

TÜV Rheinland Immissionsschutz und Energiesysteme GmbH
D-51101 Köln

Sunways AG
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78647 Konstanz
Deutschland

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www.tuv-pv-cert.de
17. August 2009

Declaration
- 21211354 -

Customer: Sunways AG
Macairestr. 3-5
78647 Konstanz
Deutschland

Product: Hilti GmbH; MSP-AL
Hilti GmbH; MSP-MC 48-50
Hilti GmbH; MSP-EC 50

Module type: Sunways; SM 210 U
Sunways; SM 215 M

Basis of testing: IEC 61215:2005 "Crystalline silicon terrestrial photo-voltaic (PV) modules – Design qualification and type approval"
Test 10.16 mechanical load tests with 2400 Pa and 5400 Pa for heavy snow load.

Test result:

The mechanical load test 10.16 of the EN IEC 61215:2005 standards were passed according to its regulations of the pass criteria. It is therefore declared, that the Hilti MSP mounting systems in combination with the photo-voltaic modules of the aforementioned type fulfil the requirements of the standard EN IEC 61215:2005.

Description:

Hilti MSP is a PV-mounting system for sloped-roofs. The PV-modules will be installed with two clamps on each side with a distance of 800–1200 mm. The PV-module and the profiles were installed according the manual instructions.

Cologne, 17.08.2009

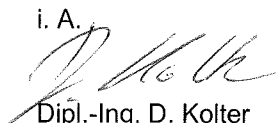
Renewable Energies

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Geschäftsführung
Dr.-Ing. Wolfgang Jockel

Amtsgericht Köln HRB 32190

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Declaration
- 21211354 -

Customer: Sunways AG
Macairestr. 3-5
78647 Konstanz
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Product: MHH Solartechnik; MHHnovotegra C-profile
MHH Solartechnik; middle- and endclamps
Module type: Sunways; SM 210 U
Sunways; SM 215 M

Basis of testing: IEC 61215:2005 "Crystalline silicon terrestrial photo-
voltaic (PV) modules – Design qualification and type
approval"
Test 10.16 mechanical load tests with 2400 Pa and
5400 Pa for heavy snow load.

Test result:

The mechanical load test 10.16 of the EN IEC 61215:2005 standards were passed according to its regulations of the pass criteria. It is therefore declared, that the MHHnovotegra mounting systems in combination with the photovoltaic modules of the aforementioned type fulfil the requirements of the standard EN IEC 61215:2005.

Description:

MHHnovotegra is a PV-mounting system for sloped-roofs. The PV-modules will be installed with two clamps on each side with a distance of 800–1200 mm. The PV-module and the profiles were installed according the manual instructions.

Cologne, 17.08.2009

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Declaration
- 21211354 -

Customer: Sunways AG
Macairestr. 3-5
78647 Konstanz
Deutschland

Product: Schletter GmbH; mounting rail 30x30mm
Schletter GmbH; Aluminium middle- and endclamps
Module type: Sunways; SM 210 U
Sunways; SM 215 M

Basis of testing: IEC 61215:2005 "Crystalline silicon terrestrial photo-voltaic (PV) modules – Design qualification and type approval"
Test 10.16 mechanical load tests with 2400 Pa and 5400 Pa for heavy snow load.

Test result:

The mechanical load test 10.16 of the EN IEC 61215:2005 standards were passed according to its regulations of the pass criteria. It is therefore declared, that the Schletter mounting systems in combination with the photo-voltaic modules of the aforementioned type fulfil the requirements of the standard EN IEC 61215:2005.

Description:


Schletter is a PV-mounting system for sloped-roofs. The PV-modules will be installed with two clamps on each side with a distance of 800–1200 mm. The PV-module and the profiles were installed according the manual instructions.

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Declaration
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Customer: Sunways AG
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78647 Konstanz
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Product: Wagner & Simon;
WASI GmbH&Co.KG; Alu mounting rail 40x40mm
WASI GmbH&Co.KG; Alu middle- and endclamps
Module type: Sunways; SM 210 U
Sunways; SM 215 M

Basis of testing: IEC 61215:2005 "Crystalline silicon terrestrial photo-voltaic (PV) modules – Design qualification and type approval"
Test 10.16 mechanical load tests with 2400 Pa and 5400 Pa for heavy snow load.

Test result:

The mechanical load test 10.16 of the EN IEC 61215:2005 standards were passed according to its regulations of the pass criteria. It is therefore declared, that the WASI mounting systems in combination with the photo-voltaic modules of the aforementioned type fulfil the requirements of the standard EN IEC 61215:2005.

Description:

WASI is a PV-mounting system for sloped-roofs. The PV-modules will be installed with two clamps on each side with a distance of 800–1200 mm. The PV-module and the profiles were installed according the manual instructions.

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Declaration
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Customer: Sunways AG
Macairestr. 3-5
78647 Konstanz
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Product: CreoTecc GmbH; RL AluTec 50 horizontal profile
CreoTecc GmbH; RL AluVerPlus vertical profile
CreoTecc GmbH; RL AluTEc BP support profile
Module type: Sunways; SM 210 U
Sunways; SM 215 M

Basis of testing: IEC 61215:2005 "Crystalline silicon terrestrial photo-voltaic (PV) modules – Design qualification and type approval"
Test 10.16 mechanical load tests with 2400 Pa and 5400 Pa for heavy snow load.

Test result:

The mechanical load test 10.16 of the EN IEC 61215:2005 standards were passed according to its regulations of the pass criteria. It is therefore declared, that the CreoTecc mounting systems in combination with the photo-voltaic modules of the aforementioned type fulfil the requirements of the standard EN IEC 61215:2005.

Description:

CreoTecc AluTec is a PV-mounting system for sloped-roofs. The PV-modules will be installed along the whole short sides of the module. The PV-module and the profiles were installed according the manual instructions.

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