

OPUS[®] Column 36 cm Non-Wood Packaging

User Guide

UG-OPUS Column 36cm Non-Wood Packaging-1. Document Status is Effective as of 2023-11-06T11:11:11

UG-OPUS Column 36cm Non-Wood Packaging-01

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.

Printed on 2023-11-13T08:37:50
Document will expire 2 days after print date.



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.

Customer Support

customerserviceUS@repligen.com

(800) 622-2259

Repligen Corporation

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

www.repligen.com

Repligen Europe B.V.

Hoeksteen 13
4815 PR BREDA

customerserviceEU@repligen.com

Contents

1. Introduction 4

2. Read prior to opening crate 4

3. Procedure 5

4. Index 18

List of figures

Figure 1. Components 5

Figure 2. Ramp and U-sheet 5

Figure 3. Bottom tray and pallet 6

Figure 4. Positioning the ramp 7

Figure 5. Moving the column 8

Figure 6. Position of the column 8

Figure 7. Casters 9

Figure 8. Placement of support blocks 10

Figure 9. Support block sizes 10

Figure 10. Ramp placement 11

Figure 11. U-sheet flaps 11

Figure 12. Collar placement 12

Figure 13. Top view of collar 12

Figure 14. Resin sample 13

Figure 15. Back sidewall 14

Figure 16. Front sidewall 14

Figure 17. Sidewall flaps 15

Figure 18. Orientation of sidewall flaps 15

Figure 19. Lid placement 16

Figure 20. Bottom tray 16

Figure 21. Strapping 17

UG-OPUS Column 36cm Non-Wood Packaging-1. Document Status is Effective as of 2023-11-06T11:11:01

1. Introduction

The purpose of this guide is to provide instructions for placing the OPUS® 36R Pre-packed Column into a non-wood shipping container. Please read completely before beginning. For your safety, take note of the steps that require two people.

2. Read prior to opening crate

- Column side guard must be secured in place between the black top cap and the bottom cap for proper fit of the packaging.
- Clamps 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, isopropyl alcohol, or ethanol is sufficient.

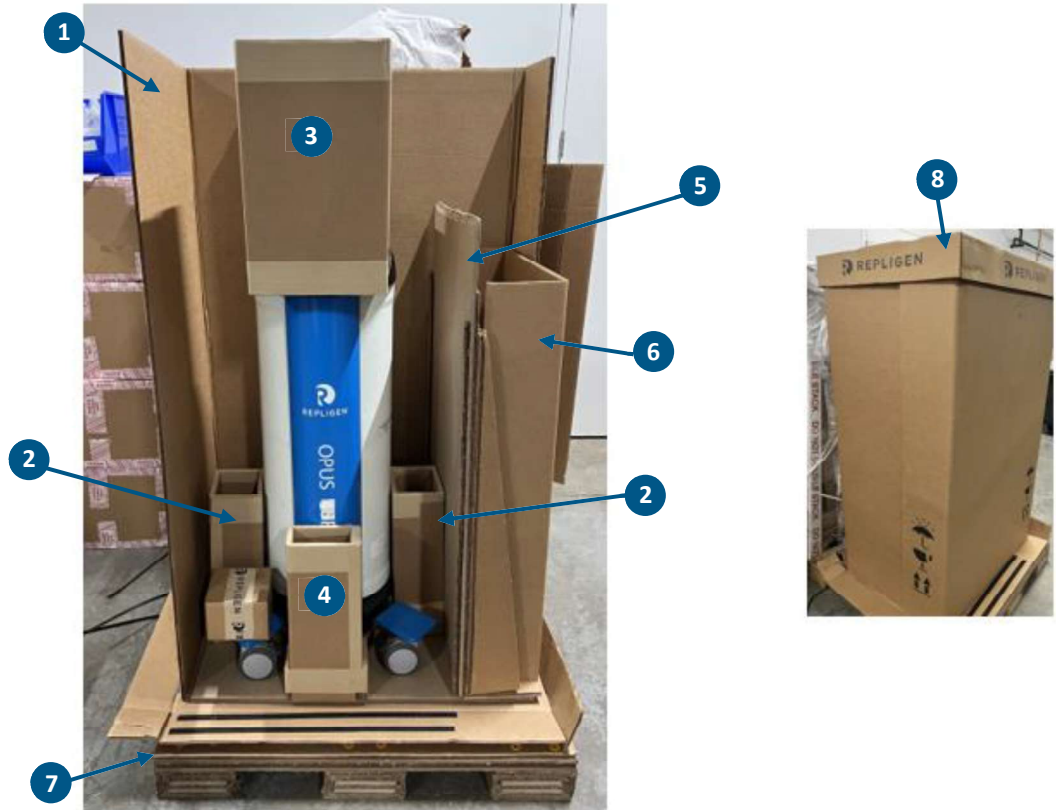
3. Procedure

Step 1.

Separate crate components and verify all required parts are included. Confirm all pieces are all present ([Figure 1](#), [Figure 2](#), and [Figure 3](#)) and in good quality condition. Customer ramp should be in one solid piece.

Figure 1. Components

- 1. Sidewall (x2)
- 2. L-shaped Bottom Support Blocks, Side (x2)
- 3. Connection Port Brace Collar
- 4. L-shaped Bottom Support Blocks, Front
- 5. Ramp
- 6. U-sheet for ramp
- 7. Bottom Tray and Pallet assembly
- 8. Lid



Note: Ramp (5), U-sheet for ramp (6) and Bottom Tray and Pallet assembly (7) are shown in detail in [Figure 2](#) and [Figure 3](#).

Figure 2. Ramp and U-sheet

- 1. Flap folds flat
- 2. Ramp back
- 3. Ramp (Top view)
- 4. U-sheet for ramp

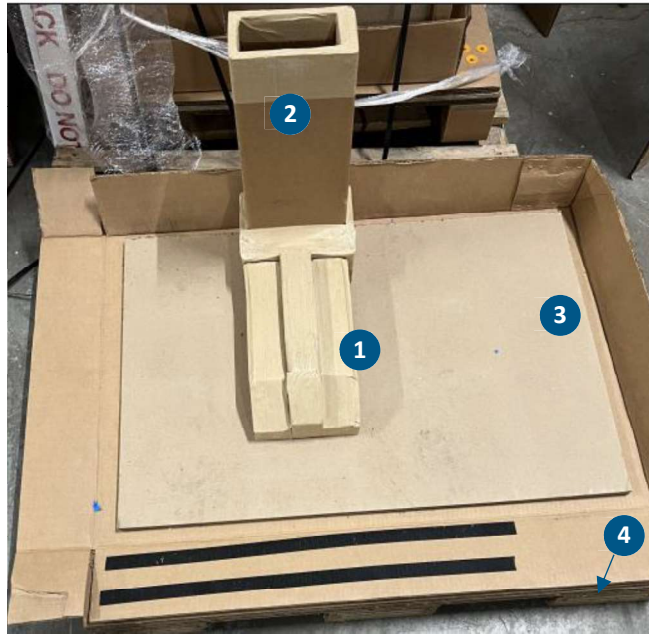


UG-OPUS Column 36cm Non-Wood Packaging-1. Document Status is Effective as of 2023-11-06T11:11:01

Note: The ramp should be in one solid piece.

Figure 3. Bottom tray and pallet

- 1. Support beam
- 2. L-shaped Bottom Support Block, Rear
- 3. Bottom Tray
- 4. Pallet



Note: The support block and the L-shaped Bottom Support Block, Rear will be pre-glued to the Bottom Tray and Pallet assembly.

Step 2.

Position the wooden ramp on the crate base side with hook and loop strips ([Figure 4A](#), [B](#), and [C](#)).

Figure 4. Positioning the ramp



Step 3.

Roll the OPUS Column up the wooden ramp so that the front of column (blue sideguard) is facing the ramp ([Figure 5](#)).

Caution: TWO OPERATORS are required. This is a TWO-person operation.

Figure 5. Moving the column



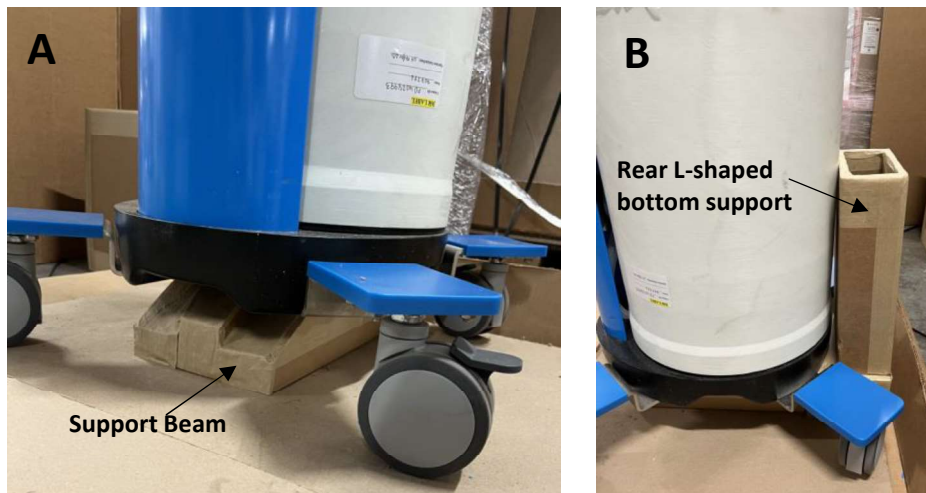
Step 4.

Lift and position the column on top of the support beam ([Figure 6A](#)) and completely against the rear L-shaped bottom support block ([Figure 6B](#)).

Note: That the support beam and rear L-shaped bottom support block will be pre-glued to the crate base and cannot be removed.

Caution: TWO OPERATORS are required.

Figure 6. Position of the column



Step 5.

Rotate all four casters inward (toward the column) such that the casters are facing each other. (Figure 7). All four caster wheels must be in a **locked** position to prevent damage during shipment. Push down on the locking tabs to secure the positioning of the casters inward (toward the column).

Figure 7. Casters



UG-OPUS Column 36cm Non-Wood Packaging-1. Document Status is Effective as of 2023-11-06T11:11:01

Step 6.

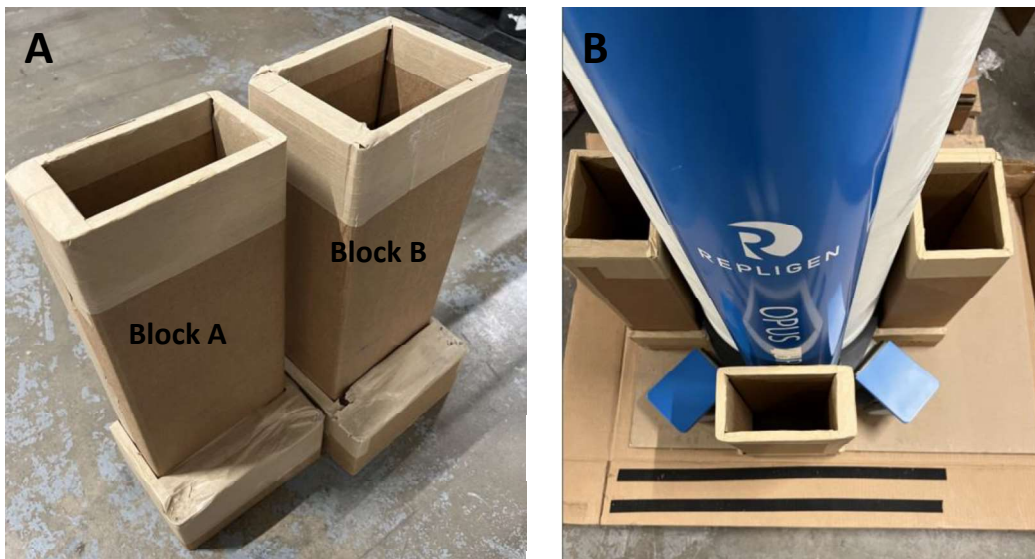
Carefully tilt the column back on each side by supporting the black top cap. Place the L-shaped bottom support blocks between the casters for each side (Figure 8).

Note: that there are two L-shaped block widths (Figure 9A). The wider blocks are inserted on the sides and the narrower block is inserted in the front of the column (Figure 9B).

Figure 8. Placement of support blocks



Figure 9. Support block sizes



Block A (1) is narrower and sits at the front of the column. Block B (2) is wider with one supporting each side of the column.

Step 7.

Place ramp on RIGHT side of the column, on its foldable flap, touching L-shaped bottom support block ([Figure 10](#)).

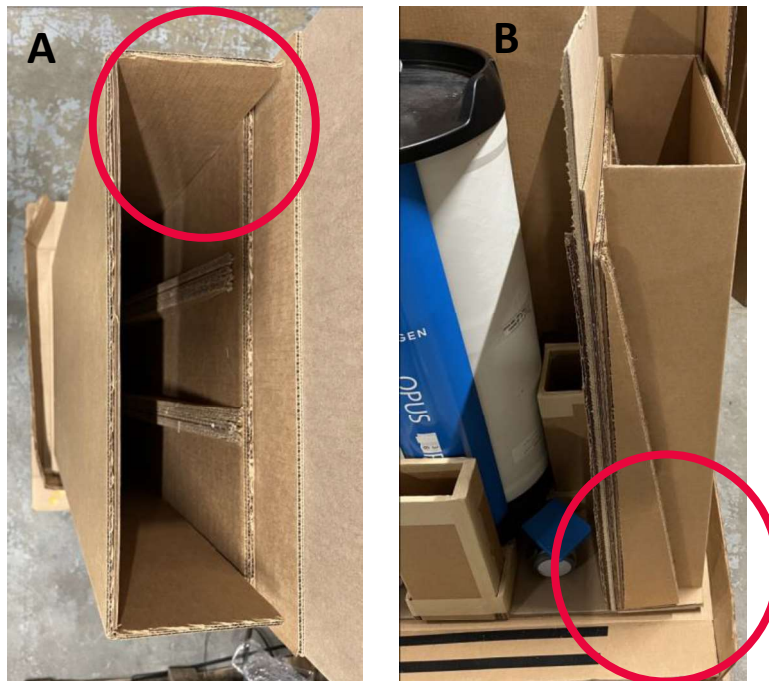
Figure 10. Ramp placement



Step 8.

Position the U-sheet flaps inside the outer non-wood ramp legs ([Figure 11A](#)) and place the U-sheet on the non-wood ramp flap with hook and loop strips ([Figure 11B](#)).

Figure 11. U-sheet flaps



Step 9.

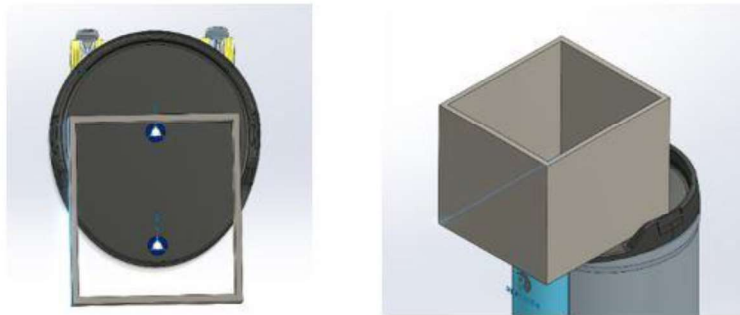
Position the corrugated collar on top of column black cap, whether tubing set is attached or not ([Figure 12](#) and [Figure 13](#)).

ALWAYS include the collar with every column shipment.

Figure 12. Collar placement



Figure 13. Top view of collar



Step 10.

If column will ship with resin sample, close/seal box containing sample and position in bottom of crate in front left corner on the flat caster bracket surface ([Figure 14](#)).

Figure 14. Resin sample



Step 11.

Insert one sidewall around the unit such that the wide panel is along the back of the column and the flaps are on either side ([Figure 15](#)).

Figure 15. Back sidewall



Step 12.

Insert the other sidewall around the unit so that the wide panel is along the column's front and the short flaps are on either side ([Figure 16](#)).Figure 16

Figure 16. Front sidewall



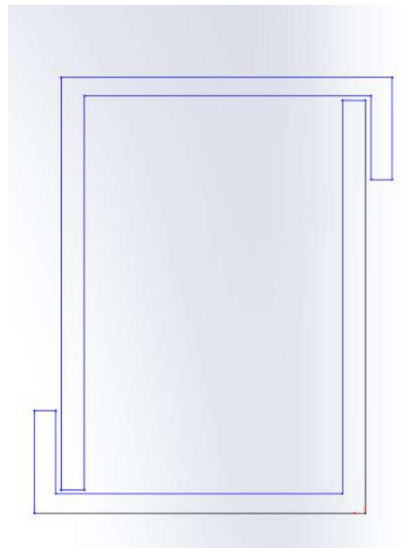
Step 13. Position each wide side-flap inside the corresponding short flap ([Figure 17](#) and [Figure 18](#)).

Note: Orientation of sidewalls is critical for optimal top to-bottom crate strength.

Figure 17. Sidewall flaps



Figure 18. Orientation of sidewall flaps



Step 14.

Place the crate lid on top of the sidewalls and push it down to lock the sidewalls into position ([Figure 19](#)).

Figure 19. Lid placement

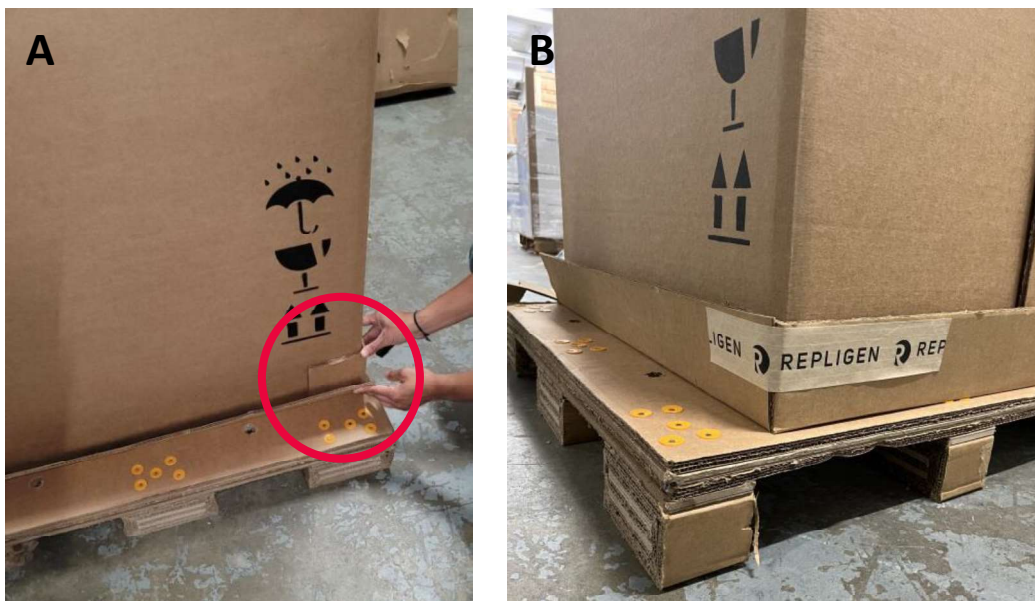


Step 15.

Fold up the front flap and a side flap of the bottom tray (with hook and loop strips), nesting the corner tabs from the side inside the front flap ([Figure 20A](#)). Tape the front flap and the side flap together using one 12" tape strip ([Figure 20B](#)). Use additional strips if needed. Repeat for all flaps of the bottom tray.

Caution: This is a two-person operation.

Figure 20. Bottom tray



Step 16. Use a pallet jack to bring the assembled crate to the strapping equipment.

Step 17. Apply strapping through integrated holes provided on one side of the tray bottom using two straps. Apply two straps around the unit on the other side ([Figure 21](#)).

Figure 21. Strapping



Step 18. Use pallet jack to bring the strapped crate to the stretch wrapping equipment and secure the crate using the wrap.

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.

4. Index

Bottom tray.....	16	Resin sample.....	13
Casters	9, 10	Safety	4
Collar.....	12	Sidewall.....	14, 15
Column.....	4, 8, 9, 10, 11, 12, 13, 14	Strapping	17
Components.....	5	Support blocks	10
Label.....	17	U-sheet	5, 11
Ramp.....	5, 6, 7, 8, 11		

UG-OPUS Column 36cm Non-Wood Packaging-1. Document Status is Effective as of 2023-11-06T11:11:01

Customer Service

Repligen Corporation
41 Seyon Street
Waltham, MA, USA 02453

customerserviceUS@repligen.com

(781) 250-0111