
ANA Cargo Packaging Guideline

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1. Air cargo

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 every effort to enhance its transportation quality, due to safety security reason, cooperation of durable 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 stipulate, "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 rulebook 2.3.1.1, 2.3.2.1.d)

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

- ① Collapse 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.
- ② Taking time for cargo loading, including build-up on aircraft pallet·container (ULD), will affect operation of the scheduled flight.
- ③ Unable 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.

2. Air cargo flow

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".



Unloading from truck



Cargo acceptance check

- ① Due 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.
- ② For 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.
- ③ Forklift entry is necessary to enable forklift handling.

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.



Build-up(Pallet)



Build-up(Pallet / Use Forklift)



Build-up(Container)



Fix the cargo to pallet

- ① For build-up of heavy cargo, forklift will be used. Forklift entry is necessary to enable forklift handling.
- ② Build-up of loose cargo will be done manually.
- ③ In 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.

Transfer to aircraft

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



ULDs will be carried out from the warehouse on dollies

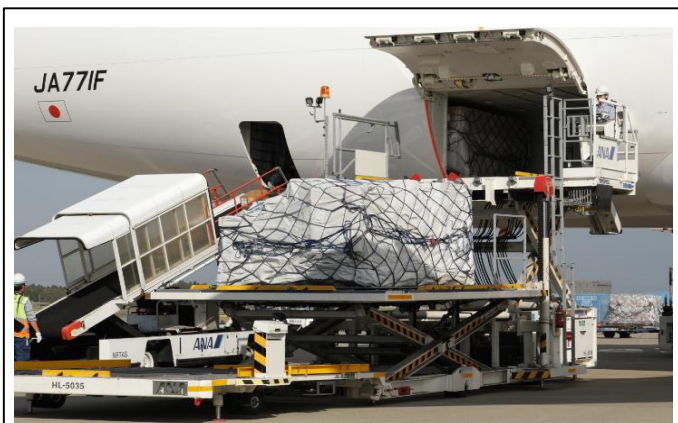


Transfer to shipside

- ① During 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.).



Lift-up and lift-down of ULDs



Loading in BULK

- ① Cargo 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.
- ③ During the flight, aircraft may shake or tilt giving certain load to the cargo.

3. Request for cooperation regarding cardboard packaging

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】

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

Appropriate



② In 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



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

Inappropriate



【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



④ When 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



⑤ 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.

Inappropriate



⑥ Any unevenness in the upper part may have risk to cause damage and space can not be effectively utilized.

Inappropriate



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 assumption 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



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- ③ Upper 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



- ④ In 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



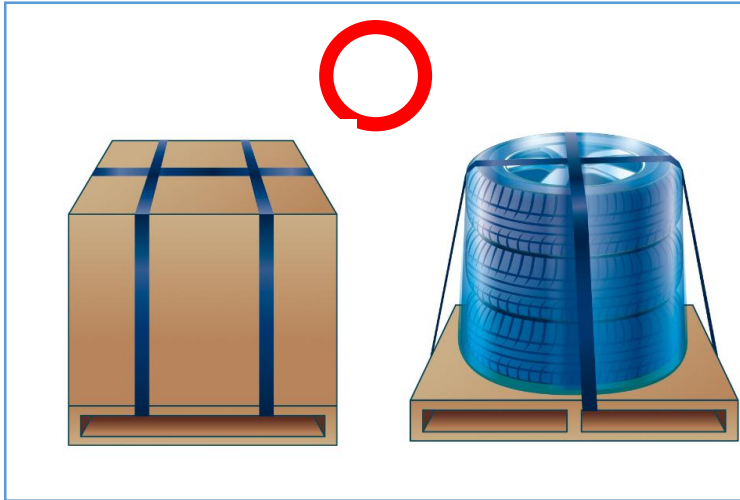
- ⑤ In case forklift claws is difficult to be inserted due to insufficient height (less than 10cm) of skid's entry, there is a risk of the cargo to turnover or to be damaged.



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5. Packaging of other commodities

Request for cooperation regarding tires



Examples of practices not recommended



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.

<https://www.anacargo.jp/ja/int/service/vehicle.html>

Request for cooperation regarding drum cans

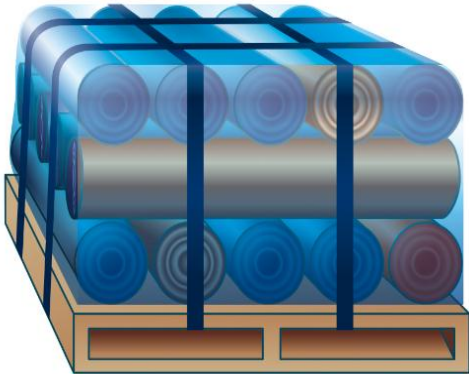


In case dangerous liquid goods is contained in single container of steel drum or steel jerrycan, ANA obligates to use appropriate protective materials, in minimum, protecting both top and bottom side of the container by overpack packaging.

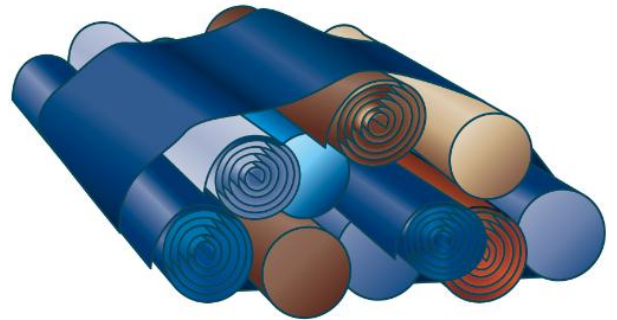
In case of inappropriate packaged cargo for air transportation, following problems will occur

- ① In 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.
- ② In 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.
- ③ In 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



Examples of practices not recommended



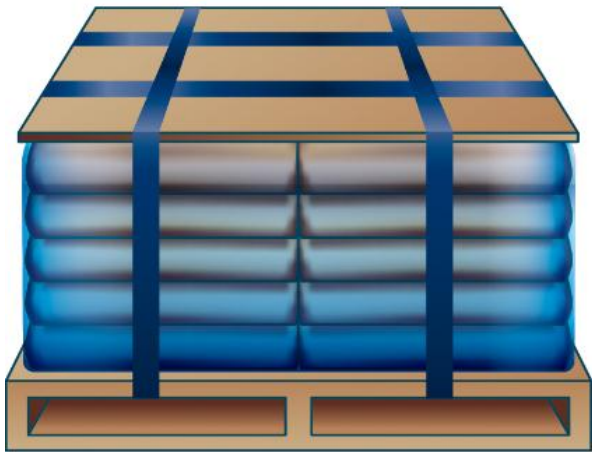
For rolled carpets or cloths, alternately stack on a skid, and surely stabilize with shrink wrap and fixing band.

※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)

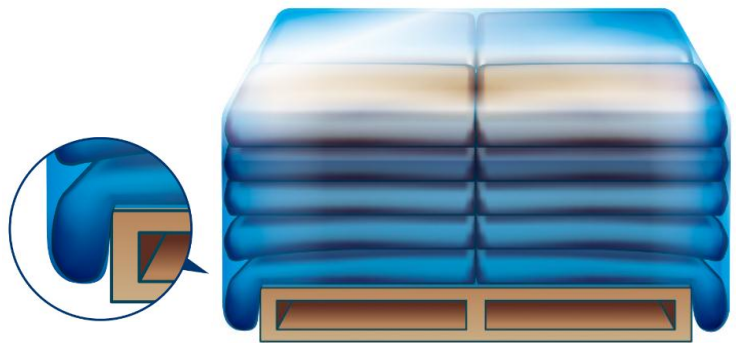
In case of inappropriate packaged cargo for air transportation, following problems will occur

- 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



**Examples of practices
not recommended**

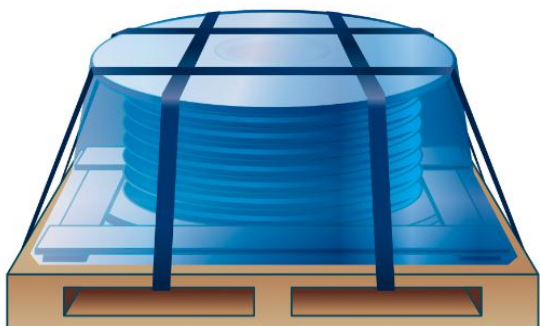


Sacks (cement, etc.) shall be a size to fit on the skid, and a sheet to be laid on skid, stabilizing with fixing bundle.

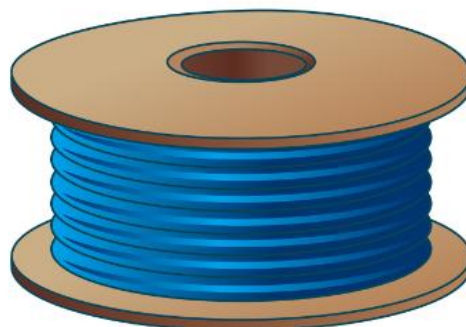
In case of inappropriate packaged cargo for air transportation, following problems will occur

- ① In 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.
- ② In 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



**Examples of practices
not recommended**

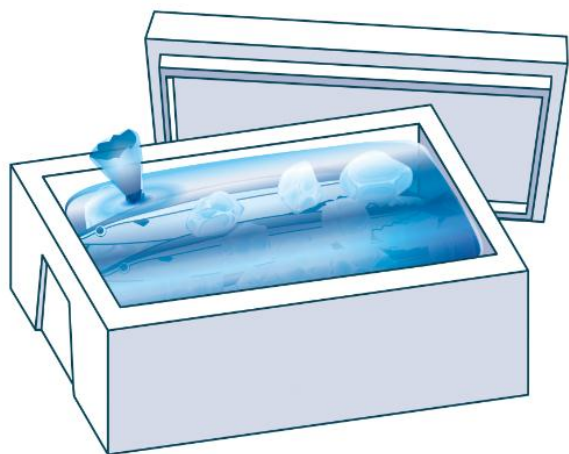


Due to cable not being suitable for transportation by only itself, be sure to load on a skid and cover with shrink wrap, as well as lashing with fix band (in multiple direction) for stability.

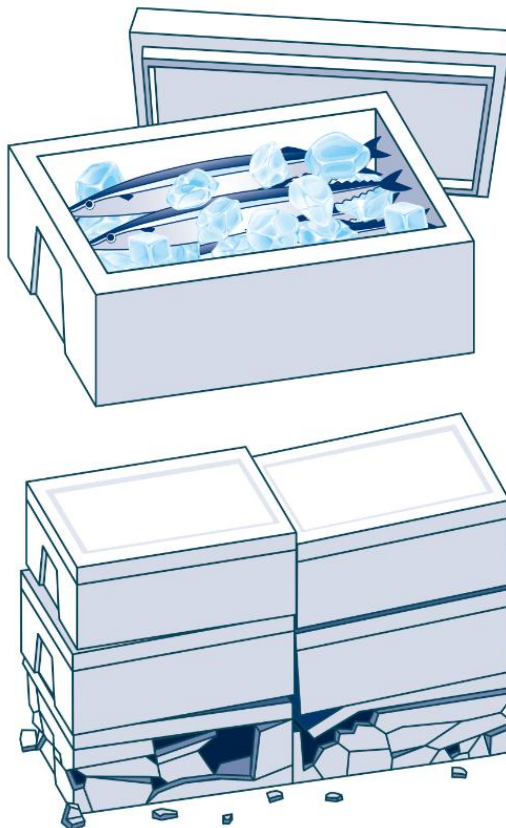
In case of inappropriate packaged cargo for air transportation, following problems will occur

- ① In case there is any crack, tear, nail protrusion, or peeling of joint in outer package, it may be a risk to damage other cargo.
- ② In 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.
- ③ In case the cargo is bundled in one direction only, lashing will be insufficient, possibly causing turnover during the transportation.

Request for cooperation regarding styrofoam



Examples of practices not recommended



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.

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

- ① In case of insufficient strength, cargo may be damaged during freight handling such as stacking, possibly causing leakage of contents.
- ② In 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.

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Issued : 1st OCT 2020

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