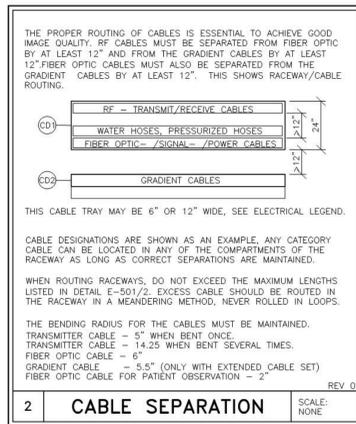
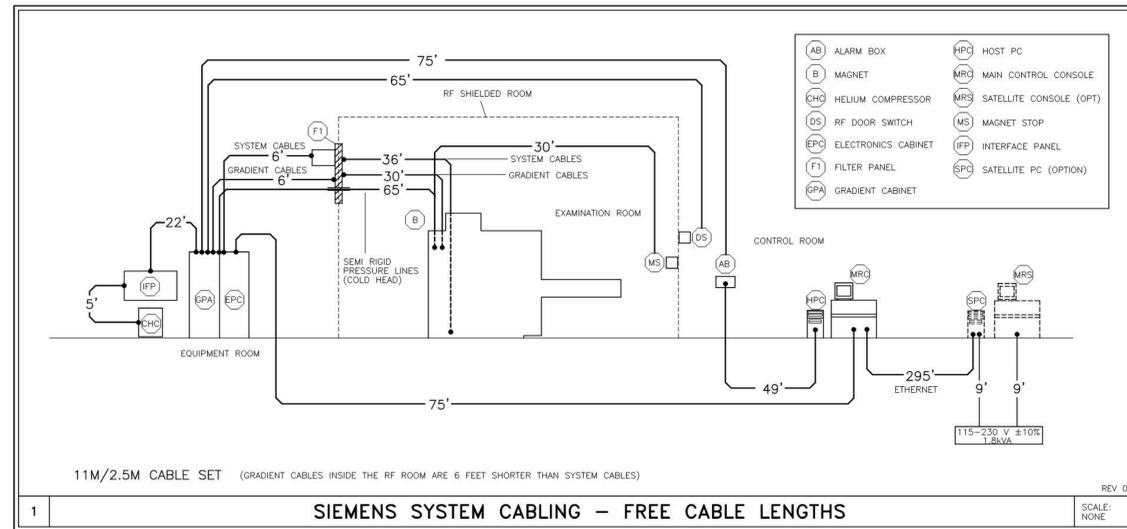


REFERENCE DOCUMENT - NOT FOR CONSTRUCTION



LIGHTING GUIDELINES

EXAM, CONTROL, AND EVALUATION ROOMS:

- 1) THE ROOM LIGHTING MUST REMAIN FUNCTIONAL WHEN THE MR SYSTEM IS SWITCHED OFF AND/OR WHEN EMERGENCY SHUTDOWN BUTTONS ARE ACTIVATED.
- 2) IT MUST BE POSSIBLE TO CONTROL THE INTENSITY OF ILLUMINATION OF APPROXIMATELY 46 FOOT-CANDELES THROUGH GROUP CONNECTION. ALL LIGHTS IN THE EXAMINATION ROOM ARE CONNECTED TO A COMMON SWITCH IN THE CONTROL ROOM. THERE SHOULD BE SEPARATE SWITCHES IN THE EXAMINATION ROOM FOR THE GROUPS OF LIGHTS ABOVE AND NEAR THE PATIENT TABLE, AS WELL AS FOR THE GROUP OF LIGHTS ABOVE THE MAGNET. THE LOCATION OF THESE SWITCHES IS AT THE OWNER'S DISCRETION.

EXAMINATION ROOM:

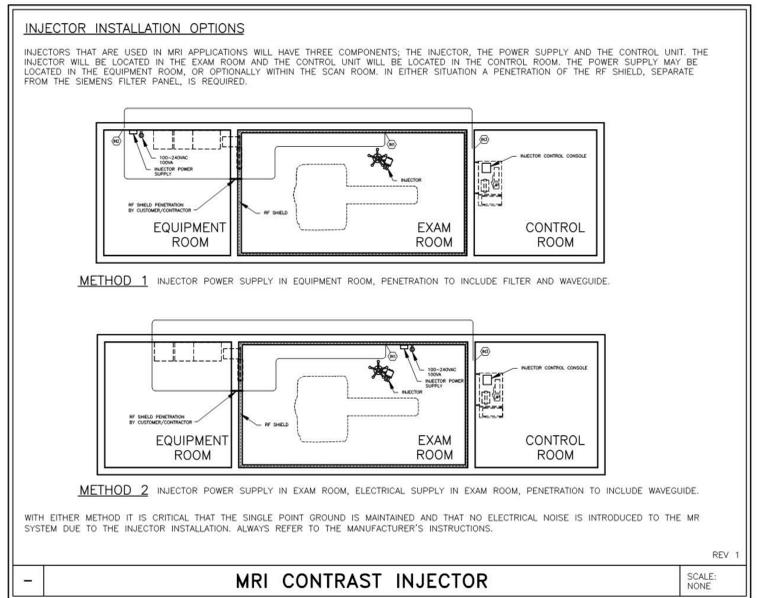
- 1) THE MAGNETIC FIELD ADVERSELY AFFECTS THE OPERATING LIFE OF LIGHT BULBS LOCATED IN THE IMMEDIATE VICINITY OF THE MAGNET. THE FILAMENT IN THE BULB OSCILLATES WITH THE FREQUENCY OF THE POWER SUPPLY. DURING SCANNING, IT IS RECOMMENDED THAT LIGHT FIXTURES IN THE VICINITY OF THE MAGNET (IN EXAMINATION ROOM) BE CONNECTED TO A DC VOLTAGE SUPPLY. THE RESIDUAL RIPPLE OF THE DIRECT VOLTAGE SHOULD BE ±5%. WHEN INSTALLING THE LIGHT SOCKET, ENSURE THAT THE POLARITY IS CORRECT.
- 2) FLUORESCENT LIGHTS, ENERGY-SAVING LIGHTS, AND DIMMERS ARE NOT PERMITTED.

CONTROL AND EVALUATION ROOM:

FOLLOW THE APPROPRIATE GUIDELINES FOR LIGHTING IN ROOMS WITH MONITOR WORKSTATIONS.

EQUIPMENT ROOM:

ILLUMINATION INTENSITY SHOULD BE APPROXIMATELY 46 FOOT-CANDELES.



CONDUITS AND RACEWAYS

- 1) ALL POWER CONDUCTORS SUPPLIED BY THE CUSTOMER/CONTRACTOR SHALL BE INSTALLED IN METAL RACEWAY, 600 VOLT CLASS, STRANDED TYPE THIN-WALL, RATED FOR 75°C (165°F) OPERATION. RECOMMEND MINIMUM 5 FEET WIRE TAILS AT ALL OUTLET POINTS WITH WIRE IDENTIFICATION TAGGED AT BOTH ENDS FOR FINAL CONNECTION BY SIEMENS MEDICAL SYSTEMS.
- 2) THE CABLE GROUPS INCLUDED WITH THE MAGNETOM SYSTEM MAY BE ROUTED IN THE SAME CABLE TRAY IF PROVIDED WITH AN 8" SEPARATION BETWEEN SMALL SIGNAL LINES, GRADIENT CABLES, AND THE RF TRANSMIT CABLE. A 24" WIDE LADDER TYPE CABLE TRAY IS RECOMMENDED. CABLES SHOULD NOT BE BUNDLED TOGETHER.
- 3) NOTE THE CABLE CONNECTOR SIZES (LARGEST CONNECTOR SIZE IS 2 1/2" x 2 1/2") FOR CABLE FEED-THROUGHS AND CABLE DUCTS.
- 4) THE CABLE LENGTHS SPECIFIED ARE THE STANDARD LENGTHS.
- 5) THE SIEMENS SYSTEM CABLES ARE NOT PLENUM RATED AND SHOULD NOT BE RUN UNPROTECTED IN AN AIR PLENUM UNLESS ENCLOSED IN A SEALED CABLE TRAY OR CONDUIT.

SIEMENS REMOTE SERVICES (SRS)

TO ENSURE THE UPTIME OF YOUR SYSTEM DURING THE WARRANTY PERIOD (AND BEYOND WITH A SERVICE AGREEMENT), SIEMENS REMOTE SERVICES (SRS) REQUIRES REMOTE LOCAL AREA NETWORK ACCESS TO SIEMENS SYSTEMS.

SRS REQUIRES ONE OF THE FOLLOWING CONNECTION METHODS:

(PREFERRED) VPN CONNECTION

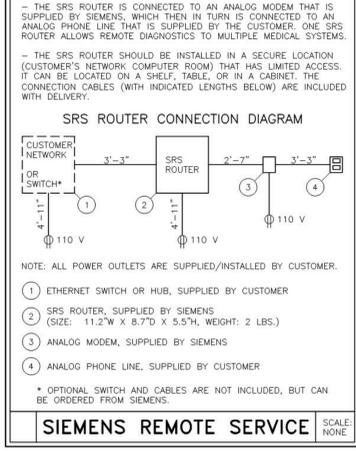
THE PREFERRED CONNECTION METHOD IS (VPN) VIRTUAL PRIVATE NETWORK (WHERE THE CUSTOMER HAS AVAILABLE A VPN CAPABLE FIREWALL OR OTHER VPN APPLIANCE). THIS METHOD PROVIDES THE POSSIBILITY FOR REMOTE SYSTEM DIAGNOSTICS WITHOUT ADDITIONAL HARDWARE. PLEASE CONTACT SIEMENS REMOTE SERVICES (800-888-SIEM) TO DETERMINE IF THIS METHOD IS SUITABLE FOR YOUR SITE.

(OPTIONAL) SRS ROUTER CONNECTION

THE SRS ROUTER IS SUPPLIED BY SIEMENS AND INSTALLED AT THE CUSTOMER'S SITE, WHILE STILL REMAINING THE PROPERTY OF SIEMENS. THE CUSTOMER'S NETWORK ADMINISTRATOR AND SIEMENS REMOTE SERVICES SHALL DETERMINE THE TYPE AND LOCATION OF THE SRS ROUTER REQUIRED.

THE SRS ROUTER IS CONNECTED TO AN ANALOG MODEM THAT IS SUPPLIED BY SIEMENS, WHICH THEN IN TURN IS CONNECTED TO AN ANALOG PHONE LINE THAT IS SUPPLIED BY THE CUSTOMER. ONE SRS ROUTER ALLOWS REMOTE DIAGNOSTICS TO MULTIPLE MEDICAL SYSTEMS.

THE SRS ROUTER SHOULD BE INSTALLED IN A SECURE LOCATION (CUSTOMER'S NETWORK COMPUTER ROOM) THAT HAS LIMITED ACCESS. IT CAN BE LOCATED ON A SHELF, TABLE, OR IN A CABINET. THE CONNECTION CABLES (WITH INDICATED LENGTHS BELOW) ARE INCLUDED WITH DELIVERY.



CABLE LENGTH RESTRICTIONS

- 1) THE CABLE SET LENGTH IDENTIFIES THE "FREE CABLE LENGTH". THIS IS THE LENGTH FROM CONNECTION POINT TO CONNECTION POINT. THE CABLE LENGTH IS NOT THE DISTANCE BETWEEN COMPONENTS.
- 2) THE GRADIENT CABLES INSIDE THE RF SHIELDED ROOM ARE 6'-0" SHORTER THAN THE OTHER SYSTEM CABLES. THIS MEANS THAT IF THE 22' CABLE SET IS SELECTED, THE GRADIENT CABLES WILL BE 16' IN LENGTH. THE GRADIENT CABLES NEED TO GO UP INTO THE CABLE TRAY IN THE CEILING AT THE FILTER PLATE AND DOWN AT THE MAGNET. THESE VERTICAL RUNS MUST BE DEDUCTED FROM THE TOTAL CABLE LENGTH OF 16'.

ATTENTION:

- THIS DRAWING IS DESIGNED TO CONFORM TO FEATURES AND EQUIPMENT REQUIREMENTS PRESENTED AT THE TIME OF THEIR PREPARATION. SINCE BOTH THESE FACTORS ARE SUBJECT TO DESIGN MODIFICATION, THEY ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES.

- THIS SET OF PLANS REPRESENTS A COMPLETE SET OF DETAILS AND SHOULD NOT BE SEPARATED.

- IT IS RECOMMENDED THAT THE SIEMENS DRAWINGS BE INCORPORATED WITH THE CONSTRUCTION DOCUMENTS FOR REFERENCE.

- ALL DIMENSIONS SHOWN ON THIS DRAWING ARE FROM FINISHED SURFACES.

- THIS DRAWING DOES NOT PROVIDE RADIATION SHIELDING REQUIREMENTS FOR X-RAY AND ASSOCIATED EQUIPMENT. THE CUSTOMER IS RESPONSIBLE FOR CONSULTING WITH A REGISTERED RADIATION PHYSICIST TO SPECIFY RADIATION PROTECTION.

PROJECT MANAGER: TRENT CHILDRRESS TEL: (317) 341-1094 EXT: FAX: EMAIL: trent.childrress@siemens.com		SIEMENS	
PROJECT #:		CINCINNATI VAMC	
11/03/15 OWNED OR CENTER LOCATION PER CUSTOMER		3200 VINE STREET, CINCINNATI, OH 45220	
10/22/15 R101R(B) DATED 09/29/15 APPROVED BY CUSTOMER FOR FINALS		MRI SUITE 2024 - MAGNETOM SKYRA W/MOBILE TABLE	
SYMBOL		PROJECT #:	
DATE		1400888	
DESCRIPTION		SHEET:	
-ISSUE BLOCK-		E-501	
SCALE: AS NOTED		SHEET 8 OF 10	
REF: 30182993		DRAWN BY: R. SUTHERS	
DATE: 11/03/15		Dwg. of	

CONSULTANTS:		ARCHITECT/ENGINEERS:		Drawing Title		Project Title		Project No.	
		<p>pfb architects Cincinnati • Chicago</p> <p>Heapy Engineering MEP Design Technology Planning Commissioning Energy Nationally Recognized Leader in Sustainability</p>		VENDOR EQUIPMENT (FOR REFERENCE ONLY)		Building 01-Imaging Center		539-CSI-201 3585.00	
		<p>STATE OF OHIO JEFFREY A. EVANS 9410768 REGISTERED ARCHITECT</p>		Approved: Project Director		Location Cincinnati, Ohio		Building Number 01-Imaging Center	
		<p>PFB Architects, Inc. 9401 Kenwood Road Cincinnati, Ohio 45242 (513) 861 3200</p>				Date 10/30/2015		Drawing Number QH-008	
						Checked PFB		Office of Construction and Facilities Management	
						Drawn PFB		Department of Veterans Affairs	
Revisions		Date						Dwg. of	