

OPUS[®] Columns 45 cm internal diameter (ID)

Packaging Instructions - Non-Wood



The information contained in this document is subject to change without notice.

With respect to documentation accompanying product, Repligen makes no warranty, express or implied. Any and all warranties related to the documentation accompanying product are expressly disclaimed. Customer shall refer to the terms and conditions of sale governing the transaction for any and all warranties for the Product.

Repligen Corporation shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of Repligen Corporation.

Products are not intended for diagnostic or therapeutic use or for use in vivo with humans or animals.

For further information, please contact Repligen Corporation at www.repligen.com.

©2023 Repligen Corporation. All rights reserved. The trademarks mentioned herein are the property of Repligen Corporation and/or its affiliate(s) or their respective owners.

OPUS® Columns 45 cm Unpackaging Instructions

Customer Support USA

customerserviceUS@repligen.com

+1-781-250-0111

Repligen Corporation

41 Seyon Street Building #1, Suite 100
Waltham, MA 02453

www.repligen.com

Customer Support Europe

customerserviceEU@repligen.com

+31 76 5719 419

Repligen Europe B.V.

Hoeksteen 13
4815 PR BREDA
The Netherlands

www.repligen.com

Read prior to preparing the column for packaging

- Column side guard must be secured in place between the black Top Cap and Bottom Cap for proper fit of the packaging
- Clamp on ports must be tightened to prevent leaking during transit
- All external column surfaces should be wiped down to remove debris and salt deposits prior to packaging column inside crate for shipment
 - Common cleanroom solution or Isopropyl Alcohol or Ethanol is sufficient

Procedure

Step 1.

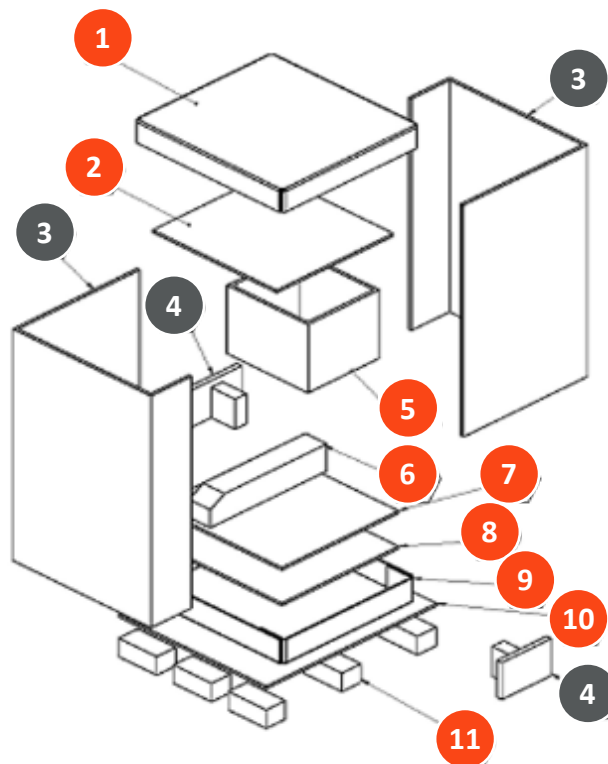
Position rear side of crate next to wall, pole, or immobile backing for safety.

Step 2.

Separate crate components and verify all required parts are included. Confirm all pieces are all present and in good quality conditions. Customer unloading ramp should be in one solid piece.

Note: Ramp is not reflected in packaging drawing but is a key component to crate.

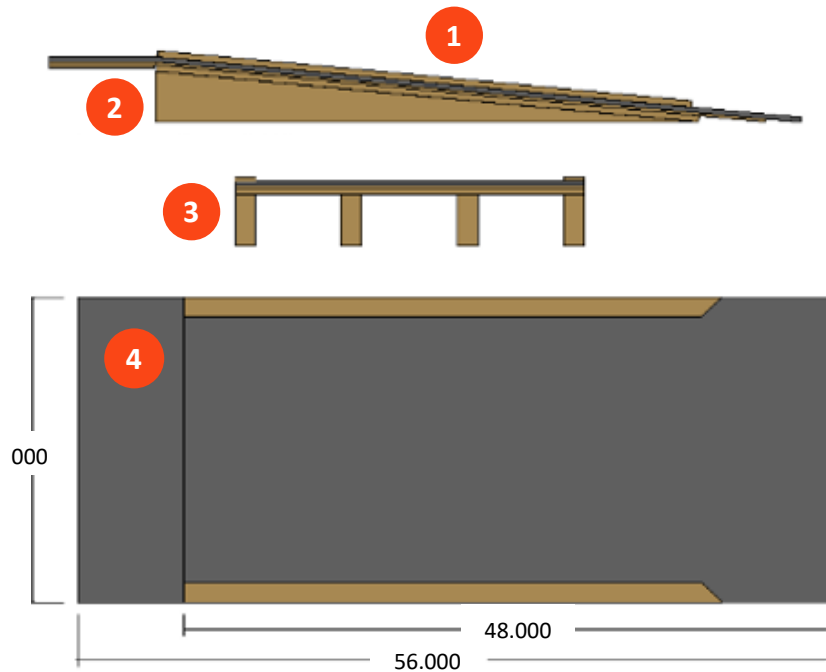
1. Top Cap
2. Top Plate
3. Sidewall (x2)
4. Bottom Support Blocks (x2)
5. Connection Port Brace Collar
6. Base Support Block
7. Bottom Plate
8. Bottom Tray
9. Bottom Cap
10. Base Deck
11. Pallet Feet



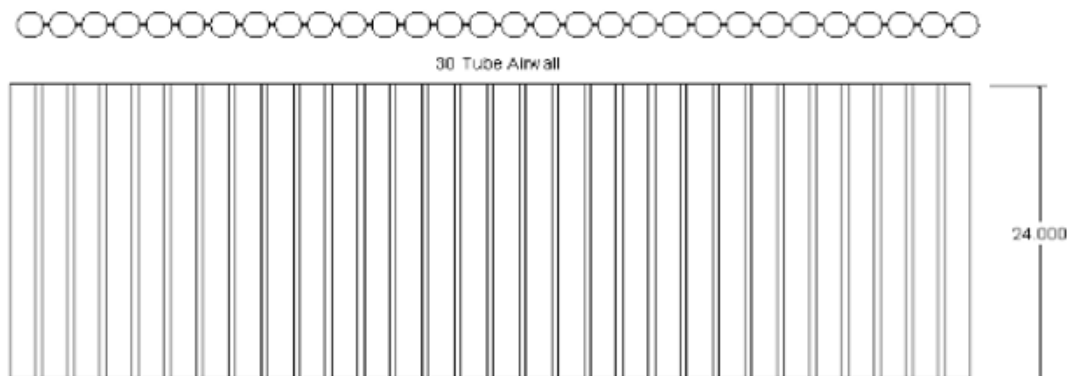
Within each crate is a detachable loading/unloading ramp for the OPUS® Column.

Note: The unloading ramp should be in one solid piece.

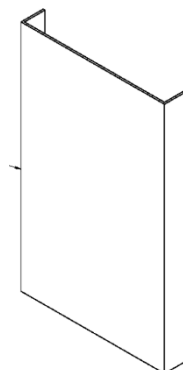
- 1. Ramp side
- 2. Flap folds flat
- 3. Ramp back
- 4. Ramp (Top view)



Within each crate is the following inflated air wrap for use in protection of the OPUS® Column body.

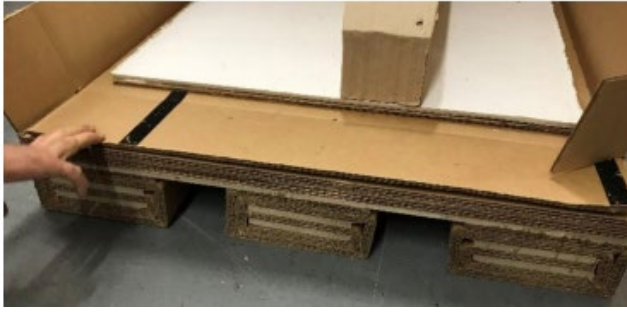


Within each crate is the following U-pad for placement between ramp and air-wall.



Step 3.

Position reusable wood ramp to crate base.



Step 4.

Roll OPUS® Column up ramp with front of Column facing ramp. Position Column on top of off-center support beam. Ensure ~2" space between backside of crate tray and back of column to allow for fit of left crate side wall.



Step 5.

Place T shaped bottom support blocks between the casters. One on each side.

**Step 6.**

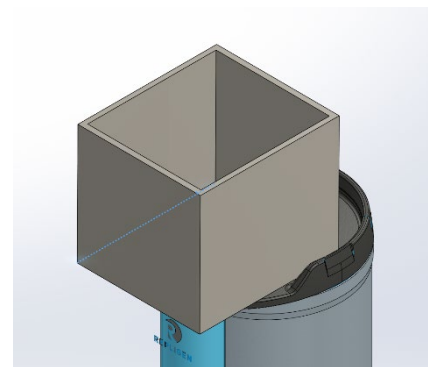
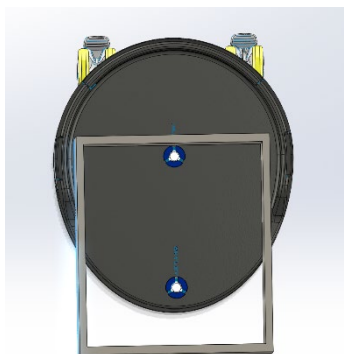
Fold in bottom left corner of tray and seal with a minimum of 2 pieces of 6" case sealing tape.



Step 7. Remove reusable wooden ramp.

Step 8. Wrap inflated Air-Wall around column and black top cap. Secure to itself with a minimum 5-inch-long piece of clear case packing tape.

Step 9. Position corrugated collar on top of column black cap, whether tubing set is attached or not. **ALWAYS** include the collar with every column shipment.



Step 10.

Insert LEFT sidewall on LEFT side of column.

**Step 11.**

If column will ship with resin sample, close/seal box containing sample and position in bottom of crate in front left corner.



Step 12.

Position the U-shaped divider on the RIGHT side of the column, with flat surface facing column and air wall.

Step 13.

Insert customer unloading ramp on RIGHT side of U-shaped divider i.e., not touching column or air wall, with rollout surface facing away from column and hinged end facing top of crate.

- 1. U Shaped Divider
- 2. Ramp

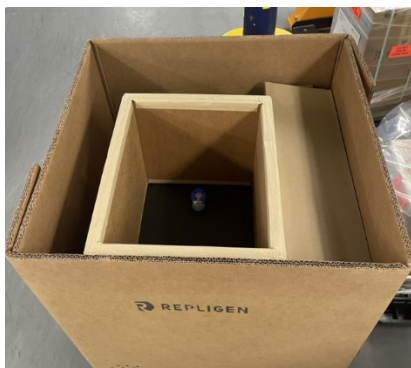


Step 14.

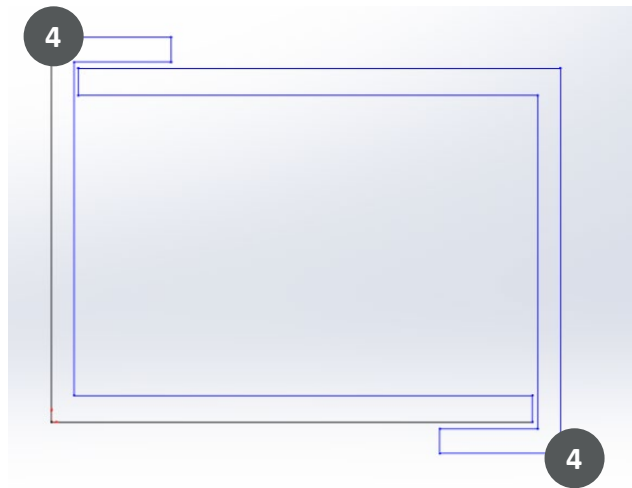
Insert RIGHT sidewall on RIGHT side of column. Position the long flaps to the inside and short tabs to the outside (see overhead view below).

Note: Orientation of side walls is critical for optimal Top to-Bottom Crate Strength.

- 3. Short Flap



4. Nested Short Flaps
(not to scale).



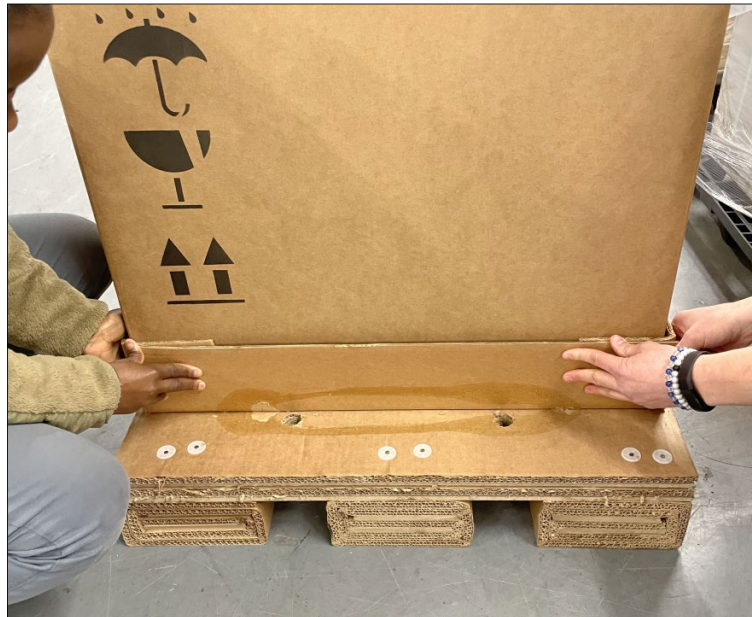
Step 15.

Place crate lid on top of side walls and feel for a noticeable “click” sound to indicate walls and lid are locked into position. **Tip:** Make sure staples on top lid align with staples on same side of crate base.



Step 16.

Fold up front corners of tray, folding corner tabs (short side) first and tabs with attached Velcro strips (long end) second.



Step 17.

Use pallet jack to move crate away from wall for ease of strapping.

Step 18.

Apply strapping through integrated holes in tray bottom using two straps in each direction (all four sides).



Step 19.

Affix Address Label and Packing List to outside panel of the crate. If applicable, affix Refrigerate Upon Arrival stickers.

- For international shipments, attach the Commercial Invoice to the outside of the crate

