

## CASE 11: RATED CURTAINS WITH MEZZANINE DECK

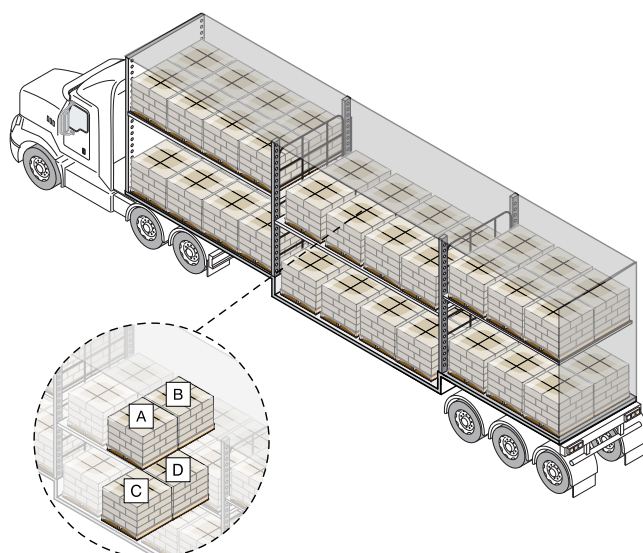
### Load:

- Palletised general freight.
- Pallet A weighs 600 kg, Pallet B weighs 750 kg, Pallet C weighs 1,000 kg and Pallet D weighs 800 kg – *Figure 504*.

### Vehicle:

- A prime mover and semitrailer with rated side curtains and a mezzanine deck.

*Figure 504 Palletised general freight on a mezzanine deck*



## IDENTIFY THE LOAD, VEHICLE AND EQUIPMENT:

### Step 1:

#### Which part of the load do I want to restrain?

I want to restrain the load of pallets on the mezzanine deck.

### Step 2:

#### What vehicle will I use?

A prime mover and semitrailer with rated side curtains and a mezzanine deck.

## CHOOSE A SENSIBLE RESTRAINT METHOD:

### Step 3:

#### Is the load blocked forwards?

**Yes** – the load on the deck is fully blocked to 0.8 g with a suitably reinforced pipe rack.

- ✓ Check the load is tightly packed and that the sum of any gaps along the trailer (front to rear of the load) is less than 200 mm.

### Step 4: Is the load blocked sideways?

To check if the load is blocked sideways you need to know the **side curtain rating capacity** and the **load mass**.

- ✓ Check the sum of any gaps across the load is less than 100 mm.
- ⚠ If the gaps are too big you need other restraints or fill the gaps.
- ⚠ If unsure about the curtain rating, ask the manufacturer.
- i For more information on using side curtains see the [Vehicle and Equipment module](#).

### Step 5: Is the load blocked rearwards?

**Yes** – the gap at the rear of the load is less than 200 mm and the blocking device is rated to 0.5 weight of the whole load.

### Step 6: Do I need extra restraints?

**No** – The load is effectively restrained in all directions.

- ⚠ If the load is a multi-drop load the restraint methods are likely to change during the journey as parts of the load are delivered, creating gaps. See [Case 12](#) for more information on multi-drop loads.

### Side rating capacity – per pallet width

- i If your rating capacity is per pallet width, you need to know the mass of one row of pallets on the lower deck **AND** the mass of one row of pallets on the mezzanine deck.

For this example, the mass of the lower deck pallet row is **1,800 kg** (Pallet C 1,000 kg + Pallet D 800 kg).

The mass of the mezzanine deck pallet row is **1,350 kg** (Pallet A 600 kg + Pallet B 750 kg).

If the rating capacity per pallet width is greater than **3,150 kg (1,800 kg + 1,350 kg)** then the load is **BLOCKED SIDEWAYS**.

- ⚠ If your curtains do not have a sufficient rating capacity, you will need extra restraints to meet the sideways forces.

### Side rating capacity – per pallet space

- i If your rating capacity is per pallet space, you need to know the **heaviest combined mass** of a pallet space for the lower and mezzanine deck (A+C or B+D).

For this example, the mass of the heaviest pallet space combination is **1,600 kg** (Pallet A 600 kg + Pallet C 1,000 kg).

If the rating capacity per pallet space is greater than **1,600 kg** then the load is **BLOCKED SIDEWAYS**.

- ⚠ If your curtains do not have a sufficient rating capacity, you will