

MCS Product Certificate

Date Issued	7th August 2024	Annual review date	29th September
Issue number	4 – erratum correction	Original/Amendment	Original
Certificate number	KIWA00037	Page	1 of 5

MCS Product Certification Certificate

Issued by Kiwa Ltd

MCS Product Certification Scheme Standards – MCS010, MCS011, MCS012
Model designations – see Appendix

Producer:

Van der Valk Solar Systems B.V

Zwartendijk 73
Monster
2681 LP
The Netherlands

Manufacturer:

As Above

Kiwa Ltd declares that the products detailed in the Appendices have been assessed by Kiwa and meet the requirements of the above MCS Product Certification Standards.

Signed on behalf of Kiwa Ltd

Mark Crowther
MCS Certification Director
Kiwa Ltd

This certificate is subject to the producer continuing to comply with the Kiwa MCS Product Scheme Rules and ongoing Annual Surveillance



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The following products have been assessed and registered by Kiwa Ltd against the provisions of: MCS 010, MCS 011, MCS 012

Product Name	Model Name	MCS Certificate Number
ValkPitched	ValkPitched Clamp for tiled roofs	KIWA00037/002 IK
Type	Above Roof: System	
System components	Components for this system are listed in ANNEX I – only those listed are included in the scope of the certification.	
System/Component Description	Roof hook based system with rails attached by bolts. Range of screw locations for mounting the hooks. Hooks are adjustable vertically and horizontally. PV modules fixed with aluminium clamps.	
Compatible Roof Coverings	<ul style="list-style-type: none"> • Discontinuous <ul style="list-style-type: none"> o Profile concrete/clay tile o Plain concrete/clay tile 	
Tests Undertaken (strikethrough inapplicable)	Resistance to wind uplift	Yes / No
	Fire performance	Yes / No
	Weather tightness	Yes / No
Resistance to Wind Uplift		
If attached to sub-structure: Compatible substructures	Timber	
Test Preparation	2 Solar PV modules mounted onto 2 horizontally positioned mounting rails. 2 end clamps applied on the outside edge of each panel and 2 middle clamps between the adjacent edges of the panels. The mounting rails each attached to 3 standard Strongline roof hooks onto the wooden substructure of the test rig. Rig slope of 45° with uplift loading system attached to the PV modules, each with 8 suction cups. Cyclic loading, unloading applied to determine failure load. 3 tests with new fittings and the Characteristic Wind Uplift Resistance calculated from the results.	
Maximum Design Wind Uplift Resistance	3.6 kPa	Partial (safety) factor(s) 1.0
Failure Mode	Serviceability Limit State	
If attached to timber sub-structure: For certified wind uplift resistance in sound timber - dimensions	width 55 mm X depth 150 mm	
Weathertightness		
If discontinuous roof covering		
Reference Roof Covering	Type:	Tiles Pitch: 30 ° Head-lap Not determined
	Maximum unprotected gap in reference roof covering (+/- 1mm)	
Maximum unprotected gap with mounting system/component installed (+/- 1mm)		Not determined
Minimum Permissible roof Pitch (°)		30 °
Test B (if applicable)	Applied suction at leakage rate 10g/m2/5min	0.06 kPa
Test D (if applicable)	Leakage observed after 2 min	0 g
Fire Performance		
Fire Classification	BS 476-3: 2004	Not determined
	CEN TS 1187:2012 Test 4	Not determined
	Not required	The fire performance of this above roof mounting system is not currently required for MCS 012. Research is ongoing into any influence above roof solar panels could have on the fire classification of the roof mounting system.

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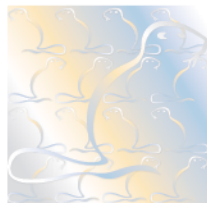
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The following products have been assessed and registered by Kiwa Ltd against the provisions of: MCS 010, MCS 011, MCS 012

Product Name	Model Name		MCS Certificate Number			
ValkAce	ValkAce for tiled roofs		KIWA00037/003 IK			
Type	Above Roof: System					
System components	Components for this system are listed in ANNEX I – only those listed are included in the scope of the certification.					
System/Component Description	SS Roof hook based system with rails attached aluminium clip arrangement. Range of screw locations for mounting the hooks. Hooks are height adjustable. PV modules fixed with aluminium clamps.					
Compatible Roof Coverings	<ul style="list-style-type: none"> • Discontinuous <ul style="list-style-type: none"> o Profile concrete/clay tile o Plain concrete/clay tile 					
Tests Undertaken	Resistance to wind uplift		Yes / No			
	Fire performance		Yes / No			
	Weather tightness		Yes / No			
Resistance to Wind Uplift						
If attached to sub-structure: Compatible substructures	Timber					
Test Preparation	2 Solar PV modules mounted onto 2 horizontally positioned mounting rails. 2 end clamps applied on the outside edge of each panel and 2 middle clamps between the adjacent edges of the panels. The mounting rails each attached to 3 Strongline roof hooks onto the wooden substructure of the test rig. Rig slope of 45° with uplift loading system attached to the PV modules, each with 8 suction cups. Cyclic loading, unloading applied to determine failure load. 3 tests with new fittings and the Characteristic Wind Uplift Resistance calculated from the results.					
Maximum Design Wind Uplift Resistance	1.716 kPa	Partial (safety) factor(s)	1.0			
Failure Mode	Serviceability Limit State					
If attached to timber sub-structure: For certified wind uplift resistance in sound timber - dimensions	width 55 mm X depth 150 mm					
Weathertightness						
If discontinuous roof covering						
Reference Roof Covering	Type:	Tiles	Pitch:	30 °	Head-lap	Not determined
	Maximum unprotected gap in reference roof covering (+/- 1mm)					Not determined
Maximum unprotected gap with mounting system/component installed (+/- 1mm)					Not determined	
Minimum Permissible roof Pitch (°)					30 °	
Test B (if applicable)	Applied suction at leakage rate 10g/m2/5min					0.06 kPa
Test D (if applicable)	Leakage observed after 2 min					0 g
Fire Performance						
Fire Classification	BS 476-3: 2004		Not determined			
	CEN TS 1187:2012 Test 4		Not determined			
	Not required		The fire performance of this above roof mounting system is not currently required for MCS 012. Research is ongoing into any influence above roof solar panels could have on the fire classification of the roof mounting system.			

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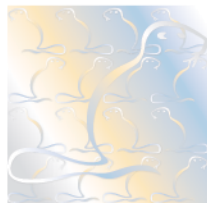
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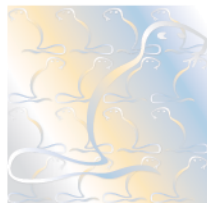
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The following products have been assessed and registered by Kiwa Ltd against the provisions of: MCS 010, MCS 011, MCS 012

Product Name	Model Name	MCS Certificate Number		
ValkPitched	ValkPitched Clamp Trapezoidal	KIWA00037/004 IK		
Type	Above Roof: System			
System components	Components for this system are listed in ANNEX I – only those listed are included in the scope of the certification.			
System/Component Description	Mini rail based customizable installation kit for attachment to trapezoidal profiled continuous metal roof coverings.			
Compatible Roof Coverings	<ul style="list-style-type: none"> • Continuous: <ul style="list-style-type: none"> o Sheet or profiled metal 			
Tests Undertaken	Resistance to wind uplift	Yes / No		
	Fire performance	Yes / No		
	Weather tightness	Yes / No		
Resistance to Wind Uplift				
If attached to roof covering: Compatible roof covering	Profiled metal (Trapezoidal)			
Test Preparation	2 Solar PV modules mounted onto Falk 1100 TR 3+ 40/70, 0,50/0,40 / 37 sandwich panels using the mounting system according to manufacturer's instructions. Sandwich panels mounted on standard testing rig, slope 45° and the uplift loading system attached to the PV modules, each with 8 suction cups. Cyclic loading, unloading applied to determine failure load. 3 tests with new fittings and the Characteristic Wind Uplift Resistance calculated from the results.			
Maximum Design Wind Uplift Resistance	1.23 kPa	Partial (safety) factor(s)	1.0	
Failure Mode	Serviceability Limit State			
If attached to timber sub-structure: For certified wind uplift resistance in sound timber - dimensions	NOT APPLICABLE			
Weathertightness				
If continuous roof covering				
Reference Roof Covering	Type:	Trapezoidal metal sheet	Pitch:	0 °
Impermeability test (if applicable)	Leakage observed at end of test			0 g
Test D (if applicable)	Leakage observed after 2 min			Not applicable
Fire Performance				
Fire Classification	BS 476-3: 2004	Not determined		
	CEN TS 1187:2012 Test 4	Not determined		
	Not required	The fire performance of this above roof mounting system is not currently required for MCS 012. Research is ongoing into any influence above roof solar panels could have on the fire classification of the roof mounting system.		

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The following components are common for the product systems that have been assessed and registered by Kiwa Ltd against the provisions of:

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Mounting frame installation components
ValkPitched Clamp for tiled roofs
Customisable kit comprising variable numbers of the following parts:
Ss Strongline roof hook (747844)
Ss Torx Screw 5.5x58mm (773360)
Alu. Side++ profile (7017xxxxx) (various lengths)
Alu. Coupling for Side++ profile (724863)
Mid panel clamp for alu profile – T30 – clamping range 28-50mm (721550)
End panel clamp for alu profile – T30 – clamping range 28-50mm (721552)
ValkAce for tiled roofs
Customisable kit comprising variable numbers of the following parts:
Ss Strongline roof hook – ValkAce (747506)
Ss Strongline Heavy Duty roof hook – ValkAce (747504)
Ss Torx Screw 5.5x58mm (773360)
Alu. Profile ValkAce (701900000) (various lengths)
Coupling piece ValkAce profile (749502)
Alu. Mid clamp ValkAce (721410)
Alu. End clamp ValkAce (721412)
ValkPitched Clamp Trapezoidal
Alu. trapezoidal profile L=120mm + EPDM (7269120)
Ss. thin sheet screw M6x25mm (773225)
Alu. mid panel clamp alu profile 28-50mm
Alu. end panel clamp alu profile 28-50mm