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Final Site Preparation Support Document

The equipment components shown in this drawing package are based on the current proposed purchase and are subject to change if modifications are made to the configuration.

Rev.	Date	Revision Descriptions	Ву			
A	2/18/2009	Created Final drawings. changed centerline from 81" to 5" and from 12" to 10". Added order to drawing. Additional notes added on 2/9/09: Eliminated closet on south wall, relocated ATY, added sink in SW corner, added IH on cart (shown as option), swapped PBK and MA rack location, added bolus chase option and placed centerline requirements on A1, and added "med select box".	SJT			
В	5/7/2009	Changed the equipment centerline to 6", removed sink, and relocated the "Med select" unit under the ATY.	SJT			
С	7/22/2009	E3: Added a 1 1/2" conduit from the gas box to the exam side of the wall	SJT			
D	5/9/2012	Replaced existing Allura FD10 Ceiling with Allura Biplane FD10/10 (all sheets affected).	RGF			
E	9/17/2014 Drawings reverted to preliminary drawings. Equipment configuration updated to OA #6600191544.010000 (all sheets affected). Used new architectural background.					
F	1/21/2014	Final site preparation support document created. Updated drawings per new CAD file.	EC			
G	3/23/2015 Updated drawings per new CAD file. A1/E1: Equipment cabinets relocated per request.					
н	4/23/2015	A1/SL/S1/S2/SD1/SD2/EL/E1: Changed AD7 Adaptation Plate to AD7 Universal Plate.	SC			
I	5/4/2015 A1/S1/S2/E1: Updated CAD background. S2: Extended unistrut to 12' long. AL/A1/AD6/SL/S2/EL/E1/E4: Added two 4000mm Mavig tracks. Removed shorter Mavig track.					
J	5/13/2015	A1/S1/S2/E1: Added Soffit. Moved system isocenter south to 10'-2". Shifted "MAV1" to the right. Moved "PB1" north 3". EL/E1/E2/ED3: Added "WR4" in control room.	SC			

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Remote Service Check List ------

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	A1
	AD1 - AD2
ails	AD3 - AD7

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Floor & Wall		
Ceiling	8	52
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nd	EL
	E1
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ils	ED1 - ED4

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CHI	K

	Project Details	Philips Contacts	Project	
С	Drawing Number N-EAS090073 J	Project Manager: Frank Donald Contact Number: (414) 788-3702	Allura Biplane FD10/10	
;1	Date Drawn: 5/13/2015 Quote: 1-VRGSZM Rev. 6	Email: frank.donald@philips.com	William S Middleton VA Hospital Madison, WI	
	Order: 6600191544.010000	Drawn By: Sam Chong	-C4156	

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General Specifications

1. Responsibility

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 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.

2. Permits

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 related rules, regulations, shall bear any expense in obtaining same or in complying with any ordinances and statutes.

3. Radiation Protection

The customer or his contractor, at his own expense, shall obtain the service of a licensed radiation physicist to specify radiation protection. (X-Ray Tube output 125 KVp max.)

4. Asbestos and Other Toxic Substances

Philips assumes no hazardous waste (i.e., PCB's in existing transformers) exists at the site. If any hazardous material is found, it shall be the sole responsibility of the customer to properly remove and dispose of this material at its 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.

5. Labor

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.

6. Schedule

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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.

7. Extended Installation or Turnkey Work by Philips

Any room preparation requirements for Philips equipment indicated on these drawings is 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.

8. Infection Control and Interim Life Safety Measures

Compliance with all Infection Control and Interim Life Safety Measures shall be the sole responsibility of the customer. The customer shall provide all means and methods necessary for compliance with Infection Control (IC) and Interim Life Safety Measures (ILSM) in connection with the construction and installation/operation of the products shown herein and shall bear any expenses related to same.

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Minimum Site Preparation Requirements

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 before the installation can begin.

1. Walls to be painted or covered, baseboards installed, floors to be tiled and/or covered, ceiling shall have grid tiles and lighting fixtures installed and operational.

2. Doors and windows, especially radiation protection barriers, installed and finished with locksets operational.

3. All electrical convenience, conduit, raceway, knockouts, cable openings, chase nipples, and junction boxes installed and operational.

- 4. Incoming mains power operational and connected to room x-ray breaker.
- 5. 120V convenience outlets operational.

6. All support structure correctly installed. All channels, pipes, beams and/or other supporting devices should be level, parallel, and free of lateral or longitudinal movements.

- 7. All contractor supplied cables pulled and terminated.
- 8. A dust-free environment in and around the procedure room.

9. All HVAC (heating, ventilating and air conditioning) installed and operational as per specifications.

10. Architectural features such as computer floor, wood floor, casework, bulkheads, installed and finished. When technical cabinets are installed in a closet with doors, it is suggested that the customer install a temperature alarm in the event of an air conditional failure.

11. All plumbing installed and finished.

12. Philips does not install or connect developing tanks, automatic processors or associated equipment, built in illuminators, cassette pass boxes, loading benches and cabinets, lead protective screens, panels or lead glass window and frame. This is to be done by the customer/contractor.

13. Clear door openings for moving equipment into the building must be 42" (1067mm) W x 82" (2083mm) H min. 48" (1219mm) W x 82" (2083mm) H rec., Or larger contingent on an 8'-0" (2438mm) corridor width.

14. Countertop is 30" (765mm) for seated height and 36" (915mm) for standing height.

Note

Once Philips has moved equipment into the 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 room to receive telephone calls. This would alleviate facility staff from answering calls for Philips personnel.

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 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.

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Temperature
Temperature gradient
Humidity (non-condensing) umidity shall be stable within
Exam Room

*Average heat emission during clinic Data applicable for basic system: Large monitor + 4 x small monitor in 1 workstation + 2 x small monitor in

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Add 1706 BTU/hr for additional large Add 273 BTU/hr for additional small Add 1024 BTU/hr for additional work

Equipment's designed airflow is from handling in the rack cabinet equipme

	Electi Ma
Power Output:	100kW
Supply Configuration:	3 phase, ider bonding cond
Nominal Line Voltage:	480 VAC, 60
Branch Power Requireme	ent: 225 k\
Circuit Breaker:	3 phase, Typ

Remote

The control of customer lighting mus demonstrated on Sheet ED4. Lighti

		U
Operation		Â
Temperature 50°F (10°C) to 86°F (30°C)		
Temperature gradient Max. 1°F / Minute (0.5°C / Minute)		
Humidity (non-condensing) 20% to 80%		
Exam Room *6483 BTU/hr		
Equipment Room *8189 BTU/hr		
Control Room *1706 BTU/hr		
heat emission during clinical use cable for basic system: itor + 4 x small monitor in Monitor Ceiling Suspension on + 2 x small monitor in Control Room BTU/hr for additional large monitor TU/hr for additional small monitor BTU/hr for additional small monitor BTU/hr for additional workstation 's designed airflow is from bottom to top and front to back. Please design the air the rack cabinet equipment area accordingly. (14.0)		A Hospital
Electrical Requirements Mains 40E Cabinet nut: 100kW figuration: 3 phase, identical 3 wire power and isolated unity ground with bonding conductor, delta (preferred) or wye ne Voltage: 480 VAC, 60 Hz	Project Allura Biplane FD10/10	William S Middleton VA Hospital Madison, WI -C4156
ver Requirement: 225 kVA ker: 3 phase, Type D 125 A with long-time delay and shunt trip (14.2)	hk Donald 4) 788-3702	philips.com
Remote Control of Room Lighting I of customer lighting must incorporate an electrical isolation system such as ted on Sheet ED4. Lighting scheme is the responsibility of the customer. (12.0)	Philips Contacts Project Manager: Frank Donald Contact Number: (414) 788-3702	Email: frank.donald@p
	Project Details Drawing Number N-EAS090073 J	Date Drawn: 5/13/2015 Quote: 1-VRGSZM Rev. 6 Order: 6600191544.010000

THE DRAWINGS AND RELATED CONSTRUCTION DOCUMENTS.

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	C D E F	Furnished and installed by Philips Furnished by customer/contractor Installed by customer/contractor Furnished by Philips and installed Existing Future Optional item furnished by Philips Equipm
	/ ↓	
A	. (SI	P Poly G Stand (Floor V
A		Larc CN Cardio
A	. (MS	Angio Diagnost 7 w/ F
A	. (M	E Certeray iX Generator
		E Certeray iX Generator
		P Peripheral 40E Cabine
		A Mains 40E Cabinet
		B Image 40E Cabinet
		Y Viewing/Control
		B Documentation Box - (Final location to be co and/or local Philips Se
		Y Exam Room Auxiliary
		/ 58" LCD Monitor Susp
A	. (VB	Video Connection Bo
A		Video Connection Bo
		JS S5i Imaging System -
		S5i Imaging System -
		B EP Power Boom (Inclu
A	. (<u>MA</u> '	V1) Mavig Ceiling Track (4 and Surgical Light
A	. (MA'	V2 Mavig Ceiling Track (4 and Surgical Light

Equipment Legend

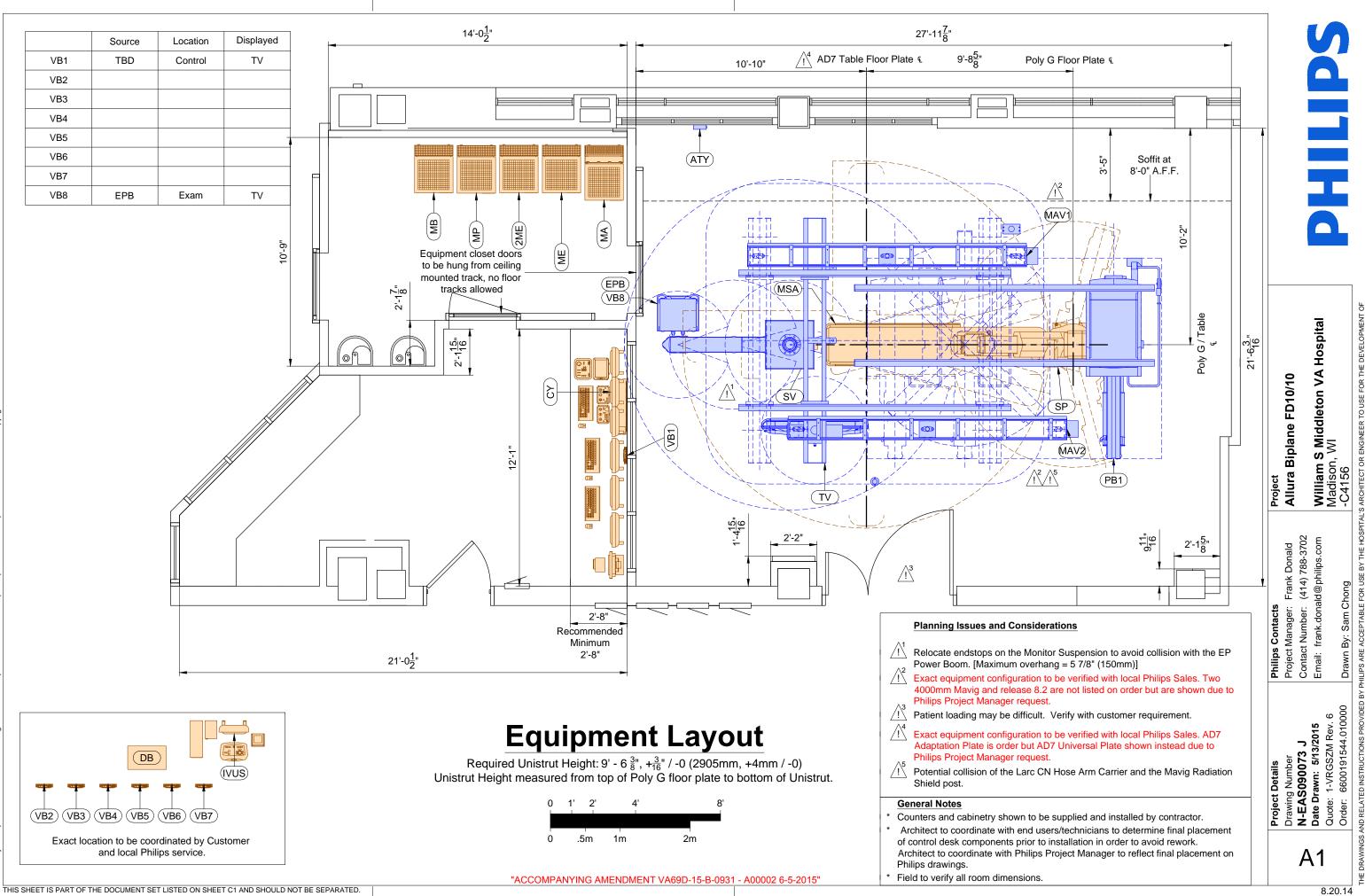
ilips ctor and installed by customer/contractor lled by contractor

Neight	l Sheet — Heat Load	
-	Heat Load	
(lbs)	(btu/hr)	\vee
1921	1195	AD3
1877	853	AD3
1693	205	AD3
320	2971	AD4
320	2971	AD4
441	2049	AD4
826	5464	AD4
441	1877	AD4
230	1527	AD4
176	0	AD5
7	1.7	AD5
603	1020	AD5
11	34	AD5
11	34	AD5
76	-	AD6
-	-	AD6
1082	-	AD7
167	350	AD6
167	350	AD6
	1877 1693 320 441 826 441 230 176 7 603 11 11 76 1082 167	1877 853 1693 205 320 2971 320 2971 441 2049 826 5464 441 1877 230 1527 176 0 7 1.7 603 1020 11 34 76 - 1082 - 167 350



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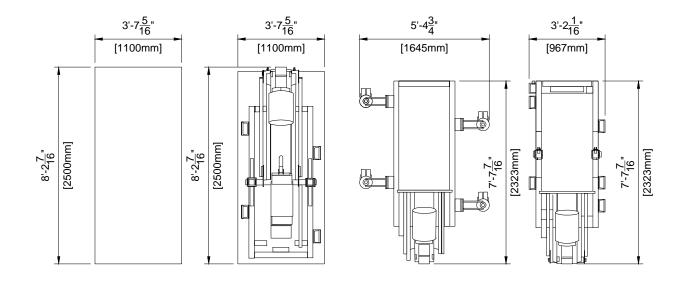
THE DRAWINGS AND RELATED

Detail - Poly Diagnost G Floor Transport Details

Detail - Poly Diagnost G Floor Plate Transport Details for Base

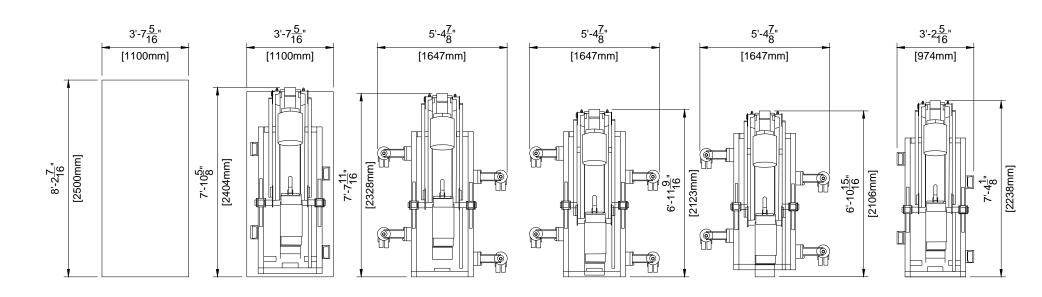
1135 lbs (515 kg)

^{3'-3"} 1991 mmj



Transport Possibilities							
Crate Pallet Klick When				Skateboards			
Height	85.04" (2160mm)	82.48" (2095mm)	76.57" (1945mm)	77.52" (1969mm)			
Weight	2998 lbs (1360 kg)	2866 lbs (1300 kg)	2756 lbs (2756 kg)	2480 lbs (1125 kg)			

Detail - Poly Diagnost G Floor Transport Details Split (C-ARC)



			Transport Possibilitie	S		
	Crate	Pallet	Klick Wheels	Shortest (Rot 24)	Shortest (Rot 42)	Skateboards
Height	77.95" (1980mm)	75.59" (1920mm)	68.90" (1750mm)	76.30" (1938mm)	85.67" (2176mm)	76.57" (1945mm)
Weight	2028 lbs (920 kg)	1907 lbs (865 kg)	1764 lbs (800 kg)	1764 lbs (800 kg)	1764 lbs (800 kg)	1488 lbs (675 kg)

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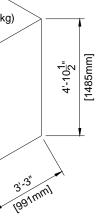
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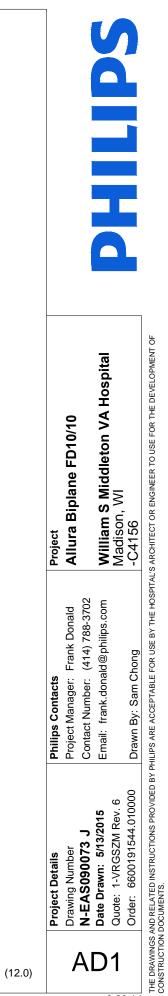
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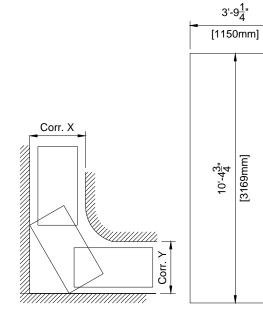
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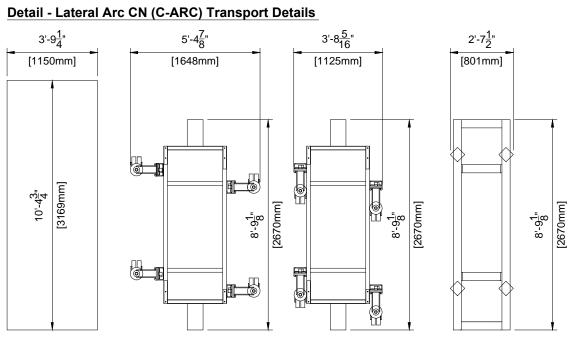
Koninklijke Philips Elect





Detail - Lateral Arc FD (Assembled) Transport Details

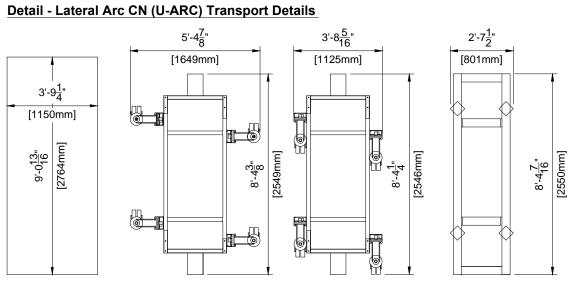




	Transport Possibilities	
	Including Crate	Without Crate
Length	114.17" (2900mm)	107.48" (2730mm)
Width	45.28" (1150mm)	31.50" (800mm)
Height	81.69" (2075mm)	74.80" (1900mm)
Weight	2094 lbs (950 kg)	2094 lbs (950 kg)

		Transport Possibilities		
	Crate Wide	Klick Wheels Wide	Klick Wheels Small	Castors
Height	85.45" (2145mm)	74.80" (1900mm)	74.80" (1900mm)	74.80" (1900mm)
Weight	1455 lbs (660 kg)	1477 lbs (670 kg)	1477 lbs (670 kg)	1202 lbs (545 kg)
Corridor X Measured	64.96" (1650mm)	64.96" (1650mm)	64.96" (1650mm)	64.96" (1650mm)
Corridor Y Must Be	75.94" (1929mm)	105.98" (2692mm)	67.95" (1726mm)	50.79" (1290mm)
* Corridor values, a tolerance	e of 3.93" (100mm) is added f	or wall obstructions.		

Corr. X



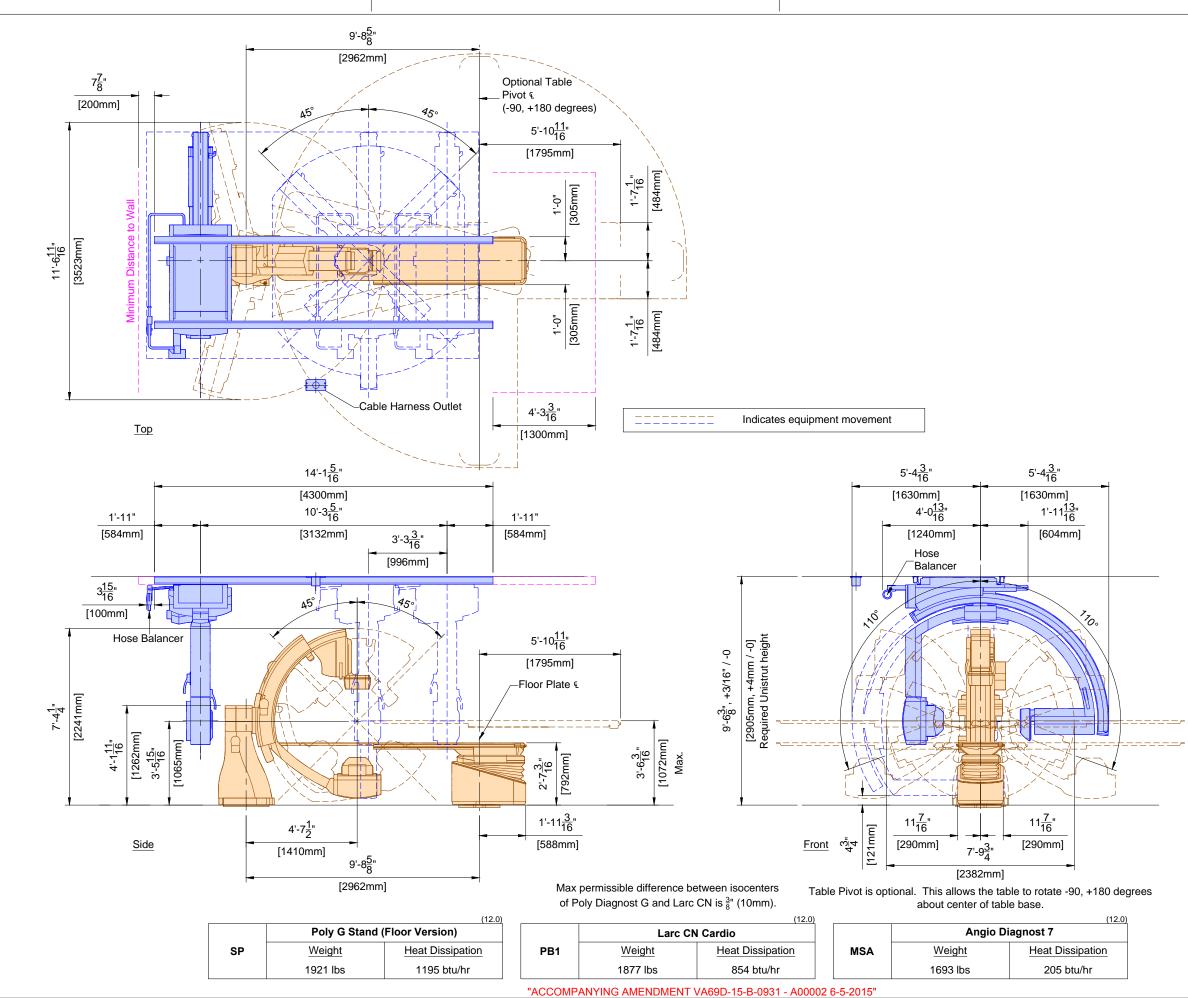
		Transport Possibilities		
	Crate Wide	Klick Wheels Wide	Klick Wheels Small	Castors
Height	84.65" (2150mm)	77.56" (1970mm)	77.56" (1970mm)	77.56" (1970mm)
Weight	1761 lbs (799 kg)	1748 lbs (793 kg)	1748 lbs (793 kg)	1510 lbs (685 kg)
Corridor X Measured	64.96" (1650mm)	64.96" (1650mm)	64.96" (1650mm)	64.96" (1650mm)
Corridor Y Must Be	75.94" (1929mm)	105.98" (2692mm)	67.95" (1726mm)	50.79" (1290mm)

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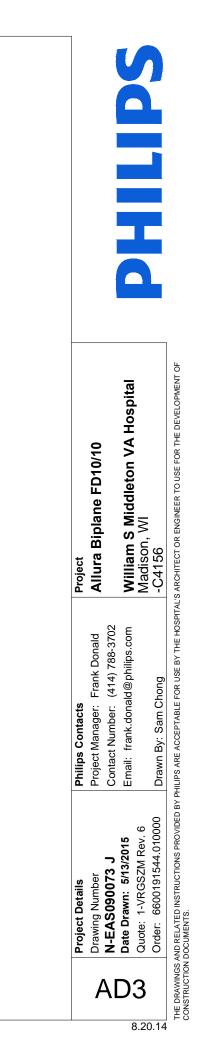
THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED.

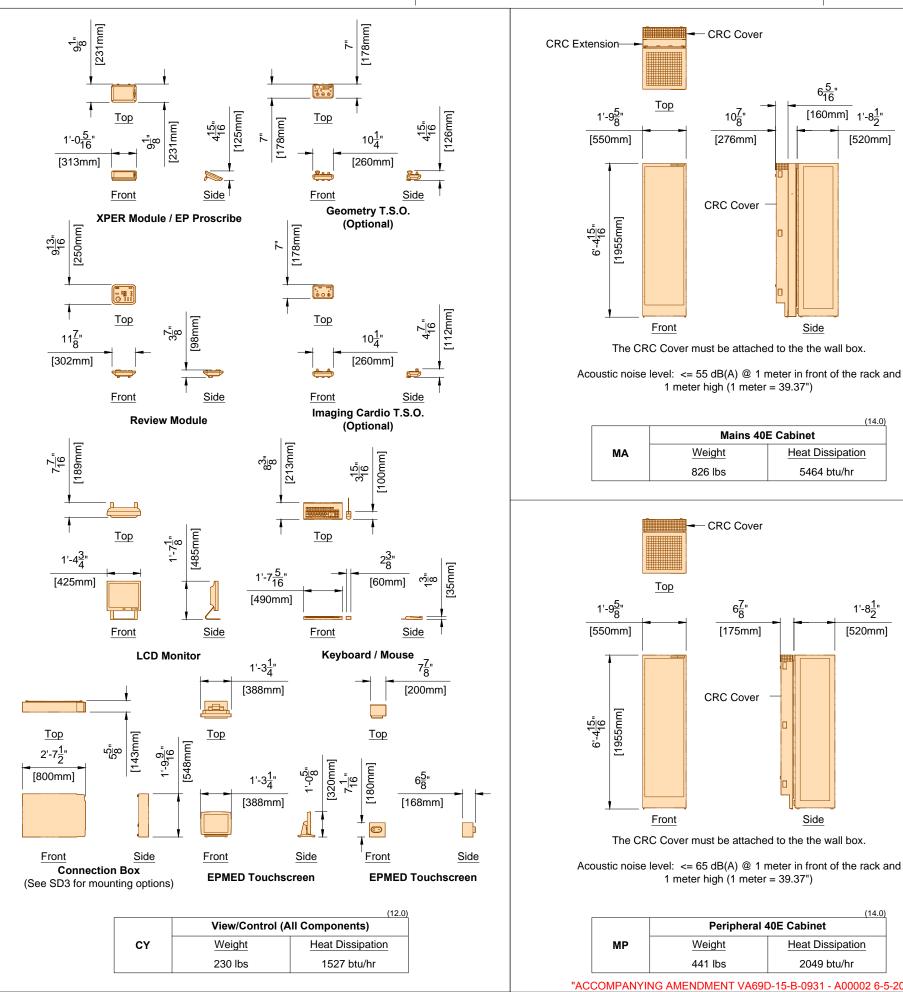
	Project Details	Philips Contacts	Project	
А	Drawing Number N-EAS090073 J	Project Manager: Frank Donald Contact Number: (414) 788-3702	Allura Biplane FD10/10	
D2	Date Drawn: 5/13/2015	Email: frank.donald@philips.com	William S Middleton VA Hospital	
	Order: 6600191544.010000	Drawn By: Sam Chong	Midulsoni, wi -C4156	

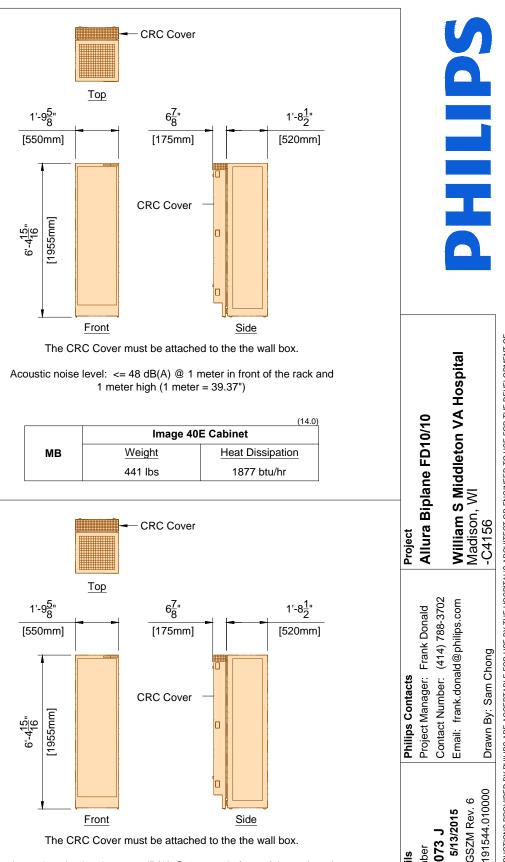
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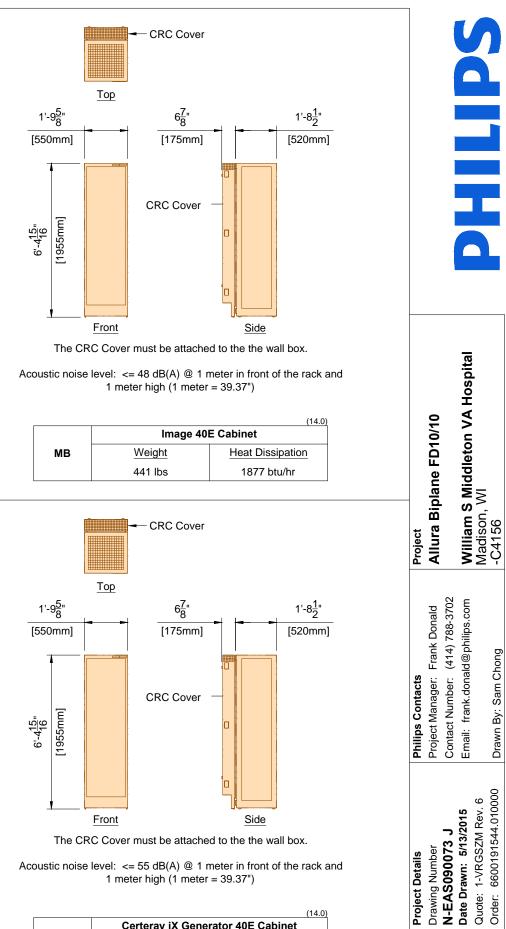


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THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED.

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"ACCOMPANYING AMENDMENT VA69D-15-B-0931 - A00002 6-5-2015"

[520mm]

(14.0)

1'-8<u>1</u>"

[520mm]

(14.0)

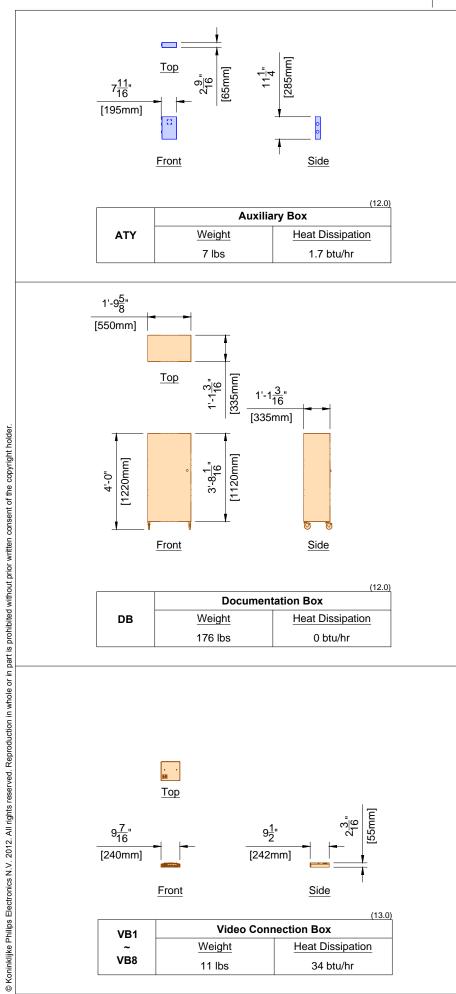
Acoustic noise level: <= 55 dB(A) @ 1 meter in front of the rack and 1 meter high (1 meter = 39.37")

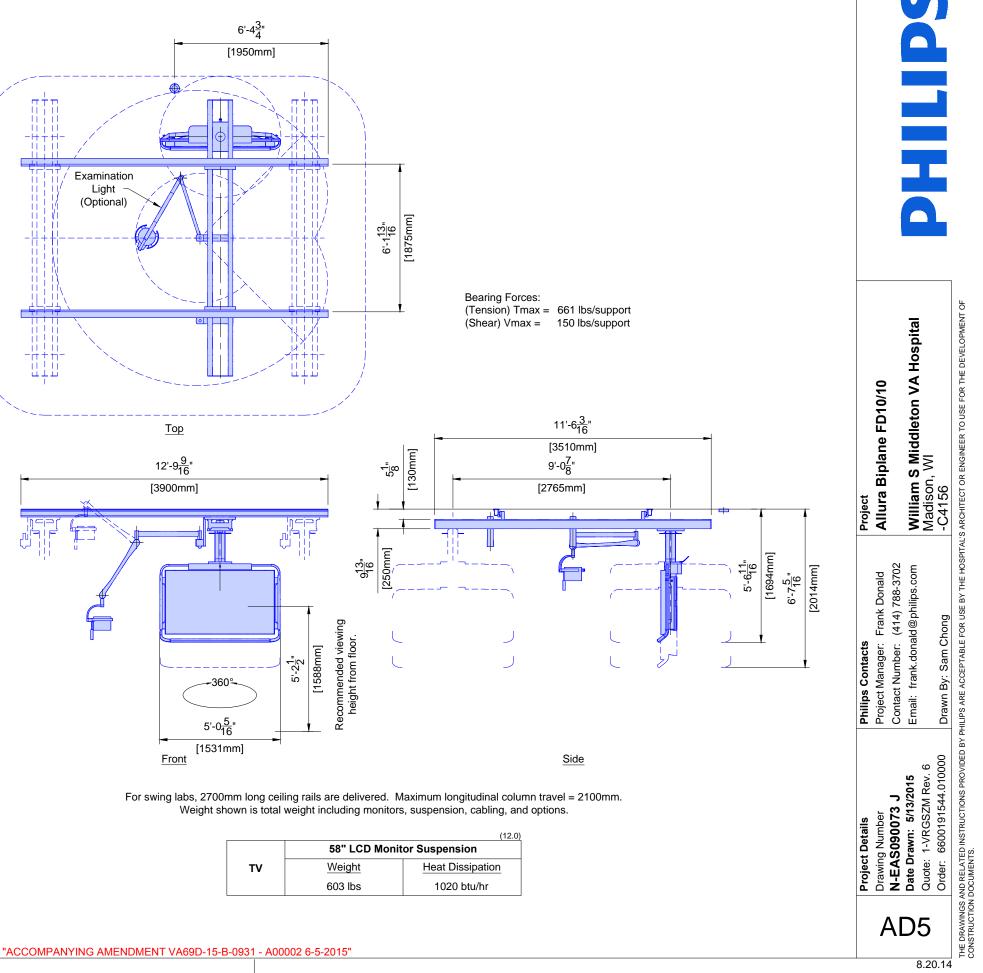
	(14.0)
Certeray iX Gene	rator 40E Cabinet
Weight	Heat Dissipation
320 lbs	2971 btu/hr

2 CHITECT OR ENG Sam Chong ABLE FOR Drawn THE DRAWINGS AND RELATED CONSTRUCTION DOCUMENTS.

BX:

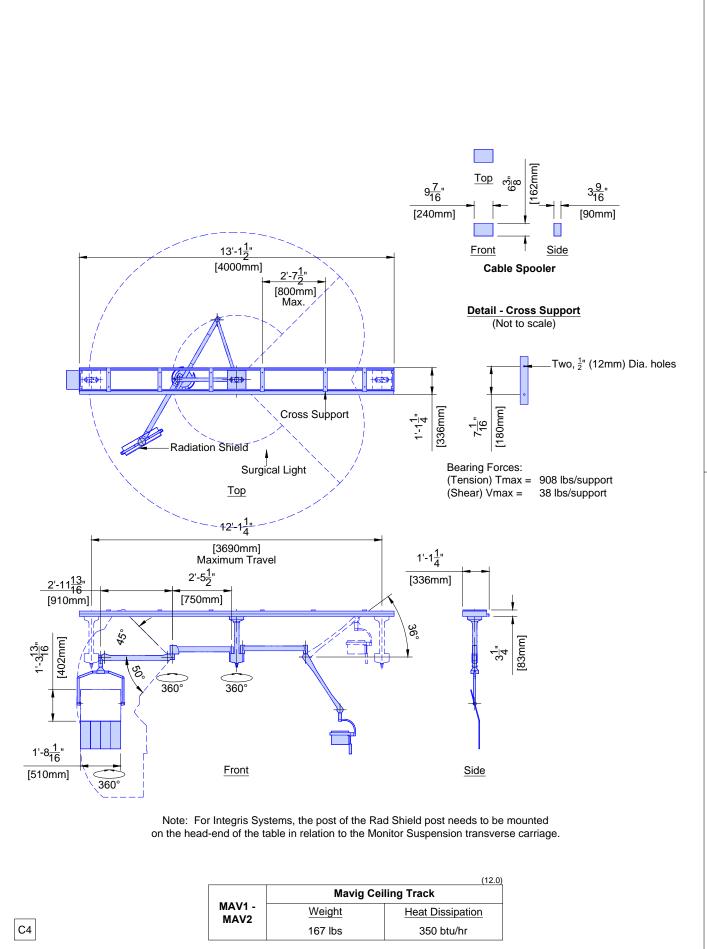
AD4

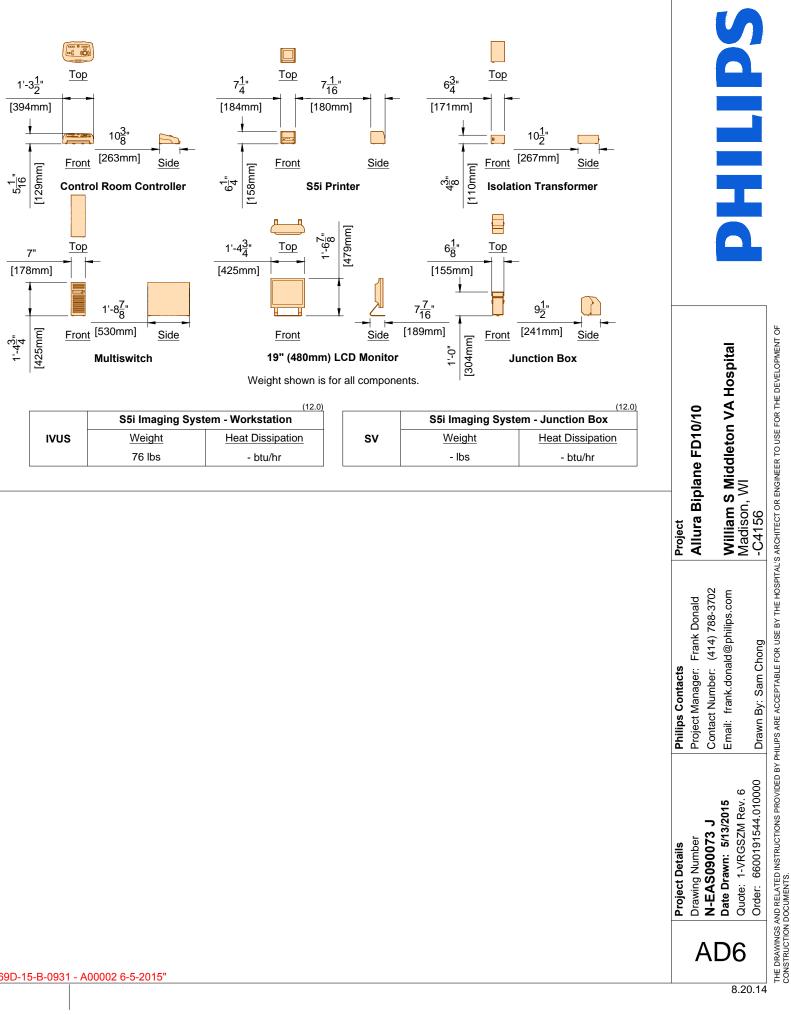




	58" LCD Monit	(12.0) or Suspension
т٧	Weight	Heat Dissipation
	603 lbs	1020 btu/hr

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED.



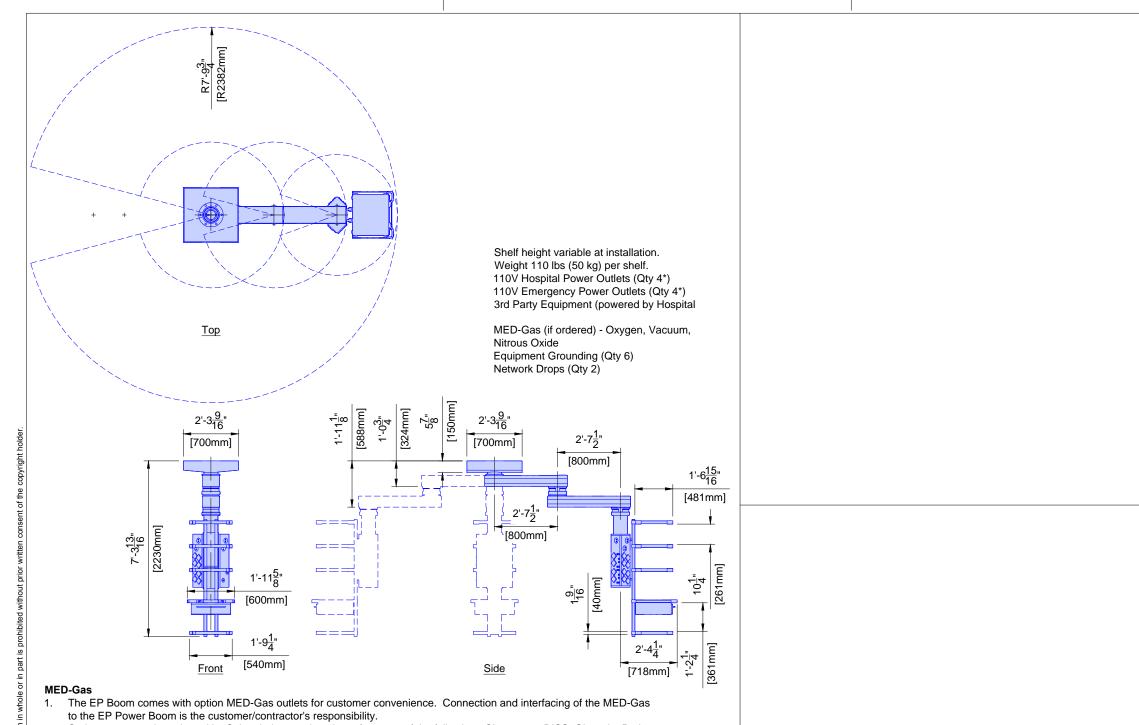


[S5i Imaging Syst	em - Workstation	Γ	
	IVUS	Weight	Heat Dissipation		sv
		76 lbs	- btu/hr		

0

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED.

"ACCOMPANYING AMENDMENT VA69D-15-B-0931 - A00002 6-5-2015"



2. Outlet types must be selected by Sales during quoting phase from one of the following: Chemetron, DISS, Ohmeda, Puritan Bennett, No gas fitting.

3. All changes must be processed prior to start of system production.

Boom Brakes

Compressed Air / Nitrogen (minimum 72.5 PSI, maximum 116 PSI @ 2.6 CFM) is needed to activate the brakes for the EP Power Boom. Connect to the 0.31" (8mm) copper inlet at EP Power Boom interface plate.

Delivery in Crate

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110" (2800mm) L x 31.5" (800mm) W x 55" (1400mm) H - Weight = 68 lbs (30.8 kg).

		(12.0)
	EP Powe	er Boom
EPB	Weight	Heat Dissipation
	1082 lbs	- btu/hr

Weight shown is for all components.

Project Details Philips Contacts Project Drawing Number Project Manager: Frank Donald Project Drawing Number Project Manager: Frank Donald Project N-EAS090073 J Contact Number: (414) 788-3702 Allura Biplane FD10/10 Date Drawn: 5/13/2015 Email: frank.donald@philips.com William S Middleton VA Hospital Order: 6600191544.010000 Drawn By: Sam Chong C4156
Philips Contacts Project Manager: Frank Donald Contact Number: (414) 788-3702 Email: frank.donald@philips.com Drawn By: Sam Chong

Equipment Support Information

1. General

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.

2. Equipment Anchorage

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. Consult with Philips service prior to specifying anchor methods. Philips equipment must be electrically isolated from anchorage.

3. Floor Loading and Surface

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 surface upon which Philips equipment is to be placed/anchored shall be flat and level to within plus or minus $\frac{1}{16}$ " (2mm) over a length of 39" (1m).

4. Ceiling Support Apparatus

a. 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. Philips equipment must be electrically isolated from anchorage.

b. Contractor to clearly mark Philips equipment longitudinal centerline on bottom of each structural support.

c. 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 $\frac{1}{16}$ " (2mm) per entire span.

d. Any drilling and/or tapping of holes required to attach Philips equipment to the structural support apparatus shall be the responsibility of the customer.

e. Fasteners/anchors (i.e., bolts, spring nuts, lock and flat washers) and strip closures shall be provided by the customer.

5. Lighting

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.

6. Ceiling Obstructions

There shall be no obstructions that project below the finished ceiling in the area covered by ceiling suspended equipment travel.

7. Seismic Anchorage (For Seismic Zones Only)

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. Consult with Philips regarding any anchor system issues. Philips equipment must be electrically isolated from anchorage.

8. Floor Obstructions/ Floor Coverings

There shall be no obstructions on the floor (sliding door tracks, etc.) in front of the Philips technical cabinets. Floor must be clear to allow cabinets to be pulled away from the wall for service. Contractor to verify with Philips the preferred floor covering installation method.

9. Safety Factors

In a worst case situation the dynamic bolt force of a floor or ceiling must be multiplied by factor 4. (static bolt force of the ceiling must be multiplied by factor 8). All safety factors are included in the bearing force values in sheet SD1.

10. Stiffness Requirements of Ceiling

Stiffness: 10,000,000 Newton/meter - 57.1 klb/in Stiffness: 20,000,000 Newtonmeter/Rad - 177,014 (klb in)/Rad The maximum deflection on the Philips rails must not exceed 0.04" (1mm) caused by the static load (weight) of the ceiling stand

11. Vibration

The maximal allowed external frequency that will not destroy the image quality of our equipment is:

a. 0 Hz till 20 Hz (frequency area of our equipment) - Displacement amplitude is smaller than 0.005mm

"ACCOMPANYING AMENDMENT \$469D-15-B-0931 - A0000 Displacement amplitude is smaller than 0.01mm

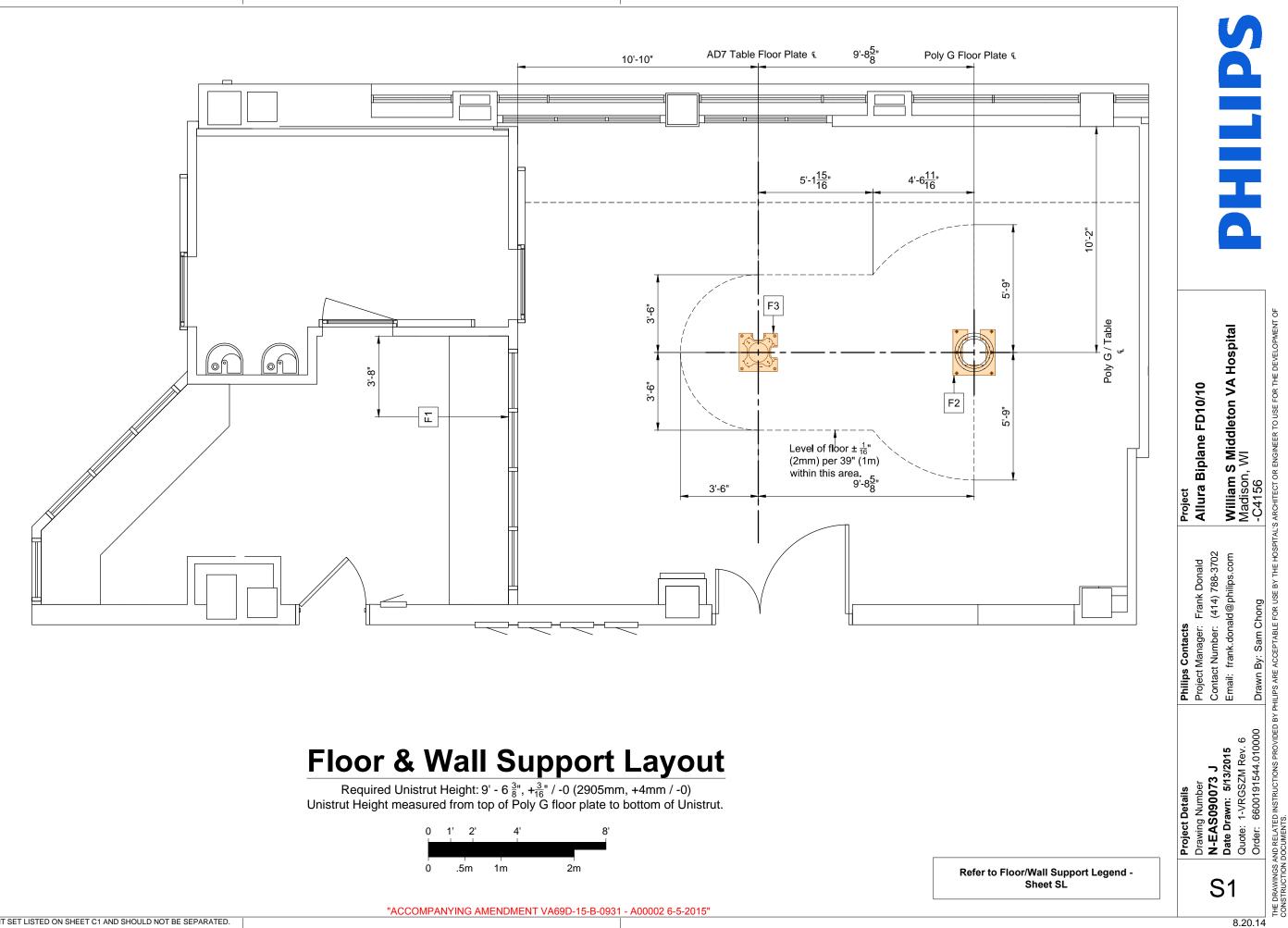
		Project Details	Philips Contacts	Project
		Drawing Number	Project Manager: Frank Donald	Allura Biplane FD10/10
	S	N-EAS090073 J	Contact Number: (414) 788-3702	
	N	Date Drawn: 5/13/2015	Email: frank.donald@philips.com	William S Middleton VA Hospital
8 20	J	Quote: 1-VRGSZM Rev. 6		Madison. WI
<u>۲</u> 1 /		Order: 6600191544.010000	Drawn By: Sam Chong	-C4156
	DRAWINGS A	AND RELATED INSTRUCTIONS PROVIDED BY	PHILIPS ARE ACCEPTABLE FOR USE BY THE HOSPITAL	THE DRAWINGS AND RELATED INSTRUCTIONS PROVIDED BY PHILIPS ARE ACCEPTABLE FOR USE BY THE HOSPITAL'S ARCHITECT OR ENGINEER TO LISE FOR THE DEVELOPMENT OF

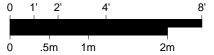
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B A D	F1 F2	ire
	B Furr C Insta D Furr E Exis F Futu	ire
A A A D B	C2 C3 C4 C5	 2 - Philips Larc CN Neuro Rails 2 - Philips Monitor Equipment Rails Unistrut (P1001 or equal) - Bottom of Ceiling 4000mm Mavig Ceiling Track (Qty: 2) EP Power Boom Ceiling Plate Additional Opening on Finished Ceilir (to be covered after EP Power Boom
		A F1 D F2 D F3 D F3 D F3

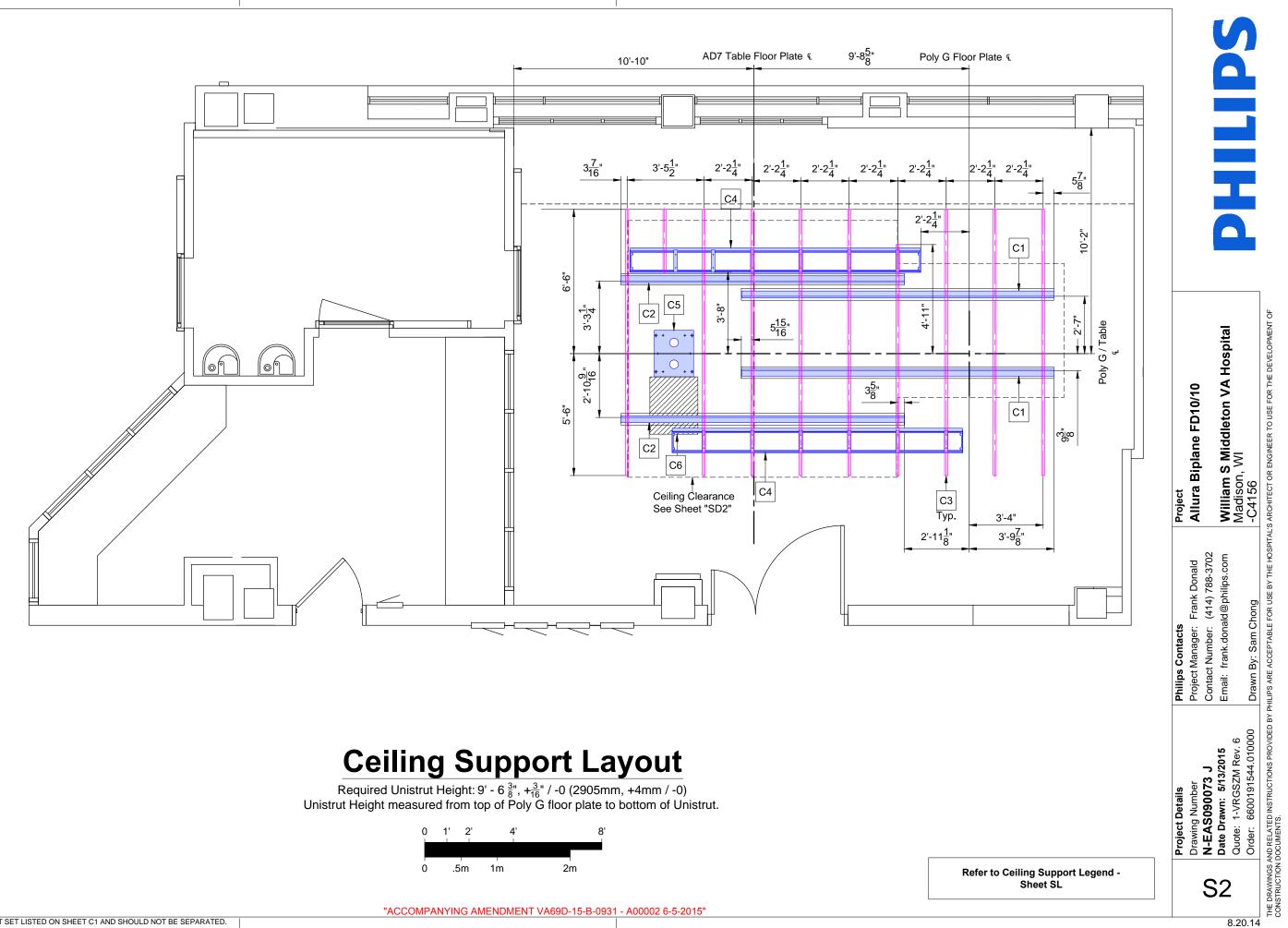
eptions may exist, see Note 2) nd installed/anchored by customer/contractor		
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Detail Sheet		
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g Support Legend]	Project Allura Biplane FD10/10 William S Middleton VA Hospital Madison, Wl -C4156
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Detail Sheet		Philips Contacts Project Manager: Frank Donald Contact Number: (414) 788-3702 Email: frank.donald@philips.com Drawn By: Sam Chong
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		Project Details Drawing Number N-EAS090073 J Date Drawn: 5/13/2015 Quote: 1-VRGSZM Rev. 6 Order: 6600191544.010000
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THE DRAWINGS AND RELATED CONSTRUCTION DOCUMENTS.





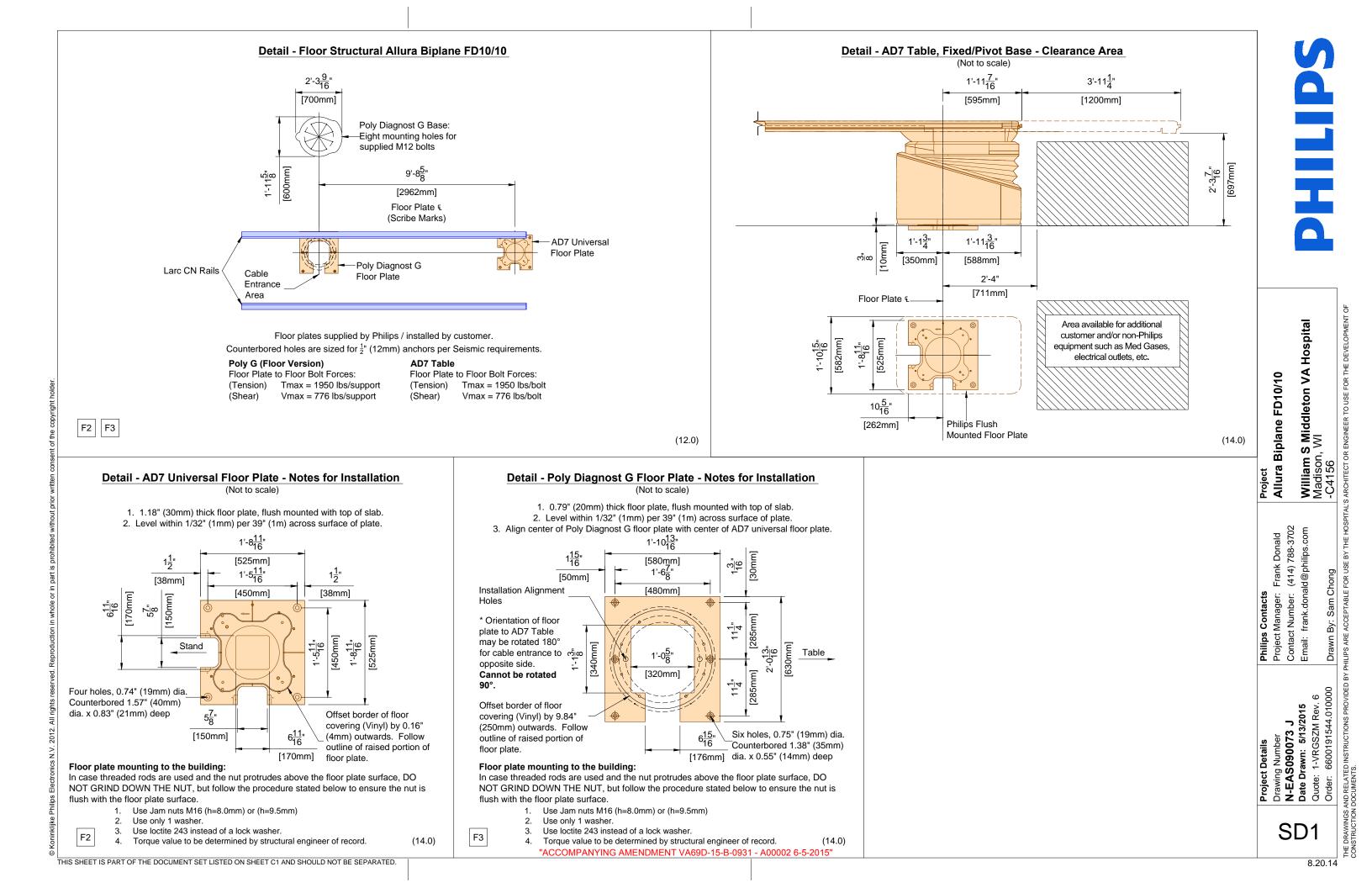
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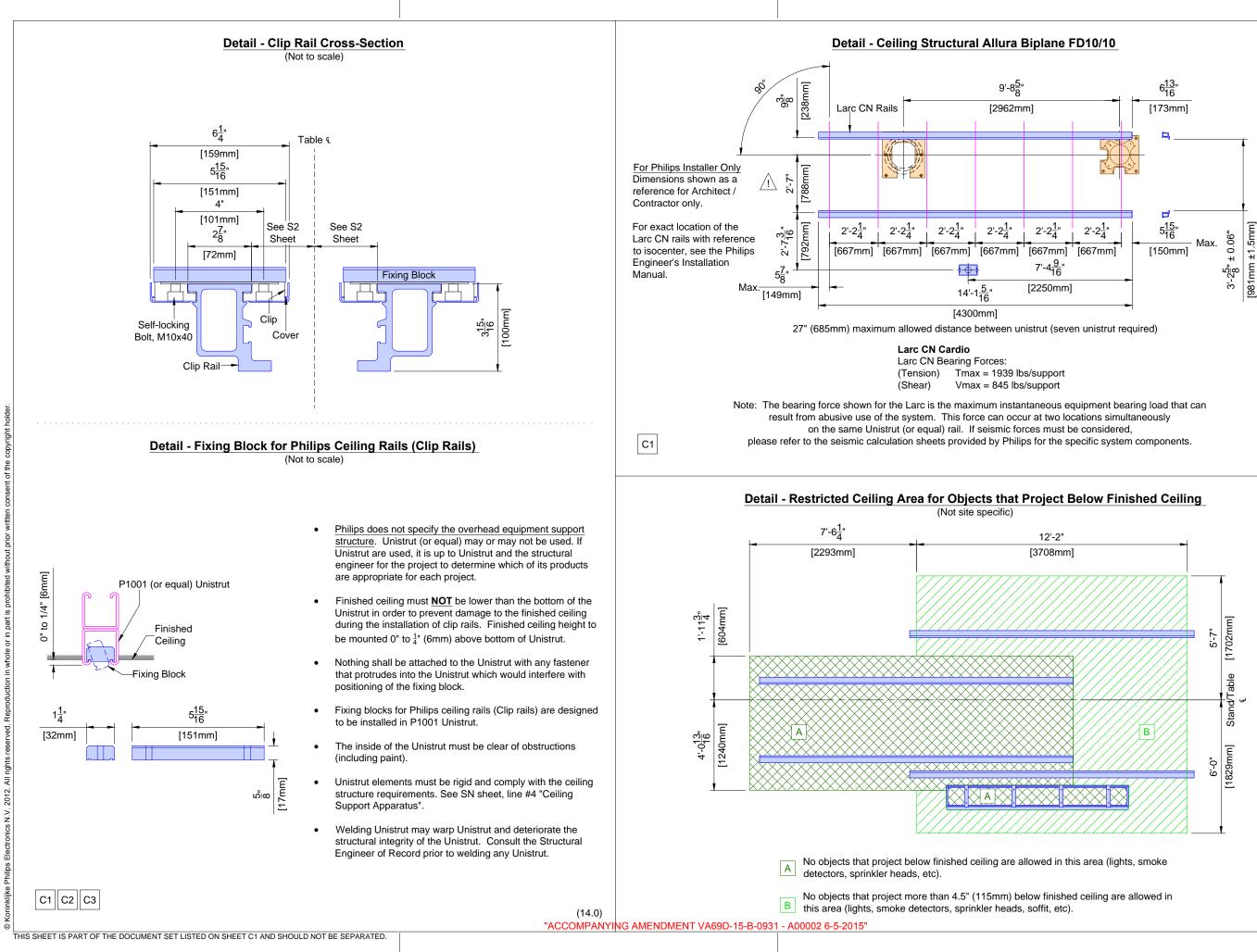




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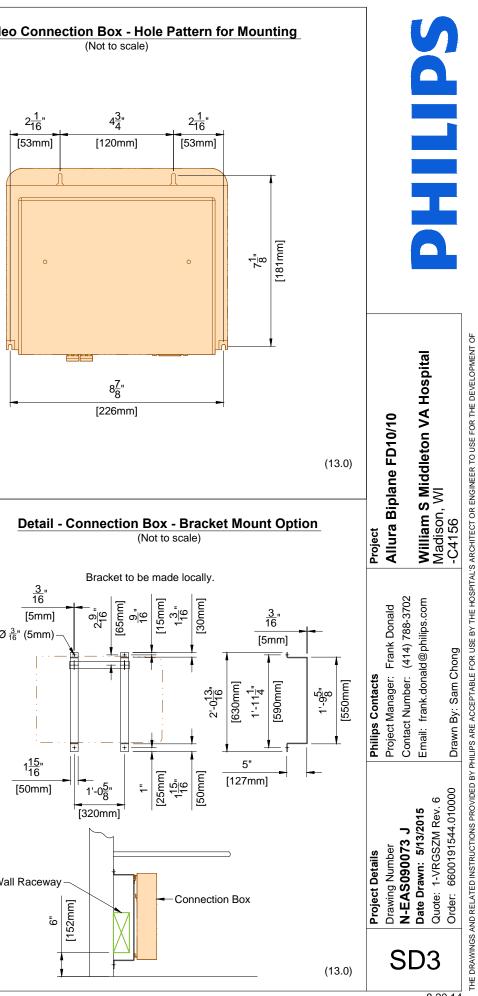


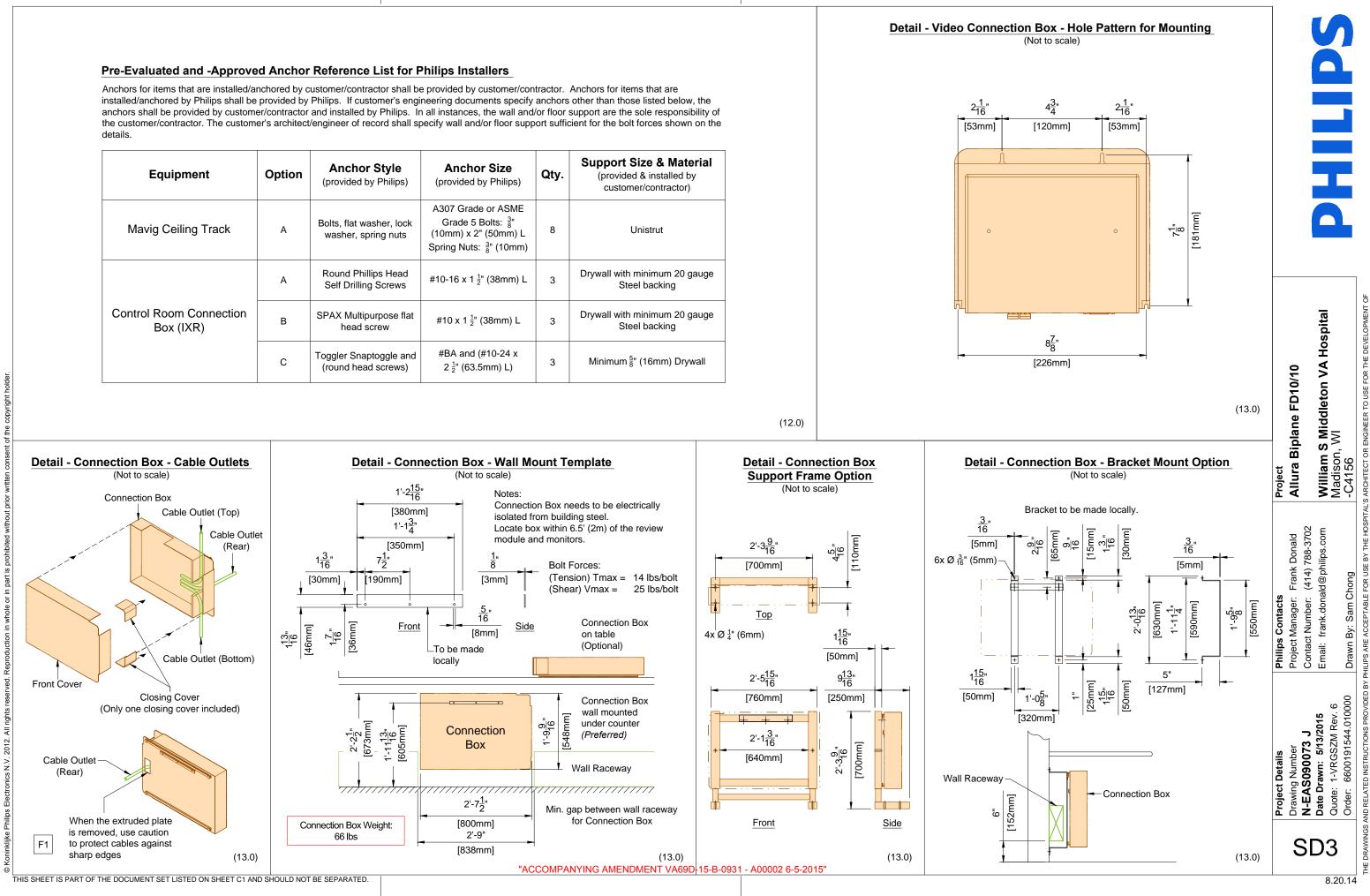
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Hospital William S Middleton VA Madison, WI Project Allura Biplane FD10/10 /ladisor C4156 tt Manager: Frank Donald ct Number: (414) 788-3702 frank.donald@philips.com Drawn By: Sam Chong Philips Contacts Project Manager: 1 Contact Number: 6 Email: frank.donal 6600191544.010000 ŝ 1-VRGSZM Drawing Number N-EAS090073 , Date Drawn: 5/13/ **Project Details** Quote: Order: SD2 (12.0)8.20.14

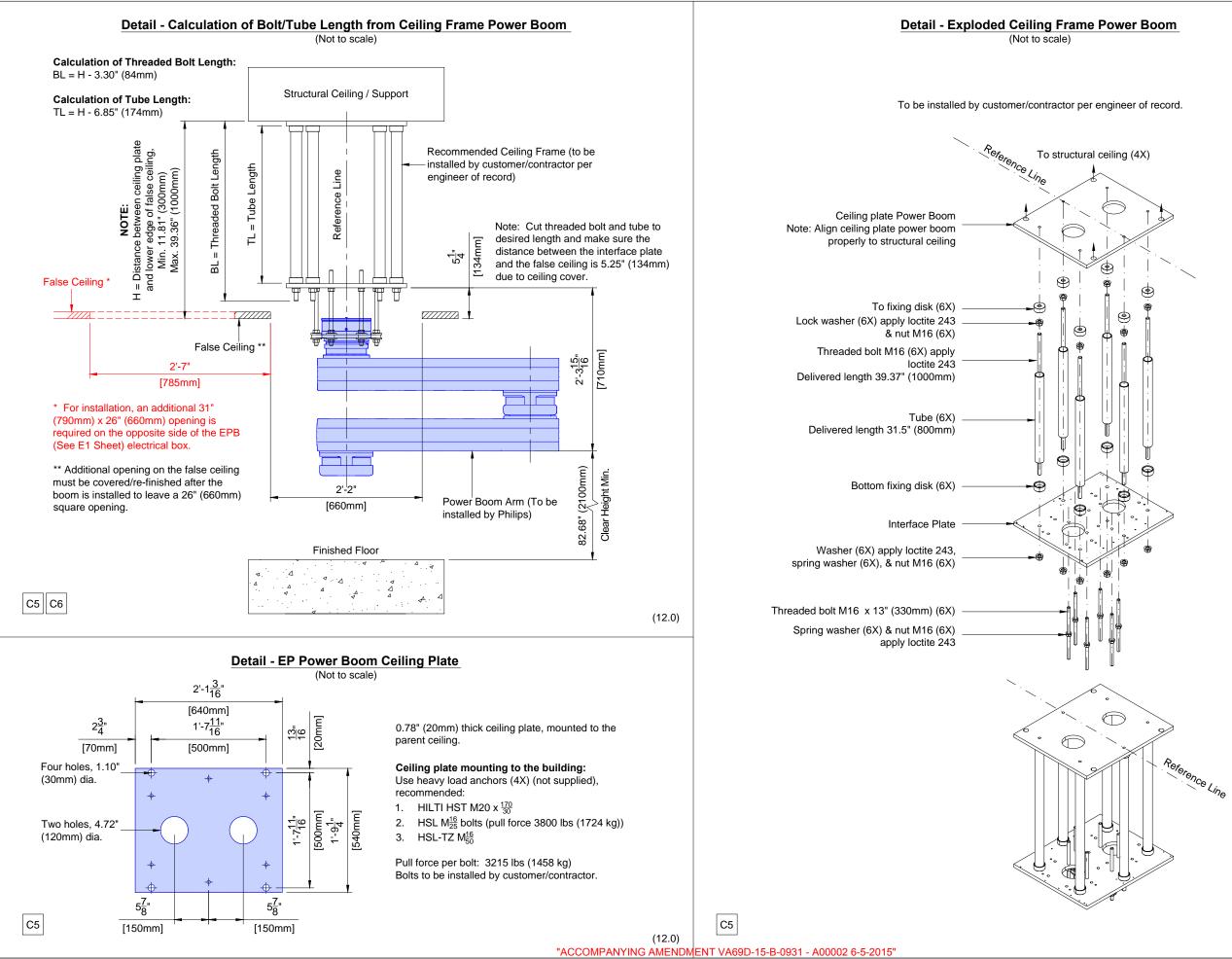
2 ⁿOR THE DRAWINGS AND RELATED INS CONSTRUCTION DOCUMENTS.

Equipment	Option	Anchor Style (provided by Philips)	Anchor Size (provided by Philips)	Qty.	Support Size & Material (provided & installed by customer/contractor)		
Mavig Ceiling Track	A	Bolts, flat washer, lock washer, spring nuts	A307 Grade or ASME Grade 5 Bolts: ³ / ₈ " (10mm) x 2" (50mm) L Spring Nuts: ³ / ₈ " (10mm)	8	Unistrut		
	A	Round Phillips Head Self Drilling Screws	#10-16 x 1 ½" (38mm) L	3	Drywall with minimum 20 gauge Steel backing		
Control Room Connection Box (IXR)	В	SPAX Multipurpose flat head screw	#10 x 1 ½" (38mm) L	3	Drywall with minimum 20 gauge Steel backing		
	С	Toggler Snaptoggle and (round head screws)	#BA and (#10-24 x 2 ¹ / ₂ " (63.5mm) L)	3	Minimum ⁵ " (16mm) Drywall		



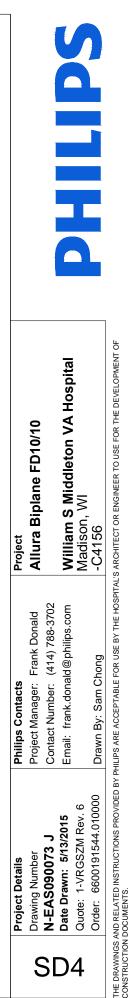


THE DRAWINGS AND RELATED INSTRI CONSTRUCTION DOCUMENTS.



THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED.

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Emergency Power	General Electrical Information
 Philips does not require equipment to be on emergency power. If the customer deems it necessary for the equipment to be supplied with emergency power, the following specifications must be applied: The Mains 40E cabinet feeding an Allura Xper system will have an absolute peak surge current of <380A. The transfer switch must be double actuator type with a minimum time delay of 400 milliseconds in both directions (utility to emergency - emergency to utility). This time is required to allow filters to dissipate their stored energy before a different mains voltage is applied. Russelectric type RMTD, Asco Series 7000 delayed transition transfer switch or equivalent is recommended. 	 General The customer shall be solely responsible, at its expense, for preparation of the site, including any required electrical alter with this plan and specifications, the architectural/construction drawings and in compliance with all safety and electrical obtaining all electrical permits from jurisdictional authority. Materials and Labor The customer shall be solely responsible, at its expense, to provide and install all electrical ducts, boxes, conduit, cable herein. Electrical Ducts and Boxes
To reduce the emergency power generator load demand, Philips equipment can be put into a lower power mode of operation by the connection of a potential free closure from the transfer switch. This potential free, normally open contact, has to be rated for 24VDC/100mA. For Philips cardio/vascular Allura equipment, the two wires from this contact have to be routed to the equipment area and connected to the System Coordinator cabinet (MA).	Electrical ducts and boxes shall be accessible and have removable covers. Floor ducts and boxes shall have watertight separate channels by metal dividers, separately specified herein, to separate wiring and/or cables into groups as follow protective earth wiring (PE). Group B: Output power wiring with associated protective earth wiring (PE). Group C: signal high-voltage cables, the use of 90 deg. ells is not acceptable. On ceiling duct and wall duct use 45 deg. bends at all cor tunnels supplied and installed by contractor to maintain separation of cables.
(14.0)	4. Conduit Conduit point - to - point runs shall be as direct as possible. Empty conduit runs used for cables may require pull boxes or cord shall be installed in each conduit run. All conduits which enter duct prior to their termination point must maintair over tunnels, or conduit supplied and installed by contractor from entrance into duct to exit from duct. Do not use flex of
Electrical Requirement Notes for Systems with Mains 40E Cabinet	5. Conductors
Electrical power distribution at the facility shall comply with:	All conductors, separately specified, shall be 75°C stranded copper, rung out and marked.
Utilization voltages per ANSI C84.1 - 1982 range A.	 Disconnecting Means A disconnecting means shall be provided as separately specified.
Voltage to be supplied is 3 phase, delta.	7. Warning Lights and Door Switches
Phase conductors to be sized for instantaneous voltage drop per NEC 517 - 73 and Philips recommendations.	"X-ray on" warning lights and x-ray termination door switches should be provided at all entrances to x-ray rooms as requ
Metal conduit shall not be used as the equipment ground conductor.	 Dimmer Switches X-ray room lights should be provided with dimmer switches.
The Philips system uses an isolated ground scheme grounding only the Allura system per clause 250.96B of the NEC. The raceway from the X-ray breaker (CB) to the Mains 40E Cabinet shall be supplemented by an internal insulated equipment grounding conductor installed in accordance with clause 250.146(D) of the NEC.	
ANSI / NFPA 70 - National Electrical Code	Electrical Notes
ANSI / NFPA 70 - National Electrical Code Article 250 - Grounding Article 517 - Healthcare Facilities ANSI / NFPA 99 - Healthcare Facilities NEMA standard XR9 - Power Supply Guideline for X-ray Machines	1. The contractor will supply & install all breakers, shunt trip and incoming power to the breakers. The exact location the architect or contractor.
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I alterations. The site preparation shall be in accordance rical codes, the customer shall be solely responsible for ables, wires, fittings, bushing, etc., As separately specified tight covers. Ducts shall be divided into as many as four llows: Group A: incoming power wiring with associated gnal and/or data wiring and/or cables. Group D: X-Ray I corners. All intersecting points in duct to have cross over							
lex conduit unless approved by Philips Service.							
required by code. (12.0)		Allura Biplane FD10/10		William S Middleton VA Hospital	M		E HOSPITAL'S ARCHITECT OR ENGINEER TO USE FOR THE DEVELOPMENT OF
tion of the breakers and shunt trips will be determined by	Project	Allura Big		William S	Madison.	-C4156	AL'S ARCHITECT OR E
t/raceways must be free from burrs and sharp edges over its ns.		ald	3702	com			
vill be supplied and installed by the contractor, subject to		rank Don	414) 788-:	@philips.		bug	DR USE BY TH
ength. In case of non - accessible floors, walls and ceilings, y be substituted. All raceways will be designed in a quire above - ceiling raceway to be installed with the covers Any changes in routing of raceway system could exceed d ceiling as possible.	Philips Contacts	Project Manager: Frank Dona	Contact Number: (414) 788-3	Email: frank.donald@philips.com		Drawn By: Sam Chong	E DRAWINGS AND RELATED INSTRUCTIONS PROVIDED BY PHILIPS ARE ACCEPTABLE FOR LISE BY TH
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and from the ERB to the Mains 40E Cabinet (per NEC	Detail	Numb	0060	awn:	1-VRG	56001	
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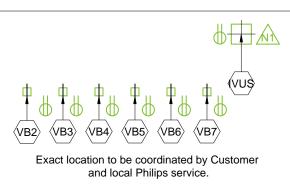
B Furnish C Installe	Electrical Legend			B Furn C Insta	Electrical Legend	
D Furnish E Existing F Future G Optiona	-			D Furn E Exisi F Futu G Optio	re	
[Litem Number Detail Sheet —				- Item Number Detail Sheet -	
	Description		\downarrow	\checkmark	Description	$] \downarrow$
$\langle CB \rangle \epsilon$	480V, 3 phase, Type D 125 A circuit breaker with long-time delay and shunt trip (e.g. Square D HDL36125 or equivalent) . Run power from breaker to "MA", leaving an 8' (2440mm) tail at "MA". See Sheet "ED1" for power quality requirements. Location per local code or owner requirements. (Not shown on plan)	ED1	в	(WL)	Warning Light - Provide a surface or flush mounted light fixture above door to indicate when X-ray is on, if required by local code or physicist of record. (Not shown on plan)	ED4
$\langle ST \rangle$	Shunt Trip (emergency off) - Large mushroom-head button on remote control station with contacts to operate feature of "CB" (if required by local code or owner, and mandatory for VA and D.O.D installations). (Not shown on plan)		в		Door Switch - 120V/5A switch limited to open when door is open. Mount in upper corner on strike side of main entry door(s) (Cooper no. 1665 or equivalent), if required by local code or physicist of record. See Sheet "ED2" diagram for connection details. (Not shown on plan)	ED4
	Local building steel (i.e. structural steel, cold water pipe > 2" (50mm), ground rod). (Not shown on plan)		в	NT	RJ45 type Ethernet 10/100/1000 Mbit network connector with access to customer's network. Locate within 10' (3050mm) 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.	
	Equi-Potential Reference Bar mounted in a 12" (305mm) W x 12" (305mm) H x 4" (105mm) D pull box with hinged cover, surface mounted to the bottom of "WR2" when possible.	ED2	В	<u>N2</u>	RJ45 type Ethernet 10/100/1000 Mbit network connector. Access to customer's network via their remote access server is needed for Remote Service Network (RSN) connectivity.	N1
	19 $\frac{1}{4}$ " (490mm) W x 67" (1705mm) H x 4" (105mm) D flanged-edge terminal wall box, surface mounted 75"	ED3	В	¶s ₪	120V/20A dedicated duplex outlet for service in the equipment room. (Not shown on plan) 120V/20A dedicated duplex outlet for each of the Video Connection Boxes. Verify electrical requirements for	
MB 2ME	(1905mm) A.F.F. to top of box. General contractor to cut top and/or bottom of box as required.	ED3		₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩ ₩	customer provided equipment. 4" (105mm) W x 4" (105mm) H x 4" (105mm) D pull box with removable screw-type cover plate, flush mounted. Exact height to be determined. Location shown is recommended and may be changed - verify relocation with	
CY WM r	Grommet opening on "WR3". Approximate location shown is recommended and may be changed - verify relocation with local Philips Service.			/B5 VB6 /B7 VB8	local Philips Service.	
	10" (255mm) W x 10" (255mm) L x 6" (155mm) D floor box, under the floor with a 5" (130mm) core drill up to the underside of AD7 universal floorplate.		в€		18" (460 mm) W x 18" (460 mm) L x 6" (150 mm) D ceiling box, flush mounted with removable screw-type cover plate. Provide minimum 72.5 PSI to maximum 116 PST @ 2.6 CFM of compressed air for boom movement control; connect to the 8mm inlet attached at the bottom of the EP Boom Interface Plate.	
$\langle SP \rangle f$	12" (305mm) W x 12" (305mm) L x 4" (105mm) D floor box with water tight removable screw-type cover plate, flush mounted @ Poly G cable opening. See "Detail - Poly G Floor Plate Cable Entrance" on Sheet "ED3" for cable routing methods.		В	$ \bigcirc^{1} $	Provide (2) 120V/20A power supply for the EP Power Boom convenience and emergency outlets. Contractor to install power to the EP Boom.	
	18" (460mm) W x 18" (460mm) L x 6" (155mm) D ceiling box, flush mounted with removable screw-type cover plate. Provide one 3" (80mm) diameter knockout.		В	VUS	10" (255mm) W x 10" (255mm) L x 6" (155mm) D floor box, flush mounted with removable screw type cover plate.	
(TV)	18" (460mm) W x 18" (460mm) L x 6" (155mm) D ceiling box, flush mounted with removable screw-type cover plate. Provide a $2\frac{1}{2}$ " (65mm) round cutout (Two $2\frac{1}{2}$ " (65mm) round cutouts are required for systems with two monitor carriages - verify with local Philips Service).		В	\bigoplus	120V/20A dedicated duplex outlet for IVUS (Volcano Intravascular Ultrasound).	
/R1 1	10" (255mm) W x 4" (105mm) D wall raceway, surface mounted with removable screw-type cover plate. "WR1" is at finished floor. "WR2" is at 75" (1905mm) A.F.F. to bottom of raceway.	ED3	в	SV	3" (80mm) flush conduit opening for IVUS system cables. Opening must be covered if the IVUS system is planned for future installation. See "Sheet E1" for exact location.	
	10" (255mm) W x 4" (105mm) D wall raceway, surface mounted with removable screw-type cover plate. "WR3" is at finished floor. "WR4" is at 86" (2185mm) A.F.F. to bottom of raceway. "WR3" may need to be cut at the location of the "CY" connection box.	ED3			10" (255mm) W x 3 $\frac{1}{2}$ " (90mm) D ceiling raceway, mounted above the ceiling line with removable screw-type cover plate accessible from top.	ED3
	Auxiliary Box - 6" (155mm) W x 6" (155mm) H x 4" (105mm) D wall box, flush mounted 70" (1780mm) A.F.F. to the bottom of the box with removable screw-type cover plate. Height and location shown are recommended and may be changed - verify height and relocation with local Philips Service.		В	R1 R2	10" (255mm) W x 4" (105mm) D riser duct with removable screw-type cover plate, surface mounted. "R1/R2" from wall raceway to ceiling raceway.	ED3
	4" (105 mm)W x 4" (105 mm)L x 2 1/2" (65 mm)D ceiling box, flush mounted with removable screw-type cover plate. Recommended location is near or above the cable spooler.					
	4" (105 mm)W x 4" (105 mm)L x 2 1/2" (65 mm)D ceiling box, flush mounted with removable screw-type cover plate. Recommended location is near or above the cable spooler.					
^r	·		1		See E1 - E4 sheets for conduit and raceway requirements.	

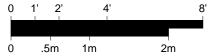
part is or in <u>e</u> .⊑ Re ed. nics N.V. 2012. All rights Ш Philips nklijke © Ko
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 1-VRGSZM Rev. 6

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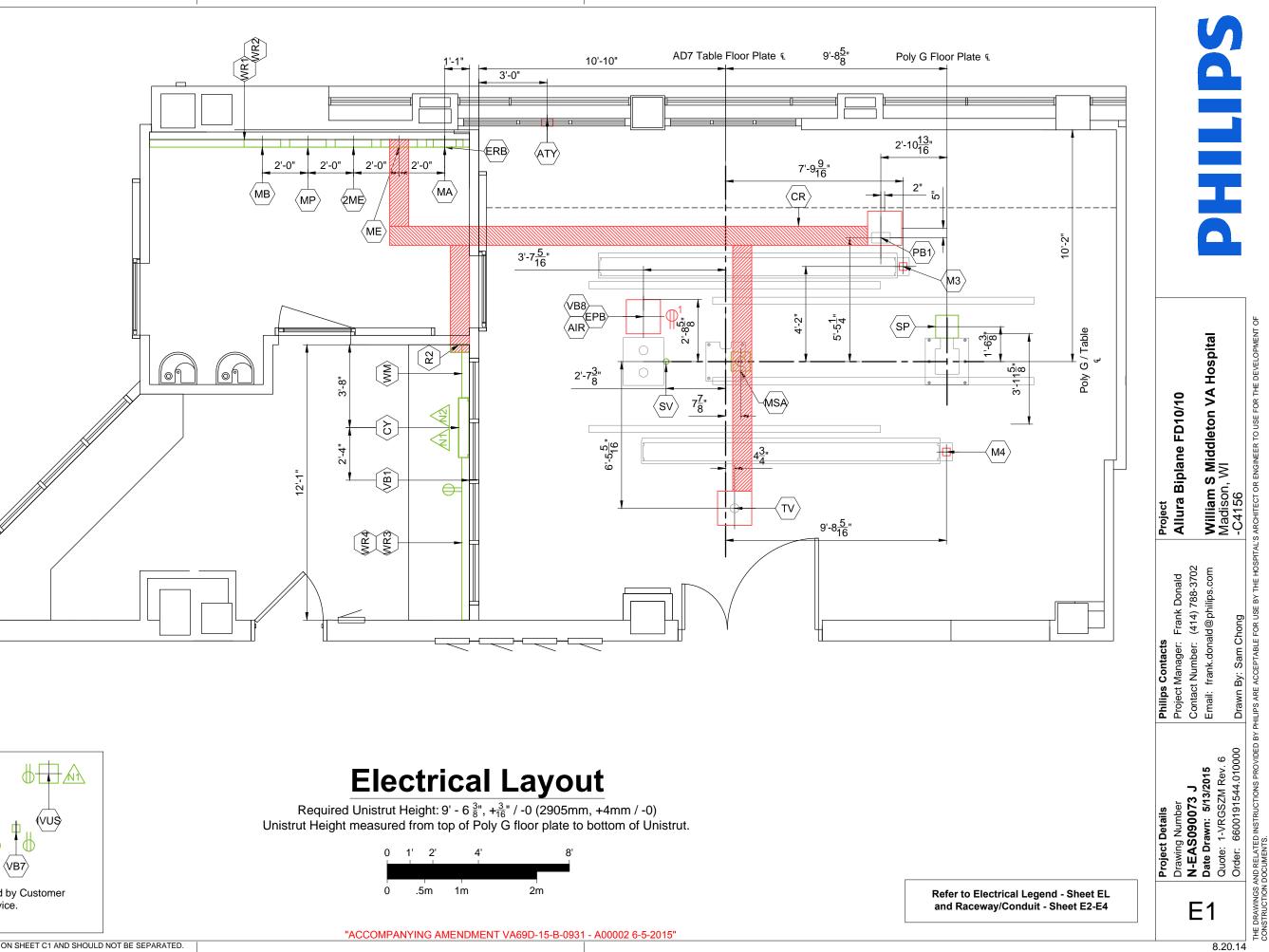
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Equipment Closet (Site Specific) 14'-0<u>1</u>" (CR1) 2'-0" 2'-0" 1'-1" 10" $\langle \mathsf{R1} \rangle$ ERB WR2 $\langle \mathsf{ME} \rangle$ $\langle MP \rangle$ (2ME) $\langle MA \rangle$ $\langle \mathsf{MB}
angle$ ڡؖ 6 6'-3" 10 WR1 **Finished Floor Control Room** (Site Specific) 12'-1" WR4 þ Ņ 2'-4" (VB1) 3'-8" 2'-6" • • • (CY) WR3 WR3 Finished Floor (ww) /wi/ /wi/ 10" 2'-0" 5'-7"

Note: The use of 90 degree ells is not acceptable. Use 45 degree bends at all raceway corners. For conduit runs, use the minimum bending radius specific to the conduit diameter. The use of crossover tunnels at all applicable locations is required. The above mentioned recommendations will help to ensure the integrity of the cables and fiber optic runs.

* Countertop Height Guide: 30" (765mm) for standard seated height. 36" (915mm) for standard standing height. * Ensure that the wall junction boxes are mounted perpendicular to the floor.

placement on Philips drawings.

2012.

Project Details	Philips Contacts	Project	
Drawing Number N-EAS090073 J	Project Manager: Frank Donald Contact Number: (414) 788-3702	Allura Biplane FD10/10	
Date Drawn: 5/13/2015		William S Middleton VA Hospital	
Order: 6600191544.010000	00 Drawn By: Sam Chong	Iviauisori, vvi -C4156	

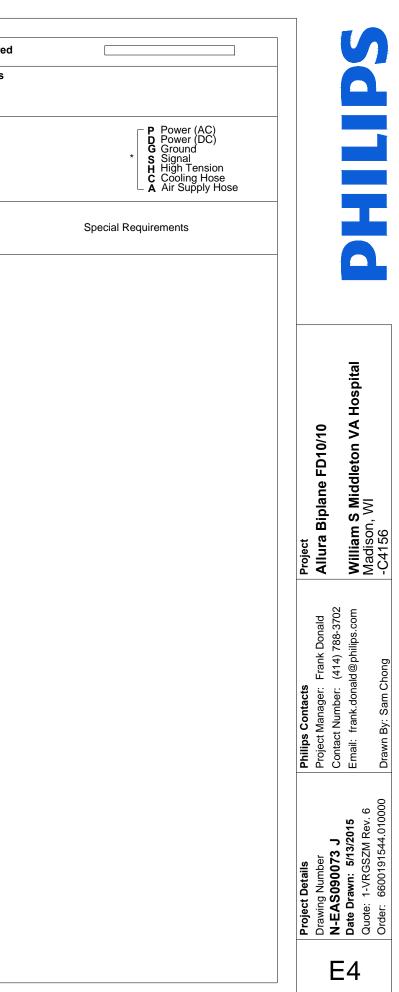
* Verify exact ceiling height of Equipment and Control Room Area. * Architect to coordinate with end users/technicians to determine final placement of control desk components prior to installation in order to avoid rework. Architect to coordinate with Philips Project Manager to reflect final

						nduit Requi General Note			[nduit Requi eneral Note		
1.	All cond	luit runs i	must take n	nost direc	t route poin		-		1.	All cond	duit runs	must take n	nost direc	t route poin			
2. A C					ng. bles installed by			_	2.					ng.			
B C C C D C E C F C	Conduit sup Conduits and Conduit exis Conduit exis Conduit exis	plied/installe d cables sup ting - cables ting - cables ting - cables	ed by contractor oplied and insta s supplied and i	r - Philips ca Illed by contr installed by F hilips and installed by c	bles installed by ractor Philips stalled by contra contractor	y contractor	 Power (AC) Power (DC) Goround Signal High Tension Cooling Hose Air Supply Hose 		B (C (D (E (F (Conduit sup Conduits an Conduit exis Conduit exis Conduit exis	, plied/installe d cables sup sting - cables sting - cables sting - cables	d by contractor pplied and insta supplied and i	- Philips cat lled by contra nstalled by P hilips and ins nstalled by c	oles installed by actor Philips talled by contra ontractor	contractor	 P Power (AC) D Power (DC) G Ground * S Signal H High Tension C Cooling Hose A Air Supply Hose 	
	Condui		Conduit	Cable	Minimum	Maximum				Condu		Conduit	Cable	Minimum	Maximum		
Run No.	From	То	Quantity	Туре (*)	Conduit Size	Conduit Length	Special Requirements		Run No.	From	То	Quantity	Type (*)	Conduit Size	Conduit Length	Special Requirements	
1	Power Panel		1	Р	Per N.E.C	Per N.E.C.	See conductor/ground size chart.	A	31		(WM)	1	S	1"	82'	Via Raceway	
2			1	Р	2 <u>1</u> "	Per N.E.C.		A	32	PB1		1	н — — — — — — — — — — — — — — — — — — —	2 <u>1</u> "	47'	High Tension Cables.	
3	Св	ST	1	Р	<u>3</u> "	50'		A	33	PB1		1	s	1"	49'	Via Raceway	
4	ERB	GE	1	Р	<u>3</u> "	6'		A	34	PB1	2ME	1	P/G	1 ½"	49'	Via Raceway	
5	ERB	Room Outlets	1	Р	<u>3</u> "	-	See Sheet "ED2" for details.	A	35	PB1		2	с	1 <u>1</u> "	57'	Tube Cooling Hoses.	
6			1	 P	<u>3</u> "	55'		A	36	PB1		2	с	2 ¹ / ₂ "	49'	Flat Detector Cooling Hoses.	
7	ATY		1	s	<u>3</u> "	55'		A	37	PB1		1	s	2 <u>1</u> "	49'	Via Raceway	
8	ATY		1	s	2 ¹ / ₂ "	41'		A	38	PB1		1	P/G	1 ¹ / ₂ "	49'	Via Raceway	/10
9	ATY	$\langle TV \rangle$	1	s	<u>3</u> "	65'		A	39	PB1		1	s	2"	49'	Via Raceway	Project Allura Biplane FD10/1
10			2	C	1 ¹ / ₂ "	60'	Tube Cooling Hoses.	C	2 40	MSA	WR3	2	s	1 ¹ / ₂ "		For future options (Patient Monitoring). Verify with local Philips Service if auxiliary box should be used.	Biplane FD10/10
11			1	P/G	1 ¹ / ₂ "	59'		C	G 41	Third Party	Third Party	-	-	-	-	For Injector, Auxiliary Box, Patient Monitoring, Video Networking, etc.	plar
12			1	s	1"	59'		C	G 42	Third	ERB	-	G	-	-	For Injector, Auxiliary Box, Patient Monitoring, Video Networking, etc.	a Bi
13			1	н	2 ¹ / ₂ "	57'	High Tension Cables.	A	43			1	s	1"	82'	Via Raceway	Project Allura
14			1	P/G	2"	59'		A	44	VB2	MB	1	s	1"	82'		<u>4</u> 4
15			1	S	2 ¹ / ₂ "	59'		A	45	VB3		1	s	1"	82'		2
16			2	с	2 ¹ / ₂ "	52'	Flat Detector Cooling Hoses	A	46	VB4		1	s	1"	82'		Donald 788-370
17			1	G	<u>3</u> " 4	50'		A	47	VB5	MB	1	s	1"	82'		Contacts Manager: Frank Donald t Number: (414) 788-370
18		$\left \left< MA \right> \right $	1	S	2"	50'		A	48	VB6		1	s	1"	82'		Frank (414)
19	MSA		1	S	2 <u>1</u> "	39'		A	49	VB7	MB	1	s	1"	82'		Philips Contacts Project Manager: Contact Number:
20	MSA		1	P/G	2"	39'		A	50	VB8	МВ	1	s	1"	82'		, Con Mani t Nun
21	MSA		1	S	2 <u>1</u> "	39'		A	× 51	VB2		1	s	<u>1</u> "	91'		Philips Project I Contact
22			1	 P	1 <u>1</u> "	52'	Via Raceway	A	52	(VB3)		1	s	<u>1</u> "	91'		ā č č
23			1	S	2 ¹ / ₂ "	52'	Via Raceway	A	53	VB4		1	s	<u>1</u> "	91'		
24	$\left \left\langle TV\right\rangle \right $		1	s	2"	52'	Via Raceway	A	54	VB5		1	s	<u>1</u> "	91'		
25	$\left \left\langle TV\right\rangle \right $	MB	1	s	1 ¹ / ₂ "	52'	For EP Cockpit XL. Via Raceway	A	55	VB6		1	s	<u>1</u> "	91'		ls ber)73 J
26		(WM)	1	S	<u>3</u> " 4	65'	For Intercom. Via Raceway	A	56	(VВ7)		1	s	<u>1</u> "	91'		Project Details Drawing Number N-EAS090073
27			1	S	2"	50'	Via Raceway	A	57	VB8	CY	1	s	<u>1</u> "	91'		Project Details Drawing Numbe N-EAS09007
28			1	P/G	1 <u>1</u> "	55'	Via Raceway	A	58			1	s	1 1/2"	82'		rojec rawin -EA:
29			1	S	2 <u>1</u> "	55'	Via Raceway	A	59	МВ	CY	1	s	3/2"	55'		đđŻ
30			1	S	1 ¹ / ₂ "	82'	Via Raceway	C	60	(VUS	sv	1	s	3"	75'	Conduit opening must be covered if the IVUS system is planned for future installation.	E

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED.

THE DRAWINGS AND RELATED CONSTRUCTION DOCUMENTS.

	1. 2.	All cond All cond	uit runs uit runs	must take n must have a	nost direc a pull strir		nduit Requi eneral Note t to point.		1. All c 2. All c	onduit runs onduit runs	must take m must have a	nost direc a pull strin	G	nduit Requi eneral Note t to point.	
	B Co C Co D Co E Co F Co	onduit supp onduits and onduit exist onduit exist onduit exist	lied/installe cables sup ing - cables ing - cables ing - cables	ed by contractor oplied and insta s supplied and i	- Philips cat lled by contra nstalled by P nilips and ins nstalled by c	Philips talled by contra ontractor	contractor	* Power (AC) D Power (DC) G Ground S Signal H High Tension C Cooling Hose A Air Supply Hose	B Condui C Condui D Condui E Condui F Condui	supplied/install s and cables su existing - cable existing - cable existing - cable	ed by contractor ed by contractor pplied and instal s supplied and ii s supplied and ii s supplied and ii rify with local Ph	- Philips cat lled by contra nstalled by P nilips and ins nstalled by co	les installed by actor hilips talled by contra	contractor	
	Run No.	Conduit From	t To	Conduit Quantity	Cable Type (*)	Minimum Conduit Size	Maximum Conduit Length	Special Requirements	Run No.	nduit om To	Conduit Quantity	Cable Type (*)	Minimum Conduit Size	Maximum Conduit Length	
A	61	ЕРВ	WR2	1	G	1"	-		110.						
A	62	(EPB)	CY	1	S	1"	78'								
A	63	EPB	MB	1	S	1"	68'								
с	64	(EPB)	WR3	1	S	2 <u>1</u> "	-	*For 3rd party equipment.							
G	65	(EPB)	WR3	1	Р	2 <u>1</u> "	-	*For 3rd party equipment.							
с	66	WR1	WR3	1	Р	2 <u>1</u> "	-	*For 3rd party equipment to control room.							
G	67	WR1	WR3	1	S	2 <u>1</u> "	-	*For 3rd party equipment to control room.							
С	68		M3	1	 P	<u>3</u> " <u>3</u> "		For Surgical Light.							
G	69	МЗ	(ERB)	1	G	<u>3</u> " 4	-	For Surgical Light. Per local code.							
с	70	MA	$\langle M4 \rangle$	1	Р	<u>3</u> " 4	-	For Surgical Light.							
G	71	$\langle M4 \rangle$	ERB	1	G	<u>3</u> " 4	-	For Surgical Light. Per local code.							
								* Verify with 3rd party vendor for conduit and power requirements of the components placed in the EP Power Boom (EPB).							



Ш 뿓 ¹OR S ARCHITECT OR ENGINEER TO USE ΗH В≺ Drawn By: Sam Chong PHILIPS ARE ACCEPTABLE FOR USE Β THE DRAWINGS AND RELATED INSTRUCTIONS PROV CONSTRUCTION DOCUMENTS.

Pow	ver Quality Requirements (Mains 40E Cabinet)
Power Output	100kW
Supply Configuration	3 phase, identical 3 wire power and isolated unity ground with bonding conductor, delta (preferred) or wye
Nominal Line Voltage	480 VAC, 60 Hz
Line Voltage Variation	Voltage Variations are never to exceed $\pm 10\%$ when measured using 10 minute mean RMS values with a measurement window of 1 week. At least 95% of all measured 10 minute mean RMS values shall be within $\pm 5\%$ of the configured nominal voltage.
Line Voltage Balance	2% maximum of nominal voltage between phases
Frequency Variation	± 1.0 Hz
Voltage Surges	To 110% of steady-state voltage 100 msecs. Maximum duration, 6 per hour max.
Voltage Sags	To 90% of steady-state voltage 100 msecs. Maximum duration, 6 per hour max.
Line Impulses	1000 VPK above phase-neutral RMS absolute maximum. No more than 1 impulse per hour to exceed 500 VPK.
Neutral-Ground Voltage	2.0 volts maximum RMS value
Neutral-Ground Impulses	No more than 1 per hour that exceeds 25 volts and 1 Mjoule
High Frequency Noise	3.0 volts steady-state maximum. Over 3.0 volts permitted for 100 msec. maximum, 1 per hour max.
Grounded Conductor Impedance	0.1 Ohms @ 60 hz. maximum

Branch Power	225 kVA
Max. Standby Current	8 A @ 3mA, 100 kVP continuous
Circuit Breaker (CB)	3 phase, Type D 125 A with long-time delay and shunt
**Conductor/Ground Size Chart: Engineer of record r Recommended conductor/ground sizes for 1% impe Based on 20°C co	dance of supply conductors to circuit breaker (CB).
Nominal Line Voltage (in VAC) (60 Hz)	480
1/0 AWG	76.92ft
2/0 AWG	96.74ft
3/0 AWG	121.95ft
4/0 AWG	155.34ft
250 KCM	181.82ft
300 KCM	217.98ft
400 KCM	294.12ft
Max. Instantaneous Power (1000mA @ 100 kVP)	249 kVA
Max. Inst. Current @ CB (RMS value over half-cycle)	300 A
Max. Phase-phase impedance @ CRC	0.465 Ω
Max. Load Voltage Drop @ CB (RMS value over half-cycle)	139.5 V
Output Voltage Mains 40E Cabinet	480 VAC ± 10%
Max. Inst. Current @ Mains 40E Cabinet output (RM value over half-cycle)	300 A
Max Phase-phase impedance @ Mains 40E Cabinet CRC input terminal	0.545 Ω
Max. Load Voltage Drop @ Mains 40E Cabinet output	163.5 V

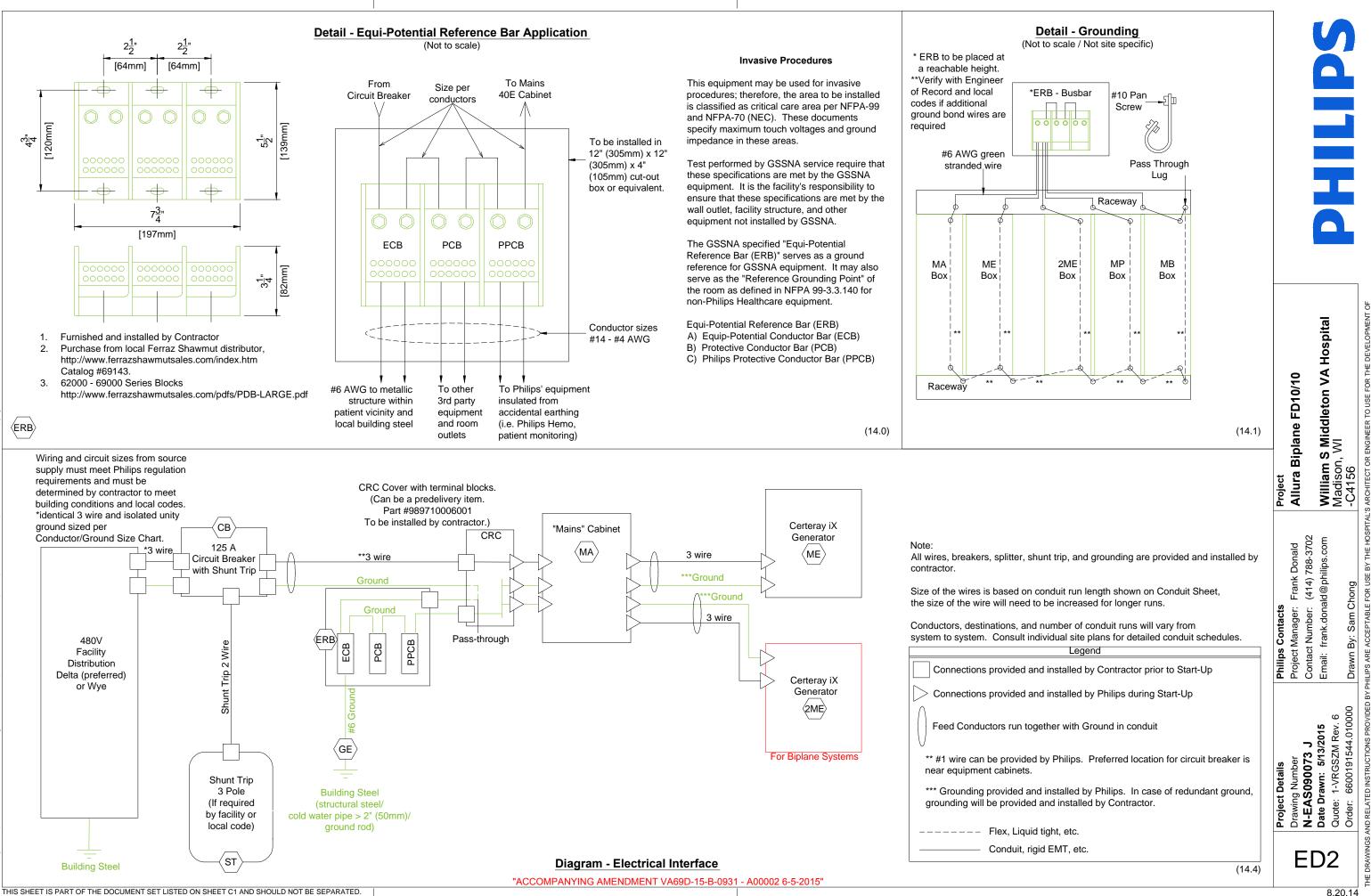
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Branch Circuit and Wire Gauge Requirements (Mains 40E Cabinet)

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Project	Allura Biplane FD10/10	William S Middleton VA Hospital	-C4156	HOSPITAL'S ARCHITECT OR ENGINEER TO USE FOR THE DEVELOPMENT OF
Philips Contacts	Project Manager: Frank Donald Contact Number: (414) 788-3702	Email: frank.donald@philips.com	Drawn By: Sam Chong	PHILIPS ARE ACCEPTABLE FOR USE BY THE HOSPITA
Project Details	Drawing Number N-EAS090073 J	Date Drawn: 5/13/2015 Quote: 1-VRGSZM Rev. 6	Order: 6600191544.010000	THE DRAWINGS AND RELATED INSTRUCTIONS PROVIDED BY F
Project Details	Drawing Number N-EAS090073 J	Date Drawn: 5/13/2015 Quote: 1-VRGSZM Rev. 6	Order: 6600191544.010000	THE DRAWINGS AND RELATED INSTRUCTIONS PROVIDED BY PHILIPS ARE ACCEPTABLE FOR USE BY THE

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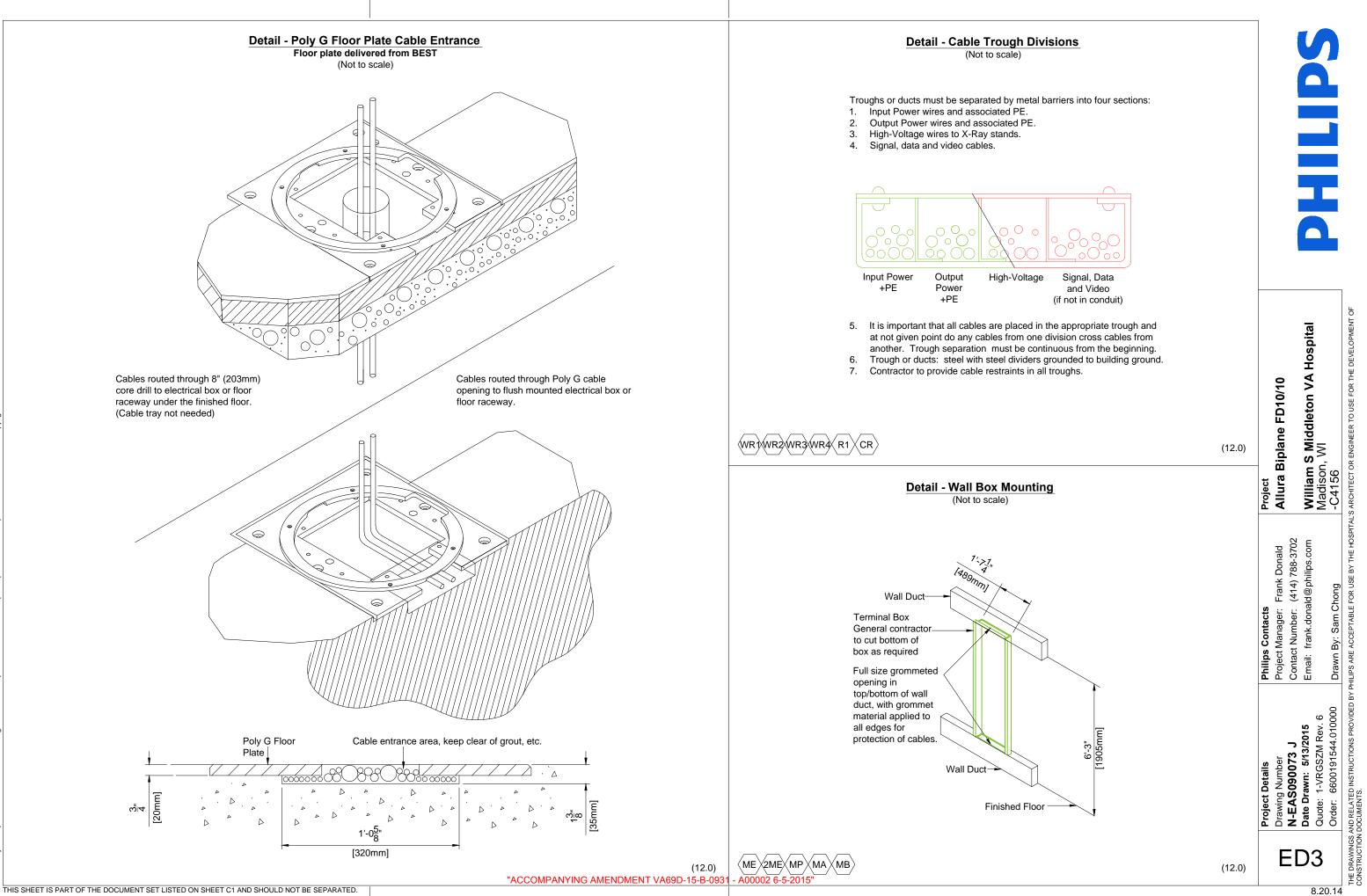
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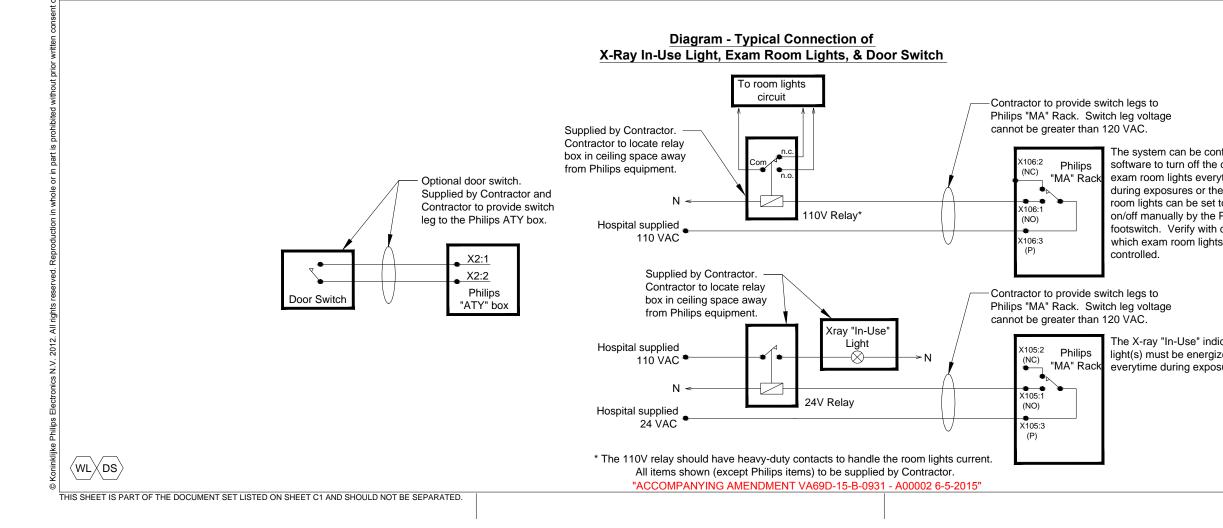
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		Project	Allura Biplane FD10/10	William S Middleton VA Hospital Madison, WI	-C4156	THE DRAWINGS AND RELATED INSTRUCTIONS PROVIDED BY PHILIPS ARE ACCEPTABLE FOR USE BY THE HOSPITAL'S ARCHITECT OR ENGINEER TO USE FOR THE DEVELOPMENT OF CONSTRUCTION DOCUMENTS.
figured by desired time e exam o turn Philips customer e are		Philips Contacts	Project Manager: Frank Donald Contact Number: (414) 788-3702	Email: frank.donald@philips.com	Drawn By: Sam Chong	PHILIPS ARE ACCEPTABLE FOR USE BY THE HOSPITAL
cator ed ures.		Project Details	Drawing Number N-EAS090073 J	_	Order: 6600191544.010000	NGS AND RELATED INSTRUCTIONS PROVIDED BY I TION DOCUMENTS.
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Philips Healthcare Remote Services Network (RSN)

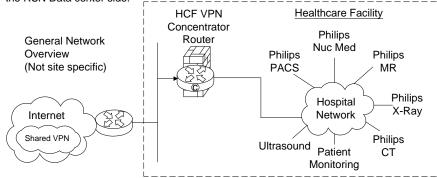
Secure broadband connection required for Philips remote technical support, diagnostics, and applications assistance

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

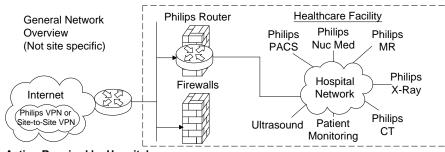
This connectivity method is designed for customers who have a dedicated high speed connection for Philips equipment.

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

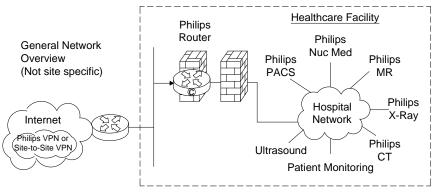
This connectivity method is designed for customers who prefer a Philips RSN Router installed on site utilizing all the security features provided and managed by Philips.



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. "ACCOMPANYING AMENDMENT VA69D-15-B-0931 - A00002 6-5-2015"

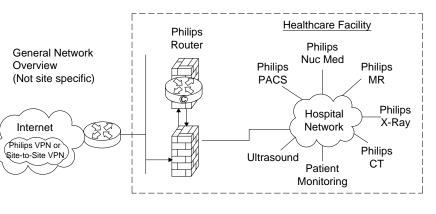
This connectivity method is designed for customers who prefer a Philips RSN Router installed equipment.



Action Required by Hospital:

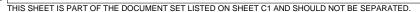
- Assign a fixed public IP Address from the ISP to be configured on the Philips router. This is the DOTTED link on the picture connected to the firewall. - Assign a Back end IP for the Philips router on the Hospital Network. - Complete appropriate Site Checklist. - Route traffic from within the hospital 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 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.



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

on site by setting up an IP-Based policy allowing access thru existing HCF Firewall to Philips

This connectivity method is designed for customers who prefer the RSN Router installed inside



(12.0)

System Network Information MPORTANT NOTE: It is the customer's responsibility to coordinate with the local Philips Engineer to provide ALL required network information and install ALL required network cabling & drops according to Philips specifications PRIOR to the scheduled installation start date. Failure to do so may delay system installation and jeopardize the customer hand over date.

Allura	IP Sec []yes []no	XperIM	IP Sec []yes []no			Time Synchronizatio	on
Physical Location:			Location	1	Location 2	2 L	ocation3	Physical Location:	
lostname:		Physical Location:		I		I		Server Name:	
MAC Address:		Hostname:						RIS	Physical Locatio
IP Address		MAC Address:							Basic Local RIS
Netmask:		IP Address						Hostname:	
Gateway:		Netmask:						IP Address:	
AE Title:		Gateway:						AE Title:	
Port Number (5101):		AE Title:						Max PDU Size:	16384 or
XtraVision	IP Sec []yes []no	Port Number (3010):						Port Number:	
Physical Location:		Remote Software In	stallation (R	PS)				Secure Node:	
Hostname:		Enable Distribution:		[]yes [] no		Encryption:	
MAC Address:		Enable Installation:		[]yes [] no		Certificate Name:	
IP Address		Dicom Printer	I					PPSM IHE	
Netmask:			Location 1	Locat	tion 2 Lo	cation3	Location 4	Compatible:	
Gateway:		Physical Location:						Time Synchronizatio	on
AE Title XtraVision:								Allura Xper:	20/21(ftp), 80(http
Port Number (3110):		Hostname:							9903(fsf.net)
AE Title for X-Ray Mod:		IP Address						Allura CV20:	20/21(ftp), 80(http
P for X-Ray Modality:		AE Title:						XtraVision:	20/21(ftp), 80(http 5900(vnc), 9905(l
P Navigator	IP Sec []yes []no	Port Number :						EP Navigator (R3):	20/21(ftp), 443(ht
Physical Location:		PACS	Physical Log	Store/	Store/	Query/	Storage/	EP Cockpit (R1.2):	20/21(ftp), 80(http
Hostname:			1	Import 2		Retrieve			9903(fsf.net)
MAC Address:		Hostname:						CX50:	
P Address		IP Address							
etmask:		AE Title:						Xper IM:	
ateway:		Port Number :						View Forum	
E Title:		PACS	Physical Lo					Hospital Network	
ort Number:			Store/ Import 1	Store/ Import 2	Store/ Export	Query/ Retrieve			M2M Server
/iew Forum	IP Sec []yes []no	Hostname:							(PRS)
hysical Location:		IP Address						Scheme (https):	
ostname:		AE Title:						IP Address (192.68.49.50):	
IAC Address:		Port Number :						Portnumber (443):	
P Address		Audit Trail						Use Proxy Server:	[]yes []no
Vetmask:		Physical Location:						IP Address	
Gateway:		Hostname:							
AE Title:		IP Address						Port Number:	
		AE Title:						User Name:	
Port Number:		Port Number :						Password:	

Locatio	n:	
cal RIS	WLM	MPPS
	[]yes []no	[]yes []no
	[]yes []no	[]yes []no
		[]yes []no

, 80(http), 443(https), 5900(vnc),

, 80(http), 4440(fsf)

, 80(http), 443(https), 5660(ist/ice),), 9905(lots)

, 443(https), 5660(ist/ice), 9055(lots)

ttp), 443(https),	, 5900(vnc),
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rver)	Proxy	ePO Server (PRS)
] no		

(13.0)

Instructions

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2012. cs N.V. 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.

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED.

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	Non-Philips provided
Modality:	Conduit lengths measured
Order:	(not just conduit run ler
Site Name:	
Location:	
Contact Name:	
Contact Phone Number	
Customer site preparation verified in general against the Philips final planning drawings.	
□ Walls finished including painting.	
\Box 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 ***.	
Dedicated phone line for modem use***.	
Room has been cleaned ***.	
Cabinets and casework installed (with insulation and building steel) according Philips specifications***.	
RSN survey completed and submitted	
Philips RSN Champion contacted.	
Approved for Delivery	
Project Manager	Date
Service Engineer	Date
"ACCOMPANYING AMENDMEN"	T VA69D-15-B-0931 - A00002 6-5-2015"

Items Specific for the Cardio/Vascular Modality

Unistrut installed and level according to Philips specifications.

Floor plates installed and level according to Philips specifications.

 \Box All cover plates have holes punched and nipples required and bushings installed.

Emergency power requirements installed according to Philips specifications.

Building steel ground installed to ECB section of ERB.

Non-Philips provided room electrical equipment grounds installed to PCB middle section of ERB.

Conduit lengths measured according to Philips specifications. Note: Specifications is from source box to destination box (not just conduit run length).

Routing of ductwork and conduits must be installed according to Philips specifications.

