

Site Planning Guide

HOLOGIC SELENIA Mammography Clinic 40' Self-propelled USA Unit



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List of Revisions

Revisions

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Initial Release

February 2010

Notice

In accordance with our policy of continued product improvement, Oshkosh Specialty Vehicles reserves the right to make changes in the equipment, design, specifications, and materials of the product described herein. Any problems or questions related to the components or systems covered in this booklet may be directed to:

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Introduction

The purpose of this document is to provide the basic information needed for site planning. For specific information not contained in this document, please contact Oshkosh Specialty Vehicles.

The mobile self-propelled unit requires sufficient room to be maneuvered and positioned for setup and takedown. The mobile self-propelled unit has many storage compartments and service doors that require access during these procedures as well as during operation. The wheel chair lift, entry stair and optional platform require additional space on the right side of the mobile self-propelled unit. Refer to the drawings provided for actual locations of doors, wheel chair lift, and stair sizes and locations.

Warnings & Safety Alert Conventions

Three types of statements are used throughout this document to warn the operator of potential situations. Always read these statements carefully and take the appropriate safety precautions to ensure a safe environment for all personnel and all property. The statements are as follows:



This type of notice indicates a potentially hazardous situation, which if not avoided, could result in injury or death to the operator of the mobile self-propelled unit.



This type of notice indicates a potentially hazardous situation, which if not avoided, could result in irreparable damage to the mobile self-propelled unit.



This type of notice is meant to inform the operator of useful information.



Support Pad Requirements

The following is a list of recommendations and requirements for a concrete support pad. However, due to varying site conditions, the actual pad design should be prepared by an appropriately licensed structural or architectural engineer.

Recommended Support Pad Requirements

A full pad measuring 10'-11" x 31'-8-3/4" is the recommended support pad. The cross hatching as shown on Figure 2: Pad Layout, Figure 3: Right Side Elevation, and Figure 4: Left Side Elevation represents the recommended support pad.

Support Pad Depth

Recommendations for the width and length of the pad are given above. Based upon the weight distribution of the mobile unit and existing site conditions, the depth should be determined by a local contractor.

Support Pad Levelness

In order to ensure proper operation of the system, the support pad(s) must be level and the deviation must not exceed 2" in 10'-0".

Recommended Service Pad

A full pad measuring 18'-4" x 45'-5" is the recommended service pad. This will allow full service access to the mobile unit. The recommended service pad is shown on <u>Figure 2: Pad Layout</u>, Figure 3: Right Side Elevation, and Figure 4: Left Side Elevation.

Vehicle Access

A firm, level surface is required around the mobile unit in order to provide access to the site, patient access to the mobile unit, and servicing of the mobile unit.

Recommended Attachment to the Facility

An inflatable air bag or soft seal is recommended at the point of connection from the unit to the facility. Fixed or solid connections may hinder imaging quality. Contact Oshkosh Specialty Vehicles or the local Hologic Selenia representative prior to construction if the proposed connection varies from the recommended.

Swing Clearance Note

Please verify the actual dimensions of the rearmost projections on the mobile self-propelled unit to the centerline of tandem suspension. Refer to Figure 8: Turning Requirements for proper turning requirements.



Radiation Shielding

IMPORTANT

Radiation exposure limits must be in accordance with all local, state, and federal requirements. It is the responsibility of the customer to perform a proper radiation survey in order to determine the exclusion zone.

Care should be taken when determining a site location. Factors such as shielding design, proximity to buildings, and occupancy of the surrounding areas must be considered. The mobile unit has been designed to provide radiation shielding for the areas adjacent to the procedure room. An exclusion zone around the mobile unit may be necessary. Please contact Oshkosh Specialty Vehicles for mobile unit specific shielding information.



Customer Power Requirements

WARNING

It is the operator's responsibility to verify that the shore power receptacle is electrically compatible with the mobile unit's power cable and connector prior to connecting to the shore power connection. Plugging into a receptacle not electrically compatible could cause serious injury or damage.



The standard connector for the unit is a Russellstoll DS2307MP (240V AC). If an existing site currently implements a different connector or connector configuration, please contact Oshkosh Specialty Vehicles in order to arrange for a compatible power connector before the unit leaves the facility.



Always inspect the power cable, connectors, and fasteners prior to usage. If during inspection, it is suspected that either internal or external damage has occurred, have a certified electrician inspect and repair the damage before using.

IMPORTANT

Follow the maintenance schedule in the Operator and Service Manual for safe operation of the mobile unit.

Lockout/Tagout

A Lockout/Tagout provision in accordance with OSHA Standard 1910.147 is required. The facility shore power disconnect device must be located within 40'- 0" of the unit and must provide for an effective lockout/tagout to facilitate safe service and maintenance of the unit.

Electrical Service

240V AC, single phase, fused at 150 amps.

Configuration

Single-phase connection, three wire, with ground.

Load Regulation at Line Frequency

Wires are to be sized such that the line voltage drops from the power source to the mobile unit is less then 6% of the nominal voltage for the rated load of the mobile unit.

Frequency

60Hz ±0.5Hz.

Phase Balance

The phase balance is 2% maximum of lowest phase-to-phase voltage.

Maximum Voltage Variation

The maximum voltage variation is $\pm 2\%$ from a nominal steady state (under the worst case conditions of line voltage).



Connector Type

The mobile unit is supplied with a 50'-0" power cables and male connector. Unless otherwise specified, the 240V AC connector is a Russellstoll DS2307MP000.

Customer Facility

The customer facility must have the matching receptacle as specified in <u>Figure 6: Russellstoll</u> <u>Service Outlet</u> and <u>Figure 7: Russellstoll 240V Chart</u>. Unless otherwise specified, the 240V AC receptacle to be used is a Russellstoll DF2307FRAB0.

Connector Notes

The standard connector for the mobile unit is a Russellstoll. The mobile unit is configured for 240V AC, single phase, 60 Hz. Many existing mobile sites are set up for a variety of different mobile units that this mammography clinic could utilize. Review the different site configurations to determine the best location for the mammography clinic on these sites If an existing site currently implements a different connector, connector configuration, or the available power supply varies from the above specifications, please contact Oshkosh Specialty Vehicles to arrange for a compatible power connector before the mobile unit leaves the facility.

Voltage Surges

Transient voltage variations caused by external loads must not:

- Exceed ±5%.
- Exceed five cycles duration.
- Occur more then ten times an hour.

Power Source Monitoring (Facility Only)

NOTE: Perform a power audit first.

A power analyzer should be used to check the proposed Mobile Hologic Selenia Series facility site power for average line voltage, surges, sags, reclosures, impulses, frequency and microcuts. A period that includes two weekends should be used to simulate several days of normal use. Analysis of the data and site history of any previous power problems with other X-ray systems or computer installations should be reviewed with your power and ground representative. Verify "brown-out" (low voltage) conditions, which may occur during summer months, will not exceed the allowable range.

Some analyzer models that are suitable for power monitoring are:

- Dranetz Model 658
- Dranetz Model 656A
- BMI 3630
- RPM



Mobile Grounding Requirements

IMPORTANT	All work is to be done in accordance with the local and national electrical codes.
IMPORTANT	Information shown here is only a recommendation and must be verified with both local and national site codes.
IMPORTANT	Ground wires inside enclosures are to be taped green for the entire visual length for identification purposes.
IMPORTANT	If a separately derived, secondary system transformer is used, a bonding jumper between the grounded conductor (neutral) and the equipment – grounding conductor must be used.

Special Ground Note

The mobile unit must have an earth driven ground rod within 5'-0" of the facility power receptacle. A grounding cable of a minimum #1/0 AWG must be connected between the grounding rod and the grounding pin of the facility power receptacle. A separate grounding conductor must still be run with the phase conductors to the source of the power from the grounding pin of the hospital power receptacle in accordance with NEC 2002 Article 250-24.



Telephone Service Requirements

Telephone Service

The mobile unit is supplied with two (2) telephone connections. The connector type that is used is an RJ-12 plug.

The customer is required to purchase and install two (2) telephone lines, RJ-11 or RJ-12 modular plugs for use at the site.

Data Service

The mobile unit is supplied with four (4) data line connections that utilize RJ-45 outlets.

The customer is required to purchase the data connection cables for use with the data line connections. The data line connections require a 50'-0" CAT-5E cable with RJ-45 connections.

Data Service

For fire alarm connections see Figure 1: Fire Alarm Cable Connections below.





Figure 1: Fire Alarm Cable Connections



Water Requirements

Fresh Water Supply Requirements

The mobile unit will require a $\frac{3}{4}$ " diameter, 20'-0" long hose terminated with a $\frac{3}{4}$ " female threaded hose connector to replenish fresh water for the humidifier onboard the mobile unit. The facility must provide a $\frac{3}{4}$ " male connector and a water supply that meets the following specifications:

- A flow rate of 5 gallons per minute.
- 45-60 PSI.
- A maximum temperature of 70°F.





Figure 2: Pad Layout

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RIGHT SIDE ELEVATION



Figure 3: Right Side Elevation





LEFT SIDE ELEVATION



Figure 4: Left Side Elevation

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FRONT ELEVATION









Figure 6: Russellstoll Service Outlet



AMP / WIRE	DESCRIPTION		RECEPTACLE	
	WIRES	POLES	PART NUMBER	
MAXIMUM WIRE SIZE FOR LUG AWG 4/0	4	3	240 VOLT (200 AMP) 4 WIRE RUSSELLSTOLL RECEPTACLE DF 2307 FRAB THIS RECEPTACLE MUST BE WATERPROOF	
240 VOLT AC DEDICATED POWER LINE FROM MAIN TRANSFORMER STATION	1Ø	L1, L2,	120 AMP NEUTRAL AND GROUND	
VIEWED FROM FACE OF RECEPTACLE		L1/ 150	MAIN DISCONNECT /L2/N/PE AC 240 VOLT AMP FUSED DISCONNECT	
'L2' (2) (1) (1) (1) (C) (C) (C) (C) (C) (C) (C) (C	NEUTRAL (WHITE)			
RECEPTACLE AND INSTALLATION PROVIDED BY CUSTOMER				

Figure 7: Russellstoll 240V Chart





VEHICLE SPECIFICATIONS SUMMARY - TURNING RADIUS

Model	
Cab Size (829)	
Wheelbase (545)	7300MM (288 INCH) WHEELBASE
Front Tires (093)	MICHELIN XZE2 275/80R22.5 14 PLY RADIAL FRONT TIRES
Width ()	
Front Axle (400)	AF-13.3-3 13,300# FF1 /1.5 KPI/3.74 DROP SINGLE FRONT AXLE
Kingpin Intersection ()	
Bumper (556)	THREE-PIECE 14 INCH CHROMED STEEL BUMPER WITH COLLAPSIBLE ENDS
Width ()	
Bumper Miter to Front Axle ()	
Primary Steering Location (003)	LH PRIMARY STEERING LOCATION
Steering Gear (536)	TRW THP-60 POWER STEERING
Dual Steering Gear	NONE
Ram	NONE
Rear Axle (420)	ART-40.0-4 HT 40,000# R-SERIES TANDEM REAR AXLE
Axle Spacing (624)	

Application Version 7.2.205 Data Version PRL-72H.017 New File



04/20/2010 7:56 AM

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Figure 8: Turning Requirements