European Union Aviation Safety Agency

Use of Child Seats on Board

Can I use a child seat on board for my baby/child? What about a rear-facing child seat?

Answer

EASA cares for the safe transport of babies and children by air and encourages the use of child seats on board an aircraft.
Having a child seat on board an aircraft requires an assessment of several aspects, such as the aircraft seat itself, if the aircraft seat is forward-facing or rear-facing, how the child seat can be safely secured on the aircraft seat, the distance between seat rows where the child seat is intended to be placed, etc. Practically all child seats allowed on board are those that have been tested and certified for the use in cars. There may be limitations for their use in cars and there are also limitations for their use in an aircraft cabin. Depending on the specifics of the child seat, but also on the specifics of the aircraft seats and of the aircraft cabin arrangement, the operator decides which child seats are accepted on board its aircraft and which ones cannot be accepted due to safety reasons.

Rear-facing child seats are recommended for the use in cars for babies and children up until the age of 4. The use of a rear-facing (also referred to as ‘aft-facing’) child seat on board an aircraft may however be limited due to the distance between passenger seat rows (so-called ‘seat pitch’). Airlines are free to order from an aircraft manufacturer an aircraft with a cabin arrangement of their choice (including the distance between seat rows) provided it is compliant with the existing aircraft certification rules. Each cabin arrangement must be approved by EASA and must comply with the applicable safety standards including emergency evacuation. EU legislation however does not specify a prescriptive figure related to the minimum distance between seats (i.e. seat rows), aircraft designers comply with the standards using a range of biometrics.

It is the operator’s responsibility to establish procedures for its operation which are subject to the approval or acceptance by the National Aviation Authority of that EU Member State. Please, contact your airline for information on types of child seats and their use on board the airline’s aircraft. You may also wish to visit the EASA webpage ‘Travelling with children’.

Extract from the EU rules on air operations related to the acceptance of child seats on board:

CAT.IDE.A.205 Seats, seat safety belts, restraint systems and child restraint devices

(a) Aeroplanes shall be equipped with:

(1) a seat or berth for each person on board who is aged 24 months or more;

(2) a seat belt on each passenger seat and restraining belts for each berth except as specified in (3);

(3) a seat belt with upper torso restraint system on each passenger seat and restraining belts on each berth in the case of aeroplanes with an MCTOM of 5 700 kg or less and with an MOPSC of nine or less, having an individual CofA first issued on or after 8 April 2015;

(4) a child restraint device (CRD) for each person on board younger than 24 months;

(5) …

AMC1 CAT.IDE.A.205 Seats, seat safety belts, restraint systems and child restraint devices
CHILD RESTRAINT DEVICES (CRDs)

(a) A CRD is considered to be acceptable if:

(1) it is a ‘supplementary loop belt’ manufactured with the same techniques and the same materials as the approved safety belts; or

(2) it complies with (b).

(b) Provided the CRD can be installed properly on the respective aircraft seat, the following CRDs are considered acceptable:

(1) CRDs approved for use in aircraft according to the European Technical Standard Order ETSO-C100c on Aviation Child Safety Device (ACSD);

(2) CRDs approved by EASA through a Type Certificate or Supplemental Type Certificate;

(3) Child seats approved for use in motor vehicles on the basis of the technical standard specified in point (i) below. The child seat must be also approved for use in aircraft on the basis of the technical standard specified in either point

(ii) or point (iii):

(i) UN Standard ECE R44-04 (or 03), or ECE R129 bearing the respective ‘ECE R’ label; and

(ii) German ‘Qualification Procedure for Child Restraint Systems for Use in Aircraft’ (TÜV/958-01/2001) bearing the label ‘For Use in Aircraft’; or

(iii) Other technical standard acceptable to the competent authority. The child seat should hold a qualification sign that it can be used in aircraft.

(4) Child seats approved for use in motor vehicles and aircraft according to Canadian CMVSS 213/213.1 bearing the respective label;

(5) Child seats approved for use in motor vehicles and aircraft according to US FMVSS No 213 and bearing one or two labels displaying the following two sentences:

(i) ‘THIS CHILD RESTRAINT SYSTEM CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS’; and

(ii) in red letters ‘THIS RESTRAINT IS CERTIFIED FOR USE IN MOTOR VEHICLES AND AIRCRAFT’;

(6) Child seats approved for use in motor vehicles and aircraft according to Australia/New Zealand’s technical standard AS/NZS 1754:2013 bearing the green part on the label displaying ‘For Use in Aircraft’; and

(7) CRDs manufactured and tested according to other technical standards equivalent to those listed above. The devices should be marked with an associated qualification sign, which shows the name of the qualification organisation and a specific identification number, related to the associated qualification project. The qualifying organisation should be a competent and independent organisation that is acceptable to the competent authority.

(c) Location

(1) Forward-facing child seats may be installed on both forward-and rearward-facing passenger seats, but only when fitted in the same direction as the passenger seat on which they are positioned. Rearward-facing child seats should only be installed on forward-facing passenger seats. A child seat should not be installed within the radius of action of an airbag unless it is obvious that the airbag is de-activated or it can be demonstrated that there is no negative impact from the airbag.

(2) An infant/child in a CRD should be located in the vicinity of a floor level exit.

(3) An infant/child in a CRD should not hinder evacuation for any passenger.

(4) An infant/child in a CRD should neither be located in the row (where rows are existing) leading to an emergency exit nor located in a row immediately forward or aft of an emergency exit. A window passenger seat is the preferred location. An aisle passenger seat or a cross aisle passenger seat that forms part of the evacuation route to exits is not recommended. Other locations may be acceptable provided the access of neighbour passengers to the nearest aisle is not obstructed by the CRD.

(5) In general, only one CRD per row segment is recommended. More than one CRD per row segment is allowed if the infants/children are from the same family or travelling group provided the infants/children are accompanied by a responsible adult sitting next to them in the same

row segment.

(6) A row segment is one or more seats side-by-side separated from the next row segment by an aisle.

(d) Installation

(1) CRDs tested and approved for use in aircraft should only be installed on a suitable passenger seat by the method shown in the manufacturer's instructions provided with each CRD and with the type of connecting device they are approved for the installation in aircraft. CRDs designed to be installed only by means of rigid bar lower anchorages (ISOFIX or equivalent) should only be used on passenger seats equipped with such connecting devices and should not be secured by passenger seat lap belt.

(2) All safety and installation instructions should be followed carefully by the responsible adult accompanying the infant/child. Operators should prohibit the use of a CRD not installed on the passenger seat according to the manufacturer's instructions or not approved for use in aircraft.

(3) If a forward-facing child seat with a rigid backrest is to be fastened by a seat lap belt, the restraint device should be fastened when the backrest of the passenger seat on which it rests is in a reclined position. Thereafter, the backrest is to be positioned upright. This procedure ensures better tightening of the child seat on the aircraft seat if the aircraft seat is reclinable.

(4) The buckle of the adult safety belt must be easily accessible for both opening and closing, and must be in line with the seat belt halves (not canted) after tightening.

(5) Forward-facing restraint devices with an integral harness must not be installed such that the adult safety belt is secured over the infant.

(e) Operation

(1) Each CRD should remain secured to a passenger seat during all phases of flight unless it is properly stowed when not in use.

(2) Where a child seat is adjustable in recline, it must be in an upright position for all occasions when passenger restraint devices are required.

Extract from the International Civil Aviation Organisation (ICAO) guidance on the approval and use of child restraint systems (ICAO Document 10049):

2.4.3 The seat pitch or the available space between two rows of seats may also be an issue and particularly significant for aft-facing CRS as they are further reclined and take up more horizontal space. The inability to be effectively installed using existing aircraft seat belts may also render motor vehicle CRS ineffective on board. The location of anchor points can also be problematic. This includes the location of the aircraft seat belt attachment to the aircraft seat, as

a CRS must translate forward until the belt path angle allows for belt tension forces to restrain the device.

Note: CRS stands for ‘child restraint system’ and means the same as ‘child restraint device’.

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Link:

https://www.easa.europa.eu/en/faq/48276