



KD Solar

3 Tier A-Frame Solution

on flat concrete roofs

Important

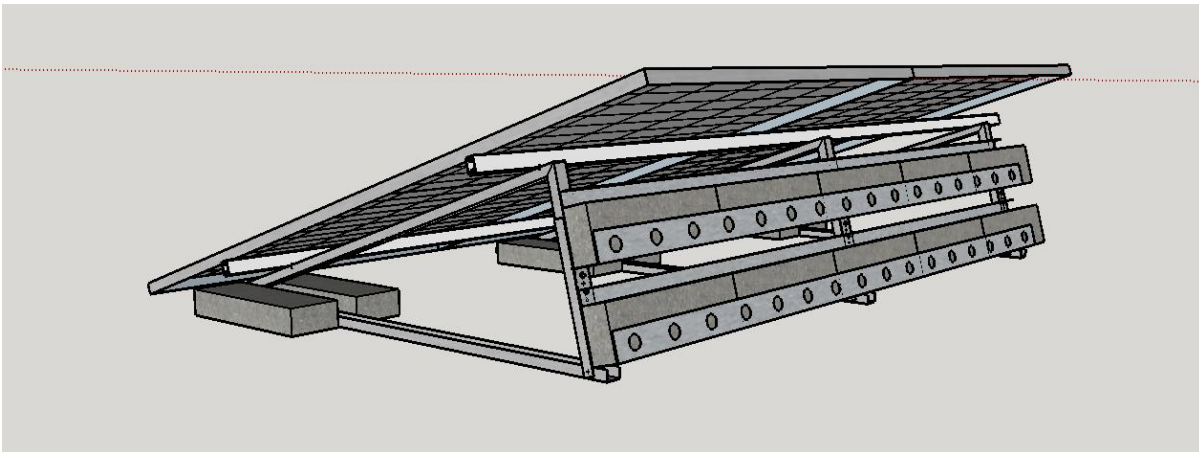
LOCATION CHECKLIST FOR PV PANELS ON BALLAST INSTALLATION		
	Yes	No
Does the roof have a parapet wall less than 600mm for portrait/300mm for Landscape high?		
Is the closest building more than 50m away?		
Is the panel installation more than 2 storeys above ground level?		
Is the site located on a steep slope or close to the top of a steep slope?		

If the answer for any of the above questions is Yes. A Tier 1 system cannot be used, turn to page 3.

Tier 1:



A Tier one A-Frame solution can be used when there is a combined 600mm+ high parapet wall, a group of buildings or permanent forestry 50m or closer, the installation is 2 storeys or less above ground level and the location of the building is situated on relatively flat terrain.



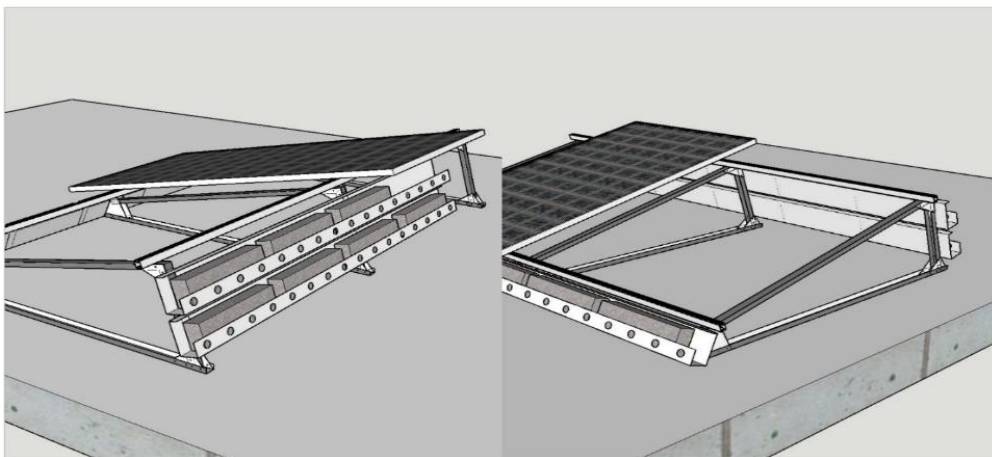
A Tier 1 A-frame solution consists of:

- Standard A-frames
- Wind deflector/Ballast holders (2 per every 2400mm)
- Concrete ballasts @ 12kg each (7 per a-frame)

Tier 2:



A Tier 2 A-frame solution can be used when there are little to no parapet walls with trees and or buildings within 50m of the solar installation. The building must not be higher than 4 storeys and on relatively flat terrain.



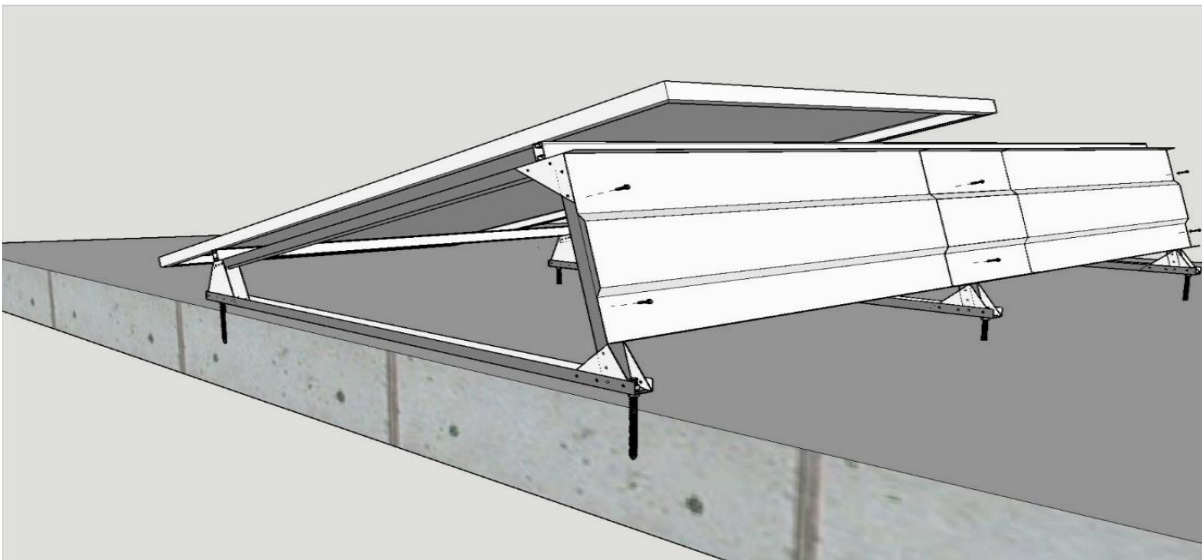
A Tier 2 A-frame solution consists of:

- The High wind fixed 15 deg A-frames
- Rear and front wind deflector/ballast holders (3 per every 2400mm)
- Concrete ballasts (7 per A-frame)
- Chemical anchors in key positions (end of rows, areas closer to the edge of the roof)

Tier 3:



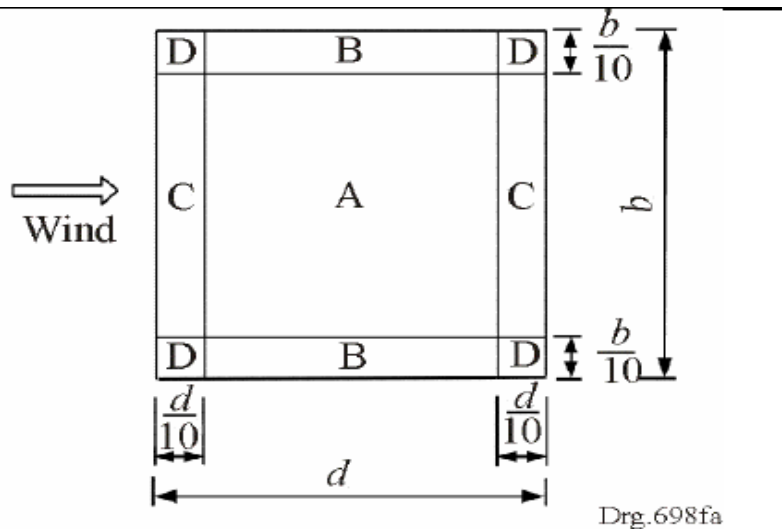
A Tier 3 A-Frame solution must be used when there are little to no parapet walls, no taller buildings within 50m of the Solar installation, the solar installation is 5 storeys or higher, the site is situated on or close to a steep slope or is in any coastal area.



A Tier 3 A-frame solution consists of:

- The high wind fixed 15 deg A-frames
- Rear and side wind deflectors across the entire system
- NO ballast systems, A Chemical anchoring system is essential.

Recommended mounting areas when mounting on a flat concrete roof.



Source: SANS 10160-3

When installing on a flat concrete roof. The force of the wind in zones B and C are greater than that of the wind force in Zone A.

It is recommended to install your System in Zone A.

Zone A can be determined by subtracting 10% from the total Length/breadth of the building.

Which Tier does your system fall under?

Tier 1	
Tier 2	
Tier 3	

Disclaimer: "freak or exceptional winds" do occur from time to time. KD Solar can not be held responsible for damage incurred in these extreme circumstances.

Company name and order ref:

Name: _____

Date: _____

Sign: _____

Location: _____

Please attach pictures of site and surroundings.