

SUPPORTS

Thanks to its flexible features, which meet any type of installation requirements, it is the most functional equipment on the market made of a folded steel plate.

It is interesting to note that the upper slots allow placing of the stringers along the whole length of the support shelf to which they will be fixed.

Electrolyte protection

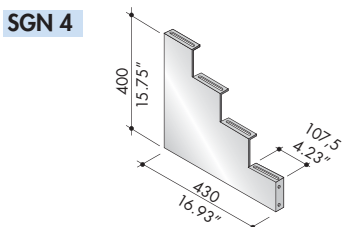
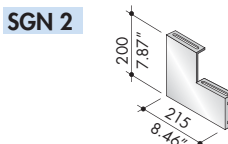
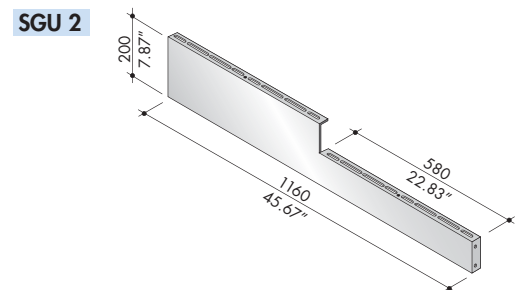
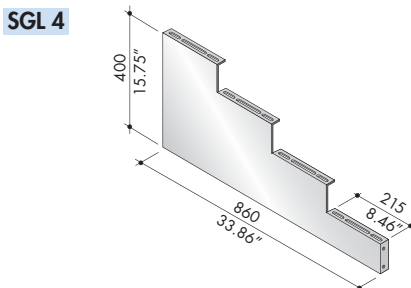
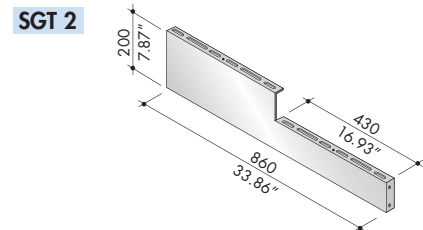
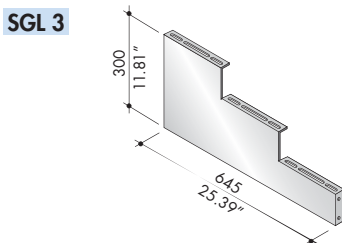
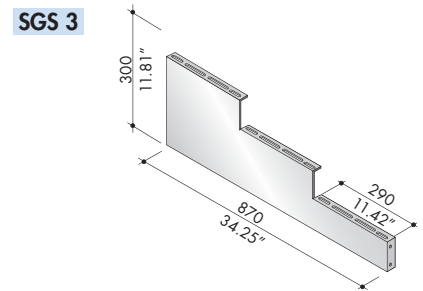
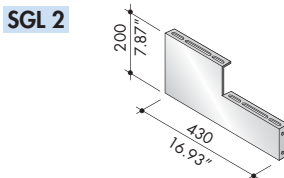
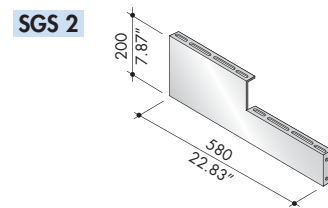
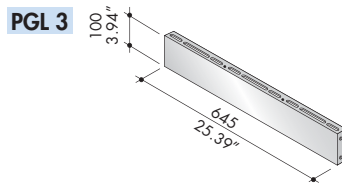
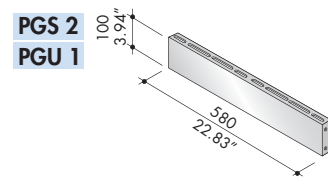
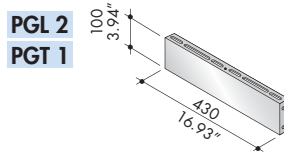
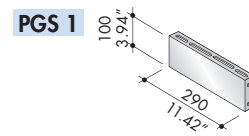
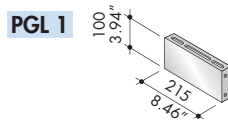
The supports are totally coated with white epoxy powder.

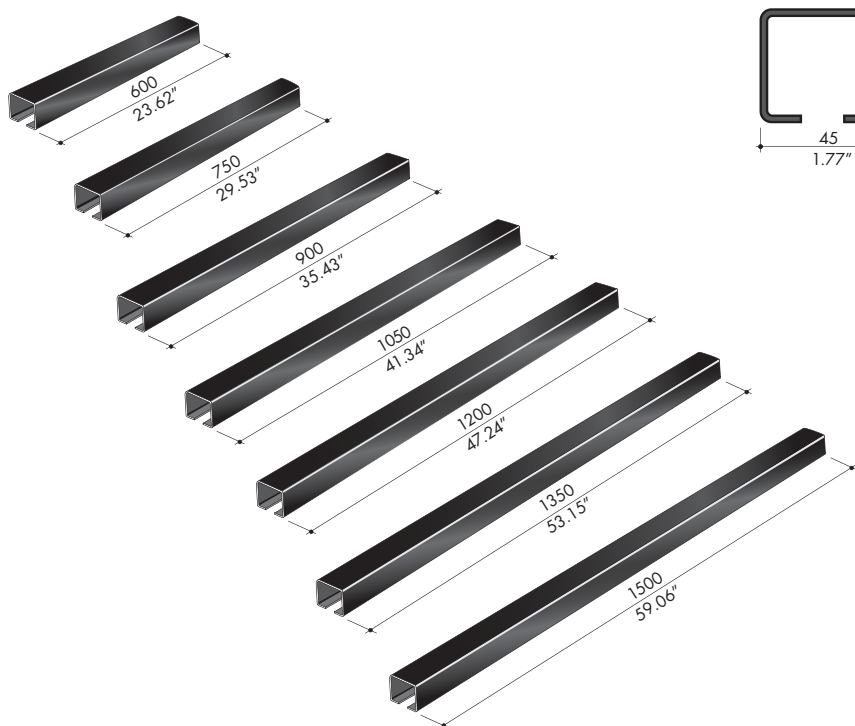
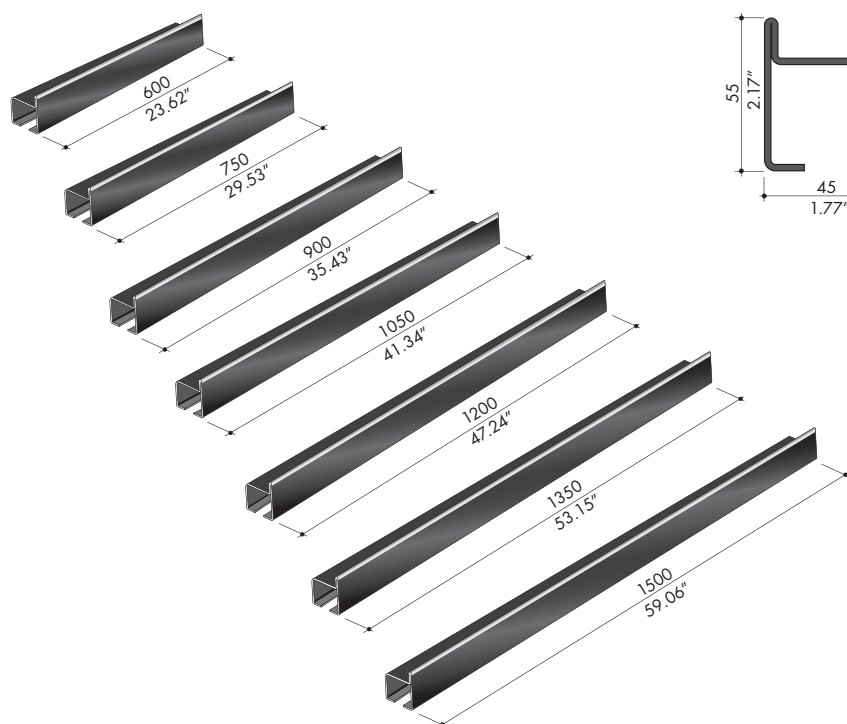
Coding and packing

The supports are packed inside easy to identify boxes with codes corresponding to the configuration on this page.

Each box has 2 supports, left and right, 4 isolators of ABS/GF.

Four laminated shims are included in the box. They can be used for the shelf in case the floor is not perfectly flat.





STRINGERS

"h" type standard stringers

These are made of cold shaped steel sections.

The sections have dimensions ranging from 45x55 mm. (1.77"x2.17").

The upper profile of the stringers permits the alignment of the elements during installation of the battery and it also avoids any incidental lateral displacement.

The lower slot allows easier longitudinal and transversal pairing of the supports.

"C" type additional stringers

The section has a dimension of 45x40 mm. (1.77"x1.57") and a flat upper support surface.

These stringers can be placed in parallel between the standard pairs if you need to increase the support surfaces and capacity of the rack.

Coating

Electrolyte protection and electrical insulation: black polyethylene.

Packing and coding

The stringers are packed into boxes. Each of the four lengths is packed in 4 or 6 pieces; fastening material is included. Codes are given according to the length and quantity of each box. Example: code n°906 identifies a pack of 6 stringers having a length of 900 mm. Therefore, the first 2 No's of the code indicates the length, the last one the quantity.

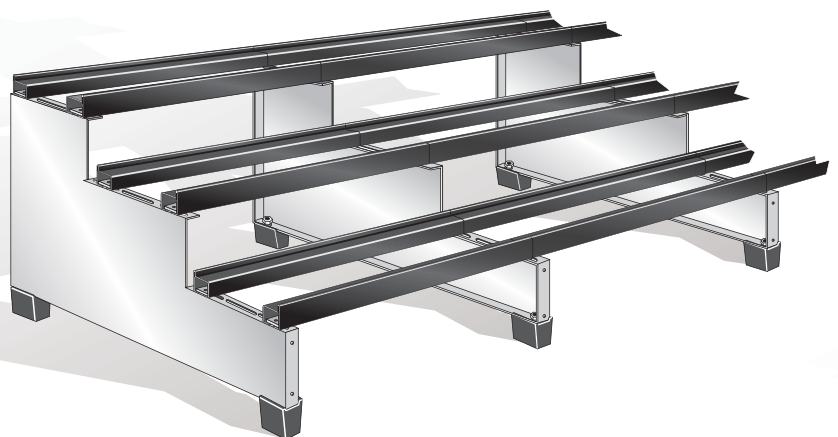
ONE TIER RACKS

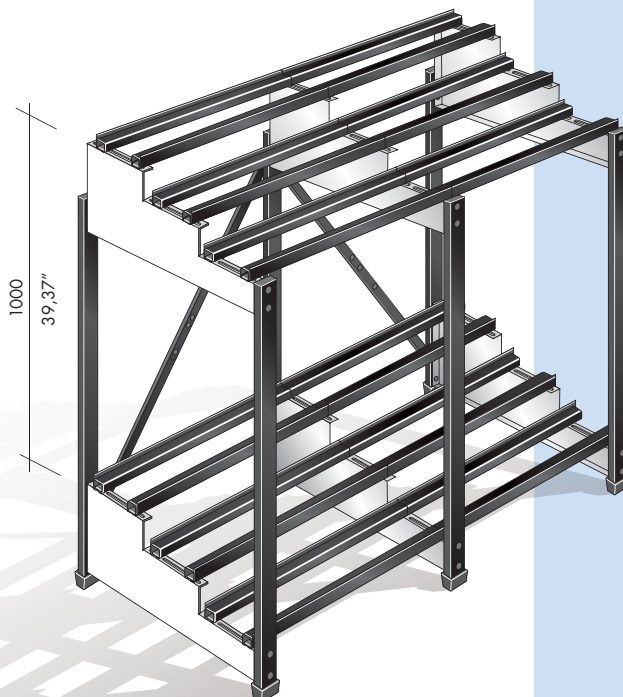
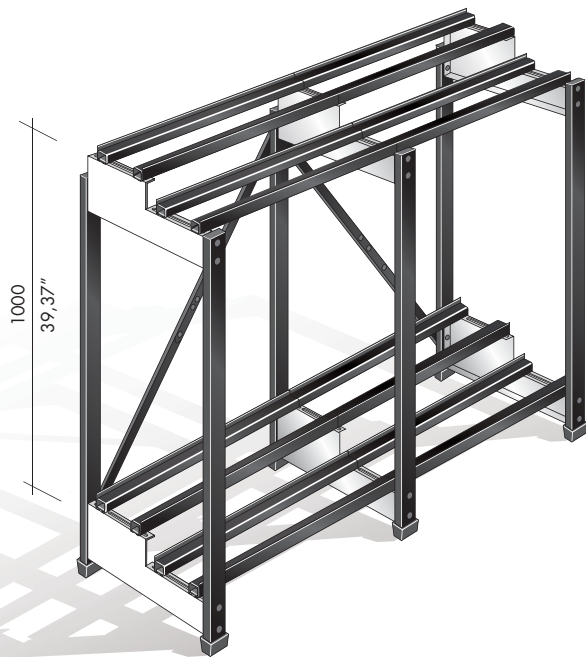
These racks have been designed for all types of stationary battery models. In designing these easy-to-use racks, all main requirements, such as, strength, flexibility, acid-proof protection have been considered. These racks are light, small and easy to move and store.

Furthermore, these racks are available at anytime because they are always in stock.

These racks can be totally disassembled and assembled by using screws and plates.

The main parts consist of stringers and supports.





TWO TIER RACKS

The two-tier rack is the extension of the single-tier rack, whose components, stringers and supports can be used with special additional sets coded 1002.

Additional sets are necessary in order to permit overlaying the two tiers.

Supporting stand

The profile is steel tube, the section is 50 x 30 mm. (1.97" x 1.18").

Electrolyte protection: black polyethylene.

Braces

Steel bars section 30 x 3 mm. (1.18" x 0.12").

Electrolyte protection: black epoxy powder.

CERTIFIED EARTHQUAKE PROOF BATTERY RACKS

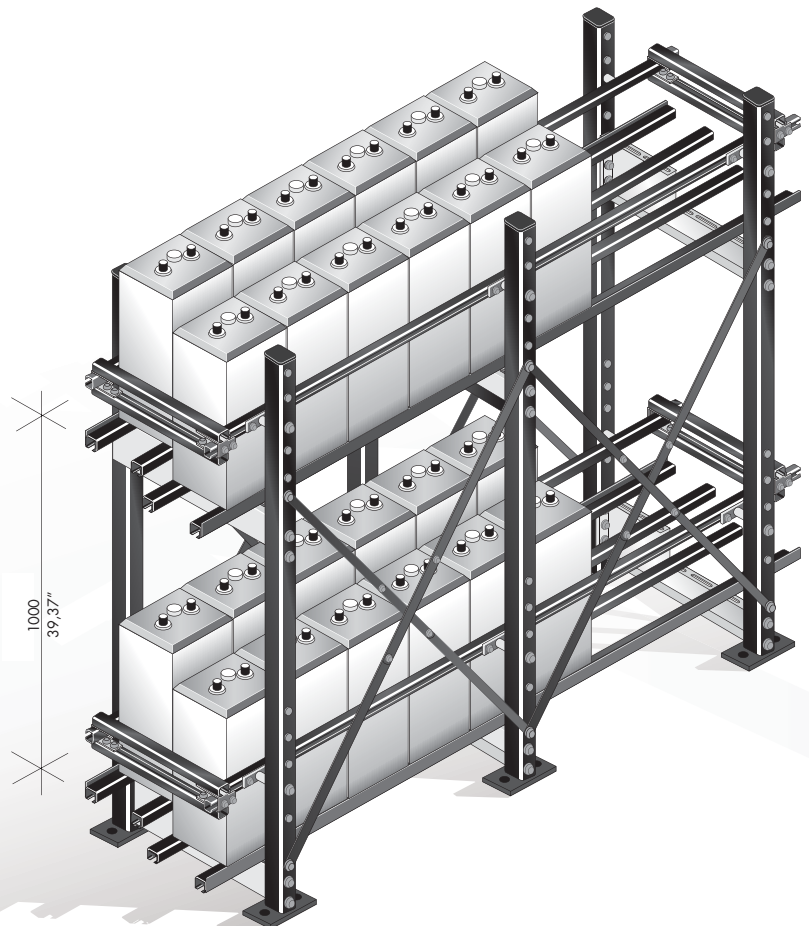
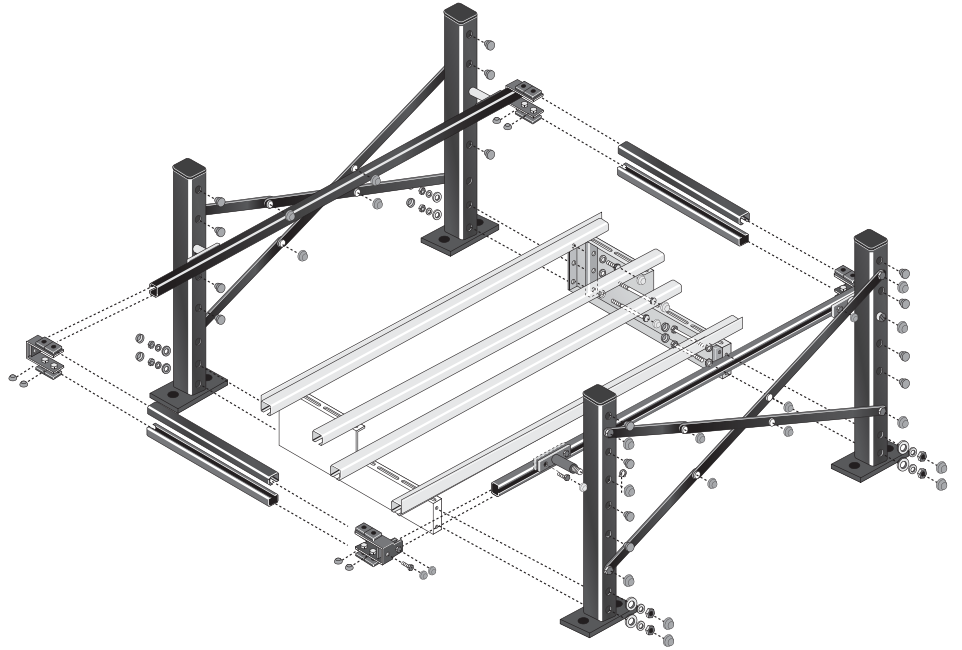
This modular rack system is based on the components of the standard rack system.

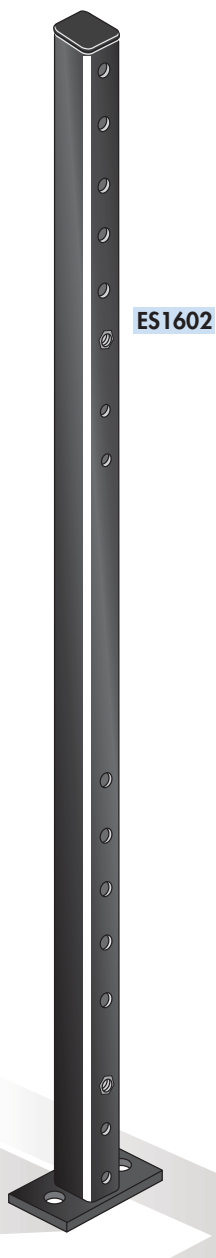
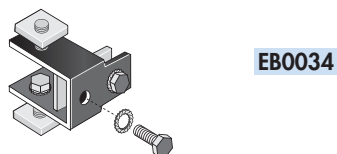
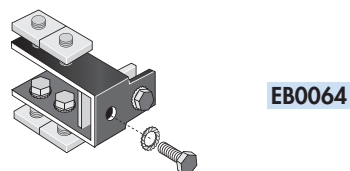
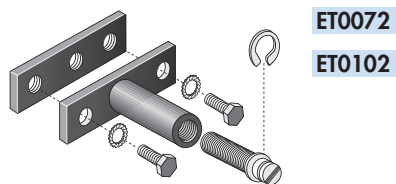
By using of some additional components, such as stands, braces, telescopes and end holders it is possible to build a seismic rack.

Dependence on the battery size and at corresponding choice of the rack components, racks can be created with an earthquake safety according to the customer demands.

The complete range of the usual earthquake loads plus the demanded security factors can be covered.

The racks are appropriate for use as earthquake proof battery racks in USA, according to UBC and IBC.





SEISMIC KITS

Supporting Stand ES0602 - ES1602

An extra heavy design of supporting stands guarantees a sufficient strength for seismic loads. Two different heights of stands make the construction of one two tier rack possible.

Brace EB0714 - EB0974

The braces guarantees a high stability in the lengthwise direction.

TELESCOPE ET0072 - ET0102

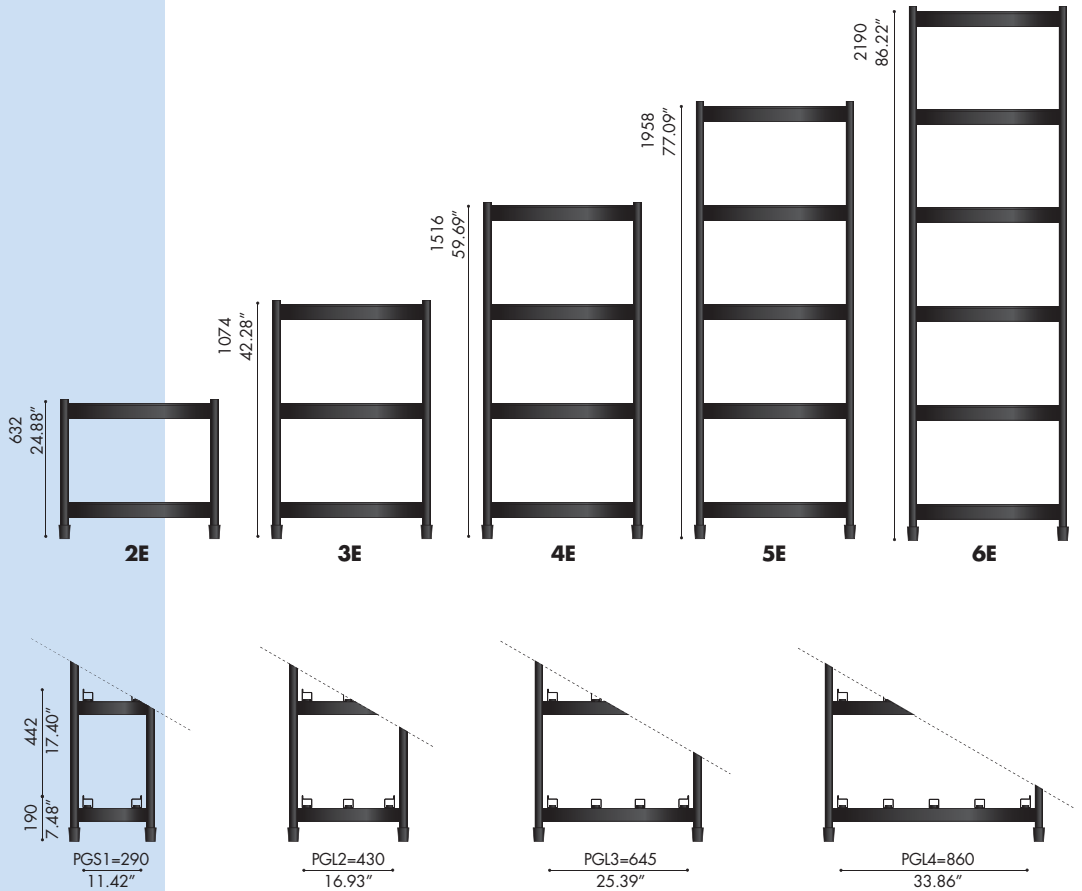
The telescope has an adjustment range of 45 mm. (1,77"). It takes over the lateral support of the cells together with the railing.

End holder EB0064 - EB0034

End Holders are adjustable and it takes over the lengthwise support of the cells package together with the railing.

Stand, brace, telescope and end holder are coated with epoxy powder.

RACKS FOR VRLA BATTERY INSTALLATION

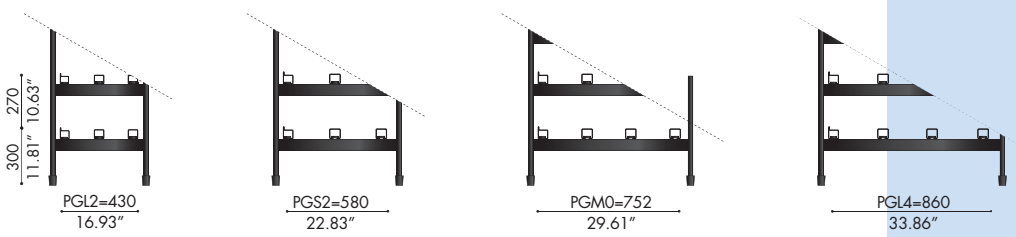
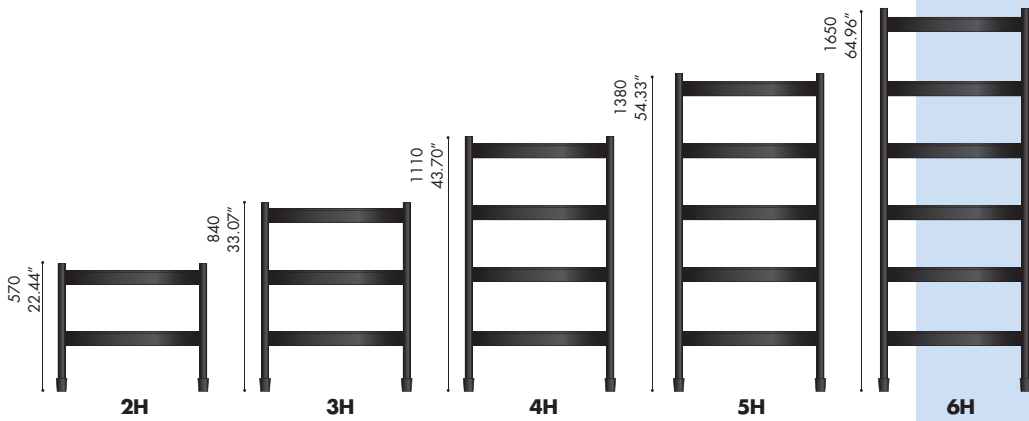


RACKS FOR HORIZONTAL BATTERY INSTALLATION



norwatt@norwatt.es

www.norwatt.es



CLADED RACKS

The **passoni alpha** cladded racks systems have been designed for the main types of stationary battery models.

The basic module is our standard battery rack including the modular cladded panels.

The cladding parts are realised in a thermoplastic compound, based on the following characteristics.

- Shock resistance according to IK 10 EN 50102
- Dielectric strength 6 kV according to EN 60950 and EN 50272-2
- Fire protection UL 94V0/ISO 1210
- Ageing according to XP C 20-540
- Chemically stable against sulphuric acid
- Chemically stable against potassium hydroxide
- Colour: RAL 7035, Light Grey
- ISO 9001



CUSTOMIZED RACKS

Beside the standard and seismic rack systems that are offered in series, we build a variety of special constructions for extreme cases, such as container, off-shore, power and nuclear power stations or military utilities.

These racks are designed, calculated and built, according to the specific customer requirement.

In quite special cases mechanical shock absorbing system are used.

alpha takes seismic and shock design criteria seriously.

For every construction a static calculation is carried out internally.

When required these racks are subject to a static calculation or computer simulation by an external, neutral expert authority, or being physically tested.

These racks are used worldwide.





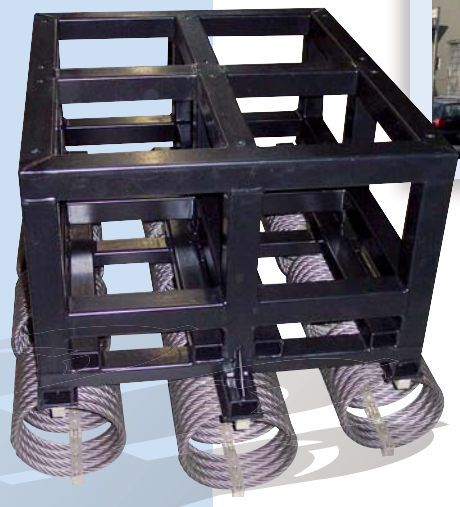
POWER PLANT RACKS
SHAKING TEST



RACKS FOR VESSEL UTILITIES



RACKS FOR MILITARY UTILITIES



RACKS FOR OFF-SHORE UTILITIES

