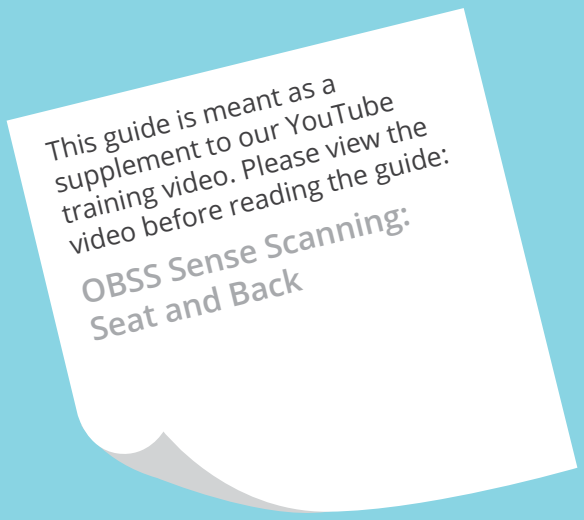
Sense™ Scanning for OBSS

Quick Reference Guide

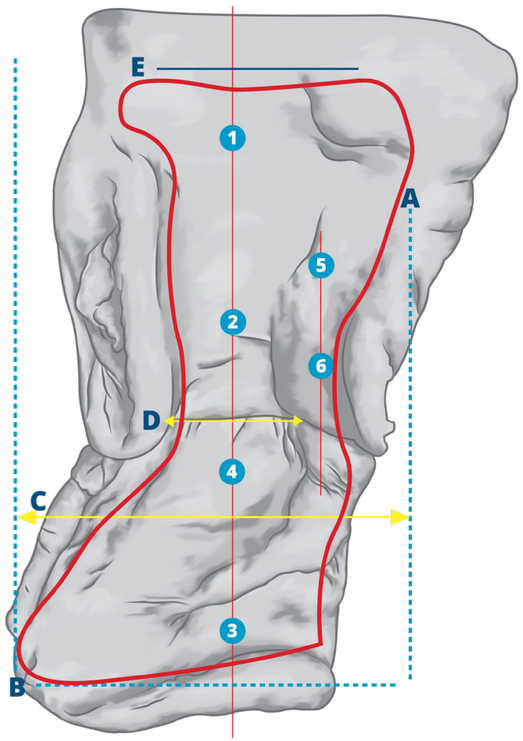


permobil | SEATING + POSITIONING

Complete Seat and Back (Full System)

Preparation

1. Complete the mold exactly as you intend the final shape.
   Note: *For optimal results, ensure enough space to move around the mold.*
2. Tape the gap between the seat and the back, and cover all big wrinkles with blue 2" wide painters' tape.
3. Return the wheelchair tilt into the upright position so that the seat plate is parallel to the ground .
4. Smaller (size 1 or 14") vacuum bags are recommended when molding for smaller individuals or when molding in manual chairs.
5. Add trimlines to indicate where the perimeter of the client contact area will be (***thick red line below***) with two pipe cleaners twisted together or putty rolled into a 3/8" diameter or greater.
   Note: *For the Tru-Shape cushions, approximately 1" will be added to the widest point on each side in order to create the overall width.*



A. The widest contact point of the mold on the client's left side
B. Widest contact point of the mold on the client's right side
C. Effective seat width. This dimension plus approximately 1" on each side will determine the overall cushion width
D. Client hip width
E. Cushion back height

Alignment

1. Project a vertical laser line through the back and the seat at approximately the mid-point of the effective seat width.
2. Place 1/2" (roughly the size of a Hershey's® Kiss) putty markers at the top (*1*) and bottom (*2*) of the line on the back.
3. Place 1/2" putty markers at the anterior (*3*) and posterior (*4*) of the line on the seat.
4. Project a vertical laser line through the inside of one trunk lateral.
5. Place 1/2" putty marker at the top (*5*) and bottom (*6*) of the line on the trunk lateral.
6. Ensure all six 1/2" putty markers are clearly visible and in the designated spots (see the circled numbers on the image).
7. Mark the desired back height (***E***) using putty or deep thumb prints.

- IF SCANNING A BACK ONLY: Using the client's everyday seat cushion and the back scanning bag only, follow the same scanning process for a Full System. When ordering, send in the Full System scan, but only complete the "Back Only" portion of the order form.
- IF SCANNING A SEAT ONLY: Using the client's everyday back cushion and the seat scanning bag only, follow the same scanning process for a Full System. When ordering, send in the Full System scan, but only complete the "Seat Only" portion of the order form.

Scanning

1. To make it easier to scan, tilt the complete system to even lighting and reduce shadows.
2. Plug the scanner into a USB port on the computer and open the Sense™ software.
3. In the software, under *Advanced Settings*, set **Geometry Resolution** to High, and **Scan Volume** to 1-2 (not 3).
4. Hold the scanner upright with the cable on the bottom, and maintain a position so the entire seating system is visible on the screen.
5. In the software under *Scan Settings,* select **Object.**
6. Press the **Scan** button (or the space bar) and hold the scanner steady during countdown.
7. Slowly move the scanner until all white areas have disappeared and you can see the complete seating system on your screen with all six alignment marks clearly visible.
8. To end the scanning process, press **Finish**. To pause, press the space bar.

* ***Note:*** *If large (bigger than a quarter) white areas persist on the seating surface, the lighting is too uneven. Finish the scanning process, change the lighting, and start over.*

File Editing Tools

Undo: The last action will be undone

Crop: The crop tool removes all content outside the area of the rectangle

Color: Adjust the color for better visibility

Trim: Allows the removal of an area of data points. This can be useful when doing a seat or back only

Erase: Used to remove any unnecessary portions of the scan, which can help reduce file size

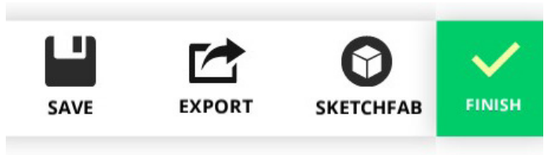
Solidify: DO NOT USE
Using the solidify tool makes the file **unusable** for our fabrication team.

Tip: The **Undo** button will appear after you click on the **Apply** button.

How to Save and Email the Scanned File

Edit and Save

1. Use the **Crop**, **Trim**, and **Erase** features to remove data that is not the contact support surface
2. See training video for tips regarding what to trim and what not to trim **here.**
3. After editing and ensuring that all six alignment marks are clearly visible, click the **Finish** button
4. Now press the **Save** button
5. A new window will open that allows you to save the file
6. Enter the name: (YYYY-MM-DD_Lastname_Firstname) and click Save button
7. Create a new email message and attach the file from its saved location (Documents/3DSystems/Sense). Then send to *orders.obss@permobil.com* with a completed order form and P.O. Number
8. ***Note:*** *OBJ is pre-selected as the file type but switch to STL if you find OBJ files too large to email.*
9. ***Note:*** *Fabrication will begin only once a completed order form and P.O. number are received.*



Scanning Equipment List

- Self-leveling laser and tripod
- Putty (Pipe cleaners are optional for indicating soft spots or trim lines)
- 2" blue painters' tape
- Sense™ 3D Scanner and software installed on a tablet or laptop. Download **here.**

Computer System Requirements:
Intel Core i5 or equivalent: 2 Ghz or faster
RAM: 4 GB minimum
2 GB available hard disk space
1280p x 1024 minimum Screen Resolution
Windows® 10 (64-bit)