



Ecotype®

Manually-operated covering
system for swap bodies



marcolin®

ECOTYPE® - Functional features

This is a simplified, manually-operated folding covering system, specifically designed to cover the widest range of open top containers, skips, **swap bodies**, and rear and three-way **tipper** bodies.

The **mechanical part** includes, at the front, a **manual drive** unit, usually installed on the left side (also available in a right-side mounted version) and a return unit, installed on the opposite side. The opening and closing movement is effected using a **single cable**, crossed over at the front.

Cable return pulleys are mounted on the rear sides of the swap body. The cable tensioning system is integrated with the front drive and cable return unit (a version with a rear tensioning system is also available).

The covering moves while the operator remains safely on the ground.

The **bows & tarp** section, provided pre-assembled, consists of a series of bows supporting the tarp, and connected by the tarp operating system.

The bows slide along the sides of the body on plastic pads, specifically designed to minimize friction and ensure a smooth and unimpeded movement, to prevent wear on the body and provide a long service life.

To protect the load from the weather and prevent losses during transport, the tarp can be integrated with side flaps to improve the tightness of the covering.

The **Ecotype** cover can be integrated with a wide range of optional accessories for a variety of specific applications.



FIELDS OF APPLICATION



quarry /
building site



agriculture



environment

ROLL-UP METHOD



folding

OPERATION



manual

ECOTYPE® - Technical characteristics (with front tensioner)

Bows & tarp

The tarp is supported by **bows** made with 25 mm dia. hot-dip galvanized steel tube. They are arched at heights of 200, 300, 400, and 500 mm to meet the most various load requirements. The sliding pads at the ends of the bows are made of 30% glass fibre reinforced polyamide PA66. The tarp lifting system, available with 500, 600, 700, 800, and 900 mm modules, is made with electrogalvanized steel rods and 30% glass fibre reinforced polyamide PA66 hinge blocks.

The **tarp** is custom-made and fitted with reinforcements on the edges for the widest range of applications, based on the specific requirements of the vehicle. Available in green or black flame-retardant PVC mesh (350 g/sqm), in 100% waterproof coated PVC in a wide range of colours (650 g/sqm), in flame retardant PVC (weight 680 g/sqm). The select choice of fibres and the quality of the coating ensure a very high resistance to mechanical stresses, light, rain and snow, and all weather conditions in general.

Rear return units

These are located on the rear sides of the body. They consist mainly of a cable return pulley with a diameter of 100 mm and a support bracket for the correct guidance of the operation cable. All the components are made with electrogalvanized steel.

Single cable

The 6 mm dia. galvanized steel cable runs at a distance of 10 mm above the edge of the load body. As an option, accessories are also available for running the cable at 23 mm below the top edge of the load body. This reduces the possibility of damage to the cable during loading.

Front return unit with tensioning system

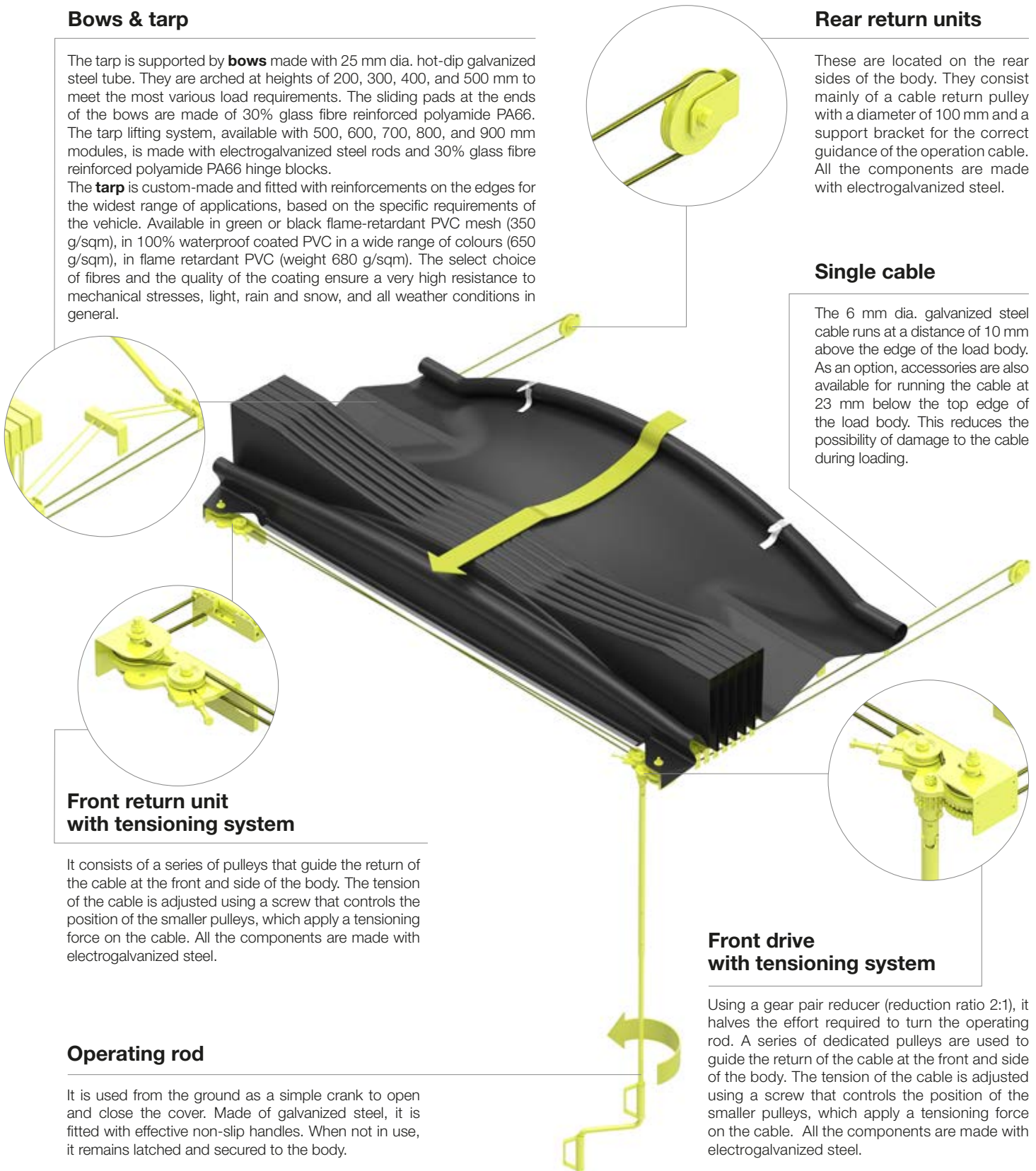
It consists of a series of pulleys that guide the return of the cable at the front and side of the body. The tension of the cable is adjusted using a screw that controls the position of the smaller pulleys, which apply a tensioning force on the cable. All the components are made with electrogalvanized steel.

Operating rod

It is used from the ground as a simple crank to open and close the cover. Made of galvanized steel, it is fitted with effective non-slip handles. When not in use, it remains latched and secured to the body.

Front drive with tensioning system

Using a gear pair reducer (reduction ratio 2:1), it halves the effort required to turn the operating rod. A series of dedicated pulleys are used to guide the return of the cable at the front and side of the body. The tension of the cable is adjusted using a screw that controls the position of the smaller pulleys, which apply a tensioning force on the cable. All the components are made with electrogalvanized steel.



ECOTYPE® - Technical characteristics (with rear tensioner)

Bows & tarp

The tarp is supported by **bows** made with 25 mm dia. hot-dip galvanized steel tube. They are arched at heights of 200, 300, 400, and 500 mm to meet the most diverse load requirements. The sliding pads at the ends of the bows are made of 30% glass fibre reinforced polyamide PA66. The tarp lifting system, available with 500, 600, 700, 800, and 900 mm modules, is made with electrogalvanized steel rods and 30% glass fibre reinforced polyamide PA66 hinge blocks.

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Rear return units with tensioning system

These are located at the rear sides of the body. They consist mainly of a pulley with a diameter of 100 mm, and a support bracket for the correct return of the operation cable. The tension of the cable is adjusted using a screw that controls the position of the pulley, and therefore the tensioning force applied to the cable. All the components are made with electrogalvanized steel.

Single cable

The 6 mm dia. galvanized steel cable runs at a distance of 10 mm above the edge of the load body. As an option, accessories are also available for running the cable at 23 mm below the top edge of the load body. This reduces the likelihood of damage to the cable during loading.

Front return unit without tensioning system

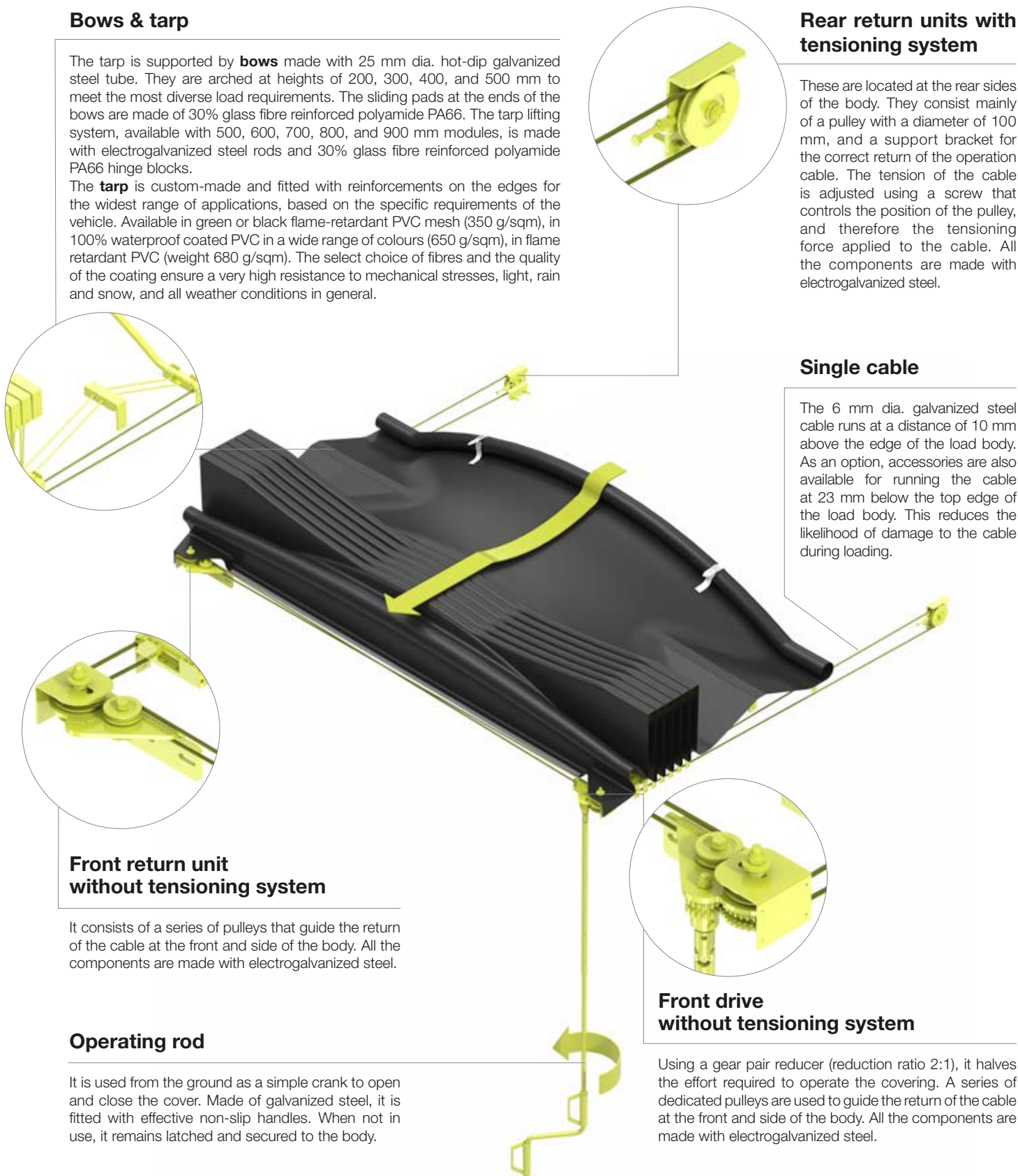
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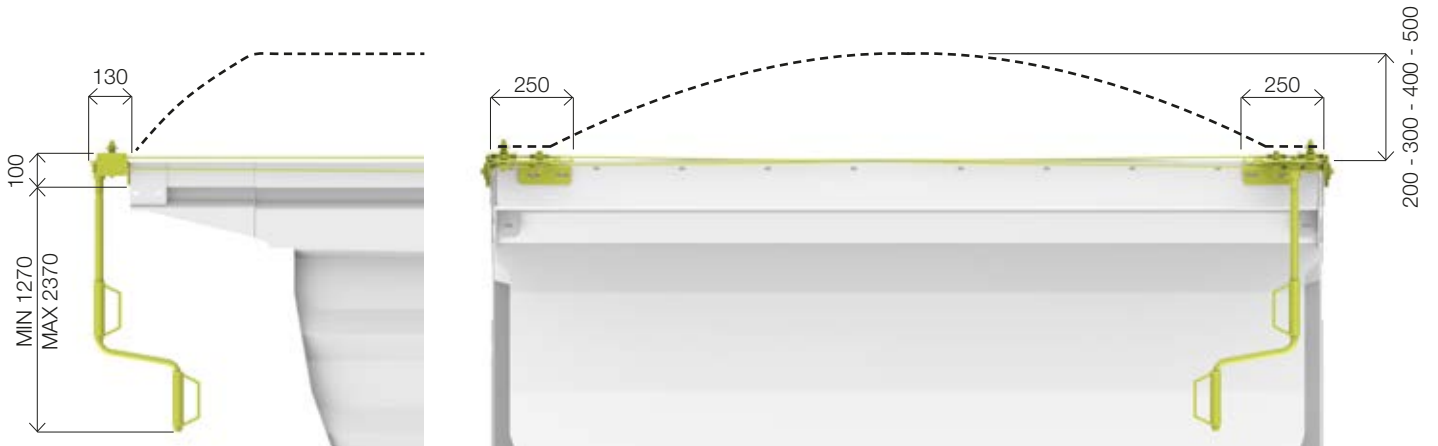
Front drive without tensioning system

Using a gear pair reducer (reduction ratio 2:1), it halves the effort required to operate the covering. A series of dedicated pulleys are used to guide the return of the cable at the front and side of the body. All the components are made with electrogalvanized steel.

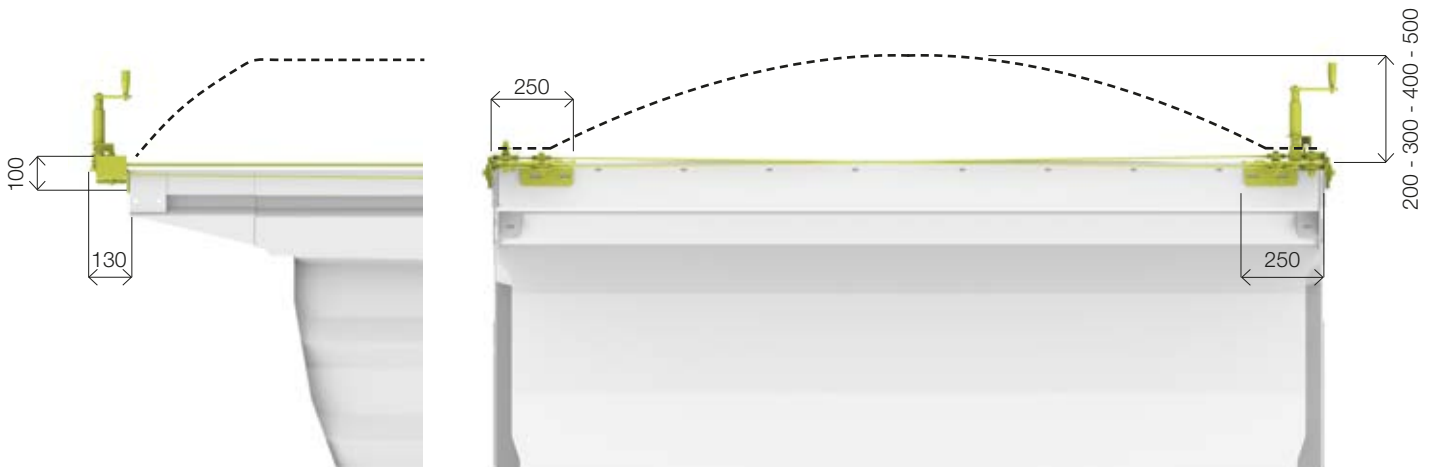


ECOTYPE® - Dimensions

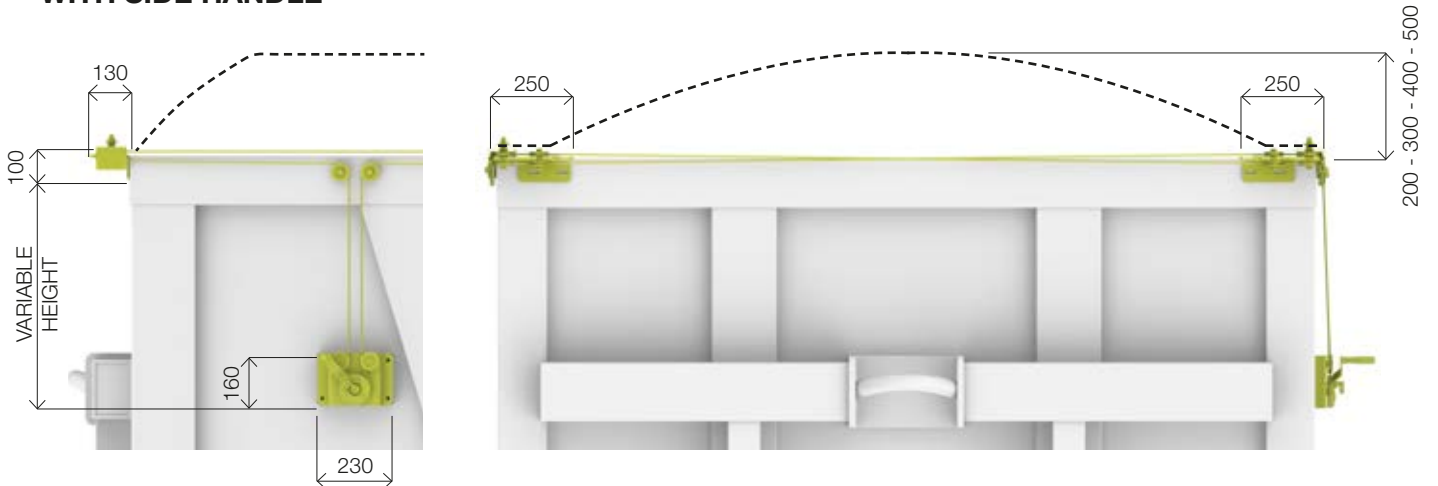
STANDARD ON BODY OPERATED FROM THE FLOOR



WITH UPPER HANDLE



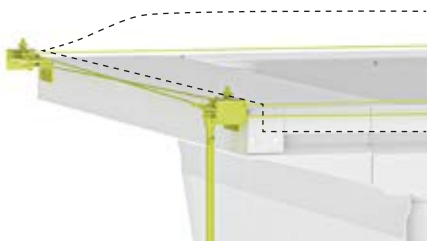
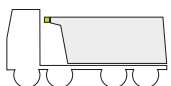
WITH SIDE HANDLE



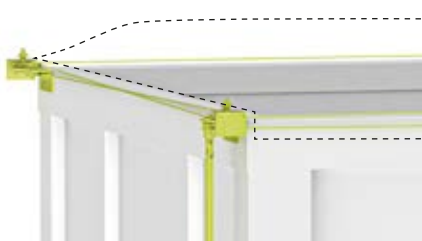
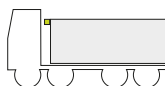
The sizes are indicated in mm

ECOTYPE® - Installation options

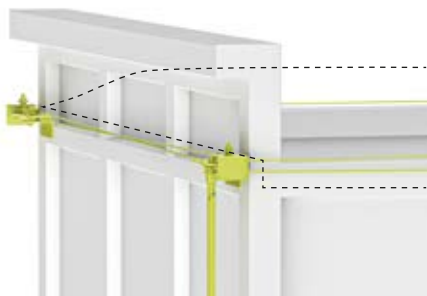
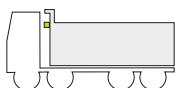
**STANDARD ON BODY
WITH CAB GUARD**



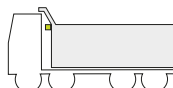
**STANDARD ON BODY
WITHOUT CAB GUARD**



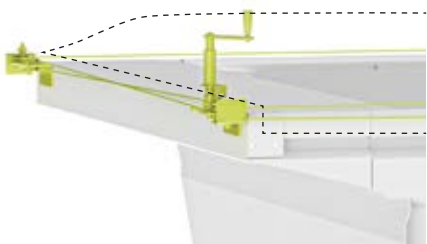
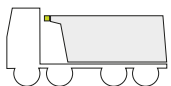
**STANDARD ON BODY
WITH RAISED END WALL**



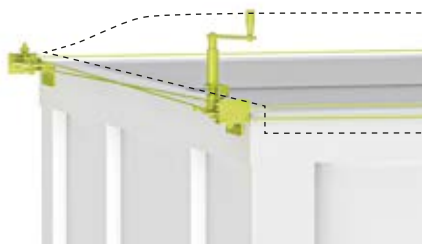
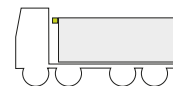
**STANDARD ON BODY
WITH RAISED CAB GUARD**



**WITH UPPER OPERATING HANDLE
UNIT ON BODY WITH CAB GUARD**

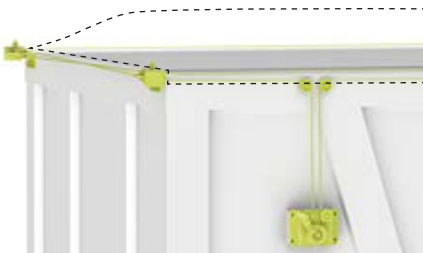
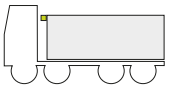


**WITH UPPER OPERATING HANDLE UNIT
ON BODY WITH RAISED CAB GUARD**

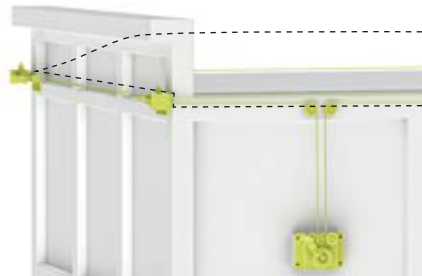
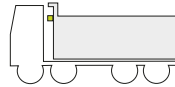


ECOTYPE® - Installation options

**WITH SIDE OPERATING HANDLE UNIT
ON BODY WITHOUT CAB GUARD**



**WITH SIDE OPERATING HANDLE UNIT
ON BODY WITH RAISED END WALL**



**WITH SIDE OPERATING HANDLE UNIT
ON BODY WITH RAISED CAB GUARD**

