PHILIPS

Healthcare

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Pre-Order Site Preparation Support Document

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

Revision History

Note for Architects and/or Contractors: If revisions are listed, these drawings must be thoroughly reviewed so that all changes can be incorporated into your project

Rev.	Date	Revision Descriptions	By
A	12/29/2014	Updated drawing equipment with order #: 6600232577.010000 and 1-150H6Z2 Rev. 2.	SC
B	1/14/2015	Completed Final Site Preparation Support Documents per order #: 6600232577.010000.	SC
C	1/27/2015	A1/EL/E1/E2/E3: Located video boxes. A1/S1/S2/E1: Updated CAD background with sliding glass doors. E1: Added outlets and network drops. AL/A1/AD6/E1/E3/E4/ED4: Updated UPS to UPS 4400.	SC
D	4/2/2015	A1/S1/S2/E1: Updated CAD Background. AL/A1/AD7/EL/E1/E2/E4: Added Xper Flex Cardio and Nurse Station. AL/A1/AD6/SL/S2: Added Zero Gravity. AL/A1/AD5/EL/E1/E3: Updated injector specifications. AL/A1/AD6/E3/ED4: Updated UPS with rotary switch.	SC
E	10/14/2015	A1/S1/S2/E1: Updated zero gravity and added sliding doors for equipment closet as shown in revision C. A1/E1: Swapped locations of UPS with UPC. EL: Updated core drill description for MSA. E3/ED4: Updated UPS conduits #51-54, #60 per latest UPS specifications #67 and 68 from MSA to MGP.	JSC
F	3/8/2017	Updated CAD background. Updated drawing with quote revision #: 1-10B0N8L Rev. 14.	SC

Table of Contents

PHILIPS

Project
Allura FD10 Ceiling

VA Augusta
Augusta, GA
-3C143 - Suite, 3C138 Equip. Rm

Philips Contacts
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Drawn By: Sam Chong

Project Details
Drawing Number
N-SOU120544 F
Date Drawn: 3/8/2017
Quote: 1-10B0N8L Rev. 14
Order: None

C1

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
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.

(14.0)

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.

(12.0)

HVAC Requirement for General Equipment Locations

Operation	
Temperature	50°F (10°C) to 86°F (30°C)
Temperature gradient	Max. 1°F / Minute (0.5°C / Minute)
Humidity (non-condensing) Humidity shall be stable within 10%	20% to 80%
Exam Room	*6483 BTU/hr
Equipment Room	*8189 BTU/hr
Control Room	*1706 BTU/hr

*Average heat emission during clinical use
Data applicable for basic system:
Large monitor + 4 x small monitor in Monitor Ceiling Suspension
1 workstation + 2 x small monitor in Control Room

Add 1706 BTU/hr for additional large monitor
Add 273 BTU/hr for additional small monitor
Add 1024 BTU/hr for additional workstation

Equipment's designed airflow is from bottom to top and front to back. Please design the air handling in the rack cabinet equipment area accordingly.

(14.0)

Electrical 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

Branch Power Requirement: 225 kVA

Circuit Breaker: 3 phase, Type D 125 A with long-time delay and shunt trip

(14.2)

Remote Control of Room Lighting

The control of customer lighting must incorporate an electrical isolation system such as demonstrated on Sheet ED3. Lighting scheme is the responsibility of the customer.

(12.0)

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N-SOU120544 F
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Order: None

AN

Equipment Legend

A Furnished and installed by Philips
B Furnished by customer/contractor and installed by customer/contractor
C Installed by customer/contractor
D Furnished by Philips and installed by contractor
E Existing
F Future
G Optional item furnished by Philips

	Equipment Designation	Description	Weight (lbs)	Heat Load (btu/hr)	Detail Sheet
A	DBS	Dose Aware - Base Station	3.2	85	AD7
A	PDR1	Personal Dose Meter Rack	-	-	AD7
A	PDR2	Personal Dose Meter Rack	-	-	AD7
A	IVUS	S5i Imaging System - Volcano IVUS Workstation	76	-	AD7
A	SV	S5i Imaging System (located inside Med Gas Pedestal)	-	-	AD7
B	MGP	Med Gas Pedestal ("SV" located inside)	-	-	-
A	SYNC	SyncVision	-	-	-
A	AR	Image Stream Audio Rack	200	600	AD5
A	DH	Dosimetry Hub	.44	-	AD5
G	NVA	Network video adapter	1.1	-	AD5
G	PEA	Power over ethernet adapter	1.3	-	AD5
G	PDR3	Personal Dose Meter Rack	-	-	AD5
G	ZG66	Zero Gravity- 66 Arm	190	-	AD6

Equipment Legend

A Furnished and installed by Philips
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F Future
G Optional item furnished by Philips

	Equipment Designation	Description	Weight (lbs)	Heat Load (btu/hr)	Detail Sheet
A	SP	Poly G Stand (Ceiling Version)	2387	1195	AD2
A	MSA	Angio Diagnost 7 with Pivot	1693	205	AD2
A	ME	Certeray iX Generator Cabinet	320	2971	AD3
A	MP	Peripheral 40E Cabinet	441	2049	AD3
A	MA	Mains 40E Cabinet	826	5464	AD3
A	MB	Image 40E Cabinet	441	1877	AD3
A	CY	Viewing/Control	126	567	AD3
A	DB	Documentation Box - Mounted on Wheels (Final location to be coordinated with customer and/or local Philips Service)	176	0	AD4
A	ATY	Exam Room Auxiliary Box	7	1.7	AD4
A	TV	58" LCD Monitor Suspension (To be mounted on third party boom - Not shown)	603	1020	-
A	IH	Interventional Hardware	73	2424	AD5
A	VB1 ~ VB9	Video Connection Box	11	34	AD4
A	IC	Injector Room Console (Mounted inside of "MP" cabinet - Not shown on plan)	43	160	-
A	RIC	Injector Remote Panel	5	160	AD5
A	INJ	Medrad Universal T-Rail Bracket for Injector Head (Not shown on plan)	-	-	-
D	UPS	4400 UPS Cabinet - 25 kVA	1125	6286	AD6
D	UPC	Universal Power Controller - 25 kVA	1020		AD6
G	RSP	Remote Status Panel (for UPS; if ordered)	12	50	AD6
A	XFC	Xper Flex Cardio	168	--	AD7
A	tUPS	Tripp Lite UPS	45.2	162.8	AD7
A	FCD	Flex Cardio Device - FC2010 (to be table mounted; not shown on plan)	39.6	--	AD7
A	TV2	Live/Reference Slave Monitor (To be mounted on third party boom - not shown)	-	-	-
B	TV3	Live/Reference Slave Monitor (To be mounted on third party boom - not shown)	-	-	-
B	TV4	Live/Reference Slave Monitor (To be mounted on third party boom - not shown)	-	-	-
B	TV5	Live/Reference Slave Monitor (To be mounted on third party boom - not shown)	-	-	-
B	TV6	Live/Reference Slave Monitor (To be mounted on third party boom - not shown)	-	-	-

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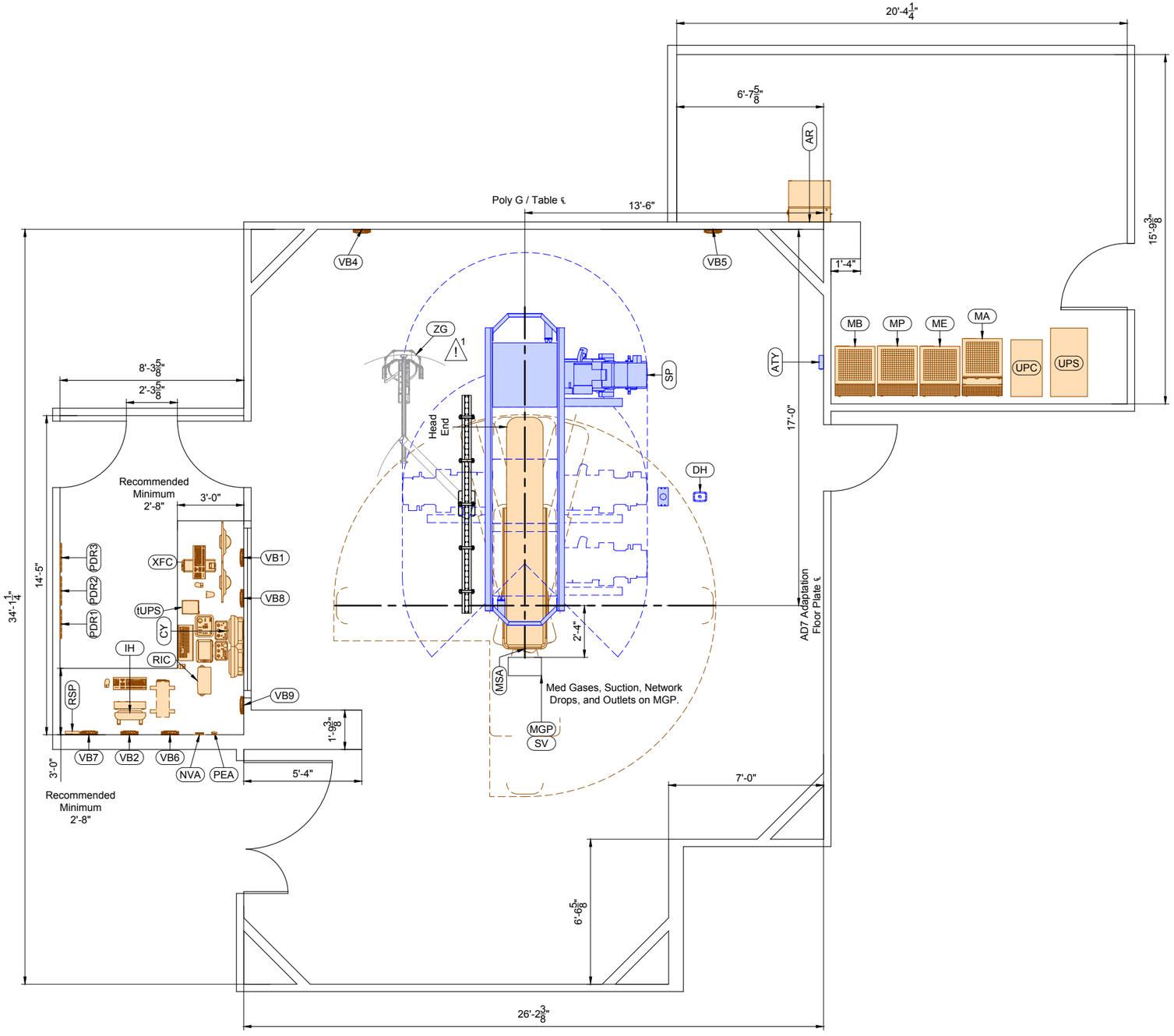
AL

Equipment Layout

Required Unistrut Height: 9' - 6 3/16", +3/8" / -0 (2900mm, +10mm / -0)
Unistrut height measured from finished floor to bottom of Unistrut.

0 1' 2' 4' 8'
0 .5m 1m 2m



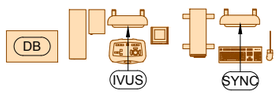
Planning Issues and Considerations

1 Exact equipment configuration to be verified with local Philips Sales. Zero Gravity and Xper Flex Cardio are not listed on order but are shown due to Philips Project Manager request.

General Notes

* Counters and cabinetry shown to be supplied and installed by contractor.
* 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 placement on Philips drawings.
* Field to verify all room dimensions.

	Source	Location	Displayed
VB1	XFC	Control	FlexVision
VB2	IH	Control	FlexVision
VB3	TV	Exam	FlexVision
VB4	Extra	Exam	FlexVision
VB5	Extra	Exam	FlexVision
VB6	DH	Control	FlexVision
VB7	Extra	Control	FlexVision
VB8	Extra	Control	FlexVision
VB9	Extra	Control	FlexVision



Exact location to be coordinated by Customer and local Philips service.

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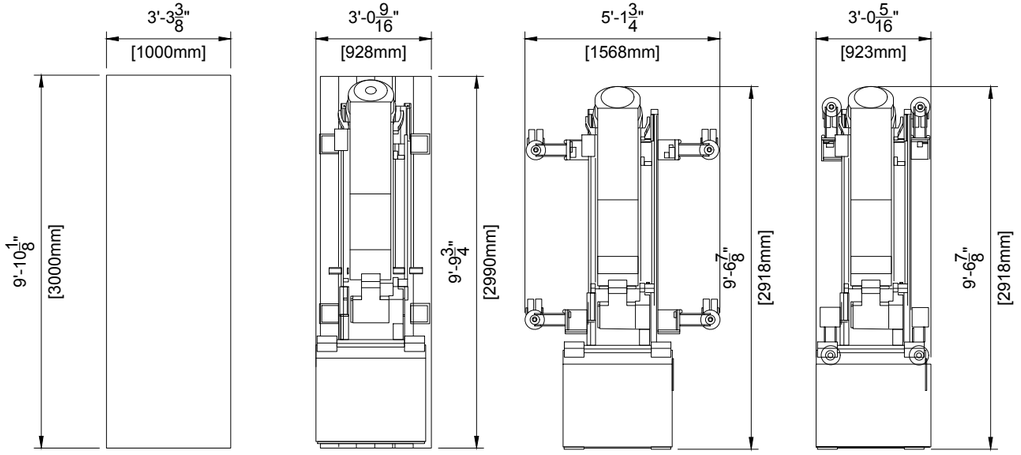
A1

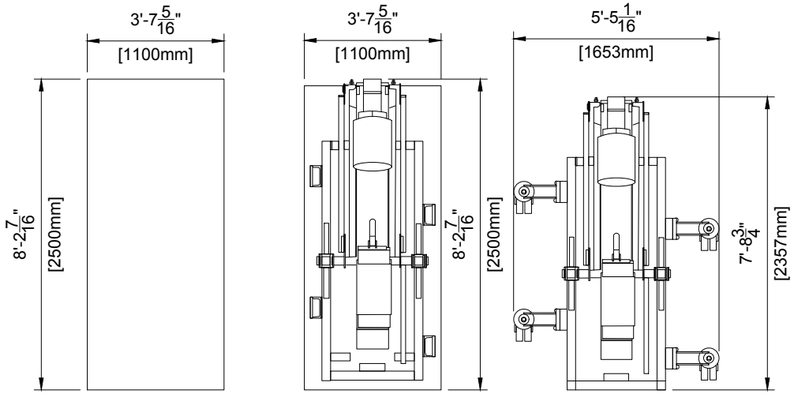
8.20.14

Detail - Poly Diagnost G Ceiling (L-ARM) Transport Details



Transport Possibilities				
	Crate	**Pallet**	**Kick Wheels Wide**	**Kick Wheels Small**
Height	57.09" (1450mm)	54.80" (1392mm)	49.25" (1251mm)	49.25" (1251mm)
Weight	2033 lbs (922 kg)	1911 lbs (867 kg)	1764 lbs (800 kg)	1764 lbs (800 kg)

Detail - Poly Diagnost G (C-ARM) Transport Details



Transport Possibilities			
	Crate	**Pallet**	**Klick Wheels**
Height	77.95" (1980mm)	75.59" (1920mm)	70.08" (1780mm)
Weight	2028 lbs (920 kg)	1907 lbs (865 kg)	1764 lbs (800 kg)

(12.0)

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

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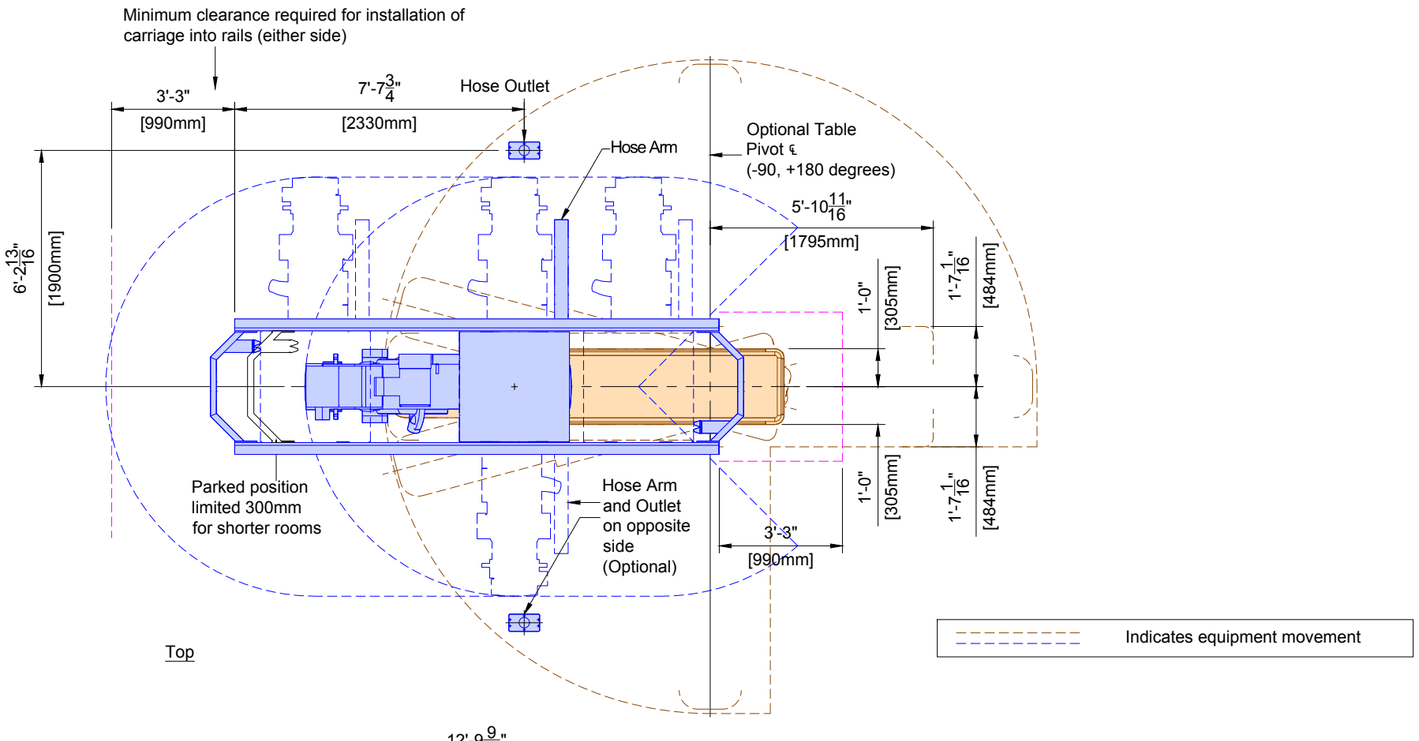
AD1

8.20.14



SP	Poly G Stand (Ceiling Version) (12.0)	
	Weight	Heat Dissipation
	2387 lbs	1195 btu/hr

Table Pivot is optional. This allows the table to rotate -90, +180 degrees about center of table base.

MSA	Angio Diagnost 7 (12.0)	
	Weight	Heat Dissipation
	1693 lbs	205 btu/hr

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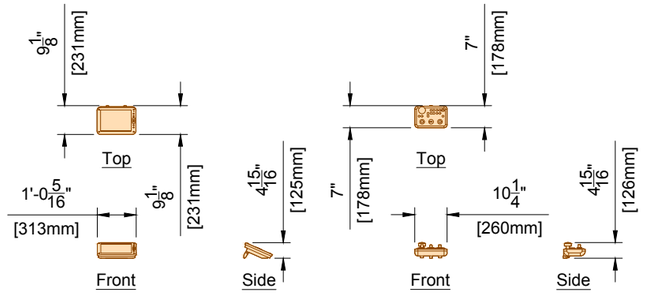
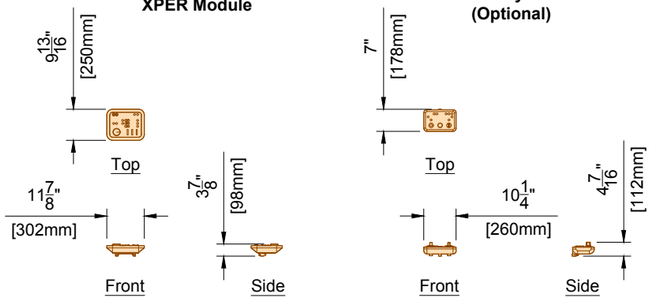
AD2

8.20.14



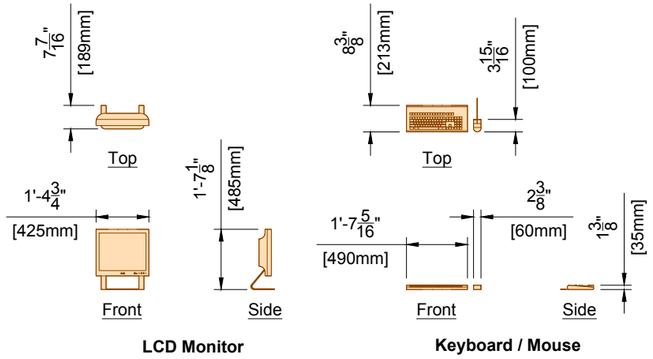
XPER Module

Geometry T.S.O. (Optional)



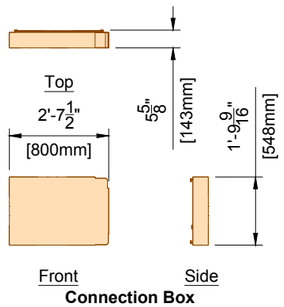
Review Module

Imaging Cardio T.S.O. (Optional)



LCD Monitor

Keyboard / Mouse



Connection Box
(See SD3 for mounting options)

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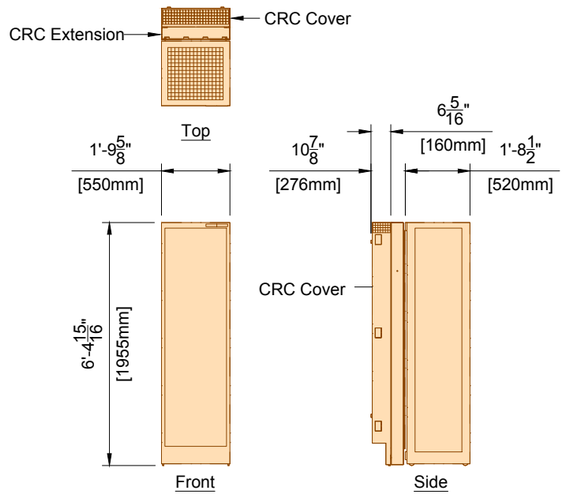
	View/Control (All Components)	
CY	Weight	Heat Dissipation
	126 lbs	567 btu/hr

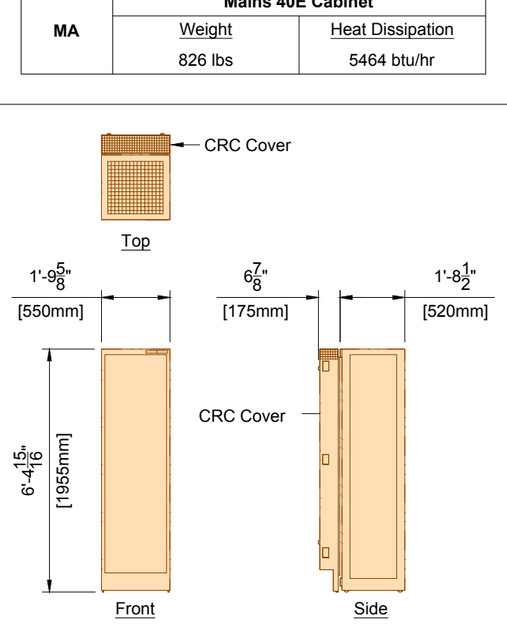


The CRC Cover must be attached to the back box.

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

(16.0)

	Mains 40E Cabinet	
MA	Weight	Heat Dissipation
	826 lbs	5464 btu/hr

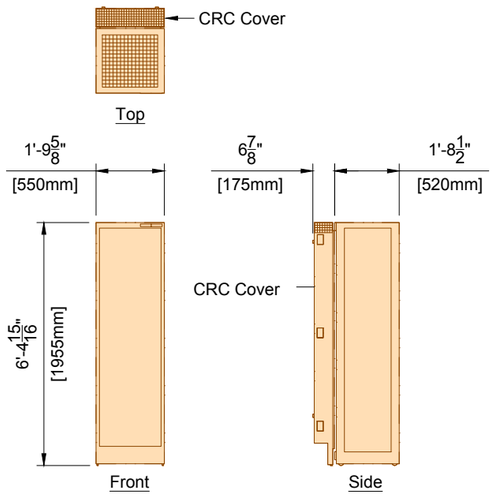


The CRC Cover must be attached to the back box.

Acoustic noise level: <= 65 dB(A) @ 1 meter in front of the rack and 1 meter high (1 meter = 39.37")

(16.0)

	Peripheral 40E Cabinet	
MP	Weight	Heat Dissipation
	441 lbs	2049 btu/hr

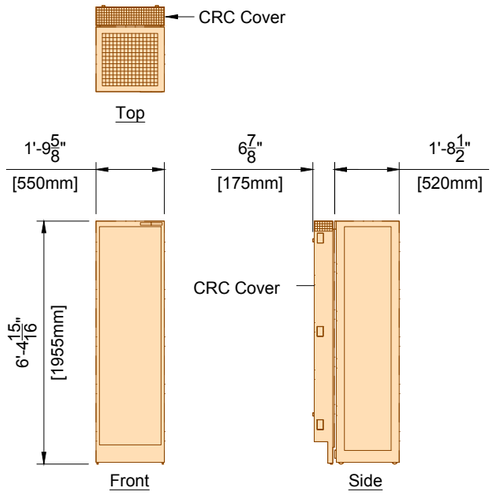


The CRC Cover must be attached to the back box.

Acoustic noise level: <= 48 dB(A) @ 1 meter in front of the rack and 1 meter high (1 meter = 39.37")

(16.0)

	Image 40E Cabinet	
MB	Weight	Heat Dissipation
	441 lbs	1877 btu/hr



The CRC Cover must be attached to the back box.

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

(16.0)

	Certeray iX Generator 40E Cabinet	
ME	Weight	Heat Dissipation
	320 lbs	2971 btu/hr

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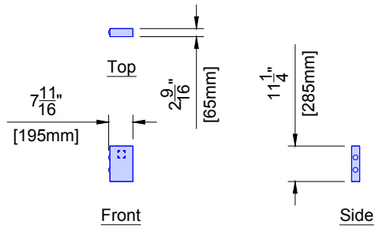
Order: None

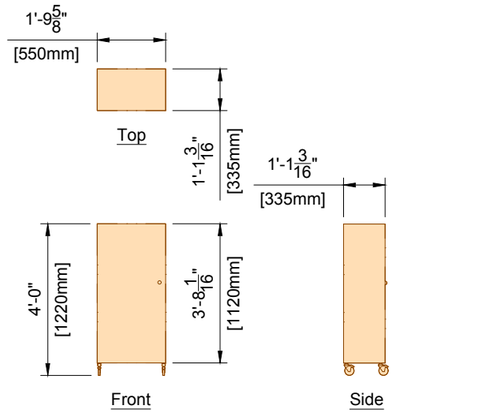
AD3

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.



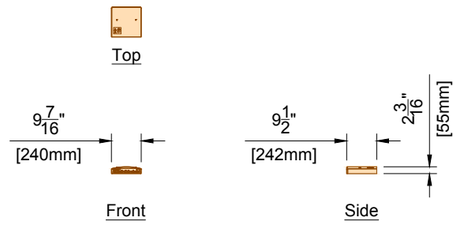
(12.0)

ATY	Auxiliary Box	
	Weight	Heat Dissipation
	7 lbs	1.7 btu/hr



(12.0)

DB	Documentation Box	
	Weight	Heat Dissipation
	176 lbs	0 btu/hr



(13.0)

VB1 ~ VB9	Video Connection Box	
	Weight	Heat Dissipation
	11 lbs	34 btu/hr

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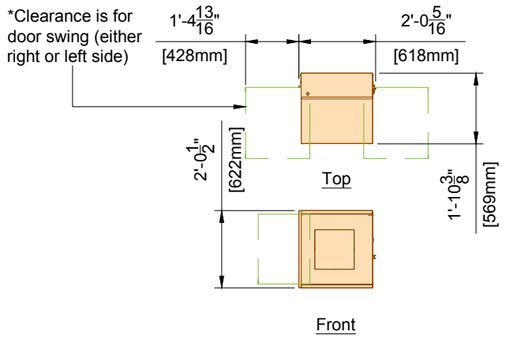
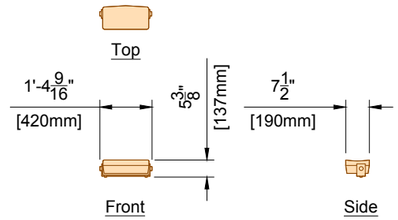
AD4



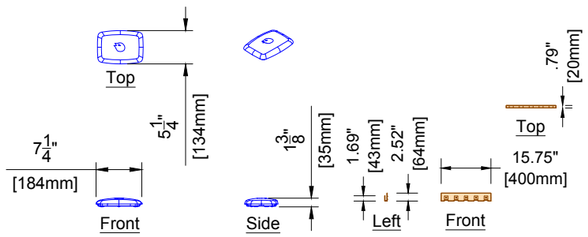
(15.0)

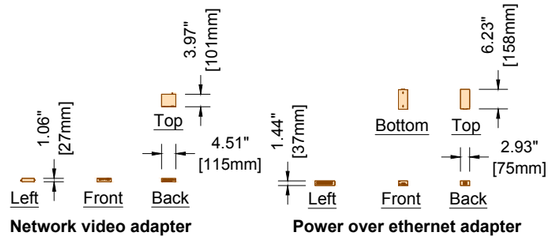
	Image Stream Audio Rack	
AR	Weight	Heat Dissipation
	200 lbs	600 btu/hr



(12.0)

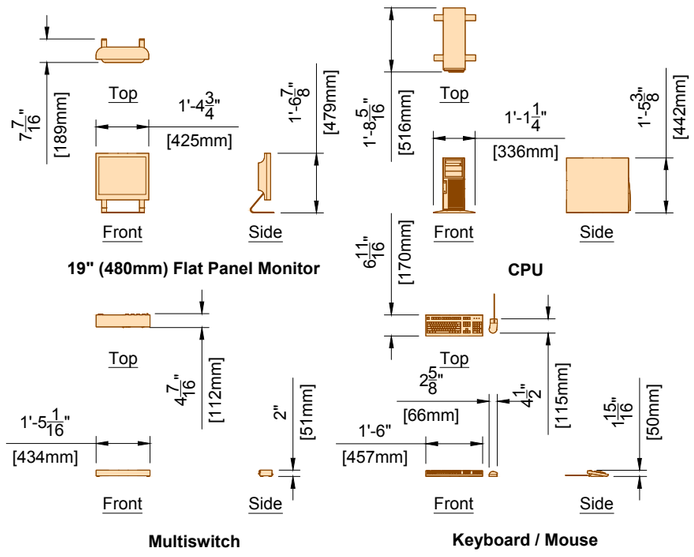
	Injector Remote Panel	
RIC	Weight	Heat Dissipation
	5 lbs	160 btu/hr





(15.0)

	DoseAwareXtend	
	Weight	Heat Dissipation
DH	.44 lbs	- btu/hr
NVA	1.1 lbs	- btu/hr
PEA	1.3 lbs	- btu/hr
PDMR	- lbs	- btu/hr



Weight shown is for all components.

(12.0)

	Interventional Hardware	
IH	Weight	Heat Dissipation
	73 lbs	2424 btu/hr

PHILIPS

Project
Allura FD10 Ceiling

VA Augusta
Augusta, GA
-3C143 - Suite, 3C138 Equip. Rm

Philips Contacts
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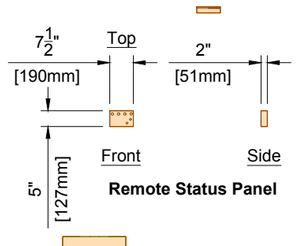
Drawn By: Sam Chong

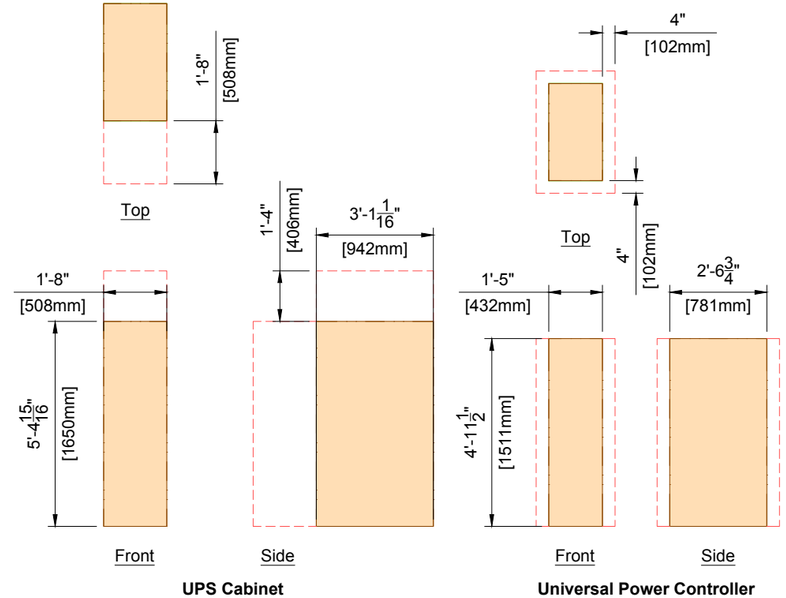
Project Details
Drawing Number
N-SOU120544 F
Date Drawn: 3/8/2017
Quote: 1-10B0N8L Rev. 14
Order: None

AD5

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.



Remote Status Panel

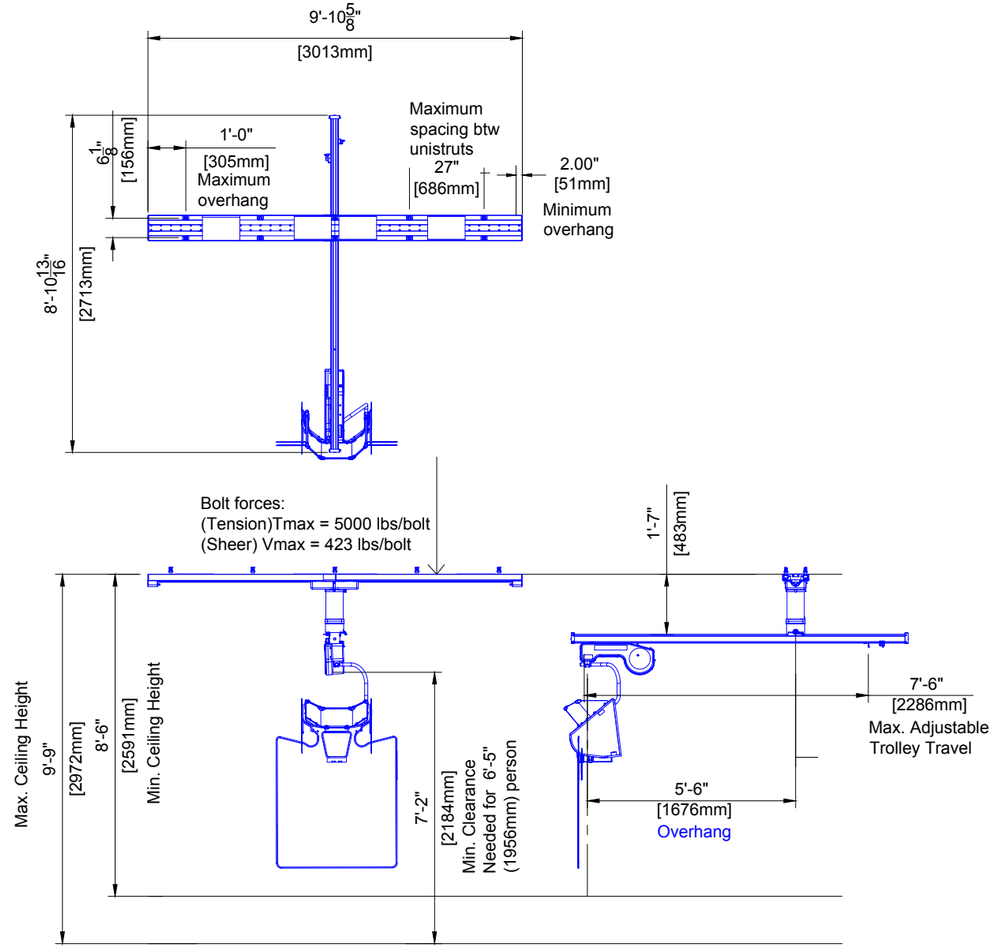


UPS Cabinet

Universal Power Controller

(15.0)

	25 kVA UPS with UPC	
	Weight	Heat Dissipation
UPS	1125 lbs	6286 btu/hr
UPC	1020 lbs	
RSP	12 lbs	50 btu/hr



C5

(12.0)

	Zero Gravity	
	Weight	Heat Dissipation
ZG	190 lbs (87kg)	- btu/hr

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Allura FD10 Ceiling

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N-SOU120544 F
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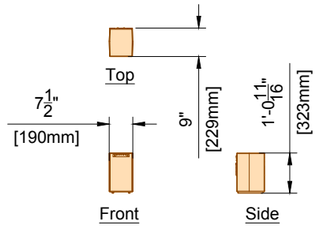
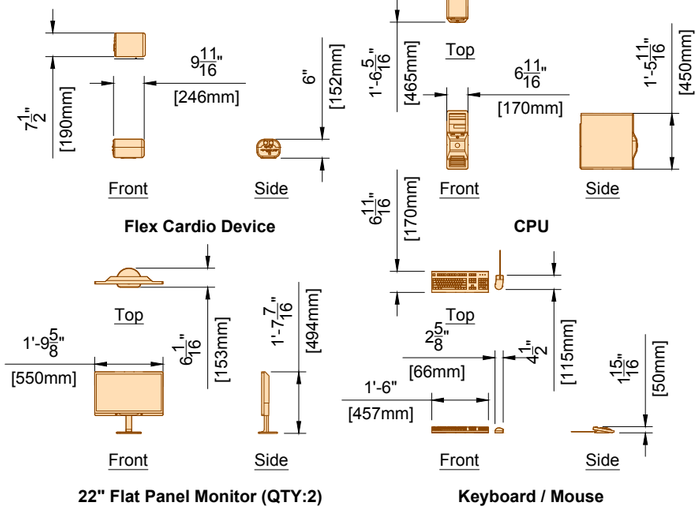
Order: None

AD6

8.20.14



Tripp Lite UPS



Flex Cardio Device

CPU

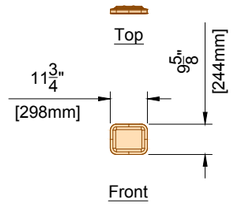
22" Flat Panel Monitor (QTY:2)

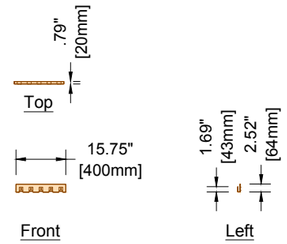
Keyboard / Mouse

Weight shown is for all components.

(12.0)

	Xper Flex Cardio	
XFC	Weight	Heat Dissipation
	168 lbs	- btu/hr
	Tripp Lite UPS	
tUPS	Weight	Heat Dissipation
	45.2 lbs	162.8 btu/hr
	Flex Cardio Device	
FCD	Weight	Heat Dissipation
	39.6 lbs	- btu/hr



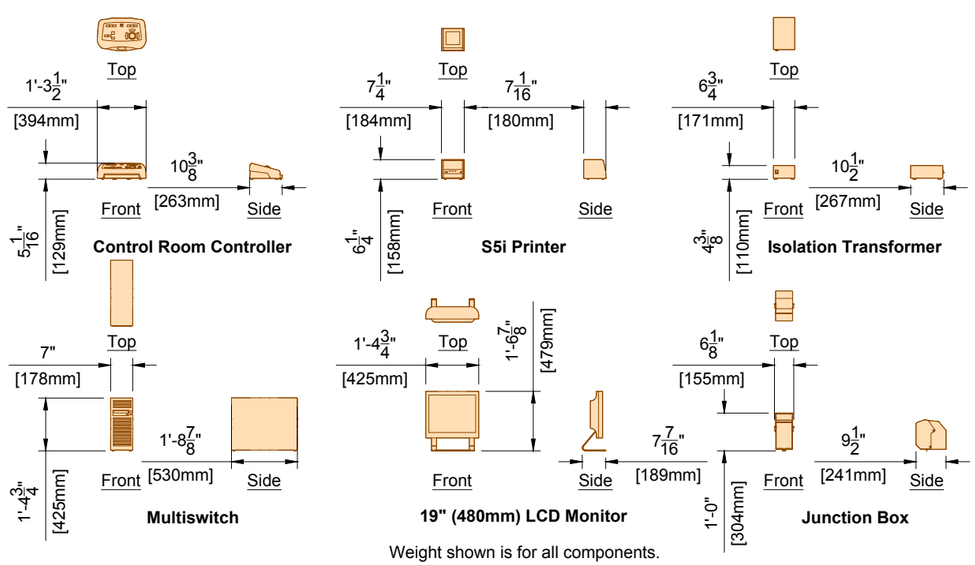


(12.0)

	Dose Aware - Base Station	
DBS	Weight	Heat Dissipation
	3.2 lbs	85 btu/hr

(15.0)

	Personal Dose Meter Rack	
PDR1-PDR2	Weight	Heat Dissipation
	- lbs	- btu/hr



Weight shown is for all components.

(12.0)

	S5i Imaging System - Workstation	
IVUS	Weight	Heat Dissipation
	76 lbs	- btu/hr

(12.0)

	S5i Imaging System - Junction Box	
SV	Weight	Heat Dissipation
	- lbs	- btu/hr

PHILIPS

Project
Allura FD10 Ceiling

VA Augusta
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Drawn By: Sam Chong

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N-SOU120544 F
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Order: None

AD7

8.20.14

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
b. Greater than 20 Hz - Displacement amplitude is smaller than 0.01mm

(14.0)

PHILIPS

Project
Allura FD10 Ceiling
VA Augusta
Augusta, GA
-3C143 - Suite, 3C138 Equip. Rm

Philips Contacts
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Contact Number: (404) 290-9407
Email: julio.coronado@philips.com
Drawn By: Sam Chong

Project Details
Drawing Number
N-SOU120544 F
Date Drawn: 3/8/2017
Quote: 1-10B0N8L Rev. 14
Order: None

SN

See S1 for Floor & Wall Support Layout

Notes:

1. Anchors for items that are installed/anchored by customer/contractor shall be provided by customer/contractor.
2. Anchors for items that are installed/anchored by Philips shall be provided by Philips. If customer's engineering documents specify anchors other than those listed in this document, the anchors shall be provided by customer/contractor and installed by Philips.
3. In all instances, the wall and/or floor support are the sole responsibility of the customer/contractor. The customer's architect/engineer of record shall specify wall and/or floor support sufficient for the bolt forces shown on the details.

Floor & Wall Support Legend

A Furnished and installed/anchored by Philips (exceptions may exist, see Note 2)
B Furnished and installed by customer/contractor and installed/anchored by customer/contractor
C Installed/anchored by customer/contractor
D Furnished by Philips and installed/anchored by contractor
E Existing
F Future
G Optional

	Item Number	Description	Detail Sheet
B	F1	Support in wall for Control Room Connection Box (CY)	SD3
A	F1	Anchors in wall for Control Room Connection Box (CY)	SD3
D	F2	AD7 Adaptation Plate	SD1
C	F3	Anchors in wall for Dose Aware Base Station (not shown)	SD4
B	F4	Personal Dose Meter Rack (Qty: 2)	SD4
G	F5	Network Video Adapter Bracket	SD4
G	F6	Personal Dose Meter Rack	SD4
B	F7	Anchors in wall for Image Stream Audio Rack (4x $\frac{3}{8}$" diameter lag bolts with min. length of 1 1/2" and standard flat washers on 2x $\frac{3}{4}$" plywood or concrete walls or equivalent)	-

See S2 for Ceiling Support Layout

Ceiling Support Legend

A Furnished and installed by Philips
B Furnished by customer/contractor and installed by customer/contractor
C Installed by customer/contractor
D Furnished by Philips and installed by contractor
E Existing
F Future
G Optional

	Item Number	Description	Detail Sheet
A	C1	2 - Philips Poly G Rails	SD1
A	C2	48" safety cable for ceiling speakers	SD2 -
B	C3	Unistrut (P1001 or equal) - Bottom of Unistrut 0" to $\frac{1}{4}$" (6mm) Below Finished Ceiling	SD2
B	C4	Dosimetry Hub Ceiling Plate	SD4
A	C5	ZeroGravity Ceiling Track	AD6

PHILIPS

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Allura FD10 Ceiling

VA Augusta
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Drawn By: Sam Chong

Project Details
Drawing Number
N-SOU120544 F
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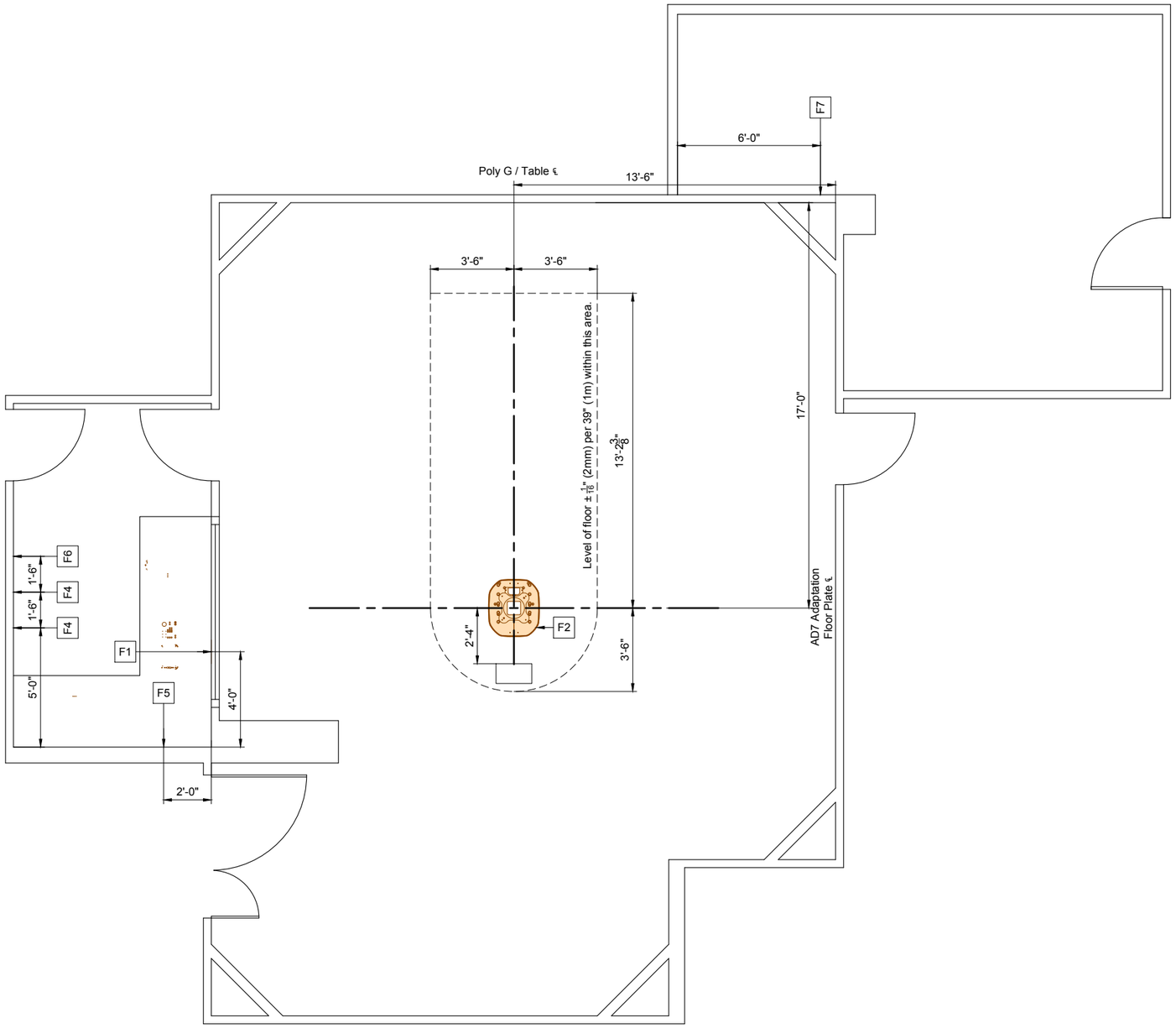
Quote: 1-10B0N8L Rev. 14
Order: None

SL

Floor & Wall Support Layout

Required Unistrut Height: 9' - 6 $\frac{3}{16}$", +$\frac{3}{8}$" / -0 (2900mm, +10mm / -0)
Unistrut height measured from finished floor to bottom of Unistrut.

0 1' 2' 4' 8'
0 .5m 1m 2m



Refer to Floor/Wall Support Legend - Sheet SL

Project
Allura FD10 Ceiling

VA Augusta
Augusta, GA
-3C143 - Suite, 3C138 Equip. Rm

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Drawn By: Sam Chong

Project Details
Drawing Number
N-SOU120544 F
Date Drawn: 3/8/2017
Quote: 1-10B0N8L Rev. 14
Order: None

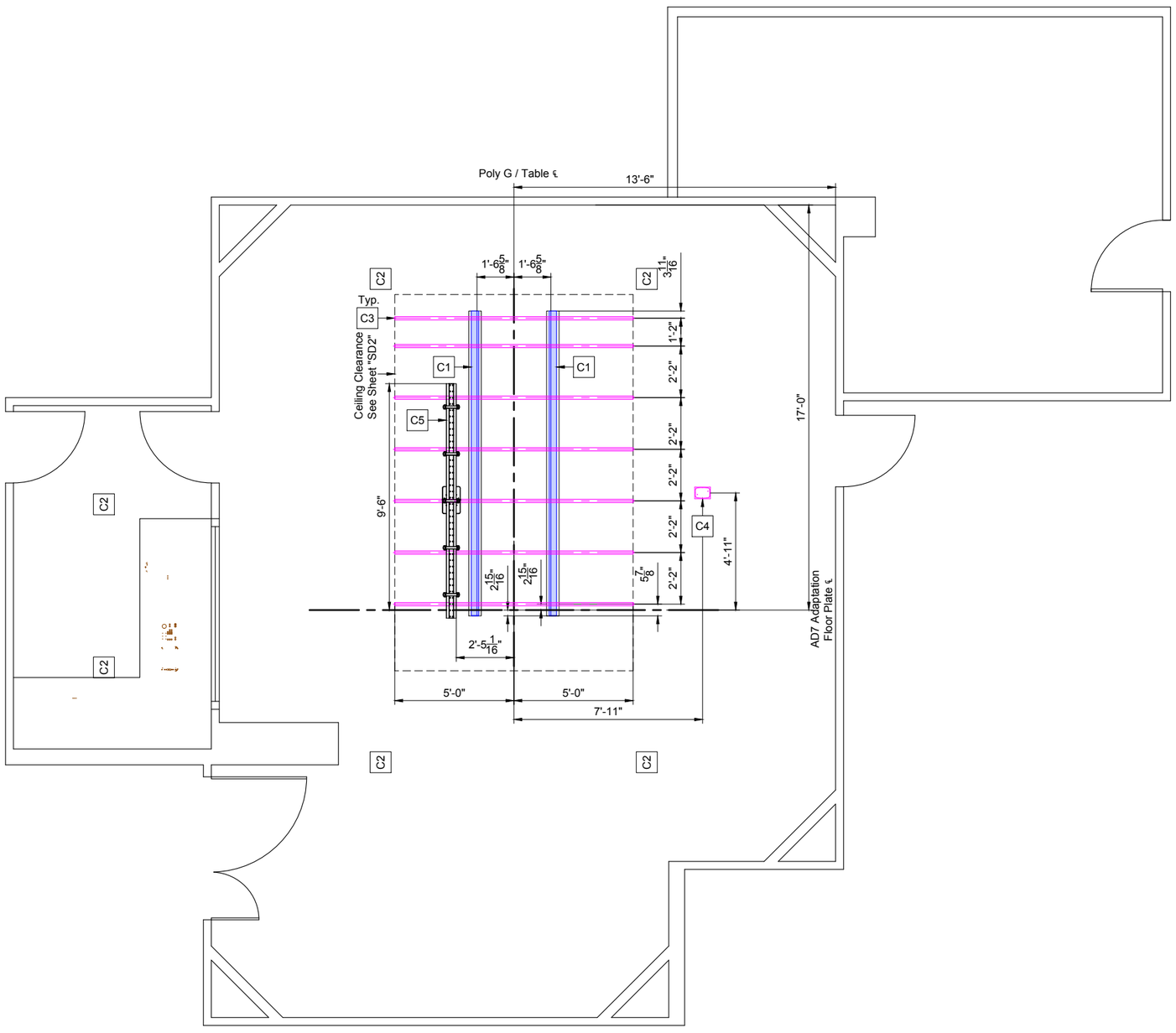
S1

8.20.14

Ceiling Support Layout

Required Unistrut Height: 9' - 6 $\frac{3}{16}$", +$\frac{3}{8}$" / -0 (2900mm, +10mm / -0)
Unistrut height measured from finished floor to bottom of Unistrut.

0 1' 2' 4' 8'
0 .5m 1m 2m



Refer to Ceiling Support Legend - Sheet SL

PHILIPS

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Allura FD10 Ceiling

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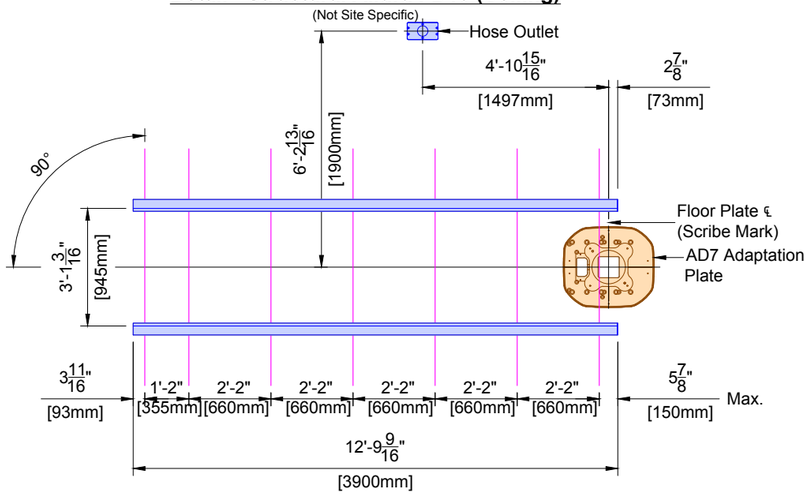
Order: None

S2

8.20.14

Detail - Structural Allura FD10 (Ceiling)



27" (685mm) maximum allowed distance between unistrut (seven unistrut required)

Floor plate supplied by Philips / installed by Customer. Counterbored holes are sized for 1/2" (12mm) anchors per Seismic requirements.

Poly G
Poly G Bearing Forces:
(Tension) Tmax = 2639 lbs/support
(Shear) Vmax = 561 lbs/support

AD7 Table
Floor Plate to Floor Bolt Forces:
(Tension) Tmax = 1950 lbs/bolt
(Shear) Vmax = 776 lbs/bolt

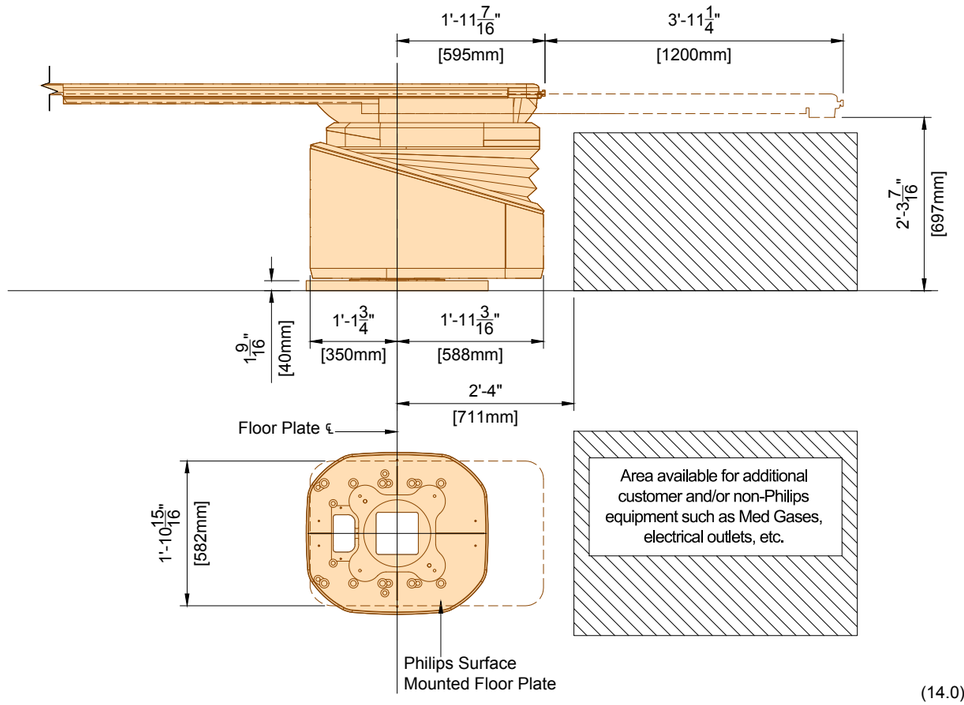
Note: The bearing force shown for the Poly G is the maximum instantaneous equipment bearing load that can result from abusive use of the system. This force can occur at two locations simultaneously on the same Unistrut (or equal) rail. If seismic forces must be considered, please refer to the seismic calculation sheets provided by Philips for the specific system components.

F2 C1

(12.0)

Detail - AD7 Table, Fixed/Pivot Base - Clearance Area

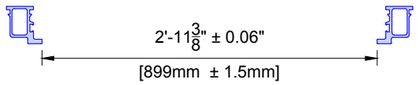
(Not to scale)



(14.0)

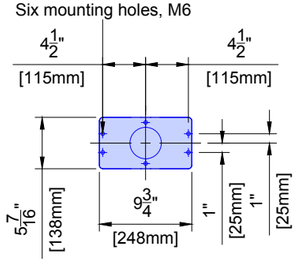
Detail - Clip Rail Spacing

(Not to scale)



Detail - Cable Hose Outlet

(Not to scale)

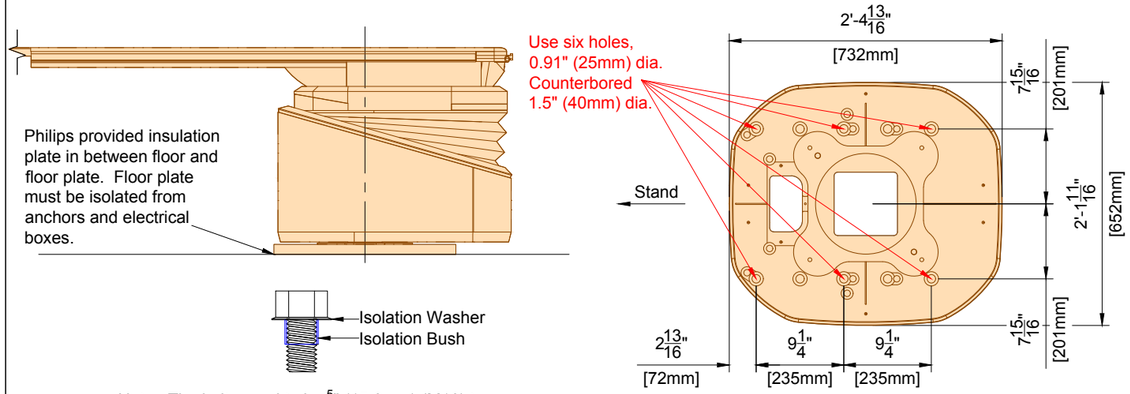


(12.0)

Detail - AD7 Adaptation Plate - Notes for Installation

(Not to scale)

1. 1.44" (40mm) thick floor plate, surface mounted with top of slab.
2. Level within 1/16" (1.5mm) across surface of plate.



Note: The bolts need to be 5/8" (15.8mm) (M16) to allow the use of the insulation bush.

F2

(13.0)

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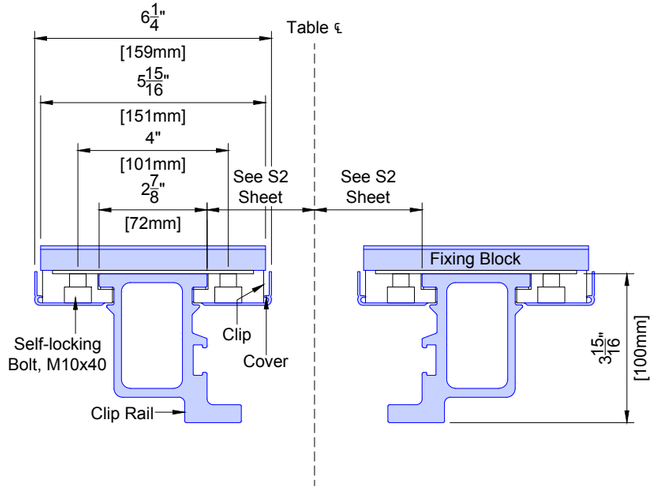
Order: None

SD1

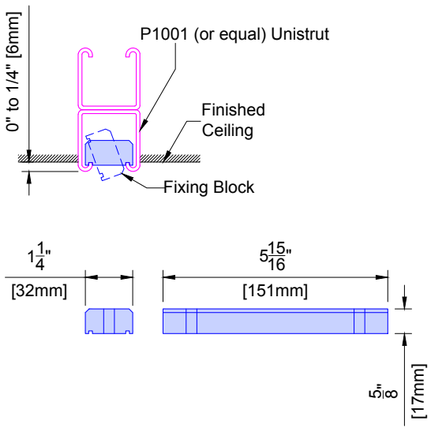
Detail - Clip Rail Cross-Section

(Not to scale)



Detail - Fixing Block for Philips Ceiling Rails (Clip Rails)

(Not to scale)



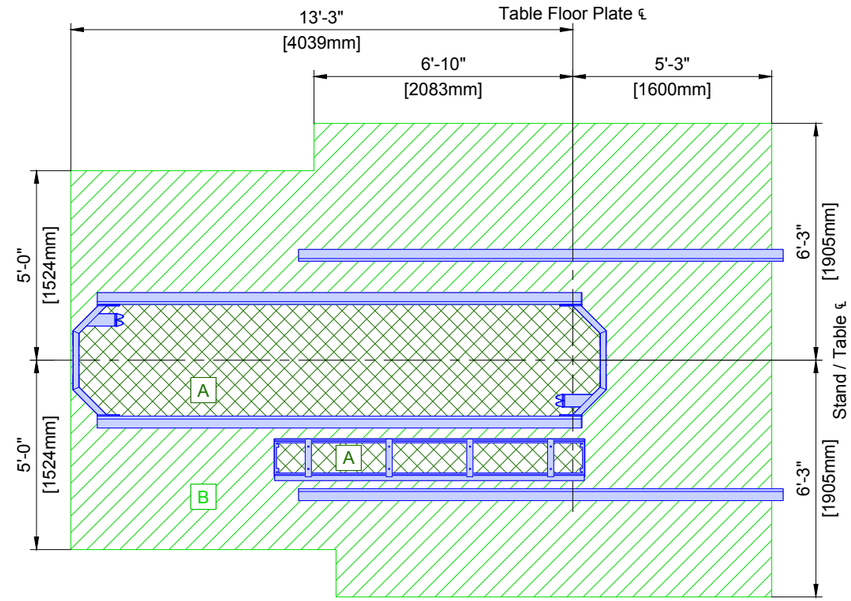
- Philips does not specify the overhead equipment support structure. Unistrut (or equal) may or may not be used. If Unistrut are used, it is up to Unistrut and the structural engineer for the project to determine which of its products are appropriate for each project.
- Finished ceiling must **NOT** be lower than the bottom of the Unistrut in order to prevent damage to the finished ceiling during the installation of clip rails. Finished ceiling height to be mounted 0" to 1/4" (6mm) above bottom of Unistrut.
- Nothing shall be attached to the Unistrut with any fastener that protrudes into the Unistrut which would interfere with positioning of the fixing block.
- Fixing blocks for Philips ceiling rails (Clip rails) are designed to be installed in P1001 Unistrut.
- The inside of the Unistrut must be clear of obstructions (including paint).
- Unistrut elements must be rigid and comply with the ceiling structure requirements. See SN sheet, line #4 "Ceiling Support Apparatus".
- Welding Unistrut may warp Unistrut and deteriorate the structural integrity of the Unistrut. Consult the Structural Engineer of Record prior to welding any Unistrut.

C1 C2 C3

(14.0)

Detail - Restricted Ceiling Area for Objects that Project Below Finished Ceiling

(Not site specific)



A No objects that project below finished ceiling are allowed in this area (lights, smoke detectors, sprinkler heads, etc).

B No objects that project more than 4.5" (115mm) below finished ceiling are allowed in this area (lights, smoke detectors, sprinkler heads, soffit, etc).

(14.0)

PHILIPS

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Drawing Number
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Order: None

SD2

Pre-Evaluated and -Approved Anchor Reference List for Philips Installers

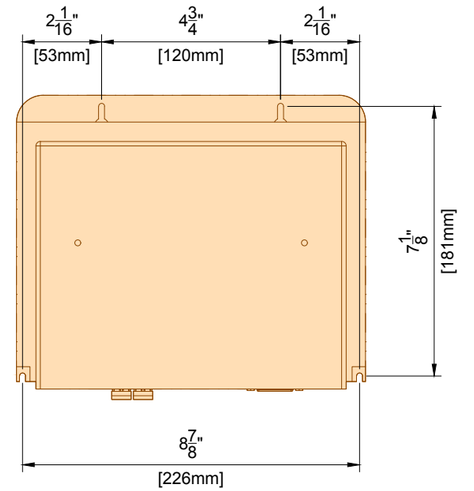
Anchors for items that are installed/anchored by customer/contractor shall be provided by customer/contractor. Anchors for items that are installed/anchored by Philips shall be provided by Philips. If customer's engineering documents specify anchors other than those listed below, the anchors shall be provided by customer/contractor and installed by Philips. In all instances, the wall and/or floor support are the sole responsibility of the customer/contractor. The customer's architect/engineer of record shall specify wall and/or floor support sufficient for the bolt forces shown on the details.

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: $\frac{3}{8}$" (10mm) x 2" (50mm) L Spring Nuts: $\frac{3}{8}$" (10mm)	8	Unistrut
Control Room Connection Box (IXR)	A	Round Phillips Head Self Drilling Screws	#10-16 x 1 $\frac{1}{2}$" (38mm) L	3	Drywall with minimum 20 gauge Steel backing
	B	SPAX Multipurpose flat head screw	#10 x 1 $\frac{1}{2}$" (38mm) L	3	Drywall with minimum 20 gauge Steel backing
	C	Toggler Snaptoggle and (round head screws)	#BA and (#10-24 x 2 $\frac{1}{2}$" (63.5mm) L)	3	Minimum $\frac{5}{8}$" (16mm) Drywall

(12.0)

Detail - Video Connection Box - Hole Pattern for Mounting

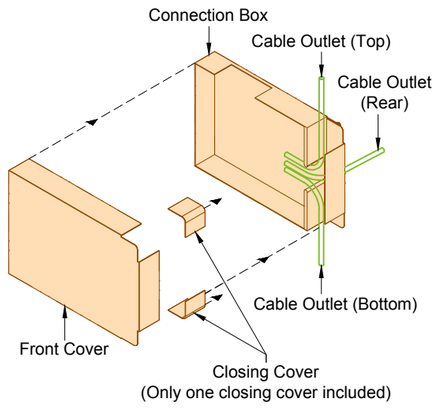
(Not to scale)

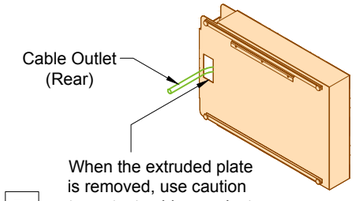


(13.0)

Detail - Connection Box - Cable Outlets

(Not to scale)



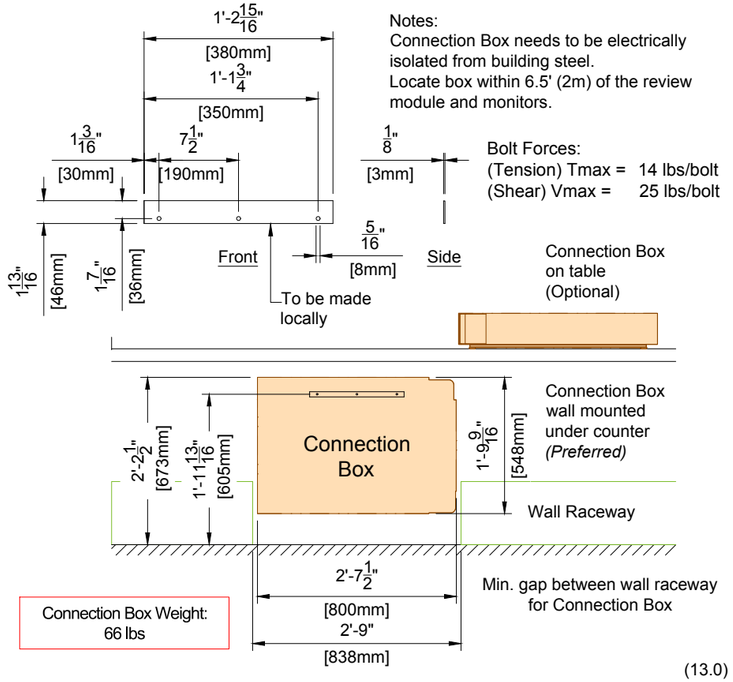


F1

(13.0)

Detail - Connection Box - Wall Mount Template

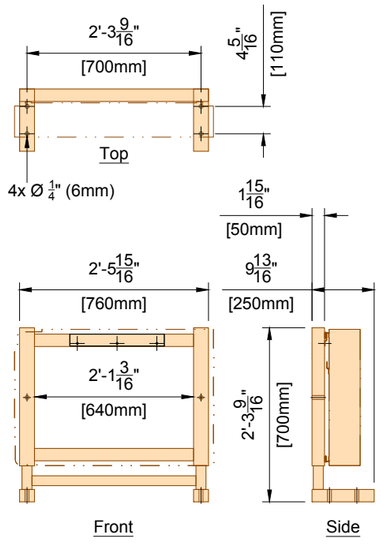
(Not to scale)



(13.0)

Detail - Connection Box Support Frame Option

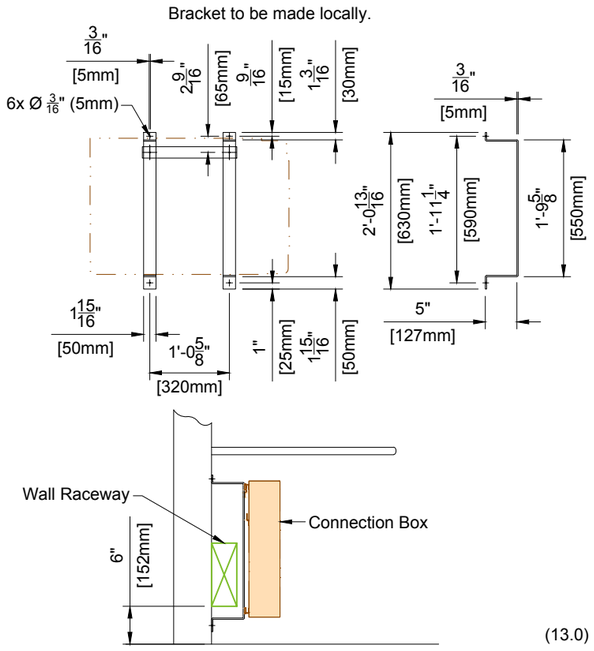
(Not to scale)



(13.0)

Detail - Connection Box - Bracket Mount Option

(Not to scale)



(13.0)

Project
Allura FD10 Ceiling

VA Augusta
Augusta, GA
-3C143 - Suite, 3C138 Equip. Rm

Philips Contacts
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Drawn By: Sam Chong

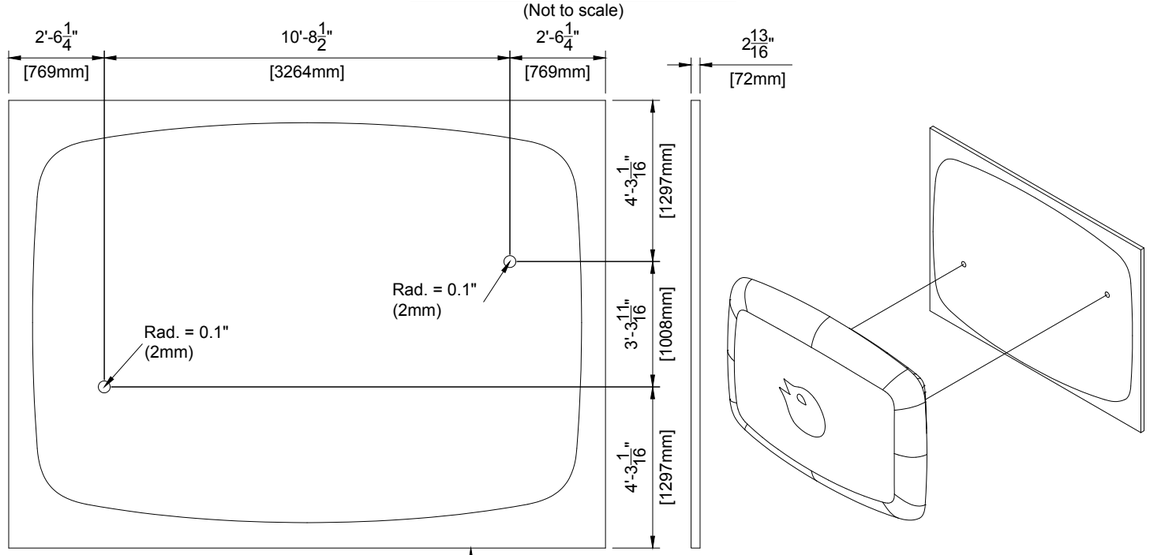
Project Details
Drawing Number
N-SOU120544 F
Date Drawn: 3/8/2017
Quote: 1-10BON8L Rev. 14
Order: None

SD3

8.20.14

Detail - Dosimeter Hub Template

(Not to scale)

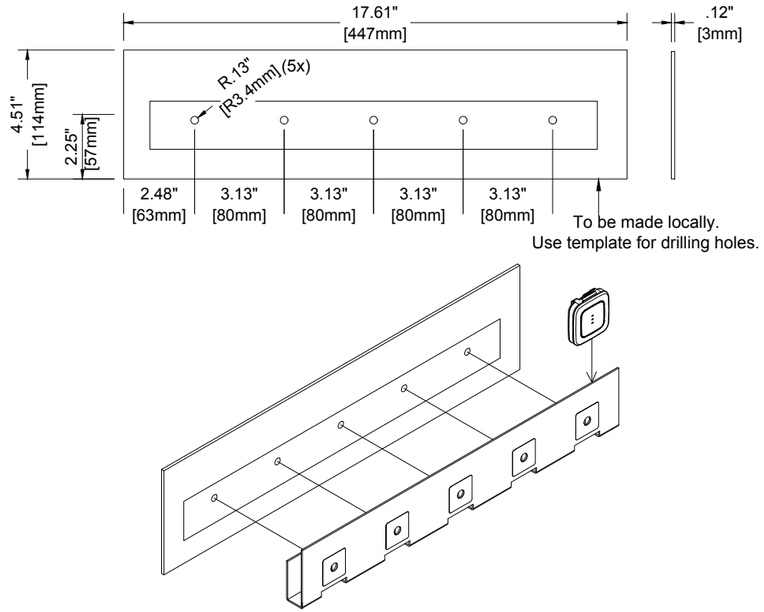


C4

(13.0)

Detail - Personal Dose Meter Template

(Not to scale)

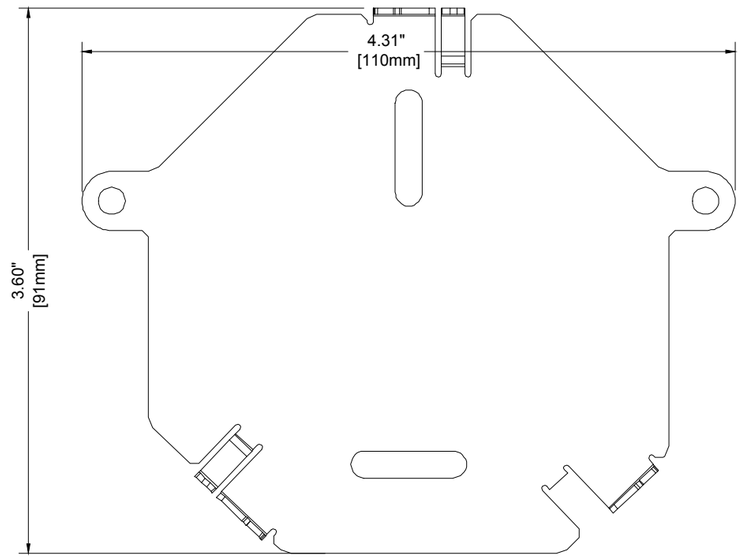


F4 F6

(15.0)

Detail - Network Video Adapter Bracket

(Not to scale)

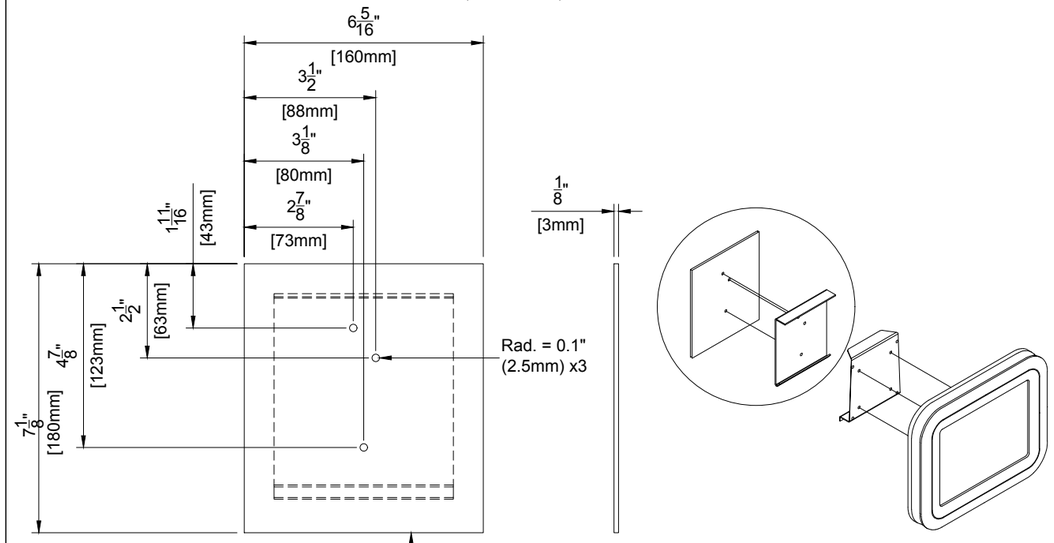


F5

(15.0)

Detail - Dose Aware Base Station Template

(Not to scale)



F3

(12.0)

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Project
Allura FD10 Ceiling

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N-SOU120544 F
Date Drawn: 3/8/2017
Quote: 1-10B0N8L Rev. 14
Order: None

SD4

8.20.14

Emergency Power

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.

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).

(14.0)

Electrical Requirement Notes for Systems with Mains 40E Cabinet

Electrical power distribution at the facility shall comply with:

Utilization voltages per ANSI C84.1 - 1982 range A.

Voltage to be supplied is 3 phase, delta.

Phase conductors to be sized for instantaneous voltage drop per NEC 517 - 73 and Philips recommendations.

Metal conduit shall not be used as the equipment ground conductor.

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
Article 250 - Grounding
Article 517 - Healthcare Facilities
ANSI / NFPA 99 - Healthcare Facilities
NEMA standard XR9 - Power Supply Guideline for X-ray Machines

Power Quality Guidelines

1. Power supplied to medical imaging equipment must be separate from power feeds to air conditioning, elevators, outdoor lighting, and other frequently switched or motorized loads. Such loads can cause waveform distortion and voltage fluctuations that can hinder high quality imaging.

2. Equipment that utilizes the facility power system to transmit control signals (especially clock systems) may interfere with medical imaging equipment, thus requiring special filtering.

3. The following devices provide a high impedance, nonlinear voltage source, which may affect image quality:

Static UPS systems, Series filters, Power conditioners, and Voltage regulators.

Do not install such devices at the mains supply to medical imaging equipment without consulting Philips installation or service personnel.

4. Line impedance is the combined resistance and inductance of the electrical system and includes the impedance of the power source, the facility distribution system, and all phase conductors between the source and the imaging equipment. Philips publishes recommended conductor sizes based on equipment power requirements, acceptable voltage drops, and assumptions about the facility source impedance. The minimum conductor size is based on the total line impedance and NEC requirements. Unless impedance calculations are performed by an electrical engineer, the recommended values must be used.

(14.0)

General Electrical Information

1. General
The customer shall be solely responsible, at its 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.

2. Materials and Labor
The customer shall be solely responsible, at its expense, to provide and install all electrical ducts, boxes, conduit, cables, wires, fittings, bushing, etc., As separately specified herein.

3. Electrical Ducts and Boxes
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 four separate channels by metal dividers, separately specified herein, to separate wiring and/or cables into groups as follows: Group A: incoming power wiring with associated protective earth wiring (PE). Group B: Output power wiring with associated protective earth wiring (PE). Group C: signal and/or data wiring and/or cables. Group D: 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.

4. Conduit
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. Consult with Philips. 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 conduit supplied and installed by contractor from entrance into duct to exit from duct. Do not use flex conduit unless approved by Philips Service.

5. Conductors
All conductors, separately specified, shall be 75°C stranded copper, rung out and marked.

6. Disconnecting Means
A disconnecting means shall be provided as separately specified.

7. Warning Lights and Door Switches
"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.

8. Dimmer Switches
X-ray room lights should be provided with dimmer switches.

(12.0)

Electrical Notes

1. The contractor will supply & install all breakers, shunt trip and incoming power to the breakers. 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, stainless steel covers, etc. Conduit/raceways must be free from burrs and sharp edges over its entire length. A Greenlee pull string/measuring tape (part no. 435, or equivalent) shall be provided with conduit runs.

3. All pre - terminated, cut to length cables, will be supplied and installed by Philips. All cables to the breakers, will be supplied and installed by the contractor, subject to local arrangements.

4. Provide and install 50mm diameter chase nipples between adjacent wall boxes.

5. 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.

6. Conduit sizes shall be verified by the architect, electrical engineer or contractor, in accordance with local or National Electrical Codes, whichever govern.

7. Convenience outlets are not illustrated. Their number and location are to be specified by the customer/architect.

8. Electrical contractor shall install ground bond wires at conduit openings within wall boxes as required by national and local electrical codes. Ground bond wires and lugs shall be installed in such a way to prevent the inadvertent contact with the installed Philips equipment to maintain Philips isolated ground scheme and maintain patient safety.

9. Install an insulated stranded ground wire per feeder/conductor size from the Main Disconnect (CB) to the ERB and from the ERB to the Mains 40E Cabinet (per NEC clause 250.146(D)).

10. Philips equipment must be electrically isolated from conduits, raceways, ducts, seismic anchoring, floor anchoring, etc.

(14.1)

PHILIPS

Project
Allura FD10 Ceiling
VA Augusta
Augusta, GA
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Project Details
Drawing Number
N-SOU120544 F
Date Drawn: 3/8/2017
Quote: 1-10B0N8L Rev. 14
Order: None

EN

Electrical Legend

A Furnished and installed by Philips
B Furnished by customer/contractor and installed by customer/contractor
C Installed by customer/contractor
D Furnished by Philips and installed by contractor
E Existing
F Future
G Optional

	Item Number	Description	Detail Sheet
B	CB	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
B	ST	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)	
B	GE	Local building steel (i.e. structural steel, cold water pipe > 2" (50mm), ground rod). (Not shown on plan)	
B	ERB	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
D	ME, MP, MA, MB	19 $\frac{1}{4}$" (490mm) W x 67" (1705mm) H x 4" (105mm including rubber isolation strips) D flanged-edge terminal back box, surface mounted 82" (2085mm) A.F.F. to top of box.	ED3
B	CY, WM, VB1, VB2, RIC, VB6, VB7, VB8, VB9, XFC, UPS	Grommet opening on "WR3". Approximate location shown is recommended and may be changed - verify relocation with local Philips Service.	
B		120V/20A dedicated duplex outlet for XFC (Xper Flex Cardio) and tUPS (Tripp Lite UPS).	
B	MSA	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 Adaptation plate. Contractor to provide protection around core drill hole so that there are no sharp edges for protection of cables. Consult with local Philips Service.	
B	SP	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.	
B	TV, VB3, DBS	18" (460mm) W x 18" (460mm) L x 6" (155mm) D ceiling box, flush mounted with removable screw-type cover plate. Provide a 2 1/2" (65mm) round cutout (Two 2 1/2" (65mm) round cutouts are required for systems with two monitor carriages - verify with local Philips Service). "VB3" to be mounted behind monitor. (not shown)	
B	WR1, WR2	10" (255mm) W x 4" (105mm) D wall raceway, surface mounted with removable screw-type cover plate. "WR1" is at 5" (130mm) A.F.F. to bottom of raceway. "WR2" is at 82" (2085mm) A.F.F. to bottom of raceway.	ED3
B	WR3	10" (255mm) W x 4" (105mm) D wall raceway, surface mounted with removable screw-type cover plate. "WR3" is at finished floor. "WR3" may need to be cut at the location of the "CY" connection box.	ED3
B	ATY	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.	
B	SYNC	6" (155mm) W x 6" (155mm) 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 local Philips Service.	
B		120V/20A dedicated duplex outlet for SYNC (SyncVision).	

Electrical Legend

A Furnished and installed by Philips
B Furnished by customer/contractor and installed by customer/contractor
C Installed by customer/contractor
D Furnished by Philips and installed by contractor
E Existing
F Future
G Optional

	Item Number	Description	Detail Sheet
B	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)	ED3
B	DS	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 "ED3" diagram for connection details. (Not shown on plan)	ED3
B	N1	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.	
B	N2	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
B	S	120V/20A dedicated duplex outlet for service in the equipment room. (Not shown on plan)	
B		120V/20A dedicated duplex outlet IH (Interventional Hardware).	
B		120V/20A dedicated duplex outlet for each of the Video Connection Boxes. Verify electrical requirements for customer provided equipment.	
B	VB4, VB5	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 local Philips Service.	
D	UPS	UPS - 25 kVA.	ED4
D	UPC	Universal Power Controller - 25 kVA.	ED4
B	RSP	Remote Status Panel (wall mounted in the control area) - 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 local Philips Service.	ED4
B		120V/20A dedicated duplex outlet for RSP (Remote Status Panel)	
B	MGP	Med Gas Pedestal. Verify exact size with customer/contractor and location with Local Philips Service.	
B	TV2, TV3, TV4, TV5, TV6	6" (155mm) W x 6" (155mm) H x 4" (105mm) D ceiling box, above finished ceiling. Location shown is recommended and may be changed - verify relocation with local Philips Service. (not shown)	
B	[1]	120V/20A dedicated power supply for third party monitor.	
B		120V/20A dedicated duplex outlet for DBS (Dose Aware).	
B	MGP, SV	Med Gas Pedestal. Verify exact size with customer/contractor and location with Local Philips Service. "SV" to be located inside Med Gas Pedestal.	
B		120V/20A dedicated duplex outlet for IVUS (Volcano Intravascular Ultrasound).	

See E1 - E4 sheets for conduit and raceway requirements.

PHILIPS

Project
Allura FD10 Ceiling

VA Augusta
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Project Details
Drawing Number
N-SOU120544 F
Date Drawn: 3/8/2017
Quote: 1-10B0N8L Rev. 14
Order: None

EL1

Electrical Legend

A Furnished and installed by Philips
B Furnished by customer/contractor and installed by customer/contractor
C Installed by customer/contractor
D Furnished by Philips and installed by contractor
E Existing
F Future
G Optional

	Item Number	Description	Detail Sheet
B	12	12" (305mm) W x 12" (305mm) L x 6" (155mm) D junction box above ceiling in accessible location in or near room	
B	6	6" (155mm) W x 6" (155mm) L x 6" (155mm) D junction box above ceilng in accessible location in or near room	
B	A	Provide 4GA electrical box no less than 2.5" (65mm) deep (pass-through for all video and control cables to station) with 4GA plaster ring, flush mounted 18" (460mm) above finished floor to center of box.	
A	Mi	4 11/16" (120mm) electrical box with 1GA plaster ring, surface mounted at the foot of bed outside of ceiling stand movement (for ceiling-mount microphone).	
B	R	12" (305mm) W x 12" (305mm) H x 4" (105mm) D junction box in wall behind equipment rack, flush mounted 44" (1120mm) above finished floor to center of box.	
A	S1 S2 S3 S4 S5 S6	Recessed ceiling mounted loudspeaker (typical)	
B	SP1	Optional desk speaker connection: provide 4 $\frac{11}{16}$" (120mm) electrical box with 1GA plaster ring (typical), flush mounted 18" (460mm) above finished floor to center of plate.	
B	WM1	Wall mount wireless mic receiver: provide 4 $\frac{11}{16}$" (120mm) electrical box with 1GA plaster ring (typical), flush mounted 72" above finished floor to center of box.	
B	WP1 WP2 WP3	Wall mount connection plate: provide 4 $\frac{11}{16}$" (120mm) electrical box with 1GA plaster ring (typical), surface mounted 18" (460mm) above finished floor to center of plate. Verify locations and quantity with customer. Add additional $\frac{3}{4}$" conduit to "12" for each additional wall plate.	
B	1	Duplex outlet(s) for AV/IT equipment on dedicated 20A circuit. AV power receptacles shall be provided with hospital grade outlets wired in accordance with NEC Article 517 and all applicable codes. AV branch circuits shall be dedicated (for local AV/IT equipment only) and with respect to any given room shall be fed from a common subpanel.	
B	T	(1) analog (pots) phone line required for rack mounted equipment by Image Stream.	

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C Installed by customer/contractor
D Furnished by Philips and installed by contractor
E Existing
F Future
G Optional

	Item Number	Description	Detail Sheet
B	VUS	10" (255mm) W x 10" (255mm) L x 6" (155mm) D floor box, flush mounted with removable screw type cover plate.	
G	DH	4" (105mm) W x 4" (105mm) L x 4" (105mm) D ceiling box, flush mounted with removable screw-type cover plate	
G		120V/20A dedicated duplex outlet for PEA (Power over ethernet adapter) and NVA (Network video adapter).	
G	PEA NVA	Grommet opening on "WR3". Approximate location shown is recommended and may be changed - verify relocation with local Philips Service.	

See E1 - E4 sheets for conduit and raceway requirements.

PHILIPS

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Project Details
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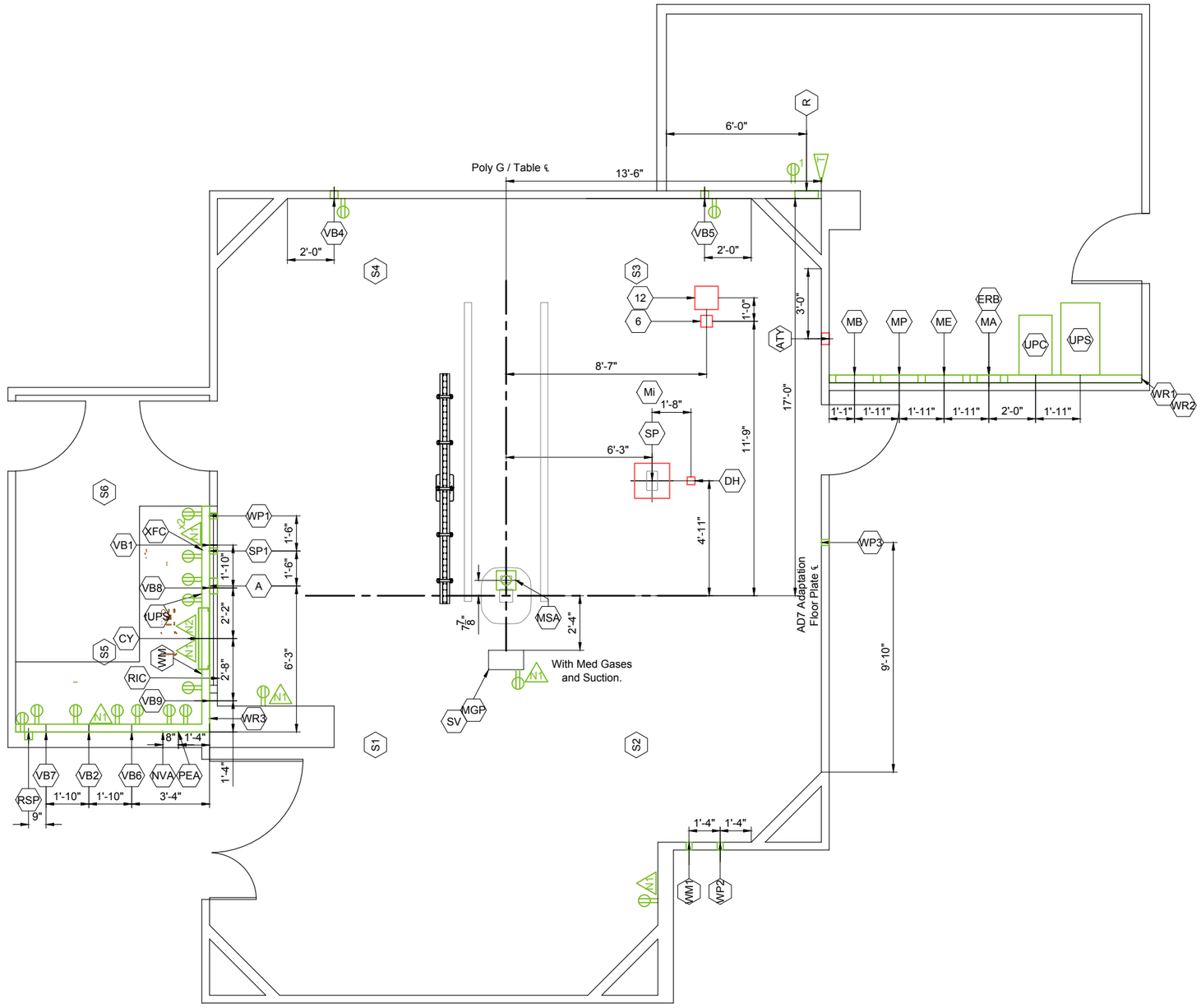
Date Drawn: 3/8/2017
Quote: 1-10B0N8L Rev. 14
Order: None

EL2

Electrical Layout

Required Unistrut Height: 9' - 6 $\frac{3}{16}$", +$\frac{3}{8}$" / -0 (2900mm, +10mm / -0)
Unistrut height measured from finished floor to bottom of Unistrut.

0 1' 2' 4' 8'
0 .5m 1m 2m



VUS SYNC

Exact location to be coordinated by Customer and local Philips service.

Refer to Electrical Legend - Sheet EL1-EL2 and Raceway/Conduit - Sheet E2-E4

PHILIPS

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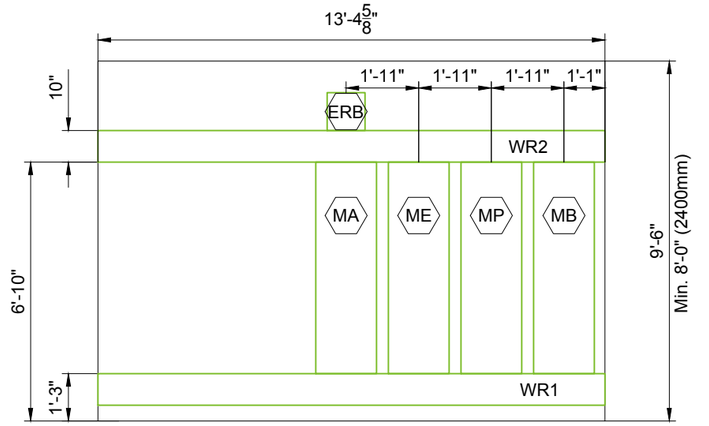
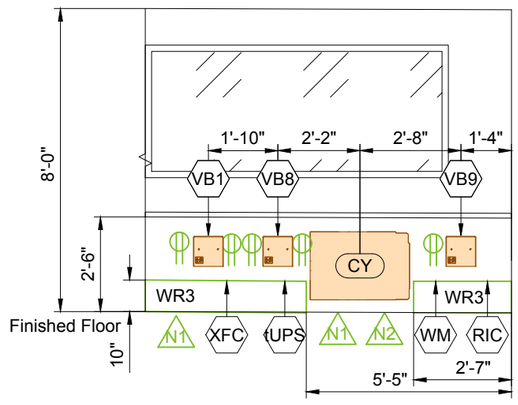
E1

Equipment Closet
(Site Specific)



Control Room
(Site Specific)



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.**
*** 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 placement on Philips drawings.**

PHILIPS

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Quote: 1-10B0N8L Rev. 14
Order: None

E2

Conduit Required

General Notes

1. All conduit runs must take most direct route point to point.
2. 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 and 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 Run No.	From	To	Conduit Quantity	Cable Type (*)	Minimum Conduit Size	Maximum Conduit Length	Special Requirements
C 1	Power Panel	CB	1	P	Per N.E.C.	Per N.E.C.	See conductor/ground size chart.
C 2	CB	MA	1	P	2 1/2"	Per N.E.C.	
C 3	CB	ST	1	P	3/4"	50'	
C 4	ERB	GE	1	P	3/4"	6'	
C 5	ERB	Room Outlets	1	P	3/4"	-	See Sheet "ED2" for details.
C 6	MA	WL	1	P	3/4"	55'	
C 7	ATY	DS	1	S	3/4"	55'	
A 8	ATY	MA	1	S	2 1/2"	41'	
A 9	ATY	TV	1	S	3/4"	65'	
A 10	SP	ME	2	C	1 1/2"	45'	Tube Cooling Hoses.
A 11	SP	ME	1	P/G	1 1/2"	42'	
A 12	SP	ME	1	S	1"	42'	
A 13	SP	ME	1	H	2 1/2"	42'	High Tension Cables.
A 14	SP	MP	1	P/G	2"	44'	
A 15	SP	MP	1	S	2 1/2"	43'	
A 16	SP	MP	2	C	2 1/2"	37'	Flat Detector Cooling Hoses
A 17	SP	MA	1	G	3/4"	35'	
A 18	SP	MA	1	S	2"	35'	
A 19	MSA	MA	1	S	2 1/2"	39'	
A 20	MSA	MP	1	P/G	2"	39'	
A 21	MSA	MP	1	S	2 1/2"	39'	
A 22	TV	MA	1	P	1 1/2"	52'	
A 23	TV	MA	1	S	2 1/2"	52'	
A 24	TV	MP	1	S	2"	52'	
A 25	TV	MB	1	S	1 1/2"	52'	For FlexVision XL.
A 26	TV	WM	1	S	3/4"	65'	For Intercom.
A 27	CY	MP	1	S	2"	50'	
A 28	CY	MA	1	P/G	1 1/2"	55'	
A 29	CY	MA	1	S	2 1/2"	55'	
A 30	MA	WM	1	S	1"	82'	

Conduit Required

General Notes

1. All conduit runs must take most direct route point to point.
2. 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 and installed by contractor
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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 Run No.	From	To	Conduit Quantity	Cable Type (*)	Minimum Conduit Size	Maximum Conduit Length	Special Requirements
C 31	MGP	WR3	2	S	1 1/2"	-	For future options (Patient Monitoring). Verify with local Philips Service if auxiliary box should be used.
G 32	Third Party	Third Party	-	-	-	-	For Injector, Auxiliary Box, Patient Monitoring, Video Networking, etc.
G 33	Third Party	ERB	-	G	-	-	For Injector, Auxiliary Box, Patient Monitoring, Video Networking, etc.
A 34	VB1	MB	1	S	1"	82'	
A 35	VB2	MB	1	S	1"	82'	
A 36	VB4	MB	1	S	1"	82'	
A 37	VB5	MB	1	S	1"	82'	
A 38	VB6	MB	1	S	1"	82'	
A 39	VB7	MB	1	S	1"	82'	
A 40	VB8	MB	1	S	1"	82'	
A 41	VB9	MB	1	S	1"	82'	
A 42	VB4	CY	1	S	1/2"	91'	
A 43	VB5	CY	1	S	1/2"	91'	
A 44	MP	MGP	1	S	2 1/2"	52'	For Table Mounted Injector.
A 45	MP	RIC	1	S	2 1/2"	50'	
A 46	TV2	MB	1	S	2 1/2"	82'	Live/reference monitors.
A 47	TV2	MB	1	P	2 1/2"	82'	Live/reference monitors.
B 48	TV3	MB	1	S	2 1/2"	82'	Live/reference monitors.
B 49	TV4	MB	1	S	2 1/2"	82'	Live/reference monitors.
B 50	TV5	MB	1	S	2 1/2"	82'	Live/reference monitors.
B 51	TV6	MB	1	S	2 1/2"	82'	Live/reference monitors.
A 52	WR3	DBS	1	S	2"	-	
G 53	VUS	MGP	1	S	3"	75'	For connection to "SV".
A 54	SYNC	MGP	1	-	3"	-	SyncVision conduit to be verified.
G 55	DH	PEA	1	S	1/2"	98'	Verify with customer if they would like to install for future upgrade.
A 56	MGP	XFC	1	S	1"	75'	
A 57	MGP	tUPS	1	P	2"	56'	
A 58	MGP	MA	1	P	2"	66'	
A 59	MGP	XFC	1	P	1"	75'	
A 60	TV	XFC	1	S	1"	66'	

PHILIPS

Project
Allura FD10 Ceiling

VA Augusta
Augusta, GA
-3C143 - Suite, 3C138 Equip. Rm

Philips Contacts
Project Manager: Julio Coronado
Contact Number: (404) 290-9407
Email: julio.coronado@philips.com
Drawn By: Sam Chong

Project Details
Drawing Number
N-SOU120544 F
Date Drawn: 3/8/2017
Quote: 1-10B0N8L Rev. 14
Order: None

E3

Conduit Required

General Notes

1. All conduit runs must take most direct route point to point.
2. 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 and 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 Run No.	Conduit From	Conduit To	Conduit Quantity	Cable Type (*)	Minimum Conduit Size	Maximum Conduit Length	Special Requirements
A	61	TV	UPS	1	S	2"	46'	
C	62	UPS	ST	1	P	3/4"	150'	
B	63	MA	UPC	1	P	2"	30'	Via raceway.
B	64	MA	UPC	1	P	2"	30'	Via raceway.
B	65	MA	UPC	1	P	2"	30'	Via raceway.
B	66	MA	UPC	1	P	2"	30'	Via raceway.
B	67	UPC	UPS	1	P	1"	15'	Via raceway.
B	68	UPC	UPS	1	P	1"	15'	Via raceway.
B	69	UPC	UPS	1	P	1"	15'	Via raceway.
B	70	UPC	UPS	1	P	1"	15'	Via raceway.
B	71	UPC	UPS	1	P	1"	15'	Via raceway.
B	72	RSP	UPS	1	P	1 1/2"	90'	Remote Status Panel.
A	73	R	12	3	S	1 1/2"	50'	
A	74	R	6	1	S	1 1/2"	50'	
A	75	S1	6	1	S	3/4"	50'	
A	76	S1	S2	1	S	3/4"	20'	
A	77	S3	6	1	S	3/4"	50'	
A	78	S3	S4	1	S	3/4"	20'	
A	79	S5	6	1	S	3/4"	50'	
A	80	S5	S6	1	S	3/4"	20'	
A	81	SP1	6	1	S	3/4"	50'	
A	82	12	Mi	1	S	3/4"	50'	
A	83	12	WM1	1	S	3/4"	50'	
A	84	12	WP1	1	S	3/4"	50'	
A	85	12	WP2	1	S	3/4"	50'	
A	86	12	WP3	1	S	3/4"	50'	
A	87	12	A	2	S	1 1/4"	50'	
A	88	12	6	2	S	1 1/2"	50'	
A	89	12	Control Interface	1	S	3/4"	50'	Lutron Lighting Control Interface to be located in equipment closet by electrician

Conduit Required

General Notes

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

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E Conduit existing - cables supplied by Philips and 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 Run No.	Conduit From	Conduit To	Conduit Quantity	Cable Type (*)	Minimum Conduit Size	Maximum Conduit Length	Special Requirements

Project
Allura FD10 Ceiling

VA Augusta
Augusta, GA
-3C143 - Suite, 3C138 Equip. Rm

Philips Contacts
Project Manager: Julio Coronado
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Drawn By: Sam Chong

Project Details
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N-SOU120544 F
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E4

Power 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 ±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 ±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 Circuit and Wire Gauge Requirements (Mains 40E Cabinet)

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 trip
****Conductor/Ground Size Chart: Engineer of record responsible for calculating conductor/ground sizes. Recommended conductor/ground sizes for 1% impedance of supply conductors to circuit breaker (CB). Based on 20°C copper conductors:**	
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

CB

(14.2)

PHILIPS

Project
Allura FD10 Ceiling
VA Augusta
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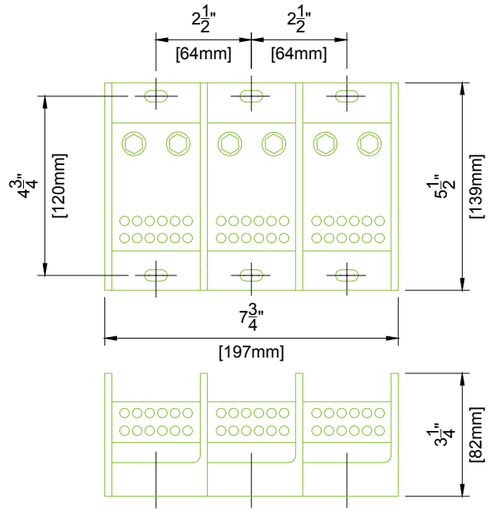
Drawn By: Sam Chong

Project Details
Drawing Number
N-SOU120544 F
Date Drawn: 3/8/2017
Quote: 1-10BON8L Rev. 14
Order: None

ED1

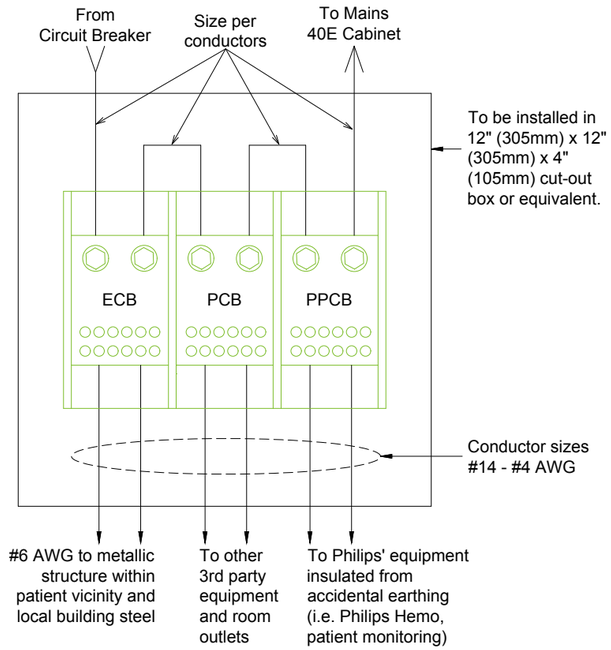


1. Furnished and installed by Contractor
2. Purchase from local Ferraz Shawmut distributor, http://www.ferrazshawmutsales.com/index.htm Catalog #69143.
3. 62000 - 69000 Series Blocks http://www.ferrazshawmutsales.com/pdfs/PDB-LARGE.pdf

ERB

Detail - Equi-Potential Reference Bar Application

(Not to scale)



Invasive Procedures

This equipment may be used for invasive procedures; therefore, the area to be installed is classified as critical care area per NFPA-99 and NFPA-70 (NEC). These documents specify maximum touch voltages and ground impedance in these areas.

Test performed by GSSNA service require that these specifications are met by the GSSNA equipment. It is the facility's responsibility to ensure that these specifications are met by the wall outlet, facility structure, and other equipment not installed by GSSNA.

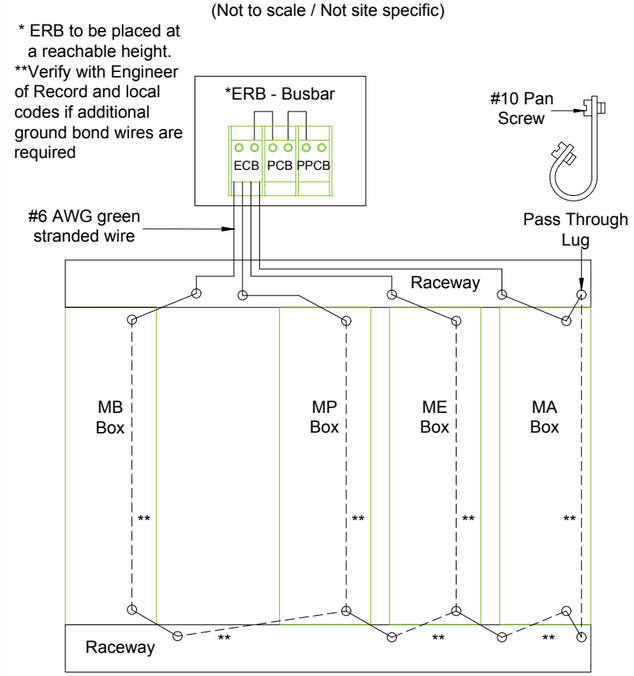
The GSSNA specified "Equi-Potential Reference Bar (ERB)" serves as a ground reference for GSSNA equipment. It may also serve as the "Reference Grounding Point" of the room as defined in NFPA 99-3.3.140 for non-Philips Healthcare equipment.

Equi-Potential Reference Bar (ERB)
A) Equip-Potential Conductor Bar (ECB)
B) Protective Conductor Bar (PCB)
C) Philips Protective Conductor Bar (PPCB)

(14.0)

Detail - Grounding

(Not to scale / Not site specific)



(14.1)

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

ED2

Project Details
Drawing Number
N-SOU120544 F
Date Drawn: 3/8/2017
Quote: 1-10B0N8L Rev. 14
Order: None

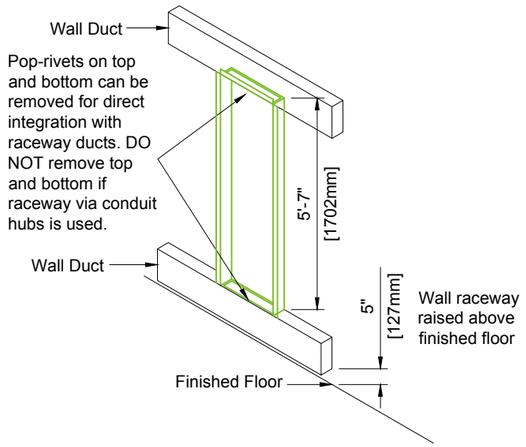
Philips Contacts
Project Manager: Julio Coronado
Contact Number: (404) 290-9407
Email: julio.coronado@philips.com
Drawn By: Sam Chong

Project
Allura FD10 Ceiling

VA Augusta
Augusta, GA
-3C143 - Suite, 3C138 Equip. Rm

8.20.14

Detail - Back Box Mounting
(Not to scale)



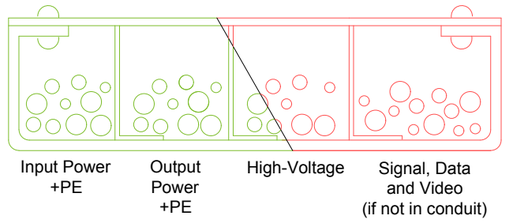
ME MP MA MB

(16.0)

Detail - Cable Trough Divisions
(Not to scale)

Troughs or ducts must be separated by metal barriers into four sections:

1. Input Power wires and associated PE.
2. Output Power wires and associated PE.
3. High-Voltage wires to X-Ray stands.
4. Signal, data and video cables.

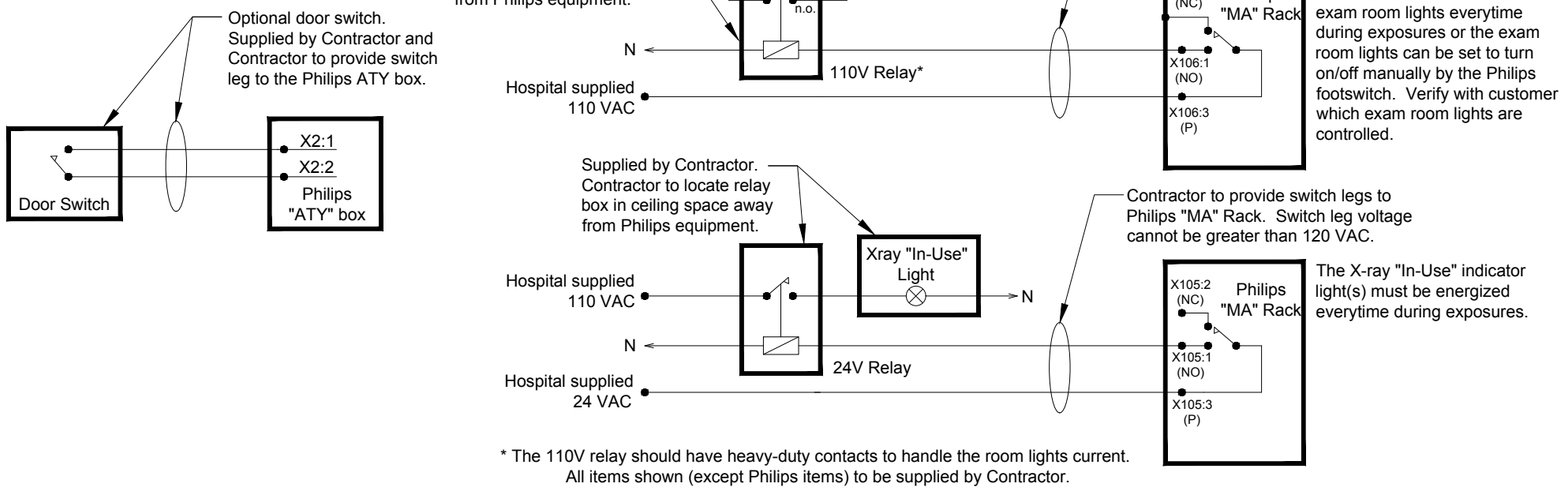


5. It is important that all cables are placed in the appropriate trough and at not given point do any cables from one division cross cables from another. Trough separation must be continuous from the beginning.
6. Trough or ducts: steel with steel dividers grounded to building ground.
7. Contractor to provide cable restraints in all troughs.

WR1 WR2 WR3

(12.0)

Diagram - Typical Connection of X-Ray In-Use Light, Exam Room Lights, & Door Switch



* The 110V relay should have heavy-duty contacts to handle the room lights current.
All items shown (except Philips items) to be supplied by Contractor.

WL DS

(14.0)

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Project
Allura FD10 Ceiling

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Augusta, GA
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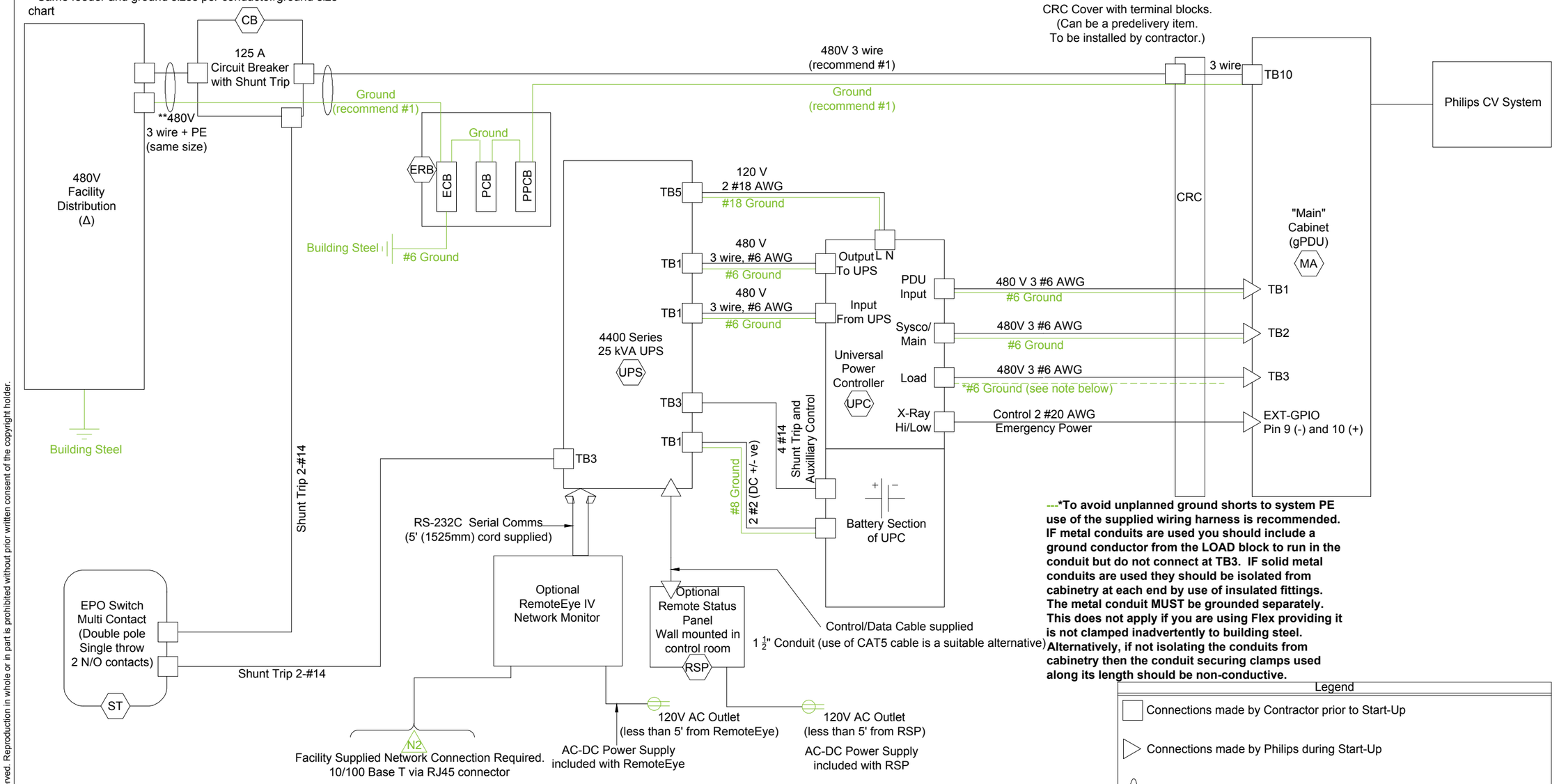
Order: None

ED3

8.20.14

Wiring and circuit sizes from source supply must meet Philips regulation requirements and must be determined by contractor to meet building conditions and local codes.
3 Phase, + PE (Protective Earth).
**Same feeder and ground sizes per conductor/ground size chart



---*To avoid unplanned ground shorts to system PE use of the supplied wiring harness is recommended. IF metal conduits are used you should include a ground conductor from the LOAD block to run in the conduit but do not connect at TB3. IF solid metal conduits are used they should be isolated from cabinetry at each end by use of insulated fittings. The metal conduit MUST be grounded separately. This does not apply if you are using Flex providing it is not clamped inadvertently to building steel. Alternatively, if not isolating the conduits from cabinetry then the conduit securing clamps used along its length should be non-conductive.

Legend

- Connections made by Contractor prior to Start-Up
- Connections made by Philips during Start-Up
- Feed Conductors run together with Ground in conduit
- Flex, Liquid Tight, etc.
- Conduit, rigid EMT, etc.

IMPORTANT NOTES:
1. Connect Ground from UPC to Main Cabinet at TB1 and TB2. Do not connect Grounds at TB3.

2. Do not run DC Battery Conductors in same conduit as Auxilliary Control and Shunt Trip cables.

3. Cables from Main Cabinet to UPC and UPC to UPS supplied by Philips.

Note:
All power (system and shunt trip) wires and ground (system and bonding) wires, breakers, and splitters are provided and installed by contractor.

Size of the wires is based on conduit run length shown on conduit sheet, the size of the wire will need to be increased for longer runs.

Conductors, destinations, and number of conduit runs will vary from system to system. Consult individual site plans for detailed conduit schedules.

Contact Philips Zone Power Specialist for detailed wiring diagram.

Diagram - Standard Connection - 25 kVA UPS with UPC

(16.0)

PHILIPS

Project
Allura FD10 Ceiling

VA Augusta
Augusta, GA
-3C143 - Suite, 3C138 Equip. Rm

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Project Details
Drawing Number
N-SOU120544 F
Date Drawn: 3/8/2017
Quote: 1-10B0N8L Rev. 14
Order: None

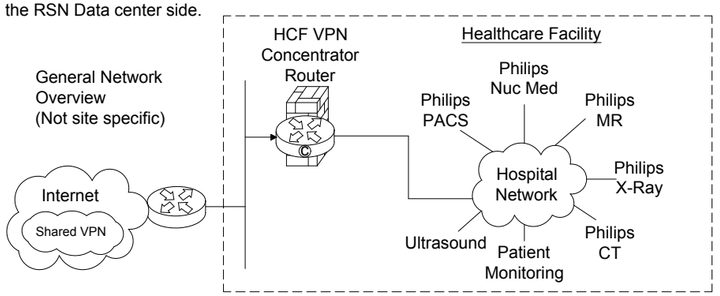
ED4

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.

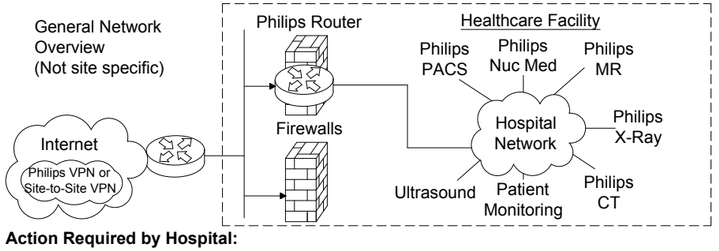


Action Required by Hospital:
- Review and approve connection details.
- Complete appropriate Site Checklist.
- Configure and allow Site-to-Site access prior to setting up connectivity depending on the access criteria that the HCF decides to implement (ex: Source IP filtering, destination IP filtering, 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.

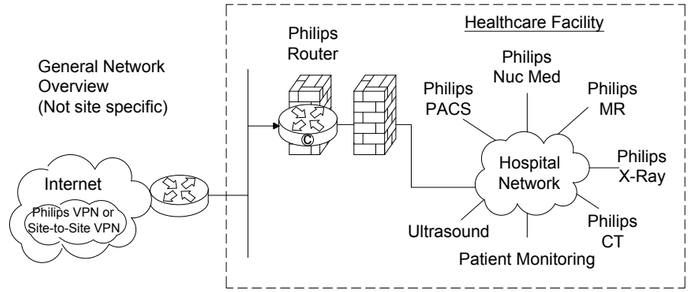
Connectivity Details:
- An RSN Cisco 1711 or 1712 router will be preconfigured and installed at the HCF by Philips in conjunction with the HCF IT representative.
- The VPN Tunnel will be an IPSEC, 3DES encrypted Tunnel using IKE and will be established from the RSN-DC and terminated at the RSN Router 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.



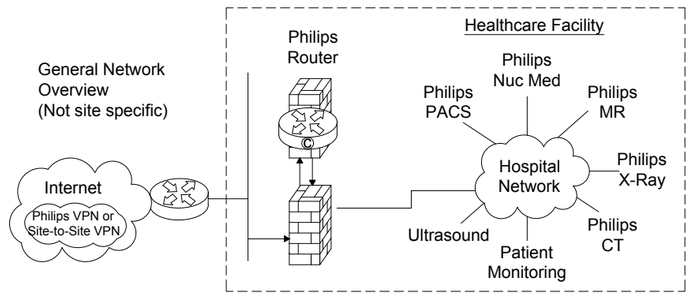
Action Required by Hospital:
- Assign a fixed public IP Address from the ISP to be configured on the Philips router. This is the DOTTED link on the picture connected to the firewall.
- Assign a Back end IP for the Philips router on the Hospital Network.
- Complete appropriate Site Checklist.
- Route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

(12.0)

PHILIPS

Project
Allura FD10 Ceiling

Philips Contacts
Project Manager: Julio Coronado
Contact Number: (404) 290-9407
Email: julio.coronado@philips.com
Drawn By: Sam Chong

Project Details
Drawing Number
N-SOU120544 F
Date Drawn: 3/8/2017
Quote: 1-10B0N8L Rev. 14
Order: None

N1

VA Augusta
Augusta, GA
-3C143 - Suite, 3C138 Equip. Rm

System Network Information

IMPORTANT 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
Physical Location:	
Hostname:	
MAC Address:	
IP Address	
Netmask:	
Gateway:	
AE Title:	
Port Number (5101):	

XtraVision	IP Sec [ ]yes [ ]no
Physical Location:	
Hostname:	
MAC Address:	
IP Address	
Netmask:	
Gateway:	
AE Title XtraVision:	
Port Number (3110):	
AE Title for X-Ray Mod:	
IP for X-Ray Modality:	

EP Navigator	IP Sec [ ]yes [ ]no
Physical Location:	
Hostname:	
MAC Address:	
IP Address	
Netmask:	
Gateway:	
AE Title:	
Port Number:	

View Forum	IP Sec [ ]yes [ ]no
Physical Location:	
Hostname:	
MAC Address:	
IP Address	
Netmask:	
Gateway:	
AE Title:	
Port Number:	

XperIM	IP Sec [ ]yes [ ]no		
	Location 1	Location 2	Location3
Physical Location:			
Hostname:			
MAC Address:			
IP Address			
Netmask:			
Gateway:			
AE Title:			
Port Number (3010):			

Remote Software Installation (RPS)	
Enable Distribution:	[ ] yes [ ] no
Enable Installation:	[ ] yes [ ] no

Dicom Printer				
	Location 1	Location 2	Location3	Location 4
Physical Location:				
Hostname:				
IP Address				
AE Title:				
Port Number :				

PACS	Physical Location:				
	Store/ Import 1	Store/ Import 2	Store/ Export	Query/ Retrieve	Storage/ Commit
Hostname:					
IP Address					
AE Title:					
Port Number :					

PACS	Physical Location:				
	Store/ Import 1	Store/ Import 2	Store/ Export	Query/ Retrieve	Storage/ Commit
Hostname:					
IP Address					
AE Title:					
Port Number :					

Audit Trail	
Physical Location:	
Hostname:	
IP Address	
AE Title:	
Port Number :	

Time Synchronization	
Physical Location:	
Server Name:	

RIS	**Physical Location:**		
	Basic Local RIS	WLM	MPPS
Hostname:			
IP Address:			
AE Title:			
Max PDU Size:	16384 or		
Port Number:		[ ] yes [ ] no	[ ] yes [ ] no
Secure Node:		[ ] yes [ ] no	[ ] yes [ ] no
Encryption:			
Certificate Name:			
PPSM IHE Compatible:			[ ] yes [ ] no

Time Synchronization	
Allura Xper:	20/21(ftp), 80(http), 443(https), 5900(vnc), 9903(fsf.net)
Allura CV20:	20/21(ftp), 80(http), 4440(fsf)
XtraVision:	20/21(ftp), 80(http), 443(https), 5660(ist/ice), 5900(vnc), 9905(lots)
EP Navigator (R3):	20/21(ftp), 443(https), 5660(ist/ice), 9055(lots)
EP Cockpit (R1.2):	20/21(ftp), 80(http), 443(https), 5900(vnc), 9903(fsf.net)
CX50:	
Xper IM:	
View Forum	

Hospital Network			
	M2M Server (PRS)	Proxy	ePO Server (PRS)
Scheme (https):			
IP Address (192.68.49.50):			
Portnumber (443):			
Use Proxy Server:	[ ] yes [ ] no		
IP Address			
Port Number:			
User Name:			
Password:			

(13.0)

PHILIPS

Project
Allura FD10 Ceiling

VA Augusta
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Philips Contacts
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Email: julio.coronado@philips.com

Drawn By: Sam Chong

Project Details
Drawing Number
N-SOU120544 F
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Order: None

N2

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 final planning 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 ***.
- ☐ 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

Items Specific for the Cardio/Vascular Modality

- ☐ Unistrut installed and level according to Philips specifications.
- ☐ Floor plates installed and level according to Philips specifications.
- ☐ 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.

PHILIPS

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Allura FD10 Ceiling

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CHK