter from X-Ray



Plan & Elevation View Stray  
Radiation Dose Map  
Brightview XCT  
(not to scale)

The values shown are in μGy units which were calculated from the direct measurements. This is a preliminary typical AC protocol.

The accumulated dose in μGy:  
14cm Axial FOV  
20mA, 12 Sec, Continuous  
Mode 1 Spin measured at 120 KVP  
Values measured at 3.28" (83mm) from floor.

(09.1)

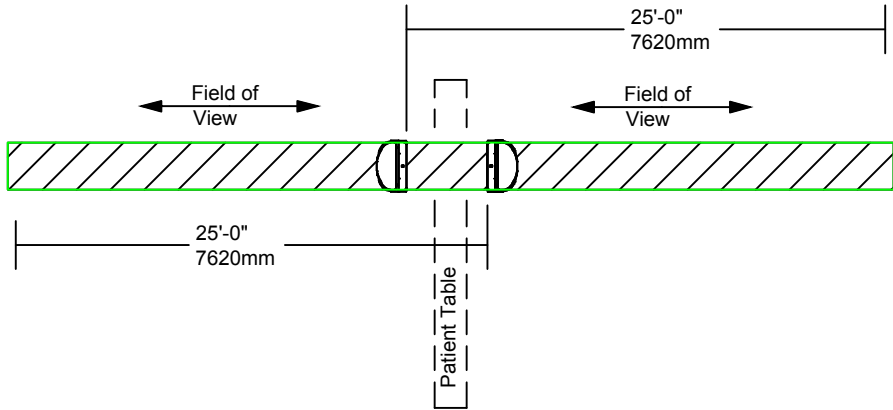
Project  
BrightView XCT  
Standard Reference Drawing  
Not Site Specific

Philips Contacts  
Project Manager:  
Contact Number:  
Email:  
Drawn By:

Project Details  
Drawing Number  
N-SRD080008  
Date Drawn: 7/12/2013  
Quote: None  
Order: None

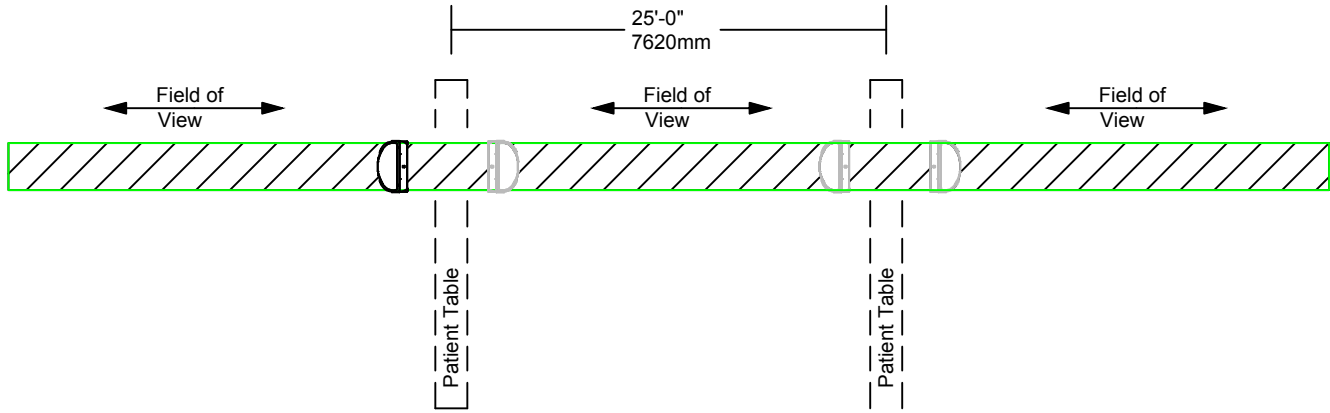
MP1





Alternative 1 - (Single Camera Option 1)

- Alternative shows Field of View is perpendicular to detector face and that no injected patient or hot source should be within 25'-0" (7620mm).

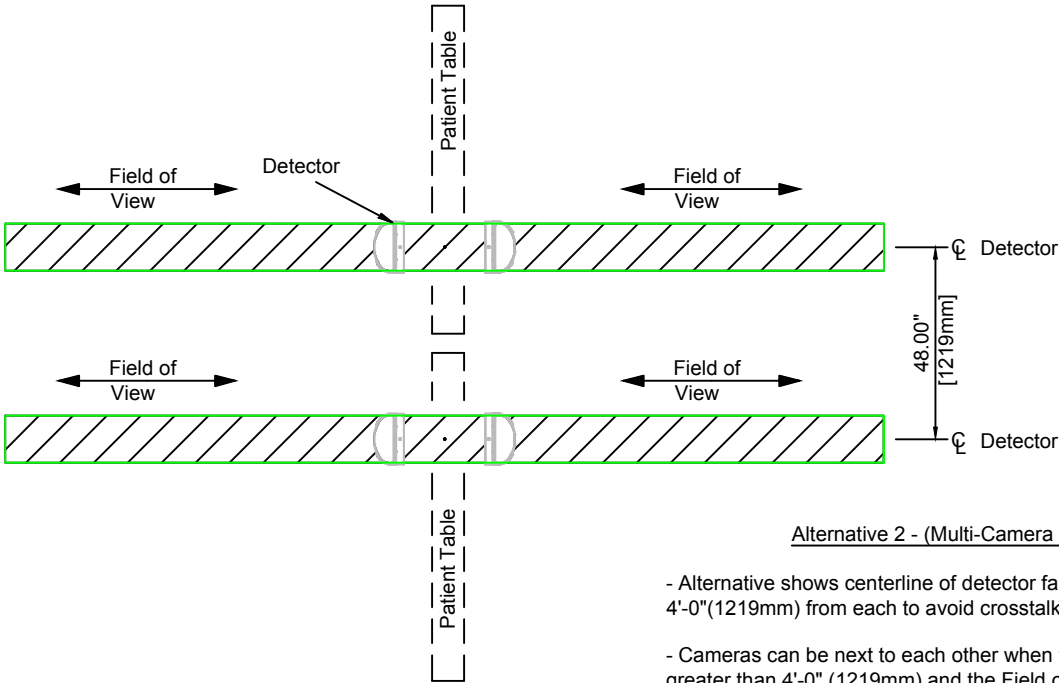


Alternative 3 - (Multi-Camera Option 2)

- Alternative shows tables being at a minimum of 25'-0" (7620mm) apart to avoid crosstalk with the Field of View being on the same plane.

- Patients must be 25'-0" (7620mm) away from the other camera's detectors and Field of View.

Single Camera and Multi-Camera  
Room Layout - Low Energy Crosstalk  
BrightView XCT



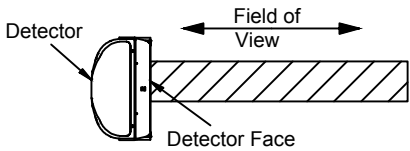
Alternative 2 - (Multi-Camera Option 1)

- Alternative shows centerline of detector face at a minimum of 4'-0"(1219mm) from each to avoid crosstalk.

- Cameras can be next to each other when the Detector Centerline is greater than 4'-0" (1219mm) and the Field of View is not in the same plane because patient is not in the Field of View of the other camera's detectors.

Notes:

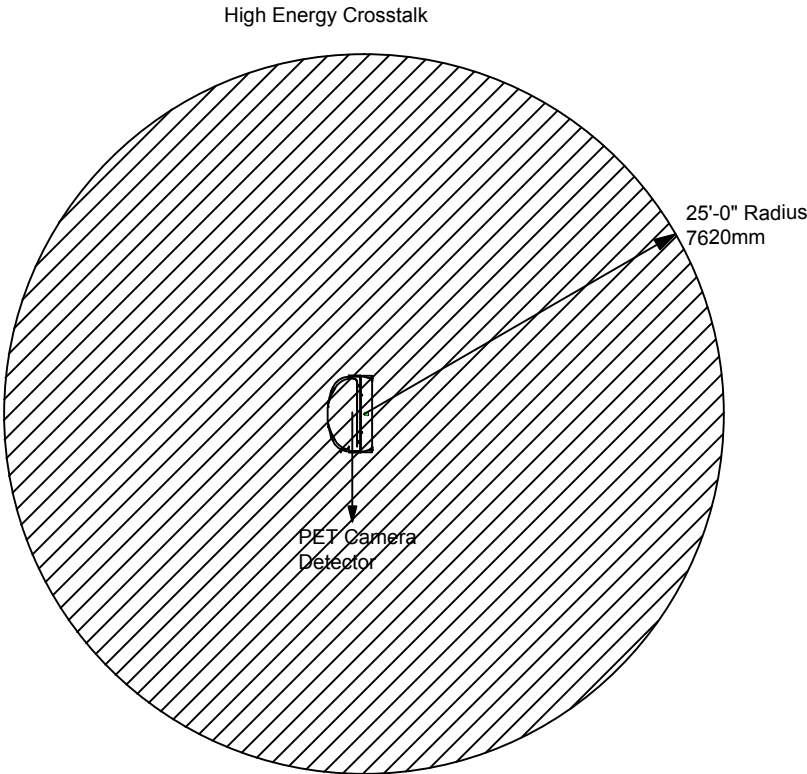
1. No injected patient or hot source in the shaded area.
2. Field of View is the view perpendicular to the detector.



Picture represents Field of View being perpendicular to the detector face

3. Low energy radiation is mostly for Nuclear Medicine Cameras and is <= 360 keV.
4. Transient patients injected with radionuclides, but not being imaged with this equipment must remain outside of these exclusion areas.

(09.0)



Notes:

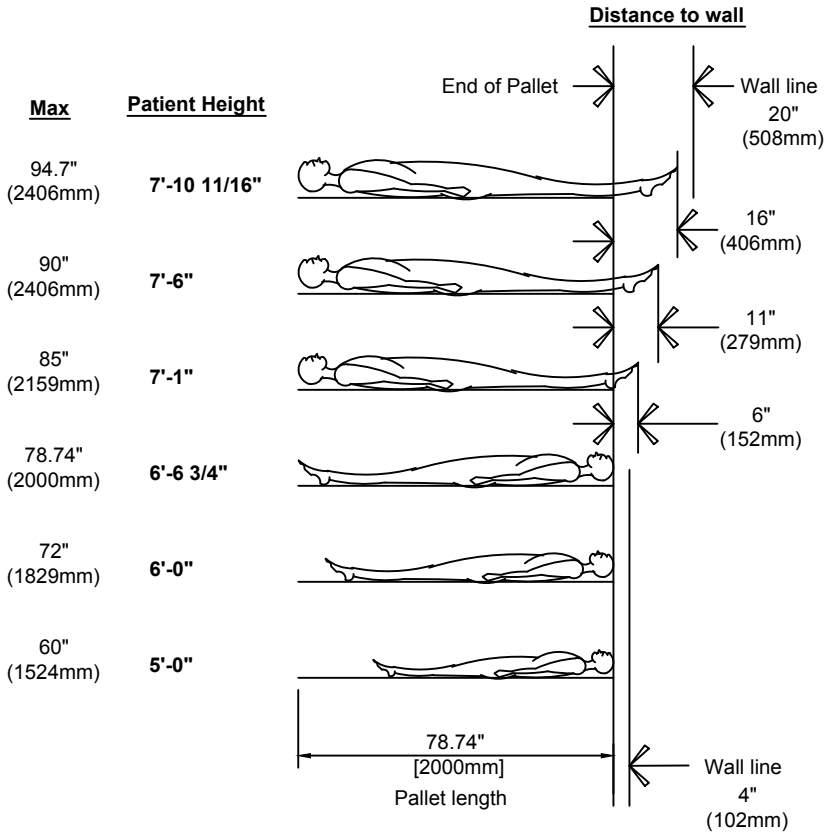
1. No injected patient or hot source in the shaded area.
2. High energy radiation is mostly for PET Camera's and is > 360 keV.

Camera Room Layout - High Energy Crosstalk  
BrightView XCT

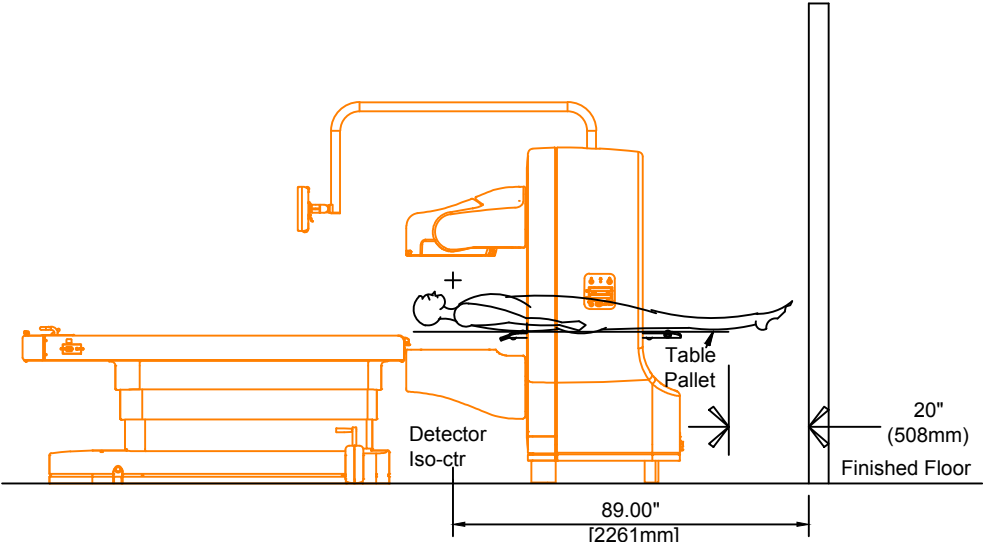
(09.0)

<b>MP2</b>		<b>Project Details</b>		<b>Philips Contacts</b>		<b>Project</b>	
Drawing Number		N-SRD080008		Project Manager:		<b>BrightView XCT</b>	
Date Drawn: 7/12/2013				Contact Number:		<b>Standard Reference Drawing</b>	
Quote: None				Email:		Not Site Specific	
Order: None				Drawn By:		-	

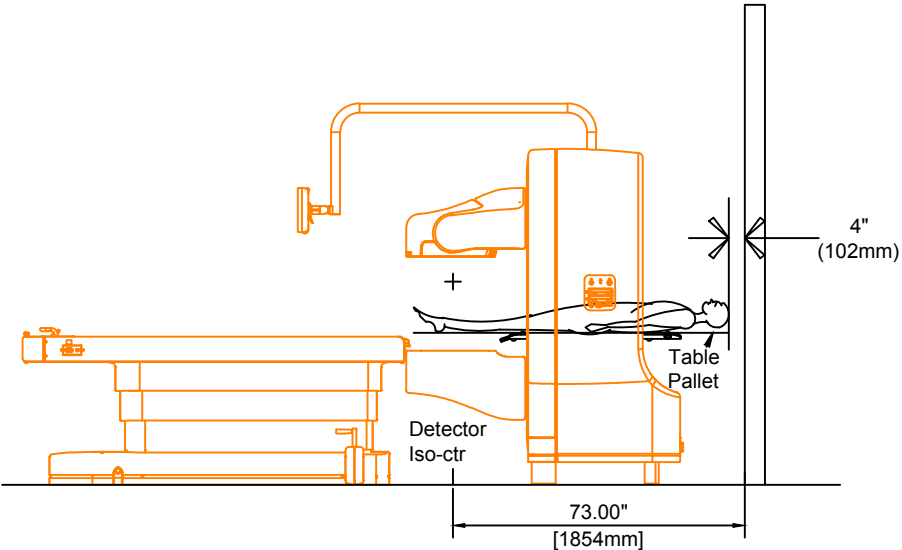
**Note:**  
Customers needs must be considered when placing the system in the room. Above is a list of distances to rear wall required for various patient lengths.



**BrightView XCT Patient Support to Rear Wall**  
**Distance Detail**  
Not to scale (09.0)



**Maximum Patient Length 7'-10 11/16" = 94.7" (2406mm) Feet First**



**Maximum Patient Length 6'-6 3/4" = 78.74" (2000mm) Head First**

<b>Project Details</b> Drawing Number <b>N-SRD080008</b> Date Drawn: <b>7/12/2013</b> Quote: None Order: None	<b>Philips Contacts</b> Project Manager: Contact Number: Email: Drawn By:	<b>Project</b> <b>BrightView XCT</b> <b>Standard Reference Drawing</b> Not Site Specific
	<b>MP3</b>	

# Philips Healthcare Remote Services Network (RSN)

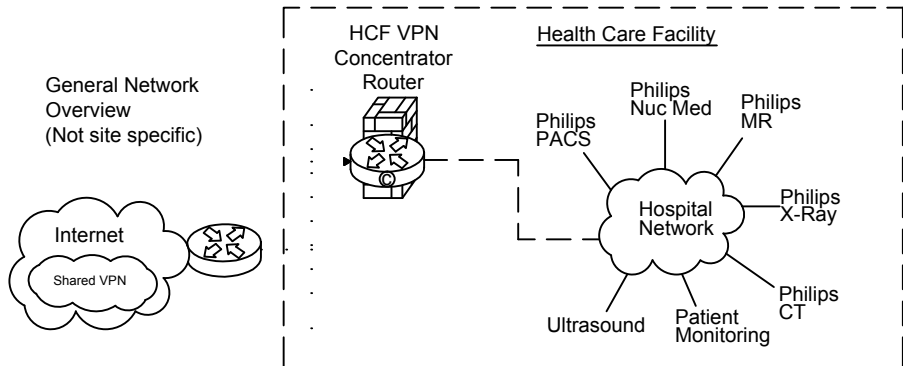
Secure broadband connection required for Philips remote technical support, diagnostics, and applications assistance

## Broadband Site-to-Site Connectivity (Preferred)

This connectivity method is designed for customers who prefer a connection from the RSN Data Center to the Health Care Facility (HCF) utilizing their existing VPN equipment.

### Connectivity Details:

- A Site-to-Site connection from the RSN data center's Cisco router will be established to the HCF's VPN concentrator.
- The VPN Tunnel will be an IPSEC, 3DES encrypted Tunnel using IKE as standard, but alternative standards are also available, such as AES, MD5, SHA, Security Association lifetime and Encryption Mode.
- Every system that we will be servicing remotely will have a static NAT IP that we configure on the RSN Data center side.



### Action Required by Hospital:

- Review and approve connection details.
- Complete appropriate Site Checklist.
- Configure and allow Site-to-Site access prior to setting up connectivity depending on the access criteria that the HCF decides to implement (ex: Source IP filtering, destination IP filtering, NAT assignment, etc.).
- Route traffic from within the hospital network with destination addresses 192.68.48.0/22 to the designed IP provided by Philips.

## Broadband Router Installed at Health Care Facility

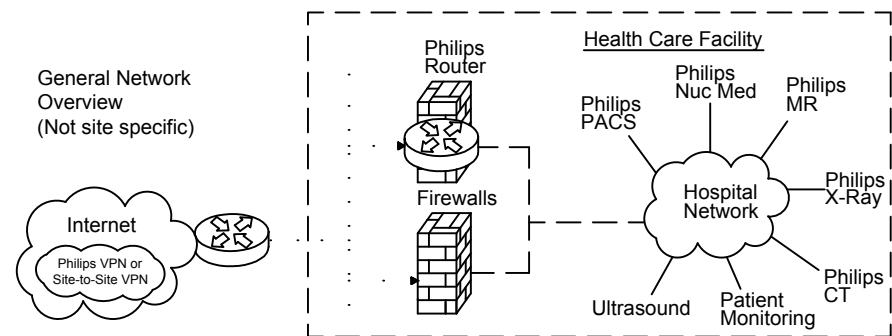
This connectivity method is designed for customers who have a dedicated high speed connection for Philips equipment.

### Connectivity Details:

- An RSN Cisco 1711 or 1712 router will be preconfigured and installed at the HCF by Philips in conjunction with the HCF IT representative.
- The VPN Tunnel will be an IPSEC, 3DES encrypted Tunnel using IKE and will be established from the RSN-DC and terminated at the RSN Router on-site.
- One to One NAT is used to limit access to Philips equipment only.
- Router Config and IP auditing is enabled for Customer IT to view via website 24/7.
- Dedicated DSL connections are also supported.

### Option 1: Parallel to HCF Firewall Connectivity Method

This connectivity method is designed for customers who prefer a Philips RSN Router installed on site utilizing all the security features provided and managed by Philips.

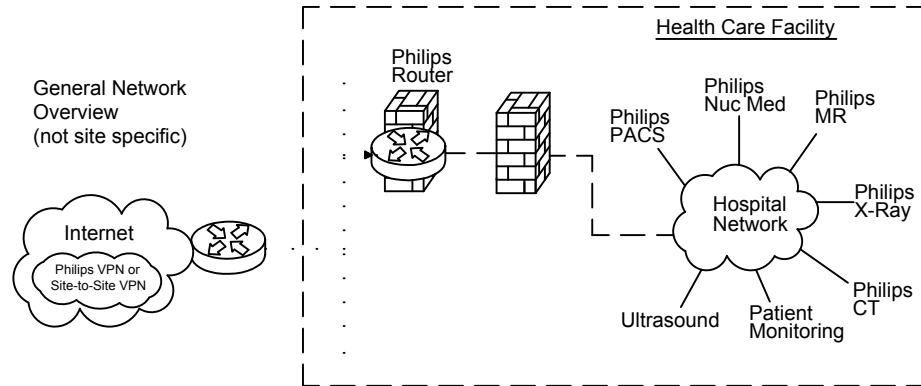


### Action Required by Hospital:

- Assign a fixed public IP Address from the ISP to be configured on the Philips router. This is the DOTTED link on the picture connected to the firewall.
- Assign a Back end IP for the Philips router on the Hospital Network.
- Complete appropriate Site Checklist.
- Route traffic from within the hospital network with destination addresses 192.68.48.0/22 to internal Philips router Ethernet interface. This is the DASHED line connected to the firewall.

## Option 2: Back End Connected to the HCF Firewall Connectivity Method

This connectivity method is designed for customers who prefer a Philips RSN Router installed on site by setting up an IP-Based policy allowing access thru existing HCF Firewall to Philips equipment.

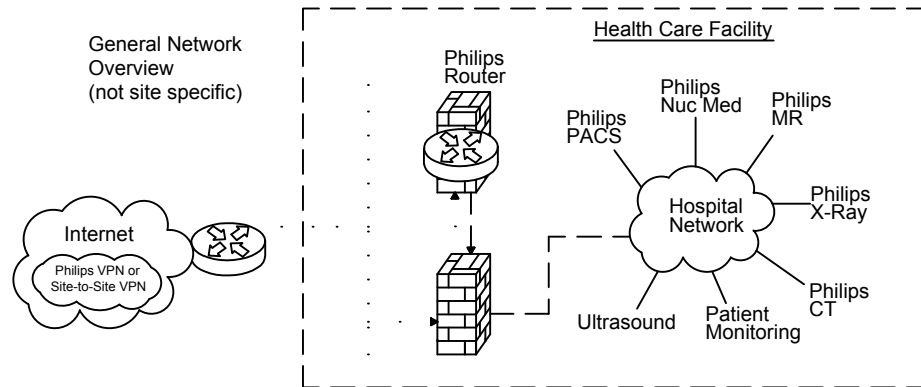


### Action Required by Hospital:

- Assign a fixed public IP Address from the ISP to be configured on the Philips router. This is the DOTTED link on the picture connected to the firewall.
- Assign a Back end IP for the Philips router on the Hospital Network.
- Complete appropriate Site Checklist.
- Route traffic from within the hospital network with destination addresses 192.68.48.0/22 to internal Philips router Ethernet interface. This is the DASHED line connected to the firewall.
- Configure and allow on the firewall on the DASHED line interface access between the IP address allocated by the hospital to the Philips internal Ethernet router interface and the target modality IP address.

## Option 3: Router Installed Inside the HCF's DZM

This connectivity method is designed for customers who prefer the RSN Router installed inside and existing, or new DMZ, allowing access to Philips equipment.



### Action Required by Hospital:

- Assign a fixed public IP Address from the ISP to be configured on the Philips router. This is the DOTTED link on the picture connected to the firewall.
- Assign a Back end IP for the Philips router on the Hospital Network.
- Complete appropriate Site Checklist.
- Route traffic from within the hospital network with destination addresses 192.68.48.0/22 to internal Philips router Ethernet interface. This is the DASHED line connected to the firewall.
- Configure and allow on the firewall on the DASHED line interface IPsec protocol communication by opening protocol 500, 50, 51, 47 and port 23 + TACACS. Traffic should be between external IP Address located on the Philips router and the RSN Data center IP address 192.68.48/24 and IP address AOSN TACAS.
- Configure and allow on the firewall on the DASHED line interface access between the IP address allocated by the hospital to the Philips internal Ethernet router interface and the target modality IP address.

Project Details	Project Manager:	Project BrightView XCT
	Contact Number:	Standard Reference Drawing
Philips Contacts	Email:	Not Site Specific
	Drawn By:	
N1		

Instructions

This form is to be used by Project Manager, Contractor and Service Engineer.

Information is used to develop and determine site ready date.

Items listed are go/no go items for delivery unless noted as delay only items.

Items identified with \*\*\* as delayed items must be completed after hours or on weekend. These items cannot be accomplished while installation is in progress. Also, these items must be completed within two days of installation start or they may stop installation.

Site Readiness Checklist

Modality: \_\_\_\_\_

Order: \_\_\_\_\_

Site Name: \_\_\_\_\_

Location: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Contact Phone Number: \_\_\_\_\_

- ☐ Customer site preparation verified in general against the Philips Site Preparation Support Drawings.
- ☐ Walls finished including painting.
- ☐ Doors installed.
- ☐ Floor leveled according to Philips drawings and specifications.
- ☐ Floors are tiled/covered finished. Flooring is covered with protective covering (scratch protection).
- ☐ Ceiling lights installed.
- ☐ Cable conduit and ductwork installed and clean. Position checked. Duct covers in place but not finally closed. Cable opening are clear, without sharp edges. Pull strings in conduit. Installation per Philips specifications.
- ☐ HVAC environmental equipment installed and working according to Philips specifications.
- ☐ Ceiling installation completed.
- ☐ Electrical preparation according to Philips specifications.
- ☐ All network cabling, drops installed according to Philips specifications (including hardcopy cameras).
- ☐ All pre-cabling identified on Philips drawings has been installed.
- ☐ Pre-move survey completed - Delivery route identified.
- ☐ Lead glass installed \*\*\*.
- ☐ X-ray warning lights installed \*\*\*.
- ☐ Room has been cleaned \*\*\*.
- ☐ Cabinets and casework installed \*\*\*.
- ☐ RSN Surveys completed and submitted.
- ☐ Philips RSN Champion contacted.

Approved for Delivery

Project Manager

Date

Service Engineer

Date

Modality Checklist

- ☐ Proper licenses for all applicable isotopes have been acquired by customer and verified by local Philips personnel. (see AN sheet).
- ☐ A hot lab area for all applicable isotopes has been identified and is fully operational.
- ☐ Any additional equipment required to handle applicable isotopes has been obtained by customer and is available on site prior to delivery of Philips equipment.

Project  
BrightView XCT  
Standard Reference Drawing  
Not Site Specific

Philips Contacts

Project Manager:  
Contact Number:  
Email:  
Drawn By:

Project Details

Drawing Number  
N-SRD080008  
Date Drawn: 7/12/2013  
Quote: None  
Order: None

CHK