



LIBERTY LOGISTICS Int'l.

UNIT LOAD DEVICES

The term Unit Load Device (ULD) means any type of container with an integral pallet, or aircraft pallet whether or not owned by an IATA member, and whether or not considered to be aircraft equipped.

Aircraft ULDs

These are units that interface directly with an Aircraft loading and restraint system. They meet all normal restraint requirements without the use of supplementary equipment – providing they are loaded in accordance with the specific Aircraft Load and Balance Manual.

Such units become an integral part of the Aircraft structure, when loaded and are typically Certified Aircraft Containers or Pallet and Net assemblies.

Note: The Aircraft Load and Balance Manual includes controls for-

- The type, number and positions, that ULDs can be loaded.
- Their allowable Max Gross Weights
- Acceptable alternate ULD loading arrangements such as:-
 - Carriage of loads exceeding normal allowances.
 - Load limitations with broken/missing restraint components.

These controls may effect direct interlining of ULDs between Aircraft Types.

Aircraft ULDs may be loaned to shippers and agents for loading purposes provided they can prove that they are equipped and capable to handle them in accordance with the Aircraft Load and Balance Manual(s).

Non-Aircraft ULDs

These units do not interface with the aircraft restraint system. They must be registered with IATA and conform to IATA standard specifications. Non-aircraft ULDs, in order to be eligible for rating incentives, must be owned by a shipper or agent.

RATING OF ULDs

Method A

On certain routes, rating Method 'A' charges shall apply at the request of the

shipper for consignments carried from airport of departure to airport of destination entirely in ULDs. In order to qualify for Bulk Unitisation Rates, the cargo must be carried from origin to destination in the same ULD.

The charge for the consignment shall consist of a flat minimum (pivot) charge for a specified pivot weight above which an additional charge (over-pivot rate) per kilo or pound will apply. Charges for airline owned Aircraft ULDs shall be based on the actual gross weight less the actual tare weight of the ULD.

Charges for shipper or agent owned Aircraft ULDs or Non-Aircraft ULDs shall be based on the actual gross weight less the actual tare weight, but not more than the IATA tare weight allowance for the particular ULD.

Method B

Discounts and tare weight allowances only apply when shipments are delivered to the airline packaged in registered shipper-owned, standard size non-aircraft units. Charges are based on the actual weight of the shipment, less the tare weight allowance, but not less than the minimum chargeable weight for the particular container used. The tare weight allowance is always that which is printed on the actual container. A discount is also granted under this programme, which refers to each type of non-aircraft ULD. The amount of discount can be deducted from the weight charge, but shall not exceed 10% of the charges applicable to the consignment carried in the ULD. In no case shall the charges established under method A be applied cumulatively with the discount authorised under rating method B.

Dangerous Goods, Live Animals and Human Remains will not be accepted in a ULD, either rated under methods A or B.

Further information on the rules applicable to ULDs and full rating tables can be obtained from: The Air Cargo Tariff (TACT). ABC Air Cargo Guide, British Airways Worldwide Cargo Tariff (Mini Tariff) or from British Airways World Cargo offices.



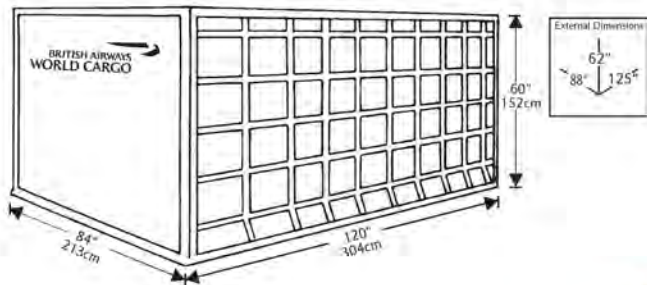
UNIT LOAD DEVICES

LD9
AAP

RATE CLASS 5

Wide body aircraft. Full width lower deck container. Suitable for the following aircraft: ■ Boeing 747, 767 & 777

| | | | |
|-------------|---------------------------|------------------|------------------|
| Volume | 350 cu. ft. (10.0 cu. m.) | | |
| Tare weight | 200 kgs/440 lbs | | |
| Max Gross | 747 | 767 | 777 |
| Weight | 6033kgs/13273 lbs | 4626kg/10501 lbs | 4626kg/10501 lbs |



UNIT LOAD DEVICES

LD3 AKE

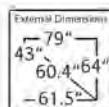
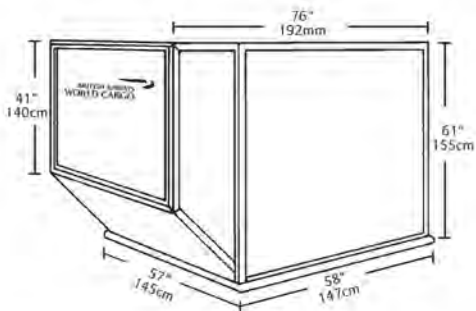
RATE CLASS 8

Wide body aircraft. Half width lower deck container. Suitable for the following aircraft: ■ Boeing 747, 767, 777, 757-200F

Volume 150 cu. ft. (4.2 cu. m.)

Tare weight 72 kgs/158 lbs

Max Gross Weight 1588 kgs/3493 lbs



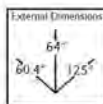
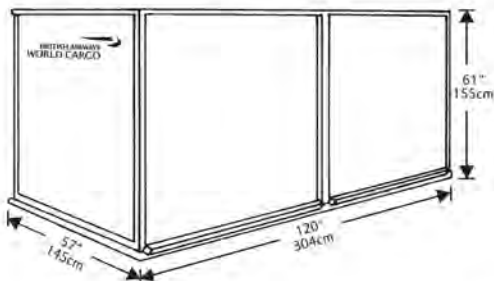
LD11 ALP/PLA

RATE CLASS 6

Wide body aircraft. ALP: Full width lower deck container.
PLA: Full width lower deck pallet

Suitable for the following aircraft: ■ Boeing 747 & 777

| | ALP | PLA |
|------------------|--------------------------|-------------------------|
| Volume | 240 cu. ft. (6.8 cu. m.) | 245 cu. ft (7.0 cu. m.) |
| Tare weight | 185 kgs/407 lbs | 73 kgs/161 lbs |
| Max Gross Weight | 747 & 777 | 747 & 777 |
| | 3175 kgs/6985 lbs | 3175 kgs/6985 lbs |



Centre post swings clear for loading

UNIT LOAD DEVICES

PAP/P1P/PAG for 757-200 Freighter

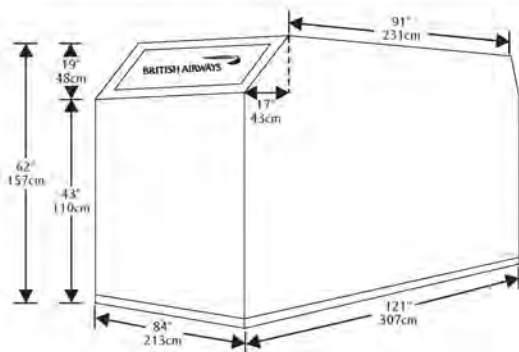
RATE CLASS 5

Wide body aircraft. Full width lower deck container. Suitable for the following aircraft: ■ Boeing 747, 767, 777, 757-200F

Volume 349 cu. ft. (9.83 cu. m.)

Tare weight 120 kgs/264 lbs

Max Gross Weight 4264 kgs/9402 lbs



PAP/P1P/PAG

RATE CLASS 5

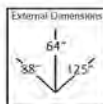
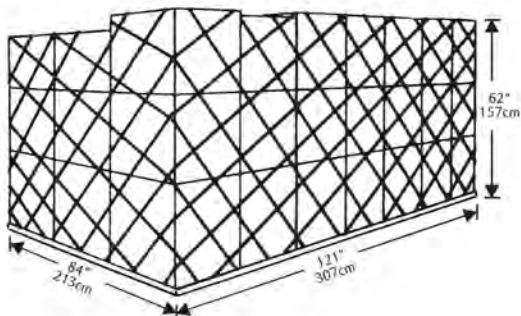
Wide body aircraft. Full width pallet with net.

Suitable for the following aircraft: ■ Boeing 747, 767, 777

Volume 240 cu. ft. (11.9 cu. m.) (with allowable overhang)

Tare weight 120 kgs/264 lbs

Max Gross Weight 747 767 777
6033 kgs/13273 lbs 4626kgs/10501 lbs 4626kgs/10501 lbs



AKH

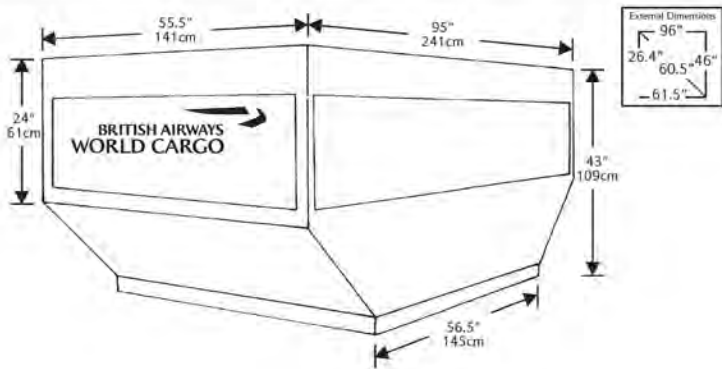
Lower deck container suitable for the following aircraft: ■ A320

Volume 120 cu. ft. (3.4 cu. m.)

Tare weight 76 kgs/167 lbs

Max Gross 1134 kgs/2499 lbs

Weight



LIBERTY LOGISTICS Int'l.

UNIT LOAD DEVICES

PMC

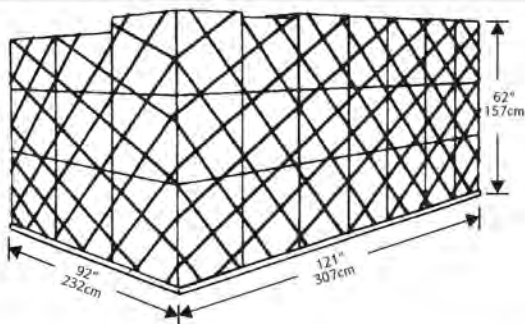
RATE CLASS 5

Wide body aircraft. Full width pallet with net. Suitable for the following aircraft: ■ Boeing 747, 767, 777

Lower deck pallet suitable for the following aircraft: ■ Boeing 747 & 767

| | | |
|------------------|---------------------------|--------------------|
| Volume | 450 cu. ft. (12.7 cu. m.) | |
| Tare weight | 130 kgs/286 lbs | |
| Max Gross Weight | 747 | 767 |
| | 5034 kgs/11075 lbs | 5103 kgs/11227 lbs |

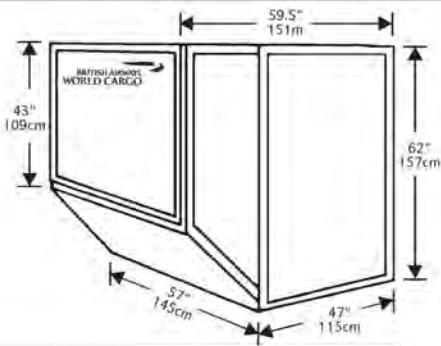
Please note that the maximum gross weight is variable for the different aircraft types, in case of transfer.



LD2
APE

Wide body aircraft. Half width lower deck container. Suitable for the following aircraft: ■ Boeing 767

| | |
|------------------|--------------------------|
| Volume | 120 cu. ft. (3.5 cu. m.) |
| Tare weight | 70 kgs/154 lbs |
| Max Gross Weight | 1225 kgs/2700 lbs |



AQF

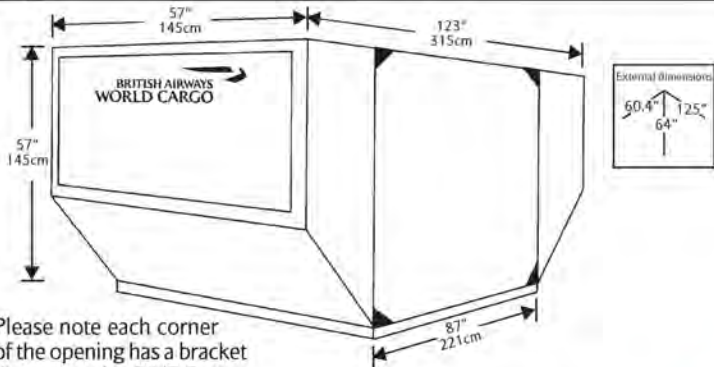
Lower deck container. Suitable for Boeing 767 only.

Volume 253 cu. ft. (7.9 cu. m.)

Tare weight 118 kgs/260 lbs

Max Gross 2449 kg/5400 lbs

Weight



Please note each corner of the opening has a bracket that protrudes 3"/7.5cm



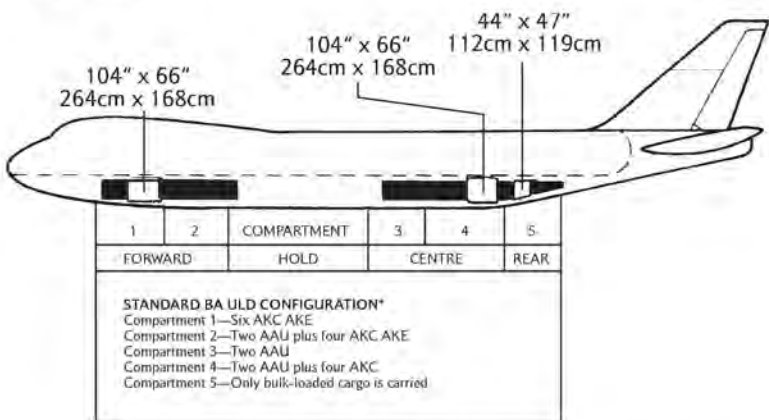
LIBERTY LOGISTICS Int'l

AIRCRAFT DIMENSIONS

BOEING 747-400

The Boeing 747-400 is a wide bodied long range passenger aircraft capable of carrying approximately 20 tonnes of cargo in addition to a full passenger load, although this figure varies dependent upon the route. The forward hold (compartments 1 & 2) and the centre hold (compartments 3 & 4) are designed for the carriage of ULD's only. Compartment 5 is for the carriage of loose cargo.

Door sizes



*The following equipment can be used in place of the 'Standard Configuration' to suit load requirements and to allow interchangeability with other carriers or aircraft.

Compartments 1 & 2 – AAU/ALP lower deck.

PAP/PLA pallets and nets.

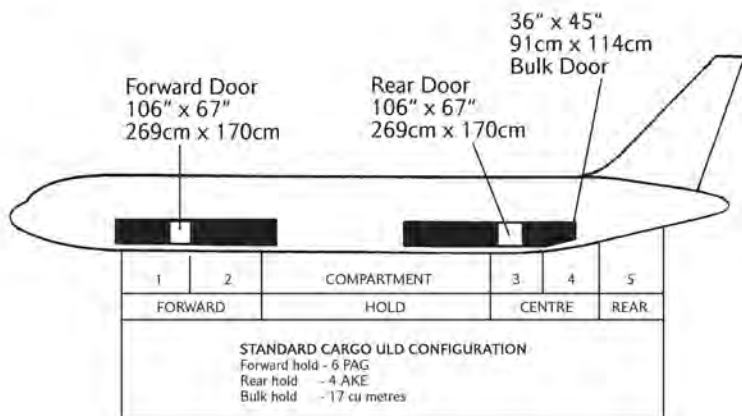
Compartments 3 & 4 – PAP/PAG pallets with nets or ALP.

AIRCRAFT DIMENSIONS

BOEING 777

The 777 is a wide body, medium to long range aircraft which can carry up to 14 tonnes (99.8 cu. metres) of cargo and mail. The aircraft has 5 holds (3 compartments), 4 (2 compartments) of which are designed to carry unit load devices with the compartment five (rear hold) available for bulk loaded cargo and mail.

Door sizes

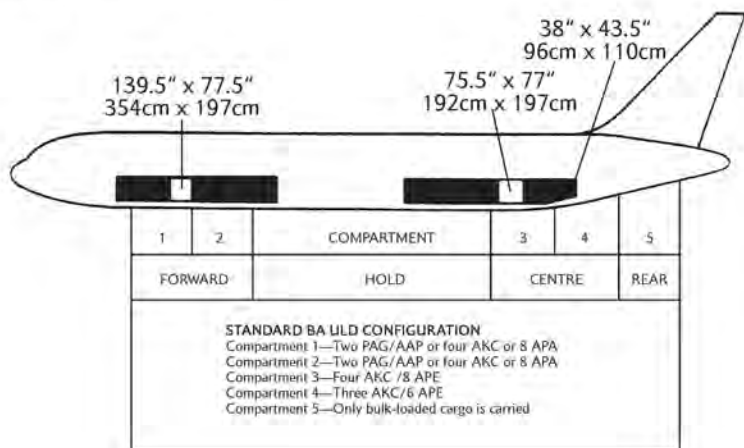


AIRCRAFT DIMENSIONS

BOEING 767

The Boeing 767 is a medium range aircraft which can carry approximately 9 tonnes of cargo in addition to a full passenger load. The aircraft has two lower deck holds comprising five compartments. The forward hold, comprising compartments 1 & 2, together with compartments 3 & 4 in the rear hold, are designed for the carriage of ULD's, whilst compartment 5 in the rear hold is for bulk-loading only.

Door sizes

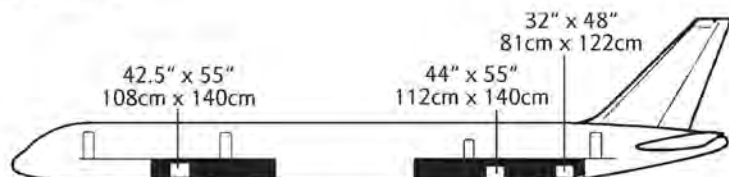


AIRCRAFT DIMENSIONS

BOEING 757

The 757 is narrow-bodied, short to medium range aircraft which can carry approximately 5 tonnes of cargo together with a full passenger load. The aircraft has two underfloor holds consisting of five compartments. The forward hold (compartments 1 & 2) is fitted with a three-bin sled installation which is extendable from about 20" behind the forward hold door to the rear of the hold. The rear hold is divided into two sections. The forward section (compartments 3 & 4) is fitted with a two-bin sled installation and the rear section (compartment 5) is a bulk compartment. Cargo and mail are loose loaded on this aircraft, which does not carry Unit Load Devices.

Door sizes



| | | | | | | |
|--------------------|---------|-------|-------------|--------|------|------|
| Compartment | 1 | 2 | | 3 | 4 | 5 |
| HOLD | FORWARD | | | CENTRE | | REAR |
| Max. Comp. load | 800 | 3464 | (Kg) | 2810 | 1699 | 2476 |
| Max. Floor loading | 732 | 732 | (Kg/Sq.m.) | 732 | 732 | 732 |
| Max. Floor loading | 68 | 68 | (Kg/Sq.ft.) | 68 | 68 | 68 |
| Usable Volume | 4.64 | 13.05 | (Cu.m.) | 13.56 | 6.85 | 6.62 |
| Usable Volume | 164 | 461 | (Cu.ft.) | 479 | 242 | 234 |

Hold Dimensions

COMPARTMENT 1 & 2

| | | | | | | | | | | | |
|--------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| | Width | | | | | | | | | | |
| Height | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | inches |
| | 12 | 25 | 38 | 50 | 63 | 76 | 89 | 101 | 114 | 127 | cm |
| 40 | 95 | 95 | 95 | 95 | 85 | 75 | 70 | 65 | 55 | 45 | |
| 101 | 241 | 241 | 241 | 241 | 216 | 190 | 178 | 165 | 140 | 114 | |

COMPARTMENT 3/4/5

| | | | | | | | | | | | |
|--------|-------|-----|-----|-----|-----|-----|-----|-----|--------|--|--|
| | Width | | | | | | | | | | |
| Height | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | inches | | |
| | 12 | 25 | 38 | 50 | 63 | 76 | 89 | 101 | cm | | |
| 40 | 110 | 110 | 110 | 95 | 85 | 75 | 68 | 60 | | | |
| 101 | 279 | 279 | 279 | 241 | 216 | 190 | 172 | 152 | | | |

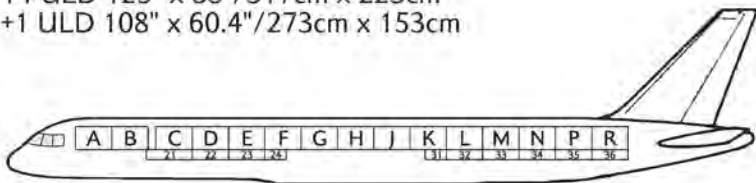
AIRCRAFT DIMENSIONS

BOEING 757-200 Freighter

The 757-200F is narrow-bodied, short to medium range aircraft which can carry 25.8 tonnes of cargo.

Normal Palletisation Arrangement

14 ULD 125" x 88"/317cm x 223cm
+1 ULD 108" x 60.4"/273cm x 153cm



Door sizes

| | |
|----------------------|---------------------------|
| Main cargo door | 134" x 86"/3.40m x 2.18m |
| Fwd belly door | 55" x 42.5"/1.40m x 1.08m |
| Rear belly door | 54" x 44"/1.40m x 1.12m |
| Cargo door sill | 149"/3.79m |
| Belly door sill fwd | 97"/2.46m |
| Belly door sill rear | 93"/2.36m |

Max Gross Weight: 757-200 Freighter

| | |
|-------------|----------------|
| 2 Positions | 4264kg/9402lbs |
| 2 Positions | 2222kg/4899lbs |
| 8 Positions | 2268kg/5000lbs |
| 1 Position | 2132kg/4701lbs |
| 1 Position | 2040kg/4498lbs |

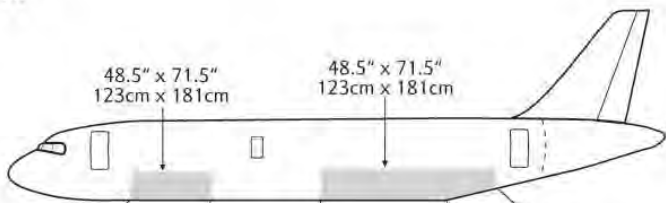
AIRCRAFT DIMENSIONS

AIRBUS

A319

The A319 is a narrow-bodied, short-haul passenger aircraft which can carry up to 1 tonne of cargo and a full passenger load. The aircraft has two holds, consisting of three compartments, which are designed to carry Unit Load Devices or loose loaded cargo. British Airways will operate these aircraft loose loaded.

Door sizes



| | 1 | COMPT NUMBER | 4 | 5 |
|--------------------|---------|--------------|-------|------|
| | FORWARD | HOLD | REAR | |
| Max. Comp Load | 2268 | (kg) | 3021 | 1497 |
| Max. Floor Loading | 488 | (kg/sq. m.) | 488 | 732 |
| Max. Floor Loading | 45.4 | (kg/sq. ft.) | 45.4 | 68 |
| Usable Volume | 8.16 | (Cu. m.) | 11.38 | 7.22 |
| Usable Volume | 288 | (Cu. ft.) | 402 | 255 |



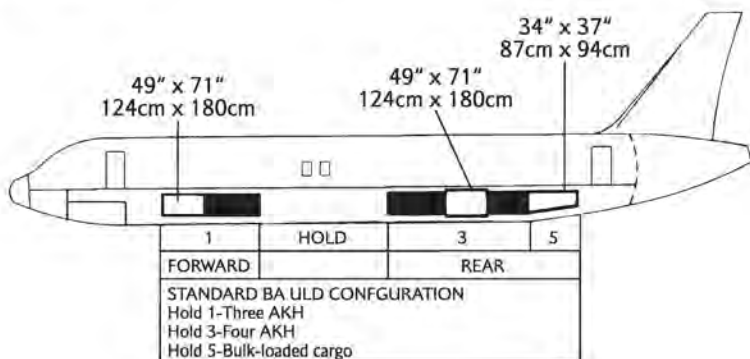
AIRCRAFT DIMENSIONS

AIRBUS

A320

The A320 is a wide-bodied short-haul passenger aircraft which can carry 2 tonnes of cargo and a full passenger load. This aircraft has three holds, two of which are designed to carry Unit Load Devices and the other hold for bulk-loaded cargo.

Door sizes

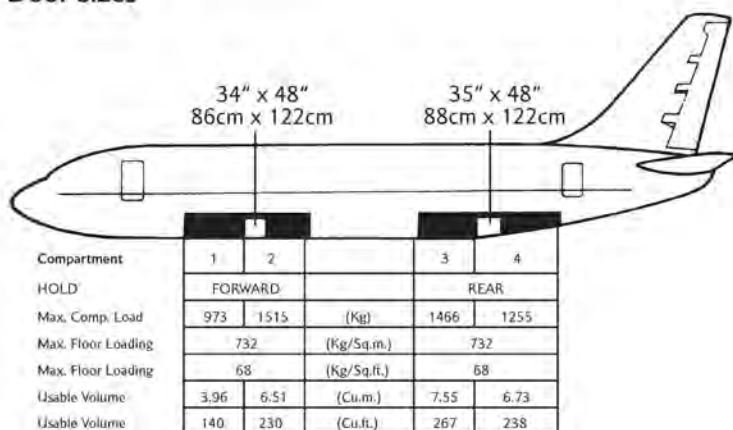


AIRCRAFT DIMENSIONS

BOEING 737

The 737 is a narrow-bodied, short-haul aircraft which is capable of carrying between 2–6 tonnes of cargo in addition to a full passenger load dependent on each route. This aircraft has two holds consisting of four compartments, all of which are designed for the carriage of loose-loaded bulk cargo and mail. The 737 does not carry Unit Load Devices.

Door sizes



Hold Dimensions

| | Width | | | | Inches cms |
|--------|----------|----------|-----------|-----------|---------------|
| | 30 76 | 35 88 | 40 101 | 42 106 | |
| Height | 10 | 100 | 100 | 100 | 100 |
| | 25 | 254 | 254 | 254 | 254 |
| | 14 | 100 | 100 | 100 | 96 |
| | 35 | 254 | 254 | 254 | 243 |
| | 18 | 100 | 100 | 100 | 96 |
| | 45 | 254 | 254 | 254 | 243 |
| | 22 | 100 | 100 | 100 | 96 |
| | 55 | 254 | 254 | 254 | 243 |
| | 26 | 100 | 96 | 96 | 96 |
| | 66 | 254 | 243 | 243 | 243 |
| | 30 | 100 | 96 | 95 | 86 |
| | 76 | 254 | 243 | 241 | 218 |
| | 34 | 100 | 20 | 20 | 20 |
| | 86 | 254 | 50 | 50 | 50 |

