

Request for quote Order Date _____

AEROCOMPACT®

Customer _____

Contact person _____

No., Street _____

City, State, ZIP code, Country _____

Phone, E-Mail _____

Checklist for the design of metal roof racking systems (USA)

receipt stamp

Project _____

Requested delivery date: _____

No., Street _____

Pick up

City, State, ZIP code _____

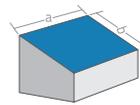
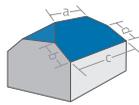
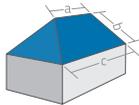
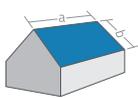
Delivery to customer

Country _____

Delivery to project address

Roof shape and dimensions

- Ridge roof
 Hipped roof
 Half-hipped roof
 Pavillon roof
 Shed roof
 other



please provide drawing with all relevant dimensions

Dimension: a = _____ ft. c = _____ ft. Roof height: _____ ft. Parapet height: _____ in.
b = _____ ft. d = _____ ft. Roof inclination: _____ ° Parapet width: _____ in.

Roofing type and mounting system

- | | | |
|--|--|---|
| <input type="radio"/> Trapezoidal sheet metal
<input type="radio"/> steel <input type="radio"/> aluminum
sheet thickness: _____ in.
crown spacing: _____ in.
<input type="radio"/> roof-parallel (modules landscape)
<input type="radio"/> roof-parallel (modules portrait)
<input type="radio"/> with additional elevation | <input type="radio"/> Standing seam roof
<input type="radio"/> steel <input type="radio"/> aluminum
sheet thickness: _____ in.
crown spacing: _____ in.
<input type="radio"/> roof-parallel (modules landscape)
<input type="radio"/> with additional elevation
<i>For seam roofs please indicate seam / system type and seam geometry, if available!</i> | <input type="radio"/> KlipLok roof
<input type="radio"/> steel <input type="radio"/> aluminum
sheet thickness: _____ in.
crown spacing: _____ in.
<input type="radio"/> roof-parallel (modules landscape)
<input type="radio"/> with additional elevation |
|--|--|---|

Module layout

- Full layout
 Targeted power: _____ kWp
Please indicate interference areas separately! (drawing, coordinates, roof plan)

PV Module Specifications

Manufacturer: _____ Module type: _____ Wattage: _____ Wp
Length x width: _____ mm Frame height: _____ in. Weight: _____ lbs

Project site Risk category Terrain / Exposure exposed position

- | | | |
|---|--|--|
| geographical latitude: _____
geographical longitude: _____
elevation asl: _____ ft. | <input type="radio"/> I low hazard in event of failure
<input type="radio"/> II neither cat. I nor cat. III/IV
<input type="radio"/> III/IV high hazard in ev. of fail.
<i>(to be determined according to local codes, terms below just for orientation, details overleaf)</i> | <input type="radio"/> A (urban / suburban and wooded areas)
<input type="radio"/> B (open terrain w / scattered obstructions)
<input type="radio"/> C (flat and unobstructed, shorelines) |
|---|--|--|

Applicable Code

- ASCE 7-05 ASCE 7-10 NBCC (Canada)
 Other (please indicate design wind load / design wind speed _____ psf _____ mph)
(please indicate design snow load on the roof _____ psf)

Disclaimer: AEROCOMPACT is not responsible for incorrect system design based on deficient information provided by the customer, e.g. via this checklist, and refuses liability for problems, delays, costs, damages to things as well as to human health and life resulting directly or indirectly from this incorrect information. In particular, the local terrain and soil conditions should be thoroughly identified on site and completely communicated to **AEROCOMPACT** by the customer.

Table 1.5-1 Risk Category of Buildings and Other Structures for Flood, Wind, Snow, Earthquake, and Ice Loads

Use or Occupancy of Buildings and Structures	Risk Category
Buildings and other structures that represent a low risk to human life in the event of failure	I
All buildings and other structures except those listed in Risk Categories	I, III, and IV II
Buildings and other structures, the failure of which could pose a substantial risk to human life.	III
Buildings and other structures, not included in Risk Category IV, with potential to cause a substantial economic impact and/or mass disruption of day-to-day civilian life in the event of failure.	
Buildings and other structures not included in Risk Category IV (including, but not limited to, facilities that manufacture, process, handle, store, use, or dispose of such substances as hazardous fuels, hazardous chemicals, hazardous waste, or explosives) containing toxic or explosive substances where their quantity exceeds a threshold quantity established by the authority having jurisdiction and is sufficient to pose a threat to the public if released.	
Buildings and other structures designated as essential facilities.	IV
Buildings and other structures, the failure of which could pose a substantial hazard to the community.	
Buildings and other structures (including, but not limited to, facilities that manufacture, process, handle, store, use, or dispose of such substances as hazardous fuels, hazardous chemicals, or hazardous waste) containing sufficient quantities of highly toxic substances where the quantity exceeds a threshold quantity established by the authority having jurisdiction to be dangerous to the public if released and is sufficient to pose a threat to the public if released. ^a	
Buildings and other structures required to maintain the functionality of other Risk Category IV structures.	

^a Buildings and other structures containing toxic, highly toxic, or explosive substances shall be eligible for classification to a lower Risk Category if it can be demonstrated to the satisfaction of the authority having jurisdiction by a hazard assessment as described in Section 1.5.2 that a release of the substances is commensurate with the risk associated with that Risk Category.

6.5.6.2 Surface Roughness Categories. A ground surface roughness within each 45° sector shall be determined for a distance upwind of the site as defined in Section 6.5.6.3 from the categories defined in the following text, for the purpose of assigning an exposure category as defined in Section 6.5.6.3.

Surface Roughness B: Urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.

Surface Roughness C: Open terrain with scattered obstructions having heights generally less than 30 ft (9.1 m). This category includes flat open country, grasslands, and all water surfaces in hurricane prone regions.

Surface Roughness D: Flat, unobstructed areas and water surfaces outside hurricane prone regions. This category includes smooth mud flats, salt flats, and unbroken ice.