# Guide for ReadyLash

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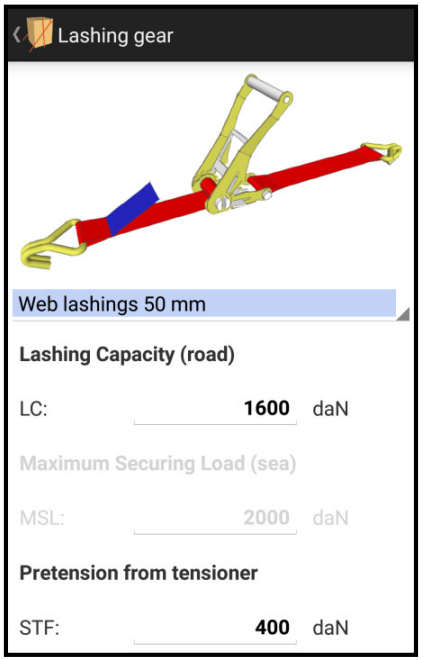
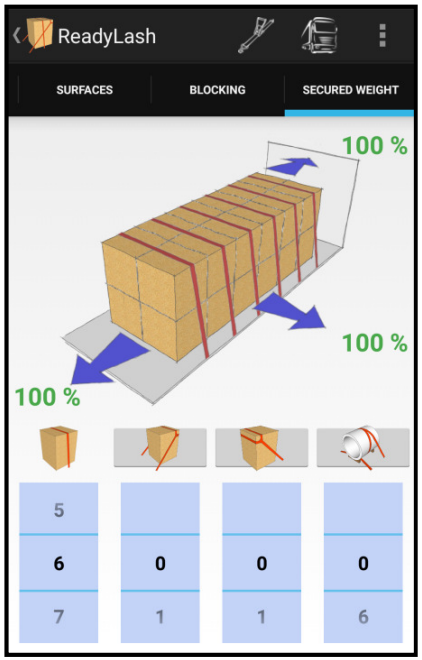
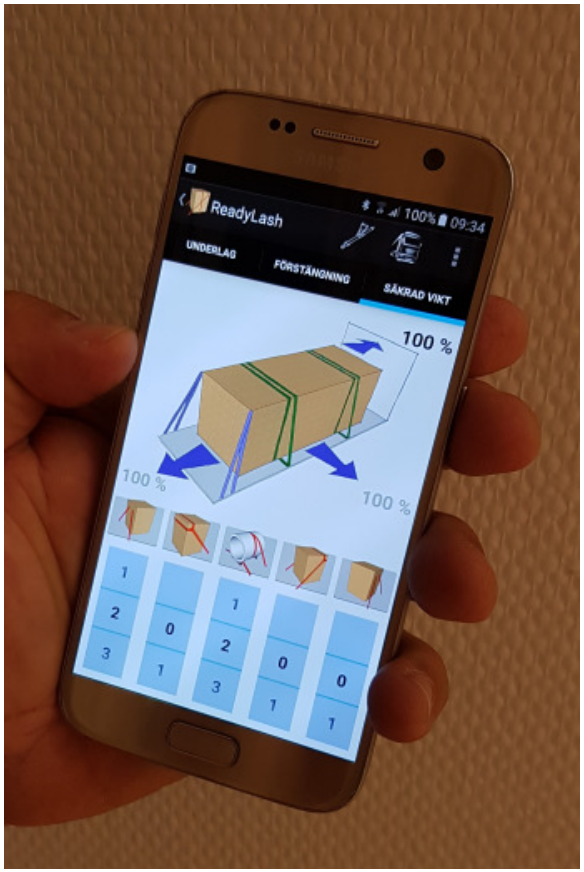
ReadyLash – Cargo Securing by MariTerm AB is a very user-friendly tool for checking required cargo securing measures according to different rules or standards and for different modes of transport. ReadyLash allows the user to easily combine and test different cargo securing methods to find the most suitable solution.

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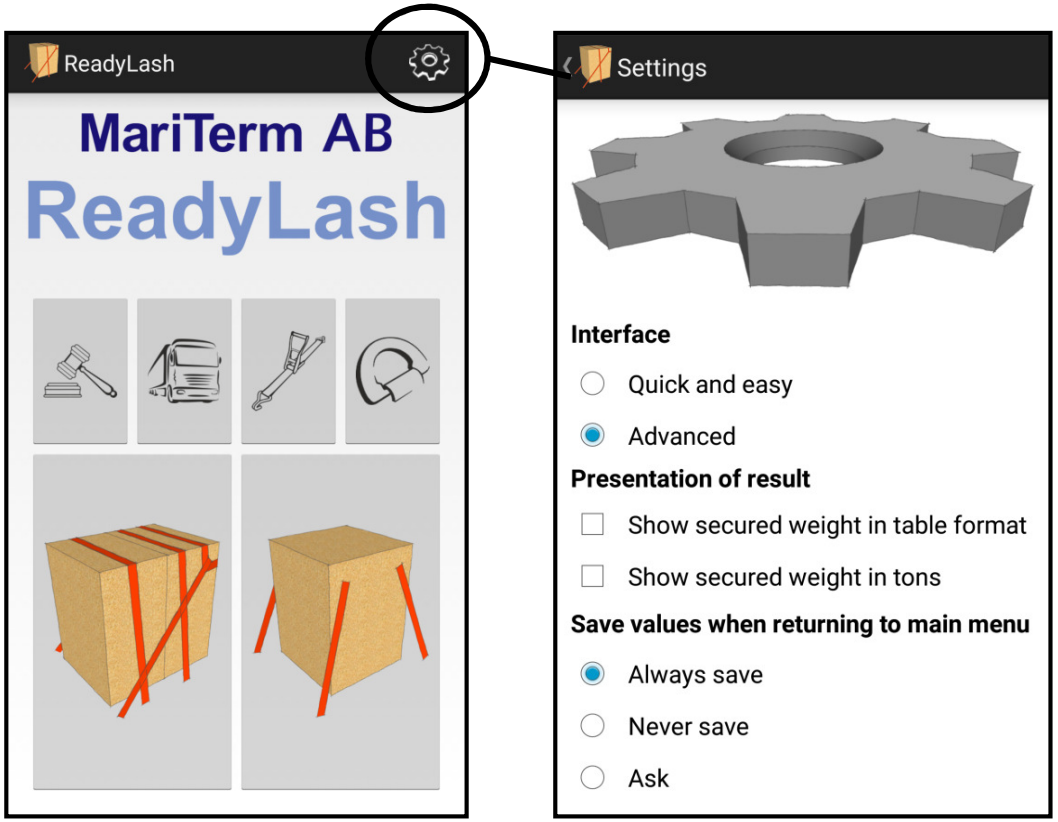
The user may choose between **Quick and easy** interface to quickly get an answer to which method to use or **Advanced** settings, which allows more detailed cargo, lashing and cargo transport unit properties to be entered.

The results can be presented in different ways:

- As percentage of cargo weight that is safely secured
- As actual secured cargo weight in ton
- In detailed table format or in simple layout

**This guide will be based on the interface Advanced**



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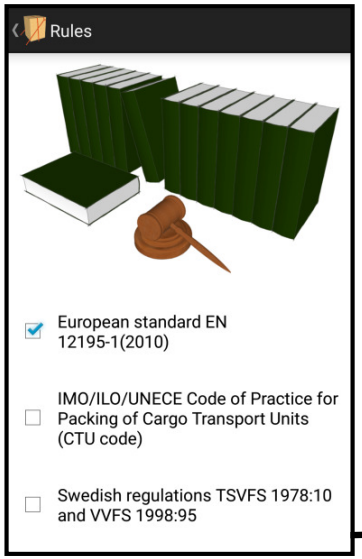
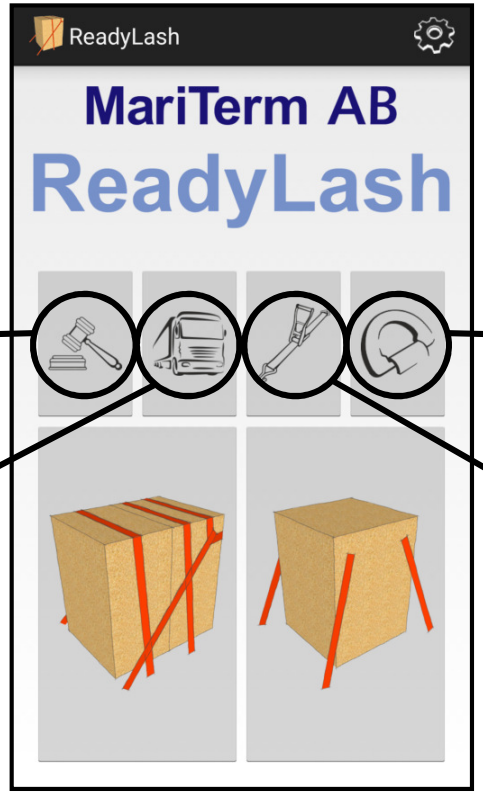
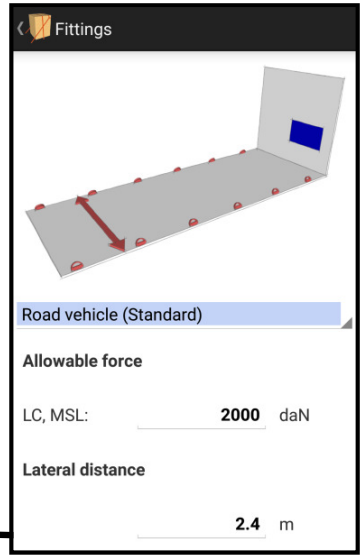


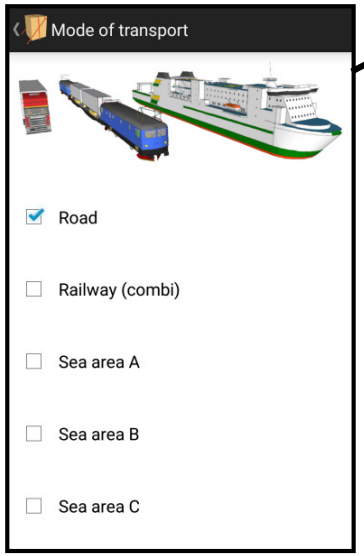

Set the rules or standard which are to be followed when checking or dimensioning required cargo securing measures.

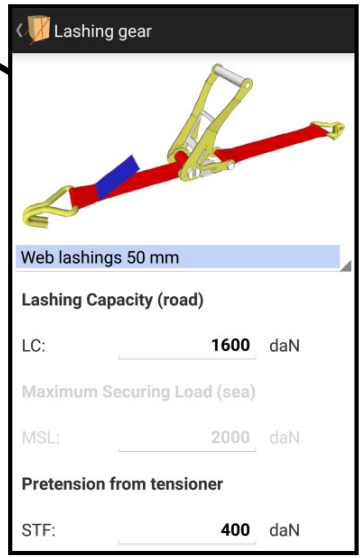



Set the lashing fittings available in the CTU. Also the allowable force in the fittings can be set as well as the lateral distance between the fittings.




Set the different modes of transport for which the cargo shall be exposed to.




Set what type of lashing equipment which is to be used. Also LC/MSL and $S_{TF}$ can be set.

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Depending on which type of cargo securing method which is to be used, the user has two choices:

1. If Top-over lashing, Loop lashing or Spring lashing are used, this button should be selected.


2. If Straight lashing is used, this button should be selected.

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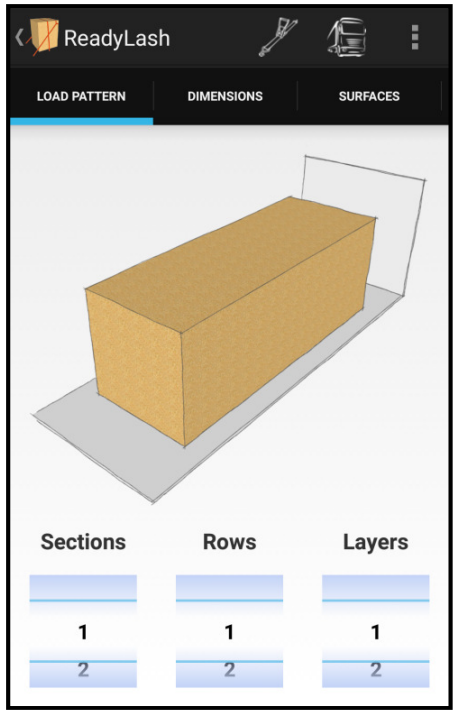
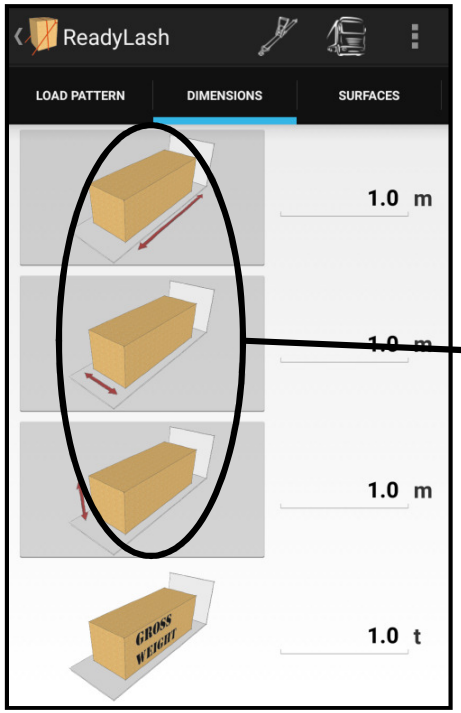
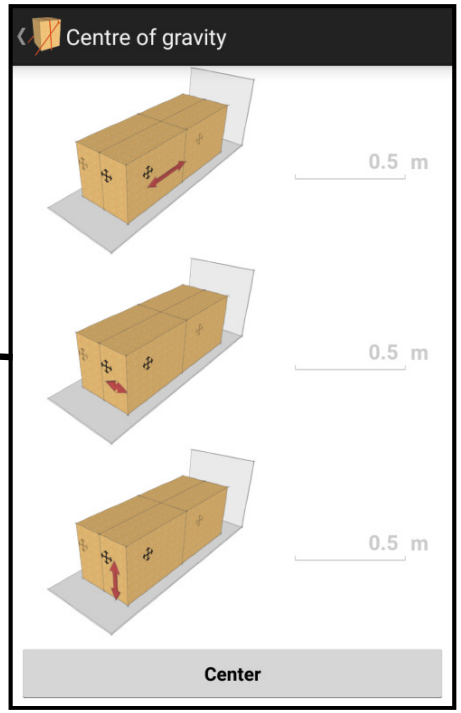
## 1. If Top-over lashing, Loop lashing or Spring lashing are used




The first thing which has to be stated is the loading pattern of the goods – how many sections, rows and layers



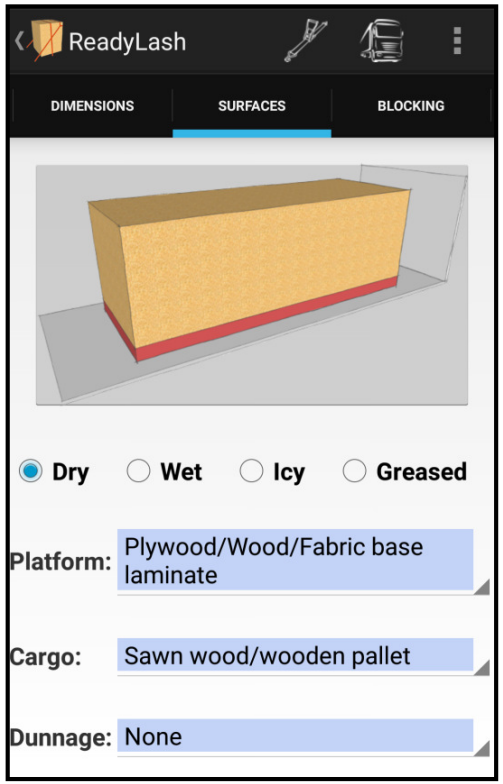

Then the dimensions of the goods are stated – length, width, height and weight. If the goods has a shifted COG the boxes marked in grey can be selected



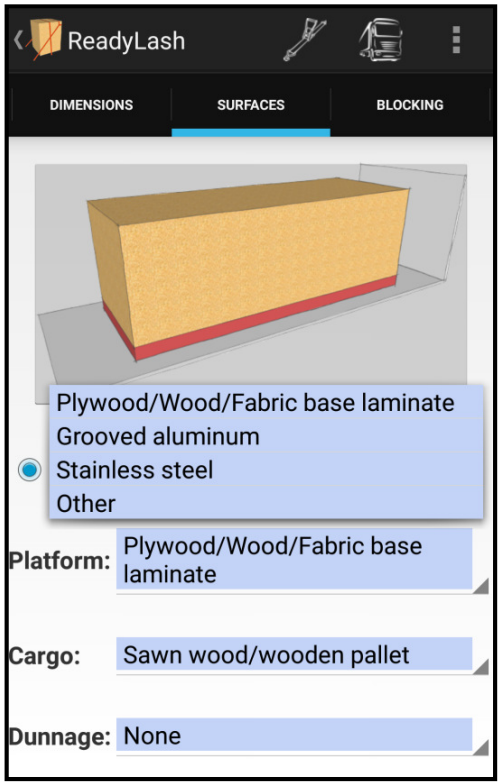

The shifted COG is stated by clicking on the values and set them to the right dimensions. The default input is a centered COG

# Guide for ReadyLash

## 1. If Top-over lashing, Loop lashing or Spring lashing are used




The surfaces of the Platform of the CTU and Cargo is set. If the surfaces are dry, wet, icy or greased this is set. If the surfaces are unknown or not in the table, select ”other”. If rubber mats are used this can be set under Dunnage




The table for Platform have a number of different surfaces. If the goods are loaded in multiple layers it is possible to set the surfaces between the different layers of goods

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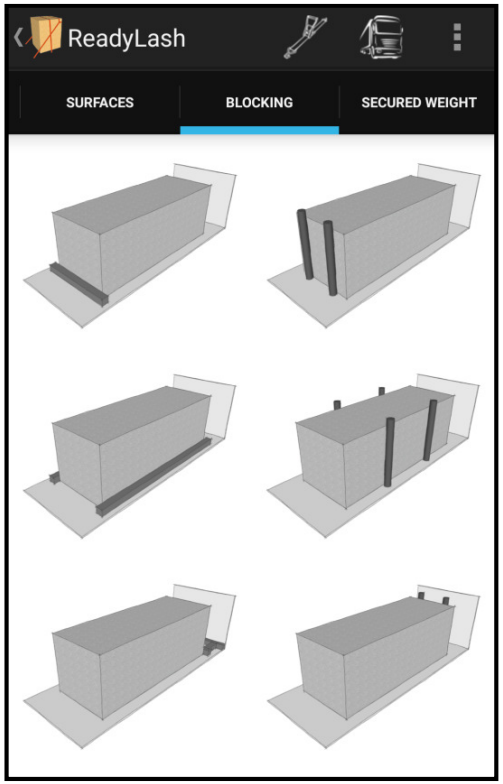
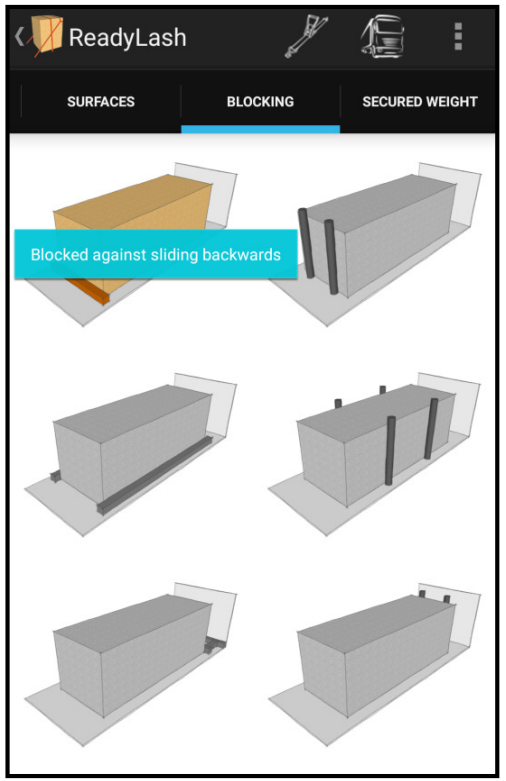
## 1. If Top-over lashing, Loop lashing or Spring lashing are used



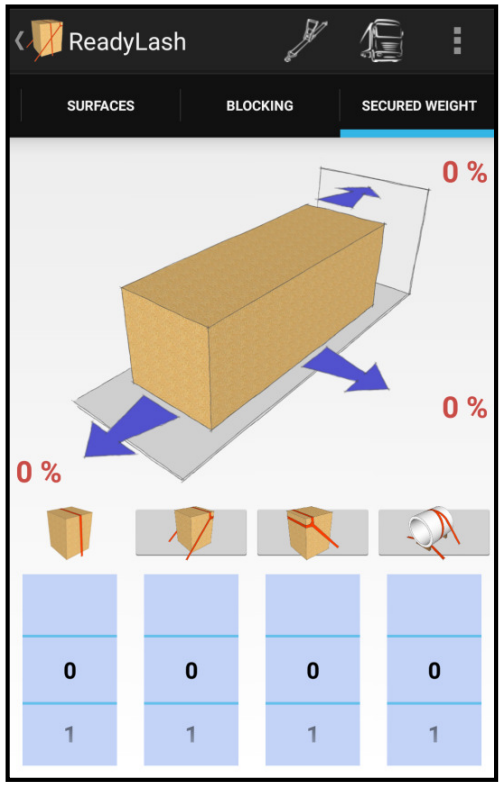

If there is a blocking arrangement this is set. The blocking arrangements in the left column are against sliding and the ones in the right column are against both sliding and tipping



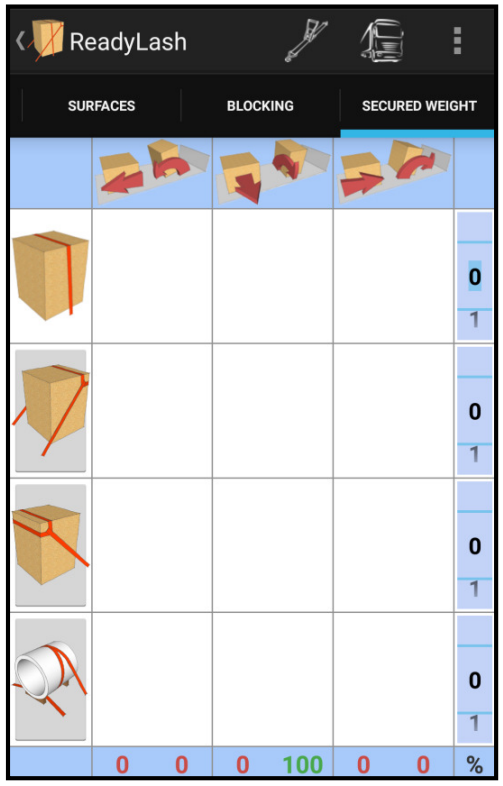

When a blocking arrangement is selected it is highlighted with color. Multiple blocking arrangements can be selected

# Guide for ReadyLash

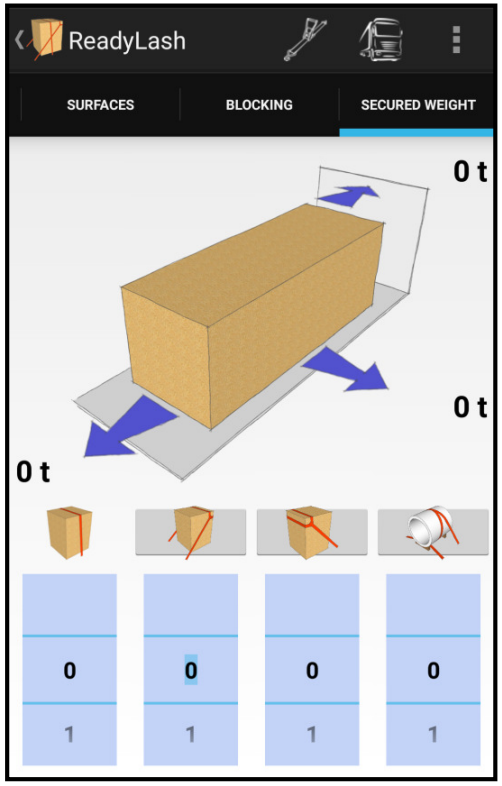
## 1. If Top-over lashing, Loop lashing or Spring lashing are used




The secured weight is presented in the next step. In this picture a percent of the secured weight is presented. The different sliders adds the different lashings



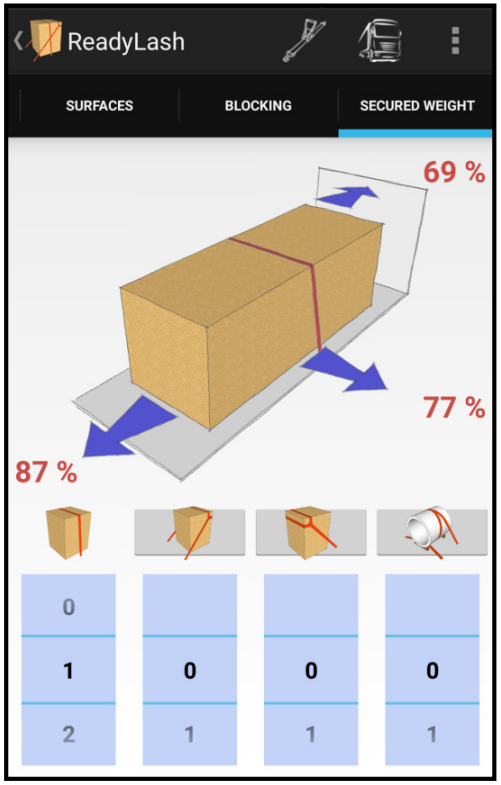

If “Show secured weight in table format” is selected under settings the secured weight will be presented in a table according to the image above



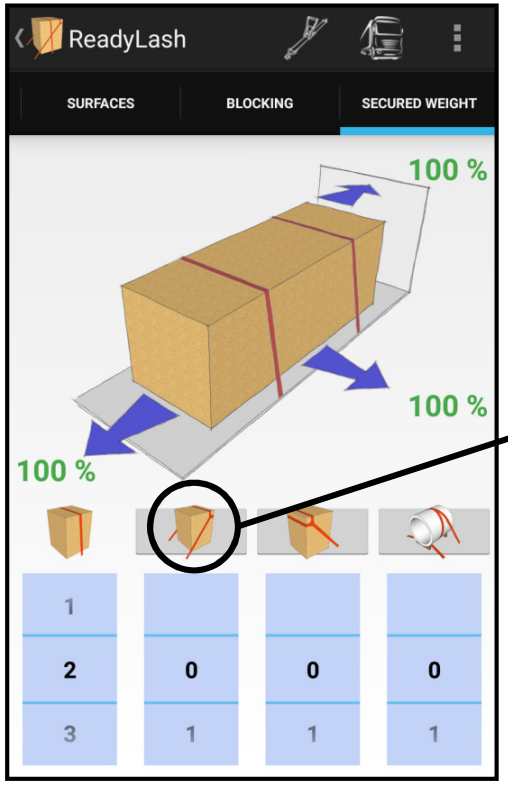

If “Show secured weight in tons” is selected under settings the secured weight will be presented according to the image above

# Guide for ReadyLash

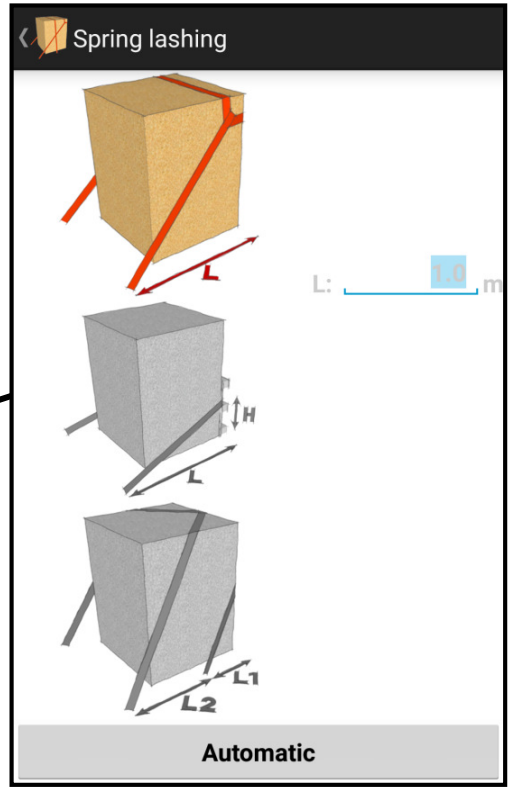
## 1. If Top-over lashing, Loop lashing or Spring lashing are used




One top-over lashing has been added and 87% of the cargo weight is secured backwards, 69% forwards and 77% sideways



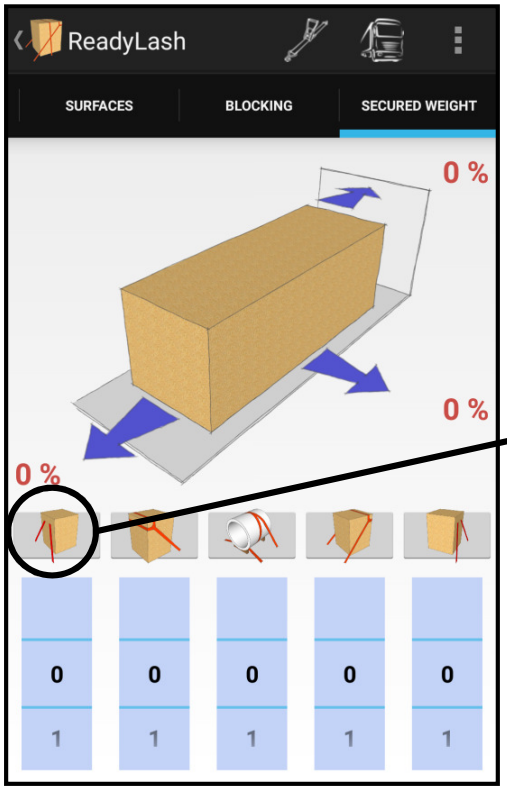

Two top-over lashings have been added and the cargo weight is 100% secured in all directions. The grey marked images of spring and loop lashings can be selected



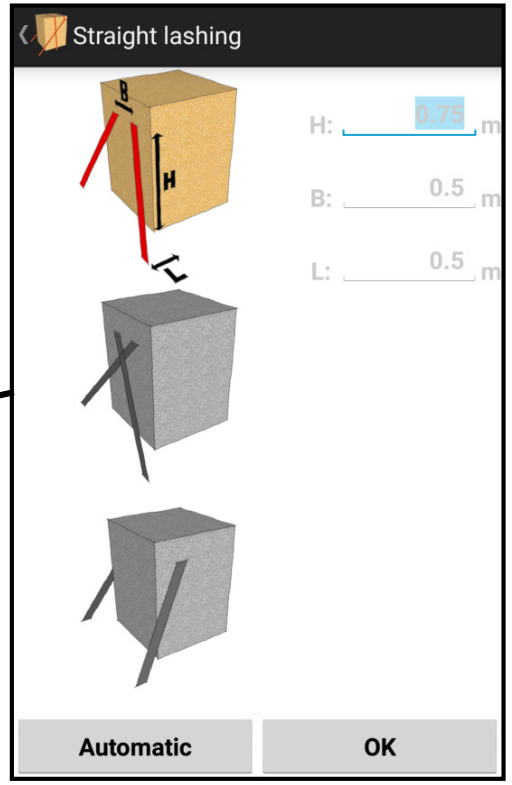

The length of the lashings can be set and also what type of spring or loop lashings which are used in the cargo securing arrangement

# 2. If Straight lashing is used

The same principles are valid for securing goods with Straight lashing; first stating the load-pattern, the dimensions of the goods, the surfaces and blocking arrangement. The difference is under the tab ”Secured weight” where the straight lashings are available




The different sliders adds the different lashings; straight lashing in different directions, spring lashing and loop lashing. The grey marked images of straight, spring and loop lashings can be selected

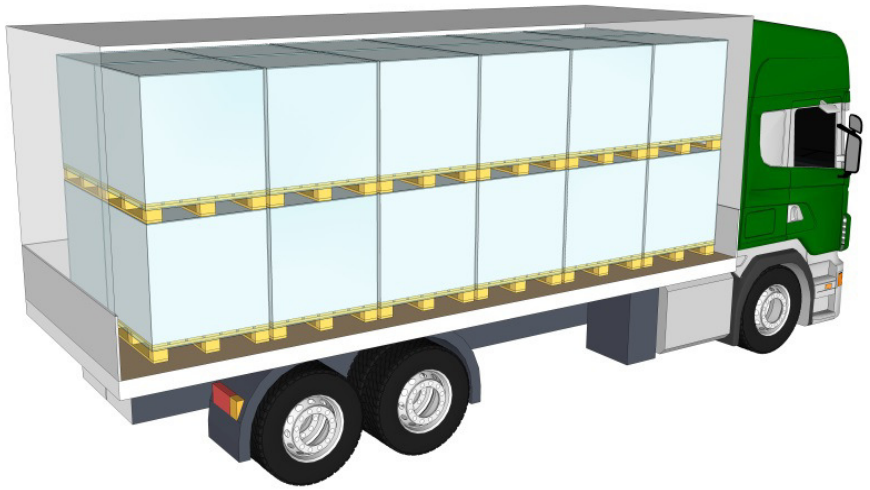



The different dimensions of the straight lashing can be set and also what type of straight, spring or loop lashing which are used in the cargo securing arrangement

# Guide for ReadyLash

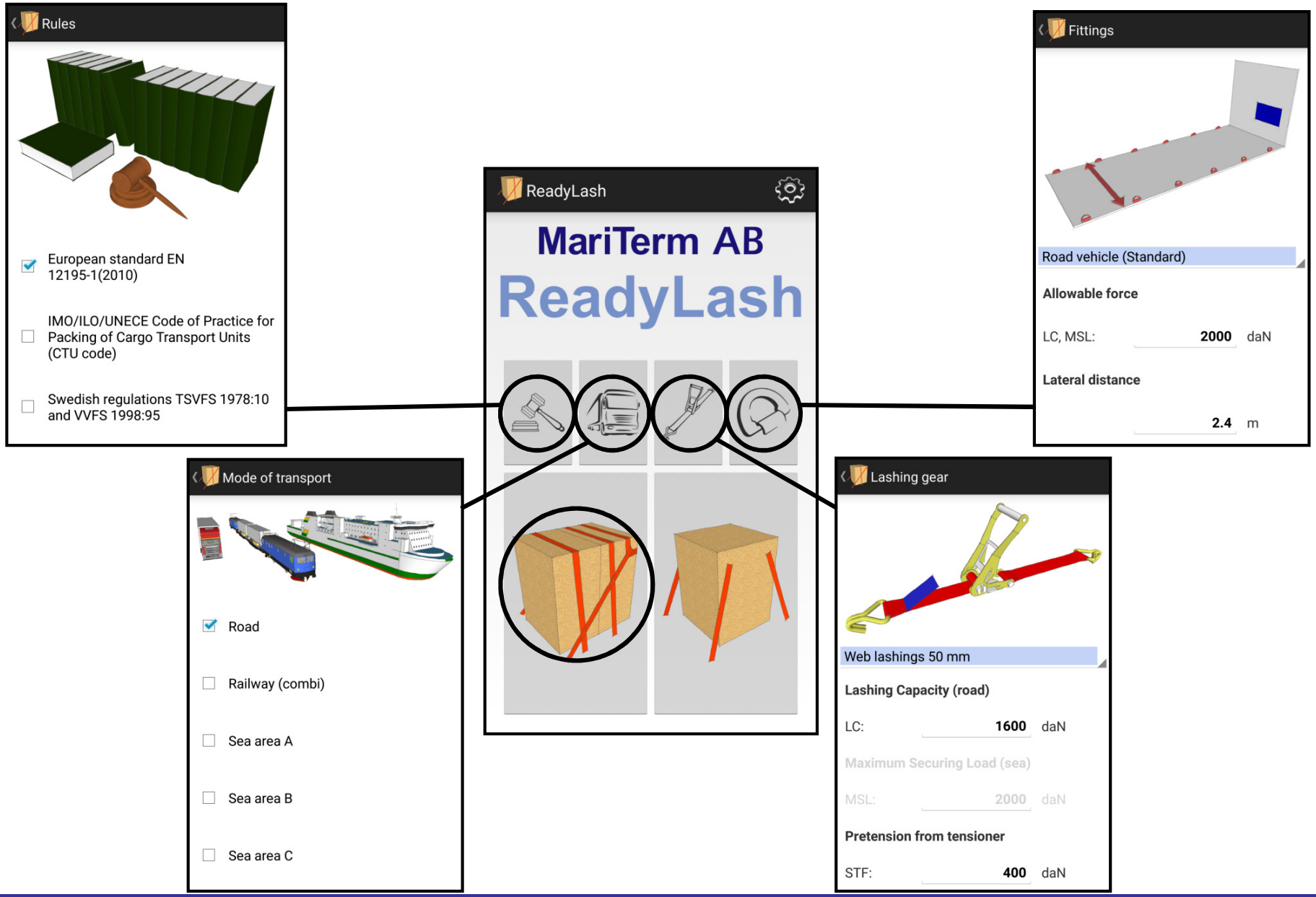
*Example 1*

- A truck with a platform of plywood
- Six sections of paper on pallets
- Each pallet is shrink filmed
- H × B × L = 1.1 × 1.0 ×1.0 m
- Weight 500 kg/pallet, in total 12 tons
- Each section consists of four pallets loaded in two rows and two layers
- The pallets are blocked against a strong headboard forward and the doors backward
- Top-over lashing are to be used
- The transport is European cross-border on road



**How many top-over lashings have to be used?**

# Guide for ReadyLash



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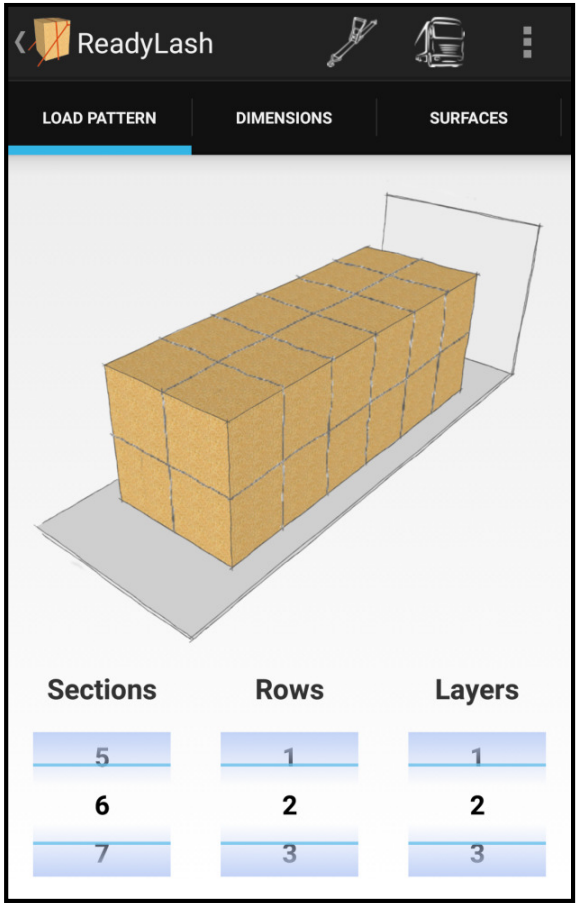


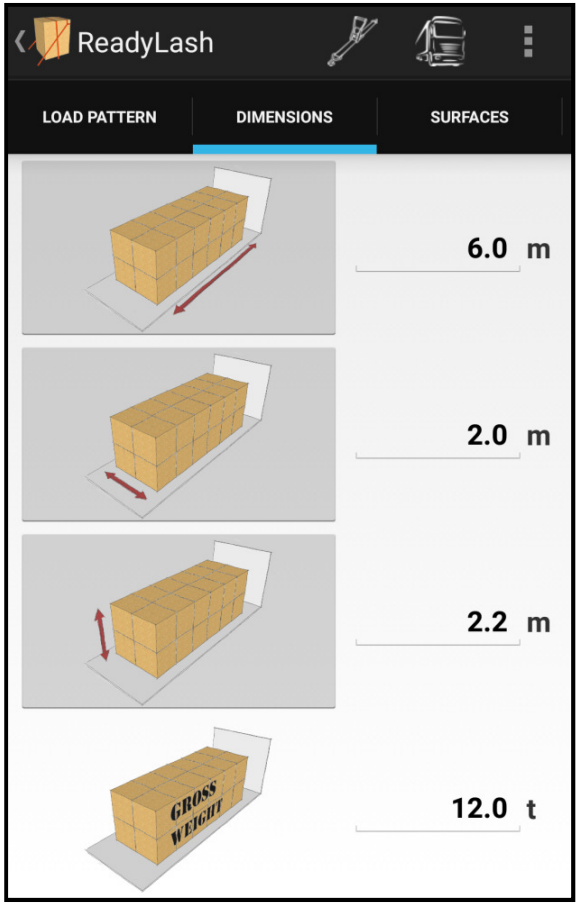


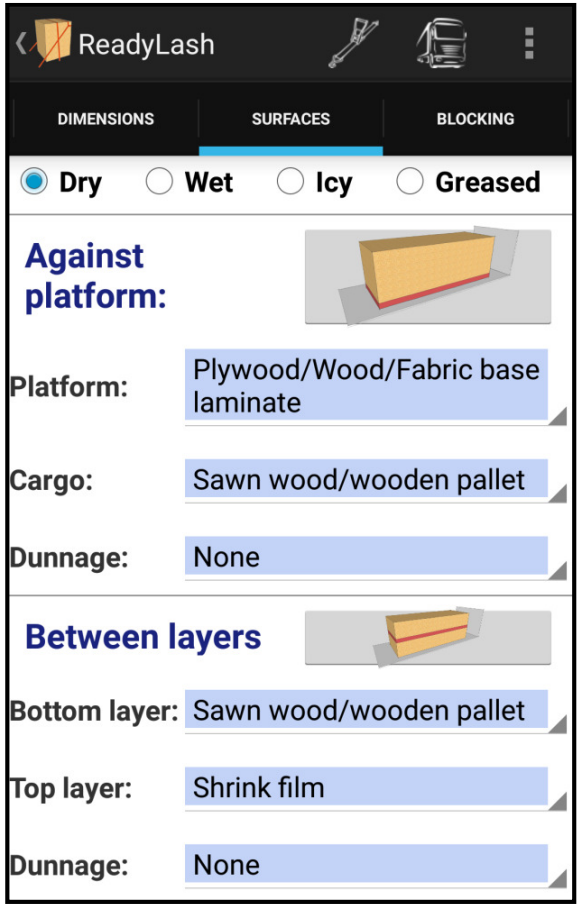

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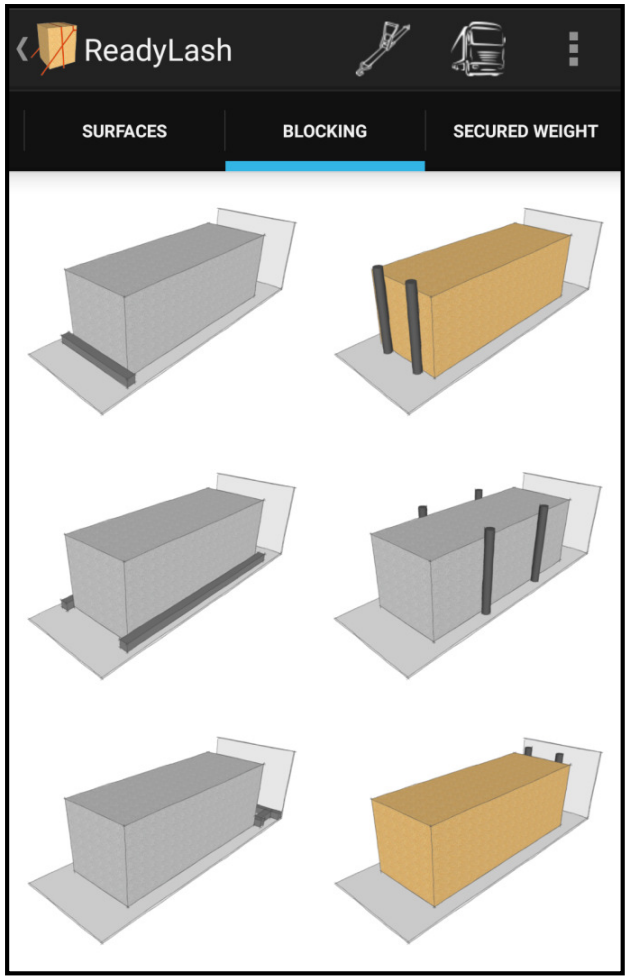
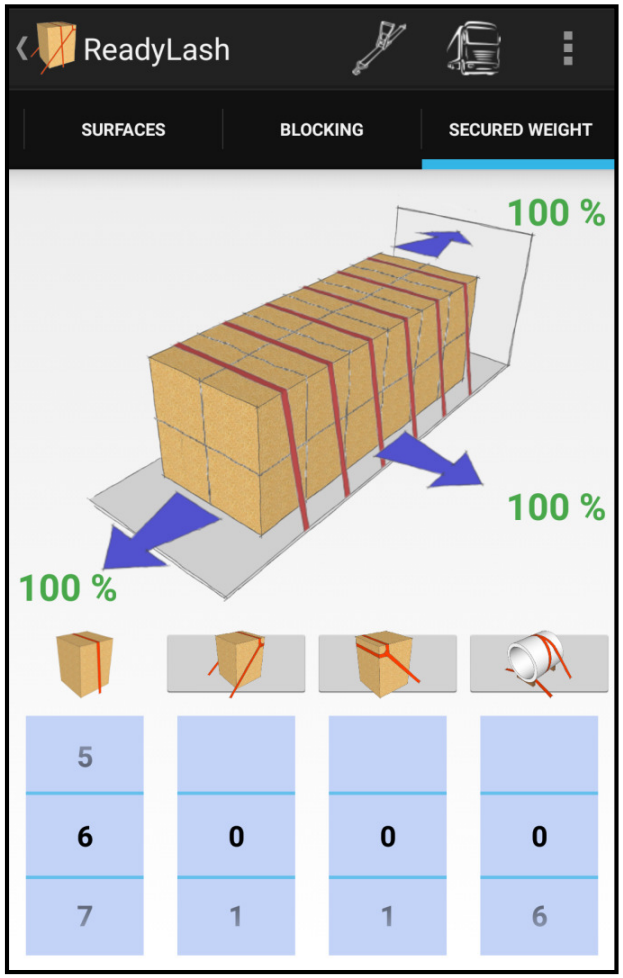


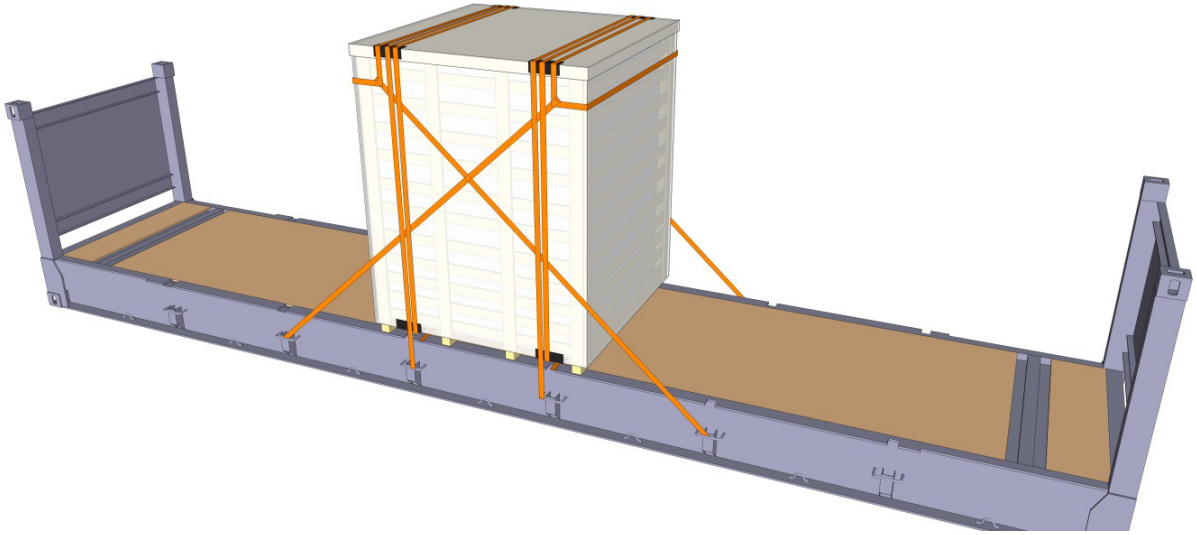

Six top-over lashings have to be used

# Guide for ReadyLash

*Example 2*

- A flat rack with wooden floor
- A box with the dimensions L × B × H = 2 × 2.4 × 3.5 m is placed in the middle of the flat rack
- Weight 5 000 kg
- The box shall be secured with two pairs of loop lashings and one spring lashing in forward direction and one in backward direction
- The flat rack shall be transported on road and in sea area C

**Is the cargo securing arrangement sufficient?**



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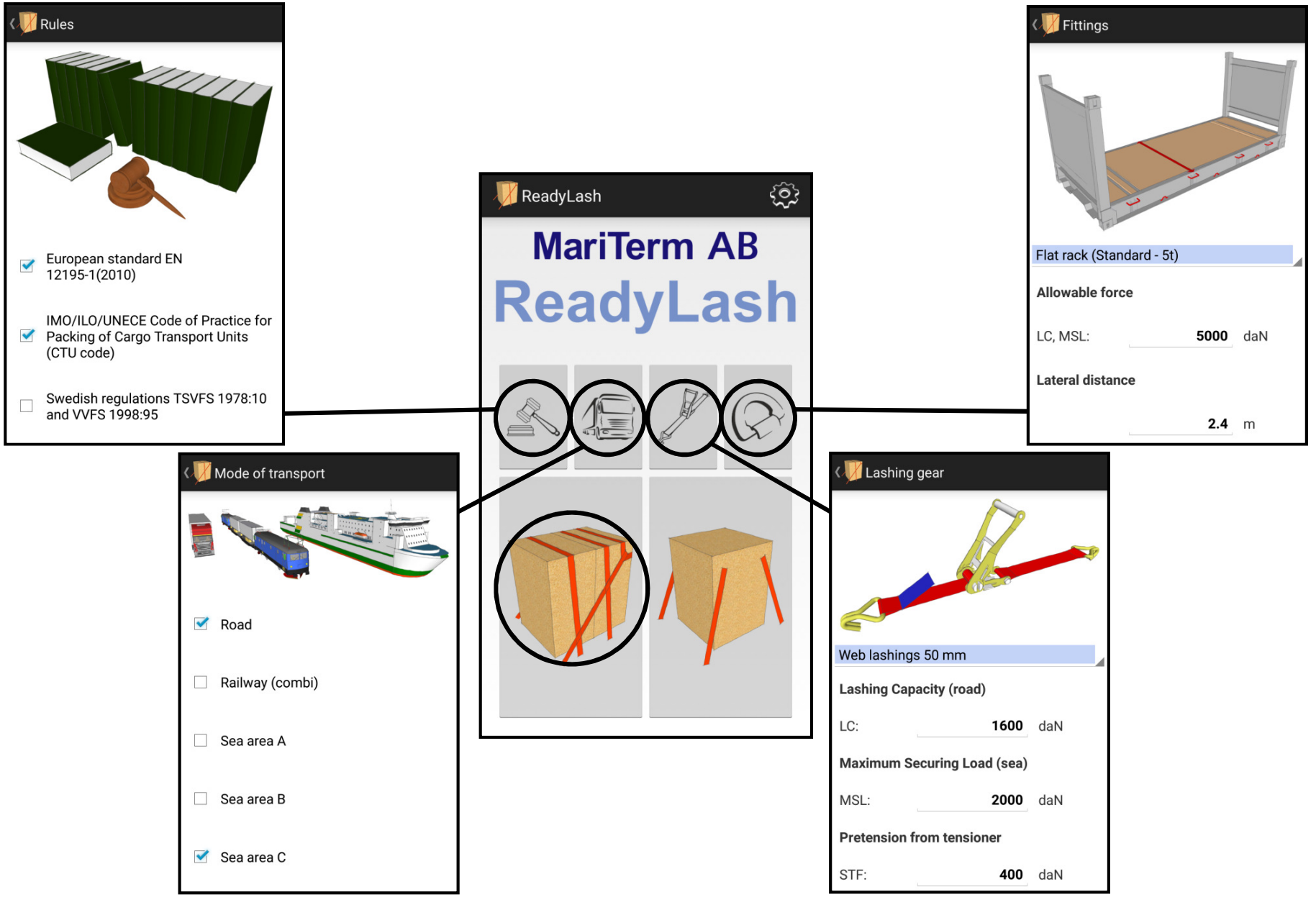

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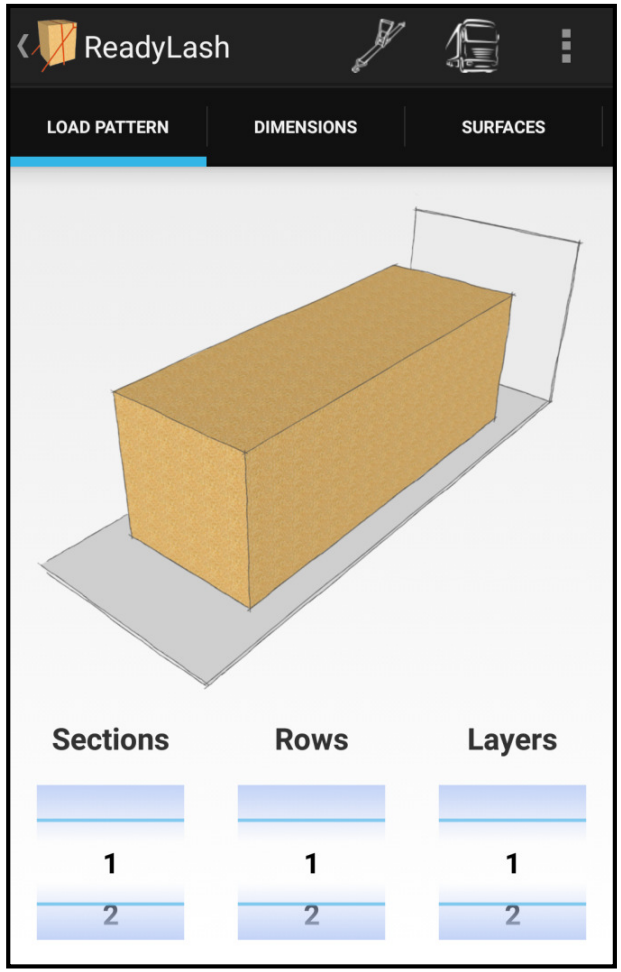


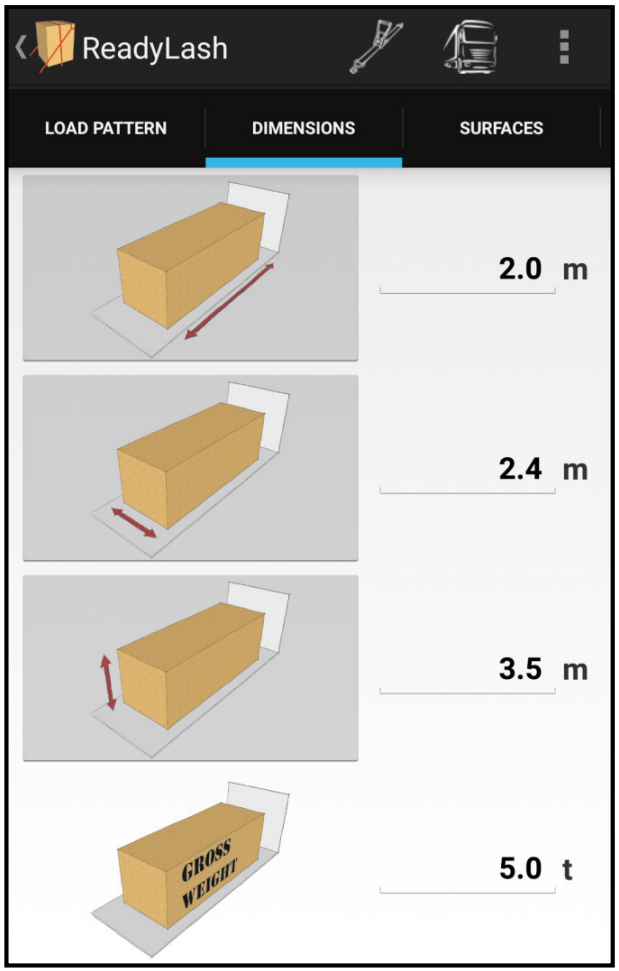


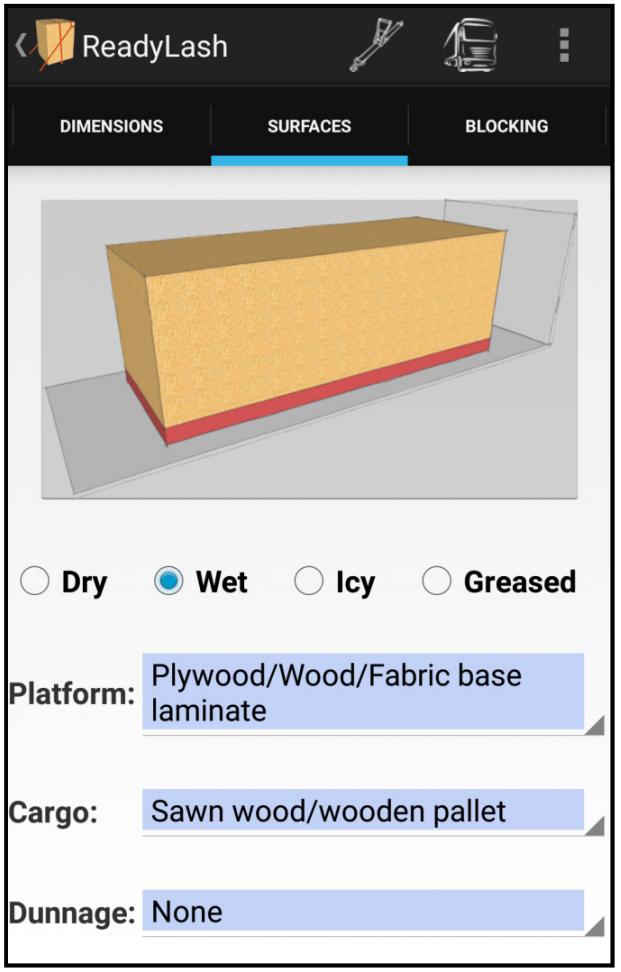

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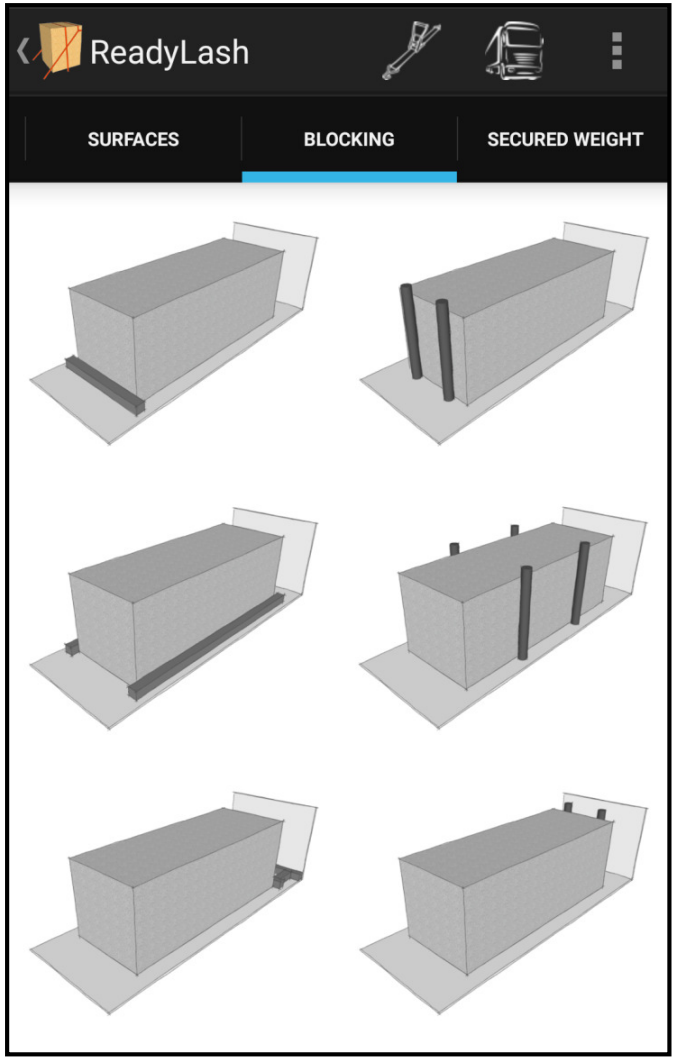
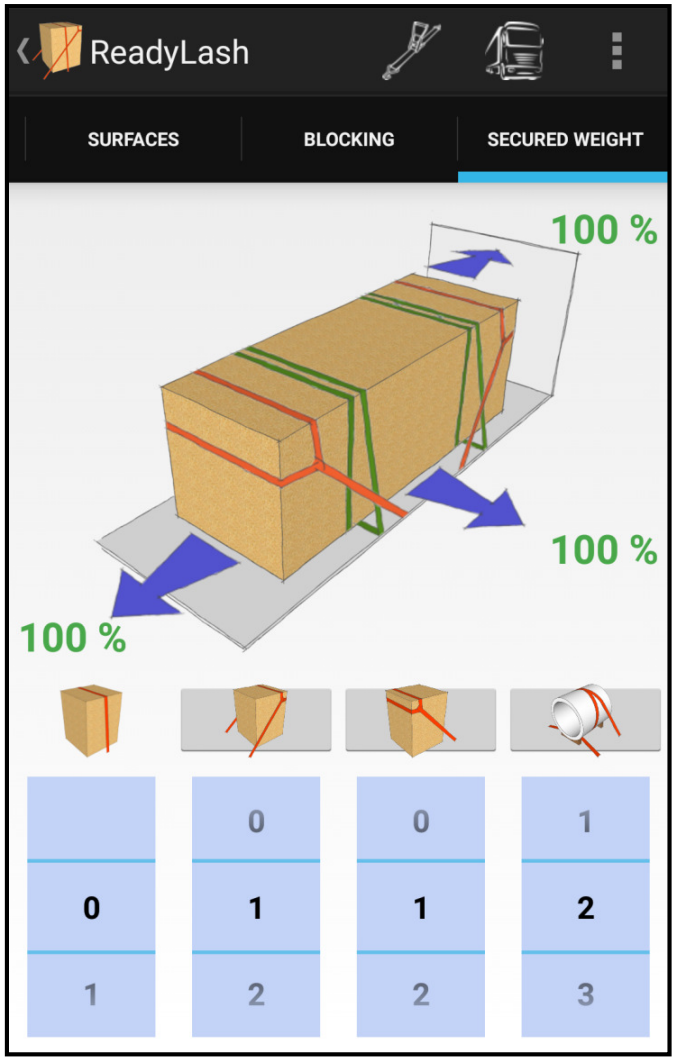


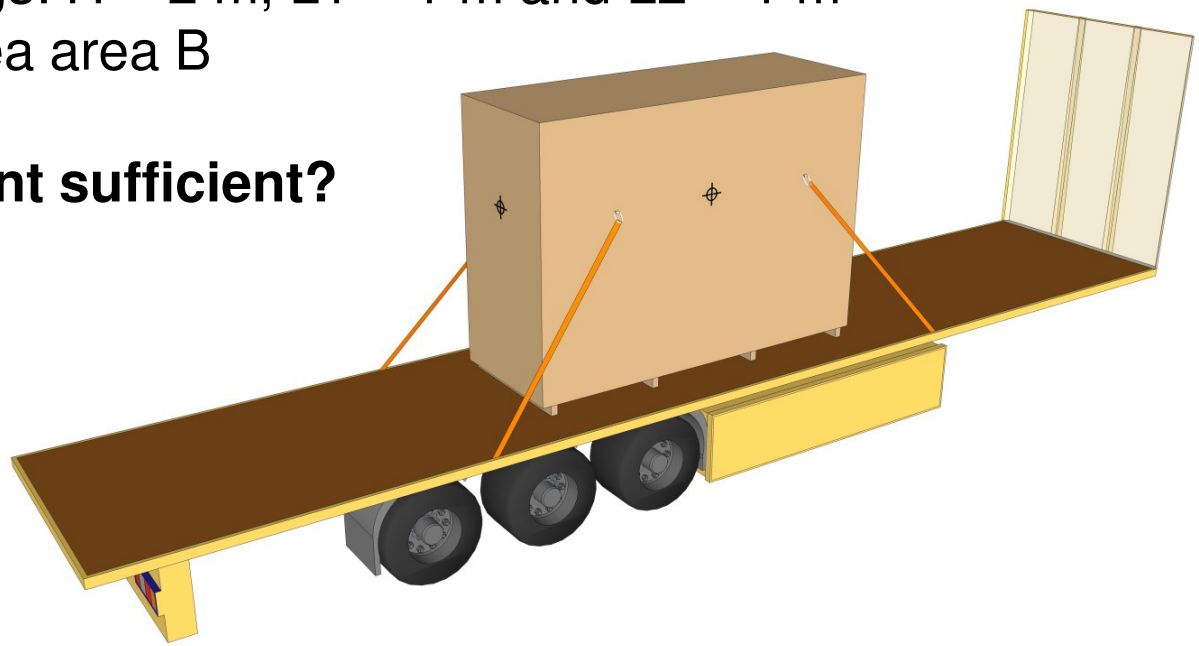

Yes, the cargo securing arrangement is sufficient

# Guide for ReadyLash

*Example 3*

- A trailer with a platform of plywood
- A box on wooden battens with the dimensions H × B × L = 3.0 × 1.5 × 4.0 m
- The box has a shifted Centre of Gravity $H_{CG}$ × $B_{CG}$ × $L_{CG}$ = 2.0 × 0.75 × 2.0 m
- Weight 4 000 kg
- Four straight lashings according to the image
- The lashings have LC/MSL = 2 500 daN and $S_{TF}$ = 500 daN
- Dimensions of the straight lashings: H = 2 m, L1 = 1 m and L2 = 1 m
- The transport is on road and in sea area B

**Is the cargo securing arrangement sufficient?**



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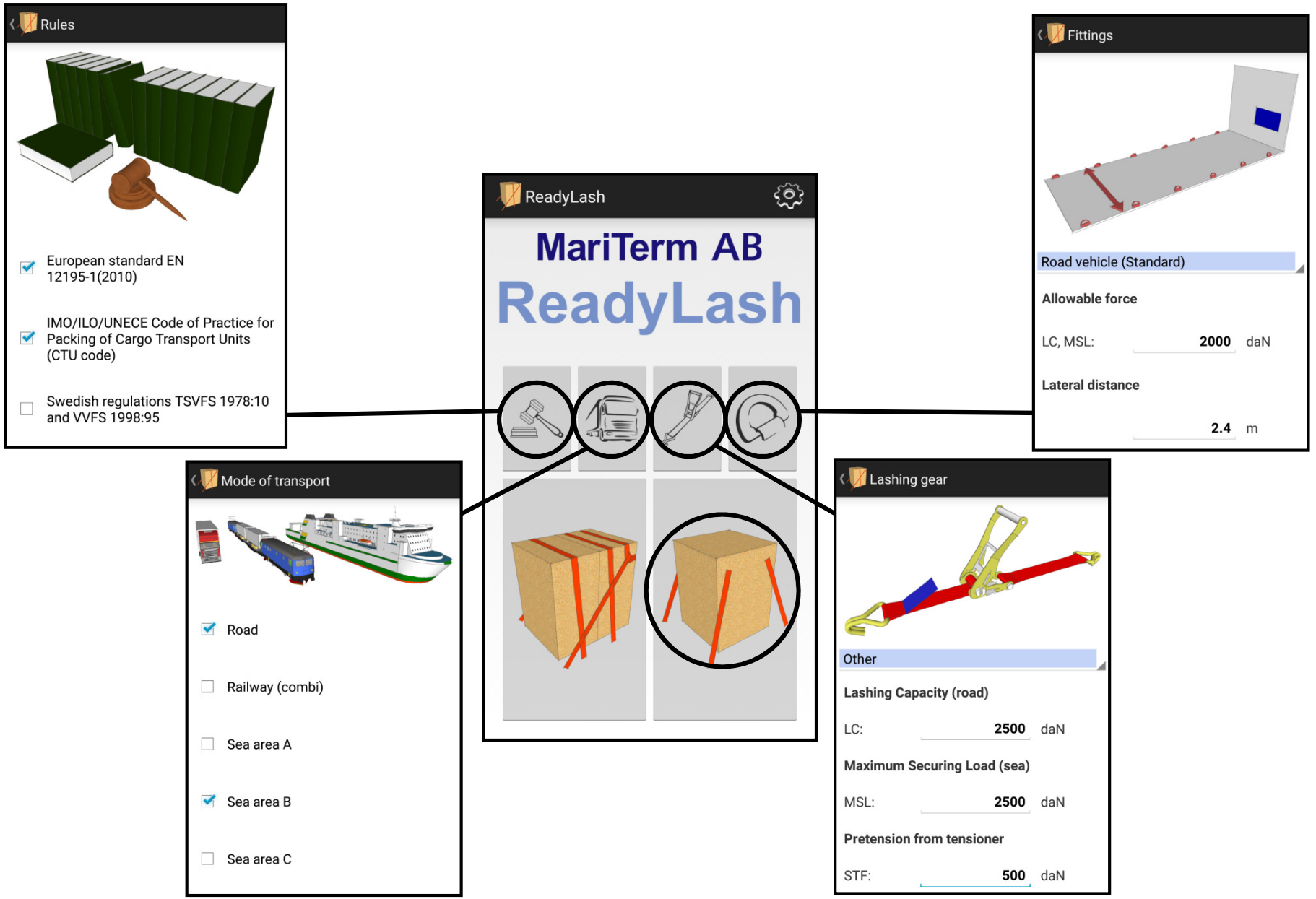

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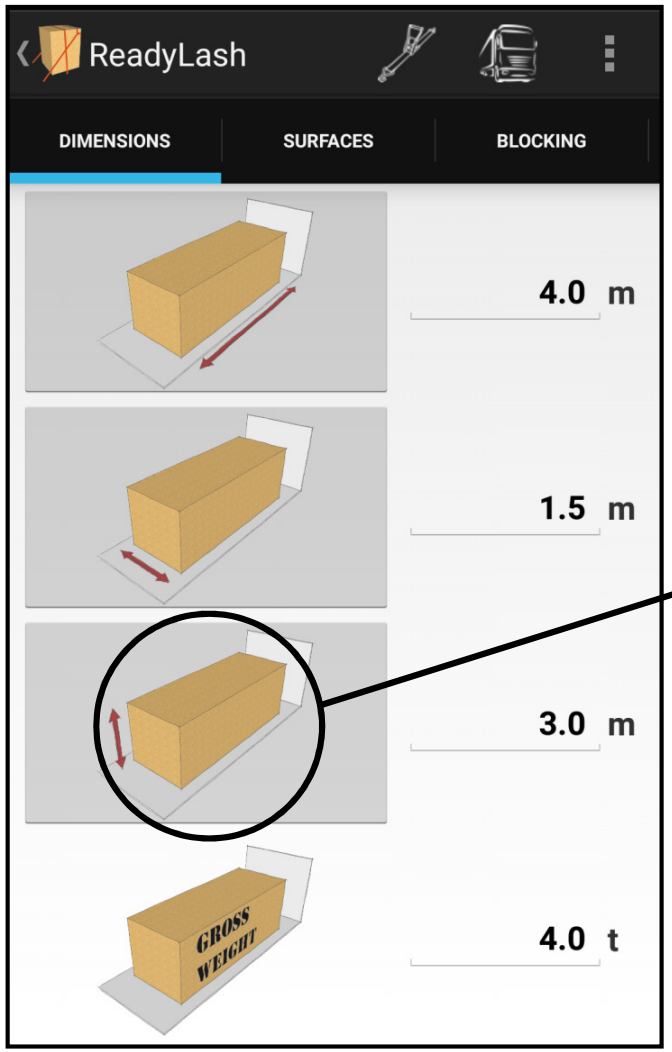


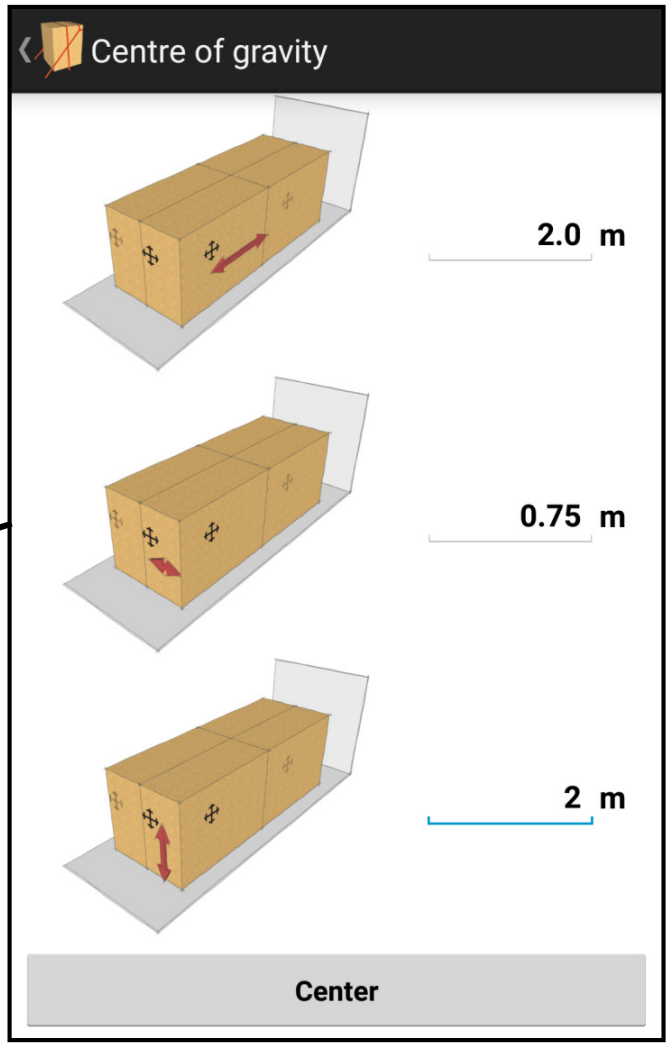

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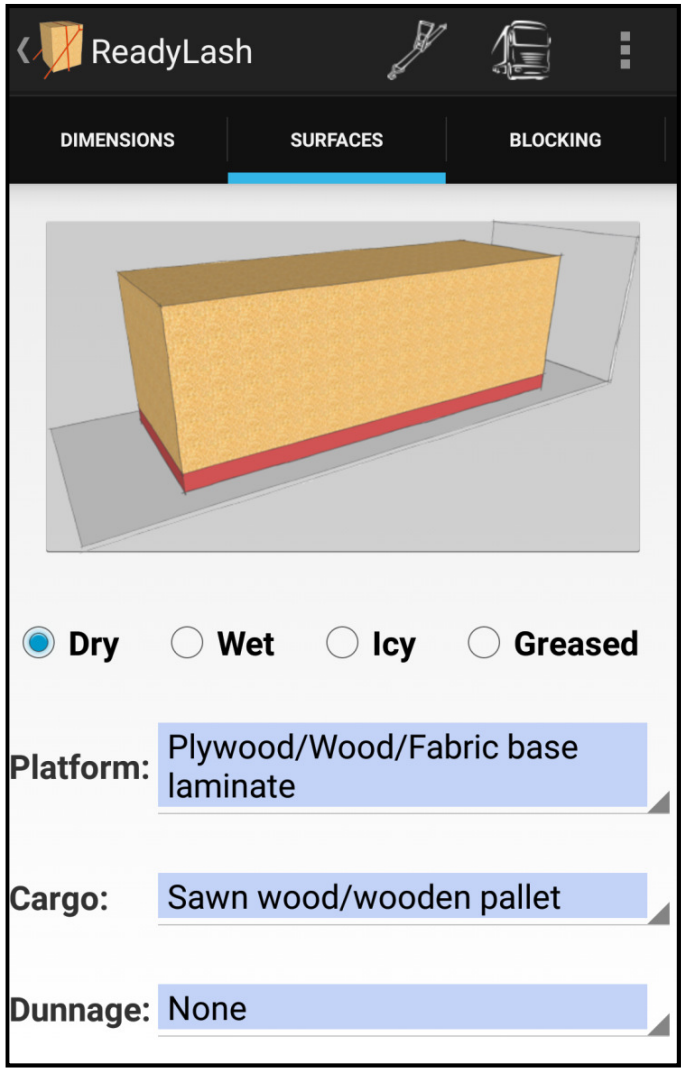


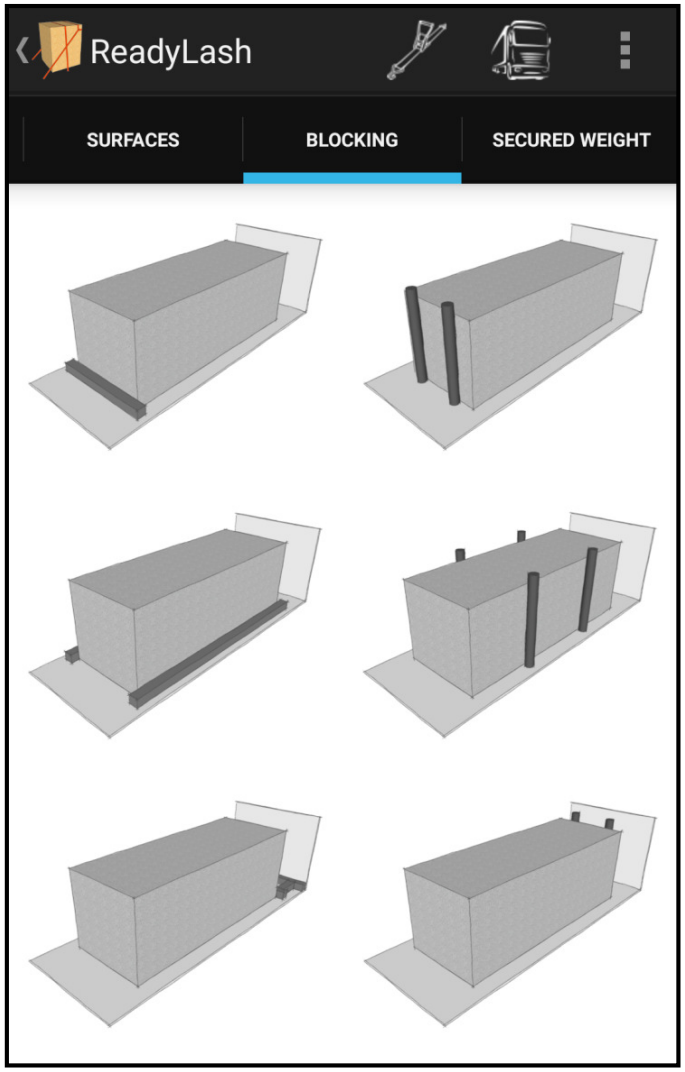

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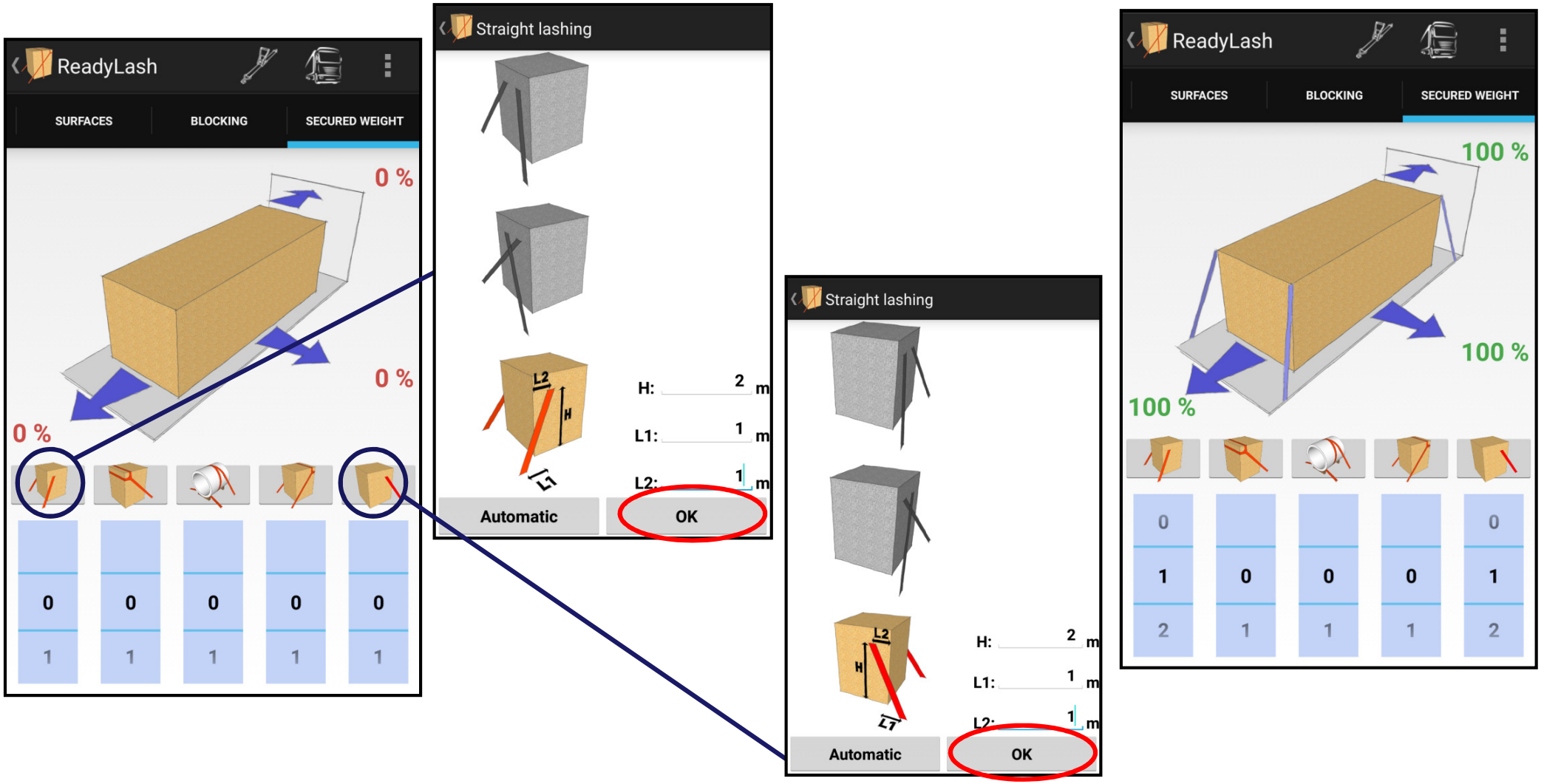


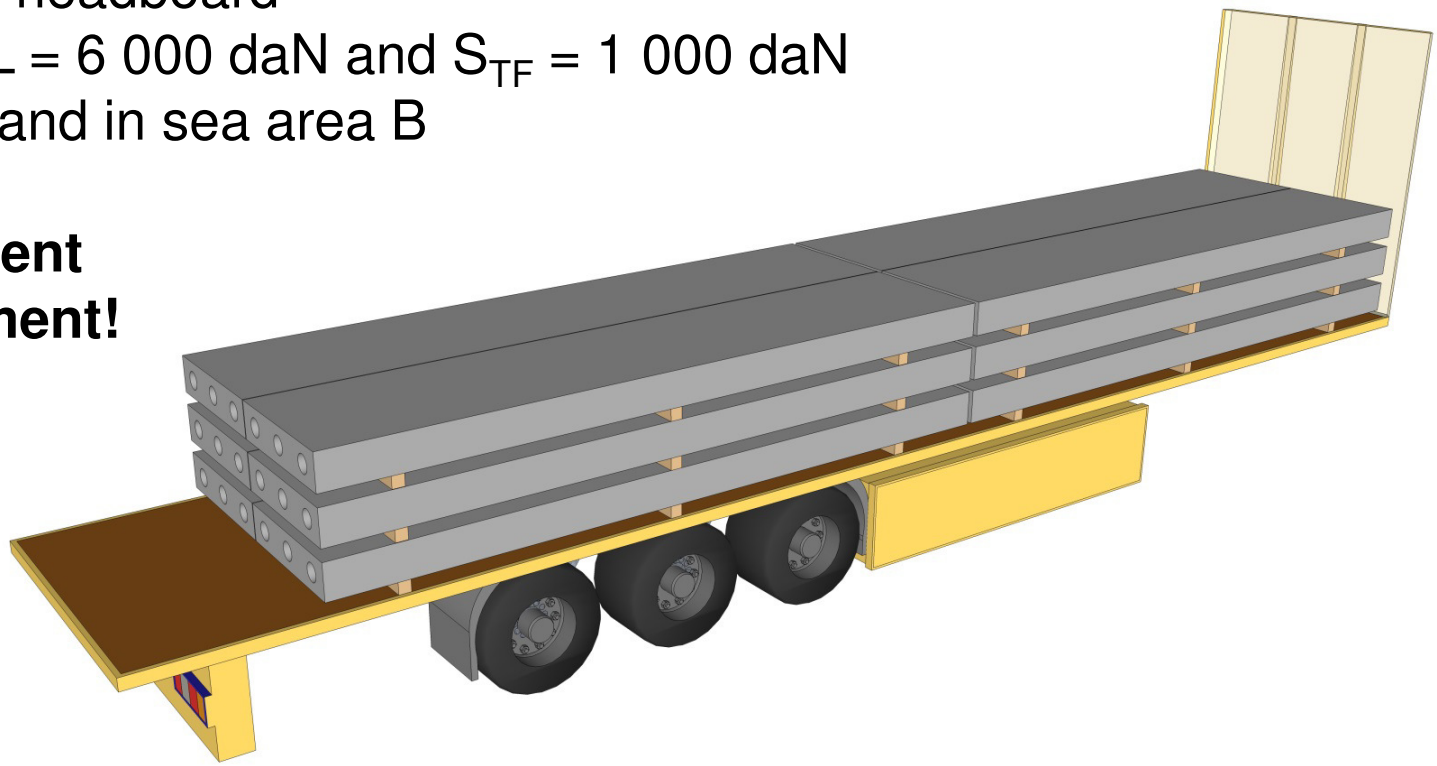

Yes, the cargo securing arrangement is sufficient

# Guide for ReadyLash

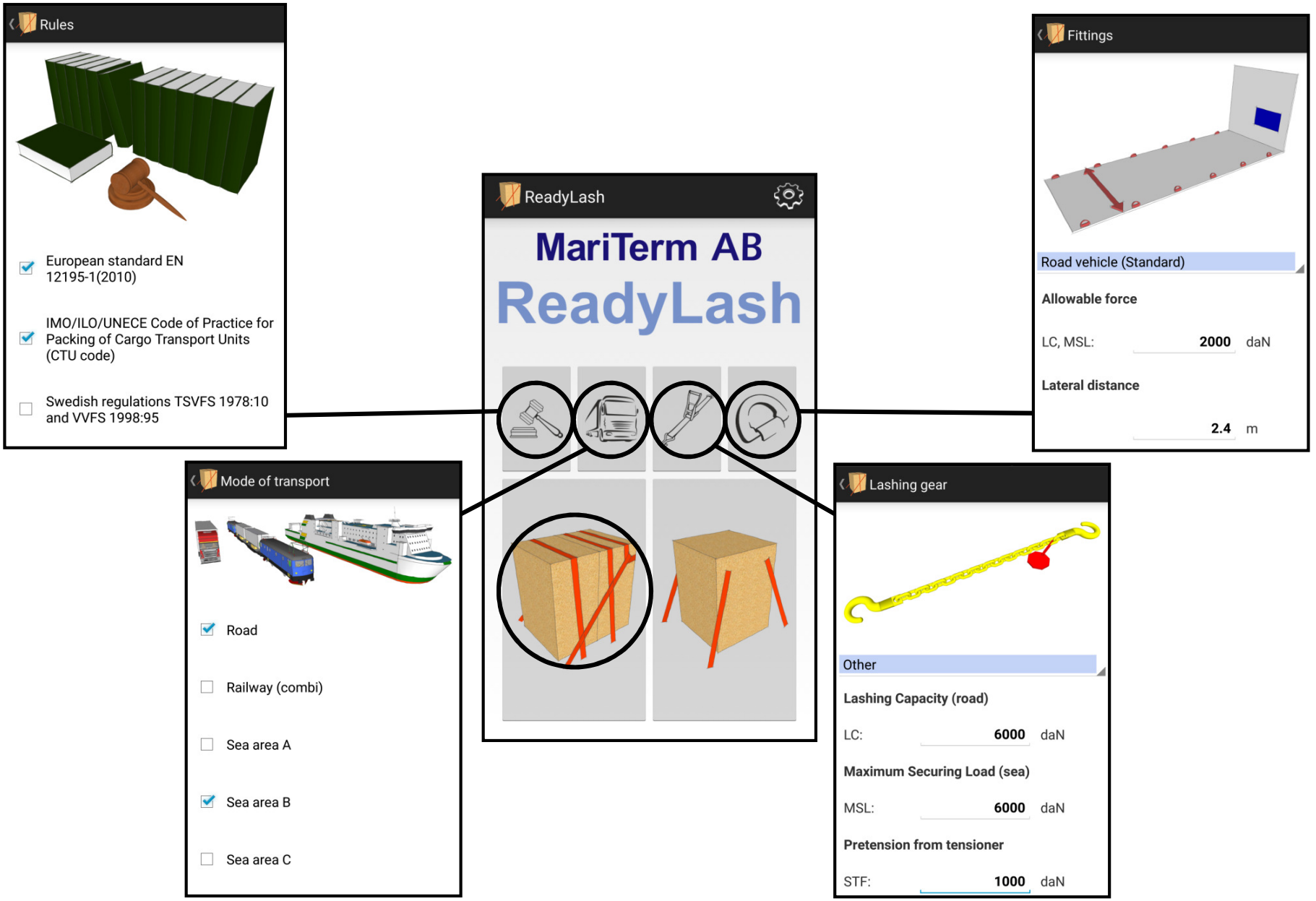
*Example 4*

- A trailer with a platform of plywood
- Concrete elemets in three layers, two rows and two sections on wooden battens with the total dimensions H × B × L = 1.5 × 2.4 × 12.0 m
- Weight 30 000 kg
- Ø 10 mm chains should be used
- Blocked against a strong headboard
- The chains have LC/MSL = 6 000 daN and $S_{TF}$ = 1 000 daN
- The transport is on road and in sea area B

**Develop a safe and efficient cargo securing arrangement!**



# Guide for ReadyLash



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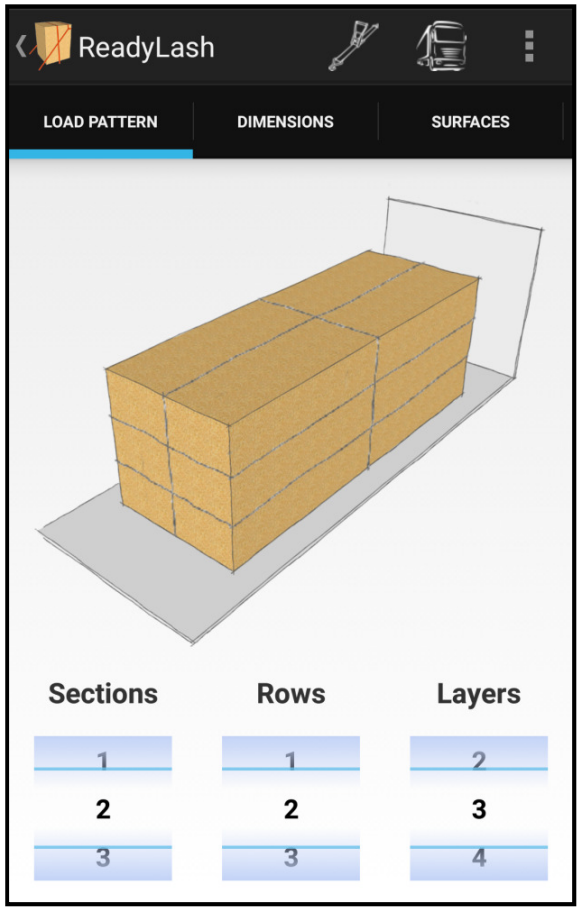
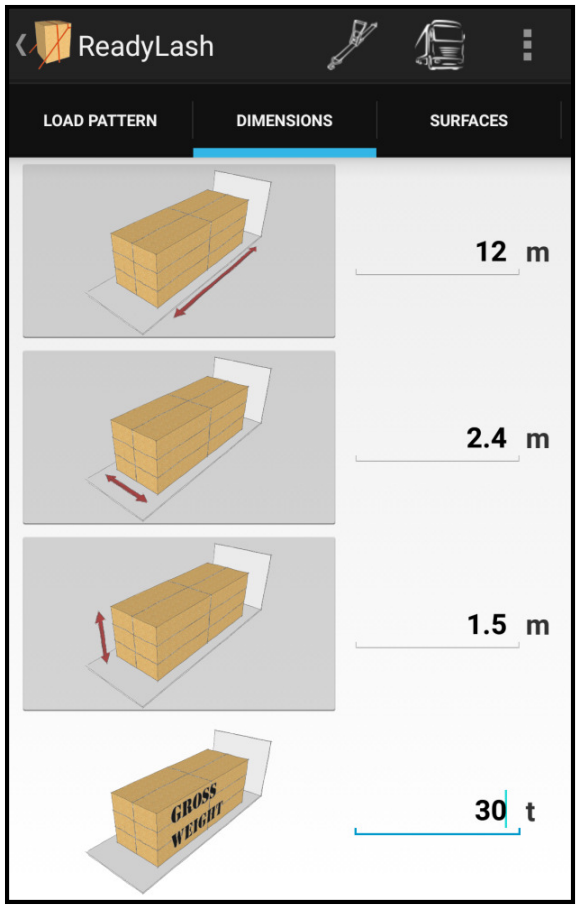
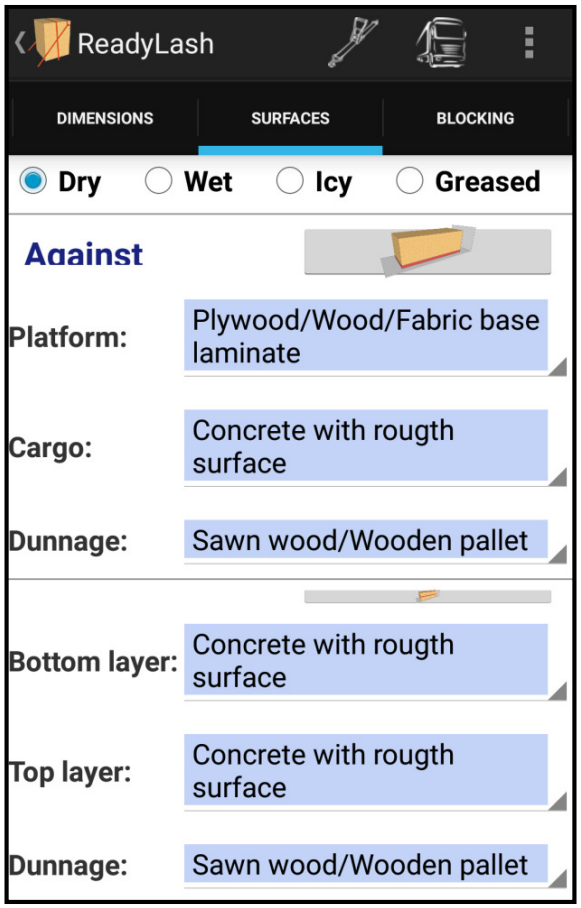
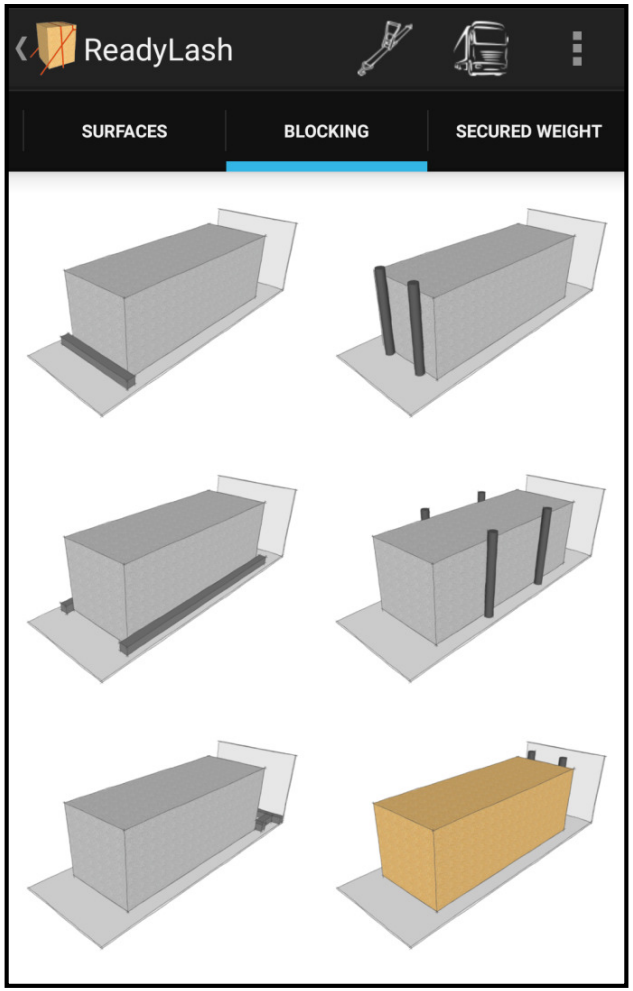
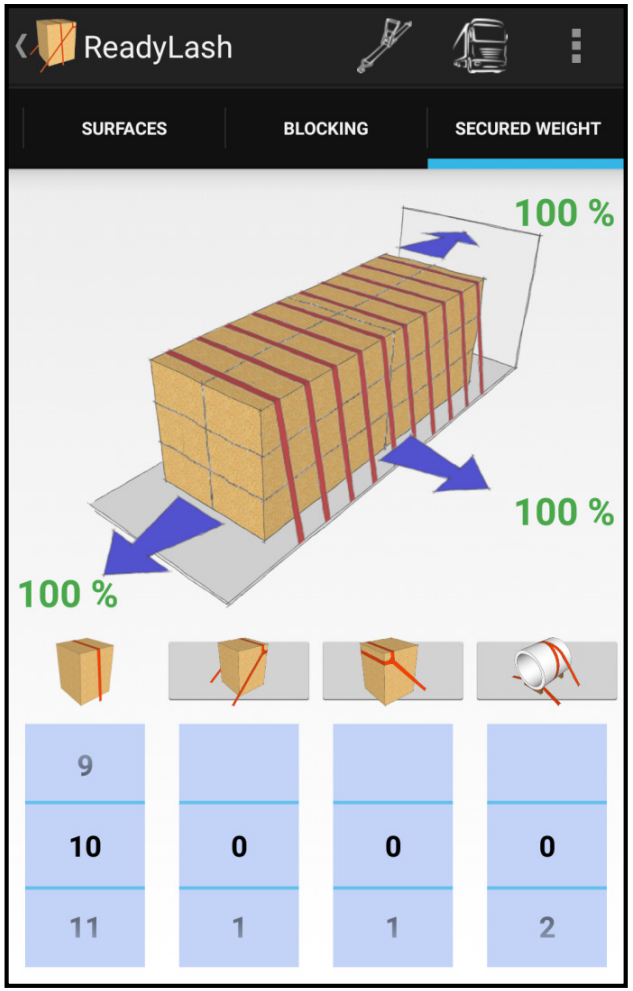


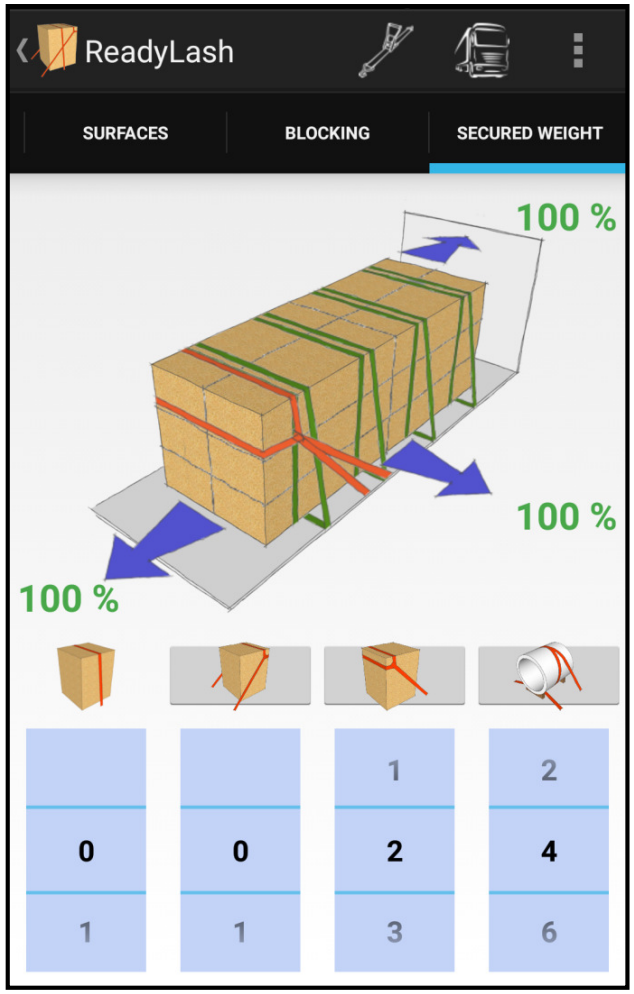



# Guide for ReadyLash



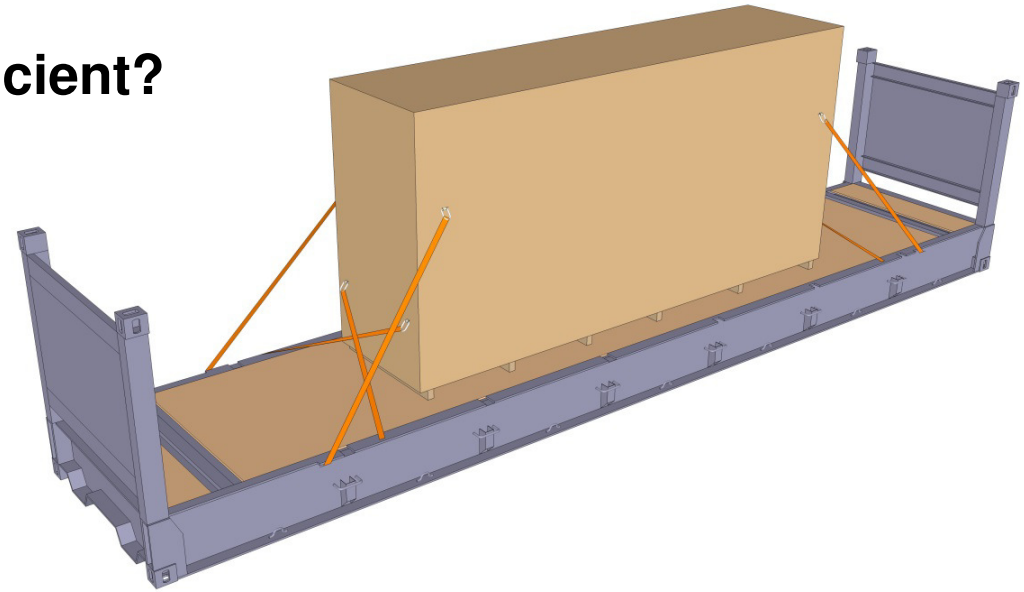

Two examples of lashing arrangements

# Guide for ReadyLash

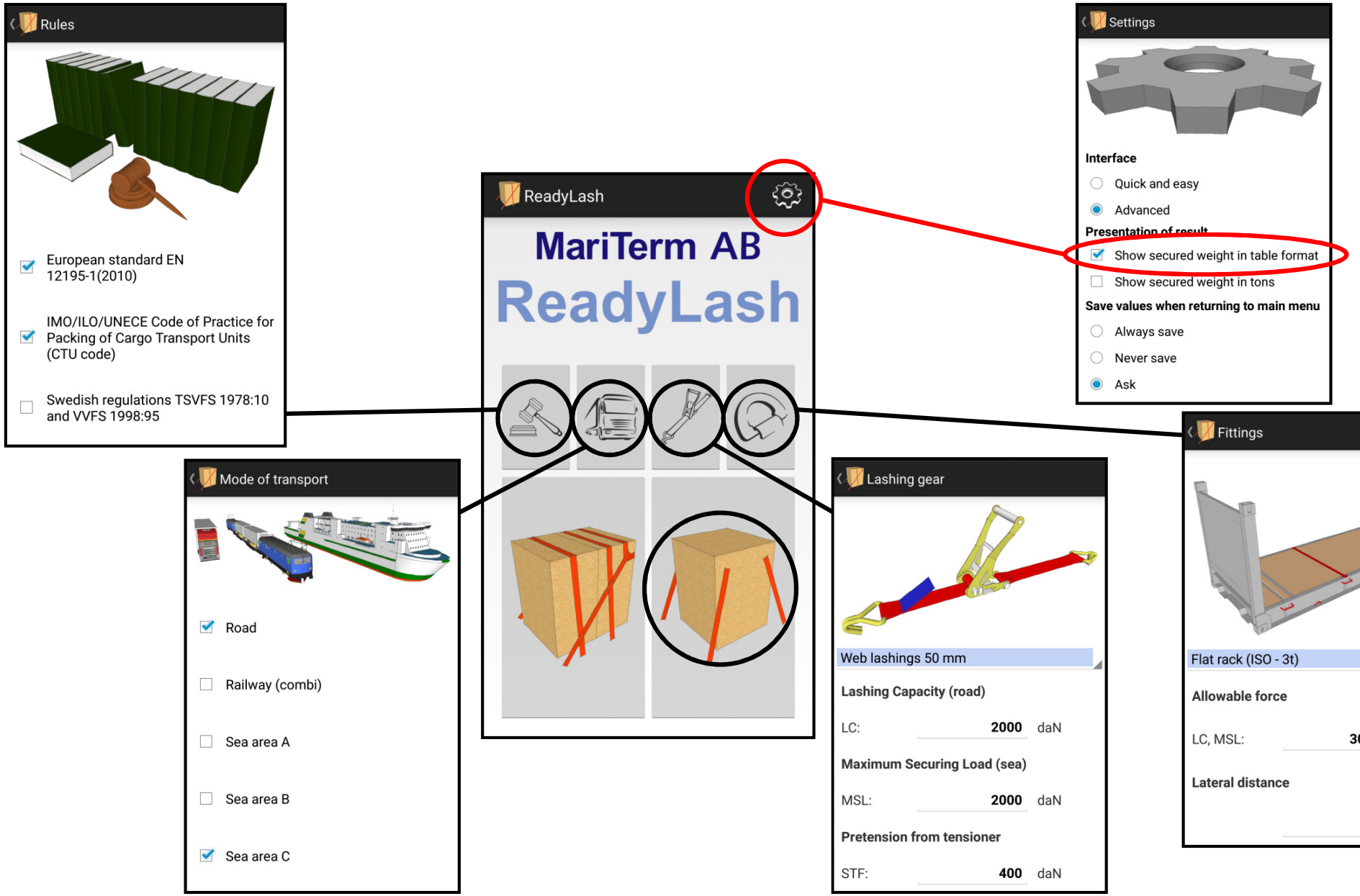
*Example 5*

- A flat rack with wooden floor
- A box on wooden battens with the dimensions H × B × L = 3.0 × 1.5 × 6.0 m
- Weight 8 000 kg
- Eight straight lashings according to the image
- The lashings have LC/MSL = 2 000 daN and $S_{TF}$ = 400 daN
- Dimensions of the straight lashings: H = 2 m, L1 = 1 m and L2 = 1 m
- Dimensions of the crossed straight lashings: H = 1 m, B = 1.2 m and L = 0.5 m
- The transport is on road and sea area C

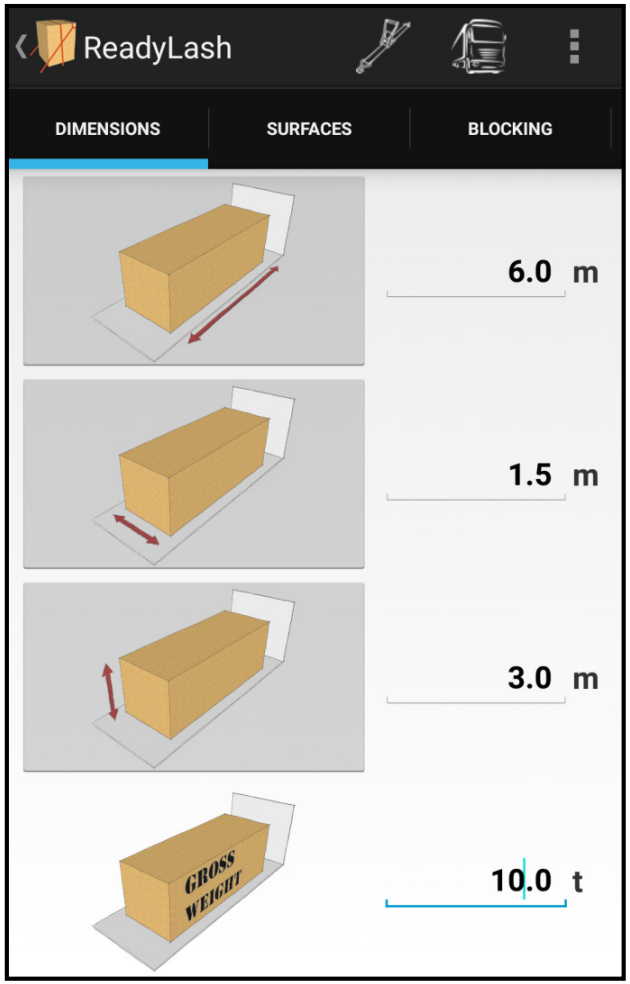
**Is the cargo securing arrangement sufficient?**

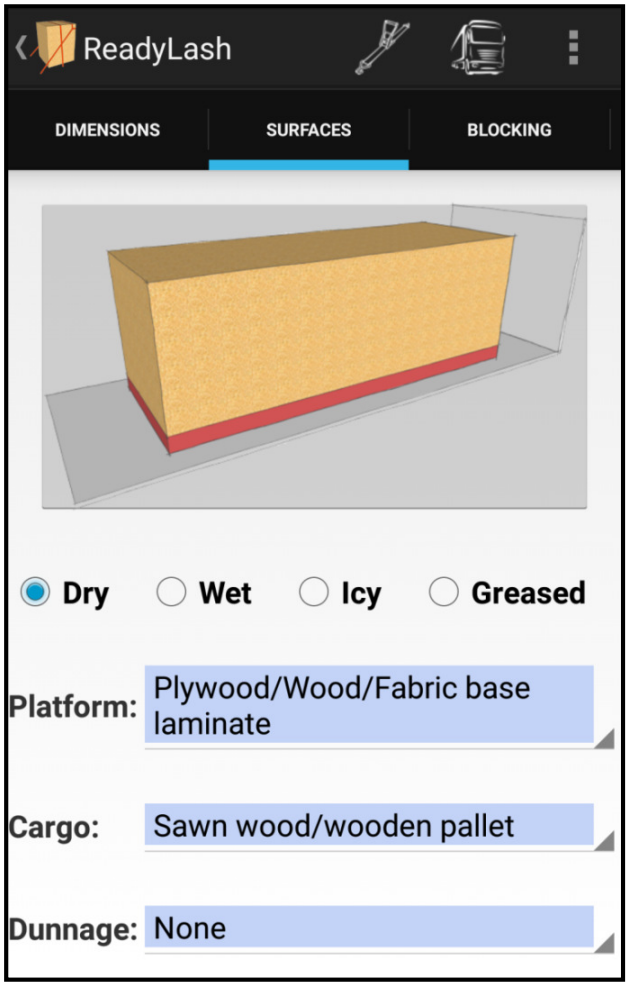


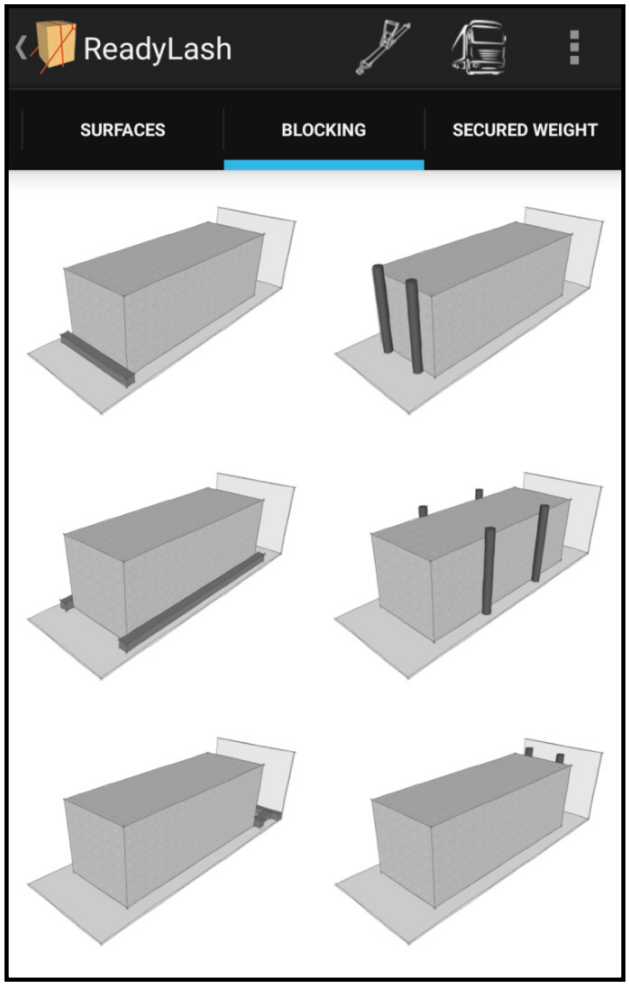
# Guide for ReadyLash



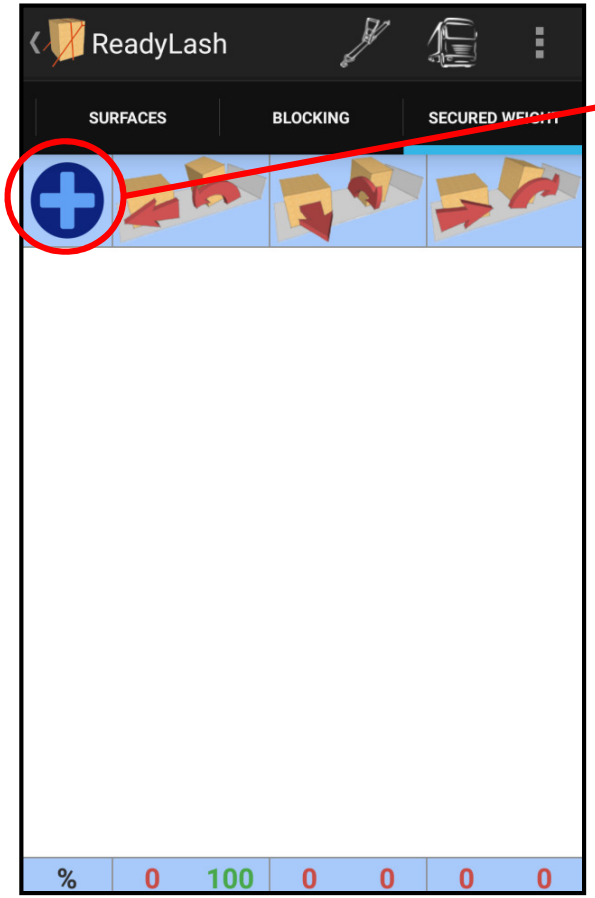
# Guide for ReadyLash

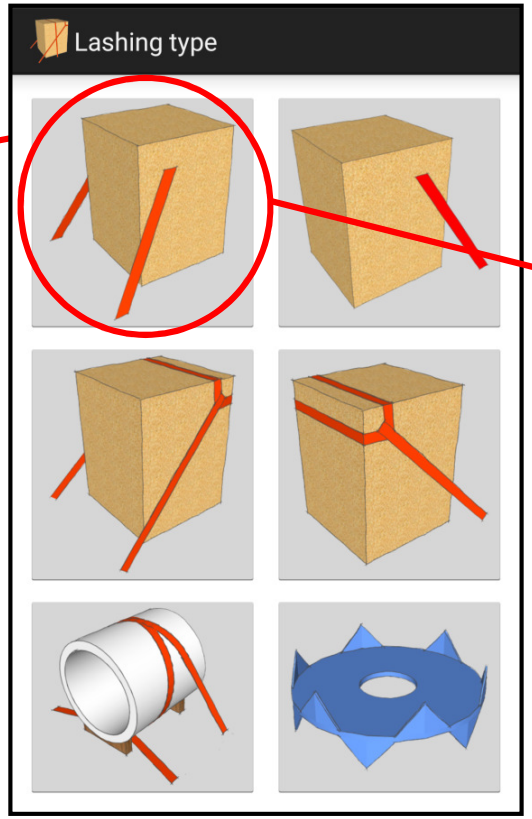


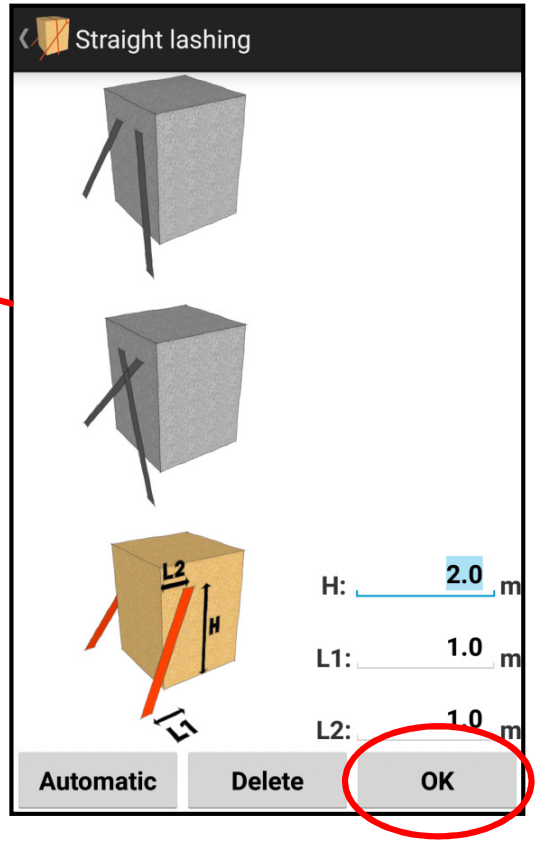



# Guide for ReadyLash

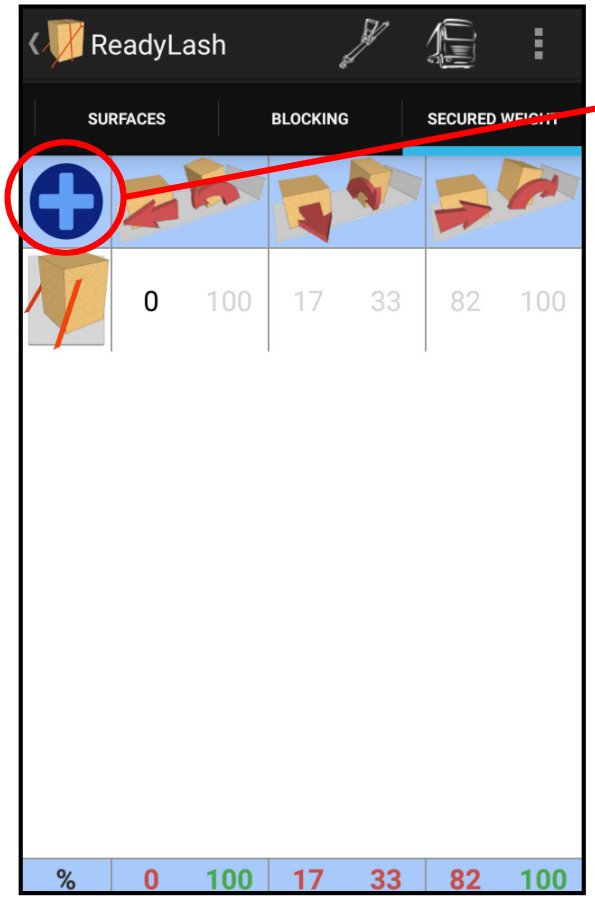


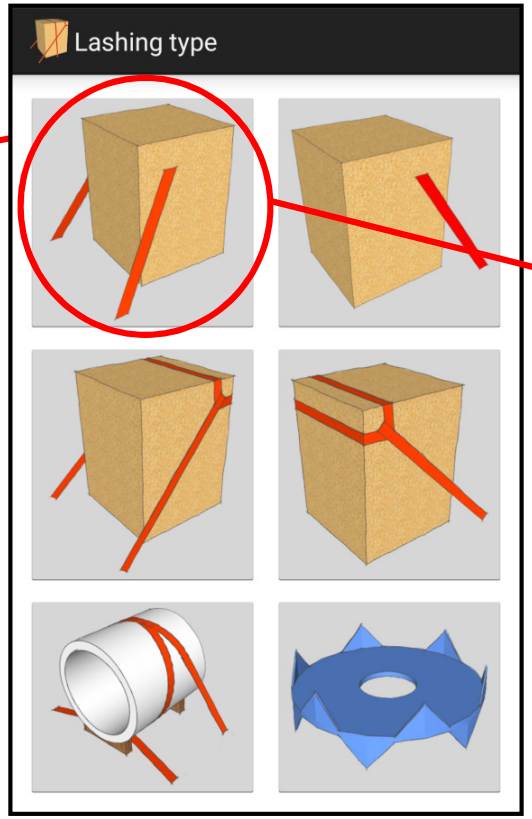



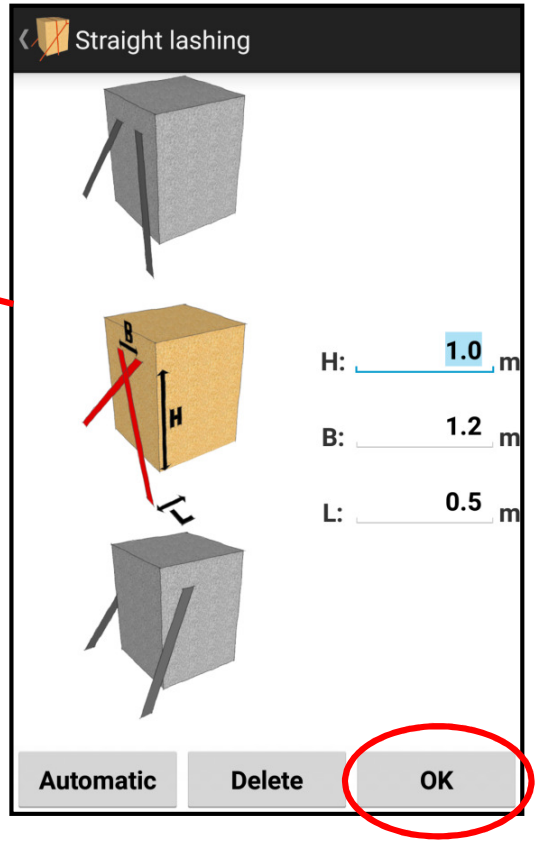




Note! If there are already lashings in the table, select one of the lashings and press delete. Repeat for the rest of the lashings

# Guide for ReadyLash

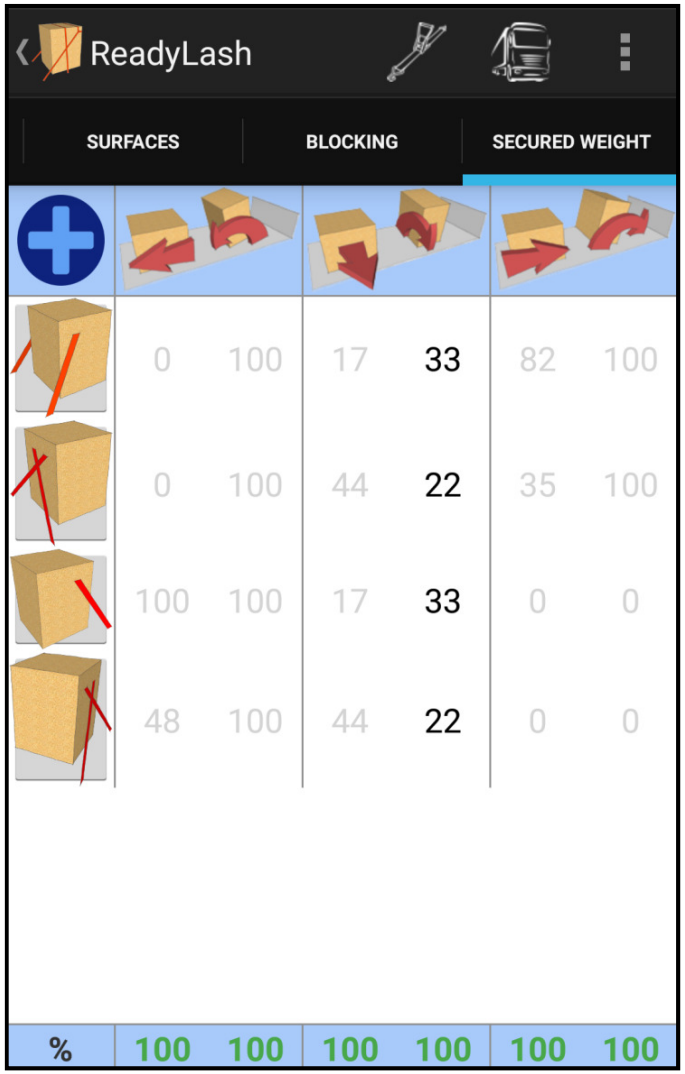



Repeat these steps for the straight lashings in the Other direction

# Guide for ReadyLash




All lashings have been added and the box is secured 100% in all direction. The cargo securing arrangement is sufficient!