

PV CONSULTANCY

MOUNTING STRUCTURE DUE DILIGENCE



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5 CONCLUSION

3E's overall impressions on the Universal and Symmetrical versions of mounting structures are good. The designs are well thought. Moreover, they are easy and fast to install. Material chosen and design are of good quality and in respect with the current standards.

3E has gathered few remarks but all of them are minors.. The tilt and the fixation on the width of the module are fixed parameters on the versions proposed by Sunbeam; this reduces the flexibility of the system. However Sunbeam mentioned to 3E that those aspects could be adapted if needed.

Table 3 and Table 4 below summarise the strengths and weaknesses of both Universal and Symmetrical versions.

Table 3 Universal version remarks summary

Strengths	Weaknesses
Well known suppliers and easily replaceable	Only one possible tilt (15°) with the standard version (however another tilt can be adapted on request)
Very easy and fast installation	Shadow angle of 25° which is not optimal for Belgium but acceptable
Good resistance to the wind	Fixation only possible on the width side (however fixation along the length side is possible on request)
Protection against corrosion and UV	Cables cannot be placed into the structure and cable trays have to be foreseen
Designed in respect to the EU1 code	The Arcelor Mittal warranty of 20 years is only valid for installation located at least 300m from the seafront
Compatible with all roofs membranes	Wind tunnel test results and conclusion not available
Optional secured fixation to the roof (SolarFix anchor)	
No sawing and cutting on the roof	
Pre-assembled in factory	
Anti-theft screws can be used upon on request	

Table 4 Symmetrical version remarks summary

Strengths	Weaknesses
Well known suppliers and easily replaceable	Only one possible tilt (10°)
Very easy and fast installation	Fixation only possible on the width side (however fixation along the length side is possible on request)
Optimal shading angle	Cables cannot be placed into the structure and cable trays have to be foreseen
Protection against corrosion and UV	The Arcelor Mittal warranty of 20 years is only valid for installation located at least 300m from the seafront
Good resistance to the wind and wind load very reduced	Wind tunnel test results and conclusion not available
Designed in respect to the EU1 code	
Compatible with all roofs membranes	
Optional secured fixation to the roof (SolarFix anchor)	
No sawing and cutting on the roof	
Pre-assembled in factory	
Anti-theft screws can be used upon on request	

QUALITY INFORMATION

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