



CanadianSolar Roof Kits Brief Introduction

Canadian solar, one of the largest solar power solution providers in the world, is a leading vertically integrated provider of ingot, wafer, solar cell, solar module and other solar applications. Canadian Solar designs, manufactures and delivers solar products and solar systems for on-grid and off-grid use to customer around the world.

With various level of governments' financial support for solar power system installation and feed-in-tariff purchasing solar power fed into the grid, solar power system investment has become a risk-free financial product with a very attractive rate of return.

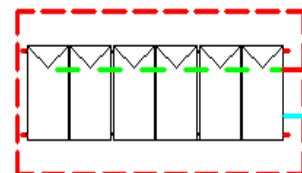


CanadianSolar Roof Kits 1.5kW

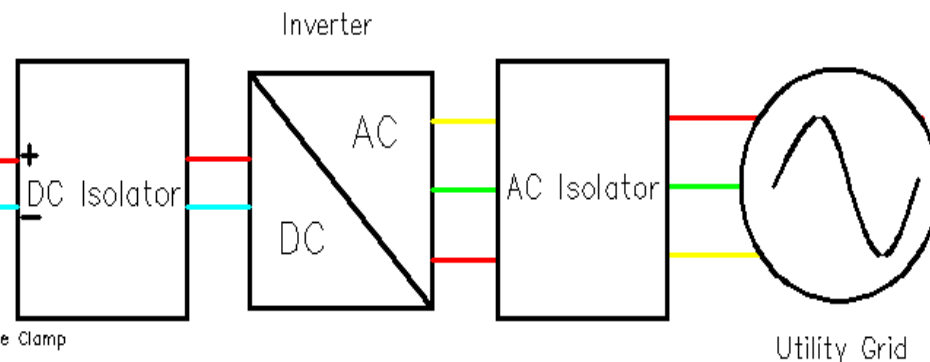
Total Kits Lead Time: 60 Days After Purchase Order



PV Array: CS6P-250P



— Standard Rail ■ End Clamp or Middle Clamp



Nominal Maximum Power (P_{max})	CS6P-250P
Optimum Operating Voltage (V_{mp})	30.1V
Optimum Operating Current (I_{mp})	8.3A
Open Circuit Voltage (V_{oc})	37.2V
Short Circuit Current (I_{sc})	8.87A
Module Efficiency	15.54%
Operating Temperature	-40 °C~+85 °C
Maximum System Voltage	1000V (IEC) / 1000V (UL)
Maximum Series Fuse Rating	15A
Application Classification	Class A
Power Tolerance	0 ~ +5W

CSI-1500-TL

Max. DC power [W]	1800
Max. DC voltage [V]	450
Max. input current [A]	12
MPP trackers / Strings per MPP tracker	1/1
MPPT voltage range [V]	125-425
Nominal AC power [W]	1500
Max. AC power [W]	1650
Max. AC current [A]	8
Nominal AC voltage/ range [V]	230/203-267
AC grid frequency/ range [Hz]	50/48-50
Power factor (cosφ)	~1
Max. efficiency	97%
Euro efficiency	>96.00%
Total harmonic distortion (THDi) (at nominal power)	<1%



Canadiansolar 1.5kW Roof Kits BOM

Item No.	Description	Qty	Unit	Specification	Remark
1	Solar Module	6	Pcs	CS6P-250P,1638mm×982mm×40mm	1×6 panel units, one string, Portrait configuration
2	Standard Rail	4	Pcs	Length=3100mm to support module	For 6 module row
3	Mid-Clamp	10	Pcs	For PV module with the thickness of 40mm	Include clamp, washer, bolt etc.
4	End-Clamp	4	Pcs	For PV module with the thickness of 40mm	Include clamp, washer, bolt etc.
5	Tile Roof Hook	10	Pcs	For ceramic tile roof	Include hook, bolt etc, For A&B wind zone in Australia
6	Wood Screw Tapping	30	Pcs	M6.3*80 self tapping screw, Decrement	For the Hook and the Purlins fixture
7	Inverter	1	Pcs	CSI-1500-GW, Rated Power:1500W,IP65	CanadianSolar
8	DC isolator Kit	1	Set	DC,2P,16Amp 1000V,IP65	Include Isolator enclosure & accessories
9	AC isolator Kit	1	Set	AC,2P,20Amp 240V,C type,IP65	Include Isolator enclosure & accessories
10	Extension DC Cable	30	M	TUV 2PfG 1169 1*4mm ² PV cable	Include Cable End and QC4 connectors
12	Extension AC Cable	10	M	3*2.5mm ² ,dual insulation	According to IEC standard
13	Earth Cable	15	M	1*4mm ² ,yellow/green line	
14	Installation Manual	1	Pcs		
15	Warning label	1	Pcs		

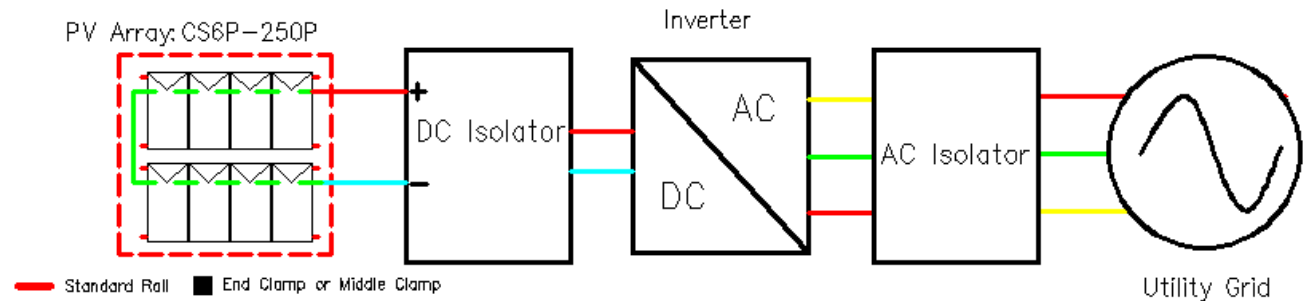
Additional Options

Item No.	Description	Qty	Unit	Specification	Remark
1	Tile Roof Hook	12	pcs	For C wind zone in Australia	Include hook, bolt etc.
2	Tile Roof Hook	14	pcs	For D wind zone in Australia	Include hook, bolt etc.
3	Array DC Isolator Kit	1	set	DC,2P,16Amp, 1000V	

CanadianSolar Roof Kits 2kW



Total Kits Lead Time: 60 Days After PO



Nominal Maximum Power (Pmax)	CS6P-250P
Optimum Operating Voltage (Vmp)	30.1V
Optimum Operating Current (Imp)	8.3A
Open Circuit Voltage (Voc)	37.2V
Short Circuit Current (Isc)	8.87A
Module Efficiency	15.54%
Operating Temperature	-40 °C~+85 °C
Maximum System Voltage	1000V (IEC) / 1000V (UL)
Maximum Series Fuse Rating	15A
Application Classification	Class A
Power Tolerance	0 ~ +5W

CSI-2000-TL

Max. DC power [W]	2300
Max. DC voltage [V]	450
Max. input current [A]	12
MPP trackers / Strings per MPP tracker	1/2
MPPT voltage range [V]	125-425
Nominal AC power [W]	2000
Max. AC power [W]	2000
Max. AC current [A]	10
Nominal AC voltage/ range [V]	230/203-267
AC grid frequency/ range [Hz]	50/48-50
Power factor (cosφ)	~1
Max. efficiency	97%
Euro efficiency	>96.00%
Total harmonic distortion (THDi) (at nominal power)	<1%



Canadiansolar 2kW Roof Kits BOM

Item No.	Description	Qty	Unit	Specification	Remark
1	Solar Module	8	Pcs	CS6P-250M,1638mm×982mm×40mm	(2×4) panels units, 2 strings, portrait configuration
2	Standard Rail	8	Pcs	Length=2100mm to support 4 module row	For 4 module row, 2 strings
3	Splice Kit	4	Pcs	used to join rails in 4 modules row	Rail joined through Splice Kit
4	Mid-Clamp	12	Pcs	For PV module with the thickness of 40mm	Include clamp, washer, bolt etc.
5	End-Clamp	8	Pcs	For PV module with the thickness of 40mm	Include clamp, washer, bolt etc.
6	Tile Roof Hook	12	Pcs	For ceramic tile roof	Include hook, bolt etc , for A&B wind zone in Australia
7	Wood Screw Tapping	36	Pcs	For the Hook and the Purlins fixture	M6.3*80 self tapping screw, Decrement
8	Inverter	1	Pcs	CSI-2000-GW, Rated Power:2000W,IP65	CanadianSolar
9	DC Isolator Kit	1	Set	DC,2P,16Amp 1000V,IP65	Include Isolator enclosure & accessories
10	AC Isolator Kit	1	Set	AC,2P,20Amp 240V,C type,IP65	Include Isolator enclosure & accessories
11	Extension DC Cable	40	M	TUV 2PFG 1169 1*4mm ² PV cable	Include Cable End and QC4 connectors
12	Extension AC Cable	10	M	10m,3*2.5mm ² ;dual insulation	According to IEC standard
13	Earth Cable	20	M	1*4mm ² ;yellow/green line	
14	Installation Manual	1	Pcs		
15	Warning Label	1	Pcs		

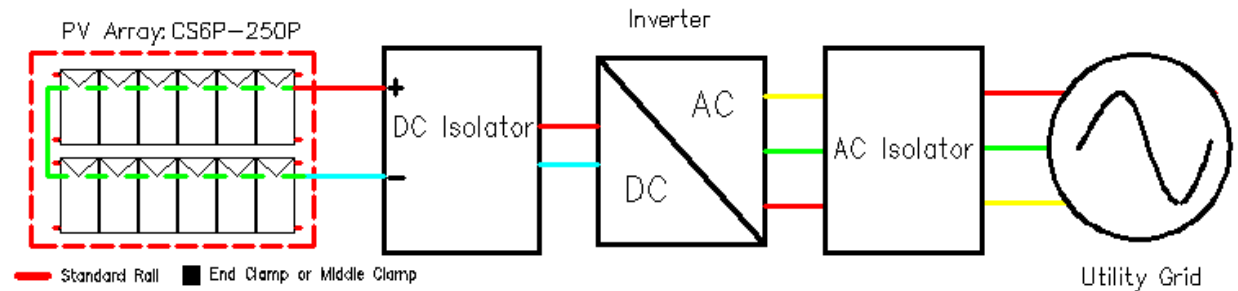
Additional Options

Item No.	Description	Qty	Unit	Specification	Remark
1	Tile Roof Hook	16	pcs	For C wind zone in Australia	Include hook, bolt etc.
2	Tile Roof Hook	20	pcs	For D wind zone in Australia	Include hook, bolt etc.
3	Array DC Isolator Kit	1	set	DC,2P,16Amp, 1000V	

CanadianSolar Roof Kits 3kW



Total Kits Lead Time: 60 Days After PO



Nominal Maximum Power (Pmax)	CS6P-250P
Optimum Operating Voltage (Vmp)	30.1V
Optimum Operating Current (Imp)	8.3A
Open Circuit Voltage (Voc)	37.2V
Short Circuit Current (Isc)	8.87A
Module Efficiency	15.54%
Operating Temperature	-40 °C~+85 °C
Maximum System Voltage	1000V (IEC) / 1000V (UL)
Maximum Series Fuse Rating	15A
Application Classification	Class A
Power Tolerance	0 ~ +5W

CSI-3000-TL

Max. DC power [W]	3200
Max. DC voltage [V]	500
Max. input current [A]	18
MPP trackers / Strings per MPP tracker	1/2
MPPT voltage range [V]	125-425
Nominal AC power [W]	3000
Max. AC power [W]	3000
Max. AC current [A]	15
Nominal AC voltage/ range [V]	230/203-267
AC grid frequency/ range [Hz]	50/48-50
Power factor (cosφ)	~1
Max. efficiency	97%
Euro efficiency	>96.50%
Total harmonic distortion (THDi) (at nominal power)	<1%



Canadiansolar 3kW Roof Kits BOM

Item No.	Description	Qty	Unit	Specification	Remark
1	Solar Module	15	Pcs	CS6P-250P, 1580mm × 808mm × 40mm	(2×6)panels units, two strings, portrait configuration
2	Standard Rail	8	Pcs	Length=3100mm to support module	For 6 module row, 2 strings
3	Mid-Clamp	20	Pcs	For PV module with the thickness of 40mm	Include clamp, washer, bolt etc.
4	End-Clamp	8	Pcs	For PV module with the thickness of 40mm	Include clamp, washer, bolt etc.
5	Tile Roof Hook	20	Pcs	For ceramic tile roof	Include hook, bolt etc. For A&B wind zone in Australia
6	Wood Screw Tapping	60	Pcs	M6.3*80 self tapping screw, Decrement	For the Hook and the Purlins fixture
7	Inverter	1	Pcs	CSI-3000-GW, Rated Power:3000W,IP65	CanadianSolar
8	DC Isolator Kit	2	Set	DC,2P,16Amp 1000V,IP65	Include Isolator enclosure & accessories
9	AC Isolator Kit	1	Set	AC,2P,20Amp 240V,C type,IP65	Include Isolator enclosure & accessories
10	Extension DC Cable	60	M	TUV 2PfG 1169 1*4mm ² PV cable	Include Cable End and QC4 connectors
11	Extension AC Cable	20	M	3*2.5mm ² ,dual insulation	According to IEC standard
12	Earth Cable	30	M	1*4mm ² ,yellow/green line	
13	Installation Manual	1	Pcs		
14	Warning Label	1	Set		

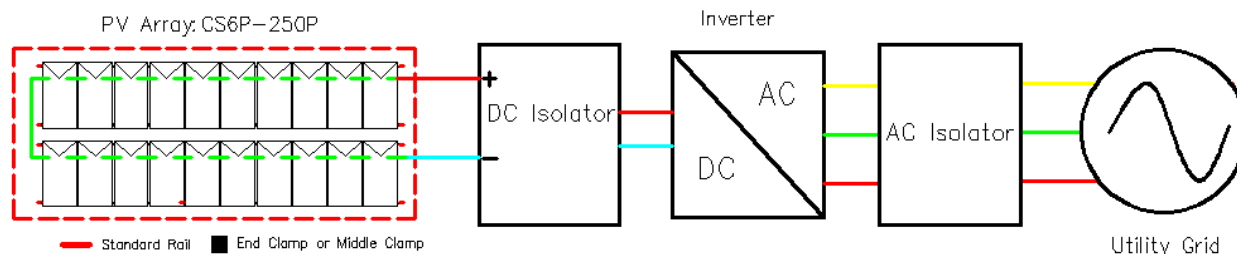
Additional Options

Item No.	Description	Qty	Unit	Specification	Remark
1	Tile Roof Hook	24	Pcs	For C wind zone in Australia	Include hook, bolt etc.
2	Tile Roof Hook	28	Pcs	For D wind zone in Australia	Include hook, bolt etc.
3	Array DC Isolator Kit	1	Set	DC,2P,16Amp 1000V,IP65	

CanadianSolar Roof Kits 5kW



Total Kits Lead Time: 60 Days After PO



Nominal Maximum Power (P_{max})	CS6P-250P
Optimum Operating Voltage (V_{mp})	30.1V
Optimum Operating Current (I_{mp})	8.3A
Open Circuit Voltage (V_{oc})	37.2V
Short Circuit Current (I_{sc})	8.87A
Module Efficiency	15.54%
Operating Temperature	-40 °C~+85 °C
Maximum System Voltage	1000V (IEC) / 1000V (UL)
Maximum Series Fuse Rating	15A
Application Classification	Class A
Power Tolerance	0 ~ +5W

CSI-5000-TL

Max. DC power [W]	5400
Max. DC voltage [V]	580
Max. input current [A]	20
MPP trackers / Strings per MPP tracker	1/3
MPPT voltage range [V]	125-550
Nominal AC power [W]	4600
Max. AC power [W]	5100
Max. AC current [A]	25
Nominal AC voltage/ range [V]	230/203-267
AC grid frequency/ range [Hz]	50/48-50
Power factor (cosφ)	~1
Max. efficiency	97.8%
Euro efficiency	>97.40%
Total harmonic distortion (THDi) (at nominal power)	<1%



Canadiansolar 5kW Roof Kits BOM

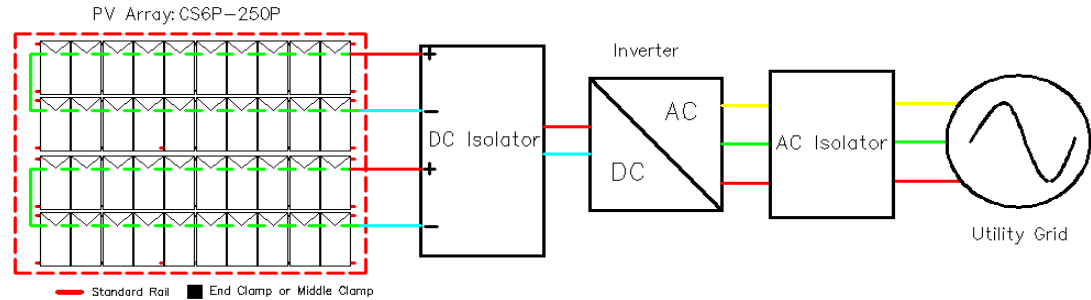
Item No.	Description	Qty	Unit	Specification	Remark
1	Solar Module	20	Pcs	CS6P-250P, 1638mm × 982mm × 40mm	(2 × 10) panel units, 2 strings Portrait configuration
2	Standard Rail	8	Pcs	Length=5100mm for 10 module row	For 10 module row, 2 strings
3	Splice Kit	4	Pcs	used to join rails in 6/7 module row	Rail joined through Splice Kit
4	Mid-Clamp	36	Pcs	For PV module with the thickness of 40mm	Include clamp, washer, bolt etc.
5	End-Clamp	8	Pcs	For PV module with the thickness of 40mm	Include clamp, washer, bolt etc.
6	Tile Roof Hook	32	Pcs	For ceramic tile roof	Include hook, bolt etc , for A&B wind zone in Australia
7	Wood Screw Tapping	96	Pcs	M6.3*80 self tapping screw, Decrement	For the Hook and the Purlins fixture
8	Inverter	1	Pcs	CSI-3000-GW, Rated Power: 3000W, IP65	CanadianSolar
9	DC Isolator Kit	2	Set	DC, 2P, 16Amp, 1000V, IP66, 2 Pcs	Include Isolator enclosure & accessories
10	AC Isolator Kit	1	Set	AC, 2P, 30Amp 240V, C type, IP65	Include Isolator enclosure & accessories
11	Extension DC Cable	100	M	TUV 2PFG 1169 1*4mm ² PV cable	Include Cable End and QC4 connectors
12	Extension AC Cable	30	M	3*2.5mm ² , dual insulation	According to IEC standard
13	Earth Cable	50	M	1*6mm ² , yellow/green line	
14	Installation Manual	1	Pcs		
15	Warning Label	1	Set		

Additional Options

ItemNo.	Description	Qty	Unit	Specification	Remark
1	Tile Roof Hook	40	Pcs	For C wind zone in Australia	Include hook, bolt etc.
2	Tile Roof Hook	48	Pcs	For D wind zone in Australia	Include hook, bolt etc.
3	Array DC Isolator Kit	1	Set	DC, 2P, 16Amp, 1000V.2 Pcs	

Canadian Solar Roof Kits 10kW

Total Kits Lead Time: 60 Days After PO



Nominal Maximum Power (P_{max})	CS6P-250P
Optimum Operating Voltage (V_{mp})	30.1V
Optimum Operating Current (I_{mp})	8.3A
Open Circuit Voltage (V_{oc})	37.2V
Short Circuit Current (I_{sc})	8.87A
Module Efficiency	15.54%
Operating Temperature	-40 °C ~ +85 °C
Maximum System Voltage	1000V (IEC) / 1000V (UL)
Maximum Series Fuse Rating	15A
Application Classification	Class A
Power Tolerance	0 ~ +5W

CSI-10KDT-TL

Max. DC power [W]	10200
Max. DC voltage [V]	580
Max. input current [A]	22/11
MPP trackers / Strings per MPP tracker	2/4
MPPT voltage range [V]	260-850
Nominal AC power [W]	12000
Max. AC power [W]	12000
Max. AC current [A]	19
Nominal AC voltage/ range [V]	230/203-267
AC grid frequency/ range [Hz]	50/48-50
Power factor (cosφ)	0.9
Max. efficiency	97.5%
Euro efficiency	>99.5%
Total harmonic distortion (THDi) (at nominal power)	<1.5%



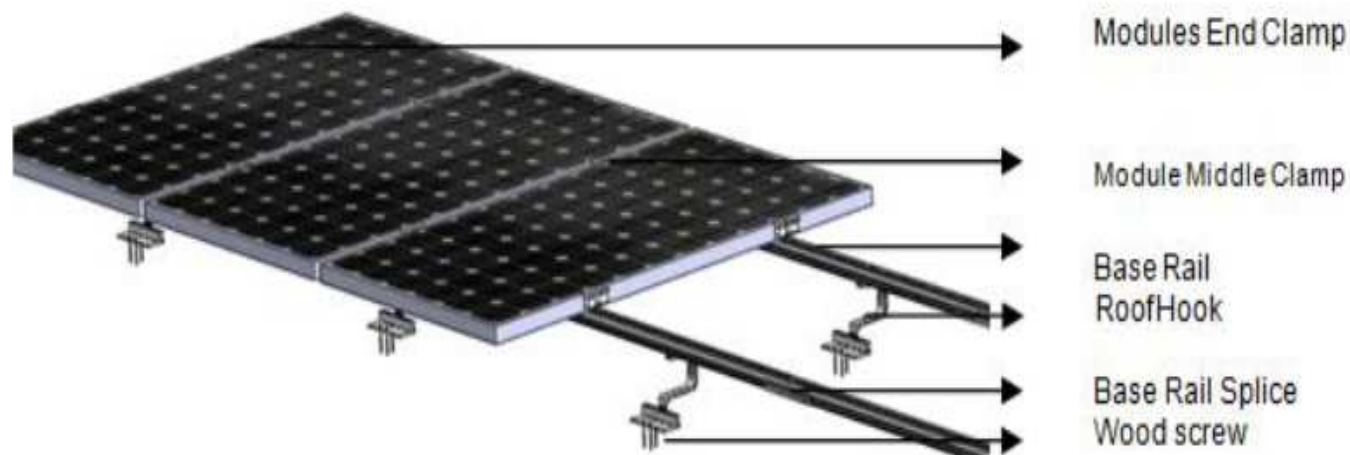
Canadiansolar 10kW Roof Kits BOM

Item No.	Description	Qty	Unit	Specification	Remark
1	Solar Module	40	Pcs	CS6P-250P, 1638mm × 982mm × 40mm	(4 × 10) panels units, 4 strings, portrait configuration
2	Standard Rail	16	Pcs	Length=5100mm for 10 module row	For 10 module row, 4 strings
3	Splice Kit	8	Pcs	used to join rails in 10 module row	Rail joined through Splice Kit
4	Mid-Clamp	72	Pcs	For PV module with the thickness of 40mm	Include clamp, washer, bolt etc.
5	End-Clamp	64	Pcs	For PV module with the thickness of 40mm	Include clamp, washer, bolt etc.
6	Tile Roof Hook	192	Pcs	For ceramic tile roof	Include hook, bolt etc., for A&B wind zone in Australia
7	Wood Screw Tapping	1	Pcs	M6.3*80 self tapping screw, Decrement	For the Hook and the Purlins fixture
8	Inverter	1	Pcs	CSI-10000-GW, Rated Power: 10000W, IP65	CanadianSolar
9	DC Isolator Kit	1	Set	DC, 2P, 16Amp, 1000V, IP66, 4Pcs	Include Isolator enclosure & accessories
10	AC Isolator Kit	1	Set	AC, 3P, 63Amp 240V, C type, IP65	Include Isolator enclosure & accessories
11	Extension DC Cable	200	M	TUV 2PFG 1169 1*4mm ² PV cable	Line from DC Arrester Combiner to inverter. Cable end
12	Extension AC Cable	60	M	3*6mm ² , dual insulation	According to IEC standard
13	Earth Cable	100	M	1*4mm ² , yellow/green line	
14	Installation Manual	1	Pcs		
15	Warning Label	1	Set		

Additional Options

Item No.	Description	Qty	Unit	Specification	Remark
1	Tile Roof Hook	80	Pcs	For C wind zone in Australia	Include hook, bolt etc.
2	Tile Roof Hook	96	Pcs	For D wind zone in Australia	Include hook, bolt etc.
3	Array DC Isolator Kit	1	Set	DC, 2P, 16Amp, 1000V, 4Pcs	

Overview Of System Components



Base Rail 40



Base Rail 34



Modules middle Clamp



Modules End Clamp



RoofHook 45/136-166



Wave support (for Tin Roof)



Base Rail 40/60 Splice



galvanised Corrugated Screw
6x80mm with Gaske

Support Structure Installation Instruction



1. Determine the positions of the roof hooks according to your plans. Remove the roof tiles at the marked positions or, if possible, simply lift them up slightly.



2. Fix the roof hooks to the rafter using 6*80mm timber screw.



3. The roof hook must not press against the roof tile. If necessary, shim the roof hook with wood.



4. Using an angle grinder or hammer to cut a recess in the tile that covers the roof hook at the point where the roof hook comes through for keeping the tile lies flat on the surface.

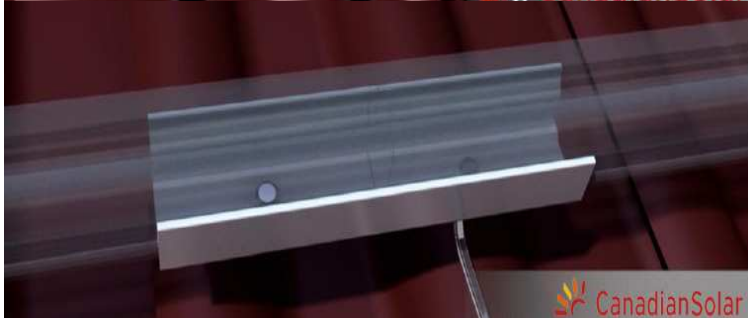


5. Put the base rail slide into the top of the roof hook, and fasten tightly using the nut (recommended torque is 18Nm).

Support Structure Installation Instruction



6.Put the Splice kits under the rails halfway, fasten the first M10*12 Allen bolt firmly using the Allen key, so does the other side of the splice kits.



7.Put the module end clamp inset the base rail, tightly against the module and fasten slightly using the Allen bolt(recommended torque is 15 Nm).



8.Put module middle clamp inset the rails from above, place it firmly against the module and fasten loosely, then insert the next module against the previously installed module and tighten the inter-module clamp using the Allen key(recommended torque is 15 Nm).



Roof Kits Packaging Information

	1.5kW Total Kits	2kW Total Kits	3kW Total kits	5kW Total Kits
20 Ft Container (GP)	12 Sets/Container	10 Sets/Container	8 Sets/Container	6 Sets/Container
40 Ft Container (GP)	26 Sets/Container	22 Sets/Container	18 Sets/Container	14 Sets/Container

Remark:

- I The total kits package information is just the general configuration and the package information for the system installed on the ceramic tile rooftop;*
- II If the system is installed on the concrete rooftop, the color steel rooftop or other roof top, the configuration will be adjusted for the different kinds of the rooftop;*
- III If the installation site is in the area of strong wind, heavy snow or nonstandard rooftop, the system will be recalculate according to the different countries' standard.*

Thank you !