



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

**APPLICATION FOR HCAI SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)**

OFFICE USE ONLY

APPLICATION #: OSP-0716

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Siemens Healthcare GmbH

Manufacturer's Technical Representative: Yuan Peng

Mailing Address: Siemensstr 3, Forchheim, Forchheim 91301

Telephone: (49162) 578-7300

Email: yuan.peng@siemens-healthineers.com

Product Information

Product Name: X-Ray and Fluoroscopy Monitor Suspension Systems

Product Model Number(s): See attachment

Product Category: Fluoroscopy and Radiography Systems

Product Sub-Category: Fluoroscopy and Radiography Systems

General Description: Ceiling and Wall Mounted Monitor suspension systems for X-Ray and Fluoroscopy System.

Mounting Description: Several - See Certified Product Tables

Tested Seismic Enhancements: None

Applicant Information

Applicant Company Name: WE Gundy & Associates, Inc

Contact Person: Travis Soppe

Mailing Address: PO Box 9121, Boise, ID 83707

Telephone: (208) 342-5989

Email: tsoppe@wegai.com

Title: President



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California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)

Company Name: W.E. GUNDY & ASSOCIATES INC.

Name: Travis Soppe California License Number: S6115

Mailing Address: P.O. Box 9121, Boise, ID 83707

Telephone: (208) 342-5989 Email: tsoppe@wegai.com

Certification Method

- GR-63-Core
- ICC-ES AC156
- IEEE 344
- IEEE 693
- NEBS 3
- Other (Please Specify): _____

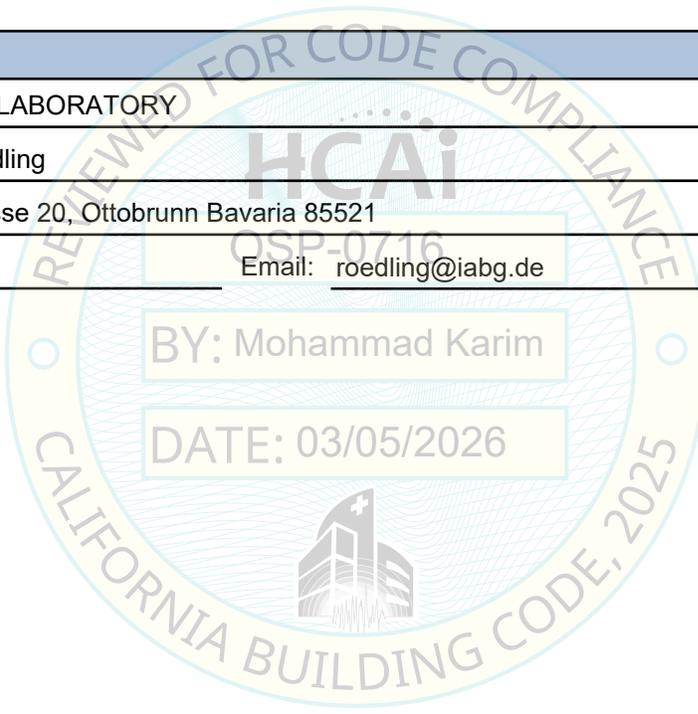
Testing Laboratory

Company Name: IABG TEST LABORATORY

Contact Person: Steffen Roedling

Mailing Address: Einsteinstrasse 20, Ottobrunn Bavaria 85521

Telephone: (49896) 088-2052 Email: roedling@iabg.de





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Seismic Parameters

Certified Response Spectral Acceleration Factors:(F_p/W_p)

Horizontal (A Flx-H), $g = \underline{3.20}$ (A Rig-H), $g = \underline{2.15}$

Vertical (A Flx-V), $g = \underline{1.68}$ (A Rig-V), $g = \underline{0.68}$

SDS (Design spectral response acceleration at short period, g) = 2.5 at $z/h = 0$; 2.0 at $z/h = 1$

H_f (Force amplification height factor) = 1 at $z/h = 0$; 3.5 at $z/h = 1$

R_u (Structure ductility reduction factor) = 1 at $z/h = 0$; 1.3 at $z/h = 1$

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 0 and 1

HCAI Approval (For Office Use Only) - Approval Expires on 03/05/2032

Date: 3/5/2026

Name: Mohammad Karim

Title: Supervisor, Health Facilities

Condition of Approval (if applicable):

OSP-0716

BY: Mohammad Karim

DATE: 03/05/2026

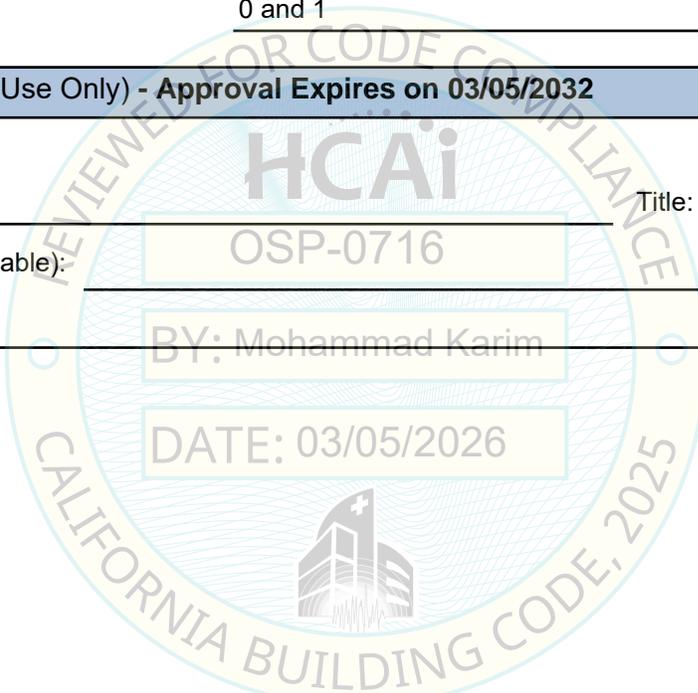


Table 1	SIEMENS HEALTHCARE GmbH SPECIAL SEISMIC CERTIFICATION CERTIFIED SYSTEM AND COMPONENTS	 W.E. GUNDY & ASSOCIATES, INC. <small>STRUCTURAL & EARTHQUAKE ENGINEERING</small>
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System: X-Ray and Fluoroscopy Systems	Manufacturer: Siemens Healthcare GmbH
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System Component ¹	Siemens Part Number	Dimensions (in)			Weight (lb)	Mounting	UUT
		Depth	Width	Height			

Display Ceiling Suspension (DCS)							
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DCS-1 w/o TUI - 1 Monitor	11371813	20 - 101.0	98.8-140.4	38.2-79.9	154	ceiling	UUT _x -2
DCS-1/1 with TUI - 1 Monitor	11371815	20 - 101.0	98.8-140.4	46.9-88.9	190	ceiling	interpolated
DCS-2 w/o TUI - 2 Monitor	11371814	20 - 115.2	98.8-154.5	38.2-79.9	202	ceiling	interpolated
DCS-2/1 with TUI - 2 Monitor	11371816	20 - 115.2	98.8-154.5	46.9-88.9	211	ceiling	UUT _x -1
DCS-1 w/o TUI - 1 Monitor	11688713 11688593	22.4-101.0	104.2-170.4	38.2-79.9	214	ceiling	interpolated
DCS-1/1 with TUI - 1 Monitor	11688715 11688593	22.4-101.0	104.2-170.4	46.9-88.9	221	ceiling	interpolated
DCS-2 w/o TUI - 2 Monitor	11688714 11688593	22.4-115.2	104.2-170.4	38.2-79.9	226	ceiling	interpolated
DCS-2/1 with TUI - 2 Monitor	11688716 11688593	22.4-115.2	104.2-170.4	46.9-88.9	235	ceiling	interpolated
DCS-1 w/o TUI - 1 Monitor	11688592 11688593	22.4-79.2	104.2-170.4	37.0-82.4	265	ceiling	UUT _y -5

Display Wall Suspension (DWS)							
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DWS-1 - 1 Monitor	11371817	52-90.9	52.0-90.9	35.2-83.5	97	wall	UUT _x -4
DWS-1 - 1 Monitor	11688736	52-90.9	52.0-90.9	35.2-83.5	100	wall	interpolated
DWS-2 - 2 Monitor	11688737	63-105.1	63.0-105.1	43.1-85.0	110	wall	interpolated
DWS-2 - 2 Monitor	11371818	63-105.1	63.0-105.1	43.1-85.0	110	wall	UUT _x -3

Notes:

¹ All components are manufactured by Siemens Healthcare GmbH. The part numbers listed uniquely identify the type of component, manufacturer, and material of construction for each sub-component within the tested units. TUI indicates the inclusion of the Siemens Touch User Interface.

² The units were tested at different times and the subscripts on the UUT's reference the following seismic certification test reports:
x = TAB3-PB-21-057-V2 / y = TA-B-006469-V1

SEISMIC CERTIFICATION LIMITS									
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CODE	I _p	S _{DS} (g)	z / h	H _f	R _μ	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2025	1.5	2.0	1.0	3.5	1.3	3.20	2.15	1.34	0.54
		2.5	0	1.0	1.0	2.50	1.00	1.68	0.68

UUT_x-1

**UNIT UNDER TEST (UUT)
SUMMARY SHEET**



Mounting Details: Rails and connecting parts of the Display Ceiling Suspension bolt with M10 bolts torqued at 36 ft-lb to unistrut grid spaced at 26.6" on center. The unistrut grid consisted of MURPO#150969 MPR-41/82/2.0 H-Profiles (Unistrut P1001 equivalent) anchored with 2 - M10 bolts with clamping claws (MURPO 157219) at each intersection to the ceiling fixture framing spaced at 23.6" on center.



Manufacturer: Siemens Healthcare GmbH	Test Location: IABG - Munich, Germany
Component: DCS-2/1 with TUI - 2 Monitor	Test Date: April 2021
Model Number: 11371816	Report Number: TAB3-PB-21-057-V2
UUT Function: Ceiling suspension of monitors used for X-Ray and Fluoroscopy systems	
UUT Description: Ceiling monitor suspension system	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Depth	Width	Height	FB	SS	V
211	115.2	154.5	46.9	N/A	N/A	N/A

The ceiling suspended monitor support moves laterally, rotates, and extends up and down to accommodate different patients and procedures. The system was tested in the normal operating position with the system horizontally centered, no rotation, and the arm fully extended.

SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.30	1.5	3.20	2.15	1.34	0.54
	2.50	0.0	1.0	1.00	1.5	2.50	1.00	1.68	0.68

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_x-2

**UNIT UNDER TEST (UUT)
SUMMARY SHEET**



Mounting Details: Rails and connecting parts of the Display Ceiling Suspension bolt with M10 bolts torqued at 36 ft-lb to unistrut grid spaced at 26.6" on center. The unistrut grid consisted of MURPO#150969 MPR-41/82/2.0 H-Profiles (Unistrut P1001 equivalent) anchored with 2 - M10 bolts with clamping claws (MURPO 157219) at each intersection to the ceiling fixture framing spaced at 23.6" on center.



Manufacturer: Siemens Healthcare GmbH	Test Location: IABG - Munich, Germany
Component: DCS-1 w/o TUI - 1 Monitor	Test Date: April 2021
Model Number: 11371813	Report Number: TAB3-PB-21-057-V2
UUT Function: Ceiling suspension of monitors used for X-Ray and Fluoroscopy systems	
UUT Description: Ceiling monitor suspension system	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Depth	Width	Height	FB	SS	V
154	101	140.4	38.2	N/A	N/A	N/A

The ceiling suspended monitor support moves laterally, rotates, and extends up and down to accommodate different patients and procedures. The system was tested in the normal operating position with the system horizontally centered, no rotation, and the arm fully extended.

SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.30	1.5	3.20	2.15	1.34	0.54
	2.50	0.0	1.0	1.00	1.5	2.50	1.00	1.68	0.68

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_x-3

**UNIT UNDER TEST (UUT)
SUMMARY SHEET**



Mounting Details: Rigid wall mounted with 4 - M10 grade 8 bolts and washers.



Manufacturer: Siemens Healthcare GmbH **Test Location:** IABG - Munich, Germany

Component: DWS-2 - 2 Monitor **Test Date:** April 2021

Model Number: 11371818 **Report Number:** TAB3-PB-21-057-V2

UUT Function: Wall suspension of monitors used for X-Ray and Fluoroscopy systems

UUT Description: Wall monitor suspension system

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Depth	Width	Height	FB	SS	V
110	63.0	105.1	43.1	N/A	N/A	N/A

The wall suspended monitor support rotates, and extends up and down to accommodate different patients and procedures. The system was tested in the normal operating position with no rotation and the arm fully extended.

SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.30	1.5	3.20	2.15	1.34	0.54
	2.50	0.0	1.0	1.00	1.5	2.50	1.00	1.68	0.68

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_x-4

**UNIT UNDER TEST (UUT)
SUMMARY SHEET**



Mounting Details: Rigid wall mounted with 4 - M10 grade 8 bolts and washers.



Manufacturer: Siemens Healthcare GmbH	Test Location: IABG - Munich, Germany
Component: DWS-1 - 1 Monitor	Test Date: April 2021
Model Number: 11371817	Report Number: TAB3-PB-21-057-V2

UUT Function: Wall suspension of monitors used for X-Ray and Fluoroscopy systems

UUT Description: Wall monitor suspension system

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Depth	Width	Height	FB	SS	V
97	52.0	90.9	35.2	N/A	N/A	N/A

The wall suspended monitor support rotates, and extends up and down to accommodate different patients and procedures. The system was tested in the normal operating position with no rotation and the arm fully extended.

SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.30	1.5	3.20	2.15	1.34	0.54
	2.50	0.0	1.0	1.00	1.5	2.50	1.00	1.68	0.68

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_y-5

**UNIT UNDER TEST (UUT)
SUMMARY SHEET**



Mounting Details: Rails and connecting parts of the Display Ceiling Suspension bolt with M10 bolts torqued at 36 ft-lb to unistrut grid spaced at 26.6" on center. The unistrut grid consisted of MURPO#150969 MPR-41/82/2.0 H-Profiles (Unistrut P1001 equivalent) anchored with 2 - M10 bolts with clamping claws (MURPO 157219) at each intersection to the ceiling fixture framing spaced at 23.6" on center.



Manufacturer: Siemens Healthcare GmbH	Test Location: IABG - Munich, Germany
Component: DCS-1 w/o TUI - 1 Monitor	Test Date: February 2025
Model Number: 11688592 / 11688593	Report Number: TA-B-006469-V1
UUT Function: Ceiling suspension of monitors used for X-Ray and Fluoroscopy systems	
UUT Description: Ceiling monitor suspension system	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Depth	Width	Height	FB	SS	V
265	79.2	104.2	37.0	N/A	N/A	N/A

The ceiling suspended monitor support moves laterally, rotates, and extends up and down to accommodate different patients and procedures. The system was tested in the normal operating position with the system horizontally centered, no rotation, and the arm fully extended.

SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.30	1.5	3.20	2.15	1.34	0.54
	2.50	0.0	1.0	1.00	1.5	2.50	1.00	1.68	0.68

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.