



Bus, coach, minibus and HGV seat belts - Guidance note for businesses

Regulations have now been made which will extend requirements to fit seat belts to certain classes of vehicle registered on or after 1st October 2001. The regulations affect:

Buses, coaches and minibuses

These are passenger vehicles with more than eight seats in addition to the driver's seat. This category covers all vehicles in the European M2 and M3 categories, including van conversions as well as purpose built vehicles.

Goods vehicles above 3,500kg gross vehicle weight

This category covers vehicles in the European N2 and N3 categories.

Requirements

Details of mandatory fitting requirements are given below.

Vehicles affected
Buses with a gross weight exceeding 3,500kg (including minibuses and coaches) which are first used on or after 1 October 2001
Buses with a gross weight not exceeding 3,500kg (including minibuses) which are first used on or after 1 October 2001
Goods vehicles with a gross weight exceeding 3500kg which are first used on or after 1 October 2001 (except those manu

Technical Standards

Seat Belts (apart from disabled person's belts) must be marked to show approval to either a British or European Standard. British standard belts will display a BS kitemark and be approved to BS 3254 Part 1. European standard belts will either be approved to ECE Regulation 16.04 and marked with an 'E' mark, or Community Directive 77/541 (as amended by 96/36 or 2000/3) and marked with an 'e' mark. These standards give details of how seat belts should be installed, in terms of belt accessibility, fit of belts to

wearer, ease of adjustment and release.

Seat Belt Anchorages must meet the technical and installation requirements of ECE Regulation 14.04 or 14.05, or EU Directive 76/115 (as amended by 96/38). The table below shows the required anchorage test loads.

Although anchorage type-approval is not mandatory for the classes of vehicle covered by these new regulations, the manufacturer or converter has a responsibility to ensure that all seat belt anchorages comply with the above standards. The only sure way of establishing whether a seat belt anchorage design meets the legislative requirements is to have it pull-tested. Manufacturers who are producing a number of vehicles of standard design will be able to assess their proposed anchorages by pull-testing either a complete vehicle prototype, or an assembly of key components. If manufacturing volumes do not justify a full programme of pull testing, it may be possible for component manufacturers to provide tested sub-systems (for example, seat and subframe assemblies) which have been previously tested in the same type of vehicle.

There are a number of organisations who can provide facilities for pull-testing, and can also advise on design and engineering aspects, and assess what level of testing (if any) is necessary. Information on suitable organisations can be obtained from The Vehicle Certification Agency (VCA). VCA can 'witness' a pull test and provide written confirmation that an anchorage system meets the required standards. They can be contacted at:

1 The Eastgate Office Centre
Eastgate Road
BRISTOL
BS5 6XX
Tel: (44) 0117 9524112
Fax: (44) 0117 9524163
e-mail: enquiries@vca.gov.uk
website: <http://www.vca.gov.uk/>

Notes

- Where older non-urban buses (or any urban buses) have seat belts fitted voluntarily after **1st October 2001**, the anchorage points must comply with the technical and installation requirements of Community Directive 76/115, 81/575, 82/318, 90/629, or 96/38 or ECE Regulation 14, 14.01, 14.02, 14.03, 14.04 or 14.05.
- Vehicles constructed or adapted for the secure transport of prisoners are required to be fitted with seat belts for the driver's and any front passenger's seat. Other forward or rearward facing seats in these vehicles are required to be fitted with anchorage points so that seat belts can be installed if required.
- Minibuses with a gross weight of under 3,500kg already must have anchorages and belts provided for front seats. Any belts and anchorages fitted must comply with specified European requirements.

Anchorage Test Loads

Anchorage loads (the load is applied through the belt in the direction the seat is facing - anchorages must withstand the load for not less than 0.2 seconds)			
	M2 & N2 Vehicles (forward facing seats)	M3 & N3 Vehicles (forward facing seats)	M2, N2, M3 & N3 Vehicles (rear facing seats)
Lap belt	11.1 kN	7.4 kN	7.4 kN
Lap & diagonal belt: Lap section Diagonal section (both sections are tested simultaneously)	6.75 kN 6.75 kN	4.5 kN 4.5 kN	4.5 kN 4.5 kN
Additional forward load per seat (integral seat belts only)	10 times the weight of the complete seat	6.6 times the weight of the complete seat	6.6 times the weight of the complete seat

M2 = Buses having a maximum gross weight not exceeding 5,000 kg

M3 = Buses having a maximum gross weight exceeding 5,000 kg

N2 = Goods vehicle having a maximum gross weight exceeding 3,500 kg but not exceeding 12,000 kg

N3 = Goods vehicle with a maximum gross weight exceeding 12,000 kg

Document Sources

The new regulations are entitled *The Road Vehicles (Construction and Use) (Amendment) (No 2) Regulations 2001, SI 2001/1043*. Copies can be purchased from The Stationery Office Ltd, PO Box 29, St Crispins House, Duke Street, NORWICH NR3 1GN; telephone: 0870 600 5522; fax: 0870 600 5533; e-mail: esupport@theso.co.uk; website: <http://www.the-stationery-office.co.uk/>. They can also be seen on the HMSO website: <http://www.hmso.gov.uk/>.

European Directives are available from The Stationery Office, or can be seen on the European Union website: http://europa.eu.int/eur-lex/en/lif/reg/en_register_133010.html.

UNECE Regulations are available from The Stationery Office, or can be seen on the UNECE website: <http://www.unece.org/trans/main/wp29/wp29regs.html> or <http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29fdoc.html>.

British Standards and amendments are available from any outlet operated by the British Standards Institution, or by post from BSI, 389 Chiswick High Road, London W4 4AL; telephone: 020 8996 9000; website: <http://www.bsi.org.uk/>.

Contact

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