PHILIPS

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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.

THIS DOCUMENT INCLUDED
FOR INFORMATIONAL PURPOSES.
AMBIENT SERVERS HAVE BEEN RELOCATED
TO TECH WORK ROOM.
THIS DOCUMENT WILL BE UPDATED AND REISSUED
TO REFLECT THAT CHANGE.

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	-	Rev. letter A not used.	-
B	3/19/2021	Updated equipment and created pre-order site preparation support document per latest quote 1-2DG32RD Rev. 4.	KH

Table of Contents

PHILIPS

Project
Tier 3 Ambient Experience
Good Samaritan Hospital of Suffern
Lsp Capital/Lsp Supplies
Suffern, NY
Prep and Recovery Bays

Philips Contacts
Project Manager: Rich Halm
Contact Number: (860) 373-3707
Email: richard.halm@philips.com
Drawn By: Kaitlyn Hennen

Project Details
Drawing Number
N-EAS210070 B
Date Drawn: 3/19/2021
Quote: 1-2DG32RD Rev. 4
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 150 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 undersirable 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.

(20.0)

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 shall be painted or covered, baseboards installed, floors shall 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 lock sets 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. 115v 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. BTUs shown on sheet A1 are average heat capacity.
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 conditioner 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. Refer to Transport Information page for clear door openings and corridor widths.

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 Healthcare is equipped with a service diagnostic feature which allows for remote and on site service diagnostics. To establish this feature, a RJ45 type ethernet 10/100/1000 Mbit network connector must be installed as shown on plan. Access to customer's network via their remote access server is needed for Remote Service Network (RSN) connectivity. All cost with this feature is the responsibility of the customer.

(13.0)

HVAC Requirement for General Equipment Locations

Heating, ventilation, air conditioning requirement for general equipment locations must maintain temperature at 75° +/- 11°Fahrenheit (24° +/- 6°Celsius) and non-condensing relative humidity at 52.5%, +/- 22.5%.

(13.0)

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Quote: 1-2DG32RD Rev. 4
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

	Equipment Designation	Description	Weight (lbs)	Heat Load (BTU/hr)	Detail Sheet
A	DE1	Data Enabler	5.4	68	AD1
A	SFF	AE "Small Form Factor" Control Components	77	277	AD1
A	ATSW	AE Touch Screen ELO 1517L (Wall mounted)	10.6	41	AD1
A	AVI	AV Input Wall Plate (Extron WPB 108)	-	-	-
A	SPK	Exron SI 26x Ceiling Speakers	2.6	-	-
A	AECM	AE 55" Ceiling Flatscreen Monitor (Qty. = 2)	97	444	-

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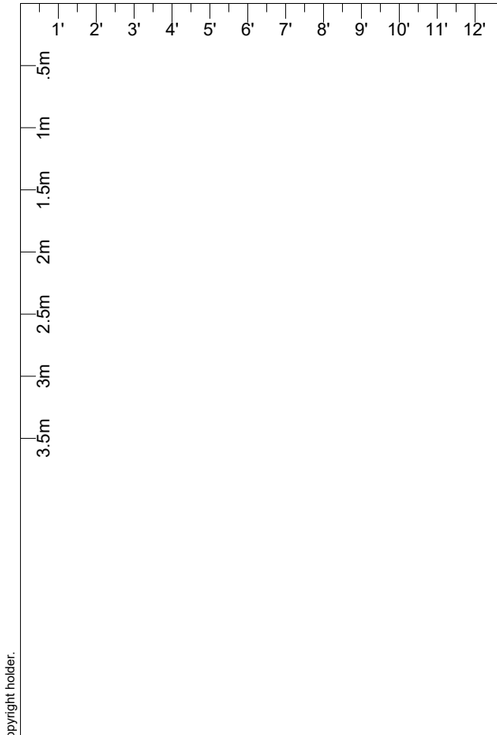
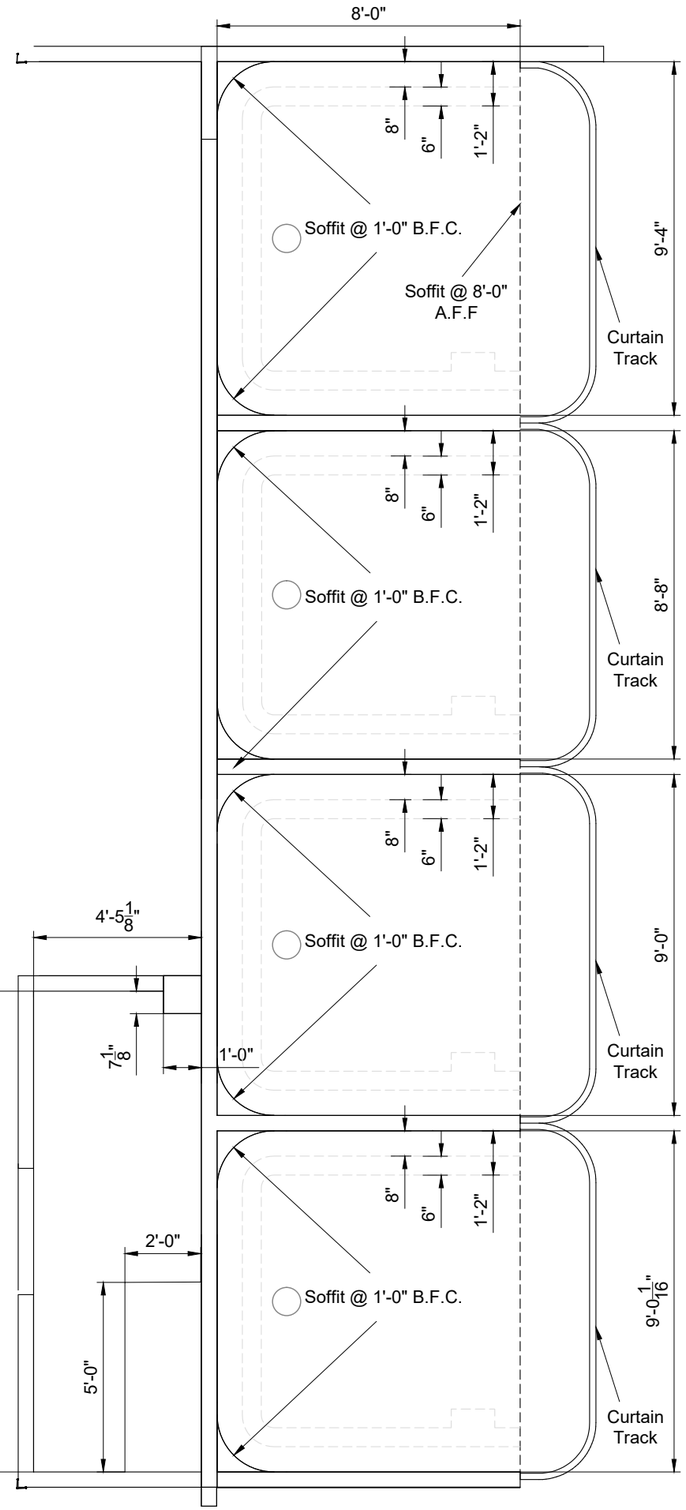
AL





Legend

- Walls
- Soffit
- Existing (to be removed)
- Beams or other building construction elements

Equipment Layout

1/4" = 1'-0"

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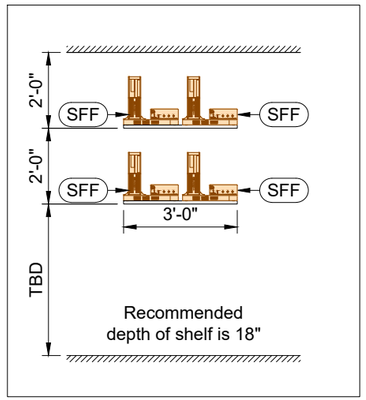
A1

1' 2' 3' 4' 5' 6' 7' 8' 9' 10' 11' 12'

.5m 1m 1.5m 2m 2.5m 3m 3.5m

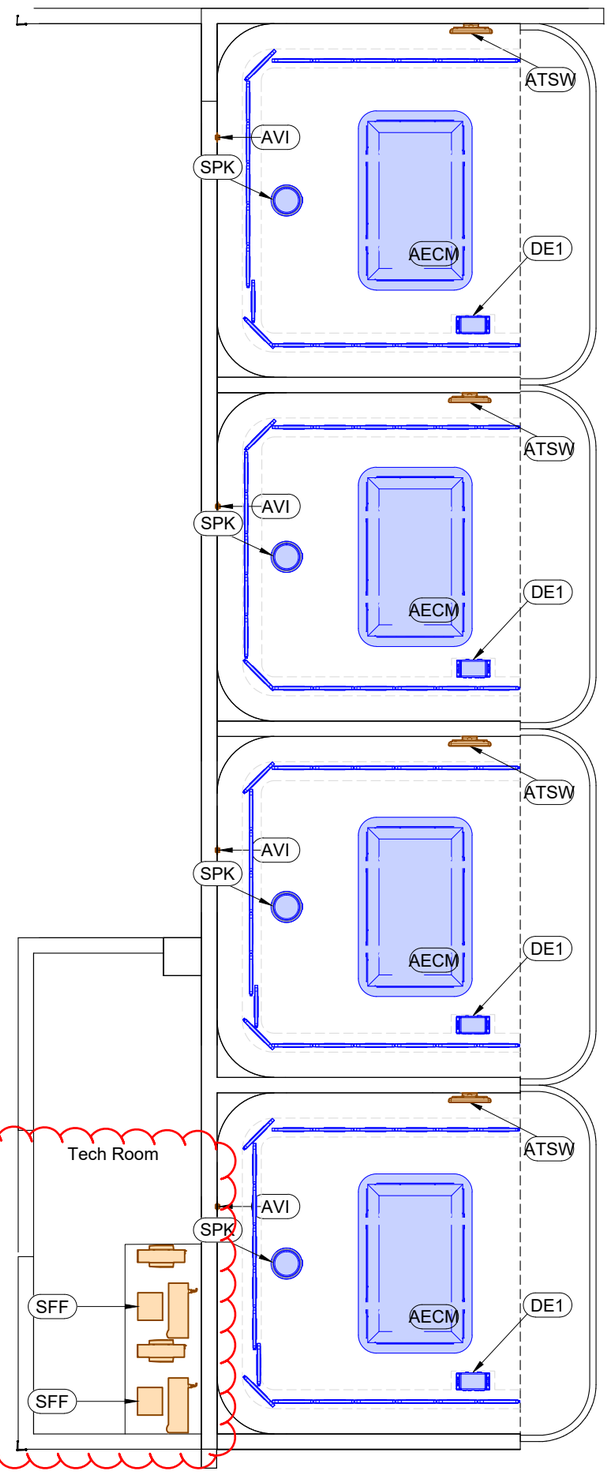
Example Tech Room
Elevation View



AMBIENT SERVERS RELOCATED TO TECH WORK ROOM; THIS DOCUMENT WILL BE UPDATED AND REISSUED TO REFLECT THAT CHANGE.

Equipment Layout

1/4" = 1'-0"



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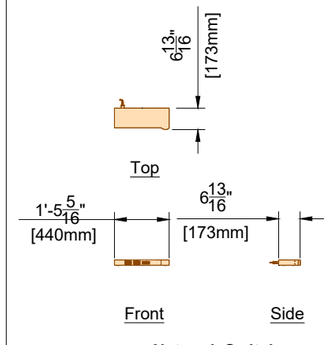
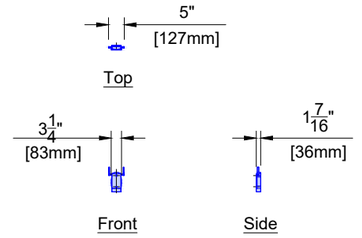
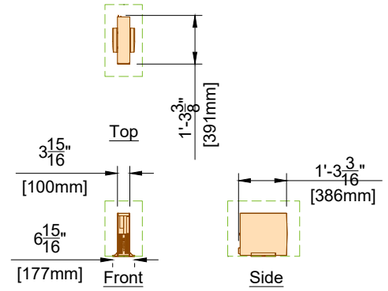
A2



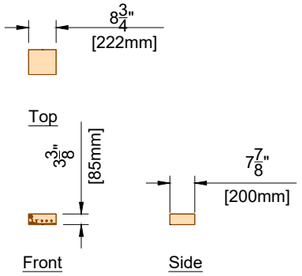
Network Switch



Wireless Adaptor (optional)



AE Server HP RP5810

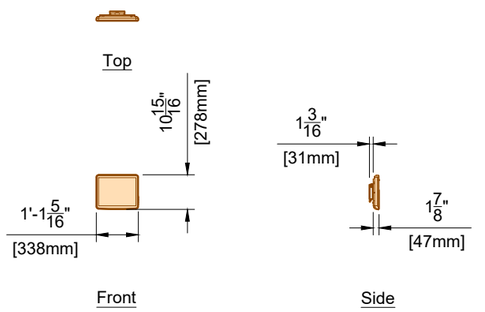


Audio Amplifier

Weight shown is for all components.

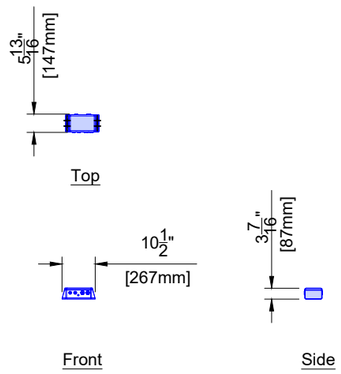
(16.0)

	Ambient Experience Small Form Factor	
SFF	Weight	Heat Dissipation
	77 lbs (35 kg)	277 Btu/hr (81 W)



(16.0)

	AE Touch Screen (Wall Mounted)	
ATSW	Weight	Heat Dissipation
	10.6 lbs (4.8 kg)	41 Btu/hr (12 W)



(16.0)

	Data Enabler	
DE1	Weight	Heat Dissipation
	5.3 lbs (2.4 kg)	68 Btu/hr (20 W)

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Order: None

AD1

Minimum Site Preparation Requirements

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.

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 per specifications on sheet SD2.

4. **Ceiling Support Apparatus**
   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.

   The structural support apparatus surface to which Philips equipment is to be attached, shall have horizontal equipment attachment surfaces parallel, square and level to within plus or minus 1/16" (2mm).

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

   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.

(14.0)

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SN

All dimensions must be off of the finished wall.

If a wall is furred out to hide electrical duct or boxes, the dimensions included in this plan must come off of the finished furred wall.

Notes:

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 (see exceptions - Note 2, below)
B Furnished 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
A	ATSW	Anchorage for Touch Sceen Wall Bracket.
B	MF	Main floor space. Forbo Smaradg Classic (Color: 6192 Light Grey).
B	FW	Finished walls. Drywall painted white matte: Sherwin Williams SW7005 Pure White. Walls must have a Level 5 finish.
B	S	Skirting. Allstate A02 Rubber Cove. Color to match Sherwin Williams SW 7005 Pure White.
B	RS	Rounded soffit corners Ø18" (Ø460mm).

Ceiling Support Legend

A Furnished and installed/anchored by Philips (see exceptions - Note 2, below)
B Furnished 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	CMS	Unistrut Support Structure for AE Ceiling Flatscreen. Exact size and location to be determined by local Philips Service.	SD3
A	CL	Cove mounted iColor Cove QLX Powercore - 12" length (79 x total)	SD1
B	PC	Perimeter Light Cove Construction	
A	DE	Data Enabler mounted to cove support structure	SD1
A	SP	Ceiling speakers to be mounted flush with suspended ceiling.	
B	CMO	55.2" (1402mm) L x 34.5" (876mm) W opening in ceiling centered around the AE Ceiling Monitor with corner curve radii of 4.9" (125mm). Third party exclusion zone above finished ceiling. All third party items are prohibited in this area.	SD3
B	CME	AE Ceiling Monitor Enclosure Drywall Box; optional per local requirements, 37" (940mm) W x 57.8" (1468mm) L x 11.8" (300mm) D minimum. Customer/contractor to ensure that projector box receives return air for cooling. *Size and location of Drywall Box extends beyond the opening in the ceiling, "CMO".	SD3 SD3

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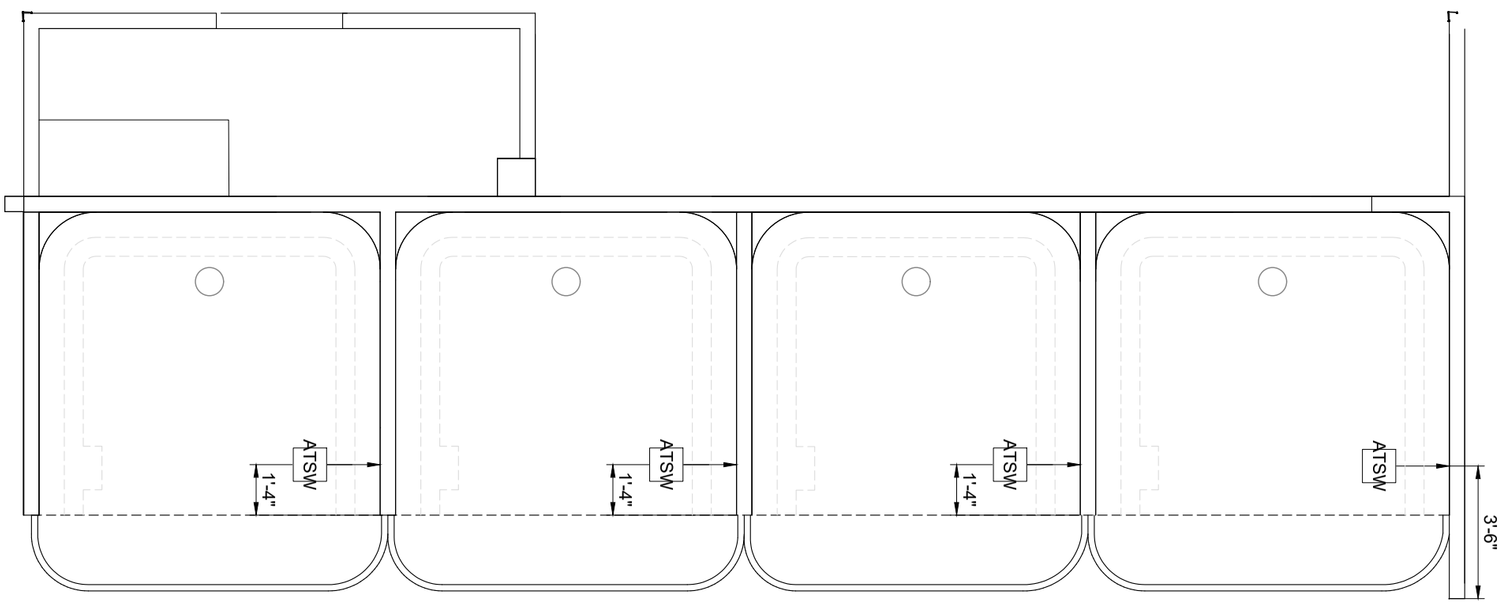
SL

3.5m 3m 2.5m 2m 1.5m 1m .5m

1' 2' 3' 4' 5' 6' 7' 8' 9' 10' 11' 12'

Floor & Wall Support Layout

1/4" = 1'-0"



S1

Project Details	Philips Contacts	Project
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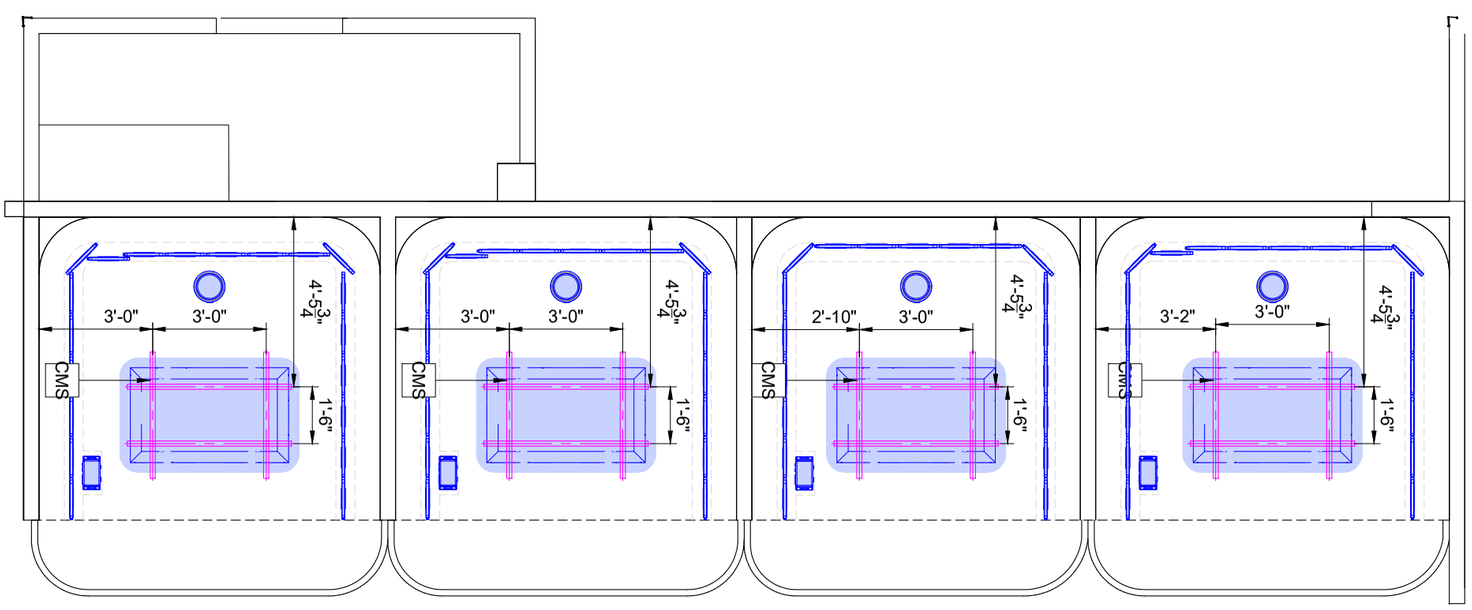
PHILIPS

6.9.2020

Ceiling Support Layout

1/4" = 1'-0"



S2	**Project Details** Drawing Number **N-EAS210070 B** **Date Drawn: 3/19/2021** Quote: 1-2DG32RD Rev. 4 Order: None	**Philips Contacts** Project Manager: Rich Halm Contact Number: (860) 373-3707 Email: richard.halm@philips.com Drawn By: Kaitlyn Hennen	**Project** **Tier 3 Ambient Experience** **Good Samaritan Hospital of Suffern** **Lsp Capital/Lsp Supplies** Suffern, NY Prep and Recovery Bays

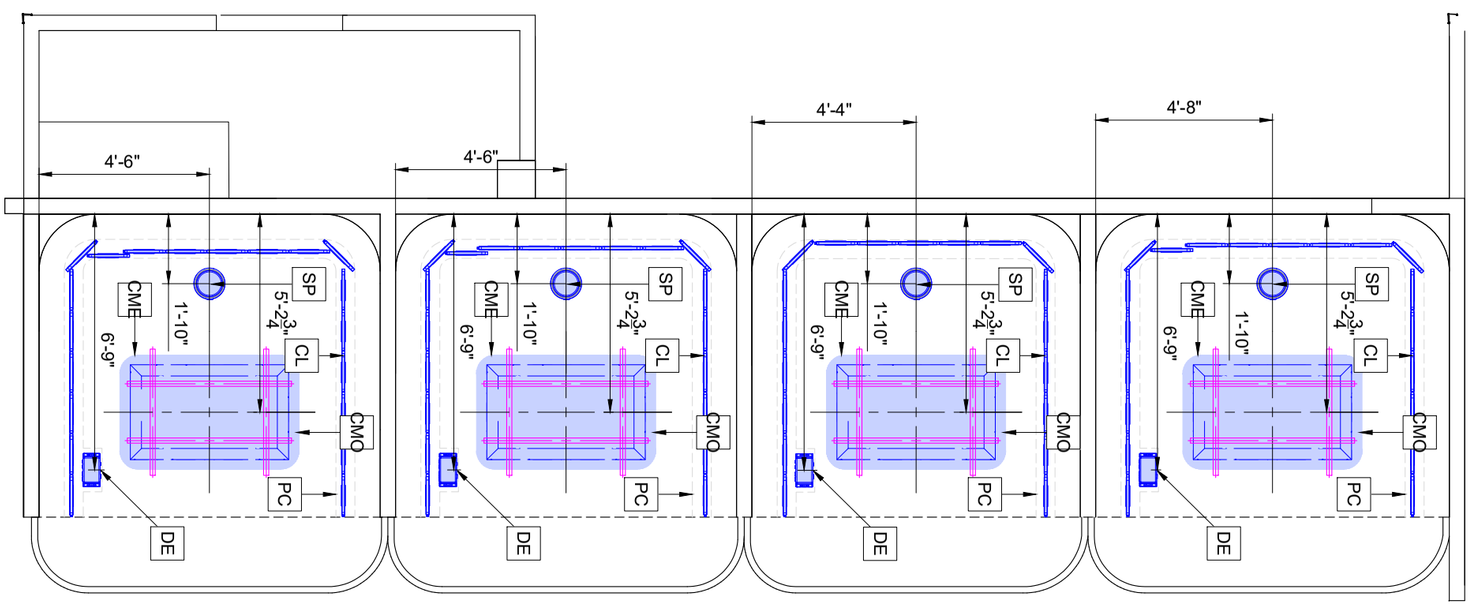
6.9.2020

3.5m 3m 2.5m 2m 1.5m 1m .5m

1' 2' 3' 4' 5' 6' 7' 8' 9' 10' 11' 12'

Ceiling Support Layout

1/4" = 1'-0"



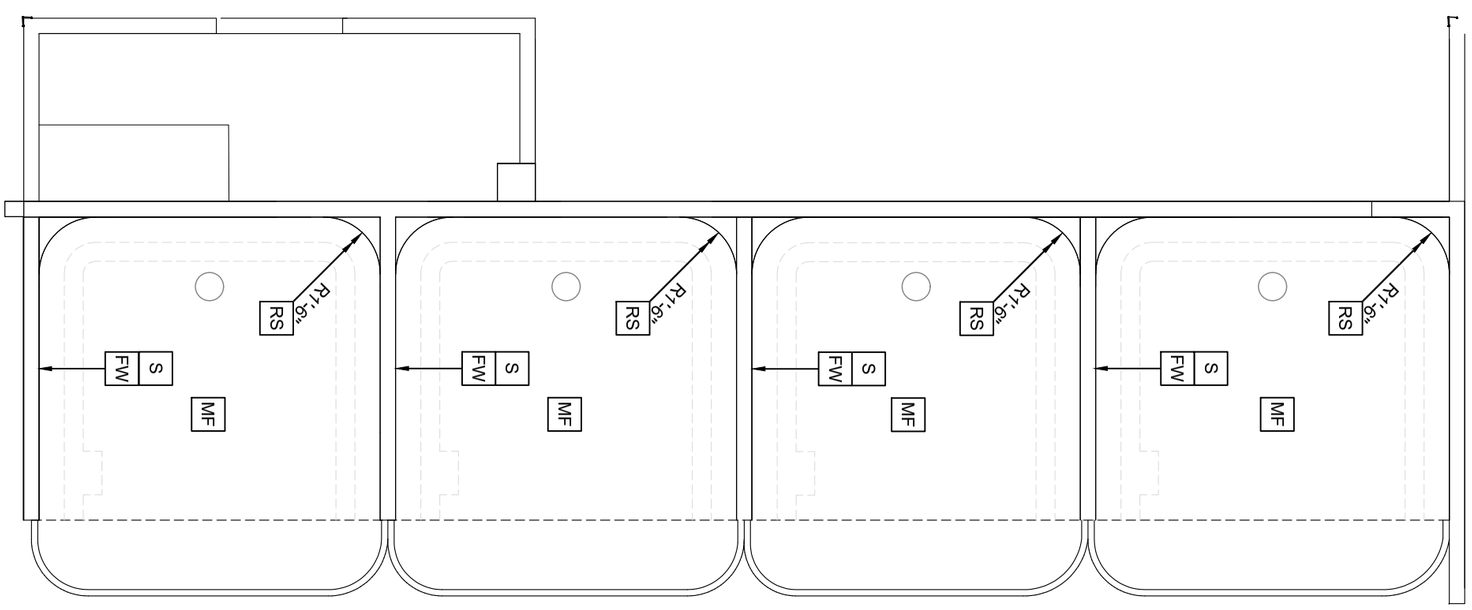
S3	Project Details	Philips Contacts	Project
	Drawing Number **N-EAS210070 B** **Date Drawn: 3/19/2021** Quote: 1-2DG32RD Rev. 4 Order: None	Project Manager: Rich Halm Contact Number: (860) 373-3707 Email: richard.halm@philips.com Drawn By: Kaitlyn Hennen	**Tier 3 Ambient Experience** **Good Samaritan Hospital of Suffern** **Lsp Capital/Lsp Supplies** Suffern, NY Prep and Recovery Bays

PHILIPS

6.9.2020

Paint Requirements Layout

1/4" = 1'-0"



S4

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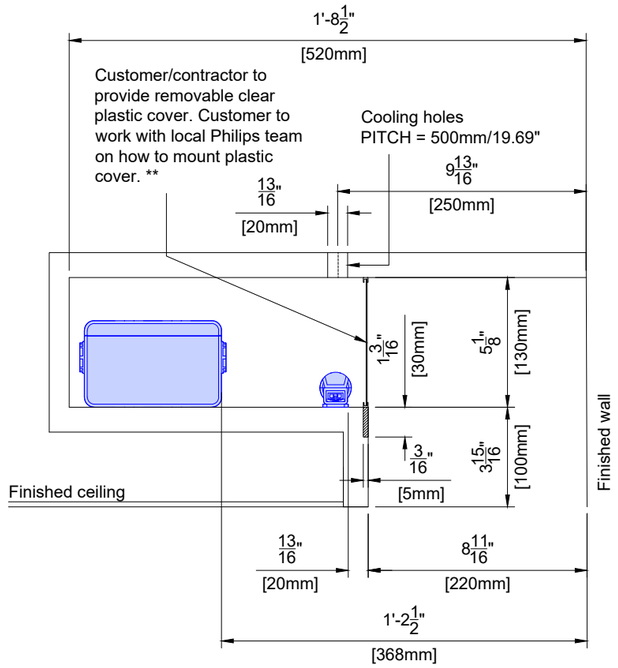
Drawing Number **N-EAS210070 B** **Date Drawn: 3/19/2021** Quote: 1-2DG32RD Rev. 4 Order: None	Project Manager: Rich Halm Contact Number: (860) 373-3707 Email: richard.halm@philips.com Drawn By: Kaitlyn Hennen	**Tier 3 Ambient Experience** **Good Samaritan Hospital of Suffern** **Lsp Capital/Lsp Supplies** Suffern, NY Prep and Recovery Bays

PHILIPS

6.9.2020

Detail - Data Enabler in Cove

(Not to scale)

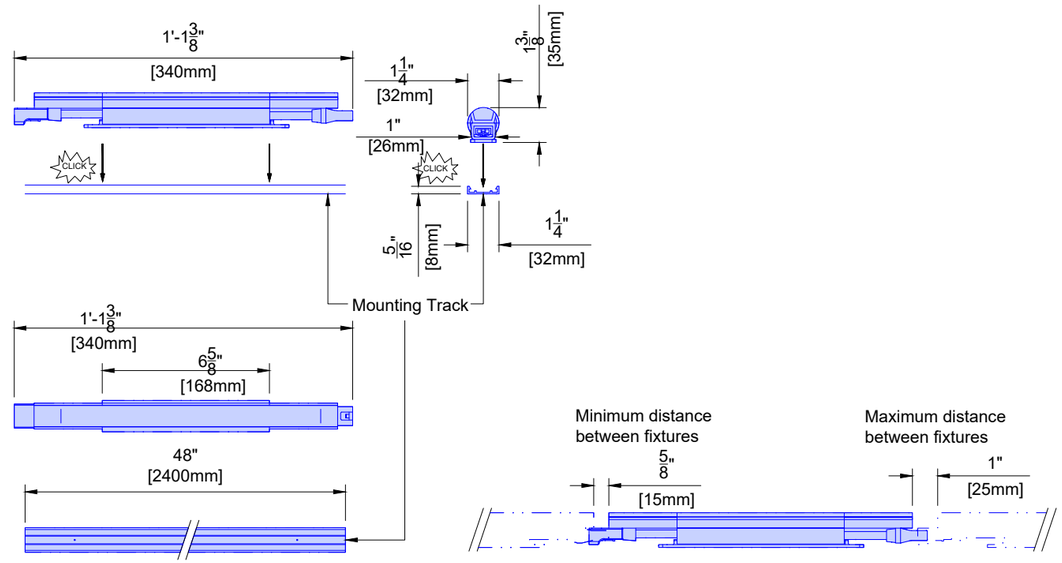


PC DE

(19.1)

Detail - Data Enabler in Cove Recess

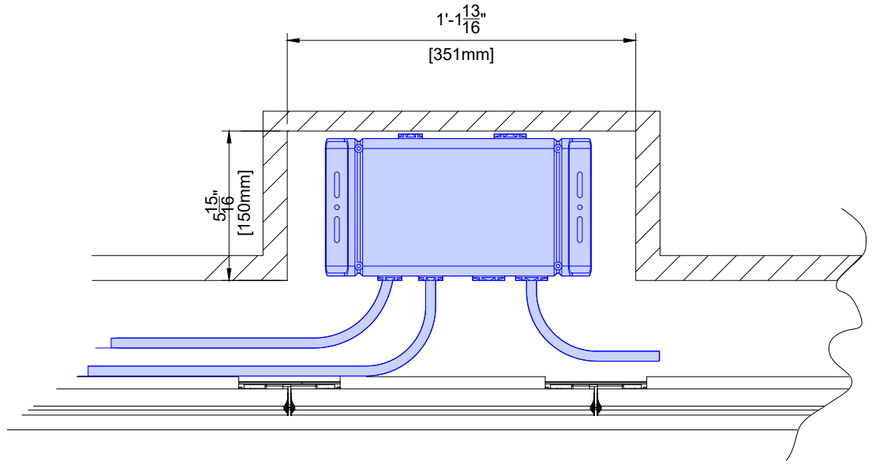
(Not to scale)



**Recommended mounting clear plastic covers on a track for ease of service.
Sufficient ventillation must be provided to closed coves to remove heat given off by LEDs.

Detail - iColor Cove QLX Powercore Cove Light

(Not to scale)



CL PC DE

(19.1)

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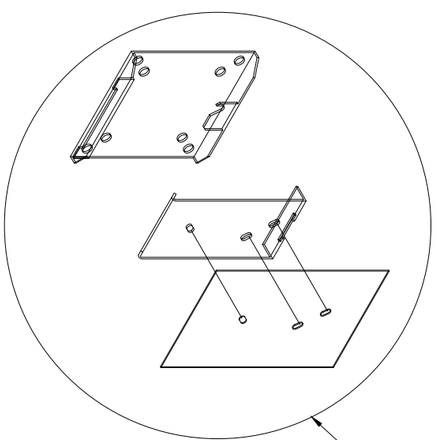
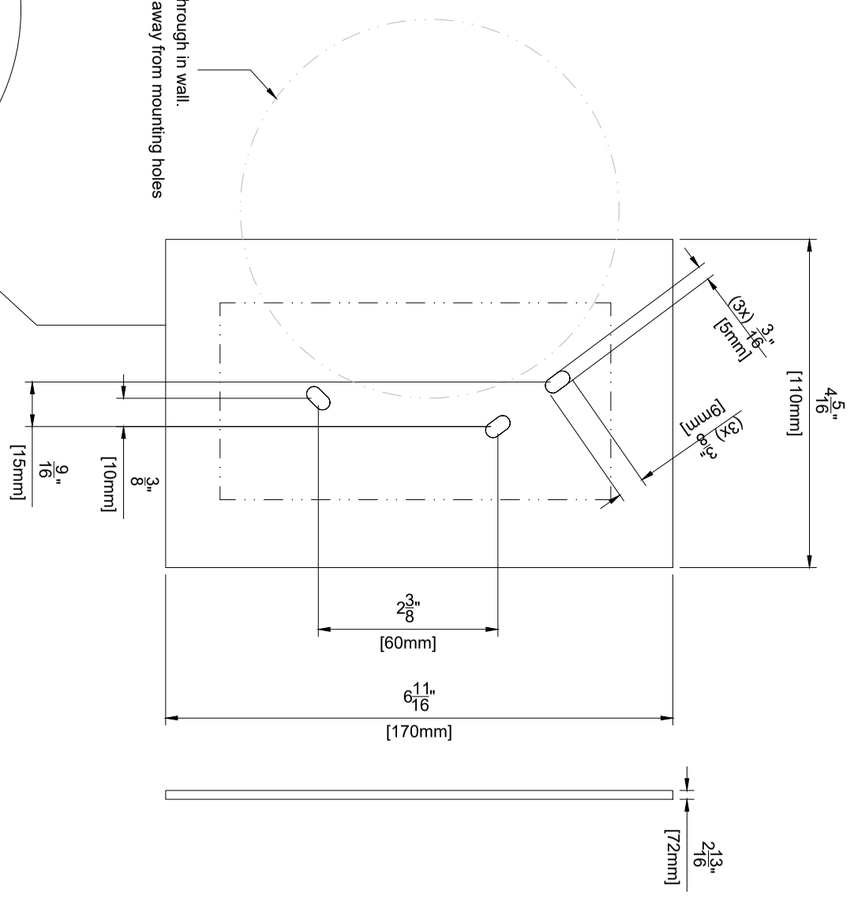
SD1

ATSW





Detail - Wall Mounting Template for Touch Screen Monitor Elo 1517L

(Not to scale)

(16.1)

SD2

Project Details	Philips Contacts	Project
Drawing Number **N-EAS210070 B** **Date Drawn: 3/19/2021** Quote: 1-2DG32RD Rev. 4 Order: None	Project Manager: Rich Halm Contact Number: (860) 373-3707 Email: richard.halm@philips.com Drawn By: Kaitlyn Hennen	**Tier 3 Ambient Experience** **Good Samaritan Hospital of Suffern** **Lsp Capital/Lsp Supplies** Suffern, NY Prep and Recovery Bays

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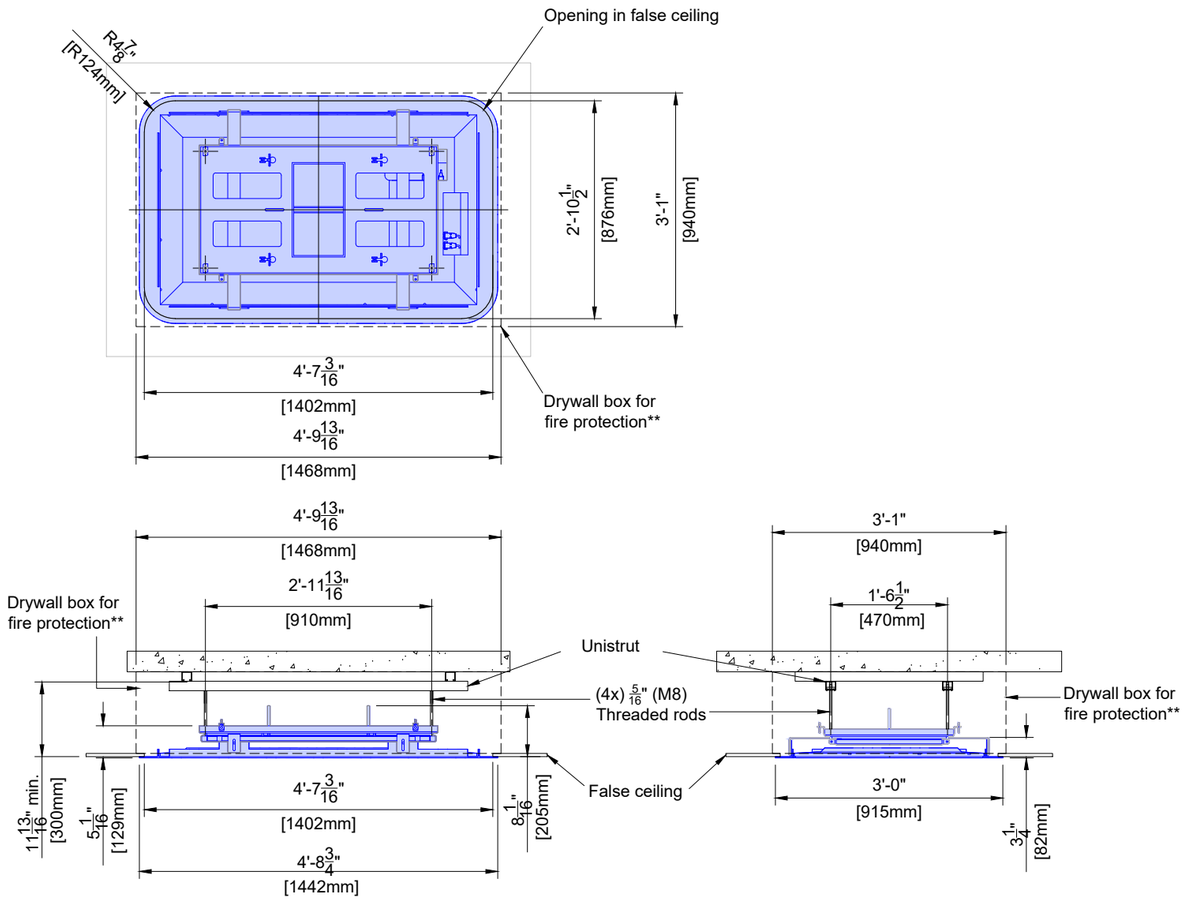
6.9.2020

Detail - Ceiling Flatscreen Display (55 inch) Support

(Not to scale)



**Note: Recommended size shown.

Absolute minimum inside dimensions for Drywall box is 36" (915mm) W x 56.8" (1442mm) L x 10.1" (257mm) D.
Unistrut will need to be lowered.

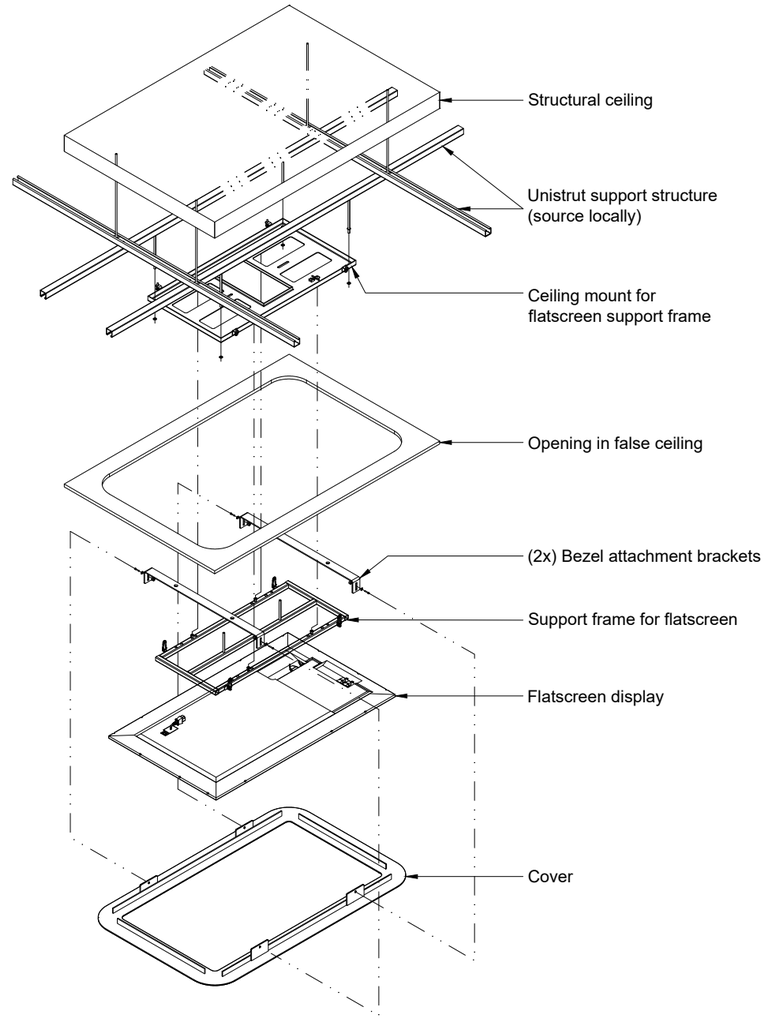
Sufficient cooling / ventilation must be provided.

CMS CMO CME

(17.0)

Detail - Ceiling Support Frame Assembly

(Not to scale - Not site specific)



CMS CMO

(14.0)

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Project
Tier 3 Ambient Experience
Good Samaritan Hospital of Suffern
Lsp Capital/Lsp Supplies
Suffern, NY
Prep and Recovery Bays

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SD3

6.9.2020

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 three separate channels by metal dividers, separately specified herein, to separate wiring and/or cables into groups as follows: Group A: power wiring and/or cables, Group B: signal and/or data and protective ground wiring and/or cables, Group C: x-ray high voltage cables. The use of 90 degree ells is not acceptable. On ceiling duct and wall duct use 45 degree 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.

(13.0)

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. See Conduit List for information regarding all other cables (e.g. cables to breakers, etc.).

4. Provide and install 4 - 2"(50mm) diameter chase nipples between adjacent wall boxes (not required if raceway installed above and below 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 governs.

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

8. All sections of raceway and conduit shall be grounded with an independent #6AWG green wire that is to be attached using solderless lugs All ceiling mounted structural support members and ceiling plates shall also be grounded. All grounding connections, terminals, etc. shall be installed in a manner to provide accessibility for inspection, maintenance, repair, etc.

(20.0)

Electrical Requirements

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, 3 wire power and ground (delta or wye) unless otherwise noted in equipment specifications.
- Phase conductors to be sized for instantaneous voltage drop per NEC 517-73 and Philips recommendations.
- Neutral and ground conductors to be sized equivalently to phase conductors, unless otherwise noted.
- Metal conduit shall not be used as the equipment ground conductor.
- Clamping type surge suppressors are highly recommended in addition to standing facility lighting arrestors. Equipment to be protected from ANSI/IEEE C62.41-1980 location category B impulses.
- ANSI/NFPA 70 - National Electrical Code (NEC)
  Article 250 - Grounding
  Article 517 - Health Care Facilities
- ANSI/NFPA 99 - Health Care Facilities Code
- NEMA standard XR 9 - Power Supply Guidelines for X-Ray Machines

(13.0)

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, 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.

(13.0)

PHILIPS

Project
Tier 3 Ambient Experience
Good Samaritan Hospital of Suffern
Lsp Capital/Lsp Supplies
Suffern, NY
Prep and Recovery Bays

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Drawn By: Kaitlyn Hennen

Project Details
Drawing Number
N-EAS210070 B
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Quote: 1-2DG32RD Rev. 4
Order: None

EN

Electrical Legend

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

Item Number — Detail Sheet — Description

Ceiling

B	DE1	4" (100mm) W x 4" (100mm) L x 4" (100mm) D junction box flush with back of ceiling cove (for Data Enablers). Power Supply Unit connections to be routed via "DE1" box.
B	SPK	4" (100mm) W x 4" (100mm) L x 4" (100mm) D ceiling junction box. To connect to speakers via 1" diameter, 6' long flex conduits.
B	CM1	4" (100mm) W x 4" (100mm) L x 4" (100mm) D junction box flush mounted (if there is drywall box) in ceiling for ceiling flatscreen display.

Electrical Legend

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

Item Number — Detail Sheet — Description

Wall

B	SFF	12" (305mm) W x 12" (305mm) L x 6" (150mm) D junction box flush mounted in wall. Height of box to be determined by local Philips Service.
B	ATS	4" (100mm) W x 4" (100mm) L x 4" (100mm) D junction box surface mounted in wall with removable screw-type coverplate, flush mounted 12" A.F.F. to bottom of box. Location shown is recommended and may be changed - verify relocation with local Philips Service.
B	ATSW	8" (200mm) W x 8" (200mm) L x 4" (100mm) D junction box flush mounted in wall with removable screw-type coverplate, flush mounted 48"(1220mm) A.F.F. with Ø2 1/2" (65mm) grommet opening 1" (25mm) off center for ATSW cable connections. Location shown is recommended and may be changed - verify relocation with local Philips Service.
B	AVI	1-Gang box for customer's external audio source. Located per customer requirement, suggested placement shown.

Duplexes

B	A_T	120 VAC recessed electrical outlet (clock outlet) for ELO Touchscreen, "ATSW", power adapter. Outlet must be located inside "ATSW" junction box. Outlet and junction box will be located behind and covered by ELO Touchscreen, "ATSW". If required by code to separate data and power, a divider must be used.
B	A_D	120 V / 20 A dedicated circuit (switched duplex outlet) for Data Enablers to be located adjacent to "DE". Located in cove or above ceiling, per local code requirements.
B	A_S	120V/20A dedicated duplex outlet for AE Control Unit (SFF) power strip.
B	A_C	120V/20A dedicated duplex outlet for flatscreen displays (CM1).

Network Connectors

B	N2	RJ45 type Ethernet 100/1000 Mbit connector (1000 Mbit recommended) with access to customer's network. Locate within 10' (3048mm) of network card. Network fiber optic and Ethernet cabling, connectors, wall boxes, patch panels, etc. are the responsibility of the purchaser. Philips assumes no responsibility for procurement, installation, or maintenance of these components. To be used for PRS for remote service access.

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Prep and Recovery Bays

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Order: None

EL

Example Tech Room
Elevation View

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

Electrical Layout

1/4" = 1'-0"

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E1

6.9.2020

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			Conduit Quantity	Cable Type (*)	Minimum Conduit Size	Maximum Conduit Length	Special Requirements
	Run No.	From	To					
A	1	SFF	AVI	1	S	1"	49'	For external audio cable
A	2	SFF	DE1	1	S	1"	98'	Cat5
A	3	DE1	LED Lights	1	S	1 1/2"	9'	Cable connections from Data Enabler leader cable to first LED of chain
A	4	SFF	SPK	1	S	1"	65'	Plenum rated speaker wire
A	5	SPK	"SPK1"	1	S	1"	-	Via 1" flex conduit.
A	6	SFF	ATS	1	S	2"	65'	For VGA and USB Connection.
A	7	SFF	ATSW	1	S	2"	65'	For VGA and USB Connection.
A	8	SFF	CM1	1	S	2"	65'	For DVI and Network Connection for CM1. For Network Connection for CM2.

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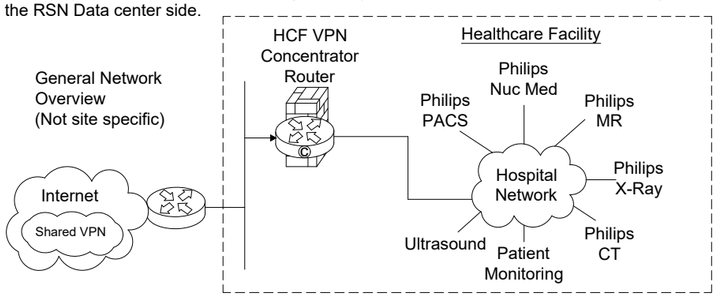
E2

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.

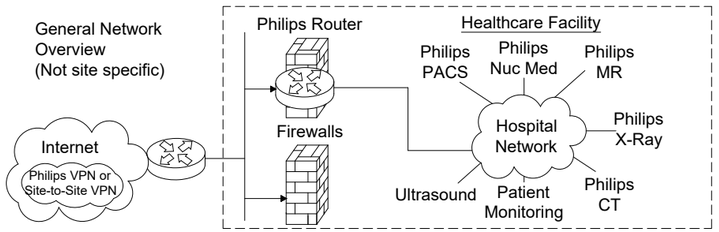


Action Required by Hospital:
- Review and approve connection details.
- Complete appropriate Site Checklist.
- Configure and allow Site-to-Site access prior to setting up connectivity depending on the access criteria that the HCF decides to implement (ex: Source IP filtering, destination IP filtering,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

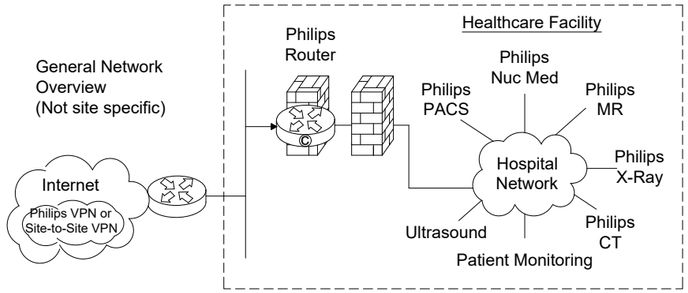
Connectivity Details:
- An RSN Cisco 1711 or 1712 router will be preconfigured and installed at the HCF by Philips in conjunction with the HCF IT representative.
- The VPN Tunnel will be an IPSEC, 3DES encrypted Tunnel using IKE and will be established from the RSN-DC and terminated at the RSN Router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



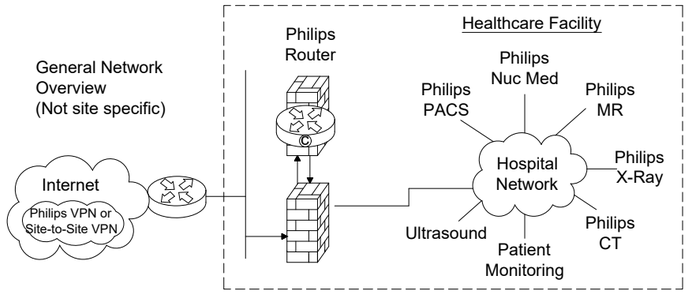
Action Required by Hospital:
- Assign a fixed public IP Address from the ISP to be configured on the Philips router. This is the DOTTED link on the picture connected to the firewall.
- Assign a Back end IP for the Philips router on the Hospital Network.
- Complete appropriate Site Checklist.
- Route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

(14.0)

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N1

Ambient Checklist

(Tier 3)

Installation Item	Philips Supply	Philips Install	Local Installer Supply	Contractor Supply	Contractor Install	Notes
Basic						
Floor covering				X	X	
Floor island				X	X	
Exam room walls (including projection wall)				X	X	
Rounded corners				X	X	
All conduits/boxes/trays specified for AE cables				X	X	
AE Control Components (SFF Server)						
AE Cabinet (optional - to be ordered)	X	X				
Shelf/location for AE Server				X	X	
Mains power for AE Server power strip				X	X	
Power strip for AE control hardware	X	X				
Junction box for all conduit runs to AE control hardware				X	X	
Audio						
1-gang junction box for external audio face plate				X	X	
Conduit from AE Server to Speakers				X	X	
External audio input plate	X	X				
External audio input cable	X	X				
Power outlet for external audio source				X	X	
AE audio speaker wires	X	X				
AE Speakers	X	X				
Conduit from AE Server to Speakers				X	X	
Location/Holes for AE Speakers		X		X		
ELO Touchscreen						
Touch Screens (wall and desk)	X	X				
Wall box and face plates for Touchscreens				X	X	
Mains power outlet for desk touchscreen				X	X	
Power for wall touchscreen and USB Extender				X	X	Located in ceiling, per local code
Conduits from AE Server to touchscreens				X	X	
Touchscreen power adapter (desk or wall)	X	X				
Touchscreen wall mount	X	X				
Cables for VGA and USB for touchscreen	X	X				

Installation Item	Philips Supply	Philips Install	Local Installer Supply	Contractor Supply	Contractor Install	Notes
Lighting						
Cove Construction for LEDs				X	X	
LED Lighting	X	X				
LED Mounting Strips	X	X				
LED Mounting Strips hardware		X	X			
Data Enabler(s)	X	X				
Data Enabler(s) mounting hardware		X	X			
Mains power for Data Enabler(s) in ceiling				X	X	
Mains power cable for Data Enabler(s)	X	X		X	X	Contractor supplied if hardwired.
Mains power switch for Data Enabler(s)				X	X	
Leader cable for Data Enabler(s) to LEDs	X	X				
Terminator(s) on LED module string	X	X				
Conduit for cable between Data Enabler and AE Server				X	X	
Conduit for cable between Data Enabler(s)				X	X	
Cable between Data Enabler(s)	X	X				
Ceiling Mounted Flatscreen						
Unistrut for Monitor mounting plate				X	X	
Monitor mounting plate	X	X				
Monitor(s)	X	X				
Monitor mounting hardware	X	X				
Opening in ceiling for monitor(s)				X	X	
Bezel for monitor(s)	X	X				
Mains power for monitor(s) above ceiling				X	X	
Conduit from AE Server to monitor Video				X	X	
Conduit from AE Server to monitor network				X	X	
Drywall Box around monitor(s)				X	X	Per local code
Air ventilation to Drywall Box for monitor(s)				X	X	Per local code

(19.0)

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CHK