The intended use for this Cut Sheet is to communicate the spatial requirements as well as the basic architectural, electrical, structural, and mechanical requirements for this piece of imaging equipment. The information provided in this document is for reference only, during the pre-planning stage, and therefore does not contain any site specific detailed requirements. This information is subject to change without notice. Federal, state and/or local requirements may impact the final placement of the components. It is the customer’s responsibility to ensure that the final layout and placement of the equipment complies with all applicable requirements.
SIEMENS MEDICAL SOLUTIONS USA, INC.

SYMBIA EVO
TYPICAL ROOM PLAN

SIEMENS HIGHLY RECOMMENDS THE
CUSTOMER'S ARCHITECT DESIGNATED
SPACE FOR A HOT LAB, PATIENT WAITING AREA, AND
UPSTAIRS ROOM.

WARNING: THERE IS NO VIEW DOWN THE BORE OF THE
GYRATORY FROM THE SYMPHO ACQUISITION
WORKSPACE.

COLLIMATOR CART
PLACEMENT TO BE
DETERMINED BY THE
CUSTOMER WHEN
LOCATED OUTSIDE THE
SCANNER ROOM.

COUNTER OR TABLE TO BE
DESIGNED, SUPPLIED, AND
INSTALLED BY THE
CUSTOMER/CONTRACTOR.
IT IS THE RESPONSIBILITY OF
THE CUSTOMER/CONTRACTOR
TO PROVIDE A MEANS OF
MOUNTING THE PC TOWER(S)
OFF OF FINISHED FLOOR FOR
DAMAGE PROTECTION AGAINST
FIRE, WATER, FLUID, IMPACT, ETC.

TYPICAL PLAN
SCALE: 1/8" = 1'-0"
### SIEMENS
### SYMBIA EVO
### SPECIFICATIONS

#### EQUIPMENT LEGEND

<table>
<thead>
<tr>
<th>NO</th>
<th>DESCRIPTION</th>
<th>SMS</th>
<th>WEIGHT (LBS)</th>
<th>BTU/HR TO AIR</th>
<th>DIMENSIONS (INCHES)</th>
<th>REMARKS</th>
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<tbody>
<tr>
<td>1</td>
<td>SYMBIA EVO GANTRY WITH COLLIMATORS</td>
<td>☐</td>
<td>5,069</td>
<td>5,118</td>
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<td>2</td>
<td>FRONT PHS</td>
<td>☐</td>
<td>2,512</td>
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<td>97 1/2</td>
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<td>3</td>
<td>AUTOMATIC COLLIMATOR CHANGER—ACC WITH ADC – PRODUCTIVITY PACKAGE (OPTION)</td>
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<td>658</td>
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<td>5</td>
<td>PHS STANDARD PILOT</td>
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<tr>
<td>6</td>
<td>REAR PHS WITH SNAC</td>
<td>☐</td>
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<tr>
<td>7</td>
<td>PATIENT ROOM SWING ARM</td>
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<td>8</td>
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<tr>
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<td>SYMBIA EVO SYNGO ACQUISITION WORKPLACE CPU</td>
<td>☐</td>
<td>55</td>
<td>1,400</td>
<td>8</td>
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<td>12</td>
<td>SYMBIA EVO SYNGO ACQUISITION WORKPLACE MONITOR</td>
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<td></td>
<td>20 1/4</td>
<td>19 1/2</td>
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<td>13</td>
<td>UPS FOR E.SOF/C.CAM (OPTION)</td>
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<td>6 3/4</td>
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<td>TVSS FOR UPS FOR E.SOF/C.CAM (OPTION)</td>
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<td>DVD (OPTION)</td>
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<td>SYMBIA NET WORKPLACE CPU (OPTION)</td>
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<td>1,400</td>
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<td>21</td>
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<tr>
<td>19</td>
<td>SYMBIA NET WORKPLACE KEYBOARD AND MONITOR (OPTION)</td>
<td>☐</td>
<td>31</td>
<td></td>
<td>17 5/8</td>
<td>18 5/16</td>
</tr>
</tbody>
</table>

#### CASEWORK & ACCESSORY NOTES

1. ALL CASEWORK IS EITHER EXISTING OR IS TO BE DESIGNED, DETAILED, FURNISHED AND INSTALLED BY THE CUSTOMER AND/OR CONTRACTOR. FOLLOW DESIGN RECOMMENDATIONS INCLUDED HEREBY, AS THEY ARE ESSENTIAL FOR THE SUCCESSFUL INSTALLATION & OPERATION OF THE SIEMENS EQUIPMENT.
2. THE SOUND SYSTEM AND INTERCOM BETWEEN THE EXAMINATION AND CONTROL ROOMS ARE TO BE LOCATED, FURNISHED AND INSTALLED BY THE CUSTOMER/CONTRACTOR.
3. ALL FURNITURE (CHAIRS, ETC.) FOR THE CONTROL ROOM ARE TO BE PROVIDED BY THE CUSTOMER.

#### REMOTE SYSTEM DIAGNOSTICS

SIEMENS REMOTE SERVICES (SRS) REQUIRES A CONNECTION BETWEEN THE SRS REMOTE SERVER AND SIEMENS SYSTEMS VIA REMOTE LOCAL AREA NETWORK ACCESS, TO ENSURE THE UPTIME OF YOUR SYSTEM.

THIS SERVICE REQUIRES ONE OF THE FOLLOWING CONNECTION METHODS:
1. (PREFERRED) VPN – WHERE THE CUSTOMER HAS AVAILABLE A VPN CAPABLE FIREWALL OR OTHER VPN APPLIANCE
2. (OPTIONAL) *SRS ROUTER* – CONNECTED TO ANALOG PHONE LINE VIA *ANALOG MODEM*, ETHERNET CONNECTION TO CUSTOMER'S LAN, AND TO PHONE OUTLET

#### FINISHED ROOM HEIGHT

FOR THE SYMBIA EVO SYSTEM

MINIMUM CEILING HEIGHT 8'-0"
ENVIROMENTAL REQUIREMENTS

Please see equipment legend to get specific component heat dissipation.

Scanner Room:
The scanner room should maintain between 85°F–86°F (± 8°F/hr.) with a relative humidity of 20–80%, non-condensing.

Control Room:
The control room should maintain 75°F (± 8°F/hr.) with a relative humidity of 20–80%, non-condensing.

Combined Control and Scanner Room:
The combined room area should maintain between 85°F–86°F (± 8°F/hr.) with a relative humidity of 20–80%, non-condensing.

Ventilation and Air Filters:
For external air supply (fresh air) it is recommended that course filters of the class E04 to E06 be used on site to filter out dust particles >10μm.

The ventilation should ensure that aggressive pollutants are prevented from entering the room. The room air should be protected against contamination by hydrogen sulfide, even in small amounts. The most well known sources of hydrogen sulfide include: exhaust fumes and waste water from developers, exposed sewer drains, exhaust fumes from diesel power units. If a danger of such contamination exists, corrective actions have to be taken e.g.: extractor fans, siphon, and modification of ventilation intake.

FLOOR REQUIREMENTS

1) The minimum allowable concrete thickness for nonseismic regions of the scanner room floor is 6".

2) Conditions of flooring:

- Vibration free location as found in a typical clinical environment.

Installation of the gantry and patient table on:

- Concrete flooring class C20/25 to C50/60.
- Composite flooring or access floor with suitable on site.
- Mounting frame, sub construction or equivalent structure.

3) Weight capacity of flooring should be tested by a structural engineer.

4) Any flooring other than listed above requires an on site friction free sub construction made from steel in the areas of support. Please consult structural engineer.

5) The minimum extraction force for the points where the patient table is attached is 610 lbf per anchor.

Installation on a floating floor without sub-construction is prohibited.

6) Floor levelness refer to the preparation/procedure floor leveling and flattening detail.

7) The base frame plate-foot are mounted to the floor using (4) 3/4" x 8" anchors.

8) The minimum requirements for compressive strength for the floor covering based on symbia collimator cart shall be 375 psi. This is base on worse case loading with 2-high energy and 2-medium energy collimators placed on the collimator cart.

POWER REQUIREMENTS

Item 1 (R1) = 208 vac single phase; 30 amps. Dedicated outlet for symbia evo system. Install a twist-lock Nema L6–30 r receptacle to receive L6–30P plug for installation of the Siemens gantry power cables. Located 12" above finished floor.

Item 2 (R1) = 115 vac single phase; 20 amps. Dedicated double duplex outlet for computers.

Note: the spec ups (option) is rated for 200–240 vac input voltage. The spec ups auto-configs out to the spec system at 208 vac.

Power supplied for Siemens Medical Solutions equipment shall be dedicated services kept entirely free and independent of all other building wiring and equipment such as: elevators, generators, pumps, HVAC systems, etc.

NOISE LEVEL

<table>
<thead>
<tr>
<th>System Component</th>
<th>Decibel Level (Approximately at 2'-0&quot; Distance)</th>
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</thead>
<tbody>
<tr>
<td>Gantry</td>
<td>&lt;63.2</td>
</tr>
<tr>
<td>PHS</td>
<td>&lt;59.2</td>
</tr>
</tbody>
</table>
RADIATION SAFETY

LEAD OR EQUIVALENT SHIELDING MAY BE REQUIRED IN THE WALLS OF THE SCANNER ROOM, HOTLAB AND/OR PATIENT PREPARATION AREAS. IT IS THE RESPONSIBILITY OF THE CUSTOMER TO VERIFY WITH THE SITE'S RADIATION SAFETY OFFICER THAT RADIATION DOSE RATES FROM THE SPECT PATIENT AND/OR ISOPIRE WILL NOT EXCEED LOCAL RADIATION SAFETY GUIDELINES IN THE ROOM ADJACENT TO SCANNER, HOTLAB, AND/OR PATIENT PREPARATION AREAS.

IMPROPER SHIELDING MAY AFFECT CAMERA’S PERFORMANCE.

RAM LICENSE

RAM LICENSE NEEDS TO BE APPLIED FOR THROUGH GOVERNMENT AGENCY AS EARLY AS POSSIBLE. PLEASE ADDRESS WITH YOUR RSO (RADIATION SAFETY OFFICER).

RAM LICENSE MUST BE OBTAINED NO LATER THAT 4 WEEKS AHEAD OF SCHEDULED DELIVERY. DELAY OF INSTALLATION MAY OCCUR IF SITE HAS NOT OBTAINED RAM LICENSE AT THIS TIME. RADIOACTIVE SOURCES NECESSARY TO COMPLETE CALIBRATION OF EQUIPMENT WILL NOT BE SHIPPED TO SITE WITHOUT VALID RAM LICENSE.

RADIOACTIVE SOURCES

THE FOLLOWING RADIOACTIVE SOURCES ARE REQUIRED FOR THE SYMBIA EVO AT THE TIME OF INSTALLATION FOR CALIBRATION:

1) 10-20 mCi Cs-137 (cobalt 57) OR LIQUID FILLED Te-99 (technetium 99) SHEET SOURCE (FOR EXTRINSIC FLOOD).
2) POINT SOURCE 30-35 uCi Te-99 (FOR INTRINSIC FLOODS, TUNING AND PEAKING).
3) QUANTITY OF 5 – 1 mCi Te-99 POINT SOURCES (FOR VRH CALIBRATION).

IT IS CUSTOMER’S RESPONSIBILITY TO OBTAIN THESE SOURCES PRIOR TO INSTALLATION. CO-57 RECTANGULAR FLOOD SHEET SOURCE MAY BE ORDERED FROM SIEMENS (ASK SIEMENS SALES ASSOCIATE). Te-99 MUST OBTAINED THROUGH CUSTOMER'S LOCAL RADIOACTIVE SOURCE PROVIDER.

THESE RADIOACTIVE SOURCES ARE NEEDED TO COMPLETE CALIBRATION OF EQUIPMENT. PLEASE NOTE SOURCE PROVIDERS WILL NOT SHIP SOURCES TO SITE WITHOUT A VALID RAM LICENSE.

MAXIMUM DISTANCES

THE MAXIMUM DISTANCE BETWEEN COMPONENTS IS CALCULATED AS THE DISTANCE FROM CABLE OUTLET TO CABLE OUTLET. VARIOUS ARRANGEMENTS OF COMPONENTS ARE POSSIBLE AS LONG AS THE DISTANCES SHOWN BELOW ARE NOT EXCEEDED.

1) SYMBIA EVO GANTRY TO THE SYNGO ACQUISITION WORKPLACE OVERALL LENGTH OF THE CABLE IS 99'-0".
2) SYMBIA UPS FOR SPECT (OPTION) TO THE GANTRY OVERALL LENGTH OF CABLE 15'-0".
3) SYMBIA UPS FOR SPECT (OPTION) TO THE WALL OUTLET OVERALL CABLE LENGTH 10'-0".

15'-2"
SYMBIA UPS FOR SPECT 3)
SYMBIA EVO GANTRY
99'-0"
1)
OPERATING CONSOLE
SYNGO ACQUISITION WORKPLACE
TRANSPORT AND DELIVERY NOTES

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL SYMBIA EVO GANTRY WITH TRANSPORT DEVICE</td>
<td>4,118 LBS.</td>
</tr>
<tr>
<td>SYMBIA EVO GANTRY WITHOUT TRANSPORT DEVICE</td>
<td>3,979 LBS.</td>
</tr>
<tr>
<td>FRONT PHS</td>
<td>2,742 LBS.</td>
</tr>
<tr>
<td>REAR PHS</td>
<td>506 LBS.</td>
</tr>
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</table>

NORMAL TRANSPORT REQUIREMENTS:
DURING THE MOVEMENT OF THE GANTRY THROUGH CORRIDORS
THE TRANSPORT CASTERS ARE SWIVELED OUT FOR STABILITY.

FRONT PHS REQUIRES THE SAME HALLWAY TRANSPORT ROUTE
AS THE GANTRY AS SHOWN BELOW.

PLEASE CONSULT PLANNING GUIDE FOR ELEVATOR CLEARANCES
FOR GANTRY AND FRONT PHS.

HALLWAY TRANSPORT:

8'-0" HALLWAY CONFIGURATION SHOWS THE GANTRY WITH THE TRUNNIONS IN THE FACTORY
SHIPPED POSITION. 5'-9" CONFIGURATION SHOWS THE GANTRY WITH THE TRUNNIONS
RELOCATED TO THE TOP AND BOTTOM CENTER POSITION. THIS ALLOWS FOR GREATER
FLEXIBILITY IN MOVEMENT AND THE USE OF A NARROWER HALLWAY.

HALLWAY TRANSPORT FOR FRONT PHS:

HALLWAY TO DOOR TRANSPORT:
TRANSPORTS MAY HAVE TO BE SWIVELED IN NARROW AREAS.
ONCE SYSTEM HAS PASSED THROUGH NARROW AREA, THE
TRANSPORT ROLLERS MUST BE SWIVELED OUT AGAIN FOR
STABILITY.

TRANSPORTING GANTRY FLOOR LOAD:
ACCESS FLOORS MUST BE LAID OUT TO SUPPORT A LOAD
MINIMUM 1296 LBS. DURING TRANSPORT OF THE GANTRY,
HIGHER LOADS CAN OCCUR AT INDIVIDUAL POINTS IF THE
FLOOR IS NOT LEVEL. COVER THE TRANSPORT PATH WITH
SHEET METAL TO DISTRIBUTE THE FLOOR LOAD.