Higher Mass HPMV Vehicle Designs

1. The vehicle combinations depicted here cover the range of vehicles that may be presented as eligible for HPMV Higher Mass Permits. Eligible vehicles are permitted for HPMV Higher Mass Permits at the mass limits defined in the VDAM Rule Amendment 2010 Schedule 2 Part B “Mass Limits for High Productivity Motor Vehicles”. These permits will be restricted to specified routes and issued by the relevant road controlling authority.

2. The axle mass limits shown here in [brackets] are from Part B Tables 1-6 of the Rule, and reflect the maximum axle mass that the vehicle combination can achieve using typical axle spacings and overall length. Some of the mass limits indicated can only be achieved with Overlength Permits. Axle limits that are not in [brackets] are the current limits from Part A of the VDAM rule (“General Mass Limits”).

3. Vehicles that exceed the dimensions in Table 4.1 of the VDAM Rule are eligible for HPMV Overlength Permits from the NZTA or an approved organisation. Depending upon the vehicle configuration, these vehicles may also be eligible for HPMV Higher Mass Permits at the higher mass limits described above.

4. Note that higher mass limits are only applicable on routes specified on a valid HPMV permit. If you deviate from this route the general mass limits will apply.

5. Road infrastructure limits may reduce the maximum mass on a Higher Mass Permit.
   If you are applying for a Higher Mass HPMV permit, please select the appropriate application vehicle type below:

6. All values are in kilograms. TOL = Total Overall Length.

**Rigid trucks and full trailers.**

**R11T11 - Not eligible for HPMV HM Permit.** [Insufficient axles under VDAM 5.2(6)(e) - a full trailer must have either: (i) two tandem axle sets; or (ii) one tandem axle set and one tri-axle set).

![Rigid Truck and Full Trailer](image)

<table>
<thead>
<tr>
<th>Type</th>
<th>Axle Mass Limits</th>
</tr>
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<tbody>
<tr>
<td></td>
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<tr>
<td>R12T22</td>
<td>55,200kg max if TOL ≥ 19.0m (Overlength Permit req. if TOL over 20.0m)</td>
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![Rigid Truck and Full Trailer](image)

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<td>6,000 (7,200 if SL) 15,000 [16,000] if ≥1.3m 15,000 [16,000] if ≥1.3m 15,000 [16,000] if ≥1.3m</td>
</tr>
</tbody>
</table>

Values in [brackets] are HPMV Limits (VDAM Rule Part B Limits)

NOTE: Road infrastructure or axle spacing mass limits may reduce the maximum mass a particular combination can be approved for.
R22T12 – Not eligible for HPMV HM Permit. [Insufficient axles under VDAM 5.2(6)(e) - a full trailer must have either: (i) two tandem axle sets; or (ii) one tandem axle set and one tri-axle set].

R22T22 – 58,800kg max if TOL over 20.5m (Overlength Permit req. if TOL > 20.0m)

R22T23 – 61,800kg max if TOL ≥ 22.0m (Overlength Permit req. if TOL > 20.0m)

R23T23 – 64,800kg max if TOL ≥ 22.0m (Overlength Permit req. if TOL > 20.0m)

TOL = total Overall Length

Values in [brackets] are HPMV Limits (VDAM Rule Part B Limits)
NOTE: Road infrastructure or axle spacing mass limits may reduce the maximum mass a particular combination can be approved for.
Tractor Semi trailers

A123 - 42,200kg - **Not eligible for HPMV HM Permit** [VDAM 5.2(1)(a) - must exceed a gross mass of 44,000 kg]

![Tractor Semi trailer A123 diagram](image)

A124 - 45,200kg max if TOL ≥ 14.0m (Overlength Permit req. if TOL > 19.0m with one steer axle)

**Not eligible for HPMV HM Permit if there are two steer axles in the quad set.** [VDAM 5.2(6)(c) a semi-trailer that is not in a B-train must have a tri-axle or quad-axle set with no more than one steering axle]

![Tractor Semi trailer A124 diagram](image)

A224 - 48,800kg max if TOL ≥ 15.5m (Overlength Permit req. if TOL > 19.0m with one steer axle)

**Not eligible for HPMV HM Permit if there are two steer axles in the quad set.** [VDAM 5.2(6)(c) a semi-trailer that is not in a B-train must have a tri-axle or quad-axle set with no more than one steering axle]

![Tractor Semi trailer A224 diagram](image)

**TOL = total Overall Length**

*Values in [brackets] are HPMV Limits (VDAM Rule Part B Limits)*

NOTE: Road infrastructure or axle spacing mass limits may reduce the maximum mass a particular combination can be approved for.
A134 – 48,200kg max if TOL ≥ 15.5m (Overlength Permit req. if TOL > 19.0m with one steer axle)

Not eligible for HPMV HM Permit if there are two steer axles in the quad set. [VDAM 5.2(6)(c) a semi-trailer that is not in a B-train must have a tri-axle or quad-axle set with no more than one steering axle]

B1222 – 55,200kg max if TOL ≥ 19.0m (Overlength Permit req. if TOL > 20.0m)

B1232 – 58,200kg max if TOL ≥ 20.5m (Overlength Permit req. if TOL > 20.0m)

TOL = total Overall Length

Values in [brackets] are HPMV Limits (VDAM Rule Part B Limits)
NOTE: Road infrastructure or axle spacing mass limits may reduce the maximum mass a particular combination can be approved for.
**B1233** – 61,200kg max if TOL ≥ 22.0m (Overlength Permit req. if TOL > 20.0m)

6,000 (7,200 if SL) 15,000 [16,000] if ≥1.3m 18,000 [19,000] if ≥2.5m 18,000 [19,000] if ≥2.5m

**B2232** – 61,800kg max if TOL ≥ 21.5m (Overlength Permit req. if TOL > 20.0m)

10,800 15,000 [16,000] if ≥1.3m 18,000 [19,000] if ≥2.5m 15,000 [16,000] if ≥1.3m

**B2233** – 64,800kg max if TOL ≥ 22.0m (Overlength Permit req. if TOL > 20.0m)

10,800 15,000 [16,000] if ≥1.3m 18,000 [19,000] if ≥2.5m 18,000 [19,000] if ≥2.5m

TOL = total Overall Length

Values in [brackets] are HPMV Limits (VDAM Rule Part B Limits)

NOTE: Road infrastructure or axle spacing mass limits may reduce the maximum mass a particular combination can be approved for.