

ICAO Aerodrome Reference Code

Definition

The ICAO Aerodrome Reference Code is a two part categorisation of aircraft types which simplifies the process of establishing whether a particular aircraft is able to use a particular aerodrome. It is included in ICAO Annex 14. It has two 'elements', the first is a numeric code based on the Reference Field Length for which there are four categories and the second is letter code based on a combination of aircraft wingspan and outer main gear wheel span.

Element 1 - Reference field length

Code number	Aeroplane reference field length	Typical aircraft types
1	< 800 m	<u>DE HAVILLAND CANADA DHC-6/PIPER PA-31</u>
2	800 m, but < 1200 m	<u>ATR ATR-42-300/320/BOMBARDIER Dash 8 Q300</u>
3	1200 m, but < 1800 m	<u>SAAB 340/BOMBARDIER Regional Jet CRJ-200</u>
4	1800 m and above	<u>BOEING 737-700/AIRBUS A-320</u>

Field length means the **balanced field length** (which is when the take-off distance required is equal to the accelerate-stop distance required) if applicable, or take-off distance in other cases. Aeroplane reference field length is defined as "the minimum field length required for take-off at maximum certificated take-off mass, at sea level, in International Standard Atmosphere conditions in still air and with zero runway slope as documented in the Aircraft Flight Manual (AFM) or equivalent document.

Element 2 - Aircraft wingspan / Outer main gear wheel span

Element 2 of the Code is derived from the most restrictive of either the aircraft wingspan or the aircraft outer main gear wheel span. The categories are as follows:

Letter code	Wing span	Typical aircraft
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A	< 15 m	<u>PIPER PA-31/CESSNA 404 Titan</u>
B	15 m, but< 24 m	<u>BOMBARDIER Regional Jet CRJ-200/DE HAVILLAND CANADA DHC-6</u>
C	24 m, but< 36 m	<u>BOEING 737-700/AIRBUS A-320/EMBRAER ERJ 190-100</u>
D	36 m, but< 52 m	<u>B767 Series/AIRBUS A-310</u>
E	52 m, but < 65 m	<u>B777 Series/B787 Series/A330 Family</u>
F	65 m, but < 80 m	<u>BOEING 747-8/AIRBUS A-380-800</u>

It should be noted that Element 2 is often used on its own since it has direct relevance to detailed airport design.

Source: www.skybrary.aero