ANA Cargo Packaging Guideline (ANA International cargo)



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Packaging of air cargo

In order to safely deliver the cargo accepted from the customers to the final destination airport, it is necessary for the customer to appropriately package the shipments. For safe, prompt and reliable delivery, ANA cargo packaging guideline has been provided. Though ANA is making evert efforts to enhance its transportation quality, due to safety security reason, cooperation of endurable packaging for the air transport is kindly required.

Air cargo packaging responsibility

There are 3 safety, "safety of aircraft", "safety of worker", and "safety of cargo", for air transportation.

To secure safety, packaging plays an extremely important role The IATA (The International Air Transport Association) regulations stipulates, "The shipper is responsible for appropriate packaging of the cargo to ensure safe carriage and to withstand any incidents occurred under normal handling and transportation." (cf.: TACT Rules Manual 2.3.1.1)

Cargo with inappropriate packaging may be requested to be re-packaged. In case the damage is caused by inappropriate packaging, carrier's responsibility is exempted from carriage conditions, as well as compensation claim may possibly be rejected.

Impact of inappropriate packaging for air transportation

- ①Collapse of cargo or leakage of contents may possibly damage other shipments or the aircraft. In such cases, compensation for damage to other shipment and aircraft repairment or cleaning expenses may possibly be claimed.
- ②Taking time for cargo loading, including build-up on aircraft pallet.container (ULD), will affect operation of the scheduled flight.
- ③Unable to effectively utilize cargo space due to inefficient build-up, including stacking, on aircraft pallet.container (ULD). Consequently, loadable cargo volume on entire aircraft will decrease, while booked shipments having offload risk, as well as being a cause of freight cost increase.



Acceptance

For other than already-built cargo on aircraft pallet.container (ULD), manual handling will be conducted at acceptance to confirm customer's shipment is "Ready for Carriage".



- ①Due to difference in height level when unloading cargo from truck with forklift, depending on loading method, freight handling may be difficult risking the cargo to be damaged.
- ②For loose cargo built on skids in unviewable condition, it will consume more handling time due to outer package and label, etc. are required to be checked.

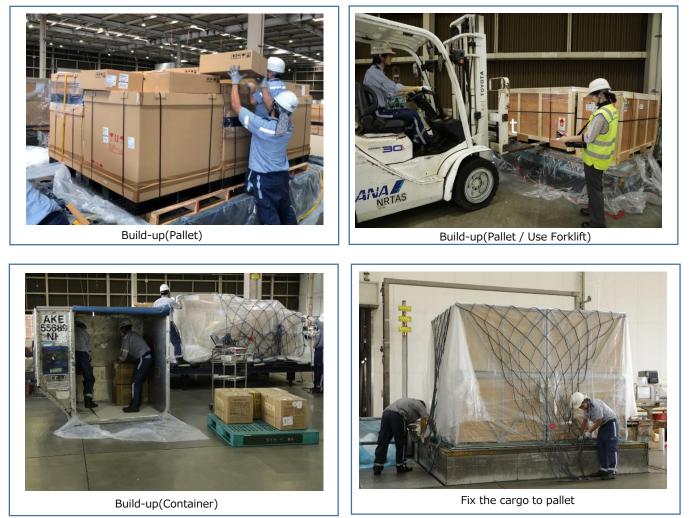
③Forklift entry is necessary to enable forklift handling.



2. Air cargo flow

Build-up

Cargo accepted from the customers are to be built-up on same aircraft pallet or container with other customers' to effectively utilize aircraft's cargo space.



①For build-up of heavy cargo, forklift will be used. Forklift entry is necessary to enable forklift handling.

②Build-up of loose cargo will be done manually.

③In case of built-up on pallets, net must be tightened to fix the cargo. Cardboard box lacking strength may possibly have its corner crushed or deformed.



2. Air cargo flow

Transfer to aircraft

ULDs will be transferred to shipside on towing vehicle for container or pallet dollies.



①During transfer, cargo may be impacted with certain degree of shock by ditches, pavement seam, or level difference around the aircraft parking spot.

Loading on aircraft

ULDs will be loaded on the aircraft using special vehicles (high lift loader, belt loader, etc.).



①Cargo built-up on ULD will be lifted for loading.

⁽²⁾Cargo loaded in BULK together with MAIL and checked baggages may slightly move depending on flight condition due to firm lashing being difficult.

③During the flight, aircraft may shake or tilt giving certain load to the cargo.



Due to efficient build-up is necessary utilizing the limited space, packaging with sufficient strength and flat top surface is required assuming to be stacked.

[In case only cardboard is to be delivered for acceptance]

①No damage on outer package of cardboard and sealed without gap

Appropriate



②In case outer package is softened due to recycle use or containing moisture, there may be possible risk of damaging the cargo with dent, crush, or tear.

Inappropriate



③In case there is any gap between the outer package and contents, the cargo may have possible risk of dent or crush.

Inappropriate



3. Request for cooperation regarding cardboard packaging

[Weight of cardboard itself is 20kg or more] %Using skids is recommended

①When building-up cardboard packaged cargos on same skid in one direction, or stacking in every direction overhanged from the skid, there is a risk of collapse due to dent or crush caused by giving load to lower part.

Inappropriate



②In case the cargo and cardboard-made skid is integrated, due to forklift claws directly contacting the cargo, there is possible risk of causing dent or crush in the bottom part. Also, paper-made skid will absorb water, which may be a risk to weaken its strength.

Inappropriate





3. Request for cooperation regarding cardboard packaging

③When building-up cardboard packaged cargos on same skid, lashing with bundle in one direction only may get loose which is a risk of causing collapse, so that cross-bundling is recommended.

Appropriate

Inappropriate



(4) When building-up cardboard packaged heavy cargos together on same skid, there is a risk of causing collapse if lashing is done with only shrink wrap.



(5) Any unevenness in the upper part may have risk to cause damage and space can not be effectively utilized.





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3. Request for cooperation regarding cardboard packaging

⑥ In case there are any spaces between the packages, the spaces are properly covered with wrapping film to prevent any small packages unintentionally mixed up.

Appropriate



⑦In case there are spaces or gap between the packages, there is a risk that other cargo may get into the space or gap. It may lead a small cargo to be missing. Please cover the space or gap in wrapping film etc.

Inappropriate

In case there are any spaces between wrapping film, it may be a risk of small packages mixed up.



In case there is any space at the center of square shaped built up packages on the skid, it may be a risk of small packages mixed up.





4. Requirement for Wooden box/frame. Steel frame

Though packaging with wooden box or wooden frame is stronger than cardboard, if in case package is insufficiently sealed or the contents not tied-down, there is a risk to cause damage.

Since it is necessary to efficiently build-up in the limited space, on assumtion to be stacked, delivery for acceptance of the cargo shall be packaged completely sealed, and the top surface being flat with sufficient strength.

%For certain cargos, such as glasswares, cylinders, auto parts, if especially packaged with sufficient cushioning material or strong skid, wooden box, frame box, skid with base for oversize/heavy cargo, transportation is possible.

In case of inappropriate packaged cargo for air transportation, following problems will occur.

①In case there is any crack, tear, nail protrusion, or peeling of joint in the outer package, it may be a risk to damage other cargo.

Inappropriate



②In case sufficient cushioning material is not used for fragile contents, there is a risk of damage during freight handling or air transportation.

Inappropriate



4. Requirement for Wooden box/frame. Steel frame

③Upper part and side of cargo package is necessary to be firmly fixed. There is a risk of damaging the contents itself or other cargo as well.

Inappropriate





④In case top board has any unevenness or protrusion, due to risk of damaging other cargo and is difficult to build-up with other shipments, it may possibly be unable to secure space. Please contact when making reservation.

Inappropriate

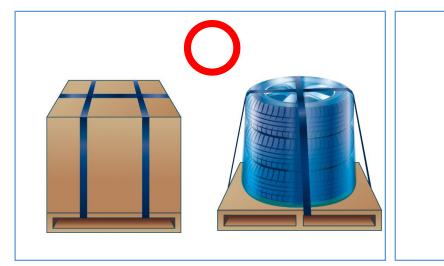


⑤In case forklift claws is difficult to be inserted due to insufficient height (less than 10cm) of skid's entry, there is a risk of the cargo to turnover or to be damaged.





Request for cooperation regarding tires





For automobiles or other vehicles, pack in strengthened cardboard or cover with shrink wrap and fix with metal or firm plastic band on standard pallet

%In case the cargo's weight can be manually handled, and number of pieces is small, it is no problem not using skids

In case of inappropriate packaged cargo for air transportation, following problems will occur

- ①In case tire is not firmly fixed, there may be a risk to damage other cargo during transportation.
- ②In case the top board has any unevenness or protrusion, due to risk of damaging other cargo or not able to securing space for the tire itself, the shipment may possibly be unable to load on scheduled flight.

For automobile transportation, please check here. <u>https://www.anacargo.jp/ja/int/service/vehicle.html</u>



Request for cooperation regarding drum cans



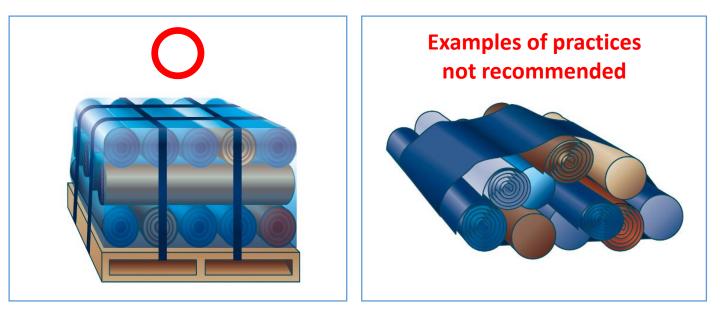
In the case of liquid or gel goods (solid goods are also included in the case of dangerous goods) in a single packaging like above, ANA obligates to use appropriate protective materials, in minimum, protecting both top and bottom side of the container by over-pack packaging.

For over-pack Requirement, please check here. https://www.anacargo.jp/en/int/regulations/overpack.html

- ①In case there is any crack, tear, nail protrusion, or peeling of joint in the outer package, it may be a risk to damage other cargo.
- ②In case the top board has any unevenness or protrusion, due to risk of damaging other cargo or not able to securing space, the shipment possibly be unable to load on scheduled flight.
- ③In case the cargo is bundled in one direction only, lashing will be insufficient, possibly causing turnover during the transportation.



Request for cooperation regarding textile goods



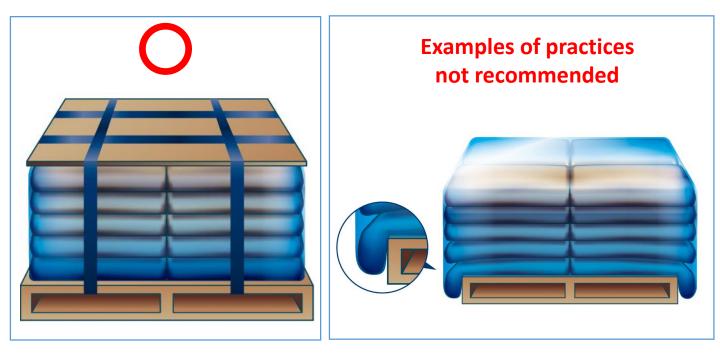
For rolled carpets or cloths, alternately stack on a skid, and surely stabilize with shrink wrap and fixing band.

※In case the space between skid boards is wide, be careful of the rolled cargo to be caught in between and bend. (Use skids with narrow space between the boards, or, lay thick paper on the skid)

- ①In case the space between skid boards is wide, the rolled cargo may be caught in between and bend. When handling with forklift, it may possibly damage the cargo with its claws.
- ②In case the top board has any unevenness or protrusion, due to risk of damaging other cargo or not able to securing space for the textile itself, the shipment may possibly be unable to load on scheduled flight.



Request for cooperation regarding cement sacks



Sacks (cement, etc.) shall be a size to fit on the skid, and a sheet to be laid on skid, stabilizing with fixing bundle.

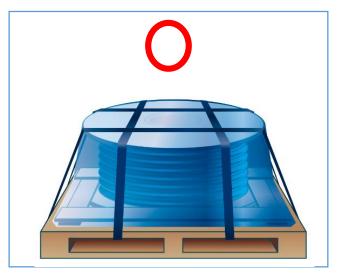
In case of inappropriate packaged cargo for air transportation, following problems will occur

①In case the space between skid boards is wide, bag may be caught in between and bend. When handling with forklift, it may possibly damage the cargo with its claws.

②In case the top board has any unevenness or protrusion, due to risk of damaging other cargo or not able to securing space for the bag itself, the shipment may possibly be unable to load on scheduled flight.



Request for cooperation regarding cables



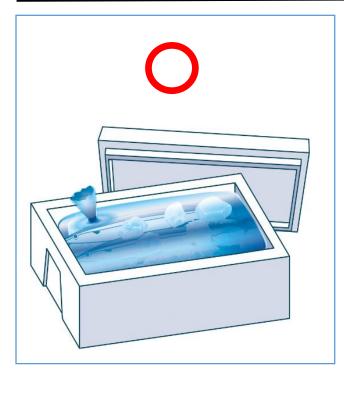


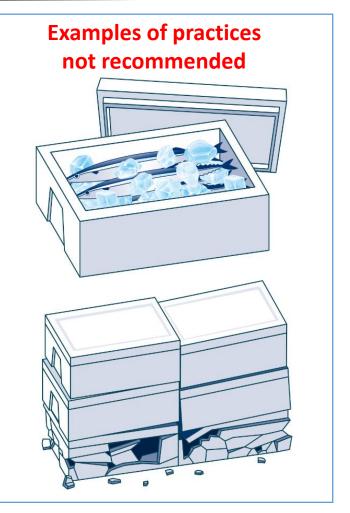
Due to cable not being suitable for transportation by only itself, be sure to load on a skid and cover with shrink wrap, as well as lashing with fix band (in multiple direction) for stability.

- ①In case there is any crack, tear, nail protrusion, or peeling of joint in outer package, it may be a risk to damage other cargo.
- ②In case the top board has any unevenness or protrusion, due to risk of damaging other cargo or not able to securing space, the shipment may possibly be unable to load on scheduled flight.
- ③In case the cargo is bundled in one direction only, lashing will be insufficient, possibly causing turnover during the transportation.



Request for cooperation regarding styrofoam





In case perishables is to be contained in styrofoam, cover the contents with plastic sheet and apply preventive packaging for leakage. In addition, use styrofoam with sufficient strength to withstand freight handling.

- ①In case of insufficient strength, cargo may be damaged during freight handling such as stacking, possibly causing leakage of contents.
- ②In case the contents is not covered with plastic sheet, etc., there is possibility of liquid leakage damaging other shipments. Also, depending on substance of the liquid, it may possibly damage the aircraft.



Request for cooperation regarding packages with casters

In case packages have casters, there is a risk for safety that casters may move or that packages with casters would fall down during handling. There is a risk that the falling may cause damage to the package itself or other customer's packages.



Example of practice not recommended

When casters don't have a stopper or it is unlocked or when the gravity is not at the center such as the roll pallet below example whose the center of gravity is positioned on one side, the risk of falling down may increase.





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