

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

APPLICATION FOR HCAI SPECIAL SEISMIC	OFFICE USE ONLY
CERTIFICATION PREAPPROVAL (OSP)	APPLICATION #: OSP-0788
HCAI Special Seismic Certification Preapproval (OSP)	
Type: New X Renewal	
Manufacturer Information	
Manufacturer: Lochinvar, LLC	
Manufacturer's Technical Representative: Cindy Maxwell	
Mailing Address: 300 Maddox Simpson Parkway, Lebanon, TN 37090	
Telephone: (615) 889-8901 Email: cmaxwell@lochinva	ar.com
Product Information	
Product Name: Veritus Air Source Heat Pump Water Heater	0.
Product Model Number(s): Veritus Air Source Heat Pump Water Heater	
Product Category: Other	2
Product Sub-Category: Heat Pump - Water Heater	
General Description: Heat Pump Water Heaters	
Mounting Description: Base Mounted Rigid	
Tested Seismic Enhancements: None None	
Applicant Information	
Applicant Company Name: Pre Compliance	
Contact Person: Katie Braman	25.
Mailing Address: 36 SW Wall St, Bend, OR 97702	
Telephone: (541) 241-2310 Email: katie@go-pre.com	

HC

Title: Principal and Program Manager



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

California Licensed Struct	ural Engineer Responsible for the Engineering and Test Report(s)
Company Name: PRE COMPL	IANCE
Name: Andrew Coughlin	California License Number: S6082
Mailing Address: 324 NW Hill S	St, Bend, OR 97703
Telephone: (415) 635-8461	Email: Andy@go-pre.com
Certification Method	
Certification Method	
GR-63-Core	ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3
Other (Please Specify):	
Testing Laboratory	
Company Name: CLARK TEST	TING LABORATORY, INC.
Contact Person: Devon Lohr	
Mailing Address: 1801 Route 5	51, Jefferson Hills PA 15025
Telephone: (412) 387-1001	Email: dlohr@clarktesting.com
	O BY: Timothy J. Piland
	DATE: 08/27/2025

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STATE OF CALIFORNIA - HEALTH AND HUMAN SERVICES AGENCY



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

Seismic Parameters

Certified Response Spectral Acceleration Factors:(Fp/Wp)

Horizontal (A Flx-H), g= 3.20 (A Rig-H), g= 2.15

Vertical (A Flx-V), g= 1.33 (A Rig-V), g= 0.54

SDS (Design spectral response acceleration at short period, g) = 2.0

Hf (Force amplification height factor) = 1@z/h=0, 3.5@ z/h=1

Ru (Structure ductility redution factor) = 1@z/h=0, 1.3@ z/h=1

Ip (Importance factor) = 1.5

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

HCAI Approval (For Office Use Only) - Approval Expires on 08/27/2031

Date: 8/27/2025

Name: Timothy Piland Title: Senior Structural Engineer

Condition of Approval (if applicable):

BY: Timothy J. Piland

DATE: 08/27/2025





STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY



SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Pre No. CC231320-01-R2

Manufacturer: Lochinvar, LLC

Heater

Seismic Parameters

Building Codes

Product Type:

Heat Pump Water Heaters

 $S_{DS} = 2.0g \text{ for } R_{\mu}=1.3, H_f=3.5$

Model Line:

Veritus™ Air Source Heat Pump Water

 $S_{DS} = 2.0g$ for

 $R_u=1.0, H_f=1.0$

 $I_{p}=1.5$ C

CBC 2025

TABLE 1

Mounting Configuration: Base N

Base Mounted - Rigid

Construction Summary

Options Summary

Carbon steel enclosure

AHP060 & AHP140 can be installed in series to achieve greater capacity (AHP200, AHP280, & AHP350). 208V and 480V

Model Line	Model	Max. Dimensions (in)		Wt.	Notes	UUT	
Wiodei Line	Model	D	W	Н	(lb)	Notes	001
	AHP060-208	34	30/	72	722	4	Extrap.
	AHP <mark>0140-20</mark> 8	34	41	72	924	12	Extrap.
	AHP200-208 ¹	34	P_7178	3872	1646	AHP060-208+AHP140-208	Extrap.
	AH <mark>P280</mark> -208 ¹	34	82	72	1848	AHP140-208+AHP140-208	Extrap.
	AHP350-208 ¹ BY	734 _m	otHJ2J.	P72an	2570	AHP140-208+AHP140- 208+AHP060-208	Extrap.
	AH <mark>PA06</mark> 0-208 ²	34	30	72	722		Extrap.
	AHPA140-208 ²	34	18427	2025	924	150	Extrap.
Veritus Heat Pump	AHPA200-208 ^{1,2}	34	71	72	1646	AHPA060-208+AHPA140-208	Extrap.
Water Heater 208V	AHPA280-208 ^{1,2}	34	82	72	1848	AHPA140-208+AHPA140-208	Extrap.
	AHPA280-208 ^{1,2}	34	112	72	2570	AHPA140-208+AHPA140- 208+AHPA060-208	Extrap.
	SHPA060-208 ³	34	30	72	722		Extrap.
	SHPA140-208 ³	34	41	72	924		Extrap.
	SHPA200-208 ^{1,3}	34	71	72	1646	SHPA060-208+SHPA140-208	Extrap.
	SHPA280-208 ^{1,3}	34	82	72	1848	SHPA140-208+SHPA140-208	Extrap.
	SHPA350-208 ^{1,3}	34	112	72	2570	SHPA140-208+SHPA140- 208+SHPA060-208	Extrap.
	AHP060-480	34	30	72	722		1
	AHP140-480	34	41	72	924		2
Veritus Heat Pump	AHP200-480 ¹	34	71	72	1646	AHP060-480+AHP140-480	Extrap.
Water Heater 480V	AHP280-480 ¹	34	82	72	1848	AHP140-480+AHP140-480	Extrap.
	AHP350-480 ¹	34	112	72	2570	AHP140-480+AHP140- 480+AHP060-480	Extrap.

Note:

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¹ Capacity based on a combination of tested units used in series. Units are not ganged (bolted together) but connected in series by piping/wiring.

²Alternate branding, models identitical to tested units. Locinvar AHP### is identical to AO Smith AHPA###.

³Alternate branding, models identitical to tested units. Locinvar AHP### is identical to State Industries SHPA###.



SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Pre No. CC231320-01-R2

Manufacturer: Lochinvar, LLC

Seismic Parameters

Building Codes

Product Type:

Heat Pump Water Heaters

 $S_{DS} = 2.0g \text{ for } R_{\mu}=1.3, H_f=3.5$

4.5

Model Line:

Veritus™ Air Source Heat Pump Water

 $S_{DS} = 2.0g$ for

 $R_u=1.0, H_f=1.0$

I_p=1.5 CBC 2025

Heater

ARIF 1

Mounting Configuration: Base Mounted - Rigid

Construction Summary

Options Summary

Carbon steel enclosure

AHP060 & AHP140 can be installed in series to achieve greater capacity (AHP200, AHP280, & AHP350). 208V and 480V

Model Line	Model	Max. Dimensions (in)		Wt.	Notes	UUT	
Wiodei Lille	Wiodei	D	W	Н	(lb)	Notes	001
	AHPA060-480 ²	34	30	72	722	5	Extrap.
	AHPA140-480 ²	34	41	72	924	12	Extrap.
	AHPA200-480 ^{1,2}	34	P_7178	3872	1646	AHPA060-480+AHPA140-480	Extrap.
	AHPA280-480 ^{1,2}	34	82	72	1848	AHPA140-480+AHPA140-480	Extrap.
Veritus Heat Pump	AHPA350-480 ^{1,2}	/: 734 _m	otH112J	. P 7 Pan	<mark>d</mark> 2570	AHPA140-480+AHPA140- 480+AHPA060-480	Extrap.
Water Heater 480V	SH <mark>PA06</mark> 0-480 ³	34	30	72	722		Extrap.
	SHPA140-480 ³	34	8417	12(72)5	924	110	Extrap.
	SHPA200-480 ^{1,3}	34	71	72	1646	SHPA060-480+SHPA140-480	Extrap.
	SHPA280-480 ^{1,3}	34	82	72	1848	SHPA140-480+SHPA140-480	Extrap.
	SHPA350-480 ^{1,3}	34	112	72	2570	SHPA140-480+SHPA140- 480+SHPA060-480	Extrap.
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Note:

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¹ Capacity based on a combination of tested units used in series. Units are not ganged (bolted together) but connected in series by piping/wiring.

²Alternate branding, models identitical to tested units. Locinvar AHP### is identical to AO Smith AHPA###.

³Alternate branding, models identitical to tested units. Locinvar AHP### is identical to State Industries SHPA###.



SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Pre No. CC231320-01-R2

Manufacturer: Lochinvar, LLC

Seismic Parameters Building Codes

Heat Pump Water Heaters

 $S_{DS} = 2.0g \text{ for } R_{\mu}=1.3, H_f=3.5$

I_p=1.5

CBC 2025

Model Line: Veritus™ Air Source Heat Pump Water

Heater

 $S_{DS} = 2.0g \text{ for } R_{\mu}=1.0, H_f=1.0$

TABLE 2

Product Type:

Compressor & Pump

Component (Manufacturer)	Model	Description	Notes	UUT
	ZB45KCE-TFC-250	Cabon steel,208V, 87 lbs.		Extrap.
Scroll Compressor	ZB95KCE-TWC-260	Cabon steel, 208V, 146 lbs.		Extrap.
(Copeland)	ZB45KCE-TFD-250	Cabon steel,480V, 87 lbs.		1
	ZB95K <mark>5E-T</mark> FD-260	OSPCarbon steel,480V, 146 lbs.		2
Pump (Grundfos)	UPMXL 25-125 180 SS	: Timothy J. P63/lbs		1,2
	DA DA	TE: 08/27/2025		
	PA			
		BUILDING		

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SPECIAL SEISMIC CERTIFICATION **CERTIFIED SUBCOMPONENTS**

 $R_u=1.0, H_f=1.0$

Pre No. CC231320-01-R2

Manufacturer: Lochinvar, LLC **Seismic Parameters**

Building Codes

Product Type:

Heat Pump Water Heaters

 $S_{DS} = 2.0g$ for

 R_{μ} =1.3, H_f =3.5 $I_{p} = 1.5$

CBC 2025

Model Line:

Veritus™ Air Source Heat Pump Water

 $S_{DS} = 2.0g$ for

Heater

Evaporator

Component (Manufacturer)	Model	Description	Notes	UUT
Evaporator Fan (Multi Wing)	C0710-001-COM-10-V2	OR CODE 56 lbs.		1,2
Evaporator Fan	E56Y22TRA2210	208V, 23.8 lbs		Extrap.
Motor (Regal)	E56Y42TRA2210	480V, 23.8 lbs		1,2
	100360811	Copper Tubbing, Aluminum Fins, 37.7 lbs.		1
Evaporator Coil	100346636	Copper Tubbing, Aluminum Fins, 42.7 lbs.		1
(Changfa)	1 <mark>00360</mark> 815	Copper Tubbing, Aluminum Fins, 49.4 lbs.		2
	100360816	Copper Tubbing, Aluminum Fins, 66.4 lbs.		2
	ODI	Timothy J. Piland		
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SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Pre No. CC231320-01-R2

Manufacturer: Lochinvar, LLC

Seismic Parameters

Building Codes

Product Type:

Heat Pump Water Heaters

 $S_{DS} = 2.0g$ for $R_{\mu}=1.3$, $H_f=3.5$

4.5

Model Line:

Veritus™ Air Source Heat Pump Water

Heater

 $S_{DS} = 2.0g$ for

 $R_u=1.0, H_f=1.0$

 $I_{p} = 1.5$

CBC 2025

TABLE 4

Condenser

Component (Manufacturer)	Model	Description	Notes	UUT
Condenser (Xylem)	BPDW 415-34 BPDW 415-64	49.4 lbs.		1 2
	LAED			
	W W	OSP-0788		
	o BY	: Timothy J. Piland		
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SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Pre No. CC231320-01-R2

Manufacturer: Lochinvar, LLC

Heater

Seismic Parameters

Building Codes

Product Type:

Heat Pump Water Heaters

 $S_{DS} = 2.0g$ for $R_{\mu}=1.3$, $H_f=3.5$

Bananig Godes

Model Line:

Veritus™ Air Source Heat Pump Water

 $S_{DS} = 2.0g$ for

 $R_u=1.0, H_f=1.0$

 $I_{p} = 1.5$

CBC 2025

TABLE 5

Valves

Component (Manufacturer)	Model	Description	Notes	UUT
Reversing Valve (Saginomiya)	STF-07U12G STF-2OU11G	2.85 lbs.		1 2
	OFF			
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	o BY	: Timothy J. Piland		
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SPECIAL SEISMIC CERTIFICATION TESTING SUMMARY

UUT	Model	Test Report	Test Laboratory	S _{DS}	Rμ	H _f	I _p
1	AHP060-480	JID 23-00579-R1	Clark Testing	2.0 2.0	1.3 1.0	3.5 1.0	1.5
2	AHP140-480	JID 23-00579-R1	Clark Testing	2.0 2.0	1.3 1.0	3.5 1.0	1.5
	RA THE	FOR COD FOR COD FOR COD	E COMBON STATE OF THE STATE OF				
		BY: Timothy J.					
		DATE: 08/27/					
		DANIA BUILDI	NG COV.				
Notes:							

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SPECIAL SEISMIC CERTIFICATION **UUT SUMMARY**

 $H_{\rm f}$

3.5

1.0

 R_{μ}

1.3

1.0

UUT 1

 \mathbf{S}_{DS}

2.0

2.0

Test Report# JID 23-00579-R1

 $\mathbf{A}_{\text{flx-h}}$

3.20

 A_{flx-v}

1.34

 A_{rig-v}

0.54

 A_{rig-h}

2.15

Highest Passed Test Level

Lochinvar, LLC Manufacturer:

Veritus™ Air Source Heat Pump Water Model Line:

Heater

Model Number: AHP060-480

TX000002165 Serial Number:

Lowest	Natural	Frequer	ncv (Hz)

Dimensions/Weights Height (in) Weight (lbs.) Front-Back Depth (in) Width (in) Side-Side Vertical 34 30 722 16.6 72 4.5 21.5

Building Codes

Test Criteria

Construction/Option Summary

CBC 2025 ICC-ES AC156 Carbon steel, 480V

UUT Mounting Details:



UUT 1 was mounted to seismic table using a total of four (4) 3/8"-16 SAE grade 5 hex bolts with washers and lock washers and torqued to 25ft-lb. One bolt was used per angle bracket. Bracket details on next page.

Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

List of Included Subcomponents						
Description	Model Number	Wt. (lbs.)				
Scroll Compressor	ZB45KCE-TFD-250	87				
Evaporator Fan	C0710-001-COM-10-V2	56				
Evaporator Fan Motor	E56Y42TRA2210	23.8				
Evaporator Coil	100360811	42.7				
Evaporator Coil	100346636	37.7				
Condenser	BPDW 415-34	49.4				
Pump	UPMXL 25-125 180 SS	6.7				
Reversing Valve	STF-07U12G	2.9				



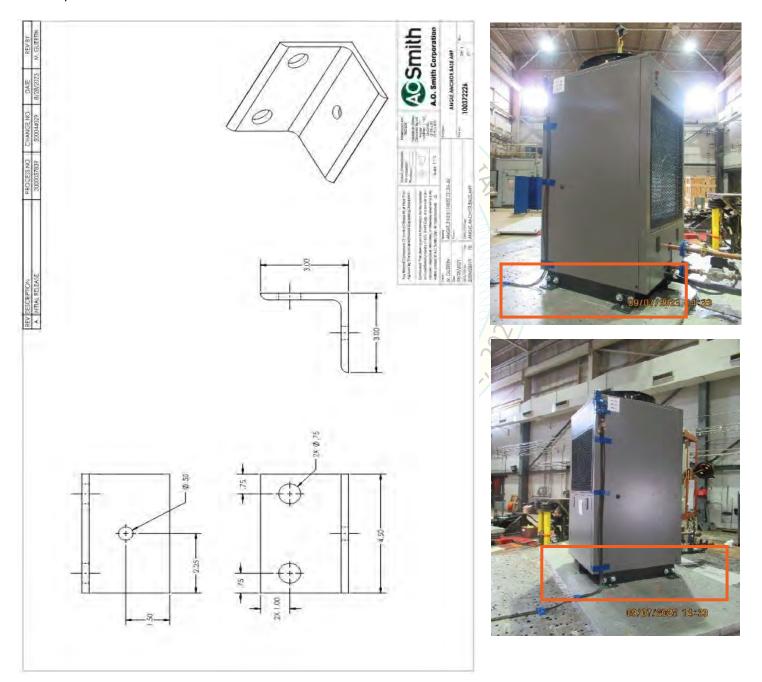
SPECIAL SEISMIC CERTIFICATION UUT SUMMARY

UUT 1

Test Report# JID 23-00579-R1

Mounting Bracket Details

Four (4) brackets used and attached to the unit with two (2) 5/8-11 SAE grade 5 bolts with washers and lock washers. Each bolt torqued to 120ft-lbs.





SPECIAL SEISMIC CERTIFICATION UUT SUMMARY

 $H_{\rm f}$

3.5

 R_{μ}

1.3

UUT 2

Test Report# JID 23-00579-R1

 A_{flx-h}

3.20

 A_{rig-h}

2.15

 A_{flx-v}

1.34

 A_{rig-v}

0.54

Manufacturer: Lochinvar, LLC

Model Line: Veritus™ Air Source Heat Pump Water

Heater

Model Number: AHP140-480

Serial Number: TX000002172

1.0	1.0		

 I_p

Highest Passed Test Level

Dimensions/Weights			Lowest Natural Frequency (Hz)		
Width (in)	Height (in)	Weight (lbs.)	Front-Back	Side-Side	Vertical

 \mathbf{S}_{DS}

2.0

2.0

34 41 72 924 17.4 8.2 >33.3

Building Codes

Depth (in)

Test Criteria

Construction/Option Summary

CBC 2025 ICC-ES AC156

Carbon steel, 480V

UUT Mounting Details:



UUT 2 was mounted to seismic table using a total of four (4) 3/8"-16 SAE grade 5 hex bolts with washers and lock washers and torqued to 25ft-lb. One bolt was used per angle.

Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

List of Included Subcomponents				
Description	Model Number	Wt. (lbs.)		
Scroll Compressor	ZB95KCE-TFD-25=60	143		
Evaporator Fan	C0710-001-COM-10-V2	56		
Evaporator Fan Motor	E56Y42TRA2210	23.8		
Evaporator Coil	100360815	66.4		
Evaporator Coil	100360816	49.4		
Condenser	BPDW 415-64	72.5		
Pump	UPMXL 25-125 180 SS	6.7		
Reversing Valve	STF-2OU11G	3.3		
Control Panel	100370141	18		



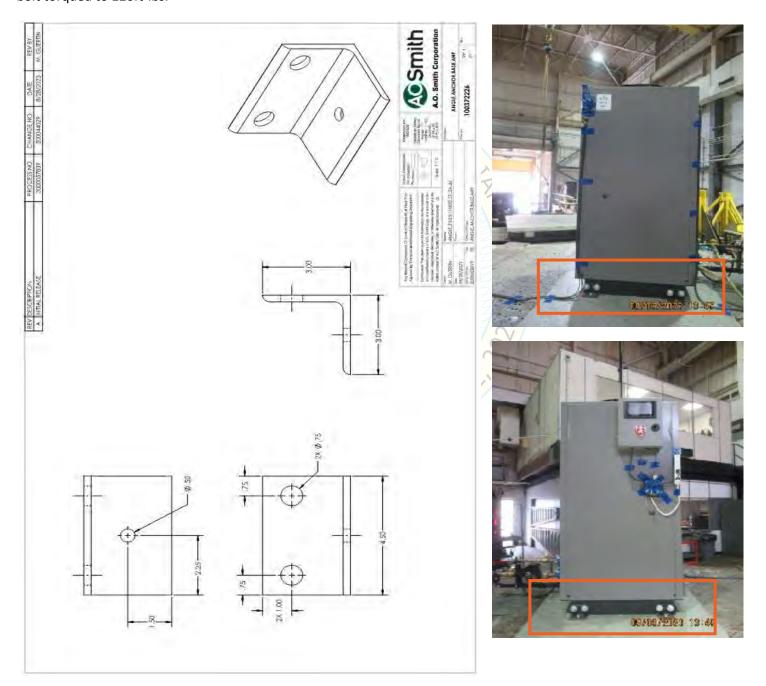
SPECIAL SEISMIC CERTIFICATION UUT SUMMARY

UUT 2

Test Report# JID 23-00579-R1

Mounting Bracket Details

Four (4) brackets used and attached to the unit with two (2) 5/8-11 SAE grade 5 bolts with washers and lock washers. Each bolt torqued to 120ft-lbs.



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