

## CIRCULAR 34-1-1

## GUIDANCE FOR SELECTION OF SUITABLE CHILD RESTRAINTS FOR ADR 34/01 & ADR 34/02 CLAUSE 34.7.3 (DYNAMIC TESTING)

- 1. This Circular provides guidance to manufacturers on how to select suitable child restraints for the purpose of demonstrating compliance with the dynamic strength test requirements of clause 34.7.3 of both ADR 34/01 and ADR 34/02.
- 2. Subject to compliance with the elongation limit for load bearing material requirements outlined in paragraph 4, the following child restraint types are considered suitable for the purpose of dynamic upper anchorage strength testing to clause 34.7.3:
  - AS/NZS 1754:2000, AS/NZS 1754:2004, or AS/NZS 1754:2010 certified Type B (forward-facing) child restraints;
  - AS/NZS 1754:2000, AS/NZS 1754:2004, or AS/NZS 1754:2010 certified Type A/B convertible child restraints in Type B (forward-facing) mode; and
  - AS/NZS 1754:2000, AS/NZS 1754:2004, or AS/NZS 1754:2010 certified Type B/E (convertible child restraints / booster seats) in Type B (forward-facing child restraint) mode.
  - AS/NZS 1754:2010 certified Type B/E (convertible child restraints / booster seats) in Type E (booster seat) mode and properly used (as per manufacturer's instructions) in conjunction with a booster seat crotch strap<sup>1</sup> and an AS/NZS 1754 (2000/2004/2010) certified Type C child harness;
  - AS/NZS 1754:2010 certified Type E booster seats fitted with an upper anchorage strap (top tether) and properly used (as per manufacturer's instructions) in conjunction with a booster seat crotch strap and an AS/NZS 1754 (2000/2004/2010) certified Type C child harness; and
  - AS/NZS 1754:2010 certified, Type F booster seats fitted with an upper anchorage strap (top tether) and
    properly used (as per manufacturer's instructions) in conjunction with a booster seat crotch strap<sup>1</sup> and an
    AS/NZS 1754 (2000/2004/2010) certified Type C child harness.
- 3. These child restraint types are examples of suitable child restraints only. Manufacturers may use other suitable child restraints to demonstrate compliance with the dynamic strength test requirements of ADR 34/01 and/or ADR 34/02. However, technical justifications and documentation provided as evidence must be sufficient to allow the Administrator to be satisfied that the vehicle complies with the ADR.
- 4. For any child restraint type used to demonstrate compliance with clause 34.7.3, child restraint inbuilt harness webbing and child restraint upper anchorage strap (top tether) webbing are both deemed to be load bearing material and must therefore have an elongation of not more than 25% when subject to a load of 11 kN. Manufacturers must be able to demonstrate that a child restraint used in ADR 34/01 or ADR 34/02 dynamic upper anchorage strength testing meets this requirement.
- 5. Although Type B child restraints are required under AS/NZS 1754 to be labelled as suitable for use by children weighing from 8 kg to 18 kg (AS/NZS 1754:2000 and AS/NZS 1754:2004) or children approximately 6 months of age to approximately 4 years of age (AS/NZS 1754:2010), they must be able to accommodate a TNO P6 dummy clothed in winter-weight clothing and must also withstand frontal impact test requirements using a TNO P6 dummy.

<sup>&</sup>lt;sup>1</sup> An AS/NZS 1754:2010 compliant booster seat device between the legs of the dummy which connects the lap portion of a seatbelt used in conjunction with a child harness to the booster seat base – recommended to ensure this child restraint system type provides for pelvic restraint (clause 34.7.3.2) during dynamic testing (i.e. lap belt does not penetrate wholly into the flexible abdominal region of the dummy).