



# APPLICATION FOR PREAPPROVAL SPECIAL SEISMIC CERTIFICATION OF EQUIPMENT AND COMPONENTS

For Office Use Only

**APPLICATION NO.**

**OSP – 0086-10**

Check whether application is: NEW  RENEWAL

**SIEMENS MEDICAL SOLUTIONS USA, INC.**

Steven B. Wagman

1.0 Manufacturer Manufacturer's Technical Representative

51 Valley Stream Parkway, Malvern, PA. 19355

*Mailing Address*

(610) 219-2137

*Telephone*

Steven.wagman@siemens.com

*E-mail Address*

2.0 Axiom Luminos dRF & Axiom Luminos TF R/F Systems Radiography & Fluoroscopy (R/F) imaging systems  
*Product Name* *Product Type*

**SEE ATTACHMENT 1**

*Product model No (List all unique product identification numbers and/or serial numbers)*

*General Description:* Multi-component radiography & fluoroscopy systems used for medical imaging.

3.0 **EQUIPMENTANCHORAGE.COM**  
*Applicant Company Name*

JONATHAN ROBERSON, S.E.  
*Contact Person*

5877 Pine Ave, Suite 210, Chino Hills, CA. 91709

*Mailing Address*

(406) 541-EASE (3273)

*Telephone*

jon@easeco.com

*E-mail Address*

I hereby agree to reimburse the Office of Statewide Health Planning and Development for the actual costs incurred by the department for review.

  
*Signature of Applicant*

June 18, 2010

*Date*

SENIOR ENGINEER  
*Title*

**EQUIPMENTANCHORAGE.COM**  
*Company Name*



Registered Design Professional Preparing the Report

4.0

EQUIPMENTANCHORAGE.COM

Company Name

Jonathan Roberson, S.E.

S4197

Contact Name

California License Number

5877 Pine Ave, Suite 210, Chino Hills, CA. 91709

Mailing Address

909-606-7622

jon@easeco.com

Telephone

E-mail Address

California Licensed Structural Engineer Review and Acceptance of the Report

5.0

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Anchorage Pre-Approval

6.0

Anchorage is pre-approved under OPA- (Separate application for anchorage pre-approval is required)

Anchorage is not Pre-approved

Certification Method

70.  Testing in accordance with:  ICC-ES AC-156  Other (Please Specify):

Analysis

Experience data

Combination of Testing, Analysis, and/or Experience Data (Please Specify):

Testing Laboratory (if applicable)

8.0

Environmental Testing Laboratory, Inc.

Brady Richard

Company Name

Contact Name

11034 Indian Trail, Dallas, TX 75229-3513

Mailing Address

972-247-9657

brady@etldallas.com

Telephone

E-mail:



**Approval Parameters**

9.0

Design in accordance with ASCE 7-05 Chapter 13:  Yes  No

Design Basis of Equipment or Components ( $F_p/W_p$ ) = **2.4g**

$S_{DS}$  (Spectral response acceleration at short period) = **2.00**

$a_p$  (In-structure equipment or component amplification factor) = **1.0**

$R_p$  (Equipment or component response modification factor) = **1.5**

$I_p$  (Importance factor) = **1.5**

$z/h$  (Height factor ratio) = **1.0**

Equipment or Component fundamental frequency(s) = **SEE ATTACHMENT 1**

Building period limits (if any) = **NO LIMIT**

Overall dimensions and weight (or range thereof) = **SEE ATTACHMENT 1**

Equipment or Components @ grade designed in accordance with ASCE 7-05 Chapter 15:  Yes  No

Design Basis of Equipment or Components ( $V/W$ ) =

$S_{DS}$  (Spectral response acceleration at short period) =

$S_1$  (Spectral response acceleration at 1 second period) =

$R$  (Response modification coefficient) = **1.0**

$\Omega_o$  (System overstrength factor) = **1.0**

$C_d$  (Deflection amplification factor) = **1.0**

$I_p$  (Importance factor) = **1.5**

Height to Center of Gravity above base =

Equipment or Component fundamental period(s) = Sec

Overall dimensions and weight (or range thereof) =

Tank(s) designed in accordance with ASME BPVC, 2007:  Yes  No

**10.0 List of attachments supporting the special seismic certification of equipment or components:**

- Test Report
- Drawings
- Manufacturer's Catalog
- Calculations
- Others (Please Specify): SE Acceptance Letter; Attachment 1

**11.0 OSHPD Approval (For Office Use Only)**



Signature & Date

**Chris Tokas, SHFR**

Name & Title

9/20/10

December 31, 2016

Approval Expiration Date

$S_{DS}$  (g) = **2.0**  $z/h$  = **1.0**

Special Seismic Certification Valid Up to

Condition of Approval (if any):



**APPLICATION FOR PREAPPROVAL  
SPECIAL SEISMIC CERTIFICATION OF EQUIPMENT AND COMPONENTS**

**ATTACHMENT 1: Seismically Certified Components**

| Description   | Width (in.) | Depth (in.) | Height (in.) | Weight (lb.) | Mount <sup>CDEF</sup> | Lowest Resonant Freq. (Hz.) <sup>A</sup> |                  |                  |
|---|-------------|-------------|--------------|--------------|-----------------------|--|------------------|------------------|
|   |             |             |              |              |                       | F/B                                      | S/S              | Vert.            |
| <b>AXIOM LUMINOS dRF RADIOGRAPHY &amp; FLUOROSCOPY SYSTEM</b> |             |             |              |              |                       |  |                  |                  |
| X-Ray Tube w/3M Bridge  | 120         | 126         | 106          | 754          | Ceiling Suspension    | 13.9                                     | 4.4              | 14.6             |
| Wall Stand  | 28          | 28          | 82           | 617          | Floor Mount           | 8.9                                      | 7.6              | 8.7              |
| Luminos dRF Table   | 83          | 75          | 107          | 2892         | Floor Mount           | 4.6                                      | 4.8              | 4.6              |
| Flourosport Compact   | 13.5        | 27.5        | 21.75        | 108          | Floor Mount           | 23.3                                     | 11.8             | >50              |
| Polydoros F80 63kW-80kW Generator Cabinet                     | 31.5        | 17.25       | 86.5         | 826          | Wall/Floor            | 10.1                                     | 11.2             | 31.0             |
| DCS-1 Display Ceiling Suspension                              | 168         | 28          | 102          | 290          | Ceiling Suspension    | 8.0                                      | 6.4              | 14.8             |
| Luminos dRF Control Console                                   | ---         | ---         | ---          | ---          | Countertop            | --- <sup>B</sup>                         | --- <sup>B</sup> | --- <sup>B</sup> |
| 19" Monitor Desktop Stand                                     | ---         | ---         | ---          | ---          | Countertop            | --- <sup>B</sup>                         | --- <sup>B</sup> | --- <sup>B</sup> |
| Keyboard & Mouse  | ---         | ---         | ---          | ---          | Countertop            | --- <sup>B</sup>                         | --- <sup>B</sup> | --- <sup>B</sup> |
| Foot Pedal  | ---         | ---         | ---          | ---          | Countertop            | --- <sup>B</sup>                         | --- <sup>B</sup> | --- <sup>B</sup> |
| <b>AXIOM LUMINOS TF RADIOGRAPHY &amp; FLUOROSCOPY SYSTEM</b>  |             |             |              |              |                       |  |                  |                  |
| 3D TOP w/4M Bridge  | 167         | 119         | 38           | 819          | Ceiling Suspension    | 10.5                                     | 6.4              | 5.0              |
| Luminos TF Table  | 83          | 72          | 77.9         | 3910         | Floor Mount           | 5.3                                      | 4.1              | 4.3              |
| Cable Drop Box  | 10.75       | 8.25        | 7            | 161          | Wall                  | 13.6                                     | 10.3             | 6.3              |
| DCS 2 Display Ceiling Suspension                              | 167         | 48          | 63           | 440          | Ceiling Suspension    | 10.3                                     | 7.7              | 4.0              |
| Fluorosport Compact Container                                 | 17.75       | 26          | 23           | 172          | Floor Mount           | 26.1                                     | 9.7              | 30.4             |
| Polydoros SX 65/80 Generator Cabinet                          | 31.5        | 17.25       | 84           | 641          | Wall/Floor            | 7.9                                      | 8.3              | 20.0             |
| System Cabinet  | 23.25       | 17.125      | 84           | 518          | Wall/Floor            | 7.9                                      | 8.3              | 19.0             |
| Vertex MT Wall Stand  | 32          | 26.75       | 88.25        | 416          | Floor Mount           | 9.8                                      | 7.9              | 7.3              |
| Vertex MT Wall Stand  | 32          | 26.75       | 88.25        | 416          | Wall/Floor            | ---                                      | ---              | ---              |
| Keyboard, Mouse & Monitor                                     | 18.3        | 9.5         | 17.5         | 20           | Countertop            | --- <sup>B</sup>                         | --- <sup>B</sup> | --- <sup>B</sup> |
| Control Console   | 9.25        | 10.25       | 2.75         | 10           | Countertop            | --- <sup>B</sup>                         | --- <sup>B</sup> | --- <sup>B</sup> |

Notes:

- A) F/B = Front-to-Back Axis; S/S = Side-to-Side Axis; Vert. = Vertical Axis
- B) Not monitored
- C) "Floor Mounted" refers to a free-standing, floor-mounted condition.
- D) "Wall/Floor" indicates a condition where the unit bears on, and is anchored directly to the supporting floor. In addition, lateral restraint anchoring the unit to an adjacent wall or other supporting structure is provided at the top of the equipment.
- E) "Ceiling Suspended" refers to a condition where the unit is anchored to and suspended from a framing system at or slightly above the ceiling line of the room.
- F) "Countertop" refers to a condition where the unit sits atop but is not otherwise anchored to a counter, desk, or other piece of fixed furniture.