

# Ex-works air freight container guide





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# Identifying a Unit Load Device (ULD)

Each Aircraft Unit Load Device (ULD) is identified by its ULD code. This code is a unique combination of letters and numbers, starting with a three-letter prefix that identifies the type of ULD. This prefix is followed by a unique 4 or 5-digit serial number to distinguish it from others of the same type. The last two or three characters designate the owner of the ULD (e.g. the airline).

Many different parties handle ULDs as they pass between airlines and airports around the world, so a system was needed to identify easily and quickly each ULD. Therefore, the International Air Transport Association (IATA) introduced a global standard system of identification. Accordingly, each ULD is assigned a unique ULD code, which is clearly visible on the relevant unit. By standardizing the system, all manufacturers, cargo handlers and airlines can now identify the ULD's classification and the owner at a glance.

The first three letters of a ULD code are perhaps the most important. They are used to identify the type, size and shape of the ULD. This information is vital in determining not only the type of cargo it can contain but also the aircraft it is compatible with. The three-letter prefix works as follows:

- 1. The first letter represents the type of ULD
- 2. The second letter represents the base size of the ULD
- 3. The third letter represents the container's contour or the pallet's restraint system

# A.TYPE

The first letter of the code's prefix describes the type of container:

- A Certified aircraft container
- B Certified winged aircraft pallet
- D Non-certified aircraft container
- F Non-certified aircraft pallet
- G Non-certified aircraft pallet net
- H Certified horse stalls
- J Thermal non-structural igloo
- K Certified cattle stalls
- L Certified multi-contour aircraft container
- M Thermal non-certified aircraft container

- N Certified aircraft pallet net
- P Certified aircraft pallet
- Q Certified hardened aircraft container
- R Thermal certified aircraft container
- S Certified multi-modal air/surface container
- U Non-structural container (igloo)
- V Automobile transport equipment
- W Certified ULD for aircraft engine transport
- X Reserved for airline internal use
- Y Reserved for airline internal use
- Z Reserved for airline internal use

# **B. BASE SIZE**

The second letter of the code's prefix describes the base dimensions of the unit. The following codes are used for containers manufactured after 1 October 1990:

- A 2235 x 3175 mm / 88 x 125 inch
- B 2235 x 2743 mm / 88 x 108 inch
- G 2438 x 6058 mm / 96 x 238.5 inch (20 ft)
- K 1534 x 1562 mm / 60.4 x 61.5 inch
- L 1534 x 3175 mm / 60.4 x 125 inch
- M 2438 x 3175 mm / 96 x 125 inch
- N 1562 x 2438 mm / 61.5 x 96 inch
- P 1198 x 1534 mm / 47 x 60.4 inch
- Q 1534 x 2438 mm / 60.4 x 96 inch
- R 2438 x 4978 mm / 96 x 196 inch (16 ft)
- S 1562 x 2235 mm / 61.5 x 88 inch

# C.CONTOUR

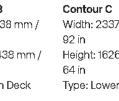
The third letter of the code's prefix describes the container's contour (shaped to fit in the plane's body) and, in the case of pallets and nets, the restraint system in which the unit is classified. The ULD contour is designed to maximize the cargo volume carried, and depends on its position in an aircraft (upper or lower deck). A summary of all contours can be found below:

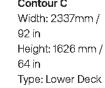




Contour A Width: 2438 mm / 96 in Height: 2438 mm / 96 in Type: Main Deck









Contour D



Contour E Width: 2007 mm / 79 in Height: 1626 mm / 64 in Type: Lower Deck

Contour F Width: 4064 mm / 160 in Height: 1626 mm / 64 in Type: Lower Deck



Contour G Width: 2007 mm / 79 in Height: 1143 mm / 45 in Type: Lower Deck



Contour H Width: 2438 mm / 96 in Height: 1143 mm / 45 in Type: Lower Deck



Contour J Width: 2438 mm / 96 in Height: 2438 mm / 96 in Type: Main Deck



Contour N Width: 2007 mm / 79 in Height: 1626 mm / 64 in Type: Lower Deck



Contour K Width: 3175 mm / 125 in Height: 1626 mm / 64 in Type: Main / Lower Deck



Contour L Width: 2438 mm / 96 in Height: 2946 mm / 116 in Type: Main Deck

Contour U

186 in

64 in

Width: 4724 mm /

Height: 1626 mm /

Type: Lower Deck



Contour P 125 in 64 in

Width: 3175 mm / Height: 1626 mm / Type: Lower Deck



Contour M

88 in

90 in

Width: 2236 mm /

Height: 2286 mm /

Type: Main Deck

Contour V Width: 2438 mm / 96 in Height: 2438 mm / 96 in Type: Main Deck

Contour X Width: 2438 mm / 96 in Height: 2997 mm / 118 in Type: Main Deck

Contour Y Width: 3175 mm / 125 in Height: 2083 mm / 82 in

Type: Main Deck



Contour Z Width: 3175 mm / 125 in Height: 2083 mm / 82 in Type: Main Deck

#### D. AIR FREIGHT CONTAINERS

#### LD-1

IATA ULD Code: AKC Contoured Container Also known as: AVC, AVD, AVK, AVJ Forkable: AVY Classification: LD-1 Suitable for: B747, B767, B777, MD-11 Internal volume: 4.8 m<sup>3</sup> (169.5 Ft<sup>3</sup>) Maximum gross weight: 1,588 Kg (3,501 Lb)

## LD-2

IATA ULD Code: DPE Contoured Container Also known as: APA, DPA Forkable: DPN Classification: LD-2 Suitable for: B767 Internal volume: 3.4 m<sup>3</sup> (120 Ft<sup>3</sup>) Maximum gross weight: 1,225 Kg (2701 Lb)

#### LD-3

IATA ULD Code: AKE Contoured Container Also known as: AKE, AVA, AVB, AVC, AVK, DVA, DVE, DVP, XKS, XKG Forkable: AKN, AVN, DKN, DVN, XKN Classification: LD-3 Suitable for: A300, A310, A330, A340, B747, B767, B777, DC-10, MD-11, L1011 Internal volume: 4.3 m<sup>3</sup> (151.8 Ft<sup>3</sup>) Maximum gross weight: 1,588 Kg (3500 Lb)



92" 233 cm

> 60.4" 153 cm

61.5" 156 cm \_\_\_\_

153 cm

79" 200 cm -

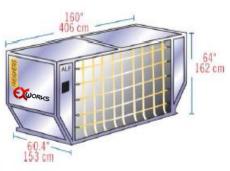
# LD-6

64" 162 cm

64" 162 cm

> 64" 162 cm

IATA ULD Code: ALF Contoured Container Also known as: AWD, AWF Forkable: AWC Classification: LD-6 Suitable for: A300, A310, A330, A340, B747, B777, DC-10, MD-11, L1011 Internal volume: 8.9 m<sup>3</sup> (314.3 Ft<sup>3</sup>) Maximum gross weight: 3,175 Kg (7,000 Lb)



#### LD-7

IATA ULD Code: XAW P1P Pallet with fixed angle wings and net Classification: LD-7 Suitable for: Wide body: All aircraft Maximum volume with overhang: 14 m<sup>3</sup> (494.3 Ft<sup>3</sup>) Maximum gross weight: 5,000 Kg (11,023 LB)



# LD-8

IATA ULD Code: DQF Also known as: ALE, ALN, DEL, DLF, DQP, MQP Classification: LD-8 Suitable for: B767 Internal volume: 6.85 m<sup>3</sup> (241.9 Ft<sup>3</sup>) Maximum gross weight: 2,450 Kg (5,401 Lb)



#### **INSULATED LD-3**

IATA ULD Code: RKN Classification: LD-3 Suitable for: A300, A310, A330, A340, B747, B767, B777, DC-10, MD-11,L1011 Internal volume: 3 m<sup>3</sup> (105.9 Ft<sup>3</sup>) Maximum gross weight: 1,588 Kg (3501 Lb) Temperature control range: -20C to +20C



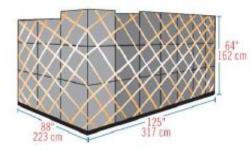
#### LD-4

IATA ULD Code: ALP Rectangular Container Also known as: ALD, AWD, AWZ, DLP Forkable: ALB, ALC, AWB, AWC Classification: LD-4 Suitable for: B767, B777 Internal volume: 5.7 m<sup>3</sup> (201.2 Ft<sup>3</sup>) Maximum gross weight: 2,449 Kg (5399 Lb)

#### 88" PALLET

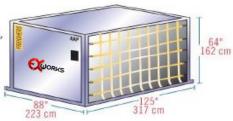
IATA ULD Code: P1P Classification: 88" Pallet with net Suitable for: B747, B767, B777, DC-10 Maximum volume: 11.9 m<sup>3</sup> (420.2 Ft<sup>3</sup>) Maximum gross weight: 747/DC-10: 6,033 Kg (13,300 Lb) 767: 5,103 Kg (11,250 Lb) 777/DC: 4,626 Kg (10,199 Lb)





#### LD-9

IATA ULD Code: AAP Enclosed Pallet on P1P base Also known as: AA2, XAG, XAV Classification: LD-9 Suitable for: A300, A310, A330, A340, B747, B767, DC-10, MD-11, L1011 Internal volume: 9.1 m<sup>3</sup> (321.3 Ft<sup>3</sup>) Maximum gross weight: 4,624 Kg (10,194 Lb) lower deck 6,000 Kg (13,227 Lb) main deck



#### LD-11

IATA ULD Code: ALP Rectangular Container Also known as: ALD, AW2, AWB, AWD, AWZ, DLP, DWB, MWB Refrigerated version: RWB, RWD, RWZ Classification: LD-11 Suitable for: A300, A310, A330, A340, B747, B777, DC-10, MD-11, L1011 Internal volume: 7.2 m<sup>3</sup> (254.2 Ft<sup>3</sup>) Maximum gross weight: 3,176 Kg (7,002 Lb)



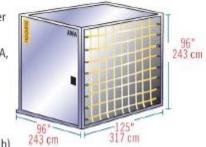
#### A-2

IATA ULD Code: DAA Classification: A-2 Suitable for: B747, B747F, DC8, DC10,A300/F Internal volume: 12.6 m<sup>3</sup> (444.9 Ft<sup>3</sup>) Maximum gross weight: 6,033 Kg (13,300 Lb)



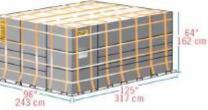
#### AQ6

IATA ULD Code: AMA Rectangular Container on P6P Base Also known as: AMF, AMG, AMK, AMP, AQA, AQD, AQ6 Classification: M-1 Suitable for: B747F, B747Combi Maximum volume: 17.5m<sup>3</sup> (617.9 Ft<sup>3</sup>) Maximum gross weight: 6,804 Kg (15,000 Lb)



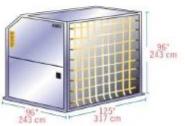
#### 96" PALLET

IATA ULD Code: P6P 10Ft flat pallet with net Also known as: P6A, P6C, P6Q, PMA, PMC, PMP, PQP Classification: LD-9 Suitable for: A300, A310, A330, A340, B747, B767, B777, DC-10, MD-11, L1011 Maximum volume: 21.2 m<sup>3</sup> (748.6 Ft<sup>3</sup>) Maximum gross weight: 6,804 Kg (15,000 Lb)



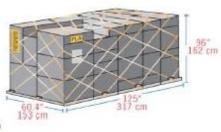
#### AQ7

IATA ULD Code: AMD Contoured Container on P6P Base Also known as: AQA, AQ7 Classification: M1H Suitable for: B747F, B747Combi Internal volume: 19.9 m<sup>3</sup> (702.7 Ft<sup>3</sup>) Maximum gross weight: 6,800 Kg (14,991 Lb)



#### HALF PALLET

IATA ULD Code: PLA half pallet with net Also known as: PLB, FLA, P9A, P9B, P9P, P9R, P9S Classification: HP Suitable for: Lower deck B747, B777 Main deck: B707F, B727F, B737F Maximum volume: 7.2 m<sup>3</sup> (254.2 Ft<sup>3</sup>) Maximum gross weight: 3,175 Kg (7,000 Lb)



## M-6

IATA ULD Code: AGA 20Ft Box Container Also known as: ASE Classification: M-6 Suitable for: B747F, B747Combi Internal volume: 33 m<sup>3</sup> (1,165.3 Ft<sup>3</sup>) Maximum gross weight: 11,340 Kg (25,000 Lb)



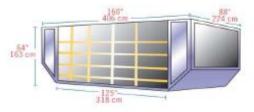
#### **16 FT PALLET**

IATA ULD Code: PRA 16Ft flat pallet with net Also known as: PMA, P4A, P4M, PZA Classification: MDP Suitable for: B747, B747Combi Maximum volume: 26.8 m<sup>3</sup> (946.4 Ft<sup>3</sup>) Maximum gross weight: 11,300 Kg (24,912 Lb)



#### LD-26

IATA ULD Code: AAF Classification: LD-26 Suitable for: B747, B777, DC-10 Maximum gross weight: 747/DC-10: 6,033 Kg (13,300 Lb) 777/DC-10: 4,626 Kg (10,199 Lb)



#### **20 FT PALLET**

IATA ULD Code: PGA 20Ft flat pallet with ne Also known as: PGA, PGE, PGF, PSA, PSG, P7A, P7E, P7F, P7G Classification: M-6 Suitable for: B747F, B747Combi Maximum volume: 33.2 m<sup>2</sup> (1,172.4 Ft<sup>3</sup>) Maximum gross weight: 11,340 Kg (25,000 Lb)



#### LD-29

IATA ULD Code: AAU Contoured Container on P1P Base Classification: LD-29 Suitable for: B747 Internal volume: 14.2 m<sup>3</sup> (501.4 Ft<sup>3</sup>) Maximum gross weight: 6,033 Kg (13.300 Lb)

