

Installation Guide

Doleco USA is partnering with LoadLok International and introducing the ESC captive load securing system aimed at reducing cost and improving current systems. Easy, Safe and Clean system for efficient and safe transport. Now you can equip your fleets with the most secure, most durable deck system available.

The ESC system may be used as a decking system to support a second level of cargo above the trailer floor or in cargo shoring applications to ensure cargo does not shift while in transit. In Decking applications, ESC beams support a removable second deck that carries cargo above the main deck. When not in use, beams are moved up to the ceiling for easy and secure storage. As with removable beams, the ESC System can be used in a multitude of shoring applications to keep your loads secure!

The ESC system comes with a variety of track configurations to best suit your needs.

These track configurations provide both the flexibility of installing on the surface of the wall or recessed into the wall for a flush mount.



Installation Guide

Doleco ESC Beams are constructed of high strength 6,000 series aluminum and can be used in all industry standard 96" and 102" trailer width configurations.

Part #	Description
33600101	Heavy Duty 102" Aluminum Beam
33600102	Standard Duty 102" Aluminum Beam



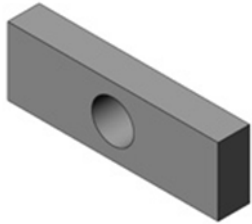
Part #	Description
33600100	Wide Top Standard 102" Aluminum Beam

Installation Guide

BEAM STOPS, 33600040:

The Beam Stop inserts snugly into bottom of track above the beam installation/removal slot. See installation for location.

Warning: Personal Injury May Occur DO NOT USE BEAMS without Beam Stop in place. If Beam Stop is damaged or missing, beams may fall causing damage.



Installation Guide

OPERATION AND WARNING DECAL, 33600042:

Each Doleco ESC System in service should have an Operation and Warning decal applied to the inside of the trailer. The location of the Decal should be in an area where the operator can easily reference the instructions. DO NOT operate, or place into service, your ESC System without this decal in place.

ESC DECK SYSTEM OPERATING INSTRUCTIONS

WARNING

Before using this deck system, please read the following operating instructions: It is most important that you read and understand these instructions and warnings. All must comply or failure to do so could lead to serious, system damage, product damage, trailer damage, personal injury and/or loss of life if not used properly

Decking/shoring capacity per beam:

- **Standard Beam Decking**- is 2,200 LBS. (1,000 KGS) Working Load Limit (WLL)/ **Shoring** is 2,200 LBS. (1,000 KGS) Working Load Limit (WLL)
- **Heavy-Duty Beam Decking**- is 3,000 LBS. (1,360 KGS) Working Load Limit (WLL)/ **Shoring** is 2,500 LBS. (1,134 KGS) Working Load Limit (WLL)
- **Wide Top Beam Decking**- is 4,000 LBS. (1,814 KGS) Working Load Limit (WLL)/ **Not recommended for shoring applications due to the wide flange on the beam. Not a smooth surface for bracing/blocking.**

The WLL limit is for evenly distributed load across the entire beam.

- Due to dynamic loads during transit, Doleco USA recommends that the actual loads supported on the deck system not exceed 50% of the working load limit.
- Concentrated or Point loading should not be done. Beams may fail.
- Store all beams to the highest position closest to ceiling within the trailer when not in use.
- Check all sidewalls, beams, beam heads, track, beam stops and track fasteners for damage before using.
- When positioning the beams at the height needed for decking make sure all beams are level. Do not use angle beams when loading.
- Heavier loads must be placed on the deck flooring to avoid a top heavy or unstable trailer.
- Beam stops are in place to stop the beam from coming out of the track. Do not rest or place beam foot assembly on beam stop when loading
- Do not use fork lifts, tow motors, or anything else to raise or lower the beams accept for the proper Release Bar made specifically for this system.
- Do not try to raise or lower the beams while products are positioned on the beams.
- Do not stand underneath beams while raising or lowering them into position.



Installation Guide

Raising the beam to its home/stored position.

- Make sure you have good personal footing before attempting to raise the beam.
- Make sure the area is clear underneath the beam before attempting to raise the beam.
- Make sure there are no products or pallets on the beams before raising.
- Stand to the side of the beam when using the Release Bar to disengage the trigger on the foot assembly and push all the way to the top of the trailers home/stored position.
- Release the Release Bar from the beam foot assembly. Beam is in the stored position. Store Release Bar.

Lowering the beam into position.

- Make sure you have good personal footing before attempting to lower the beam.
- Make sure the area is clear underneath the beam before attempting to lower the beam.
- Make sure there are no products or pallets on the beams before lowering.
- Stand to the side of the beam, then use the Release Bar to disengage the trigger on the foot assembly and lower to desired decking position. Store Release Bar.

Inspection and/or maintenance on the deck system:

- Check the trailer walls, track fasteners and each component of the system before use.
- Make sure the beams raise and lower in the track before using.
- Check beams and track to make sure there is no damage to them before using.
- Repair or replace any component as needed.



Installation Guide

TRACK LAYOUT

Pallet sizes and trailer manufacture configurations differ greatly in the industry. It is important to take these conditions into consideration when laying out your system. When installing your system, you must ensure structural integrity by attaching system track to vertical posts of the trailer or, through the walls in plate trailers.

24" POST SPACING

For trailers with 24" post spacing, alternate the single and double tracks.

16" POST SPACING

For trailers with 16" post spacing use double track on every third post or all single tracks on each post depending on your customers needs.

TRACK INSTALLATION

ESC track must be installed no more than 1" from the top flange of the upper rail to prevent accidental release of the beam out of the top of the track.

1. To install the track, place the top end of the track, flush against top flange of upper rail, centered with the vertical post. Be sure the slot for inserting the beam is down toward the floor of the trailer.
2. Transfer drill holes through trailer support post or plate wall and attach track to post through wall, at each end of track (top and bottom) using selected fasteners.
3. Continue installation by transfer drilling and installing fasteners to remaining mounting hole locations within the remaining tracks.
4. If bonding tracks to trailer walls, please consult trailer manufacturer as well as bonding agent supplier for strength requirements.

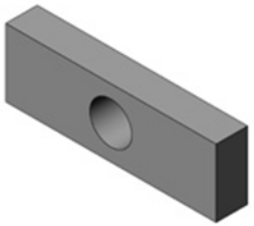
BEAM INSTALLATION

1. To install beams, slide foot assembly into the beam installation/removal slot (bottom end of track) at each side of the trailer.
2. Push up on beams until fully engaged in track teeth. Beams should ratchet up when pushed upward. Push beams up to top "storage location" in track.

Installation Guide

BEAM STOP INSTALLATION

Place Beam stops into track, above the installation/removal slot. Torque track stop screws to a maximum of 20-25 in-lbs. **Do not over torque Beam Stop screws** .



BEAM POSITIONING TEST – For purpose of quality, to be sure the system works as intended the installation specialist needs to cycle through one use of the system.

1. Using the release bar, lift end of trigger lock away from wall to release trigger lock from track and lower beam from its stored position.
2. Slide beam along track to desired position. Release trigger lock and it will rotate back into track. Make sure trigger lock is fully engaged into track teeth.
3. Repeat for opposite side of beam until beam is lowered to one tooth above the beam stop and the beam is level.
4. Push the beam back up to the stored position.



Installation Guide

Load Limits:

Decking: Do not exceed the following weight limit per beam

33600101	Heavy Duty Aluminum Beam	3,000 lbs.
33600100	Wide Top Standard Aluminum Beam	3,335 lbs.
33600102	Standard Duty Aluminum Beam	2,200 lbs.

Shoring: Do not exceed the following weight limit per beam

33600101	Heavy Duty Aluminum Beam	2,500 lbs.
33600100	Wide Top Standard Aluminum Beam	Not Recommended
33600102	Standard Duty Aluminum Beam	1,984 lbs.

- Above Working Load Limits should be reduced by 50% to account for dynamic G-Forces.

WARNING

- Improper use may result in personal injury or cargo damage.
- Place heavier freight on bottom when possible to avoid top heavy trailers.
- Do not reposition beams while loaded to avoid damage or injury.
- Ensure that the beam is locked into place before use.
- Beams cannot rest on the beam stops while under load.
- Lower and raise beams according to the process. Do not use a forklift.
- Consult Operation and Warning decal for additional instructions.

Moving parts of end fittings do not require lubrication. End fittings lubrication is not necessary and some types of lubricants can gum up the mechanism and cause additional wear.

Inspection: Periodically inspect beams, tracks or components for damage and excessive wear. If excessive wear is noted, replace or repair as necessary to ensure proper functioning.

Fastener Selection: For fastener selection, please consult the trailer manufacturer or installer.

Installation Guide

WARNING

DO NOT LOAD THE BEAM IF ANY OF THESE DEFECTS BECOME APPARENT:

- Foot assembly is compromised or missing
- Spring lock does not seat foot fully into track
- Decking beams are not straight or are damaged
- Track fasteners are missing, not properly installed, or are loose
- Additional damage to parts of the unit that the operator thinks could affect safe loading