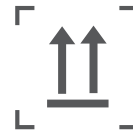
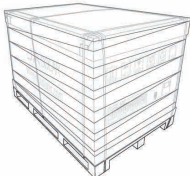
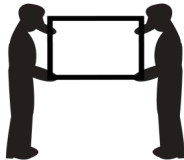


TRANSPORT AND STORAGE REQUIREMENTS, STANDARD UNPACKING INSTRUCTION OF JA SOLAR PV MODULES



Transport and Storage Requirements of JA Solar PV Modules

1. There is a layer of plastic film surrounding the JA Solar PV Modules package (hereinafter referred to as "Modules"); it can protect the package from general dirt and water. There is no need to remove the film if the pallet is in a long-distance transit or in long-term storage. 	2. The package can be shipped by land, sea or air. The Modules are fragile: please ensure that the package won't roll or fall down during the transportation. It is better if the package is fastened to the transportation platform. The package should not be shocked.  	3. The package is not completely damp-proof. The damp may be damaging if it penetrates the package material since it can reduce its structural strength. The package must not get wet during the transportation and storage. Please maintain the package remains in a ventilated, damp-proof and dry place. 
4. JA Solar Modules package can be stacked up to two layers. The total stacking quantity must not exceed two layers. 	5. In order to avoid any damage do not step on the package. 	6. Please follow the 'Unpacking Instruction of JA Solar PV Modules Standard Package' to open the package. 
7. It's forbidden to put the package together with corrosive chemicals, inflammable and explosives, please away from these. 	8. If the package has been exposed to humidity or water unpack and take out the Modules carefully, put them in a ventilated place to prevent them from mildew. The total stacking quantity of modules should not be more than the quantity of Modules in the package.	9. Two persons are required to handle a single module at any time, preventing damage to the module.  MODULES SHOULD BE HANDLE BY 2 PERSONS

Standard unpacking Instruction of JA Solar PV Modules

Equipment and Toll: cutter, glove and forklift.

Operators: No less than 4 persons.

Attention:

1. It is forbidden to unpack the package outdoor when it is raining. The carton will become soft and the PV module (Hereinafter referred to as "Modules") will slip out of the package.
2. The operators need to be careful on a windy day; in strong wind conditions the operators must not operate and unpack the package.
3. It is preferable not to move the Modules from the package if not needed to and to fasten those which have been unpacked.
4. The unpacking location ground should be stable for setting the package and avoiding the collapse of the box.
5. Please wear gloves throughout the entire unpacking process in order to protect your hands and avoid leaving handprint on the surface of the glass, cotton gloves are recommended.

Unpacking process:

1. Use a forklift to transport the packing carton with the underneath pallet to the operation area. The package must not be shocked or shaken when moving it.

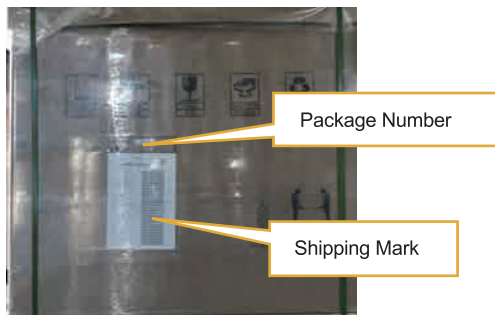
The forklift arms should be long enough to avoid the package toppling backwards when moving the packages. If using a hand-push forklift, the customer is recommended to move the package through the short-side. If the long side of package is used, the minimum height of the size of the hand push forklift is recommended to be less than 65mm. The hand push forklift is only used on loading, not transporting.

The long-side of the package should be placed near a wall, a strong support or another unpacked package of the same specification (Hereinafter referred to as "upholder"). The upholder should be parallel to the package long-side and the distance should be 15~20cm.

(Note: The content of the labels on the carton will be different according to the exact product type and batch, all below pictures are only for reference.)



2. Check if the packing label is complete, for example, check the module power and other information on the shipping mark.



3. Remove the upper plastic straps

Find the joint of the straps, grab the two ends of the strap with two hands and pull in the opposite direction in order to divide them. During operation, please wear gloves and pay attention to burr so as not to scratch hands.



4. Remove the plastic protective film on the top.



5. Removal of the strapping film.

Rip the protective film outside the package with a cutter or other cutting tool. Be careful not to scratch the box. Then remove the protective film and remove the plastic straps finally. Pay attention to wear gloves during the operation to prevent to scratch hands.



6. Open the package.



7. Removal of the peripheral board.

The modules with frame: One person stand each on the short side of the box, ready to hold the modules and prevent the modules from tipping after the peripheral board is disassembled. The other two persons pull the peripheral board up and then place the board between the package and the upholder to protect the modules. Two persons push the modules softly and keep the module line against the upholder. The upholder is required to support not less than 1 ton weight.



The modules with no frame: Two persons pull the peripheral board up and then place the board between the package and the upholder to protect the modules.



8. Removal of the Module.

The modules with frame: Two persons take the short-side frame of the module separately and pull the module at the same time in order to move the module.

The operators must use the gloves throughout the transportation of the module to protect their hands and prevent from scratching. The inside of the frame has to be taken to move the Modules. The fingers must not touch the glass surface to avoid leaving fingerprints on glass surface.



Then two persons remove all the modules one by one. If the Modules are not installed immediately and you need to put them horizontally, place first the package cover on a pallet. Then put the first module into the cover and keep it glass face up. Then stack other Modules on the top and keep them glass face down. When the Modules are stacked horizontally, the frames should be alignment, the paper corners of the module should not be torn off and should be completely retained, and the maximum number of Modules is no more than the number of Modules in one package.



The modules with no frame: Two persons take the short-side of the module separately and pull the module at the same time, lift the modules vertically up from the slot and move the modules. The operators must use the gloves throughout the transportation of the module to protect their hands and prevent from scratching.



9. Note: The Modules must be stacked trimly, if moving the modules horizontally, please use the packing belt to fix the modules, otherwise the Modules may lean or even fall down during the transportation. Lift the Modules by the frame only; when carrying and lifting the Modules be careful not to twist the Modules.

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