

Request for quote Order Date _____

AEROCOMPACT®

Customer _____

Contact person _____

No., Street _____

City, State, ZIP code, Country _____

Phone, E-Mail _____

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

receipt stamp

Project _____

Requested delivery date: _____

No., Street _____

Pick up

City, State, ZIP code, Country _____

Delivery to customer

Delivery to project address

Roof shape and dimensions

rectangular other

Roof height: _____ ft.

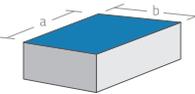
Roof inclination: _____ °

Parapet height: _____ in.

Parapet width: _____ in.

Dimension: a = _____ ft. b = _____ ft.

please provide drawing with all relevant dimensions



Mounting System Typ

Aerocompact S 5 (mono-pitch, 5°)
 7.0" row spacing
 13.2" row spacing

Aerocompact S 10 (mono-pitch, 10°)
 15.0" row spacing

Aerocompact S 15 (mono-pitch, 15°)
 22.5" row spacing

Aerocompact + (double-pitch, 10°)
 4.5" + 7.2" row spacing
 4.5" + 13.8" row spacing

Roofing type and sub-structure

Membrane only
 PVC
 TPO/FPO

Bitumen roof
 Concrete roof

Gravel roof
 gravel layer < 4 in.
 gravel layer ≥ 4 in.
 Bulk density: _____

Insulation (under membrane)
 type: _____
 thickness: _____ in.
 compr. strength _____ psf

Ballast block specification

Length: _____ in. Width: _____ in. Height: _____ in. Weight: _____ lbs

Module layout *Please indicate interference areas separately! (drawing, coordinates, roof plan)*

Full layout Targeted power: _____ kWp Preferred array size: _____ kWp

Further Design Options

only ballast (no roof anchor) only roof anchor (no ballast) optimized selection / mixture

PV Module Specifications

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

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

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. CL AE/GM US 2018. 1

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.