

Good Working Practices

Caliber 270, 300 & 315

Intermediate Bulk Containers

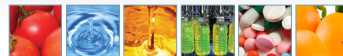


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Caliber 270, 300 & 315



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Caliber 270 & 315 OVERVIEW - Top & Bottom Discharge Models

Caliber 315
Standard Color: Tan

Top Discharge
Item No. BZ48444700

Bottom Discharge
Item No. BZ484447V0

Outside Dimensions incl. Lid
48.6 x 44.7 x 48.0 inch
1235 x 1135 x 1217 mm

Inside Dimensions
44.9 x 40.9 x 40.9 inch
1140 x 1040 x 1040 mm

Caliber 270
Standard Color: Gray

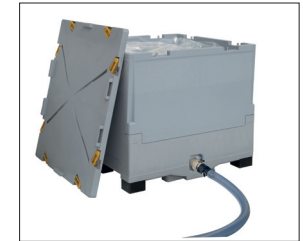
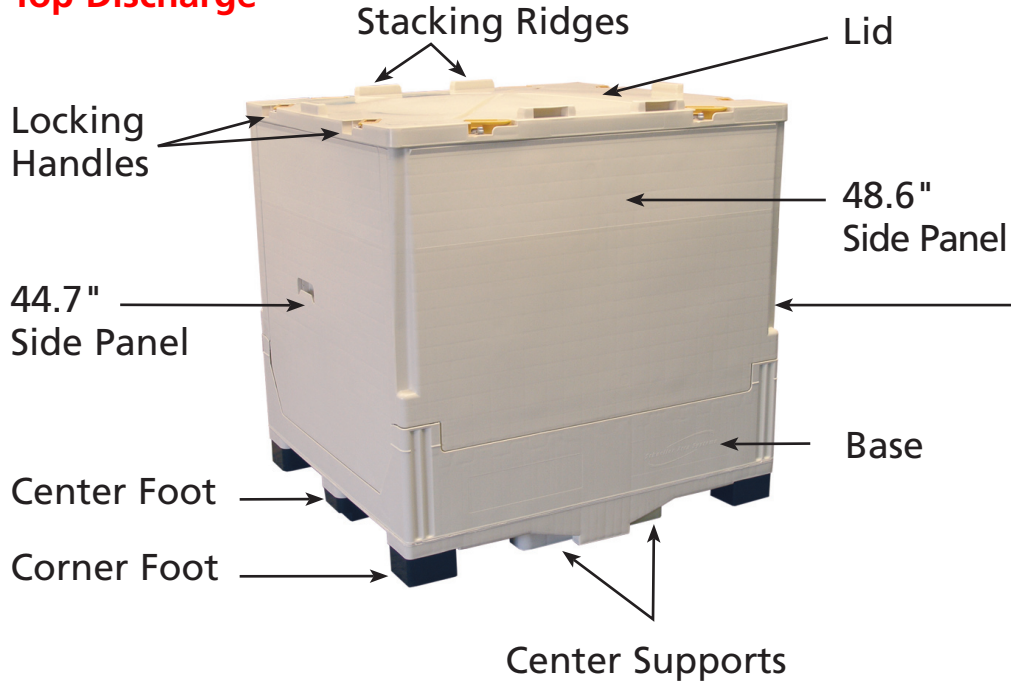
Top Discharge
Item No. BZ48444100

Bottom Discharge
Item No. BZ484441V0

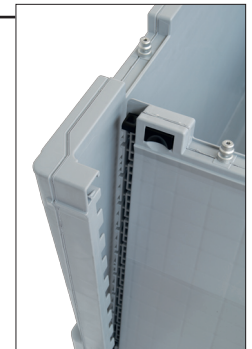
Outside Dimensions incl. Lid
48.6 x 44.7 x 41.9 inch
1235 x 1135 x 1064 mm

Inside Dimensions
44.9 x 40.9 x 33.5 inch
1140 x 1040 x 852 mm

Caliber 315
Top Discharge



Caliber 270
Bottom Discharge



Interlocking Side Panels

Tipping Precaution

If tipped for emptying, container must have full, positive support on the side wall and bottom in the direction of tilt. Also, the container must be securely held by an appropriate tipping device. Container must not be tipped by forklift.

Cleaning

Never use fluorine-based solutions. The following methods can be used to clean Buckhorn IBCs. Consult with your cleaning solution supplier to determine appropriate concentrations and formulations.

- Low-pressure washing methods
- Chlorine-based solutions
- Mild soaps/detergents

Caliber 300 OVERVIEW - Top & Bottom Discharge Models

Caliber 300
Standard Color: Gray

Top Discharge
Item No. BZ48444400

Bottom Discharge
Item No. BZ484444V0

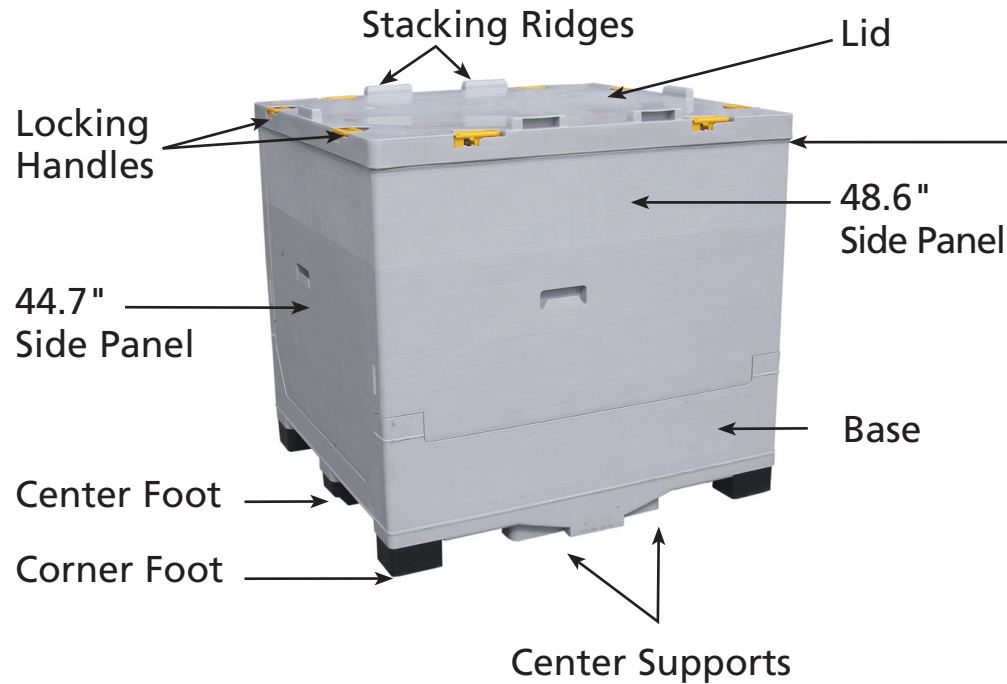
Outside Dimensions incl. Lid
48.6 x 44.7 x 45.6 inch
1235 x 1135 x 1158 mm

Inside Dimensions
44.9 x 40.9 x 38.5 inch
1140 x 1040 x 978 mm



Caliber 300
Bottom Discharge

Caliber 300 Top Discharge



**Corner Rod
Panel Locking
System**

Tipping Precaution

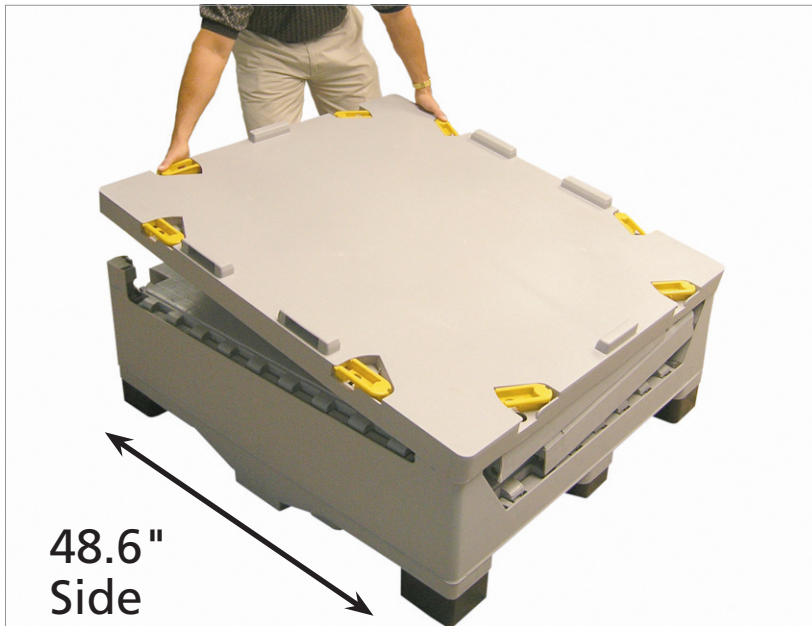
If tipped for emptying, container must have full, positive support on the side wall and bottom in the direction of tilt. Also, the container must be securely held by an appropriate tipping device. Container must not be tipped by forklift.

Cleaning

Never use fluorine-based solutions. The following methods can be used to clean Buckhorn IBCs. Consult with your cleaning solution supplier to determine appropriate concentrations and formulations.

- Low-pressure washing methods
- Chlorine-based solutions
- Mild soaps/detergents

REMOVING THE LID - From a Collapsed Container



1. Lift two corners along the 48.6" sides.



2. Lift a third corner on a 44.7" side.

3. Lift the fourth corner and slide the lid off the container.

ERECTING CALIBER - 270 & 315 CONTAINERS



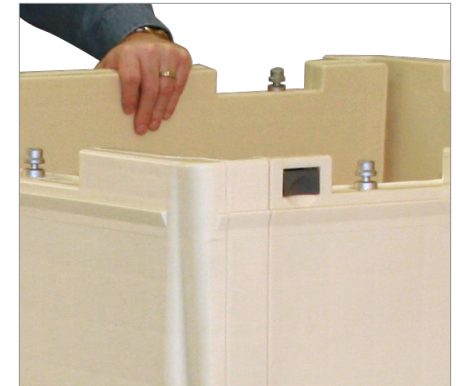
1. Erect 48.6" side panels until they remain upright.



2. Erect a 44.7" side panel with one hand holding the hand grip.



3. Snap the 44.7" side panel in place until fully engaged.



4. Repeat steps 2 and 3 for the remaining 44.7" side panel.

ERECTING CALIBER - 300 CONTAINERS



1. Erect 48.6" side panels until they remain upright.



2. Pull up two corner rods.



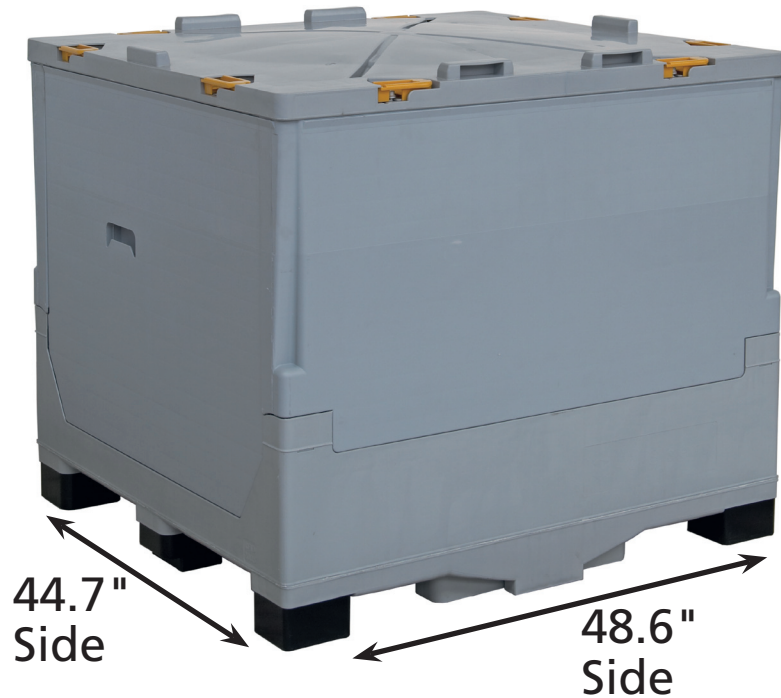
3. Erect a 44.7" side panel until fully engaged.



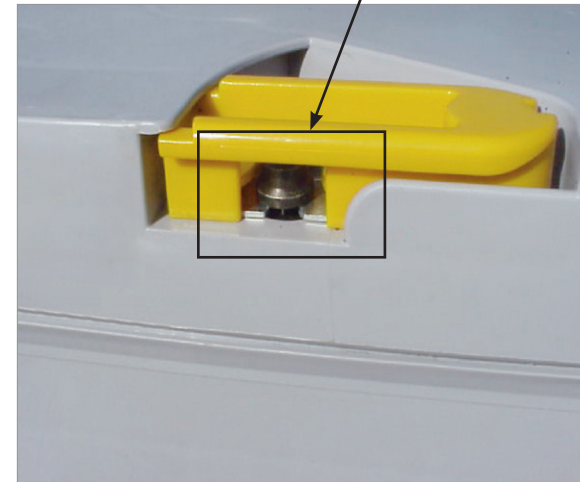
4. Push down corner rods.

5. Repeat steps 2, 3 and 4 for the remaining 44.7" side panel.

ATTACHING THE LID - Caliber 270, 300 & 315

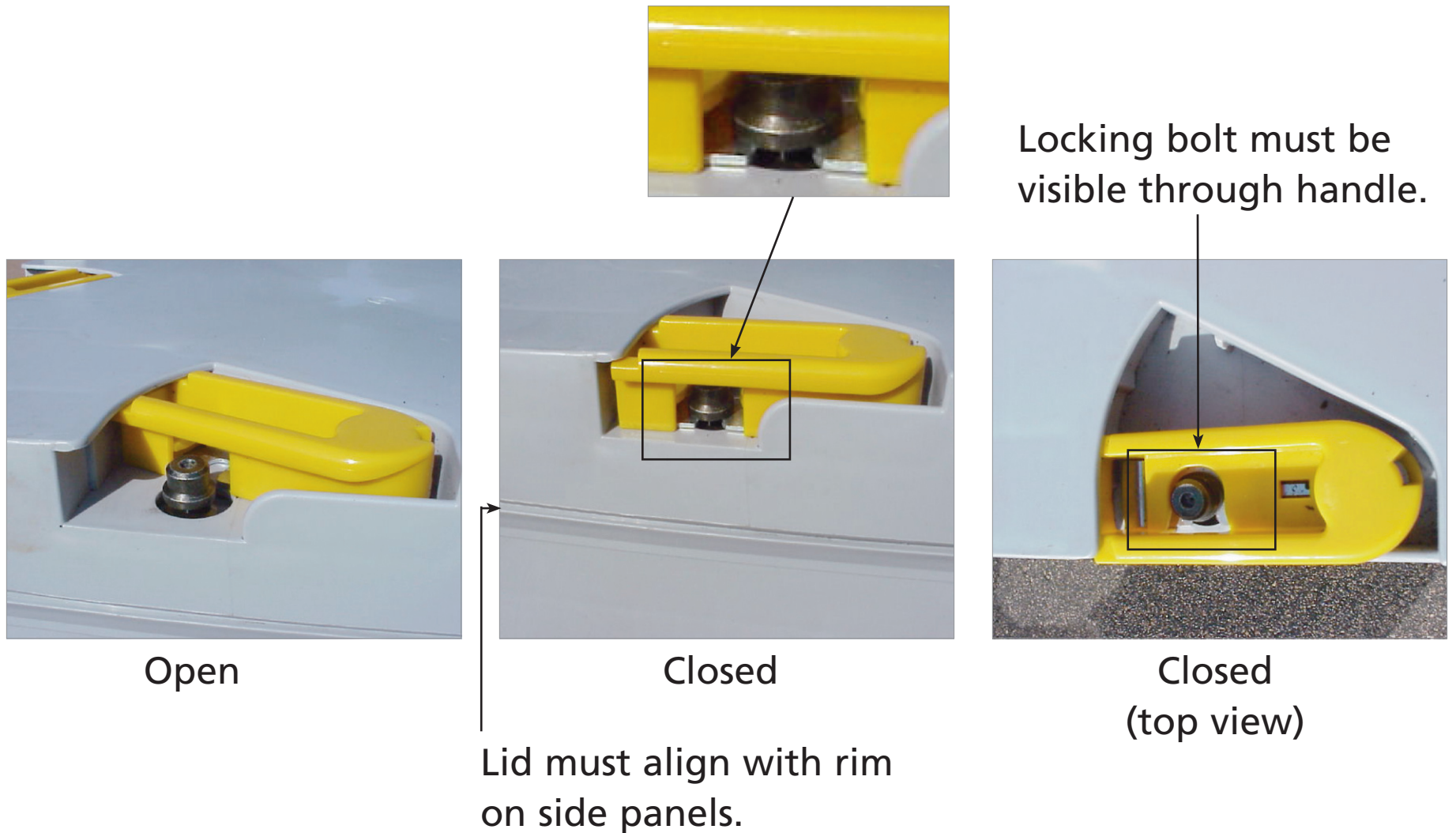


1. Align the 48.6" side of the lid to the corresponding side of the container.



2. Lock the lid in place by pulling the locking handles forward around the locking bolt.

LOCKING CALIBER LIDS



LOCKING CALIBER LIDS

- Lid and/or handle damage can occur when the handles are not properly engaged.



Handle not properly engaged with locking bolt.



If handle and locking bolt are not properly engaged, weight on lid can cause handle to dislodge.

COLLAPSING THE CONTAINER - Caliber 270 & 315



1. Remove the lid by unlocking the latches. Lift corners on the long sides and slide the lid off the container.



2. Push up corner latches on a 44.7" side to disengage panel locks or simply push panel firmly with palm of hand to fold down side; repeat on the other 44.7" side.



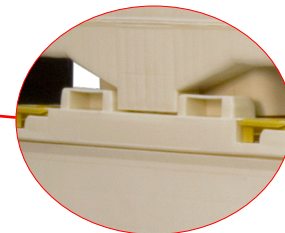
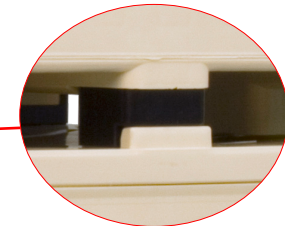
3. Collapse the remaining 48.6" sides.



4. Align the lid and reinstall.



5. Carefully stack collapsed containers ensuring the base of the top container interlocks with the lid of the container below it.



COLLAPSING THE CONTAINER - Caliber 300



1. Pull up two corner rods on the 44.7" side.



2. Fold the panel and push down the corner rods. Repeat on the other 44.7" side



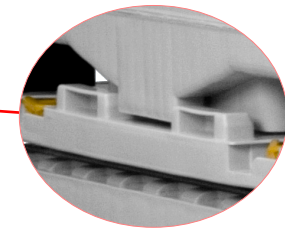
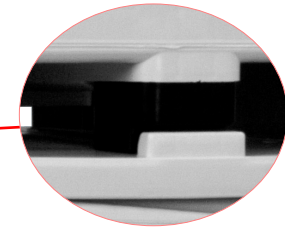
3. Fold the 48.6" side panels.



4. Align the lid and reinstall.

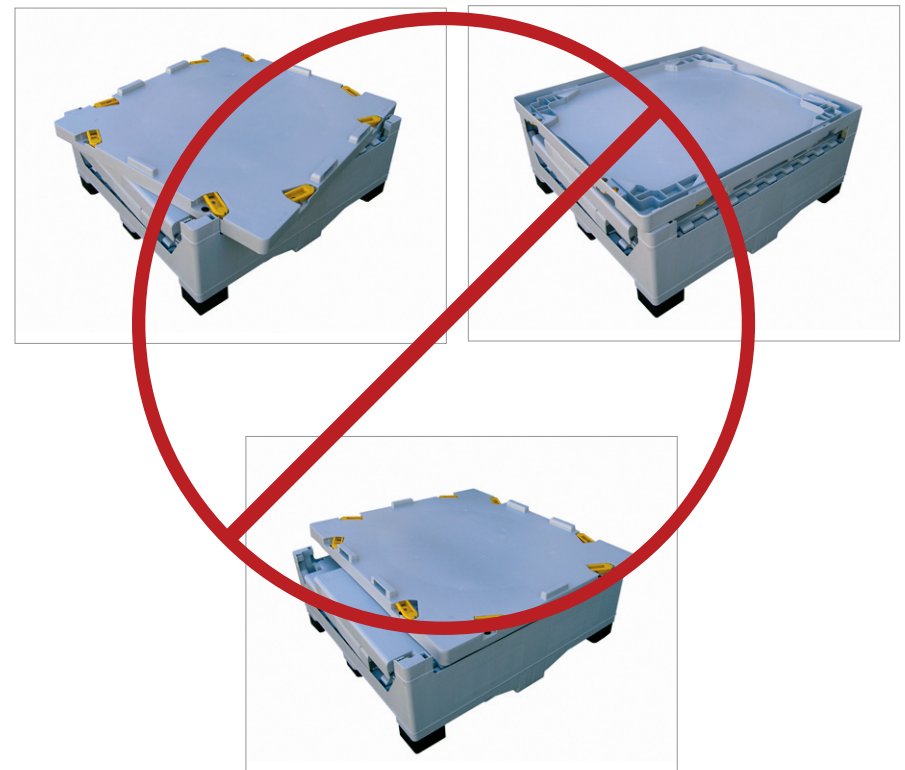
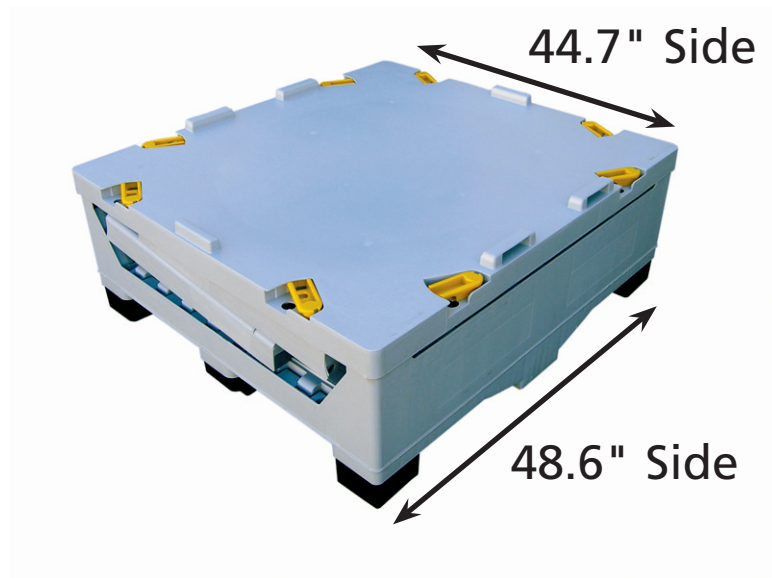


5. Carefully stack collapsed containers ensuring the base of the top container interlocks with the lid of the container below it.

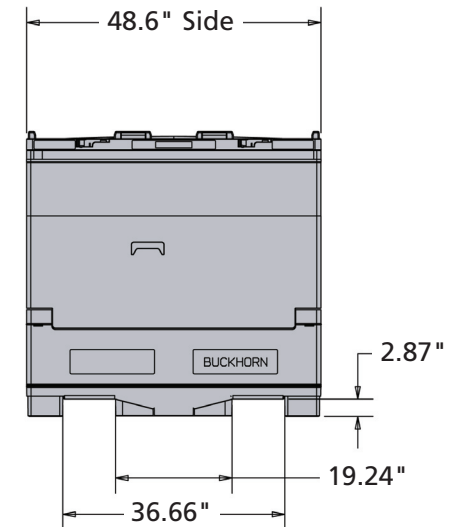
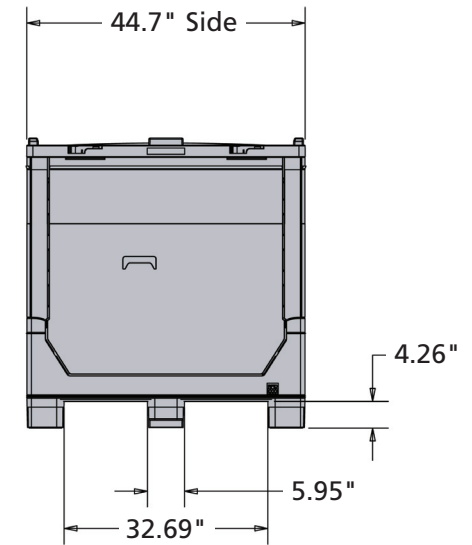
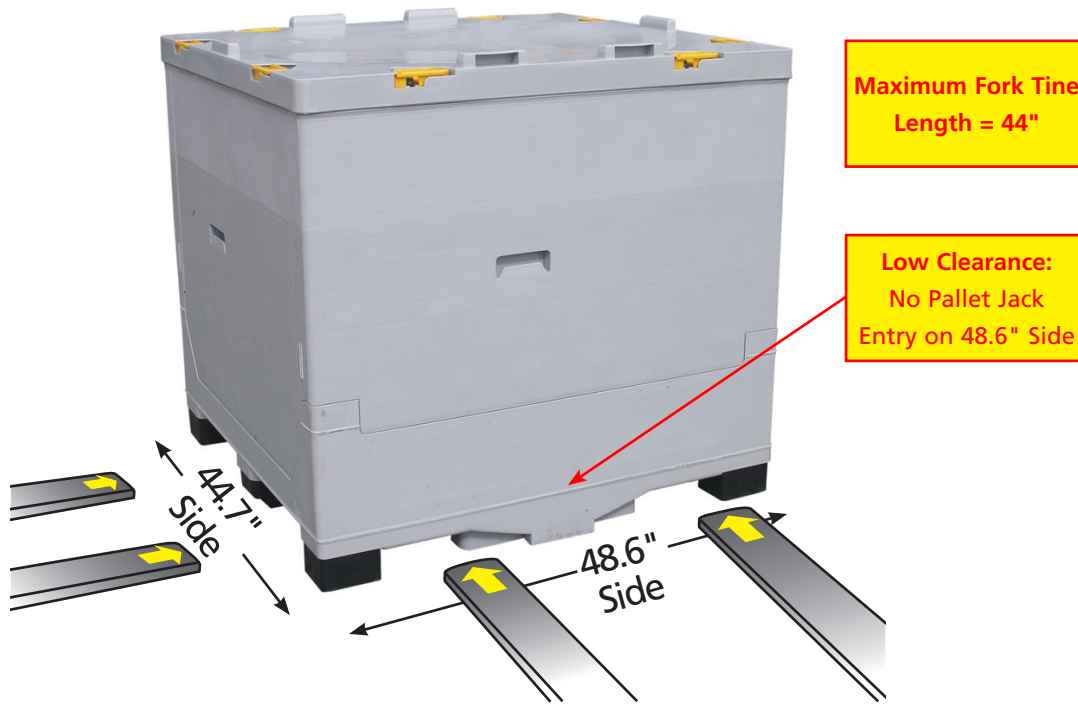


COLLAPSING THE CONTAINER - Proper Lid Attachment

- Align the 48.6" side of the lid to the 48.6" side of the container.
- Press down on corners to seat the lid.



FORK ENTRIES - Caliber 270, 300 & 315



FORKLIFT HANDLING

- Use appropriate fork length and height, or spearing damage may occur.
- Do not tip fork tines up when entering container base.
- Maximum Fork Tine Length = 44"

Correct handling procedure



Spearing Damage

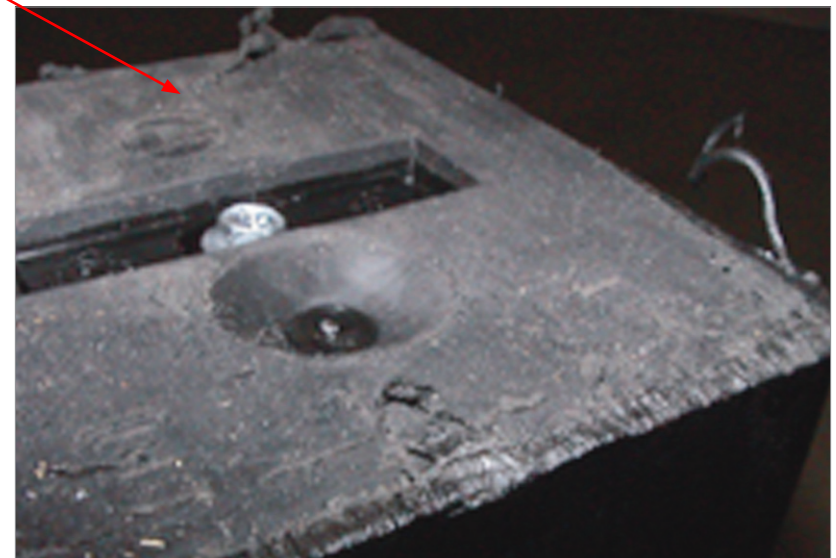


CAUTION: Incorrect fork tine length can cause stacked containers to collapse if stacked rows are hit by protruding fork tines.

FORKLIFT HANDLING

- Calibers come standard with 6 anti-slip corner and center feet.
- Pushing/sliding a Caliber container across the ground will result in wear or damage to the anti-slip surface.

Correct handling procedure



ALWAYS LIFT CONTAINERS ABOVE GROUND BEFORE MOVING.

FORKLIFT HANDLING

- Pay close attention to adjacent containers, or damage may occur.



BE CAREFUL WHEN BACKING NEAR OTHER CONTAINERS!

FORKLIFT HANDLING



Do not short fork or tip the container.



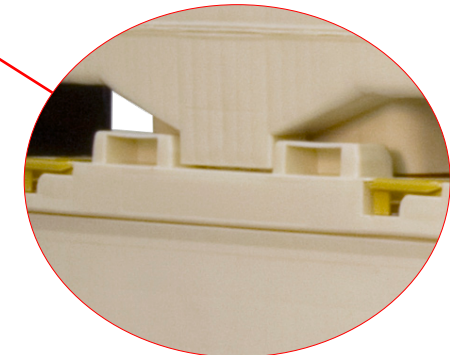
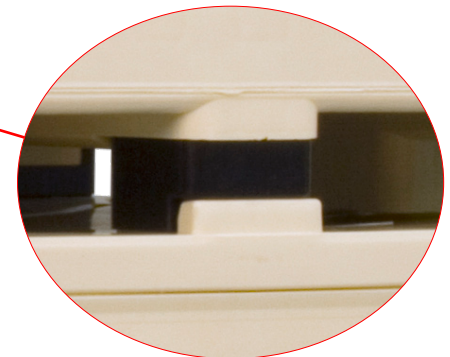
Do not push the container with forklift.



Improper handling will result in damaged containers.

STACKING & STORING - Full Containers

- Containers must be stacked with same sides in alignment.
- Ensure base of the top container interlocks with the lid of the container below it. Full containers cannot be stacked without their lids in place.



STACKING & STORING - Collapsed Containers

- Containers must be stacked with same sides in alignment.
- Ensure base of the top container interlocks with the lid of the container below it.



LOADING RAILCARS - Full Containers

- When loading the containers, make sure the 44.7" side, or short side, is facing the center void.
- Doorway stacks and the four stacks nearest the doorway area are most critical when loading containers (see diagram on next page).
- When stacking containers, make sure the feet of the container being loaded are interlocked with the lid ridges on the container below to ensure safe stacks.
- Use caution when stacking doorway columns as there is little room to maneuver forklifts!
- Do not spear or spin containers with fork tines, as damage may occur. Recommended fork tine length is 42" with a maximum of 44".



1. Stacking containers in railcars.

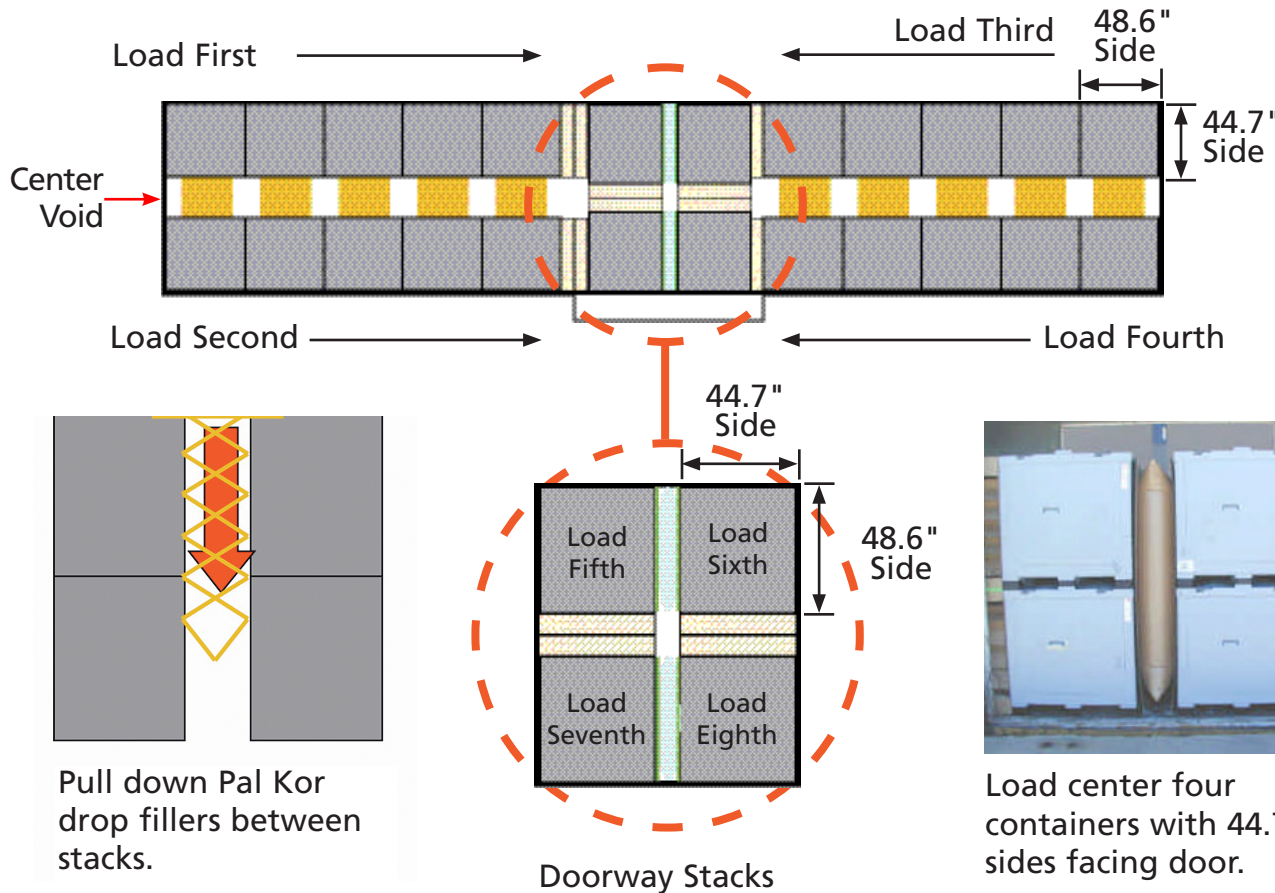


2. Proper stacking with feet and lid interlocked.









LOADING RAILCARS - Full Containers

Loading Diagram: 48 containers per 50-foot straight railcar.



INSTALLING AIR BAGS:
Apply a corrugated sheet on each side of the two doorway stacks, insert the air bag between them and inflate. Fill air bag to 6-8 psi.

-  Air Bag (2)
Size: 48"x 84", 6 Ply
-  Corrugated Sheet (4)
-  Pal Kor Bulk Head (10)
Size: 45"x 89" Width: 8"
Caliber 270 & 300
-  Pal Kor Bulk Head (10)
Size: 45"x 92" Width: 8"
Caliber 315
-  Dor Kor Drop Filler (10)
Width: 23", Length: 60"
-  Caliber Containers

BE CAREFUL WHEN MANEUVERING THE FORKLIFT IN NARROW AREAS!

LOADING RAILCARS - Full Containers



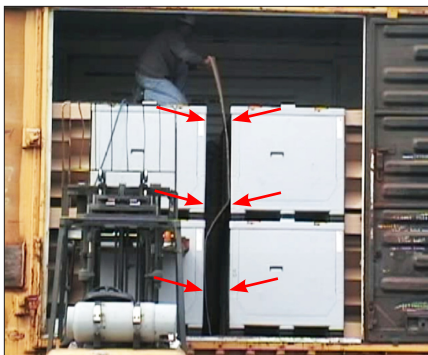
1. Place the Dor Kor Drop Fillers in the center void as the rows are created.



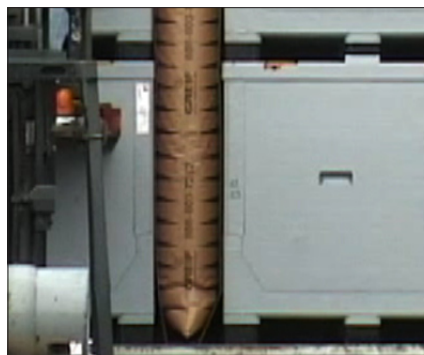
2. Apply a Pal Kor Bulk Head on each side of the two doorway stacks.



3. Load the outside doorway stacks.



4. Apply a corrugated sheet on each side of the two doorway stacks.

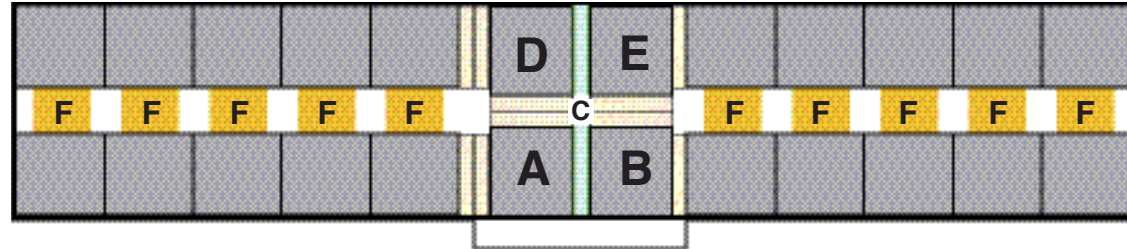


5. Insert an airbag between the two sheets and fill.

UNLOADING RAILCARS - Full Containers



1. Deflate air bags with a utility knife.



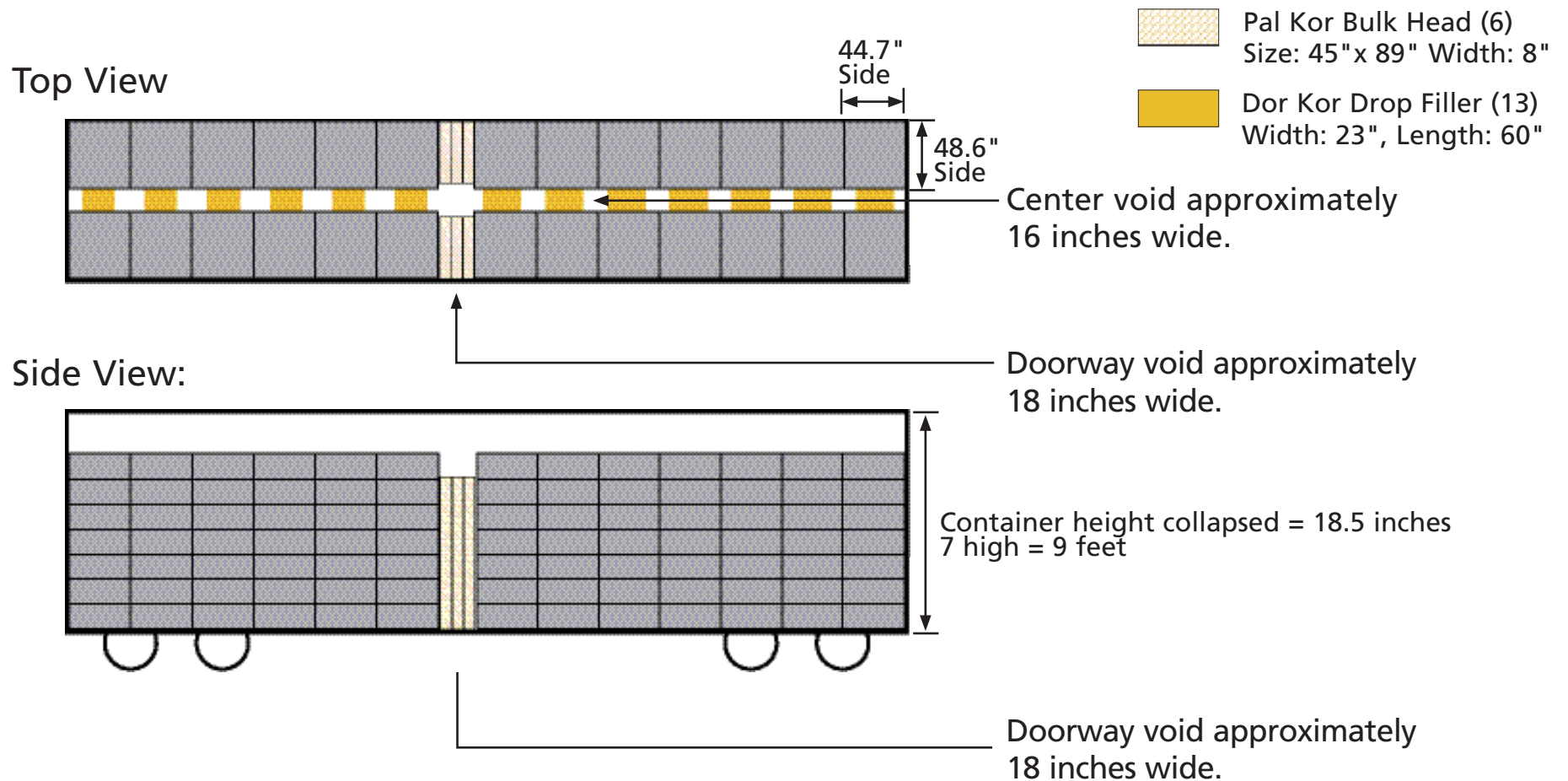
2. Unload the outside stacks in the doorway area (A/B). Remove the Pal Kor Bulk Head from inside doorway stacks (C), then unload the remaining doorway containers (D/E). Then remove the Dor Kor Drop Filler (F) used to secure the remaining containers and unload the car.



Use forklift with care! Carefully enter the fork tines to bases to prevent container damage. Recommended fork tine length is 42" with a maximum of 44".

RETURN LOADING RAILCARS - Collapsed Containers

Return Loading Pattern: based on a 50-foot straight railcar.
6 or 7 high based on the height of railcar. 156 to 182 containers per railcar.



RETURN LOADING RAILCARS - Collapsed Containers

- Make sure the short side (44.7") is facing the center void



1. Before loading doorway stacks, place fillers in the center void.

Make sure the feet are interlocked properly with the lid ridges to ensure safe stacks!



2. Corrugated sheet is placed in the doorway area to prevent side-to-side movement.



3. Partially loaded doorway area.



4. Before closing the railcar door, place void fillers at the doorway for end-to-end movement.

- Use caution when stacking doorway columns as there is little room to maneuver forklifts!
- Do not spear or spin containers with fork tines, as damage may occur. Recommended fork tine length is 42" with a maximum of 44".

UNLOADING RAILCARS - Collapsed Containers

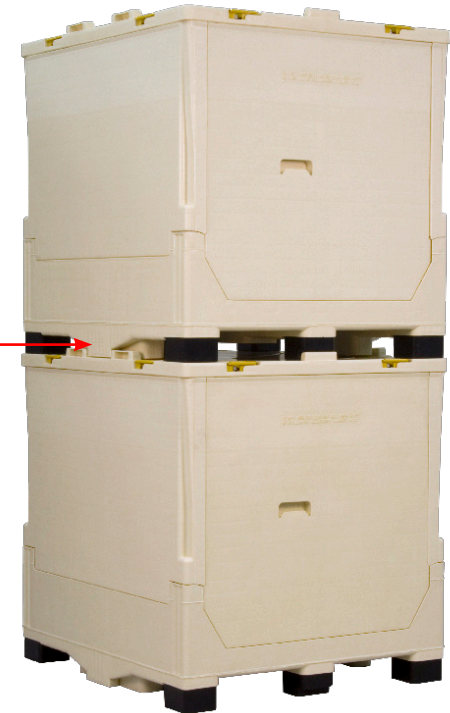


Unload the outside stacks in the doorway area. Remove the Pal Kor Bulk Head from inside doorway stacks (A), then unload the remaining doorway containers. Then remove the Dor Kor Drop Filler (B) used to secure the remaining containers and unload the car.

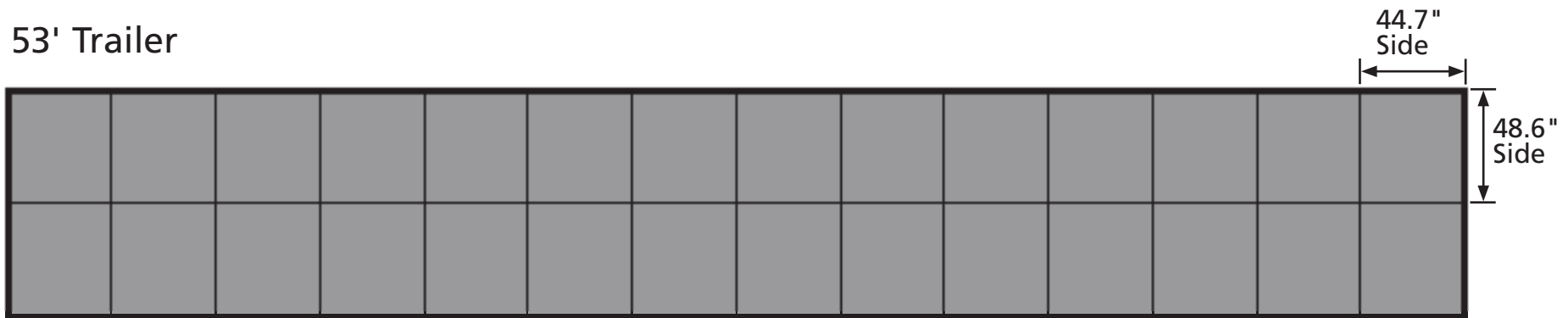
TRAILER LOAD PATTERN - Full Containers

- Begin loading at the bulkhead of trailer and use standard forklift loading procedures
- Fully loaded, stacked containers*
- Based on 53' trailer
- Containers/Layer = 28
- Number of layers = 2
- Total Stacked Containers/Load = 56
- Recommended fork tine length is 42" with a maximum length of 44".

*Note: Containers can weigh up to 3,300 lbs. each.
Trailer may weigh out before it is fully loaded.



53' Trailer



RETURN TRAILER LOAD PATTERN - Collapsed Containers

- Begin loading at the bulkhead of trailer and use standard forklift loading procedures
- Fully loaded, stacked containers
- Based on 53' trailer
- Containers/Layer = 28
- Number of Layers = 6 maximum
- Total Collapse Containers/Load = 168
- % Cube = 95.3%
- % Area Used = 98.0%
- Recommended fork tine length is 42" with a maximum length of 44".

Ensure base feet interlock with the lid of the container below it for secure stacks!



53' Trailer



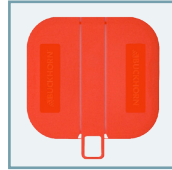
IBC Accessories - Plus Custom Solutions!

Contact a Buckhorn Sales Representative for assistance with accessories...



Liner Bag

A wide range of Liner Bags are available for Caliber and Citadel IBCs from a variety of suppliers. The Liner Bag can be made of different materials to provide desired performance.



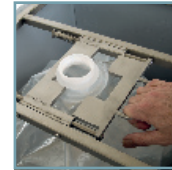
Tamper Evident Cap

The Tamper Evident Cap for bottom discharge Caliber 270, 300 and 315 models protects the discharge area during transportation and storage.



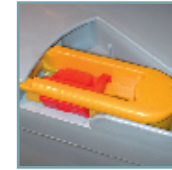
Gland Adapter

The Gland Adapter for bottom discharge Caliber 270, 300 and 315 models easily attaches to liner bag to secure the bag's fitment valve to the container.



Filling Bridge

The filling gland on the liner bag is connected to a Filling Bridge for easy filling. Available for both Caliber and Citadel IBCs.



Tamper Evident Seal

The Tamper Evident Seal for Caliber 270, 300 and 315 is used to secure the eight locking handles on the lid.

CUSTOM CONTAINERS

Let Buckhorn assist you with any custom container need for bulk liquid handling. Our consistent innovation, engineering excellence, multiple manufacturing processes and application expertise are unmatched in the industry!

For more details, call (800) 543-4454

www.buckhorninc.com



Caliber 270



Caliber 300



Caliber 315






Citadel



Citadel-v

Caliber or Citadel - What are Your Needs?

Contact a Buckhorn Sales Representative for assistance in selecting the right IBC for your application. . .

	 Caliber™ Intermediate Bulk Container	 Citadel By Buckhorn	 Citadel V™ By Buckhorn
Gallon Capacities	Three sizes: 267, 295, 315 gal.	302 gal.	302 gal.
Construction	High pressure injection molded	Structural foam	Structural foam
Material	Polypropylene	Polypropylene	High Density Polyethylene
Tare Weight with Lids	205 lbs. (270 model) 225 lbs. (300 & 315 models)	276 lbs.	276 lbs.
Base Style	Feet	Rails	Rails
Entry	4-way entry for forklifts, 2-way for pallet jacks	True 4-way entry	True 4-way entry
Stacking	Lids stack on top of each collapsed box	Lids stack separately	Lids stack separately
Fitment Cover	Disposable gland adapters and cap sold separately	Not applicable	Integrated
RFID	2 per container standard	Optional	Optional
Lids	Rotating locking handles	Spring latch and sliding locks, flush with container	Spring latch and sliding locks, flush with container
Bottom Discharge	Option on each model	Not applicable	Standard
Rail Certified	Yes	Yes	No
Operating Temperature	0° F to 140° F / -17° C to 60° C	0° F to 140° F / -17° C to 60° C	-20° F to 120° F / -29° C to 49° C

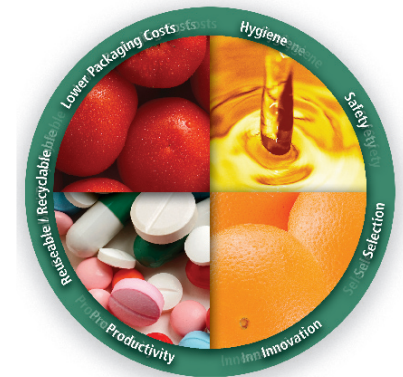
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CONTACT INFORMATION



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DACO

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