## **Planning Sheet & Equipment Drawings**

SHT. NO.	CONTENTS
1	Table of Contents
2	Account Information
3	SCCT Custom Orders
4	Elevation & Plan Overviews
5	Outlet Configuration
6	Accessories
7	Customer Supported Equipment
8	Parts List
9	Support Structure
10	Canopy Mount Details
11	Bolt Hole Pattern
12	Engineering Requirements
13	Electrical Details
14	Gas Details
15	Air Requirements - Pneumatic Brake
16	Ceiling Access
17	EMS Wiring Diagram
18	Redundant Ground Detail
19	Structural Plate Instructions



- 1. STERIS RECOMMENDS INSTALLATION DURING EARLY PHASE OF CONSTRUCTION.
- 2. STERIS ASSUMES NO RESPONSIBILITY FOR CHANGES MADE NECESSARY THROUGH FAILURE TO OBSERVE INSTALLATION INSTRUCTIONS. IT IS THE RESPONSIBILITY OF THE CUSTOMER TO INSURE THAT UNITS ARE INSTALLED IN ACCORDANCE WITH STATE AND LOCAL CODE.
- 3. HARMONY EMS IS DESIGNED AND TESTED TO MEET THE APPLICABLE REQUIREMENTS OF THE FOLLOWING STANDARDS AND REGULATIONS: CSA C22.2 No. 601.1-M90, CSA Z305.8, INTERNATIONAL STANDARDS IEC 60601-1-2, UL STANDARD 60601-1 2003, NFPA 99 2002 AND FDA GOOD MANUFACTURING PRACTICES REGULATIONS 21CFR 820 FOR MEDICAL DEVICES.

THIS SIGNATURE CONFIRMS EQUIPMENT SPECIFICATIONS AND CEILING HEIGHT CONTAINED IN THIS DOCUMENT AND ACKNOWLEDGES THAT ANY CHANGES MAY RESULT IN ADDITIONAL FEES AND DELAYED DELIVERY

TITLE: SIGNATURE:

DATE:

ACCOUNT NAME

ACCOUNT LOCATION

FILE NAME Kelowna Cardiac Room Reno

PRINTED DATE 9/26/2011

SHEET 1 of 19

STERIS\*

ALL DIMENSIONS ARE IN INCHES

ALSO REFER TO GENERAL NOTES



# TITLE SHEET AND TABLE OF CONTENTS

Harmony EMS 70"Dbl Fixed Arm with 40"Column

Date: Septemb	per 26, 2011		H-number
Description:			Item no:
Room Application	on: Cardiac Cath	EMS Application: Endoscopy	
Account:			
Customer Rep:		Voice Mail:	
Project Manage	r:	Voice Mail:	
Customer PO N	lumber:		
Quantity: 1	Room Numbers:_		
Date Required:		Date Pre-installation items required	<u> </u>
STERIS Order I	No:	Order Item No:	
Seismic Require	ed:_No		
		n Description	Part Number
Mount #1	Harmony EMS 70"Dbl Fixed Arr	m with 40"Column	UUDF07003

# **Special Instructions:**

	Video Vendor	Video cables installed in STERIS factory
Mount#1	STERIS-VTS (Cables by STERIS)	YES

ALL DIMENSIONS ARE IN INCHES
ALSO REFER TO GENERAL NOTES
APPLICABLE TO EQUIPMENT DRAWINGS

STERIS\*

STERIS Corporation

Mentor, OH

ACCOUNT INFORMATION

ACCOUNT NAME

ACCOUNT LOCATION

FILE NAME Kelowna Cardiac Room Reno

Harmony EMS 70"Dbl Fixed Arm with 40"Column

PRINTED DATE 9/26/2011 SHEET

2 of 19

### Additional Terms for SCCT Custom Orders

Custom orders for integrated operating rooms, lights and booms, and other customized equipment for surgical and critical care shall be subject to STERIS's standard Terms and Conditions of Sale and Installation as well as the following additional terms and conditions:

### **Payment**

A non-refundable deposit of thirty percent (30%) of the total purchase price of any order that includes custom equipment must be paid to STERIS within ten days of the date that STERIS receives Customer's purchase order. Payment of the remainder of the purchase price must be made within thirty days of STERIS's invoice date.

### Cancellation

If a customer chooses to cancel a purchase order for a custom order, the Customer's deposit will be forfeited

### **Change Orders**

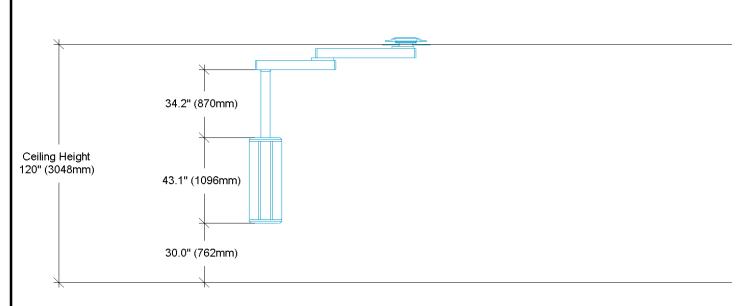
Customer change orders shall be subject to a change order fee of \$2500.00 plus any price difference between the original and revised order. Customers will be invoiced for the change order fee at the time that the requested change is implemented. All change orders must be accepted and approved by STERIS. Change orders may result in delays in shipping and/or installation.

The \$2,500.00 change order fee shall also apply if a STERIS installation team arrives at a Customer facility for a scheduled installation but is unable to complete the installation because of the Customer's failure to prepare the site according to previously agreed upon specifications.

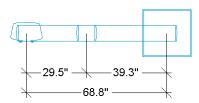
### **Return of Goods**

Customer shall not be entitled to any refund or credit for custom-made parts, used parts or parts that are missing labels or packaging. Goods may not be returned without prior approval from STERIS. Customer is responsible for all freight costs associated with the return of goods after shipment and may be required to pay a restocking fee.



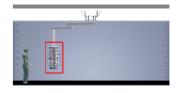


Standard 1000mm tube cut to 975mm (38")



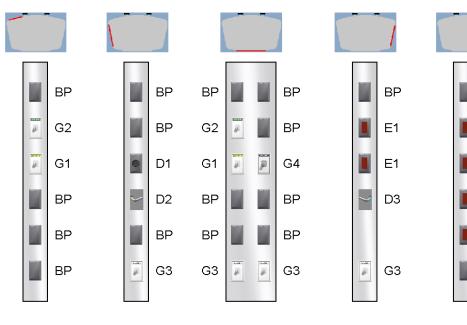
	Arm Description	Load (lbs)	Moment (ft- lbs)
Mount #1	Harmony EMS 70"Dbl Fixed Arm with 40"Column	862	4453
TOTAL:		862	4453

ALL DIMENSIONS ARE IN INCHES ALSO REFER TO GENERAL NOTES APPLICABLE TO EQUIPMENT DRAWINGS  STERIS*	ELEVATION AND PLAN OVERVIEWS	ACCOUNT NAME  ACCOUNT LOCATION	
SILKIS	5140 F01151 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FI <b>LE NAME</b> Kelowna Cardiac Room Reno	
STERIS Corporation  Mentor, OH	Harmony EMS 70"Dbl Fixed Arm with 40"Column	PRINTED DATE 9/26/2011 SHEET 4 of 19	



Gas Outlet Type:





	Description	Туре	Isolated	Circuit#	Qty
E1	Emergency Duplex	Emergency	Yes	1	2
E4	Emergency Duplex	Emergency	Yes	4	2
E3	Emergency Duplex	Emergency	Yes	3	2

	Description	Connector	Qty
G1	Medical Air	DISS	2
G2	Oxygen	DISS	2
G3	Vacuum	DISS	4
G4	Nitrogen	DISS	1

	Description	Lines	Qty
BP	Blank Plate	0	17
D1	Plate with 1.5" Grommet	1	1
D2	Brake Handle (Blue)	0	1
D3	Brake Handle (Green)	0	1

Circuit identification engraving and/or plates are provided and installed by others on site

ALL DIMENSIONS ARE IN INCHES ALSO REFER TO GENERAL NOTES APPLICABLE TO EQUIPMENT DRAWINGS



# **OUTLET CONFIGURATION**

Harmony EMS 70"Dbl Fixed Arm with 40"Column

TITLE: SIGNATURE: DATE:

ACCOUNT NAME

ACCOUNT LOCATION

FILE NAME Kelowna Cardiac Room Reno

PRINTED DATE 9/26/2011

SHEET 5 of 19

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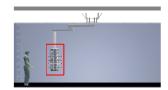
**E**3

E4

E3

E4

ΒP





Description	Part no.	Qty (per unit)
Harmony EMS Lifespan Equip 18.9"Side Rail Kits	LS1018-526	4
Harmony EMS Front Rail Mounted 21.3"x 18.9"Shelf	DWSC16000	4

ALL DIMENSIONS ARE IN INCHES
ALSO REFER TO GENERAL NOTES
APPLICABLE TO EQUIPMENT DRAWINGS





# ACCESSORIES

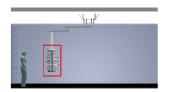
ACCOUNT NAME

ACCOUNT LOCATION

FI**LE NAME** Kelowna Cardiac Room Reno

PRINTED DATE 9/26/2011

SHEET 6 of 19





Customer Equipment Supported by Harmony EMS

Description	Manufacturer	Model	Width	Depth	Height	Weight
-------------	--------------	-------	-------	-------	--------	--------

	lbs.
Total Capacity of Arm	471
Total Weight of Accessories	52
Total Weight of User Items	0
Remaining Capacity of Arm	419

All weights are approx. and should be verified by the customer prior to manufacture

	ALL DIMENSIONS ARE IN INCHES ALSO REFER TO GENERAL NOTES	CUSTOMER SUPPORTED	ACCOUNT NAME  ACCOUNT LOCATION	
	STERIS*	EQUIPMENT		
		Lieuwe en a FNAC ZOUDEL Fire et Anne a vitte 4000 et anne	FI <b>LE NAME</b> Kelowna Cardiac Room Reno	
	STERIS Corporation Mentor, OH	Harmony EMS 70"Dbl Fixed Arm with 40"Column	PRINTED DATE 9/26/2011 SHEET 7 of 19	

Description	Part #	Туре	Qty / Unit	Total Qty
Harmony EMS Above Ceiling Pre-Install	QR00-000-000-000-22	Acc	1	1
Electric, Gas Kit				
Harmony Sgl Mt Flush Ceilg Covr 6.7"Diam	UG19759	Acc	1	1
Harmony EMS Above Ceiling Structural Mounting Plate	QR00-000-000-000-21	Acc	1	1
Harmony EMS Lifespan Equip 18.9"Side Rail Kits	LS1018-526	Acc	4	4
Harmony EMS Front Rail Mounted 21.3"x 18. 9"Shelf	DWSC16000	Acc	4	4
Vacuum Riser Assembly	P136818-285	Acc	4	4
Oxygen Riser Assembly	P136818-286	Acc	2	2
Medical Air Riser Assembly	P136818-290	Acc	2	2
Nitrogen Riser Assembly	P136818-289	Acc	1	1
Harmony Ceiling Plate - Medium & Strong Systems	UG19215	XGen	1	1
Harmony EMS 70"Dbl Fixed Arm with 40"Column	UUDF07003	XGen	1	1
Harmony EMS AVV Cable Svc Chge for VTS Cbi Orders	P129387-527	XGen	1	1
Harmony EMS Blank Plate Cover for Future Service	P093933-004	XGen	17	17
Vacuum Outlet DISS	P093923-753	XGen	4	4
Emergency Duplex Isolated	P093923-775	XGen	6	6
Oxygen Outlet DISS	P093923-749	XGen	2	2
Medical Air Outlet DISS	P093923-757	XGen	2	2
Nitrogen Outlet DISS	P093923-769	XGen	1	1
Harmony EMS AV Cable Plate w Grommet Hole Access	P093923-520	XGen	1	1
Harmony EMS Col Control Handle Kit Dbl Fixed Arms	P129387-293	XGen	1	1

All thread kits are included for CS orders engineered after November 01, 2008

ALL DIMENSIONS ARE IN INCHES
ALSO REFER TO GENERAL NOTES
APPLICABLE TO EQUIPMENT DRAWINGS

STERIS Corporation
Mentor, OH

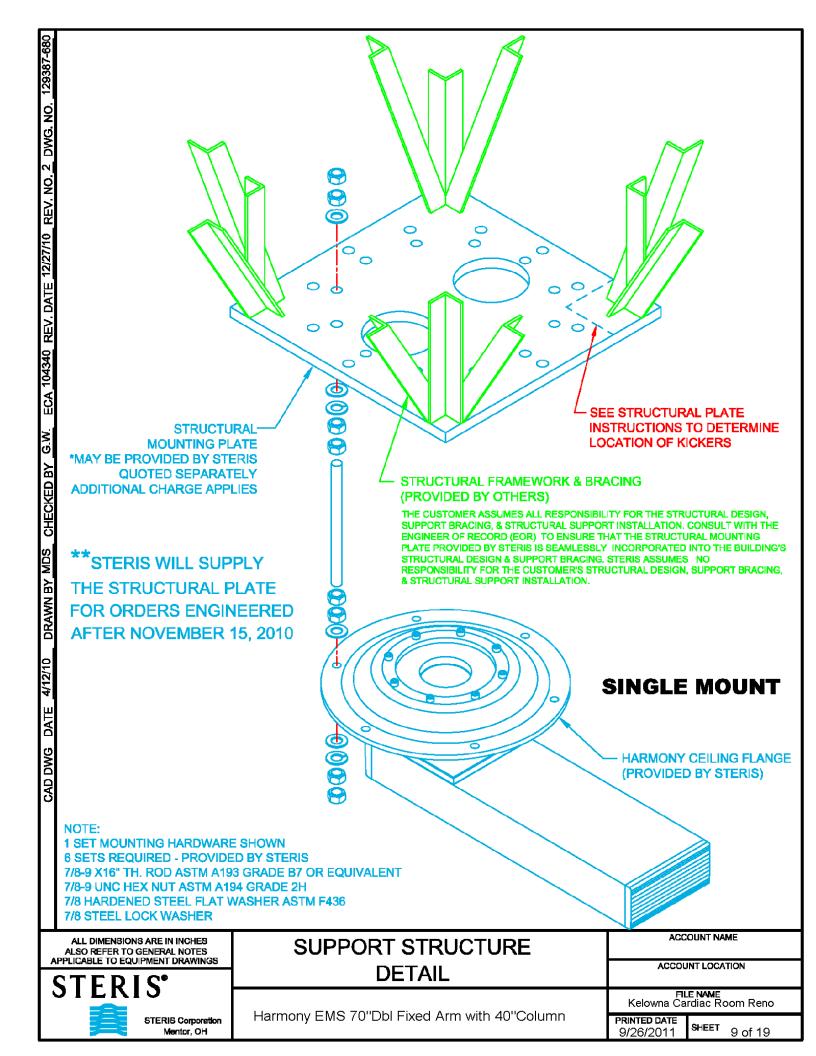
Harmony EMS 70"Dbl Fixed Arm with 40"Column

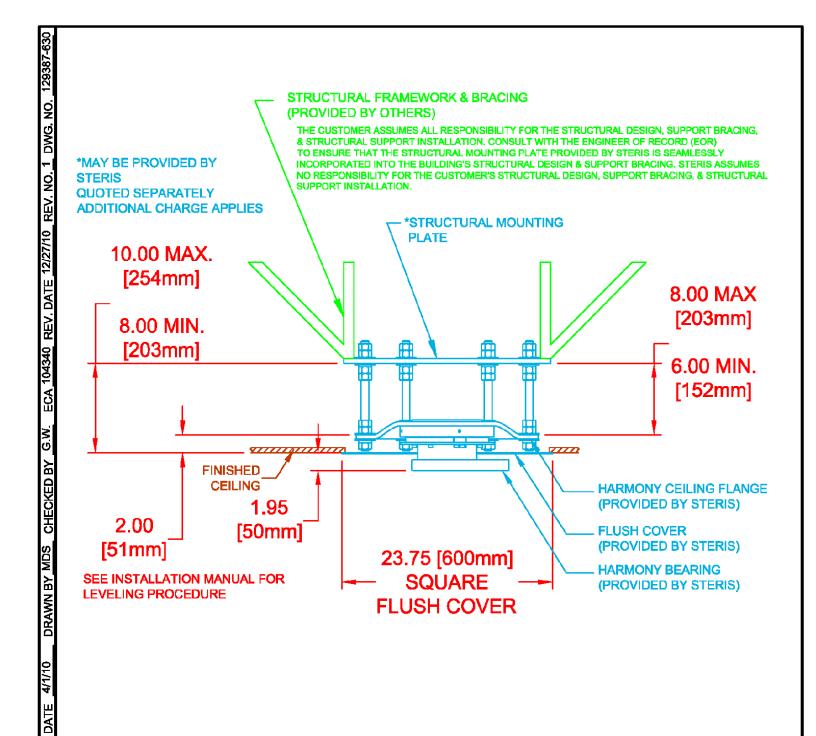
ACCOUNT NAME

ACCOUNT NAME

Kelowna Cardiac Room Reno

PRINTED DATE
9/26/2011
SHEET 8 of 19





## **FLUSH MOUNT**

NOTE:

CAD DWG

STRUCTURAL PLATE HEIGHT IS SPECIFIC TO COMPONENTS SHOWN IN THIS DRAWING PACKAGE. DIFFERENT COMPONENT CONFIGURATIONS WILL REQUIRE DIFFERENT STRUCTURAL PLATE HEIGHTS.

ALL DIMENSIONS ARE IN INCHES
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APPLICABLE TO EQUIPMENT DRAWINGS

MOUNTING HEIGHT

STERIS Corporetton
Mentor, OH

Harmony EMS 70"Dbl Fixed Arm with 40"Column

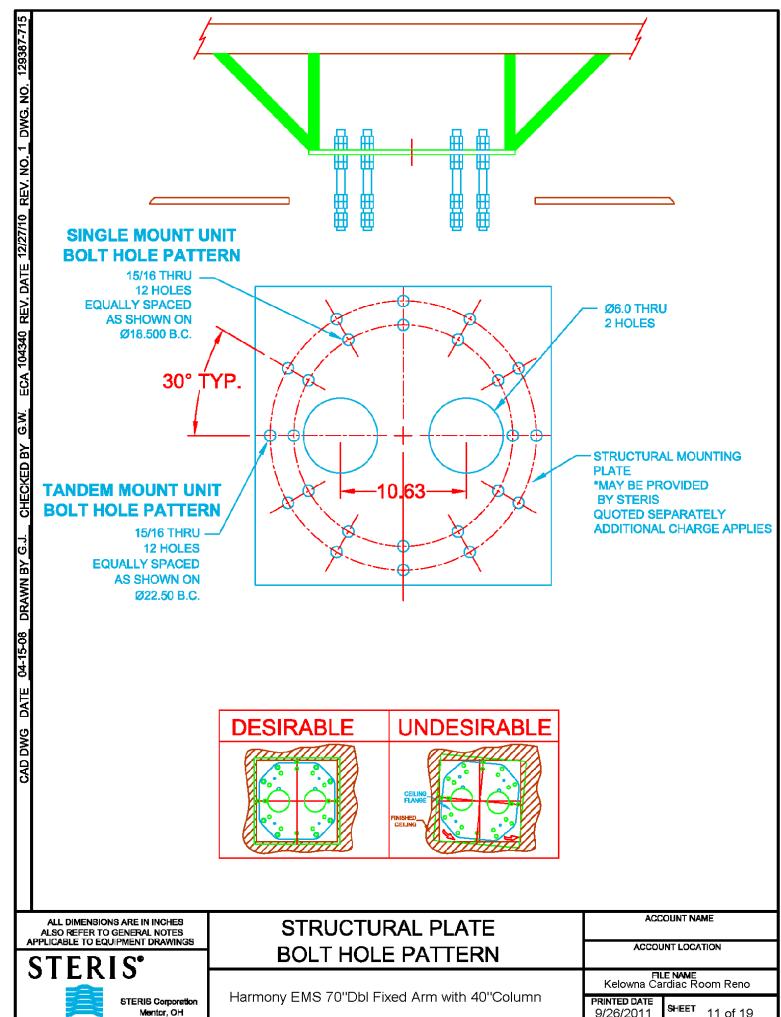
ACCOUNT NAME

ACCOUNT LOCATION

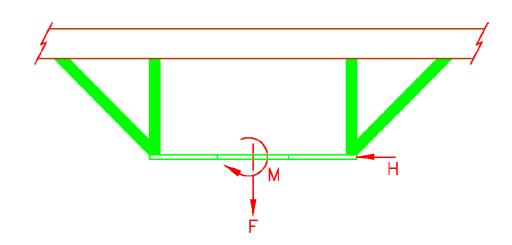
Relowna Cardiac Room Reno

PRINTED DATE
9/26/2011

SHEET 10 of 19



SHEET 9/26/2011 11 of 19



### STRUCTURAL MOUNT ENGINEERING DATA NOTES

DESIGN OF THE EMS SUPPORT STRUCTURE IS CRITICAL TO SAFE, TROUBLE FREE OPERATION.

- A. THE STRUCTURAL MOUNTING PLATE MUST BE FLAT, LEVEL AND MUST ADEQUATELY SUPPORT THE EMS SYSTEM CONFIGURATION TO BE INSTALLED.
- B. MAXIMUM LOAD CONFIGURATIONS-STERIS RECOMMENDS A STRUCTURAL MOUNT THAT CAN ACCOMMODATE THE MAXIMUM LOAD CONFIGURATION TO ALLOW FOR THE ADDITION OF COMPONENTS IN THE FUTURE. TOTAL LOAD "F" ON THE STRUCTURAL MOUNTING PLATE:

2,020 LBS (8,920 N) MAXIMUM MOMENT "M" AT THE STRUCTURAL MOUNTING PLATE: 12,850 FT-LBS (17,400 Nm) (FOR MORE SPECIFIC LOADING INFORMATION REFERENCE PAGE 2)

C. MAXIMUM ACCEPTABLE HORIZONTAL DEFLECTION OF THE STRUCTURAL MOUNTING PLATE:

0.1 INCHES (2.5mm) WITH A HORIZONTAL LOAD OF "H" OF 2,020 LBS (8,920 N)

- D. MAXIMUM ACCEPTABLE ANGULAR DEFLECTION OF THE STRUCTURAL MOUNTING PLATE: 1/3 OF A DEGREE WITH THE MAXIMUM MOMENT "M" APPLIED OF 12,850 FT-LBS (17,400 Nm) [FOR ZONE 4 REFERENCE THE APPROPRIATE SEISMIC REPORT]
- E. IF SPACE BETWEEN "HARMONY BEARING PLATE" ON THE EMS UNIT (PROVIDED BY STERIS) AND STRUCTURAL MOUNTING PLATE EXCEEDS THE ACCEPTABLE DIMENSIONAL RANGE SHOWN IN THIS EQUIPMENT DRAWING, AN "INTERMEDIATE SUPPORT PLATE (STIFFING PLATE) OR STRUCTURE" (PROVIDED BY OTHERS) IS REQUIRED. CONSULT THE STRUCTURAL ENGINEER OF RECORD.

#### NOTES:

- 1) FOR THE MAXIMUM ALLOWABLE LOAD THAT CAN BE CARRIED ON EACH PENDANT COLUMN OR HEAD (CONSISTING OF EQUIPMENT, SHELVES, & ACCESSORIES), REFERENCE THE EMS "TECH DATA" DOCUMENTATION.(CONTACT STERIS) OR REFERENCE THE ALLOWABLE LOAD CAPACITY "LABEL" LOCATED ON THE PENDANT HEAD OR COLUMN.
- 2) LAMINAR AIR FLOW DUCT-WORK SHOULD BE INSTALLED NO CLOSER THAN 24 INCHES FROM THE CENTERLINE OF THE VERTICAL EXTENSION TUBE/HARMONY BEARING PLATE. IF ADEQUATE CLEARANCE IS NOT ACHIEVED, AN ACCESS DOOR SHOULD BE PROVIDED IN THE CEILING TO ASSIST IN CABLE ROUTING AND SYSTEM TROUBLESHOOTING.

ALL DIMENSIONS ARE IN INCHES ALSO REFER TO GENERAL NOTES





# SUPPORT STRUCTURE **ENGINEERING REQUIREMENTS**

ACCOUNT LOCATION

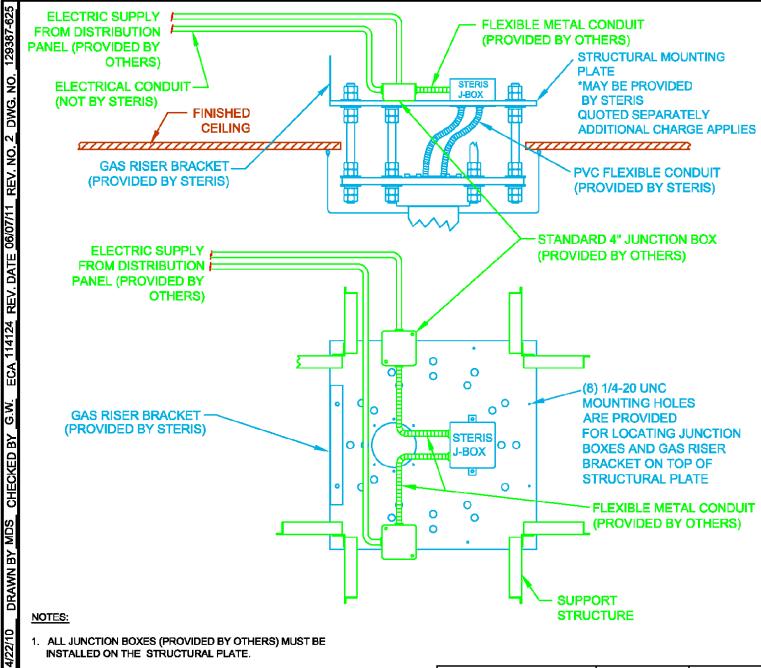
ACCOUNT NAME

FILE NAME Kelowna Cardiac Room Reno

Harmony EMS 70"Dbl Fixed Arm with 40"Column

PRINTED DATE SHEET 9/26/2011

12 of 19



- 1. ALL JUNCTION BOXES (PROVIDED BY OTHERS) MUST BE INSTALLED ON THE STRUCTURAL PLATE.
- 2. THE QUANTITY OF ELECTRICAL SERVICES REQUIRED FOR EMS UNITS IS DEPENDENT ON INDIVIDUAL DESIGN. CONSULT FACILITIES ENGINEER FOR REQUIREMENTS. CIRCUITS ARE DEDICATED SINGLE PHASE, 120VAC, 15 AMP EACH, OR 220VAC, 30 AMP FOR LASER APPLICATIONS WHEN A NEMA L6-30R OUTLET IS UTILIZED.
- 3. IF THE CIRCUITS FOR ELECTRICAL RECEPTAGLES ARE SUPPLIED BY ISOLATED POWER THEN THE EMS MOTOR ALSO. MUST BE SUPPLIED BY ISOLATED POWER.
- 4. STERIS PROVIDES POLYESTER CIRCUIT LABELS FOR EACH **ELECTRIC SERVICE. CIRCUIT ASSIGNMENT & ELECTRIC** SERVICE PLACEMENT ARE AGREED UPON WITH THE CUSTOMER DURING THE PLANNING STAGE, REFERENCE THE STERIS PLANNING SHEET DOCUMENTS. ELECTRIC SERVICE PLATE ENGRAVING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR/CUSTOMER. (NOT PROVIDED BY STERIS)

EMS CIRCUIT TYPE		<u>AMP</u>	QUANTITY
STANDARD NORMAL		15 AMP	
STANDARD ISOLATED		15 AMP	
EMERGENCY NORMAL EMERGENCY ISOLATED LASER (NEMA LB-30R) OUTLET EMS BRAKES		15 AMP	
		15 AMP	3
		30 AMP	
		1 AMP	1
EMS MOTOR		6 AMP	
PES MOTOR  AC FOR LIGHTS  AC FOR MONITORS  INSIGHT 200 (NOTOR & BRAKES)  INSIGHT 100 BRAKES  INSIGHT 55 BRAKES		15 AMP	
		10 AMP	
		15 AMP	
		10 AMP	
		1 AMP	
		1 AMP	
ACCOUNT NAME		IAME	

ALL DIMENSIONS ARE IN INCHES ALSO REFER TO GENERAL NOTES APPLICABLE TO EQUIPMENT DRAWINGS

STERIS\*

DATE

CAD DWG



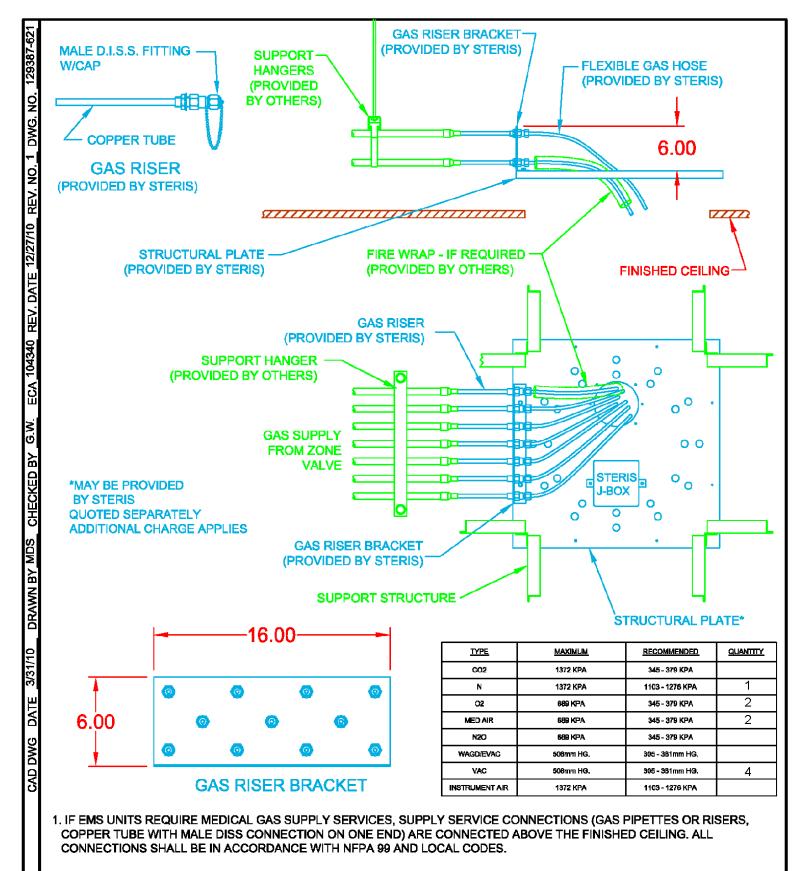
# **ELECTRICAL DETAILS** CANADA

FILE NAME Kelowna Cardiac Room Reno

Harmony EMS 70"Dbl Fixed Arm with 40"Column

PRINTED DATE SHEET 9/26/2011 13 of 19

ACCOUNT LOCATION



- 2. MEDICAL GAS REQUIREMENTS ARE SPECIFIED BY THE CUSTOMER.
- 3. CLEARANCE OF 6" (152mm) IS REQUIRED ABOVE STRUCTURAL MOUNTING PLATE FOR GAS SUPPLY HOOK-UP.

ACCOUNT NAME ALL DIMENSIONS ARE IN INCHES **GAS DETAILS** ALSO REFER TO GENERAL NOTES APPLICABLE TO EQUIPMENT DRAWINGS ACCOUNT LOCATION CANADA STERIS\* FILE NAME Kelowna Cardiac Room Reno Harmony EMS 70"Dbl Fixed Arm with 40"Column STERIS Corporation PRINTED DATE SHEET Mentor, OH 9/26/2011 14 of 19

- **GAS RISER NOT PROVIDED BY STERIS**
- STERIS BRAKE LINE TERMINATES WITH 1/8 NPT MALE FITTING
- CUSTOMER SUPPLY LINE MUST TERMINATE WITH 1/8 NPT FEMALE FITTING NOT PROVIDED BY STERIS
- IMPORTANT: MEDICAL GASES SUCH AS OXYGEN, NITROUS OXIDE, MEDICAL AIR, AND CARBON DIOXIDE ARE NOT ACCEPTABLE SOURCES FOR SUPPLYING PNEUMATIC BRAKES

### ACCEPTABLE SOURCES FOR SUPPLYING THE PNEUMATIC BRAKES:

- STERIS RECOMMENDS USING COMPRESSED AIR OR INSTRUMENT AIR TO SUPPLY THE PNEUMATIC BRAKES **COMPRESSED AIR:**
- RECOMMEND INSTALLING AN OIL-WATER SEPARATOR NOT PROVIDED BY STERIS CORPORATION **INSTRUMENT AIR:** 
  - APPROVED FOR SUPPLYING THE PNEUMATIC BRAKES

### NITROGEN:

- CAN BE USED TO SUPPLY THE PNEUMATIC BRAKES, BUT NOT RECOMMENDED
- MUST CONSULT THE LOCAL INSPECTOR TO GAIN APPROVAL PRIOR TO INSTALLATION
- USING NITROGEN TO SUPPLY THE PNEUMATIC BRAKES WILL GRADUALLY DEPLETE YOUR NITROGEN STOREAGE LEVELS OVER TIME.

ALL DIMENSIONS ARE IN INCHES ALSO REFER TO GENERAL NOTES

STERIS\*

DATE

CAD DWG



# AIR REQUIREMENTS PNEUMATIC BRAKE

ACCOUNT NAME

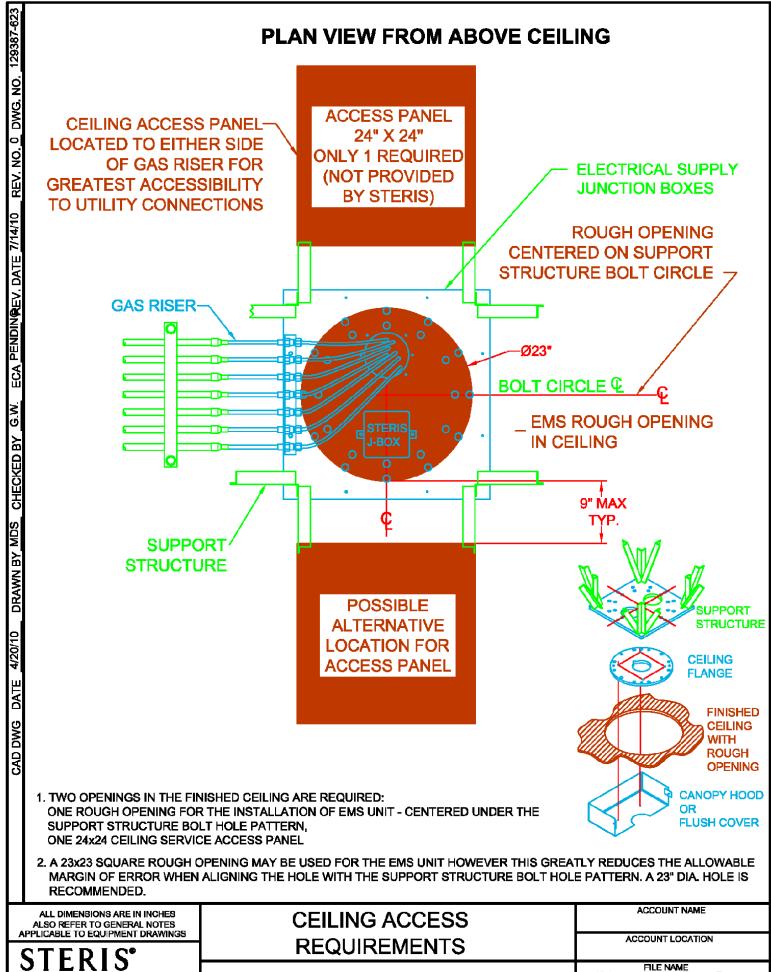
ACCOUNT LOCATION

FILE NAME Kelowna Cardiac Room Reno

PRINTED DATE 9/26/2011

SHEET 15 of 19

Harmony EMS 70"Dbl Fixed Arm with 40"Column

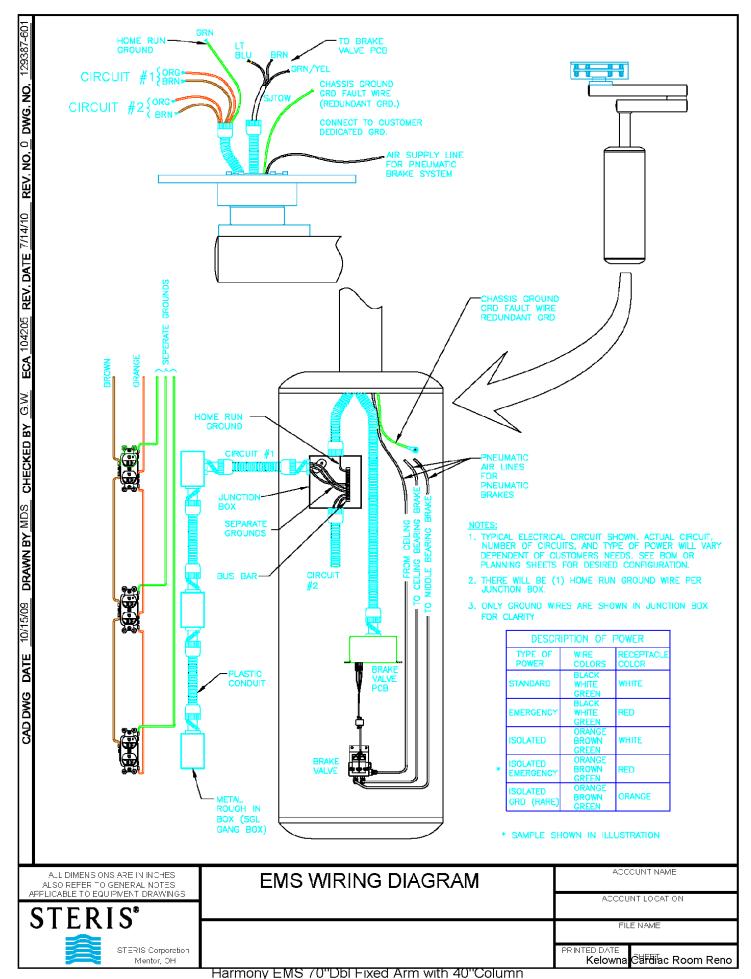


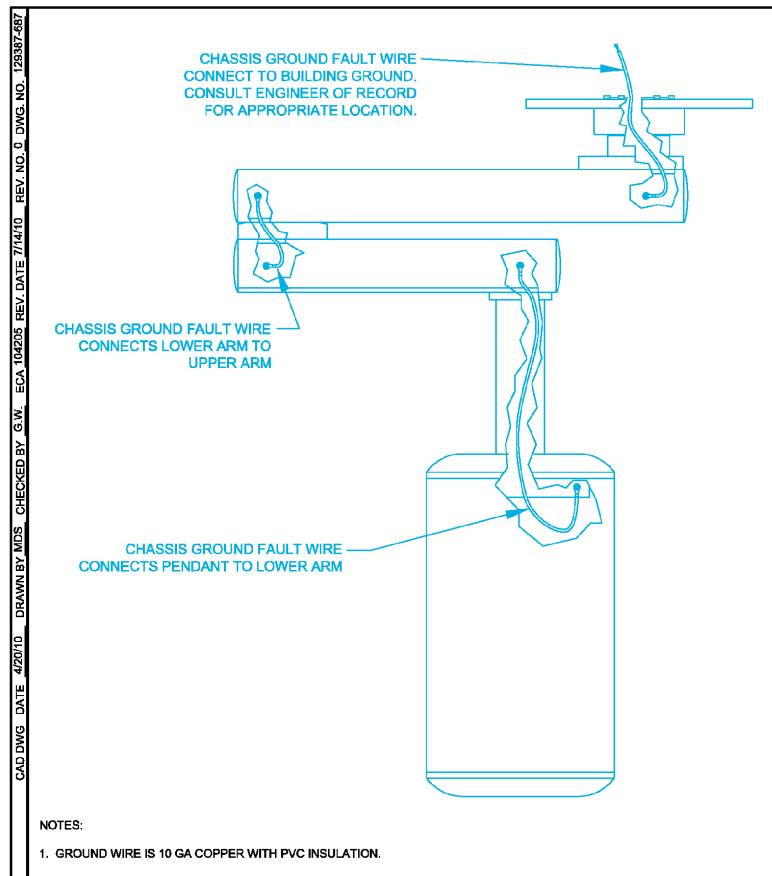
STERIS Corporation Mentor, OH Harmony EMS 70"Dbl Fixed Arm with 40"Column

**FILE NAM**E Kelowna Cardiac Room Reno

PRINTED DATE 9/26/2011 SHEET

ET 16 of 19





2. ALUMINUM ARM IS CONSIDERED A METAL RACEWAY.

ALL DIMENSIONS ARE IN INCHES
ALSO REFER TO GENERAL NOTES
APPLICABLE TO EQUIPMENT DRAWINGS

DETAIL

REDUNDANT GROUND

ACCOUNT NAME

ACCOUNT LOCATION

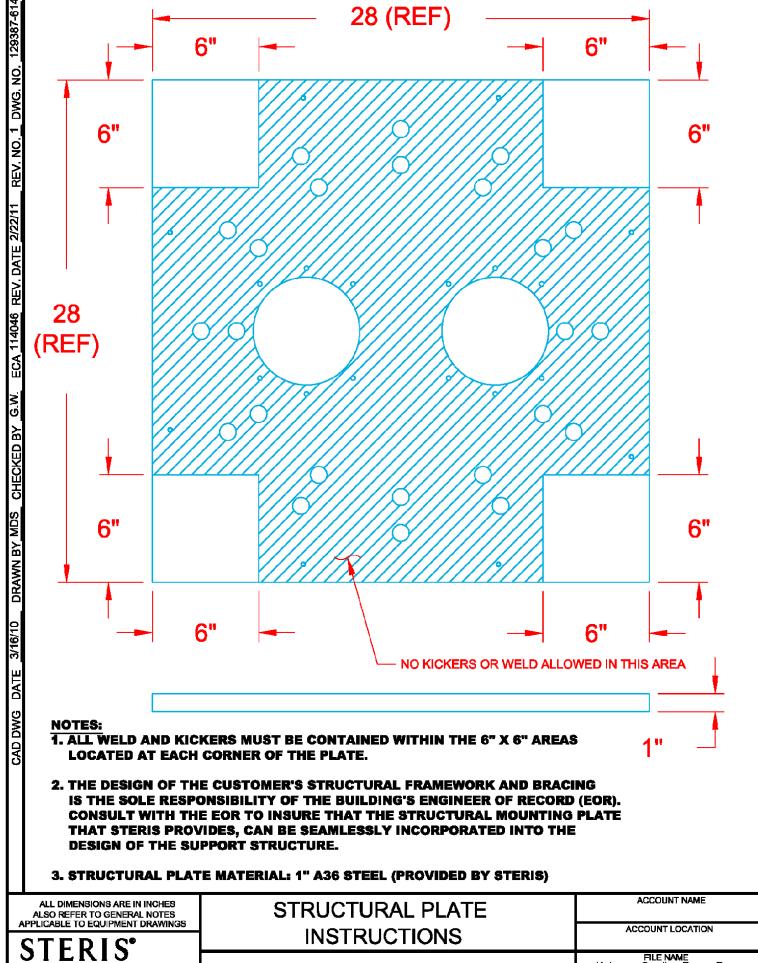
ACCOUNT LOCATION

FILE NAME

Kelowna Cardiac Room Reno

PRINTED DATE

9/26/2011
SHEET 18 of 19



STERIS Corporation Mentor, OH

INSTRUCTIONS

Harmony EMS 70"Dbl Fixed Arm with 40"Column

FILE NAME Kelowna Cardiac Room Reno

9/26/2011

SHEET 19 of 19