PBS Payload Management Procedure for Containers

[Business Name]

PBS design application number: **V[000000]**

PBS Design Approval number: **DA[0000]**

Vehicle: **[A-Double]**

Document Number: **[PMP Document Reference Number]**

This document sets out the procedure to comply with the PBS Design Approval condition limiting maximum payload height.

This template can be used as a guide to create a PBS Payload Management Procedure for a vehicle carrying containers.

For different load types you’ll need to adjust this template to suit your specific case. A separate template is provided for tankers carrying liquids.

Add your own content where relevant, including new sections.

Sample content along with comments have been included. Delete the comments texts when the PMP is complete.

The first time you enter the name of your business in the ‘Business Name’ field it will automatically update all other instances of the field in this template.

Paste your logo into the ‘Insert Logo Here’ box in the header on this cover page and on page 2 (double-click in header to open). To increase or decrease the size of your logo, click the logo to display a box around the image and then drag a sizing handle from a corner of the box away from or toward the centre. Adding your logo is optional.

\*\*\* Delete this text box before printing. \*\*\*

# Declaration

**Training in this procedure will be provided to all personnel involved in loading and operation of the vehicle.**

**Containers with unknown load heights will not be transported on this PBS combination.**

**The drivers must keep a copy of this procedure along with the PBS Vehicle Approval in their possession and be able to produce these documents for inspection by compliance officers.**

Include the following statement if only planning to transport Mixed Density Freight which does not have a height restriction.

*This PBS combination will be loaded with mixed Density freight only. Uniform density loads will not be transported on this combination.*

|  |  |  |  |
| --- | --- | --- | --- |
| Signed: |  | Date: |  |
| **Name:** |  | **Position:** |  |

# Instructions

1. Determine the applicable mass limit (GML, CML or HML)
2. Confirm payload type – Mixed Freight or Uniform Density
3. From Table 2 establish the Maximum Fill Height
4. Measure and mark the maximum fill height inside the container
5. Any load above the fill height limit must be removed or the container must be transported on another vehicle which does not have load height restrictions.

**Containers with unknown load heights must not be transported on this PBS combination when load height restrictions exist.**

Optional: insert a section with instructions on how to determine the applicable mass limits mentioned in point 1 above.

# PBS Maximum Payload Height

PBS Maximum Payload Heights is measured from the ground in meters. This table is taken directly from the PBS Design Approval.

Copy the Maximum Payload heights table from your PBS Design Approval. Please contact your PBS Certifier if you don’t have access to that information. Below is an example of a common type of Maximum Payload heights table.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Table 1 - Maximum Payload Heights (m) | | | | | | | |
|  | Mixed Freight Payload | | | | Uniform Density Payload | | |
| <Variant Name> | GML | CML | | HML | GML | CML | HML |
| Lead Trailer | 4.300 | 4.250 | | 4.200 | 4.020 | 3.950 | 3.910 |
| Rear Trailer | 4.250 | 4.200 | | 4.150 | 3.600 | 3.540 | 3.500 |
| Load Height Restriction is not required | | |
| Load Height Restriction is required | | |

Payload height restriction don’t apply if the Maximum Payload Height is within 150mm of the overall vehicle height.

In this example, only the Uniform Density payload requires a load height restriction.

If you are not planning to transport Uniform Density payloads on your vehicle, you may include the following statement:

*Uniform Density* payloads *must not be transported on this vehicle.*

This way your vehicle can be used as general vehicle with no load height restrictions.

An operating condition prohibiting the transportation of Uniform Density loads will be included on your VA.

In this example, the overall vehicle height is 4.300m. Load heights of 4.150m and above do not require a load height restriction and therefore have been color-coded as green.

# Maximum Fill Height

Maximum Fill Height is measured from the container floor to the top of the freight within the container and is calculated using the following formula:

|  |
| --- |
| Max. Fill Height = PBS Max. Payload Height – Twist Lock Height – Container Floor Thickness |

where,

Twist Lock Height = *<1350>*mm

Container Floor Thickness = *<150>*mm

\*Calculation - Maximum Load Fill Height: 4.020 - 1.350 - 0.150 = 2.520m

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Table 2 - Maximum Fill Heights (m) | | | | | | | |
|  | Mixed Freight Payload | | | | Uniform Density Payload | | |
|  | GML | CML | | HML | GML | CML | HML |
| Lead Trailer | Full | Full | | Full | 2.520\* | 2.450 | 2.410 |
| Rear Trailer | Full | Full | | Full | 2.100 | 2.040 | 2.000 |
| Load Height Restriction is not required | | |
| Load Height Restriction is required | | |

# Definitions

**Bulk / Uniform Density** Payloads have the mass equally distributed throughout the volume of the load space. Examples of uniform density products include, but are not limited to - grain, gravel sand, boxed ceramic tiles and canned drinks. Uniform Density load type assumes the Centre of Gravity (CoG) height is the centroid of the load or 50% of the height of the load.

**General / Mixed Freight** Payloads have heavier items placed on the bottom of the load and lighter items on top. For example, a mix of boxes of different weights, with heavier boxes placed on the bottom while lighter and smaller are placed on the top. Mixed Freight assumes the CoG height is at approximately 40% of the height of the load.

**PBS Maximum Payload Height** - is measured from the ground to the top of the freight transported within the container. This value is provided in the PBS Design Approval.

**Maximum Fill Height** - is the maximum load height inside the container. It is measured from the container floor to the top of the freight within the container.

**GML** – General Mass Limits

**CML** – Concessional Mass Limits

**HML** – Higher Mass Limits

**QML** – Quad Axle Mass Limits

**TCM** – Total Combination Mass