

Panels produced by ASSAN PANEL are produced with great consideration and caution in order to achieve the Customer Satisfaction, and the materials are delivered to the vehicles of the Customers and the Dealers with caution. Because, the materials and products should be handled with duly care in the transportation and unloading in the execution sites, and they should be protected against natural conditions (rain, mud, and etc.).

The proper handling, stacking and protection of thee materials are specified in this document.

a) Unloading from Vehicle

A crane should be used when unloading the materials brought to the application site as stacked on the vehicles in bundles and taking them to the roof directly from the vehicles. Especially, for the bundles with heights more than 8 meters the usage of a crane will minimize any possible damages to the materials during the handling.

If the length of the bundle is between 6 and 8 meters, then a forklift with wide forks (~3.5 m) should be used, and for the bundles with length less than 6 meters a forklift with narrow forks (~1.2 m) shall be used. When handling with forklifts, the projected parts of the bundles should not exceed 2 to 2.5 meters from the forks.

The matters which should be considered when using crane:

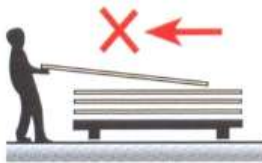
1. The below measurements and adapter length should be complied with in order to insure the balanced handling and transportation will be conducted through a crane.
2. The ropes should be made of nylon, hemp or silk, ad steel or chain ropes will not be used.
3. The wooden wedges should be inserted at the places of the ropes to prevent any harm from the ropes to the materials, and the wedges should be projected as 3 to 5 cm from the bundle.
4. If the materials are moved to the roof in bundles, then the bundles should be loaded to the system balanced and no bundle should be inserted on the scissors. If the gaps between the bundles are set to provide the lowest vertical bearing, then it will be convenient for occupational safety and speed.



b) Stacking Manually

If the material is pulled from the stack in the Site manually, then the following issues should be considered in order to prevent the scratching probability in the painted sheet panel and single layer trapezes.

1. The material should not be pulled by gripping from only one side.
2. The materials should not be slid or dragged on the purlins when putting on the materials.
3. When the material is pulled from the stack or put in the place on the roof, the short materials ($\leq 6-7$ m) should be gripped from both sides, and long materials (> 7 m) should be gripped from both sides and the center as balanced.
4. When the material is moved the material beneath the other one should not be stepped up or walked over.
5. If any side is projected or ear is left on the panels over the roof, the panel should not be gripped from this part by gripping it.

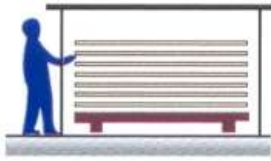


Do not drag panel's in a pile, or on the roof purlins. Lift panel's from both ends when moving or laying in place.

c) Stocking

If the materials are not taken to the roof directly, then they should be stacked in a suitable place not leading to re-stacking in this area.

1. The first preference is the stock area in the long term storing. In addition to this, the materials in the closed stock area should not be deprived of the air (the excessive heat difference in the stocking area is ($\Delta T 10$ °C) and they should not be stored in the areas with the relative humidity more than 70%). The most important aim in the closed stacking and not preventing the air circulation are to prevent the water and wet permeability, leading fade-out in the contact points. These fade-outs shall not damage the structure of the materials and lead bad appearance esthetically.
2. In the event of storing for dew days, a nylon or tint should be put on the panels not to touch with the material and not to prevent air circulation.
3. Especially protective film coated painted metal sheets should be protected from the direct sun ray. The thin polyethylene films on the painted metal sheet will be bonded with the panels firmly under the direct sun.

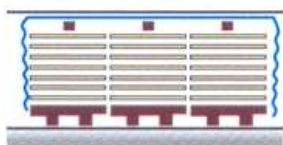


Panel's to be stored on site for long periods should be stacked in covered areas. Wherever possible, always place stacks preferably on wooden wedges, against ground water.

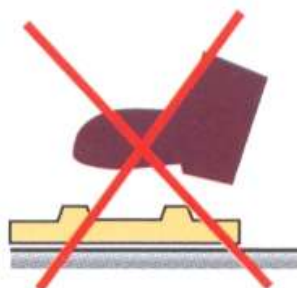
d) Stack Type

The following issues should be considered when stacking the panels regardless the duration of stacking.

1. Tow bundles should be put over each other at most.
2. The wedges should be put to provide a slope. (Around ~%2-3)
3. The height of wedge should be 3 to 5 cm and the distance between the wedges should be 2m.
4. No wedge should be put at the pallet height under the bundle tips if there are wood pallets under the bundles.
5. The wedges between the bundles should be inserted to allow the wedges to be at the same height.
6. Polyurethane or wood wedges should be used as wedges.
7. The panels stacked at the ground or standing individually should not be stepped over or walked over.



For shorter periods stacks should be arranged on sloppy areas with a simple scaffolding and polyethilen coverleaving space for ventilation. Place stacks on a simple wedge.



Do not walk on panels.