

MRH

CERTIFICATE OF SEISMIC QUALIFICATION BY ANALYSIS

EARTHQUAKE PROOF RACKS FOR STATIC BATTERIES MANUFACTURED BY

Passoni Paolo e figli S.r.l.
Via Aristotele, 32
20047 Brugherio (MI) – Italy

Alpha Industrie-bedarfs gmbh
Niedesheimer Str. 26
DE-67550 Worms - Germany

The earthquake proof battery racks produced by Alpha-Passoni are hereby seismically certified for compliance with the following Building Codes:

2012 International Building Code – IBC 2012

2013 California Building Code – CBC 2013

These battery racks are hereby seismically qualified when properly installed for their structural adequacy in areas with the Risk-Targeted Maximum Considered Earthquake (MCE_R) Design Spectral Acceleration Parameter at a short period of $S_{DS} \leq 1.0g$ as defined by the above codes. These battery racks shall be located at or below grade with $z/h=0$. These battery Racks shall be used with Risk Categories I, II & III, on Site Classes A, B, C & D, and in structures assigned with Seismic Design Categories A, B, C, D & E. Other limitations and modifications of this qualification are included in our seismic qualification report dated January 22, 2014. This qualification is based on a thorough review of the report entitled “static calculations of racks for earthquake proof battery installation” produced by:

Kühne BSB GmbH, Mina-Rees-Straße 5A, 64295 Darmstadt - Deutschland

and investigation and collateral seismic stress analysis performed by our engineers.

MRH Structural Engineers, Inc.

1411 N. Batavia Street, Suite 121
Orange, California 92867

Phone : (714) 633-6302

WWW.MRHSE.COM

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