



# How to Properly Measure for the Charleston Bending Brace

Designed by  
C. Ralph Hooper, Jr., CPO



Charleston  
Bending Brace®

## CHARLESTON BENDING BRACE


# CBB Measurement Form

Patient Information

Practitioner Information

Ordering Instructions

Material Selection

 524 Barbados Drive., Charleston, SC 29492 Phone: 843-884-2202 -- Fax: 843-884-1554 -- jackie@cbb.org		Date: _____	
		Workorder #: _____	
		PO/OPS: _____	
		Part Number: <b>CBB01</b>	
Ship To: _____ Address: _____ _____ <input type="checkbox"/> Same as Ship To		Patient Name: _____ <input type="checkbox"/> Male <input type="checkbox"/> Female Age: _____ <input type="checkbox"/> Pt is a previous CBB Wearer Height: _____ Weight: _____ <input type="checkbox"/> Previous Other/Type: _____	
Bill To: _____ _____ _____ Email: _____ Phone: _____		<b>IMPORTANT INSTRUCTIONS</b> 1. COMPLETE THIS MEASUREMENT FORM 2. PROVIDE AN X-RAY ( <b>Digital Images Preferred</b> ). 3. EMAIL, FAX, OR MAIL	
		Email:	<b>jackie@cbb.org</b>
		Fax:	<b>843-884-1554</b>
<b>Brace Design Options (Check One)</b> <input type="checkbox"/> CBB Modified Polyethylene <input type="checkbox"/> Copolymer available on request (not recommended) <input type="checkbox"/> CBB Lite 1/4" volara soft inside, MPE inner shell, 1/8" volara firm outside		Mail:	<b>Charleston Bending Brace Attn: Jackie Hooper 524 Barbados Drive Charleston SC 29492</b>
<b>Friddles Color Choices (Check one)</b> <input type="checkbox"/> White <input type="checkbox"/> Pink <input type="checkbox"/> Blue <input type="checkbox"/> Friddles Transfer		<b>NOTE:</b> Please send measurement forms and x-rays only. Tracer Cad Technology precludes the necessity for 3-dimensional body casts.	
Transfer Pattern #: _____ Pattern Name: _____			

# CBB Measurement Form

Color/  
Transfer Selection

Accurate measurements

Classification/  
Treatment Type

Curve limits, Cobb angles

Brace Bending Right/Left

**CBB-11C 1/4" Volara soft inside, 1/4" L inner shell, 1/8" Volara 1mm outside**

**Friddles Color Choices (Check one)**  
☐ White ☐ Pink ☐ Blue ☐ Friddles Transfer  
 Transfer Pattern #: \_\_\_\_\_ Pattern Name: \_\_\_\_\_

**NOTE: Transfer patterns have potential to bleed.**

For MPE - Please choose Friddles recommended transfer less likely to bleed. Color charts available on CBB.org and Friddles.com...or via email upon request.

**Advise patients to wear protective clothing both under and over the orthosis for the first week of wear.**

**Select Type Of Treatment**  
☐ CBB-1 - Double Lumbar Primary  
☐ CBB-2 - Double Thoracic Primary  
☐ Dynamic Lumbar Pad  
☐ CBB-3 - Single Thoracic  
☐ CBB-4 - Single Thorocolumbar  
☐ CBB-5 - Double Thoracic

**COBB ANGLES:**  
 Thoracic \_\_\_\_\_  
 Lumbar \_\_\_\_\_

**LORDOSIS:**  
 Supine mx: \_\_\_\_\_  
 In brace: ☐ 10° ☐ 20°  
☐ Other: \_\_\_\_\_°

**Bend Patient to:** ☐ Right ☐ Left

**DATE NEEDED:** \_\_\_\_\_

**SPECIAL INSTRUCTIONS:**

**Charleston SC 29492**

**NOTE: Please send measurement forms and x-rays only. Tracer Cad Technology precludes the necessity for 3-dimensional body casts.**

MEASUREMENTS IN INCHES ONLY			
All Measurements Can Be Taken Standing or Supine	Circ.	M/L*	A/P*
Axilla			
Xyphoid			
Waist			
ASIS			
Trochanter			

\*M/L & A/P measurements taken with a M/L mx stick (not a tape measure)

Linear mx:	Supine	Standing
Axilla to Waist		Total Finished Length [ ]
Waist to Gluteal Fold		Bending Position Axilla to Gluteal Fold

**See Illustrations under "Ordering Info Tab" on Website  
www.cbb.org or www.originalbendingbrace.com**

Practitioner: \_\_\_\_\_  
(Print Name)

Signature: \_\_\_\_\_

All Braces Designed by C. Ralph Hooper, Jr., CPO

All Braces Fabricated by Friddles Orthopedic Appliances

# Before You Measure

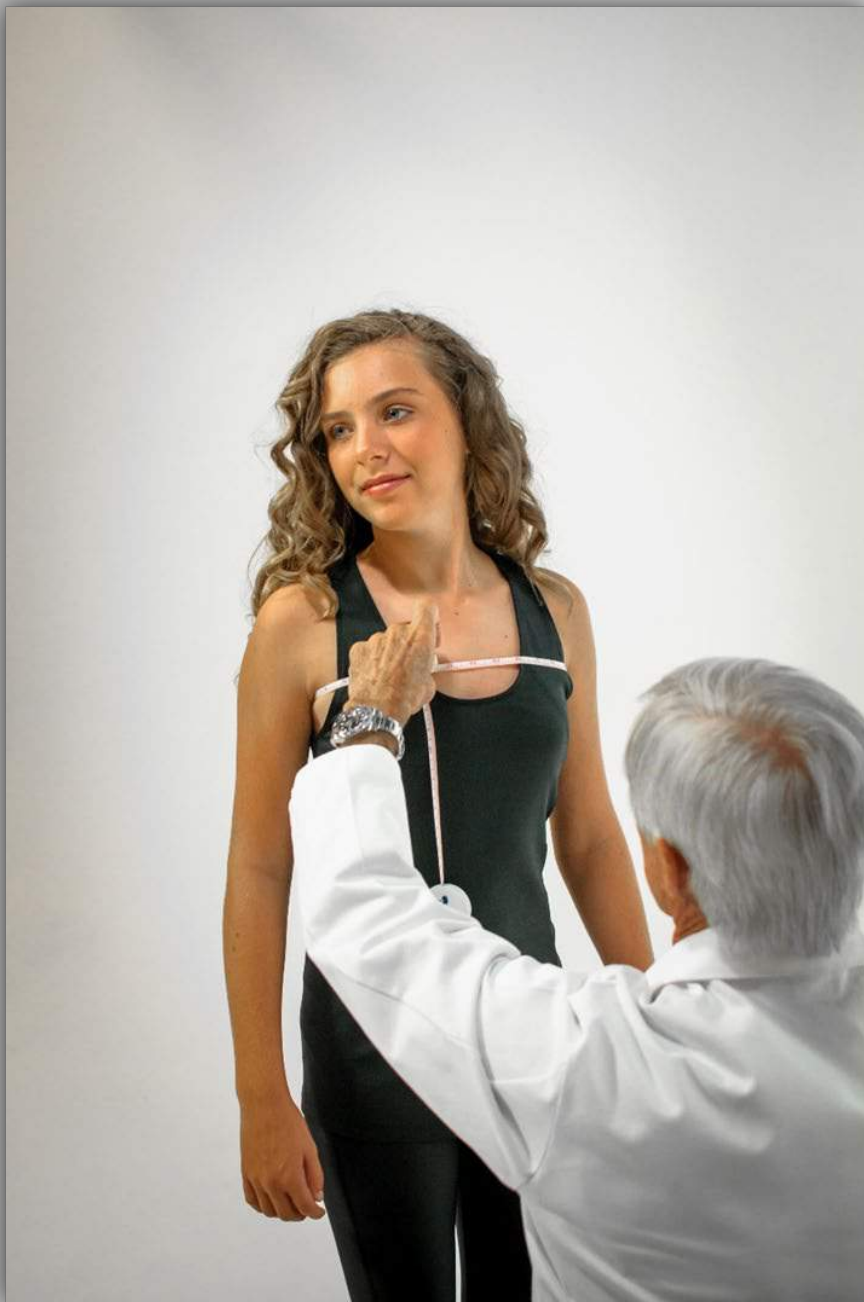


Patient should be dressed in tight fitting clothes in order to identify anatomy.

Example: leotard, camisole stockinette t-shirt, etc.

Tools necessary:  
Tape Measure  
ML stick  
Goniometer  
Measurement Form  
X-ray





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<b>MEASUREMENTS IN INCHES ONLY</b>			
All Measurements Can Be Taken Standing or Supine	<b>Circ.</b>	<b>M/L*</b>	<b>A/P*</b>
Axilla	✓		
Xyphoid			
Waist			
ASIS			
Trochanter			
*M/L & A/P measurements taken with a M/L mx stick (not a tape measure)			
<b>Linear mx:</b>	<b>Supine</b>		<b>Standing</b>
Axilla to Waist			Total Finished Length <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
Waist to Gluteal Fold			Bending Position Axilla to Gluteal Fold
<b>See Illustrations under "Ordering Info Tab" on Website <a href="http://www.cbb.org">www.cbb.org</a> or <a href="http://www.originalbendingbrace.com">www.originalbendingbrace.com</a></b>			

## Circumference Axilla

Tape measure is loose or slightly snug, **NOT TIGHT**



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All Measurements Can Be Taken Standing or Supine	<b>Circ.</b>	<b>M/L*</b>	<b>A/P*</b>
Axilla			
Xyphoid	✓		
Waist			
ASIS			
Trochanter			
*M/L & A/P measurements taken with a M/L mx stick (not a tape measure)			
<b>Linear mx:</b>	<b>Supine</b>		<b>Standing</b>
Axilla to Waist			Total Finished Length <div></div>
Waist to Gluteal Fold			Bending Position Axilla to Gluteal Fold
<b>See Illustrations under "Ordering Info Tab" on Website <a href="http://www.cbb.org">www.cbb.org</a> or <a href="http://www.originalbendingbrace.com">www.originalbendingbrace.com</a></b>			

### Circumference Xyphoid

Tape measure loose or slightly snug, **NOT TIGHT**



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All Measurements Can Be Taken Standing or Supine	<b>Circ.</b>	<b>M/L*</b>	<b>A/P*</b>
Axilla			
Xyphoid			
Waist	✓		
ASIS			
Trochanter			
*M/L & A/P measurements taken with a M/L mx stick (not a tape measure)			
<b>Linear mx:</b>	<b>Supine</b>	<b>Standing</b>	
Axilla to Waist		Total Finished Length <div></div>	
Waist to Gluteal Fold		Bending Position Axilla to Gluteal Fold	
<b>See Illustrations under "Ordering Info Tab" on Website <a href="http://www.cbb.org">www.cbb.org</a> or <a href="http://www.originalbendingbrace.com">www.originalbendingbrace.com</a></b>			

Circumference Waist

Tape measure is loose or slightly snug, **NOT TIGHT**





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All Measurements Can Be Taken Standing or Supine	<b>Circ.</b>	<b>M/L*</b>	<b>A/P*</b>
Axilla			
Xyphoid			
Waist			
ASIS			
Trochanter	✓		
*M/L & A/P measurements taken with a M/L mx stick (not a tape measure)			
<b>Linear mx:</b>	<b>Supine</b>		<b>Standing</b>
Axilla to Waist			Total Finished Length <div></div>
Waist to Gluteal Fold			Bending Position Axilla to Gluteal Fold
<b>See Illustrations under "Ordering Info Tab" on Website</b>			
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### Circumference Trochanter

Tape measure pulled slightly snug, not tight, over apex (largest) portion of buttocks usually close to trochanter





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All Measurements Can Be Taken Standing or Supine	<b>Circ.</b>	<b>M/L*</b>	<b>A/P*</b>
Axilla		✓	
Xyphoid			
Waist			
ASIS			
Trochanter			
*M/L & A/P measurements taken with a M/L mx stick (not a tape measure)			
<b>Linear mx:</b>	<b>Supine</b>		<b>Standing</b>
Axilla to Waist			Total Finished Length <div></div>
Waist to Gluteal Fold			Bending Position Axilla to Gluteal Fold
<b>See Illustrations under "Ordering Info Tab" on Website <a href="http://www.cbb.org">www.cbb.org</a> or <a href="http://www.originalbendingbrace.com">www.originalbendingbrace.com</a></b>			

M/L Axilla  
Slightly touching skin



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**MEASUREMENTS IN INCHES ONLY**

All Measurements Can Be Taken Standing or Supine	Circ.	M/L*	A/P*
Axilla			
Xyphoid		✓	
Waist			
ASIS			
Trochanter			

\*M/L & A/P measurements taken with a M/L mx stick (not a tape measure)

Linear mx:	Supine	Standing
Axilla to Waist		Total Finished Length <input type="text"/>
Waist to Gluteal Fold		Bending Position Axilla to Gluteal Fold

**See Illustrations under "Ordering Info Tab" on Website  
[www.cbb.org](http://www.cbb.org) or [www.originalbendingbrace.com](http://www.originalbendingbrace.com)**

M/L Xyphoid

Slightly touching skin

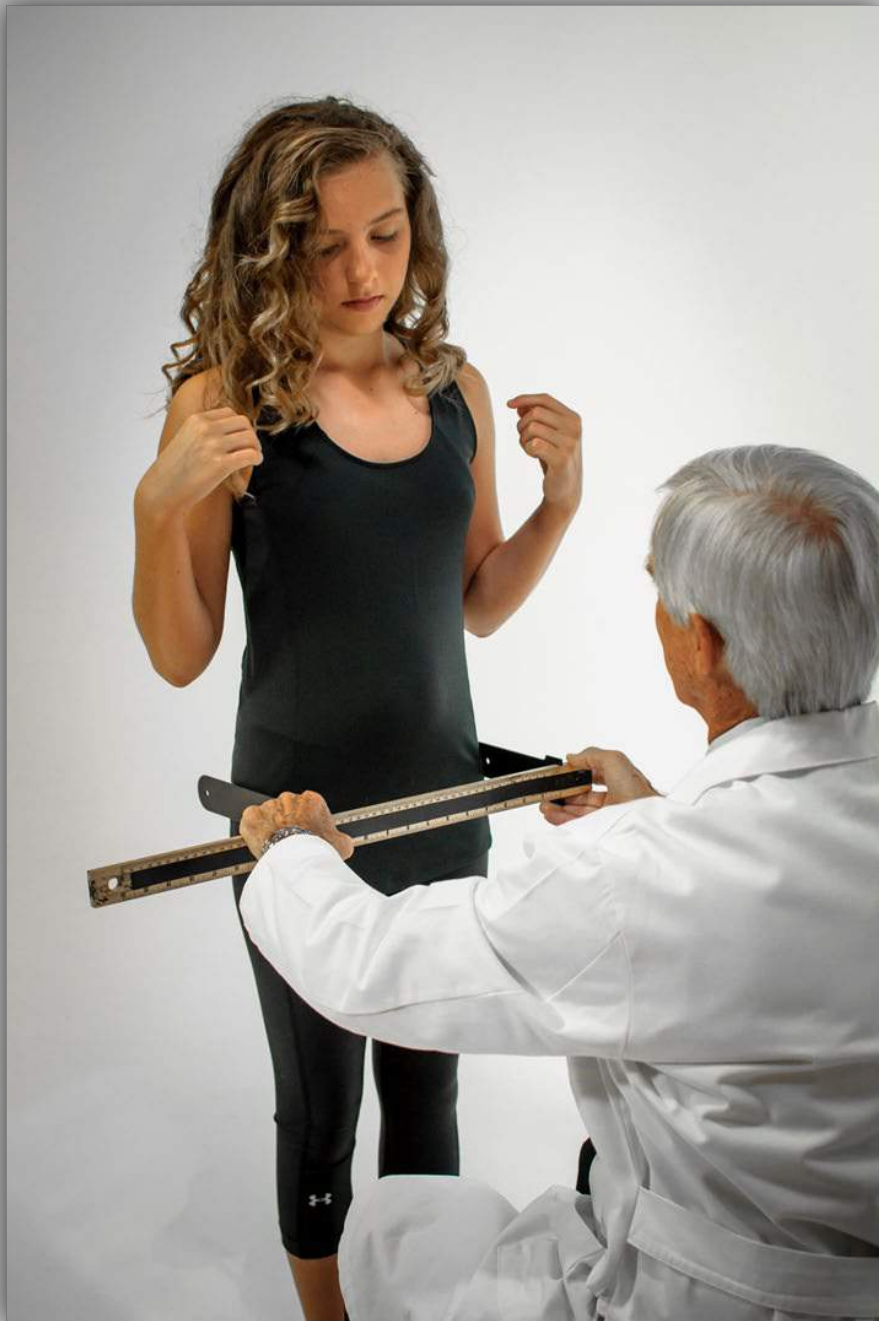


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All Measurements Can Be Taken Standing or Supine	<b>Circ.</b>	<b>M/L*</b>	<b>A/P*</b>
Axilla			
Xyphoid			
Waist		✓	
ASIS			
Trochanter			
*M/L & A/P measurements taken with a M/L mx stick (not a tape measure)			
<b>Linear mx:</b>	<b>Supine</b>		<b>Standing</b>
Axilla to Waist			Total Finished Length <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
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### M/L Waist

Same position as circumference measurement  
Do not compress tongue, Light touch is correct





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All Measurements Can Be Taken Standing or Supine	<b>Circ.</b>	<b>M/L*</b>	<b>A/P*</b>
Axilla			
Xyphoid			
Waist			
ASIS			
Trochanter		✓	
*M/L & A/P measurements taken with a M/L mx stick (not a tape measure)			
<b>Linear mx:</b>	<b>Supine</b>		<b>Standing</b>
Axilla to Waist			Total Finished Length <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
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### M/L Trochanter

Same position as circumference measurement  
Do not compress tongue, Light touch is correct



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All Measurements Can Be Taken Standing or Supine	<b>Circ.</b>	<b>M/L*</b>	<b>A/P*</b>
Axilla			
Xyphoid			
Waist			
ASIS			
Trochanter			
*M/L & A/P measurements taken with a M/L mx stick (not a tape measure)			
<b>Linear mx:</b>	<b>Supine</b>		<b>Standing</b>
Axilla to Waist	✓		Total Finished Length <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
Waist to Gluteal Fold			Bending Position Axilla to Gluteal Fold
<b>See Illustrations under "Ordering Info Tab" on Website <a href="http://www.cbb.org">www.cbb.org</a> or <a href="http://www.originalbendingbrace.com">www.originalbendingbrace.com</a></b>			

### Axilla to Waist

This measurement is taken in the bent position




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All Measurements Can Be Taken Standing or Supine	<b>Circ.</b>	<b>M/L*</b>	<b>A/P*</b>
Axilla			
Xyphoid			
Waist			
ASIS			
Trochanter			
*M/L & A/P measurements taken with a M/L mx stick (not a tape measure)			
<b>Linear mx:</b>	<b>Supine</b>		<b>Standing</b>
Axilla to Waist			Total Finished Length <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
Waist to Gluteal Fold	✓		Bending Position Axilla to Gluteal Fold
<b>See Illustrations under "Ordering Info Tab" on Website</b> <b><a href="http://www.cbb.org">www.cbb.org</a> or <a href="http://www.originalbendingbrace.com">www.originalbendingbrace.com</a></b>			

### Waist to Gluteal Fold

This measurement is **NOT** taken in the bent position





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All Measurements Can Be Taken Standing or Supine	<b>Circ.</b>	<b>M/L*</b>	<b>A/P*</b>
Axilla			
Xyphoid			
Waist			
ASIS			
Trochanter			
*M/L & A/P measurements taken with a M/L mx stick (not a tape measure)			
<b>Linear mx:</b>	<b>Supine</b>	<b>Standing</b>	
Axilla to Waist		Total Finished Length 	
Waist to Gluteal Fold		Bending Position Axilla to Gluteal Fold	
<b>See Illustrations under "Ordering Info Tab" on Website</b> <b><a href="http://www.cbb.org">www.cbb.org</a> or <a href="http://www.originalbendingbrace.com">www.originalbendingbrace.com</a></b>			

**Total Finished Length  
(Axilla to Gluteal Fold)**

**This measurement is taken in the bent position**

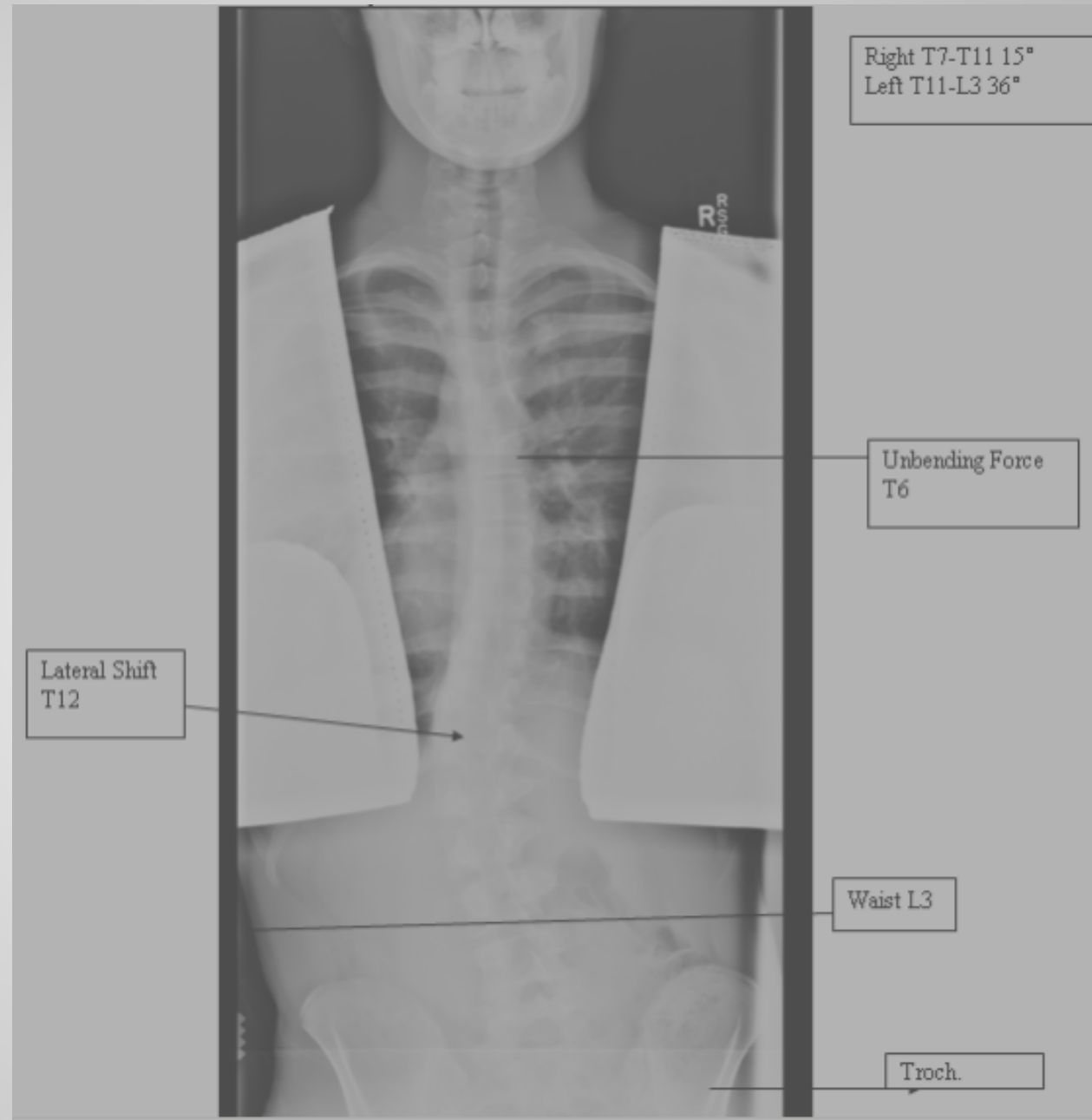
# X-ray Blueprint

Provide Digital X-ray of patient in supine position

Identify curve pattern

Locate Apex(s)  
lateral shift force  
stabilizing force  
unbending force

This will ensure good  
communication for  
production for **your** brace  
for **your** patient



<p><b>Select Type Of Treatment</b></p> <p><input type="checkbox"/> CBB-1 - Double Lumbar Primary</p> <p><input type="checkbox"/> CBB-2 - Double Thoracic Primary</p> <p><input type="checkbox"/> Dynamic Lumbar Pad</p> <p><input type="checkbox"/> CBB-3 - Single Thoracic</p> <p><input type="checkbox"/> CBB-4 - Single Thorocolumbar</p> <p><input type="checkbox"/> CBB-5 - Double Thoracic</p>	<p><b>COBB ANGLES:</b></p> <p>Thoracic _____</p> <p>Lumbar _____</p> <p><b>LORDOSIS:</b></p> <p>Supine mx: _____</p> <p>In brace: <input type="checkbox"/> 10° <input type="checkbox"/> 20°</p> <p><input type="checkbox"/> Other: _____°</p>
<p><b>Bend Patient to:</b> <input type="checkbox"/> Right <input type="checkbox"/> Left</p>	

# Classification/Treatment Type



CURVE PATTERNS		
Type I	Lumbar Primary Curve	S-shaped curve in which both thoracic and lumbar curves cross midline. Lumbar curve is larger than the thoracic curve on standing film.
Type II	Thoracic Primary Curve	S-shaped curve in which thoracic and lumbar curve cross midline. Thoracic curve is larger than lumbar curve.
Type III	Single Thoracic Curve	Thoracic curve in which the lumbar curve does not cross midline (also called overhang.)
Type IV	Single Thoracolumbar/ Lumbar Curve	Long thoracic curve in which L5 is centered over sacrum but L4 fits into long thoracic curve.
Type V	Double Thoracic	Double thoracic curve with T1 tilted into concavity of upper curve. Upper curve structural inside-bending.



# Friddle's Coloring Paper For Modified Polyethylene Bending Braces



(A limited number of transfers recommended to minimize bleeding. Patients should be advised to wear protective clothing over/under orthosis.)

## Color/Transfer Selection

### Brace Design Options (Check One)

- ☐ **CBB Modified Polyethylene**  
☐ Copolymer available on request (not recommended)
- ☐ **CBB Lite** 1/4" volara soft inside, MPE inner shell, 1/8" volara firm outside

### Friddles Color Choices (Check one)

- ☐ White    ☐ Pink    ☐ Blue    ☐ Friddles Transfer

Transfer Pattern #: \_\_\_\_\_ Pattern Name: \_\_\_\_\_

**NOTE: Transfer patterns have potential to bleed.**

For MPE - Please choose Friddles recommended transfer less likely to bleed. Color charts available on CBB.org and Friddles.com...or via email upon request.

**Advise patients to wear protective clothing both under and over the orthosis for the first week of wear.**





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