2 Maximum gross mass

2.1 Freight containers, like all CTUs, have a maximum gross operating mass or rating which is shown both on the CSC safety approval plate (see figures 4.1, 4.2 and 4.3) and on the rear end of the freight container (see figure 4.7).

Figure 4.7 Rear of freight container

2.2 The two values shown on a freight container should be the same, however if they are different the value shown on the CSC safety approval plate should be used.

2.3 The tare mass shown in the figure relates to the empty mass of the freight container and should always be shown on the rear end of the freight container. This value will include any permanently attached equipment such as an integral refrigeration unit, but will not include items that are attached, such as a nose mounted generator (clip on unit).

2.4 The maximum payload (or net mass) may be shown on the rear of the freight container, however the correct method for calculating the maximum mass of cargo that the freight container can carry is:

$$P = R - (T_c + T_g + T_s)$$

Where:	
P	Maximum payload (or net mass) of cargo
R	Maximum gross mass of freight container
T_c	Tare mass of the freight container
T_g	Mass of additional attached items
T_s	Mass of the securing and bracing materials

3 Allowable stacking mass

3.1 The allowable stacking mass represents the maximum superimposed load that any freight container can be subjected to and is often referred to as the stacking capability or stack height (when converted to a number of freight containers).

3.2 Freight containers built to the provisions of ISO 1496 are required to withstand a minimum superimposed load of 192,000kg. This value is the equivalent of eight superimposed freight containers with an average mass of 24,000kg.

3.3 Freight containers having an allowable stacking mass of less than 192,000 kg are not unrestrictedly suitable for sea transport. This includes:

- Freight containers built to a previous standard;
- Swap bodies;
- Freight containers designed to be used with one door removed/open.