

Höganäs, Sweden, 2020-10-22

Cordstrap CornerLash® AAR 200LE.4 solution Certification of the compliance with the CTU Code MariTerm AB Certificate CS202008

MariTerm AB, Höganäs, Sweden, has on behalf of Cordstrap BV, Oostrum, the Netherlands, evaluated the strength and efficiency of the Cordstrap CornerLash® AAR 200LE.4 solution according to the principles of the IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU Code).

The evaluation has been based on the following properties and strengths in the equipment:

Fully CTU Code compliant

- Lashing length and elongation
- Lashing angles
- Securing point rated strengths

Practical calculations

- Lashing length and elongation
- Lashing angles

A Cordstrap CornerLash® AAR 200LE.4 solution has the following system strength:

- SBS: 24000 daN
- MSL: 12000 daN

Where the component strengths are:

- Cornerelements: BS 6000 daN; MSL 3000 daN
- Lashings: BS: 4893 daN, in a system: BS 8500 daN; MSL 4250 daN
- Buckles: BS 6000 daN; MSL 3000 daN
- MSL in the container Corner points: min 1000 daN
- MSL in the container roof lashing points: min 500 daN

It is hereby certified that the Cordstrap CornerLash® AAR 200LE.4 solution is an acceptable securing arrangement and fully complies with the CTU Code for the securing of the cargo weights given in the tables below. The calculations underlying these tables can be found in CS202008-A CornerLash AAR 200LE.4 – Appendix to certificate CS202008.



Sven Sökjer-Petersen, CEO
MariTerm AB



Lashing tables

The lashing tables below are based on the following modes of transport and accelerations:

Mode of transport	Horizontal acceleration	Vertical acceleration
Road (doors to the rear) and rail transport (doors in any direction)	0.5 g	1.0 g
Road transport (doors to the front)	0.8 g	1.0 g
Sea transport (sea area C – unrestricted)	0.4 g	1 ± 0.8 g

CornerLash® AAR 200LE.4 – 20ft CTU

Fully CTU Code compliant

Friction factor, μ	Secured cargo weight in ton		
	Road (Doors to rear) & Rail	Road (Doors to front)	Sea area C
0.0	24.1	15.0	30.1
0.1	28.0	16.4	30.9
0.2	33.6	18.1	31.7
0.3	42.2	20.2	32.7
0.4	57.3	22.9	33.7
0.45	70.1	24.6	34.2
0.5	no slide	26.6	34.8
0.6	no slide	31.9	36.0
0.7	no slide	40.1	37.4



Practical calculations

Friction factor, μ	Secured cargo weight in ton		
	Road (Doors to rear) & Rail	Road (Doors to front)	Sea area C
0.0	24.1	15.0	30.1
0.1	28.0	16.4	30.9
0.2	33.6	18.1	31.7
0.3	42.2	20.2	32.7
0.4	57.3	22.9	33.7
0.45	70.1	24.6	34.2
0.5	no slide	26.6	34.8
0.6	no slide	31.9	36.0
0.7	no slide	40.1	37.4



CornerLash® AAR 200LE.4 – 40ft CTU

Fully CTU Code compliant

Friction factor, μ	Secured cargo weight in ton		
	Road (Doors to rear) & Rail	Road (Doors to front)	Sea area C
0.0	22.1	13.8	27.7
0.1	26.0	15.3	28.8
0.2	31.6	17.0	29.9
0.3	40.3	19.3	31.2
0.4	55.3	22.1	32.6
0.45	68.1	23.9	33.3
0.5	no slide	26.0	34.1
0.6	no slide	31.6	35.7
0.7	no slide	40.3	37.5



Practical calculations

Friction factor, μ	Secured cargo weight in ton		
	Road (Doors to rear) & Rail	Road (Doors to front)	Sea area C
0.0	22.1	13.8	27.7
0.1	26.0	15.3	28.8
0.2	31.6	17.0	29.9
0.3	40.3	19.3	31.2
0.4	55.3	22.1	32.6
0.45	68.1	23.9	33.3
0.5	no slide	26.0	34.1
0.6	no slide	31.6	35.7
0.7	no slide	40.3	37.5



Notes regarding the application of the Cordstrap CornerLash® AAR 200LE.4 solution

Soft or deformable cargo should be adequately protected against breakage, damage or significant deformation, e.g. by applying edge protection and/or blocking boards. Appropriate measures should be applied to keep the lashing in the right position.

Please note that the values of secured cargo weight might differ slightly for specific solutions with different dimensions.