



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-0897

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Carrier Corporation

Manufacturer's Technical Representative: Hamza Hakimi

Mailing Address: 1201 Kinne Street, East Syracuse, NY 13057

Telephone: (315) 378-7584

Email: hamza.hakimi@carrier.com

Product Information

Product Name: Carrier VRF - Carrier Ductless System

Product Model Number(s): Varies. See Attachment

Product Category: Air Conditioning Units

Product Sub-Category: Air Conditioning Units - Split

General Description: Split Air Conditioning System consisting of indoor and outdoor units.

Mounting Description: Several - See Certified Product Tables

Tested Seismic Enhancements: Seismic enhancements made to the test units and/or modifications required to address anomalies during the tests shall be incorporated into the production units.

Applicant Information

Applicant Company Name: Pre Compliance

Contact Person: Galen Reid

Mailing Address: 324 NW Hill St., Bend, OR 97703

Telephone: (541) 241-2310

Email: galen@go-pre.com

Title: Principal & Program Manager



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

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

Company Name: PRE COMPLIANCE

Name: Andrew Coughlin California License Number: S6082

Mailing Address: 324 NW Hill St, Bend, OR 97703

Telephone: (415) 635-8461 Email: Andy@go-pre.com

Certification Method

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

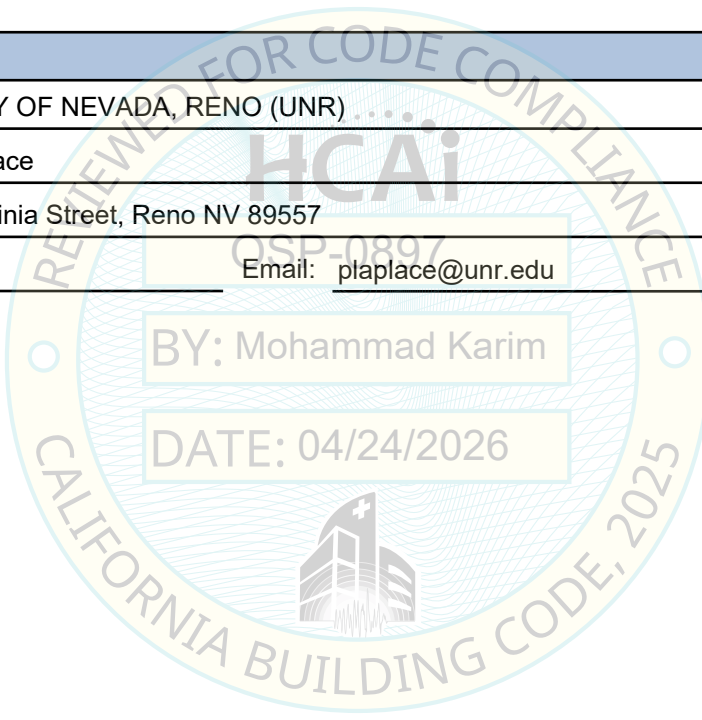
Testing Laboratory

Company Name: UNIVERSITY OF NEVADA, RENO (UNR)

Contact Person: Patrick LaPlace

Mailing Address: 1664 N. Virginia Street, Reno NV 89557

Telephone: (775) 784-6937 Email: plaplace@unr.edu





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

Seismic Parameters

Certified Response Spectral Acceleration Factors:(F_p/W_p)

Horizontal (A Flx-H), g= 3.48 (A Rig-H), g= 2.34

Vertical (A Flx-V), g= 1.94 (A Rig-V), g= 0.78

SDS (Design spectral response acceleration at short period, g) = 2.90 @ z/h = 0; 2.18 @ z/h = 1

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

R_u (Structure ductility reduction factor) = 1 @ z/h = 0; 1.3 @ 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 04/26/2032

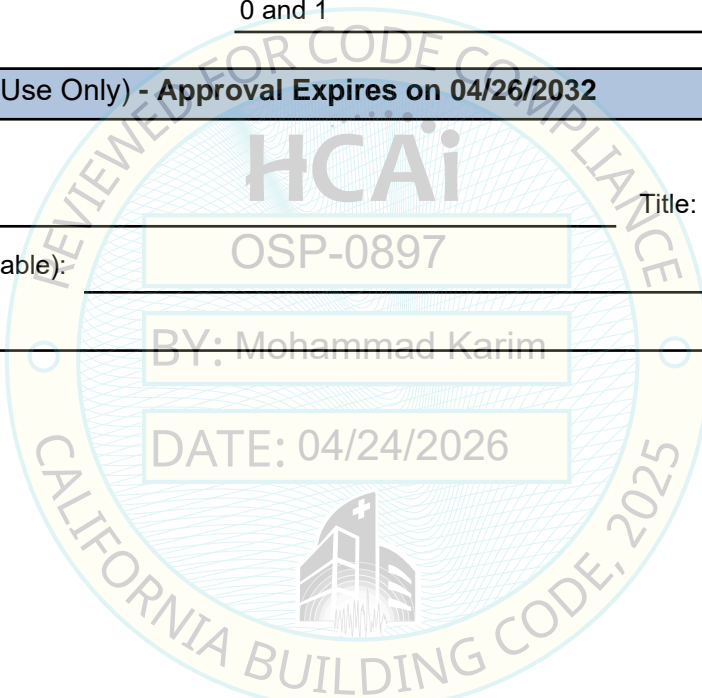
Date: 4/24/2026

Name: Mohammad Karim Title: Supervisor, Health Facilities

Condition of Approval (if applicable): OSP-0897

BY: Mohammad Karim

DATE: 04/24/2026



Manufacturer: Carrier Corporation
Product Type: Air Conditioning Units – Split
Model Line: Carrier VRF

Seismic Parameters

$S_{DS} = 2.18g$ for $z/h=1, R_{\mu}=1.3, H_f=3.5$
 $S_{DS} = 2.90g$ for $z/h=0, R_{\mu}=1.0, H_f=1.0$ $I_p=1.5$

Building Codes

CBC 2025

TABLE 1

Mounting Configuration: Base Mounted - Rigid

Construction Summary

Carbon steel

Options Summary

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Notes	UUT
		D	W	H			
Infinity 27 Mini Split Heat Pump Single Zone 6,000 to 33,000 BTUH	37MAHAQ06AA3	11.9	30.1	21.9	63		1
	37MAHAQ09AA3	13.0	31.7	21.8	73		Interp.
	37MAHAQ12AA3	13.0	31.7	21.8	73		Interp.
	37MAHAQ18AA3	13.5	35.0	26.1	100		Interp.
	37MAHAQ24AA3	16.1	37.2	31.9	159		Interp.
	37MAHAQ33AA3	16.1	37.2	31.9	159		2
Performance 26 Mini Split Heat Pump Single Zone 9,000 to 33,000 BTUH	37MARAQ12AA1	11.9	30.1	21.9	65		Extrap.
	37MARAQ09AA3	11.9	30.1	21.9	65		Extrap.
	37MARAQ12AA3	11.9	30.1	21.9	65		3
	37MARAQ18AA3	13.5	35.0	26.5	93		Interp.
	37MARAQ24AA3	16.1	37.2	31.9	122		Interp.
	37MARAQ30AA3	16.1	37.2	31.9	143		Interp.
Infinity 25 Multi-Zone High Heat Mini Split Heat Pump with Basepan Heater Single Zone 18,000 to 55,000 BTUH	37MGHAQ18CA3	16.1	37.4	31.9	136		5
	37MGHAQ24DA3	16.1	37.4	31.9	168		Interp.
	37MGHAQ30EA3	17.4	42.8	38.4	212		Interp.
	37MGHAQ36EA3	17.4	42.8	38.4	212		Interp.
	37MGHAQ48FA3	17.6	37.3	52.5	243		Interp.
	37MGHAQ55FA3	17.6	37.3	52.5	243		6
Performance 25 Multi-Zone Mini Split Heat Pump 18,000 to 55,000 BTUH	37MGRAQ18CA3	13.5	35.0	26.5	102		7
	37MGRAQ24DA3	16.1	37.2	31.9	139		Interp.
	37MGRAQ30EA3	16.1	37.2	31.9	169		Interp.
	37MGRAQ36EA3	16.1	37.2	31.9	169		Interp.
	37MGRAQ48FA3	16.3	37.5	52.5	222		Interp.
	37MGRAQ55FA3	16.3	37.5	52.5	236		8

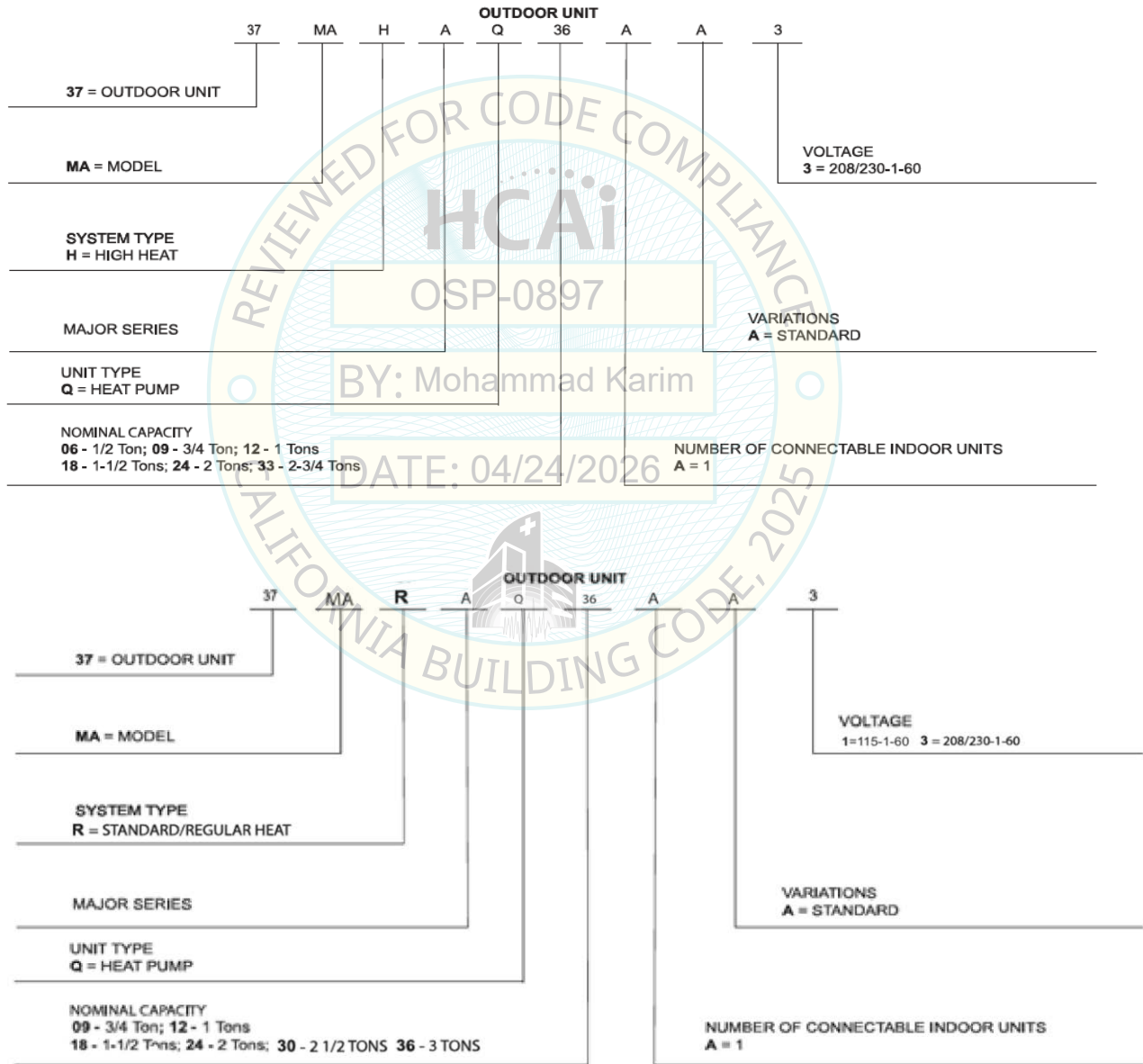
Manufacturer: Carrier Corporation
Product Type: Air Conditioning Units – Split
Model Line: Carrier VRF

Seismic Parameters
 $S_{DS} = 2.18g$ for $z/h=1, R_{\mu}=1.3, H_f=3.5$
 $S_{DS} = 2.90g$ for $z/h=0, R_{\mu}=1.0, H_f=1.0$ $I_p=1.5$

Building Codes
CBC 2025

TABLE 1 Mounting Configuration: Base Mounted - Rigid

For Reference Only



Manufacturer: Carrier Corporation
Product Type: Air Conditioning Units – Split
Model Line: Carrier VRF

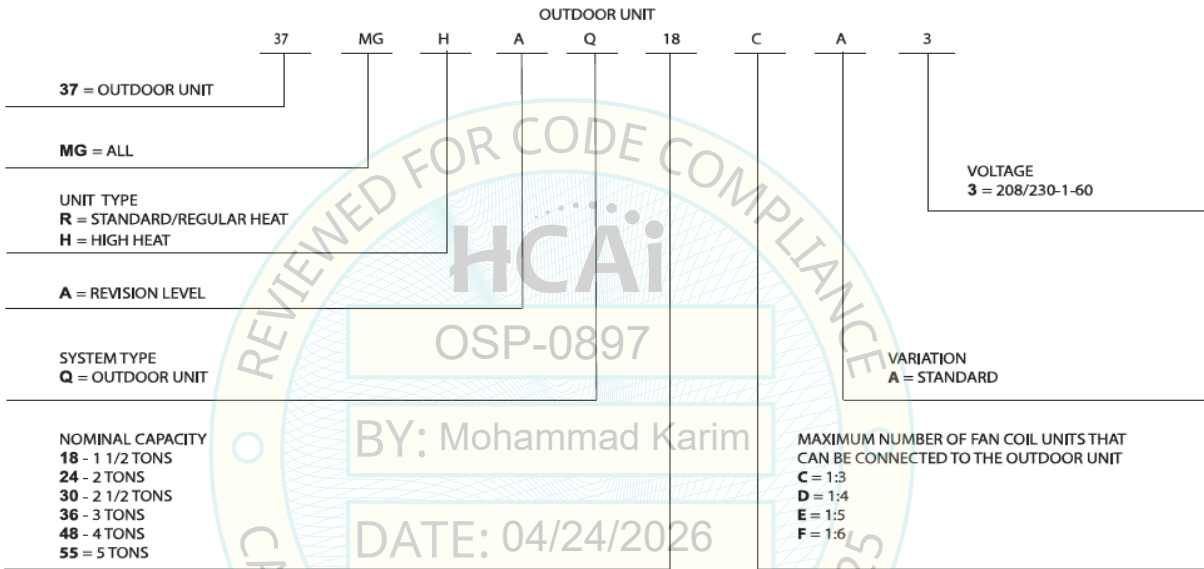
Seismic Parameters
 $S_{DS} = 2.18g$ for $z/h=1, R_{\mu}=1.3, H_f=3.5$
 $S_{DS} = 2.90g$ for $z/h=0, R_{\mu}=1.0, H_f=1.0$ $I_p=1.5$

Building Codes
CBC 2025

TABLE 1

Mounting Configuration: Base Mounted - Rigid

For Reference Only





SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Pre No. CC241467-01-R0

Manufacturer: Carrier Corporation
Product Type: Air Conditioning Units – Split
Model Line: Carrier VRF

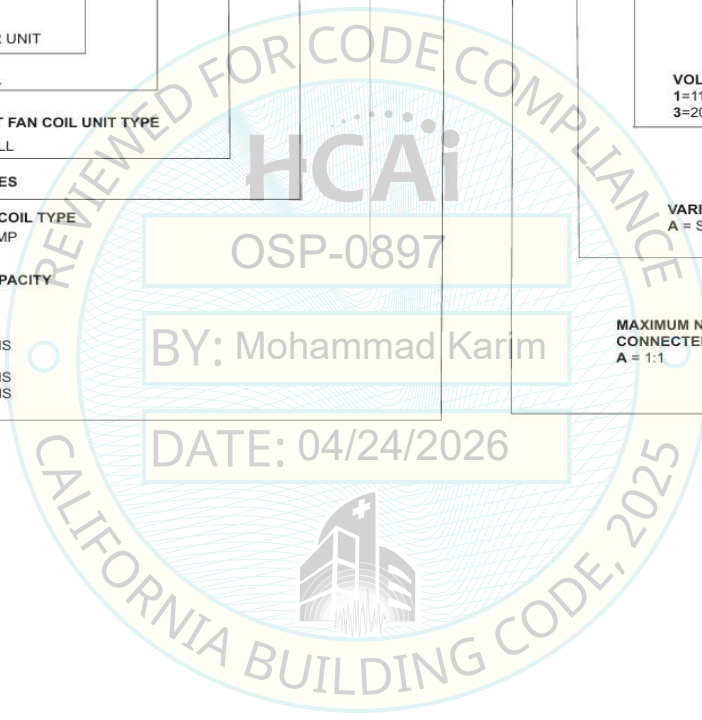
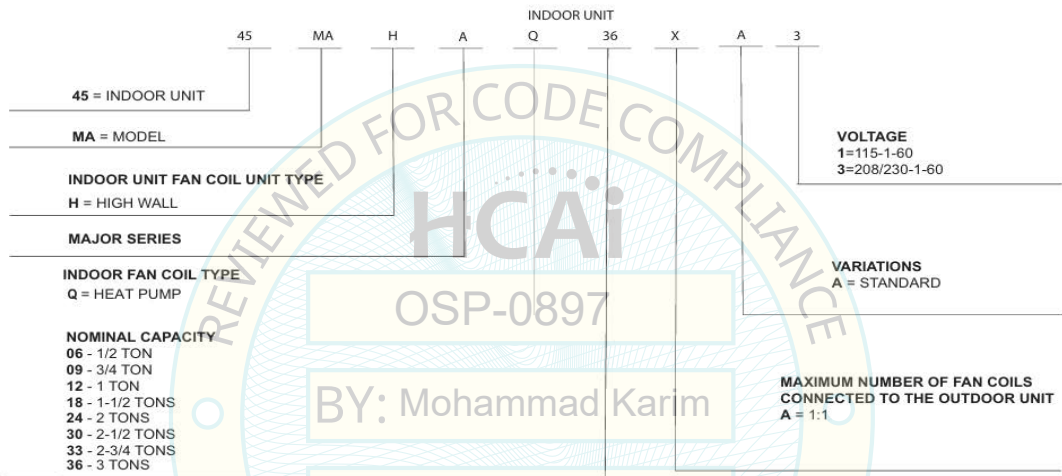
Seismic Parameters
 $S_{DS} = 2.18g$ for $z/h=1, R_{\mu}=1.3, H_f=3.5$
 $S_{DS} = 2.90g$ for $z/h=0, R_{\mu}=1.0, H_f=1.0$ $I_p=1.5$

Building Codes
CBC 2025

TABLE 2

Mounting Configuration: Wall Mounted - Rigid

For Reference Only



Manufacturer: Carrier Corporation
Product Type: Air Conditioning Units – Split
Model Line: Carrier VRF

Seismic Parameters

$S_{DS} = 2.18g$ for $z/h=1, R_{\mu}=1.3, H_f=3.5$
 $S_{DS} = 2.90g$ for $z/h=0, R_{\mu}=1.0, H_f=1.0$ $I_p=1.5$

Building Codes

CBC 2025

TABLE 3 Mounting Configuration: Ceiling Suspended - Rigid with Cable Braces

Construction Summary

Carbon Steel

Options Summary

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Notes	UUT
		D	W	H			
Performance Cassette Indoor Unit 9,000 - 48,000 BTUH	45MBCAQ09XA3	22.4	22.4	9.7	42		Extrap.
	45MBCAQ12XA3	22.4	22.4	9.7	42		Extrap.
	45MBCAQ18XA3	22.4	22.4	9.7	42	UUT: weight includes decorative cover	11
	45MBCAQ24XA3	32.7	32.7	11.3	47		Interp.
	45MBCAQ36XA3	32.7	32.7	11.3	59		Interp.
	45MBCAQ48XA3	33.1	33.1	11.3	65	UUT: weight includes decorative cover	12
Performance One-Way Cassette Indoor Unit 6,000 - 18,000 BTUH	45MCCAQ06A3	13.2	50.3	8.9	56		13
	45MCCAQ09A3	13.2	50.3	8.9	57	UUT: weight includes decorative cover	Interp.
	45MCCAQ12A3	13.2	50.3	8.9	57		Interp.
	45MCCAQ18A3	13.2	50.3	8.9	57		14
Performance Ducted Indoor Unit Low and High Static 6,000 - 58,000 BTUH	45MBDAQ06XA3	19.9	27.6	7.9	45		15
	45MBDAQ12XA3	19.9	27.6	7.9	47		Interp.
	45MBDAQ12XH3	29.5	27.6	9.7	74		Interp.
	45MBDAQ18XA3	28.5	42.1	11.0	66		Interp.
	45MBDAQ18XH3	29.5	39.3	9.7	91		Interp.
	45MBDAQ24XH3	29.5	39.4	9.6	92		Interp.
	45MBDAQ36XH3	29.5	47.2	11.8	120		Interp.
	45MBDAQ48XH3	29.5	47.2	11.8	125		Interp.
	45MBDAQ58XH3	31.5	55.1	14.9	162		16 ¹

Notes: 1. UUTs were tested with seismic modifications. See UUT summaries for details on seismic enhancements.

Manufacturer: Carrier Corporation
Product Type: Air Conditioning Units – Split
Model Line: Carrier VRF

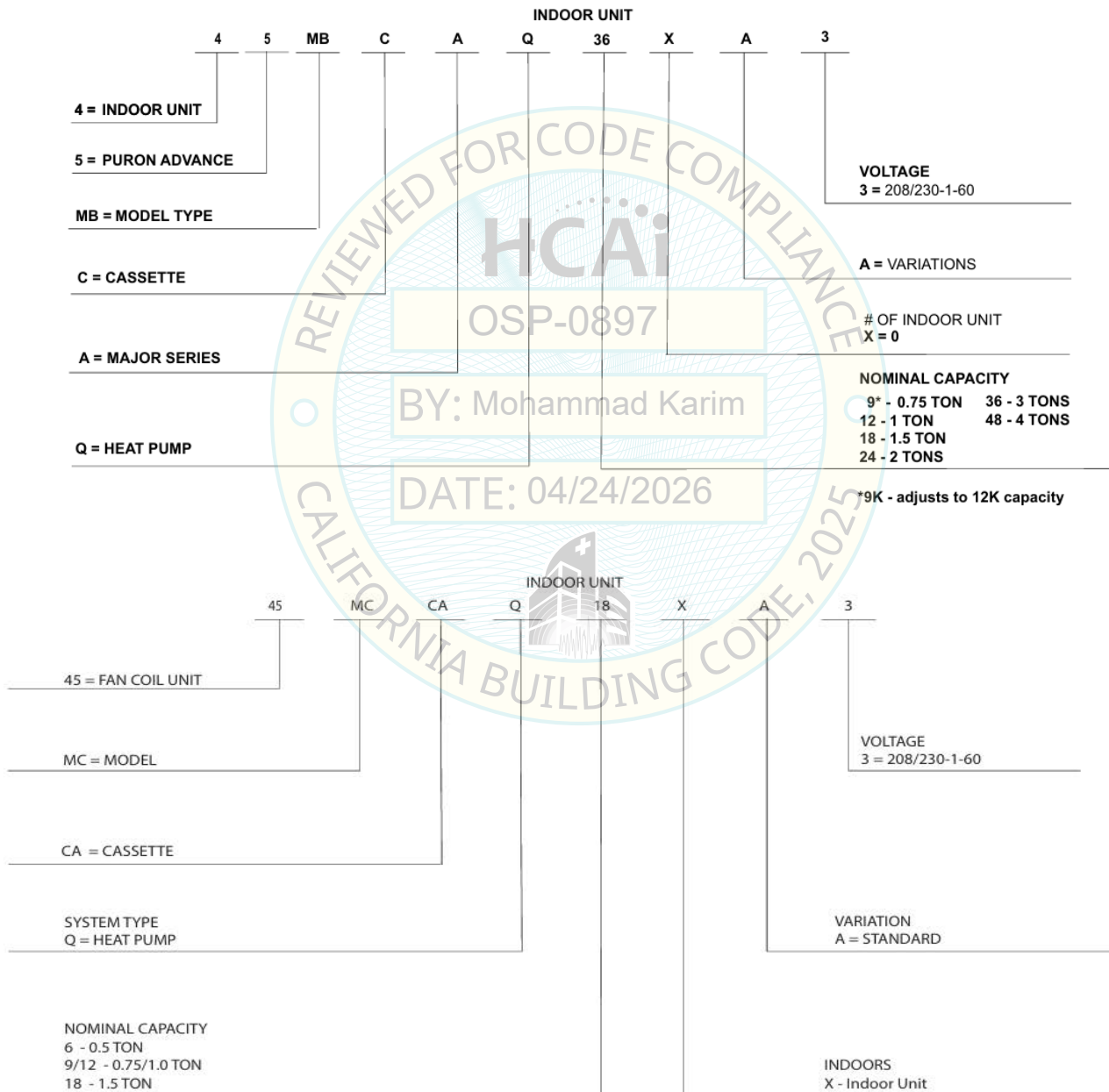
Seismic Parameters
 $S_{DS} = 2.18g$ for $z/h=1, R_{\mu}=1.3, H_f=3.5$
 $S_{DS} = 2.90g$ for $z/h=0, R_{\mu}=1.0, H_f=1.0$ $I_p=1.5$

Building Codes
CBC 2025

TABLE 3

Mounting Configuration: Ceiling Suspended - Rigid with Cable Braces

For Reference Only



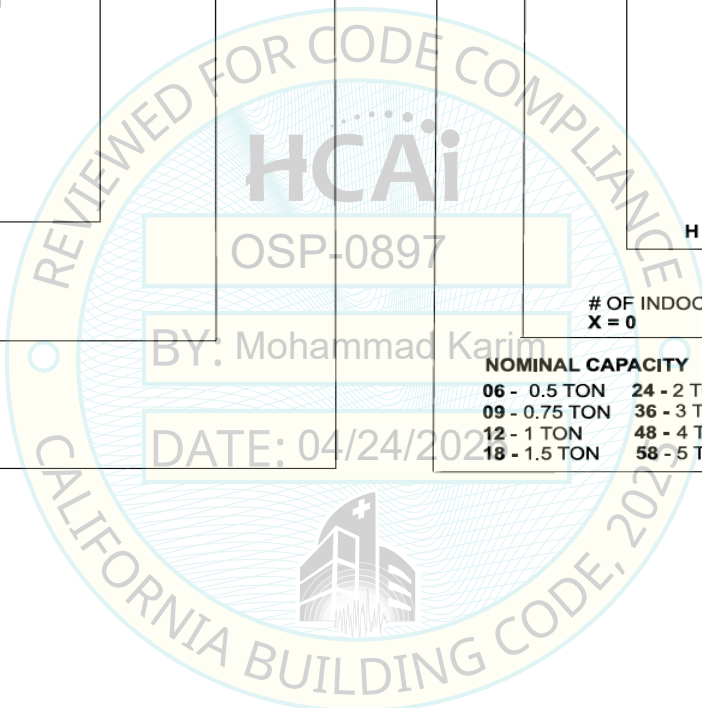
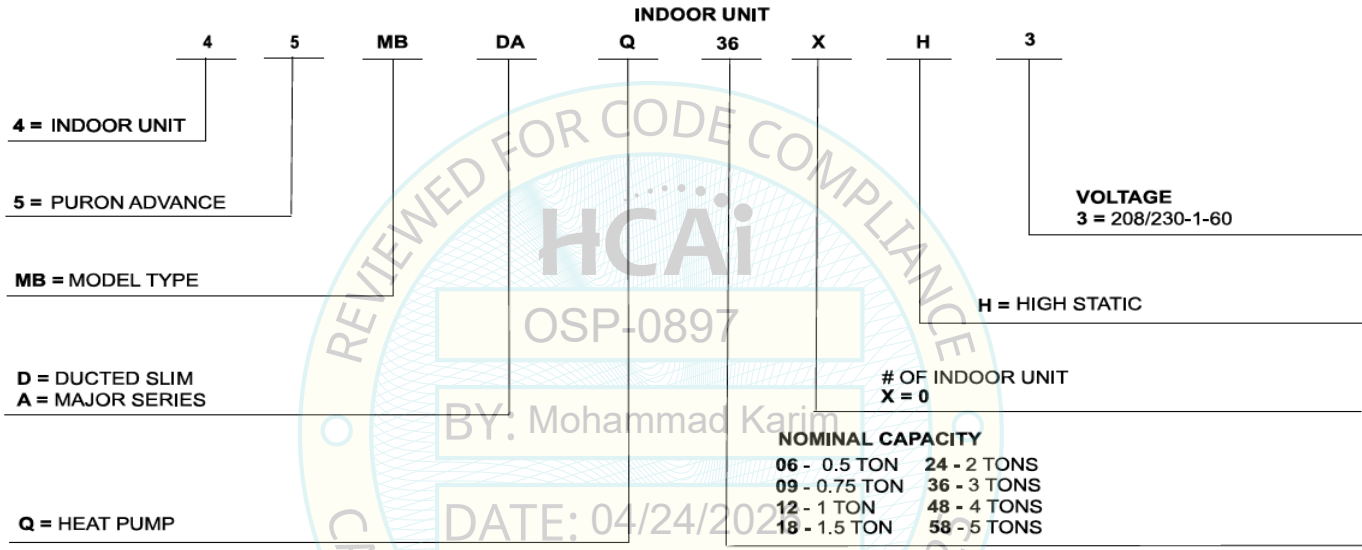
Manufacturer: Carrier Corporation
Product Type: Air Conditioning Units – Split
Model Line: Carrier VRF

Seismic Parameters	Building Codes
--------------------	----------------

$S_{DS} = 2.18g$ for $z/h=1, R_{\mu}=1.3, H_f=3.5$ $S_{DS} = 2.90g$ for $z/h=0, R_{\mu}=1.0, H_f=1.0$	$I_p=1.5$ CBC 2025
--	------------------------------

TABLE 3	Mounting Configuration: Ceiling Suspended - Rigid with Cable Braces
---------	---

For Reference Only



UUT	Model	Test Report	Test Date	Test Laboratory	S _{DS}	z/h	R _μ	H _f	I _p
1	37MAHAQ06AA3	TR241467-01-R0	2/2/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
2	37MAHAQ33AA3	TR241467-01-R0	2/2/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
3	37MARAQ12AA3	TR241467-01-R0	2/2/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
4	37MARAQ36AA3	TR241467-01-R0	2/2/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
5	37MGHAQ18CA3	TR241467-01-R0	2/2/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
6	37MGHAQ55FA3	TR241467-01-R0	2/3/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
7	37MGRAQ18CA3	TR241467-01-R0	2/2/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
8	37MGRAQ55FA3	TR241467-01-R0	2/3/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
9	45MAHAQ06XA3	TR241467-01-R0	2/3/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
10	45MAHAQ36XA3	TR241467-01-R0	2/3/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
11	45MBCAQ18XA3	TR241467-01-R0	2/2/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
12	45MBCAQ48XA3	TR241467-01-R0	2/4/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
13	45MCCAQ06XA3	TR241467-01-R0	2/4/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
14	45MCCAQ18XA3	TR241467-01-R0	2/2/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
15	45MBDAQ06XA3	TR241467-01-R0	2/2/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5
16	45MBDAQ58XH3	TR241467-01-R0	2/2/26	University of Nevada Reno (UNR) Structures Laboratory	2.18 2.90	1.0 0.0	1.3 1.0	3.5 1.0	1.5

Notes:

UUT 1

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 37MAHAQ06AA3
Serial Number: 2625V12759

Highest Passed Test Level								
S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
11.9	30.1	21.9	63

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
13.5	17.4	>33.3

Building Codes
CBC 2025

Test Criteria
ICC-ES AC156 2024 (2nd Edition)

Construction/Option Summary
Carbon steel

UUT Mounting Details:



The unit was base-mounted rigid to the shake table with four (4) 3/8" Grade 8 hex head bolts and flat washers. Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

SPECIAL SEISMIC CERTIFICATION UUT SUMMARY

UUT 2

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 37MAHAQ33AA3
Serial Number: 1125V12943

Highest Passed Test Level								
S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
16.1	37.2	31.9	159

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
13.9	9.0	24.6

Building Codes
CBC 2025

Test Criteria
ICC-ES AC156 2024 (2nd Edition)

Construction/Option Summary
Carbon steel

UUT Mounting Details:



The unit was base-mounted rigid to the shake table with four (4) 3/8" Grade 8 hex head bolts and flat washers. Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

UUT 3

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 37MARAQ12AA3
Serial Number: 2625V22887

Highest Passed Test Level								
S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
11.9	30.1	21.9	65

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
13.2	17.7	>33.3

Building Codes
CBC 2025

Test Criteria
ICC-ES AC156 2024 (2nd Edition)

Construction/Option Summary
Carbon steel

UUT Mounting Details:



The unit was base-mounted rigid to the shake table with four (4) 3/8" Grade 8 hex head bolts and flat washers. Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

UUT 4

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 37MARAQ36AA3
Serial Number: 4925V10824

Highest Passed Test Level								
S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
16.1	37.2	31.9	151

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
13.0	9.0	30.0

Building Codes	Test Criteria	Construction/Option Summary
CBC 2025	ICC-ES AC156 2024 (2nd Edition)	Carbon steel

UUT Mounting Details:



The unit was base-mounted rigid to the shake table with four (4) 3/8" Grade 8 hex head bolts and flat washers. Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

UUT 5

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 37MGHAQ18CA3
Serial Number: 3025V22565

Highest Passed Test Level								
S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
16.1	37.4	31.9	136

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
11.4	8.2	29.3

Building Codes
CBC 2025

Test Criteria
ICC-ES AC156 2024 (2nd Edition)

Construction/Option Summary
Carbon steel

UUT Mounting Details:



The unit was base-mounted rigid to the shake table with four (4) 3/8" Grade 8 hex head bolts and flat washers. Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

UUT 6

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Serial Number: 3525V22179

Highest Passed Test Level								
S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
17.6	37.3	52.5	243

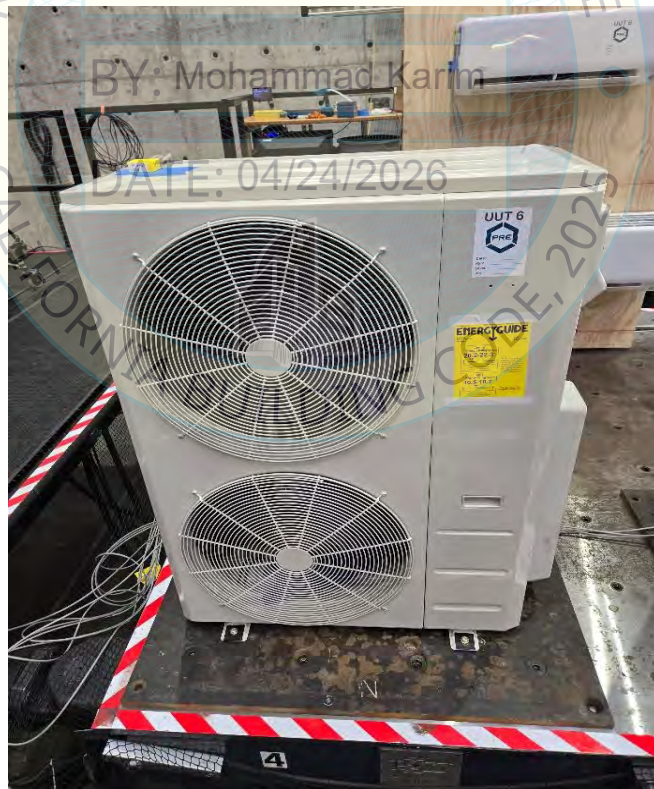
Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
7.7	5.4	25.1

Building Codes
CBC 2025

Test Criteria
ICC-ES AC156 2024 (2nd Edition)

Construction/Option Summary
Carbon steel

UUT Mounting Details:



The unit was base-mounted rigid to the shake table with four (4) 3/8" Grade 8 hex head bolts and flat washers. Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

UUT 7

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 37MGHAQ55FA3
Serial Number: 3525V22179

Highest Passed Test Level								
S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
13.5	35	26.5	102

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
18.0	13.0	>33.3

Building Codes
CBC 2025

Test Criteria
ICC-ES AC156 2024
(2nd Edition)

Construction/Option Summary
Carbon steel

UUT Mounting Details:



The unit was base-mounted rigid to the shake table with four (4) 3/8" Grade 8 hex head bolts and flat washers. Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

UUT 8

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 37MGRAQ55FA3
Serial Number: 3525V22309

Highest Passed Test Level								
S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
16.3	37.5	52.5	236

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
8.3	5.7	25.1

Building Codes
CBC 2025

Test Criteria
ICC-ES AC156 2024 (2nd Edition)

Construction/Option Summary
Carbon steel

UUT Mounting Details:



The unit was base-mounted rigid to the shake table with four (4) 3/8" Grade 8 hex head bolts and flat washers. Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

UUT 9

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 45MAHAQ06XA3
Serial Number: 3625V10726

Highest Passed Test Level								
S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
8.9	31.3	11.6	23

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
N/A	N/A	N/A

Building Codes

CBC 2025

Test Criteria

ICC-ES AC156 2024
(2nd Edition)

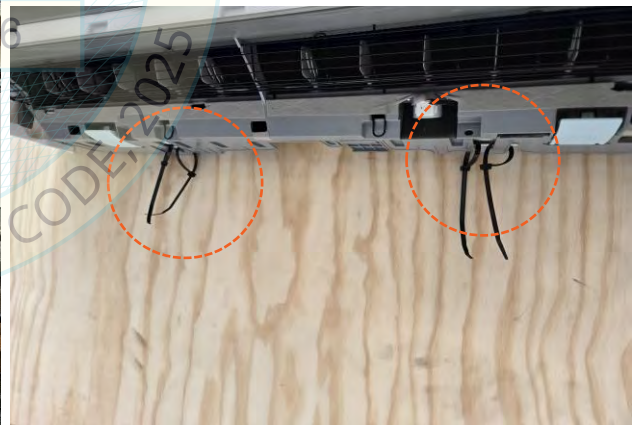
Construction/Option Summary

Plastic and carbon steel

UUT Mounting Details:

BY: Mohammad Karim

DATE: 04/24/2026



The unit was wall-mounted rigid with eight (8) #8 Teks 3/4" lath screws. Additionally, four (4) zip ties were attached at the bottom of the unit, connecting the unit to mounting plate.

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

UUT 10

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 45MAHAQ36XA3
Serial Number: 1125V16347

Highest Passed Test Level								
S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
10.8	44.9	14.6	43

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
N/A	N/A	N/A

Building Codes
CBC 2025

Test Criteria
ICC-ES AC156 2024
(2nd Edition)

Construction/Option Summary
Plastic and carbon steel

UUT Mounting Details:

BY: Mohammad Karim

DATE: 04/24/2026



The unit was wall-mounted rigid with twelve (12) #8 Teks 3/4" lath screws. Additionally, four (4) zip ties were attached at the bottom of the unit, connecting the unit to mounting plate and a single #10 machine screw thru bolted with #10 nut.

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

UUT 11

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Serial Number: 4225V11653

Highest Passed Test Level								
S_{DS}	z/h	R_{μ}	H_f	I_p	A_{flx-h}	A_{rig-h}	A_{flx-v}	A_{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
22.4	22.4	10.2	42

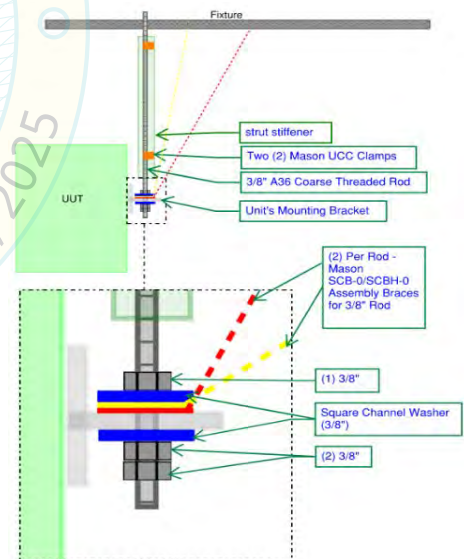
Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
N/A	N/A	N/A

Building Codes
CBC 2025

Test Criteria
ICC-ES AC156 2024 (2nd Edition)

Construction/Option Summary
Carbon steel

UUT Mounting Details:



The unit was ceiling suspended - rigid with cable braces to the fixture with four (4) 3/8" A36 threaded rods. Each rod affixed with strut stiffeners and two (2) Mason UCC rod clamps. Two (2) Mason SCBH/SCB-0 braces were attached to each rod for a total of eight (8). The threaded rod was secured to each mounting bracket with two (2) 3/8" square strut washers and three 3/8" nuts.

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

UUT 12

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 45MBCAQ18XA3
Serial Number: 4225V11653

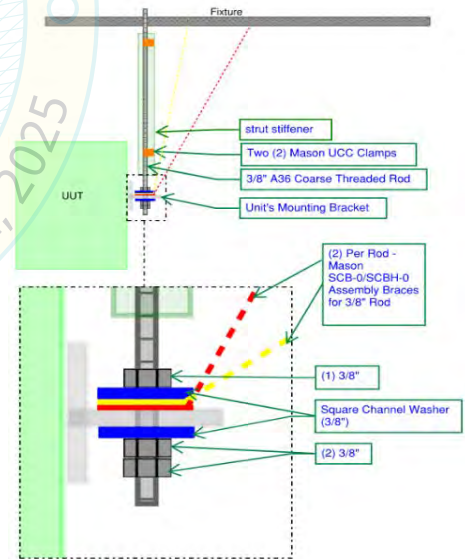
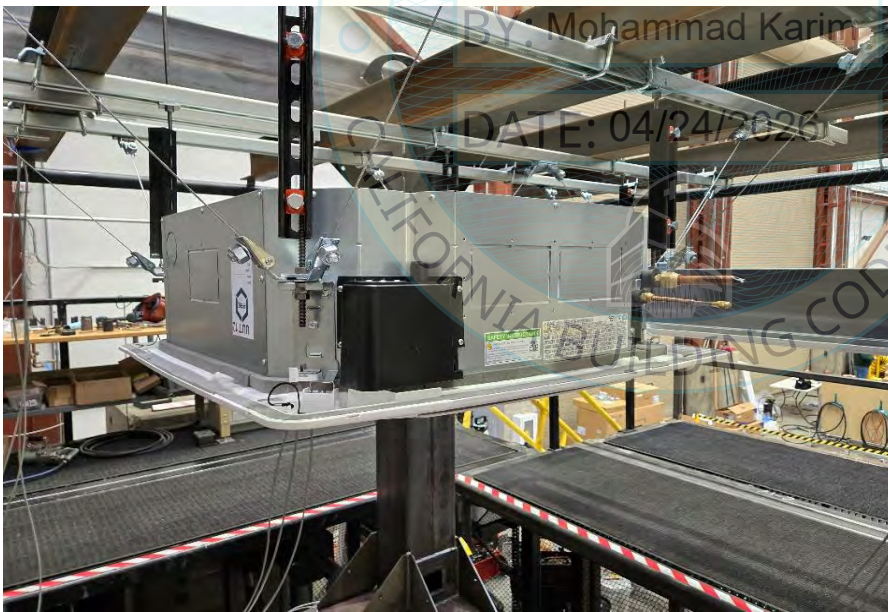
Highest Passed Test Level									
S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}	
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78	
2.90	0.0	1.0	1.0						

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
33.1	33.1	11.3	65

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
N/A	N/A	N/A

Building Codes	Test Criteria	Construction/Option Summary
CBC 2025	ICC-ES AC156 2024 (2nd Edition)	Carbon steel

UUT Mounting Details:



The unit was ceiling suspended - rigid with cable braces to the fixture with four (4) 3/8" A36 threaded rods. Each rod affixed with strut stiffeners and two (2) Mason UCC rod clamps. Two (2) Mason SCBH/SCB-0 braces were attached to each rod for a total of eight (8). The threaded rod was secured to each mounting bracket with two (2) 3/8" square strut washers and three 3/8" nuts.

Two (2) Teks screws 1/4" x 3/4" screws added to each mounting bracket.

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

UUT 13

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 45MCCAQ06XA3
Serial Number: 3525V34656

Highest Passed Test Level								
S_{DS}	z/h	R_{μ}	H_f	I_p	A_{flx-h}	A_{rig-h}	A_{flx-v}	A_{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
13.2	50.3	8.9	56

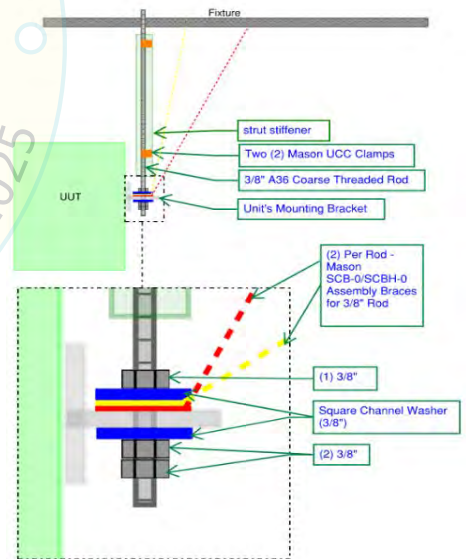
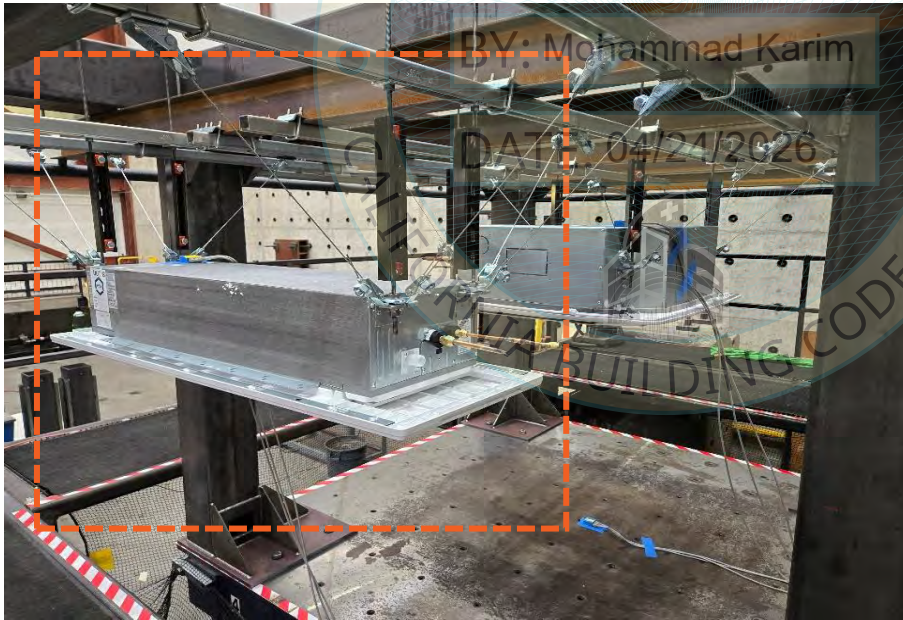
Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
N/A	N/A	N/A

Building Codes
CBC 2025

Test Criteria
ICC-ES AC156 2024
(2nd Edition)

Construction/Option Summary
Carbon steel

UUT Mounting Details:



The unit was ceiling suspended - rigid with cable braces to the fixture with four (4) 3/8" A36 threaded rods. Each rod affixed with strut stiffeners and two (2) Mason UCC rod clamps. Two (2) Mason SCBH/SCB-0 braces were attached to each rod for a total of eight (8). The threaded rod was secured to each mounting bracket with two (2) 3/8" square strut washers and three 3/8" nuts.

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

UUT 14

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 45MCCAQ18XA3
Serial Number: 3525V34921

Highest Passed Test Level								
S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
13.2	50.3	8.9	57

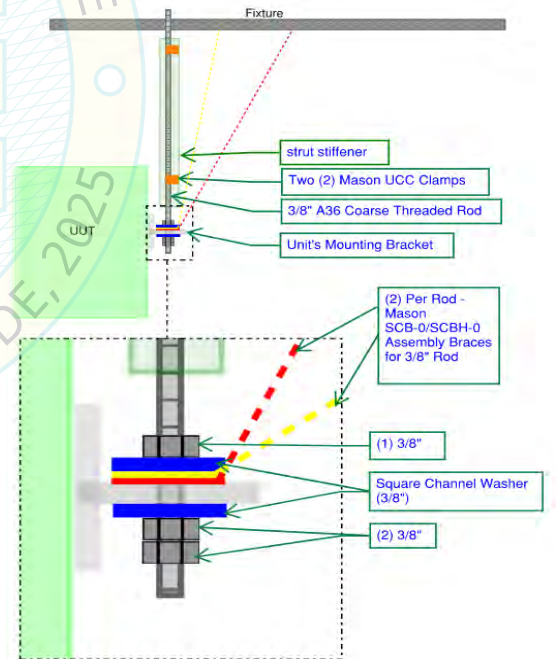
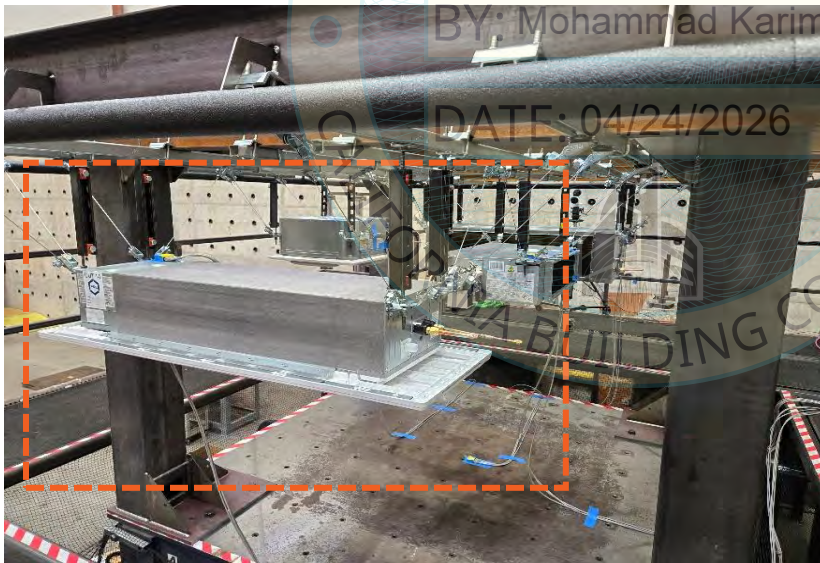
Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical

Building Codes
CBC 2025

Test Criteria
ICC-ES AC156 2024 (2nd Edition)

Construction/Option Summary
Carbon steel

UUT Mounting Details:



The unit was ceiling suspended - rigid with cable braces to the fixture with four (4) 3/8" A36 threaded rods. Each rod affixed with strut stiffeners and two (2) Mason UCC rod clamps. Two (2) Mason SCBH/SCB-0 braces were attached to each rod for a total of eight (8). The threaded rod was secured to each mounting bracket with two (2) 3/8" square strut washers and three 3/8" nuts.

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

UUT 15

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 45MBDAQ06XA3
Serial Number: 3125V18687

Highest Passed Test Level								
S_{DS}	z/h	R_{μ}	H_f	I_p	A_{flx-h}	A_{rig-h}	A_{flx-v}	A_{rig-v}
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78
2.90	0.0	1.0	1.0					

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
19.9	27.6	7.9	45

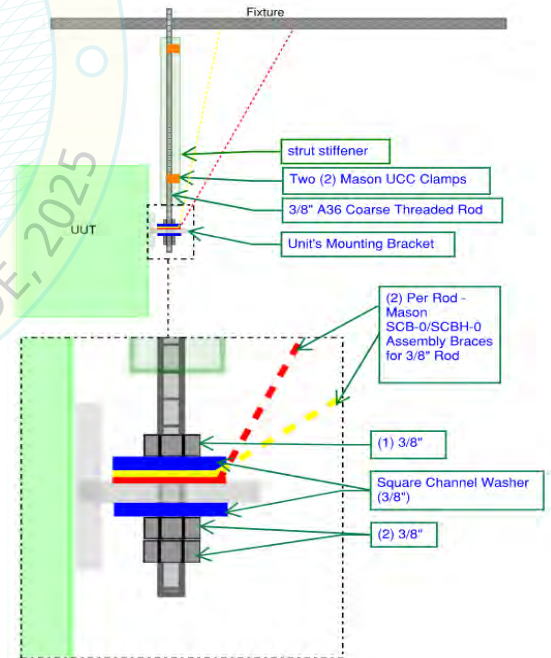
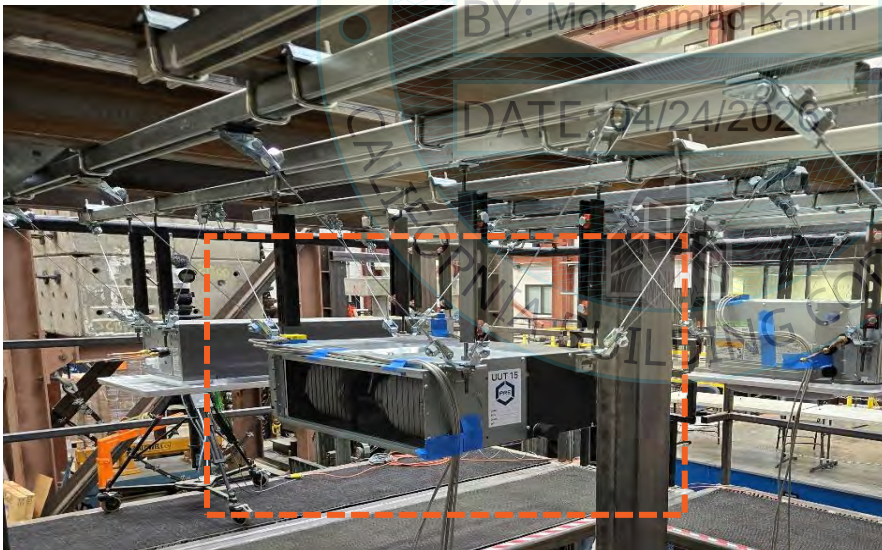
Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
N/A	N/A	N/A

Building Codes
CBC 2025

Test Criteria
ICC-ES AC156 2024 (2nd Edition)

Construction/Option Summary
Carbon steel

UUT Mounting Details:



The unit was ceiling suspended - rigid with cable braces to the fixture with four (4) 3/8" A36 threaded rods. Each rod affixed with strut stiffeners and two (2) Mason UCC rod clamps. Two (2) Mason SCBH/SCB-0 braces were attached to each rod for a total of eight (8). The threaded rod was secured to each mounting bracket with two (2) 3/8" square strut washers and three 3/8" nuts.

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

UUT 16

Test Report# TR241467-01-R0

Manufacturer: Carrier Corporation
Model Line: Carrier VRF
Product Type: Air Conditioning Units – Split
Model Number: 45MBDAQ58XH3
Serial Number: 3125V18725

Highest Passed Test Level									
S_{DS}	z/h	R_{μ}	H_f	I_p	A_{flx-h}	A_{rig-h}	A_{flx-v}	A_{rig-v}	
2.18	1.0	1.3	3.5	1.5	3.48	2.34	1.94	0.78	
2.90	0.0	1.0	1.0						

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
31.5	55.1	15	162

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
N/A	N/A	N/A

Building Codes

CBC 2025

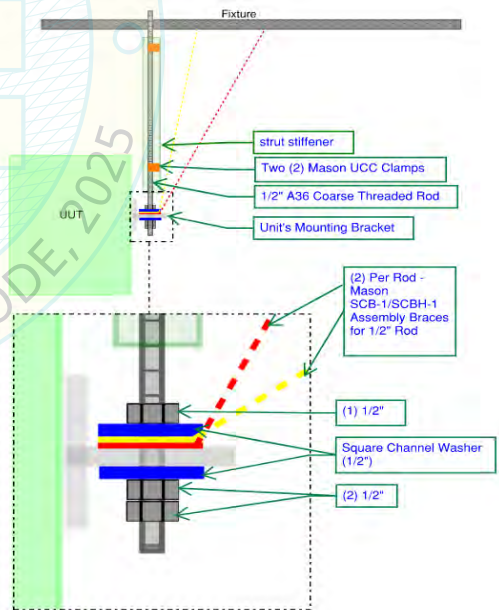
Test Criteria

ICC-ES AC156 2024
(2nd Edition)

Construction/Option Summary

Carbon steel

UUT Mounting Details:



The unit was ceiling suspended - rigid with cable braces to the fixture with four (4) 1/2" A36 threaded rods. Each rod affixed with strut stiffeners and two (2) Mason UCC rod clamps. Two (2) Mason SCBH/SCB-1 braces were attached to each rod for a total of eight (8). The threaded rod was secured to each mounting bracket with two (2) 1/2" square strut washers and three 1/2" nuts.

Each mounting bracket's hardware changed to thru-bolts (2) #10 x 3/4" machine screws with nut and washer.

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