45 cm - 60 cm Internal Diameter (ID)

#### READ PRIOR TO REMOVING THE COLUMN FROM THE CRATE

Thank you for your OPUS® column order! This Uncrating Guide provides step-by-step instructions to help you uncrate your 45 – 60 cm ID OPUS® column safely. Your OPUS® column has been securely packaged and shipped in a custom designed wooden crate to ensure product quality. The wooden crate (Figure. 1) has eight removable parts which are numbered below:

7 8 5 1

Figure 1: 45 – 60 cm OPUS® column packaging – wooden crate

- 1. Fold down ramp
- 2. Top lid (not shown)
- 3. Rectangular foam guard
- 4. Top cross support guard (x2)
- 5. Upper foam disc
- 6. Upper foam guard
- 7. Left and right upper column supports
- 8. Bottom foam guard

The packaging is designed to fit the OPUS® column so it doesn't touch the bottom of the crate. The top lid is attached to the body of the crate with (6) quarter turn latches. The remaining support members are held in place with Phillips flat head screws. Once the supports are removed you will be able to easily pull the column out of the crate by grabbing the sides or the black top cap of the column. Do not pull or push on the tube ports of tubing set if so equipped.



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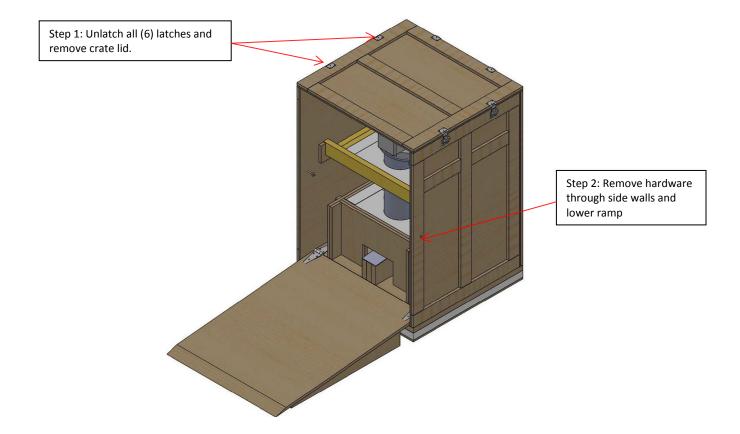
### How to uncrate your OPUS® Pre-packed Columns 45 cm – 60 cm ID

- Step 1: The top lid is attached to the body of the crate with (6) quarter turn latches. Unlatch all (6) and lift off the top lid and set aside.
- Step 2: The front ramp is held in place by (2) carriage bolts and wing nuts. Remove them and carefully lower the front ramp. Keep one hand on the ramp at all times prior to removing (2) bolts so the ramp doesn't fall.
- Step 3: The rectangular foam guard protects the H tube configuration while in transit. Carefully maneuver and lift off foam so as not to damage the tube set
- Step 4: Use a power screwdriver to remove the (4) Phillips flat head black wood screws from either side of the crate in preparation of removing the top cross supports.
- Step 5: Remove the foam disc from the top of the column.
- Step 6: Use a power screwdriver to remove the (8) Phillips flat head black wood screws from either side of the upper foam guard that hold the left and right column supports in place.
- Step 7: Use a power screwdriver to remove the (4) Phillips flat head black wood screws from either side of the crate that hold the upper foam guard in place. Lift upper foam guard up and out.
- Step 8: Remove the bottom foam guard by lifting up and out.
- Step 9: Pull the OPUS® column off the supports by handling the column. Do not pull on the tube ports or tube set in any way. Roll the column out of the crate using the ramp. Alternately, 45 60 cm ID OPUS® columns are also equipped with grooves on its top and bottom caps so they can be attached to a strap (12 feet long and 3 inches wide not included), lifted up by a fork lift and transported to a desired location. Please contact Repligen for more information on availability of hoisting straps.
- Step 10: Store the OPUS® column according to the recommendations of the resin manufacturer.

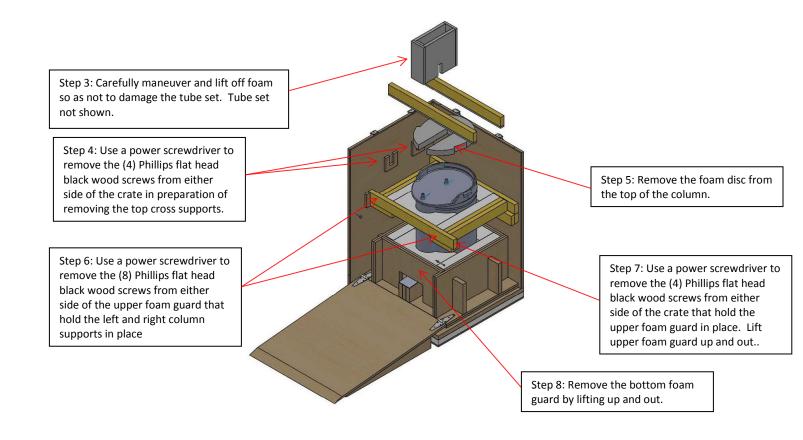


<sup>\*</sup>See page 3 for diagram of steps 1-5.

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The full OPUS® column User Guide may be downloaded at: www.repligen.com

For more information or questions, please contact Repligen:

Repligen Corporation
41 Seyon Street Building #1, Suite 100
Waltham, MA 02453
+1-781-250-0111
bioprocessing@repligen.com
www.repligen.com

