### Trailer and modifier details (as applicable) identity and information source

|  |  |  |
| --- | --- | --- |
| Vehicle make: | Vehicle model: | Month and year of manufacture: |
|  |  |  |
| VIN (if applicable): | Vehicle chassis no. (if applicable): | Vehicle modifier (company name): |
|  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Vehicle examined or details supplied by: | | | | | | | | S12 design certificate number: | | | | | | | |
|  | | | | | | | |  | | | | | | | |
| Wheelbase: | | Forward radius: | | | | Rear overhang: | | | | Tow coupling overhang: | | | Drawbar length: | | |
|  | mm |  | | | mm |  | | | mm |  | mm | |  | | mm |
| Point of articulation to rear overhang line: | | | | **Modified ATM:** | | | | | **Modified GTM:** | | | | | **Tare mass:** | |
|  | | | mm |  | | | kg | |  | | | kg | |  | kg |

### Trailer component details

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Component details: | | | | | | | | | | | | | | | | | | | | | | |
| Component | | Make/model | | | | | | | | | | | Compliance mark approval (SARN) | | | | | | | | | Load rating |
| Control system | |  | | | | | | | | | | |  | | | | | | | | |  |
| Braked axles | |  | | | | | | | | | | |  | | | | | | | | | kg |
| Front suspension | |  | | | | | | | | | | |  | | | | | | | | | kg |
| Rear suspension | |  | | | | | | | | | | |  | | | | | | | | | kg |
| Tyre size | |  | | | | | | | | | | |  | | | | | | | | | kg |
| Axle group: front | | Axle number 1 | | | | Axle number 2 | | | | | | Axle number 3 | | | | | | | | Axle group load | | |
| Brake chamber size | |  | | | |  | | | | | |  | | | | | | | | kg | | |
| Slack adjuster length | |  | | | |  | | | | | |  | | | | | | | |
| Axle group: fear | | Axle number 1 | | | Axle number 2 | | | | Axle number 3 | | | | | | Axle number 4 | | | | | Axle group load | | |
| Brake chamber size | |  | | |  | | | |  | | | | | |  | | | | | kg | | |
| Slack adjuster length | |  | | |  | | | |  | | | | | |  | | | | |
| Chassis construction | |  | | | | | | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | | | | | | |
| Tow couplings | | Make | | | | | | Model | | | | | | | | D-rating | | | | | | |
| Front tow coupling / fifth wheel | |  | | | | | |  | | | | | | | | kN | | | | | | |
| Rear tow coupling / fifth wheel | |  | | | | | |  | | | | | | | | kN | | | | | | |
| Brake timing test (if applicable): | | Application time: | | | | | | | | | | | | | | | Release time: | | | | | |
| Rear brake chamber | | ms | | | | | | | | | | | | | | ms | | | | | | |
| Rear coupling to test cylinder | | ms | | | | | | | | | | | | | | ms | | | | | | |
| Calculated braking performance | | | | | | | | | | | | | | | | | | | | | | |
| Calculated ERC deceleration performance relative to Australian Design Rule (ADR) 38/.. upper and lower boundaries at different control signal strengths. | | | | | | | | | | | | | | | | | | | | | | |
| Control signal 'E' | 0.2 | | | 0.4 | | | | | | | 0.6 | | | | | | | 0.8 | | | 1.0 | |
| Control signal kPa | 130 | | | 260 | | | | | | | 390 | | | | | | | 520 | | | 650 | |
| Calculated ERC |  | | |  | | | | | | |  | | | | | | |  | | |  | |
| Parking grade percent at modified ATM | | | | Emergency skid limit | | | | | | | | | | | | | | | Certified suspension skid limit | | | |
|  | | | % |  | | | | | | | | | | | | | | |  | | | |
| All trailers: | | | | Dog trailer: | | | | | | | | | | | | | | | | | | |
| Axle fade rating required (tonnes) | | | | Front friction utilisation | | | | | | | | | | | | | | | Rear friction utilisation | | | |
|  | | | |  | | | at | | |  | | | | ERC | | | | |  | | | |

### Trailer component details

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| --- | --- | --- | --- | --- | --- | --- | --- |
| If you answer NO to any question below, the modification is not acceptable. Check Yes, No, N/A as applicable: | | Yes | | No | | N/A | |
| 1 | Have all calculations required to establish the modified ATM been retained for future audit? | |  | |  | |  |
| 2 | Has the chassis construction been assessed (by calculations) to be adequate for the modified axle group loads, GTM and/or ATM as applicable? | |  | |  | |  |
| 3 | Are the trailer dimensions within the permitted maximum limits? | |  | |  | |  |
| 4 | Does design certification give adequate specification so that the S7 AVE can verify that the chassis conforms to the detail construction, section properties, cross member location and dimensions of the S12 design certification? | | ☐ | |  | |  |
| 5 | Does the design certification specify the trailer's entire braking system, including brake chamber sizes and slack adjuster length setting? | |  | |  | |  |
| 6 | Does the parking brake ability exceed 18% gradient at the modified ATM? | |  | |  | |  |
| 7 | Are the requirements of ADR 38/.. met including ERC, emergency skid limits, friction utilisation and axle fade rating? | |  | |  | |  |
| 8 | Do the tow coupling, tow coupling mounting components and drawbar (if applicable) meet the requirements of ADR 62/.. ? | |  | |  | |  |
| 9 | Does the design certificate specify the tyre placard changes for the trailer, if fitted, so that it records the correct tyre and rim sizes, axle configurations, axle loads and inflation pressures for the modified trailer? | |  | |  | |  |

### Compliance

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Modification** Check Yes, No as applicable: | | Yes | No |  |
| 1 | Does this modification meet all the requirements of the manufacturer’s guidelines / Modification Code S12? |  |  |  |
| 2 | Is the quality of the work to an accepted industry standard? |  |  |  |
| 3 | Does the vehicle continue to comply with ADRs and heavy vehicle standards regulations affected by the modification? |  |  |  |

### Authorisation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **If the answer to any relevant question is NO, the modification is not acceptable.** | | | | |
| **Comments:** |  | | | |
| Issued by: | | Company (if applicable): | | AVE no.: |
|  | |  | |  |
| Signed: | | Modification certificate no.: | S12 design certificate no. issued: | Date: |
|  | |  |  |  |