

GUIDE FOR CERTIFICATION OF

CONTAINER SECURING SYSTEMS 1988

NOTICE NO. 2 – 1 February 2003 (Rev. on 24 March 2004)

Commentary on the Revised Table 4.6, “Loads on Containers”

ABS has received numerous inquiries from ship owners, container operators, shipyards, designers and container securing device manufacturers to update this table in order to reflect the fact that cargo containers produced for full compliance with the ISO standard can sustain higher testing loads than the specified loads in the standard. ABS recognizes that most of containers produced in the past decade are satisfactorily certified for higher prototype testing loads than those specified in the ISO standard. In view of the above, the allowable loads on containers in Table 4.6 are upgraded.

This Notice becomes effective on 1 February 2003.

TABLE 4.6
Loads on Containers (1 February 2003)

Metric Units

<i>Item</i>		<i>20 Ft. Container W = 24.00 M. Ton</i>	<i>40 Ft. Container W = 30.48 M. Ton</i>
End Wall Racking		15.2 M. Ton	15.2 M. Ton
Side Wall Racking		12.7 M. Ton	12.7 M. Ton
Corner Post Compression		86.4 M. Ton	86.4 M. Ton
Vertical Compression on Bottom Corner Fitting		97.2 M. Ton	97.2 M. Ton
Transverse Securing ⁽¹⁾ Force on Corner Fitting:			
Top Corner	Tension	25.4 M. Ton	25.4 M. Ton
	Compression	25.4 M. Ton	25.4 M. Ton
Bottom Corner	Tension	35.6 M. Ton	35.6 M. Ton
	Compression	35.6 M. Ton	35.6 M. Ton
Longitudinal Securing ⁽¹⁾ Force on Corner Fitting:			
Top Corner	Tension	10.2 M. Ton	10.2 M. Ton
	Compression	5.1 M. Ton	5.1 M. Ton
Bottom Corner	Tension	20.3 M. Ton	30.5 M. Ton
	Compression	20.3 M. Ton	30.5 M. Ton
Lashing Force ⁽²⁾ on Corner Fitting	Vertical	30.5 M. Ton	30.5 M. Ton
	Horizontal	15.2 M. Ton	15.2 M. Ton
Vertical Tension on Top Corner Fitting		20.3 M. Ton	20.3 M. Ton
Vertical Tension on Bottom Corner Fitting		25.4 M. Ton	25.4 M. Ton

(1) See Figure 4.5

(2) See Figure 4.6

For containers which cannot support the above loads due to the container construction standards, the loads are to be properly reduced. See Section 1.1.

TABLE 4.6
Loads on Containers (1 February 2003)

Inch/Pound Units

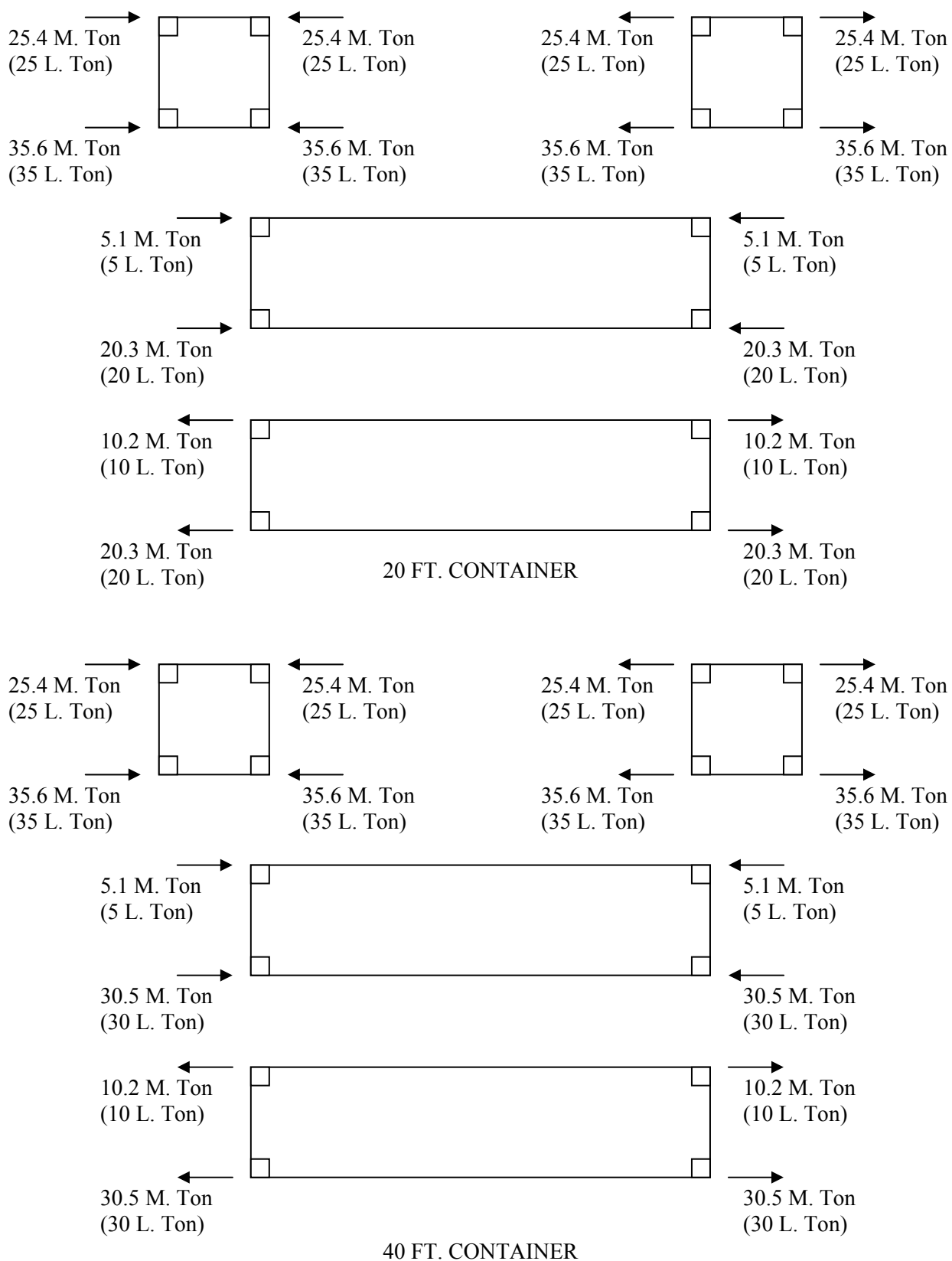
<i>Item</i>		<i>20 Ft. Container W = 23.62 L. Ton</i>	<i>40 Ft. Container W = 30 L. Ton</i>
End Wall Racking		15 L. Ton	15 L. Ton
Side Wall Racking		12.5 L. Ton	12.5 L. Ton
Corner Post Compression		85 L. Ton	85 L. Ton
Vertical Compression on Bottom Corner Fitting		95.7 L. Ton	95.7 M. Ton
Transverse Securing ⁽¹⁾ Force on Corner Fitting:			
Top Corner	Tension	25 L. Ton	25 L. Ton
	Compression	25 L. Ton	25 LM. Ton
Bottom Corner	Tension	35 L. Ton	35 L. Ton
	Compression	35 L. Ton	35 L. Ton
Longitudinal Securing ⁽¹⁾ Force on Corner Fitting:			
Top Corner	Tension	10 L. Ton	10 L. Ton
	Compression	5 L. Ton	5 L. Ton
Bottom Corner	Tension	20 L. Ton	30 L. Ton
	Compression	20 L. Ton	30 L. Ton
Lashing Force ⁽²⁾ on Corner Fitting	Vertical	30 L. Ton	30 L. Ton
	Horizontal	15 L. Ton	15 L. Ton
Vertical Tension on Top Corner Fitting		20 L. Ton	20 L. Ton
Vertical Tension on Bottom Corner Fitting		25 L. Ton	25 L. Ton

(1) See Figure 4.5

(2) See Figure 4.6

For containers which cannot support the above loads due to the container construction standards, the loads are to be properly reduced. See Section 1.1.

TABLE 4.6
Securing Force on Corner Fitting (1 February 2003)



CORRIGENDA/EDITORIALS – 1 February 2003

Section	3	Container Securing Arrangements
2 (Notice 1)	3.5.4.a(2)	In second line, “semi-automatic twist lock” to read “hanging stacker”.
2 (Notice 1)	Table 3.1	In column “Cell Guide End of 20 ft Container”, values for “2 nd tier”, “3 rd tier” and “4 th & higher tiers” to read “60%”, “65%” and “70%”, respectively, as shown below:

Table 3.1**Transverse Dynamic Force Distribution for 20 ft Containers in 40 ft Container Cells**

	Cell Guide End of 20 ft Container	Mid-Hold End of 20 ft Container
Lowest tier	50% of transverse force	50%of transverse force
2nd tier	60% of transverse force	40%of transverse force
3rd tier	65% of transverse force	35%of transverse force
4th & higher tiers	70% of transverse force	30%of transverse force