# Instructions for Boston Brace 3D Order Form

Reminder – this form is for the technicians and goes with the flow of fabrication. All items on this form need to be completed to ensure customer service and manufacturing are able to fabricate the desired orthosis.

<u>PLEASE DO NOT</u> use this as your clinical note.

## **Demographics:**

Boston Brace 3D Order Form				
Ship To: Address:	Due Date:	Account #:	Contact: Email: Phone: Scan Label:	
Patient Name: Age: Sex:_	Diagnosis:	Ht:ftin Wt:lbs		

Customer service uses this section to initiate the fabrication process. All of the above is entered into our system. In the event we need to contact you, the treating orthotist, or if you have a question on the fabrication, having this information entered allows for easy retrieval.

The highlighted area above needs to be completed. We will keep a secondary record for you showing the patient's age, sex, height and weight as well as the diagnosis. Height and weight are needed in the event a second brace is required. By having this noted on the work order, it serves as a backup for your clinical record.

#### **Previous 3D Wearer:**

This notifies the technician to review potential previous finish orders. At times, a scoliosis curve may change and thus the design of the brace may change. If there is a change, it allows us to notify the clinician of design changes.

### Scan label:

Scan Label:		
	•	

Scan label is required to make sure the correct scan is modified.

Captevia: File name is auto populated. The file will include both scans if taking a bivalve scan.

Techmed: File name is auto populated within Boston O&P App. The file will include both scans if taking a bivalve scan.

Laser scanner: Patient's first initial, last name; scan number; clinicians' initials, the word scoli; date of scan

i.e. patient John Smith is seeing clinician Jane Doe on April 1, 2020 for his first brace.

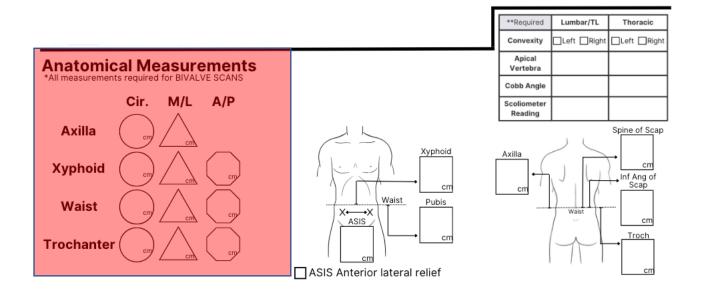
Scan Label: jsmith#1jdscoli04012020

Bivalve scan: Follow the sequence above and add \_ant and \_post after the date



## **Measurements:**

We no longer require circumferential, ML or AP measurements. Scan label is required to make sure the correct scan is modified. All other linear measurements are needed for fabrication and design.



**Required	Lumbar/TL	Thoracic
Convexity	□Left □Right	□Left □Right
Apical Vertebra		
Cobb Angle		
Scoliometer Reading		

The above chart must be fully completed to monitor outcomes and provide guidance for shift/push magnitudes. Indicate the side of the curve convexity (left or right). Please indicate the numerical values for Apical vertebra, Cobb angle, and scoliometer reading in the designated box. Apical vertebra: denote the apical vertebra for the curve(s) (Example- T9 or L3). Cobb angle: indicate the angle of the selected curve(s) in degrees (Example: 35deg). Scoliometer reading: document your findings from the scoliometer reading to determine the degree of rotation of the curve(s) (Example: 9 deg). Both the Cobb angle measurement and the scoliometer reading will help to determine the push magnitude built into the brace.



Brace Design				OPSB™ Sensor	
Opening ☐Posterior ☐Anterior w/tongue	Liner  ☐ 3/16" Aliplast ☐ Unlined ☐ 1/8" Partial Liner	Plastic  ☐ 5/32" Copoly  ☐ Other:	Straps White Black	Pads  .5" Installed  .5" Un-Installed  Unfinished Pads	☐Send Sensor ☐Sensor Hole
Lumbar Reinforcement ☐Left ☐Right		Transfer 1st 2nd		<u>Gusset</u>	

## **Opening**

There are two options for the opening – anterior/posterior. The posterior opening is the standard.

## **Liner and Plastic**

Standard liner choice is 3/16" aliplast. Unlined provides the most low-profile orthosis. The partial liner consists of foam just superior and inferior to the waist. Crest rolls are included. Plastic is 5/32" copoly. If a different plastic or liner choice is desired, write it in the "other" option.

#### **Straps**

Indicate the color of the straps requested by the patient. White straps are the standard.

#### **Pads**

Pads are pre-trimmed and skived per the curve pattern and brace design. Pads may be pre-installed to ease the fitting process. .5-in pads installed is the standard.

## **Lumbar Reinforcement**

The lumbar reinforcement is defined as a built-in corrugation positioned superior to inferior just lateral to the posterior opening that assists in maintaining the lumbar push. This is not a standard for the Boston Brace 3D. However, when treating patients with a higher BMI, an unlined or partially lined brace where primary lumbar control is needed, a reinforcement may be necessary.



## **Transfer:**

Strap transfers are no longer an option here as they decrease the life and integrity of the straps. Indicate a second-choice option in the event the first choice is not available.

#### **OPSB Sensor:**



The OPSB Sensor adherence monitor is standard of care for the Boston Brace 3D. Note: The OPSB Sensor is part of a system including a cloud storage platform, and App. A clinician cloud account needs to be set up and activated prior to launching the sensor. (Contact our Customer Service with more details.) The sensor needs to be activated (launched) at the time of fitting.



## **Send Sensor:**

The OPSB Sensor with instructions for how to enroll a patient to the cloud platform, launch and download adherence data will be sent with the orthosis. This is for patients that have consented to having a sensor installed into their orthosis.

### **Sensor Hole:**

A hole is drilled in the center of the anterior section of the orthosis unless otherwise specified in the notes section of the order form.



The section below is optional – <u>If you complete it, it needs to be FULLY filled out.</u> If left blank fabrication will complete per standards based off scan and X-ray.

CAD Design Section				
Lumbar/TL  ☐ Left ☐ Right ☐ Pad Only  ☐ TL Extension Heightcm	Apex cm  *LEV  *LEV  *Lower End Vertebra	Thoracic Extension  □ Left □ Right  Heightcm  □ 4-5 Pad □ TL Window	Axillary Modifications  Left Right  Outset Axilla:mm  Inset Axilla:mm  Posterior Extension	
Scoli Tees Single Double Qty:	Finished Heights •from waist  Xyphoid:m Axilla:  Pubis:m Inf Ang Scap: Trochanter:Left ☐ F	cm cm		

### Lumbar/Thoracolumbar (TL);

Indicate the side of the curve, left or right. If a lumbar or thoracolumbar curve does not exist leave this section blank. Pad only indicates there is no built-in lumbar push. Only a pad will be added to provide a lumbar block.



<u>Thoracic Extension:</u> This is the length from waist to the midline (the midpoint of the Anterior/posterior dimension of the patient) of the rib corresponding to the apical vertebra. Always evaluate your patient and using your hands, verify the height of the extension. There are times, in larger more linearly deviated curves, that the extension may be above the midpoint of the apical rib. The height of the extension is determined by analyzing both the radiograph and clinical presentation of the patient.

## **Axillary Modifications:**

Indicate left or right side.

The axillary modifications consist of either an outset or inset axilla. The inset axilla may also be coupled with a

posterior extension.





## **Outset Axilla**

Used in thoracolumbar and low (T11 presenting like a thoracolumbar) thoracic curves when the patient is decompensated to same side as the curve. It consists of a lateral (under arm) section. It provides a counter force to the primary thoracolumbar extension but does not restrict the patient from shifting in the coronal plane.

## **Inset Axilla**

Used for single thoracic and double curves. The under-arm section generates a medially directed vector and is rectangular in shape to allow for a large window relief. Useful when a medially directed vector is needed for decompensation and or the patient presents with a high waist and short torso and additional height of the thoracic window is needed.

### **Thoracolumbar (TL) Extension:**

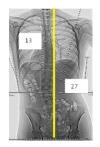
Indicate if a TL extension is needed. For TL curves where the vertebral bodies that make up the curve are all to the left or right of the CSL, a TL extension is recommended to help with the coronal plane correction. A TL extension is also recommended for a single thoracic curve with a compensatory lumbar curve that is linearly deviated from the CSL to the opposite side of the thoracic curve. The extension in this case acts as a hold to prevent the lumbar curve from further shifting away from CSL.

After blue printing the x-ray, transfer the linear distances from waist to apical vertebra and lower end vertebra for both the TL/L curve and Thoracic curve. If no curve exists, NA is added to the boxes.



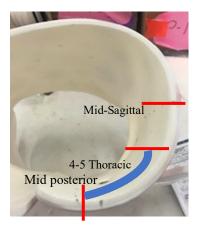
## 4-5 Pad/TL Window:

Patients that present (examples below) with a primary Lumbar or Thoracolumbar curve with an upper thoracic curve where the thoracic spine is along or off to the same side as the lumbar/thoracolumbar spine are candidates for a 4-5 pad and TL window. These two are typically provided together.





The 4-5 pad is named for the templates used for these curve types (numbers 4 and 5). The 4-5 pad is a thoracic pad that is full thickness from the mid-point between the posterior trim line and the lateral aspect of the orthosis to the midpoint between the lateral aspect and the mid-sagittal point of the thoracic extension. Its purpose is to provide a de-rotational force only, and not block the patient from moving medially in the orthosis. (see photo)



The TL Window is the opening opposite the Lumbar/Thoracolumbar push/shift/pad. It allows the patient to shift in the coronal plane. The photo on the left shows the pre-fit TL window, the photo on the right shows the modified window at final delivery. See the clinical standards for further details on finishing the window at the fitting.





#### **Posterior Extension**

The posterior portion controls shoulder rotation and is trimmed between spine of scapulae and mid-scapulae. It is useful when the patient presents with a posteriorly rotated shoulder girdle.

#### **Scoli Tees**

Indicate if you are providing the patient with a Boston Scoliosis T shirt. There are a few options: two underarm flaps or a single. The T-shirts do not have a front or back, so a single axilla can be left or right. The size is determined from the submitted measurements. We no longer offer silver tees.



## **Finish heights from waist:**

Finished heights have been reorganized and simplified. They go from lateral to posterior to anterior (all superior to inferior). All measurements are in centimeters. The anatomical lengths provided above are used for modifying the scan, these measurements are used to finish the orthosis.

MAM-WI-0030

Rev:1

