Queensland Code of Practice: Vehicle Modifications (QCOP)

Code LK3: Light Vehicle Modifications for Wheelchair Accessibility

Queensland Government

Light Vehicle Modifications for Wheelchair Accessibility
CODE LK3

1.0 Scope

The LK3 modification code specifies requirements for certifying modifications for wheelchair access on light vehicles. A vehicle is a light vehicle if it has a Gross Vehicle Mass (GVM) of not more than 4,500 kg.

This code covers modifications to light vehicles so a wheelchair loader can be installed and wheelchair(s) and the passenger(s) occupying those wheelchair(s) can be adequately restrained to the vehicle during travel on road. This code does not cover the modifications related to the occupant in wheelchair.

The Original Vehicle Manufacturer (OVM) refers to the entity holding the first stage type approval. An entity holding the Second Stage Manufacture (SSM) Approval or RAWS Approval is not deemed as the OVM.

In cases where the OVM has not specified a GVM rating, the maximum laden mass at which the OVM has shown compliance with the Australian Design Rules (ADRs) is to be taken as the original GVM rating.

This code is not to be used for certifying modifications to new light vehicles before first registration.

Refer to Vehicle Standards Bulletin 6 (VSB-6) Code of Practice for all heavy vehicle modifications.

Imported vehicles with WAT features carried out overseas are not specifically excluded from the scope of this code, so long as they meet the relevant approved standards mentioned in this code.

When certifying modifications to this code, the Wheelchair Loading Device (WLD) and the Wheelchair Tiedowns and Occupant Restraint System (WTORS) fitted must be those that are manufactured to comply with the relevant Approved Standard for Product. WLD includes the loading ramps used, if any. When certifying modifications to this code, the WLD and the WTORS must be installed to comply with the Approved Standard for Product Installation.

Application	Details of the Approved Standard	Acceptable Alternate Standard for modifications up to 31 Dec 2022
Technical Standard for Product- WLD	AS 3856.1:2021	AS/NZS 3856.1:1998 (R2016)
Technical Standard for Product Installation- WLD	AS 3856.2:2021	AS/NZS 3856.2:1998 (R2016)
Technical Standard for Product – WTORS	AS/NZS 10542.1:2015	
Technical Standard for Product Installation- WTORS	AS/NZS 10542.1:2015	

1.1 What is permitted

Modifications that may be certified under LK3 code are:

- Installation of WLD that complies with the Approved Standards for Product and Product Installation.
- Installation of WTORS that complies with the Approved Standard for Product and Product Installation.
- Installation and/or repositioning of anchorages for passenger seats.
- Installation and/or repositioning of anchorages for passenger seat belts.
- Installation and/or repositioning of anchorages for child restraints.

1.2 What is not permitted

Modifications that must not be certified under LK3 code are:

- Modifications other than those described in Section 1.1.
- Installations of WLD or WTORS for the driver's seating position in a vehicle.

2.0 General Requirements

The installed WLD and the WTORS must be able to safely operate and withstand the loads imposed on them. All affected components, including the chassis frame, axles, and wheels must be assessed individually to ensure that they can safely support the loads resulting from the WLD and the WTORS.

Extensive modifications to a vehicle's frame and body may affect the warranty provided by the vehicle manufacturer. Consideration of the effect that modifications under this code may have on product warranty is outside the scope of this code. The certifying AP must clarify this point to the modifier and the vehicle operator.

For audit purposes, sufficient evidence of the modification and its inspection must be retained by the certifying AP. Typically this may include photographs, sketches, engineering drawings, measurements and test reports, sheets of calculations and analysis, RPEQ assessment reports, manufacturer's instructions, images of certification markings and completed checklists.

Note that the conversion for wheelchair access is often performed under the guidance of a trained Occupational Therapist who can consider the specific needs of the wheelchair user. Certifying APs should work in conjunction with the OT to ensure that the completed vehicle is fit for purpose and suitable for the end user.

2.1 Compliance with applicable vehicle standards

2.1.1 The modified vehicle must continue to comply with the ADRs that apply to it.

2.1.2 If different or additional ADRs apply to the modified vehicle due to the modifications, the vehicle must comply with those ADRs that apply to it after modification.

2.1.3 The modified vehicle must also comply with the applicable in-service requirements of the Transport Operations (Road Use Management—Vehicle Standards and Safety) Regulation 2021 (the Regulation).

2.1.4 A modified pre-ADR vehicle must continue to comply with the Regulation.

2.1.5 Specific requirements, if listed in Section 3.0 of this code, take precedence over the general requirements in Section 2.0.

2.1.6 Outlined in Table LK3-1 are areas of the vehicle that may be affected by the modifications and may require re-certification, testing and/or data to show compliance of the modified vehicle. This is not an exhaustive list and compliance to other ADRs may also be affected.

Table LK3-1 List of items and likely affected ADRs

DETAIL	REQUIREMENTS
Seat Anchorages	ADR 3/…
Seatbelts	ADR 4/…
Seatbelt Anchorages	ADR 5/…
Child Restraint Anchorages	ADR 34/…
General Safety Requirements	ADR 42/…
Specific Purpose Vehicles	ADR 44/…

The ADR applicability is according to the vehicle's category and date of manufacture. It is the responsibility of the certifying AP to refer to the appropriate ADRs applicable to the vehicle.

Sections 2.2 to 2.8 describe the general requirements applying to different areas of the modifications under LK3 code.

2.2 Installation of Wheelchair Loading Device (WLD)

2.2.1 Certification to code R2 in VSB-6 is not required when certified to LK3 code. However, where it is appropriate to do so, guidance may be sought from Section R2 – *Wheelchair Loader Installation* of the VSB-6 Code of Practice.

2.2.2 Installation of the WLD must not interfere with the emergency exits in the vehicle and must not protrude in a way that poses risk of injury to the vehicle's occupants and other road users.

2.2.3 If WLD includes loading ramp(s), they must comply with the requirements of the relevant approved standard for WLD. Additional marker lamps or retroreflectors may be fitted to WLD or loading ramp(s) to assist in night-time operation. Such lamps must be switched off and retroreflectors concealed when travelling.

2.3 Installation of Wheelchair Tiedowns and Wheelchair Occupant Restraint Systems (WTORS)

2.3.1 Certification to code K5 in VSB-6 is not required when certified to LK3 code. However, where it is appropriate to do so, guidance may be sought from Section K5 – *Installation of Wheelchair Occupant Restraint System* of the VSB-6 Code of Practice.

2.3.2 Installation of the WTORS must not interfere with the emergency exits in the vehicle and must not protrude in a way that poses risk of injury to vehicle's occupants.

2.4 Design for Access and Mobility

2.4.1 If the modified vehicle is providing public passenger service of any kind, including a hire and reward or community courtesy service, the modifications certified under LK3 code must comply with the relevant requirements in the following instruments (as revised from time to time):

(a) Disability Standards for Accessible Public Transport 2002 (Cth)

(b) Disability Standards for Accessible Public Transport Guidelines 2004 (No. 3) (Cth)

(c) Australian Standard AS 1428.2-1992 (R2015).

Note that the following documents (as revised from time to time) may assist in this regard:

- Information Bulletin PT 601/03.19 (TransLink TMR Queensland)
- Fact Sheet on Accessible Taxi Requirements FS1.25/09.19 (TransLink TMR Queensland)

2.5 Installation of Additional, Replacement or Reconfigured Seats

2.5.1 All seat anchorages must comply with the Australian Design Rule (ADR) 3/…

2.5.2 Additional or replacement seats (other than the vehicle manufacturer's original seats) must comply with the current version of Vehicle Standards Bulletin 5 (VSB-5)

2.5.3 Additional or replacement seats must be installed in a way that the installation complies with the instructions of the OVM or VSB-5, as appropriate.

2.5.4 Additional or replacement seat installation must comply with the Modification Codes LK2 and LK1 in the Vehicle Standards Bulletin 14 (VSB-14)

2.5.5 Certification to codes LK2 and LK1 in VSB-14 must be provided separately, in addition to the certification to this code.

2.5.6 Installation of additional seats must not interfere with the emergency exits in the vehicle and must not protrude in a way that poses risk of injury to vehicle's occupants.

2.6 Installation of Additional, Replacement or Reconfigured Seatbelt Anchorages

2.6.1 All seatbelt anchorages must comply with the applicable ADR 5/… This includes the upper torso anchorage provided for use by the wheelchair bound person when travelling. Wheelchair location when travelling must comply with the requirements of the approved standard for the WTORS.

2.6.2 Additional or replacement seatbelt anchorages must comply with the Modification Codes LK2 and LK1 in VSB-14.

2.6.3 Additional or replacement seatbelt anchorage must be installed in a way that they do not intrude into the passenger head strike zone and should be free of sharp edges that may cause injury.

2.6.4 The head strike zone boundary may be determined by measuring the vertical distance up to 965 mm above the seat cushion of the nearest outboard seating position, repeating the measurement from the front edge of the seat cushion to the rear. No sharp metallic objects must be present in the area below the head strike zone boundary. If sharp metallic fittings lie below the head strike zone boundary, the risk of injury must be mitigated by either.

(a) relocating the offending part outside the head strike zone, or

(b) covering the offending part with a suitable smooth non-metallic shock absorbent cover such that it is permanently tied to the part it covers. This is to make sure it remains in place for use when needed (example: fuel filler cap in many cars).

2.6.5 The extent to which the OVM configuration meets the intent of the Clause 2.6.4 will be accepted as an alternative to the prescriptive requirement of Clause 2.6.4. The certifying AP needs to justify it accordingly.

2.6.6 Certification to codes LK2 and LK1 in VSB-14 must be provided separately in addition to the certification to this code. Note that the strength requirements for seat anchorages are substantially higher if the seatbelts are mounted on the seats.

2.7 Installation of Additional, Replacement or Reconfigured Seatbelts

2.7.1 All seatbelts must comply with the applicable ADR 4/…

2.7.2 Additional or replacement seatbelts must comply with the Modification Codes LK2 and LK1 in VSB-14.

2.7.3 Additional or replacement seatbelts must be new.

2.7.4 Certification to codes LK2 and LK1 in VSB-14 must be provided separately in addition to the certification to this code.

2.8 Installation of Additional, Replacement or Reconfigured Top Tether Anchorages for Child Restraints

2.8.1 All child restraints must comply with the applicable ADR 34/…

2.8.2 Additional or replacement child restraints must comply with the Modification Code LK6 in VSB-14.

2.8.3 Additional or replacement child restraints must be installed in a way that luggage items or wheelchairs or other objects in the vehicle will not interfere with the top tether.

2.8.4 This code does not cover the fitting of the ISOFIX type lower anchorages for child restraints.

2.8.5 Certification to code LK6 in VSB-14 must be provided separately in addition to the certification to this code.

3.0 Specific Requirements

Sections 3.1 to 3.6 describe the specific requirements applying to different areas of the modifications under LK3 code.

3.1 Installation of WLD

3.1.1 WLD must be installed to comply with the Approved Standard for Product Installation, using the parts and following the instructions supplied by the WLD manufacturer. If the parts and/or the instructions are only generic and are observed not to suit the specific vehicle make/model, then a written approval must be obtained from the WLD manufacturer before using alternate parts or making changes to the parts or the installation procedure.

3.1.2 If a written approval from the WLD manufacturer cannot be readily obtained, the installation must be strictly according to a detailed design approval package supplied by an AP Engineer who is also a Registered Professional Engineer of Queensland (RPEQ).

3.1.3 After installing the WLD, performance tests must be conducted to verify compliance with the relevant sections of the Approved Standard for Product Installation. Test results must be documented.

3.1.4 External vehicle mounted controls must be installed and operated on the left side or rear of the vehicle.

3.1.5 The make/model/serial number of the WLD must be recorded.

3.1.6 A copy of the installation instructions supplied by the WLD manufacturer must be retained.

3.1.7 All changes to the installed parts and the installation procedures that vary from the WLD manufacturer's supplied items must be documented.

3.1.8 Sound engineering practice and quality of workmanship must be evident in the installation of WLD.

3.2 Installation of WTORS

3.2.1 WTORS must be installed to comply with the Approved Standard for Product Installation, using the parts and following the instructions supplied by the WTORS manufacturer. If the parts and/or the instructions are only generic and are observed not to suit the specific vehicle make/model, then a written approval must be obtained from the WTORS manufacturer before using alternate parts or making changes to the parts or installation procedure.

3.2.2 If a written approval from the WTORS manufacturer cannot be readily obtained, the installation must be strictly according to a detailed design approval package supplied by an AP Engineer who is also an RPEQ.

3.2.3 The make/model/serial number of the WTORS must be recorded.

3.2.4 A copy of the installation instructions supplied by the WTORS manufacturer must be retained.

3.2.5 All changes to the installed parts and the installation procedures that vary from the WTORS manufacturer's supplied items must be documented.

3.2.6 Sound engineering practice and quality of workmanship must be evident in the installation of WTORS.

3.3 Seats, Seatbelts, and their Anchorages

3.3.1 OVM anchorages should be used if possible.

3.3.2 For manufactured anchorages, test evidence must be retained to show their compliance to the positional and the strength requirements of the relevant ADR.

3.3.3 For additional or replacement seats and seatbelts, OVM parts should be used if possible.

3.3.4 If using aftermarket seats, the seats and their installation must meet VSB-5, using the parts and following the instructions supplied by the seat manufacturer. If the parts and/or the instructions are only generic and are observed not to suit the specific vehicle make/model, then a written approval must be obtained from the seat manufacturer before using alternate parts or making changes to the parts or installation procedure.

3.3.5 If a written approval from the seat manufacturer cannot be readily obtained, the installation must be strictly according to a detailed design approval package supplied by an AP Engineer who is also a RPEQ.

3.3.6 The make/model/serial number of the aftermarket seats/seatbelts must be recorded.

3.3.7 A copy of the installation instructions supplied by the seat manufacturer must be retained.

3.3.8 All changes to the installed parts and the installation procedures that vary from the seat manufacturer's supplied items must be documented.

3.3.9 Sound engineering practice and quality of workmanship must be evident in the installation of additional/replacement seats and seatbelts.

3.4 Anchorages for Child Restraint Top Tether

3.4.1 OVM anchorages should be used if possible.

3.4.2 For aftermarket child restraint, test evidence must be retained to show their compliance to the positional and the strength requirements of the relevant ADR.

3.4.3 If additional brackets are used for the child restraint location, the strength testing must be conducted replicating the complete arrangement. A drawing of the bracket(s) must be included and referenced in the test report.

3.4.4 Sound engineering practice and quality of workmanship must be evident in the installation of the child restraint.

3.4.5 For this code, the following positional requirement from ADR 34/03 applies to all child restraint, other than those fitted by the OVM:

ADR 34/03 - 8.1.3. In the horizontal plane, the centreline of the ‘Interface Profile’ of each ‘Upper Anchor Fitting’ shall lie within 40 mm of the ‘Seating Reference Plane’ of the seating position for which the ‘Upper Anchor Fitting’ is provided.

3.5 Backing Plates for Anchorages

3.5.1 Manufactured anchorages for WLD, WTORS, seats, seatbelts and child restraints must be in the substantial part of the vehicle frame or body so they can resist the imposed loads without failure or deformation.

3.5.2 Manufactured aftermarket anchorages must have backing plates made of 3 mm thick mild steel and minimum 3,750 sq. mm bearing area, with regular shape like circular or 75X50 mm rectangular or similar. Backing plates must have rounded edges, free from sharp corners and adequately protected from rusting. The mounting hole of the backing plate must be approx. at the geometric centre of its bearing area.

3.5.3 Non-standard, custom backing plates that do not meet the above prescription may be used, provided they are supplied as part of a kit by the manufacturer of the WLD or WTORS or seat or seatbelt or child restraint and are intended for use at the specific locations on that make/model of the vehicle and are installed according to the manufacturer's instructions. The mounting hole must be approx. at the geometric centre of the bearing area.

3.5.4 Non-standard, custom backing plates that do not meet the above prescription may also be used, provided they are supported by physical testing by an approved test facility on a vehicle or on a test rig that replicates the anchorage in the vehicle. The mounting hole must be approx. at the geometric centre of the bearing area.

3.5.5 Backing plates must be contoured to match the profile of the surface where they are mounted. Metal spacer blocks or crush tubes must be used to prevent loosening of the anchorage fasteners, if the anchorage and the backing plate sandwich non-metallic parts like timber, plywood, structural foam, or plastic.

3.5.6 Unless recommended otherwise by the equipment manufacturer, the anchorages and the backing plates must be fitted using at least ISO Grade 8.8 (SAE Class 5) fasteners with self-locking nuts.

3.6 Structural Modifications

3.6.1 Structural modifications to vehicle's frame or body, if required, must be strictly according to the vehicle manufacturer's instructions. A copy of the instructions must be retained.

3.6.2 If the instructions are not available or cannot be readily obtained from the vehicle manufacturer, the modification must be strictly according to a detailed design approval package supplied by an AP Engineer who is also a RPEQ.

3.6.3 Where it is appropriate to do so, guidance may be sought from Section H – *Chassis* of the VSB-6 Code of Practice.

4.0 User Information

The vehicle operator must be adequately informed of the changes made to the vehicle and the proper use of the equipment installed.

4.1 Information about Wheelchair Loading Device (WLD)

4.1.1 Each WLD must bear marking to show compliance with the Approved Standard for Product. This includes for example, make, model, serial number of the WLD, essential instructions near the control unit for the safe operation and the safe working load of the WLD.

4.1.2 User Information complying with the relevant Approved Standard for Product must be supplied to the end user. This includes for example, name and address

of the WLD manufacturer or distributor, operating instructions, instructions for regular inspection and maintenance, a copy of the installation guide and service and spare parts guide.

4.1.3 Padding and protective covering must be provided to comply with the relevant Approved Standard for Product Installation.

4.1.4 Protection against entrapment must be provided to comply with the relevant Approved Standard for Product Installation.

4.1.5 Warning system must be provided to comply with the relevant Approved Standard for Product Installation.

4.1.6 Ramps must be secured to comply with the relevant Approved Standard for Product Installation.

4.2 Information about Wheelchair Tiedown and Occupant Restraint System (WTORS)

4.2.1 WTORS and replacement parts must be marked and labelled to comply with the relevant Approved Standard for Product - for example only; section 6.1.1 of the AS/NZS 10542.1:2015; make/model of the WTORS, month and year of manufacture and statement that it complies to AS/NZS 10542.1:2015

4.2.2 Printed information must be provided to the end user to comply with the relevant Approved Standard for Product Installation - for example only; section 6.1.2 of the AS/NZS 10542.1:2015; It must contain model or identification code, part names and their intended use.

4.2.3 A permanent notice must be provided to comply with the relevant Approved Standard for Product Installation - for example only; Section 6.1.3 of the AS/NZS 10542.1:2015 so it can be posted in the vehicle at the wheelchair space. It must contain for example, proper use and operation of the device, and the manual override, if any.

4.2.4 In case the WTORS is intended for use with a specific model of wheelchair, the requirements in the relevant Approved Standard for Product Installation - for example only; section 6.1.4 of the AS/NZS 10542.1:2015 must be met. Accordingly, information about the make and model of the wheelchair and the maximum permissible mass of the wheelchair and its occupant must be supplied to the end user.

4.2.5 It must be ensured that the instructions for installers of WTORS as per the relevant Approved Standard for Product Installation - for example only; section 6.2 of the AS/NZS 10542.1:2015 are received, kept on file and a copy is provided to the end user.

4.2.6 Printed information containing written instructions to the end user must be provided to comply with the relevant Approved Standard for Product Installation - for example only; section 6.3 of the AS/NZS 10542.1:2015 covering the instructions about the use and maintenance of the WTORS.

5.0 Limitations

Section 1.2 of this code provides information about which types of modifications are not permitted to be certified under the LK3 code. In addition, the following limitations apply.

5.1 Electronic Stability Control

If the vehicle is fitted with Electronic Stability Control (ESC) system by the OVM or is required to be fitted, the following conditions must be met:

5.1.1 ESC system must not be disabled.

5.1.2 It must be ensured that the modifications being certified do not reduce the effectiveness of the ESC system.

5.1.3 Extensive modifications to a vehicle's frame, suspension and body may affect the centre of gravity location, weight distribution and hence the vehicle's ESC performance. Continued compliance with the mandatory ESC standard must be confirmed.

6.0 Additional Modifications and Changes to Vehicle Category

6.1 If additional modifications are made that may or may not be essential for fitting of the WLD and WTORS, all such modifications must be assessed separately and certified using the appropriate codes or vehicle-specific approvals. For example, a change to the ride height may require certification under LS9 and LS10 codes; changes to the vehicle's body construction may require certification under LH5 and LH6 codes. In some cases, LT2 testing also may be required.

6.2 If the vehicle's ADR category has changed due to change in seating capacity, the vehicle must comply with the vehicle standards that apply to it in its new category. Certification of such compliance using the appropriate additional code(s) must be provided. For example, certification to the LO1 code, unless a specific exemption has been granted for this purpose.

In case the seating capacity has changed from that specified by the OVM, the LK3 modification plate should show the revised maximum adult seating capacity and the total number of wheelchair positions with prefix WC.

For example: Mod Seating Capacity: Max12 / 10+WC1/ 8+WC2

This means the vehicle can carry a maximum of 12 adult seated passengers when no wheelchairs or wheelchair bound persons are being transported. This number is reduced when wheelchair bound passengers are being transported and restricted by the number of available seats. With one wheelchair, maximum seating capacity is 10, with two wheelchairs, maximum seating capacity is 8 and so on.

6.3 Conflicting requirements, if any, in Section 3.0 override the requirements in this section.

Checklist for modification under code LK3

Modification for Wheelchair Accessibility

CODE LK3

(Y=Yes, N=No)

1	**If the certification is for installation of Wheelchair Loading Device (WLD)**		
1.1	Make of WLD_____ Model of WLD_____ Serial Number_____		
1.2	Is there evidence to show WLD is manufactured to comply with the Approved Standard for Product?	Y	N
1.3	Is the WLD installed to comply with the Approved Standard for Product Installation?	Y	N
1.4	Is the WLD installed using the parts (tick appropriate): (a) supplied in kit form by the WLD manufacturer? or (b) that are approved as alternate parts by the WLD manufacturer? or (c) that are certified by an AP Engineer who is RPEQ?	Y	N
1.5	Is it ensured that installation of the WLD does not interfere with the emergency exits in the vehicle and does not protrude in a way that may cause injury to others in or around the vehicle?	Y	N
1.6	Is the performance test conducted according to the Approved Standard for Product Installation and a report retained? Report Number_____ Date_____	Y	N
1.7	Are all external vehicle mounted controls located on the left side or rear of the vehicle and they can be operated from the left side?	Y	N
1.8	Is a copy of the installation instructions supplied by the WLD manufacturer retained?	Y	N
1.9	Are all variations in the installed parts and the installation procedures from the WLD manufacturer's items documented?	Y	N
1.10	Are the anchorages for the WLD located in the substantial part of the vehicle frame or body and can resist the imposed loads without failure or deformation?	Y	N
1.11	Is it ensured that all backing plates are loaded at approx. centre of the bearing area and are either? (a) as supplied in the kit form by the WLD manufacturer? or (b) meet the nominal size requirement of 3 mm thick mild steel having minimum 3,750 sq. mm area with regular shape like circular or 75X50 mm rectangular or similar? or (c) are supported by physical testing?	Y	N
1.12	Is it ensured that the backing plates for WLD anchorages are contoured to match the profile of the surface where they are mounted?	Y	N
1.13	Are metal spacer blocks or crush tubes used to prevent loosening of the anchorage fasteners, where the anchorage and the backing plate sandwich non-metallic parts like timber, plywood, structural foam, or plastic?	Y	N

1.14	Are all fasteners of the size and strength as recommended by the WLD manufacturer, or in their absence, at least ISO Grade 8.8 (SAE Class 5) with self-locking nuts.	Y	N
1.15	Overall, does the installation of the WLD show sound engineering practice and quality of workmanship?	Y	N
1.16	Is the WLD marked with information such as make, model, serial number of the WLD, essential instructions near the control unit for the safe operation and the safe working load of the WLD?	Y	N
1.17	Is the user information such as the name and address of the WLD manufacturer (or distributer), operating instructions, instructions for regular inspection and maintenance provided to the end user?	Y	N
1.18	Is the required padding and the protective covering provided as per the Approved Standard for Product Installation?	Y	N
1.19	Is the warning system provided as per the Approved Standard for Product Installation?	Y	N
1.20	Are ramps secured as per the Approved Standard for Product Installation?	Y	N
2	**If the certification is for installation of Wheelchair Tiedown and Occupant Restraint System (WTORS)**		
2.1	Make of WTORS_____ Model of WTORS_____ Serial Number_____		
2.2	Is there evidence to show the WTORS is manufactured to comply with the Approved Standard for Product?	Y	N
2.3	Is the WTORS installed to comply with the Approved Standard for Product Installation?	Y	N
2.4	Is the WTORS installed using the parts (tick appropriate): (a) supplied in kit form by the WTORS manufacturer? or (b) that are approved as alternate parts by the WTORS manufacturer? or (c) that are certified by an AP Engineer who is RPEQ?	Y	N
2.5	Is it ensured that installation of the WTORS does not interfere with the emergency exits in the vehicle and does not protrude in a way that may cause injury to others in the vehicle?	Y	N
2.6	Is it ensured that the shoulder anchor points of the WTORS are either: (a) outside the head strike zone of any seating position? or (b) are appropriately covered with padding?	Y	N
2.7	Is a copy retained of the installation instructions supplied by the WTORS manufacturer?	Y	N
2.8	Are all variations in the installed parts and the installation procedures from the WTORS manufacturer's items documented?	Y	N

2.9	Are the anchorages for WTORS located in the substantial part of the vehicle frame or body and can resist the imposed loads without failure or deformation?	Y	N
2.10	Is it ensured that all backing plates are loaded approx. at the centre of the bearing area and are either? (a) as supplied in the kit by the WTORS manufacturer? or (b) meet the nominal size requirement of 3 mm thick mild steel having minimum 3,750 sq. mm area with regular shape like circular or 75X50 mm rectangular or similar? or (c) are supported by physical testing?	Y	N
2.11	Is it ensured that WTORS backing plates are contoured to match the profile of the surface where they are mounted?	Y	N
2.12	Are metal spacer blocks or crush tubes used to prevent loosening of the anchorage fasteners, where the anchorage and the backing plate sandwich non-metallic parts like timber, plywood, structural foam, or plastic?	Y	N
2.13	Are all fasteners of the size and strength as recommended by the WTORS manufacturer, or in their absence, at least ISO Grade 8.8 (SAE Class 5) with self-locking nuts?	Y	N
2.14	Overall, does the installation of the WTORS show sound engineering practice and good quality of workmanship?	Y	N
2.15	Is it confirmed that the WTORS and replacement parts are marked and labelled to comply with the Approved Standard for Product? This includes: (a) marking of the make/model of the WTORS (b) month and year of manufacture and (c) statement that it complies with the Approved Standard for Product	Y	N
2.16	Is it ensured that printed information is provided to the end user to comply with the Approved Standard for Product Installation? This includes: (a) model or identification code, part names and their intended use (b) information about the make and model of the wheelchair and the maximum permissible mass of the wheelchair and its occupant, if the WTORS is intended for use with a specific model of wheelchair (c) instructions about the use and maintenance of the WTORS	Y	N
2.17	Is it ensured that a permanent notice is provided to comply with the Approved Standard for Product Installation and is posted in the vehicle at the wheelchair space? Such information includes: (a) proper use and operation of the device, and (b) proper use and operation of the manual override, if any.	Y	N
3	**If the certification is for installation of additional, replacement or reconfigured seats**		
3.1	Are the seats manufactured by the OVM? or if aftermarket seats, do they comply with VSB-5?	Y	N
3.2	For the additional, replacement or repositioned seats (a) does the installation comply with codes LK2 and LK1? and (b) are the seat installations certified to codes LK2 and LK1?	Y	N
3.3	Is it ensured that additional seats do not interfere with the emergency exits in the vehicle and do not protrude in a way that poses risk of injury to vehicle's occupants?	Y	N

3.4	Is the make/model/serial number of the aftermarket seats/seatbelts recorded?	Y	N
3.5	Do all seat anchorage backing plates, other than OVM anchorages, meet the requirements of this code?	Y	N
3.6	Are seats installed in a way that sound engineering practice and quality of workmanship is evident?	Y	N
4	**If the certification is for installation of additional, replacement or reconfigured seatbelts and/or their anchorages**		
4.1	Are the seatbelts the OVM parts or complying with the relevant Australian Standard?	Y	N
4.2	Installation of seatbelts and seatbelt anchorages: (a) Do they comply with codes LK2 and LK1? and (b) Are they certified to codes LK2 and LK1?	Y	N
4.3	Do all seatbelt anchorage backing plates, other than OVM anchorages, meet the requirements of this code?	Y	N
4.4	Are seatbelts and their anchorages installed in a way that sound engineering practice and quality of workmanship is evident?	Y	N
5	**If the certification is for installation of additional, replacement or reconfigured anchorages for child restraint top tether**		
5.1	Are the child restraint hardware the OVM parts or from a reputed accessory supplier whose compliance to ADR 34/… is traceable?	Y	N
5.2	For child restraint installation: (a) Do they comply with code LK6? and (b) Are they certified to code LK6?	Y	N
5.3	Do child restraint backing plates, other than the OVM anchorages, meet the requirements of this code?	Y	N
5.4	Is any child restraint extension bracket, if used? (a) tested for strength? and (b) a proper test report retained? and (c) an engineering drawing of the bracket attached to and referenced in the report?	Y	N
5.5	Do the manufactured child restraint meet the position requirement of section 3.4.5 of this code?	Y	N
5.6	Is the child restraint installed in a way that sound engineering practice and quality of workmanship is evident?	Y	N
6	**Structural modifications to vehicles**		
6.1	For installation of the WLD, if vehicle's frame or body is modified, is it ensured that the modifications are strictly according to the OVM instructions? or in absence of which, they are strictly according to a design approval package from an RPEQ Engineer?	Y	N
6.2	Is it ensured that the OVM instructions or the RPEQ design approval package are retained as a record?	Y	N
6.3	Are structural modifications carried out in a way that sound engineering practice and quality of workmanship is evident?	Y	N
7	**Electronic Stability Control (ESC) system (if fitted)**		
7.1	Is it ensured that the ESC system is not disabled?	Y	N
7.2	Is it ensured that the ESC system is not made less effective due to modifications carried out under this code?	Y	N

Note: If the answer to any question is **N (No)** the design cannot be certified under LK3 code.

CERTIFICATION DETAILS																		
Make						**Model**						**Year of Manufacture**						
VIN* **(if applicable)**																		
Chassis Number **(If applicable)**																		
Brief Description of Modification(s)																		
Vehicle Modified by (if applicable)																		
Certificate of Modification Number																		
Name of the Certifying AP (*Print*)																		
Name of the Employer of the Certifying AP **(If applicable)**																		
Signature of the Certifying AP												**Date**						

*Or the unique Design Package Number, if providing LK3 design certification

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