



BUEHLER & BUEHLER
structural engineers

SPECIAL SEISMIC CERTIFICATION

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B&B Project No: 2013-0254.02

LG Electronics

Multi-V Split System Air Conditioning Product Line



The LG Multi-V split system air conditioning product line is seismically certified in accordance with the International Building Code (IBC) 2012, California Building Code (CBC) 2013, and American Society of Civil Engineers (ASCE) Minimum Design Loads for Buildings and Other Structures ASCE 7-10. This certification is not intended for use in hospitals under OSHPD jurisdiction.

The air conditioning units must be installed and attached to the building structure per the manufacturer supplied seismic installation instructions. This certification excludes all non-factory supplied accessories.

The shake table testing was conducted in accordance with ICC-ES AC 156 (2012). The basis of this Seismic Certification is through successful tri-axial shake table testing at the QualTech NP Laboratory in Cincinnati, OH (Report No: Q1526.1 & Q1538.0).

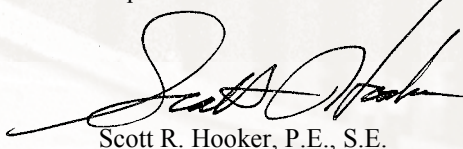
The above referenced equipment set is approved for seismic applications when properly installed and used as intended and located in United States where the “design 5 percent damped spectral response acceleration at short periods adjusted for site class effects”, S_{DS} is as shown in the Table 1. Below grade, at grade, or above grade installations are permitted and included in this approval. This certification is good for an I_p of 1.0 or 1.5.

Table 1. Shake table test parameters PER ICC-ES AC156

LG Multi-V Model Numbers	Group	S_{DS} (g)	z/h	A_{FLX}	A_{RIG}	$A_{FLX VERT}$	$A_{RIG VERT}$
ARUN/ARUB 72000-169000	A	2.95	1.0	4.72	3.54	1.98	0.80
ARNU073BGA4 - ARNU963B8A4	B						
ARNU073TUC4 - ARNU123TUC4	C						
ARNU183TLC2 - ARNU243TLC4	D						
ARNU053TRC2 - ARNU483TMC4	E						
ARNU073SEL2 - ARNU243SCL4	F						
PRHR022A - PRHR042A	G						

▲ Equipment is qualified for S_{DS} and z/h values shown. Qualification may be valid for higher S_{DS} where z/h < 1.0

Refer to the manufacturer supplied seismic installation instructions and drawings for anchor requirements and mounting considerations for seismic applications. Mounting requirement details such as anchor brand, type, embedment depth, edge spacing, anchor-to-anchor spacing, concrete strength, special inspection, and attachment to non-building structures must be outlined and approved by the Structural Engineer of Record (SEOR) for the project or building. Structural floors and housekeeping pads must also be seismically designed and approved by the project or building SEOR to withstand the seismic anchor loads as defined on the installation drawings. The installing contractor is responsible for the proper installation of all anchors and mounting hardware, observing the mounting requirements detailed in the seismic installation drawings, and additionally outlined by the SEOR.



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