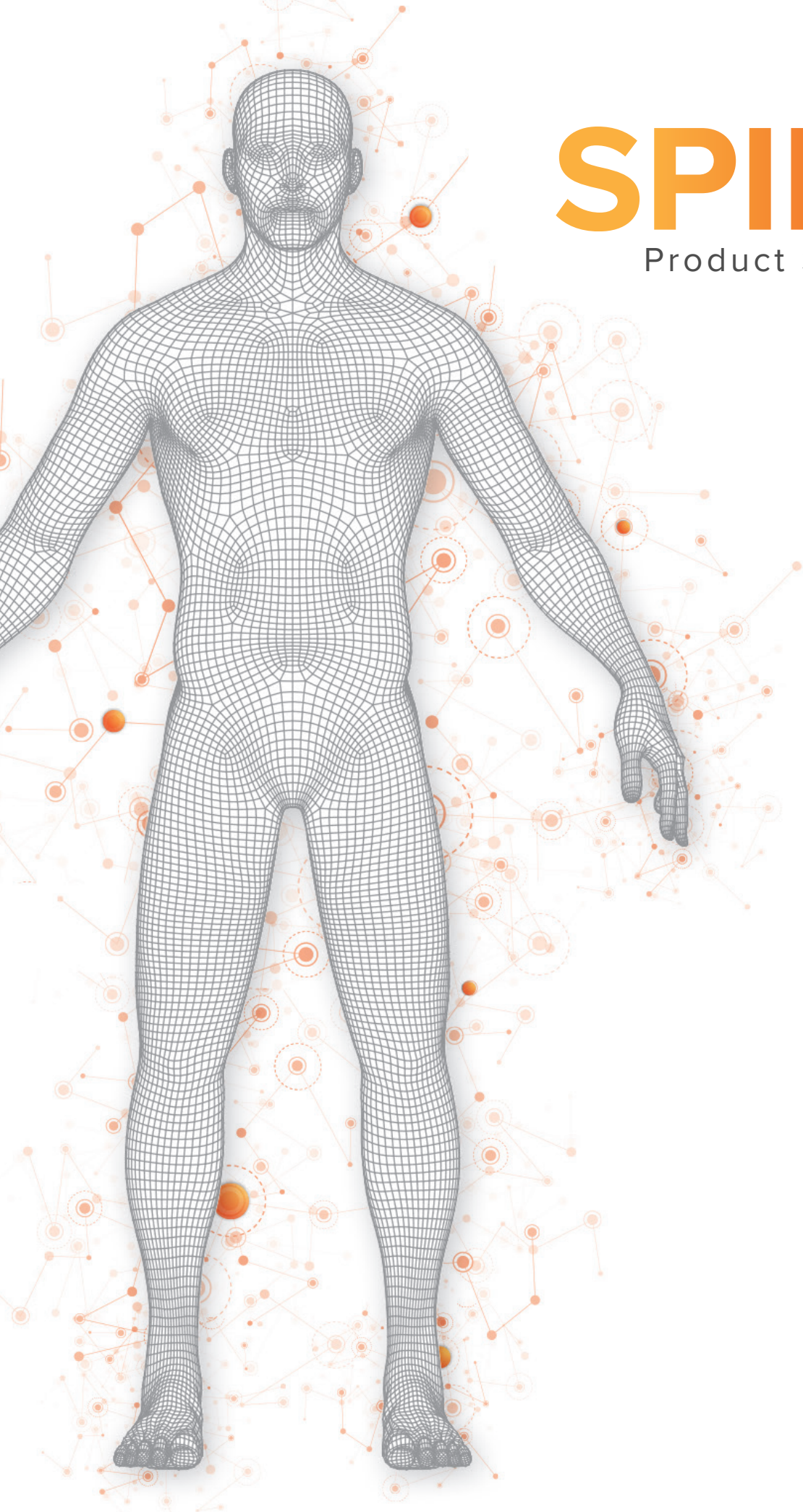




SPINAL

Product Standards

HFN

PURPOSE

Hanger Clinic Product Standards

The Hanger Clinic Product Standards are a collaborative effort between Hanger Clinic and the Hanger Fabrication Network to deliver Best in Class O&P devices to our patients.

The goals of the product standards are to:

- 1) **ALIGN** expectations between clinicians and technicians
- 2) **CONTROL** input and output variations and
- 3) **REFERENCE** best in class blueprints and orthomerty sheets to fabricate products that translate into maximizing clinical outcomes for Hanger patients
- 4) **SUPPORT** future system integration (MRP)
- 5) **REINFORCE** clinical research outcome reliability through controlling design variation

Endorsements: Mary-Kate Ennis, MBA, CO, Aaron Flores, PhD, Jim Campbell, PhD, Jeffrey Lutz, CPO, Dennis Huysman, CPO, John Rheinstein, Kevin Carroll, Dan Strzempka, Damien Boltas

Acknowledgment: We would like to extend our appreciation to the many clinicians and technicians across Hanger who collaborated on the Hanger Product Standards development.

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LSO-Bi-valve
LSO-Overlap
LSO/TLSO Flex Frame
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TLSO-Bi-valve
Flex Frame Trim Variations

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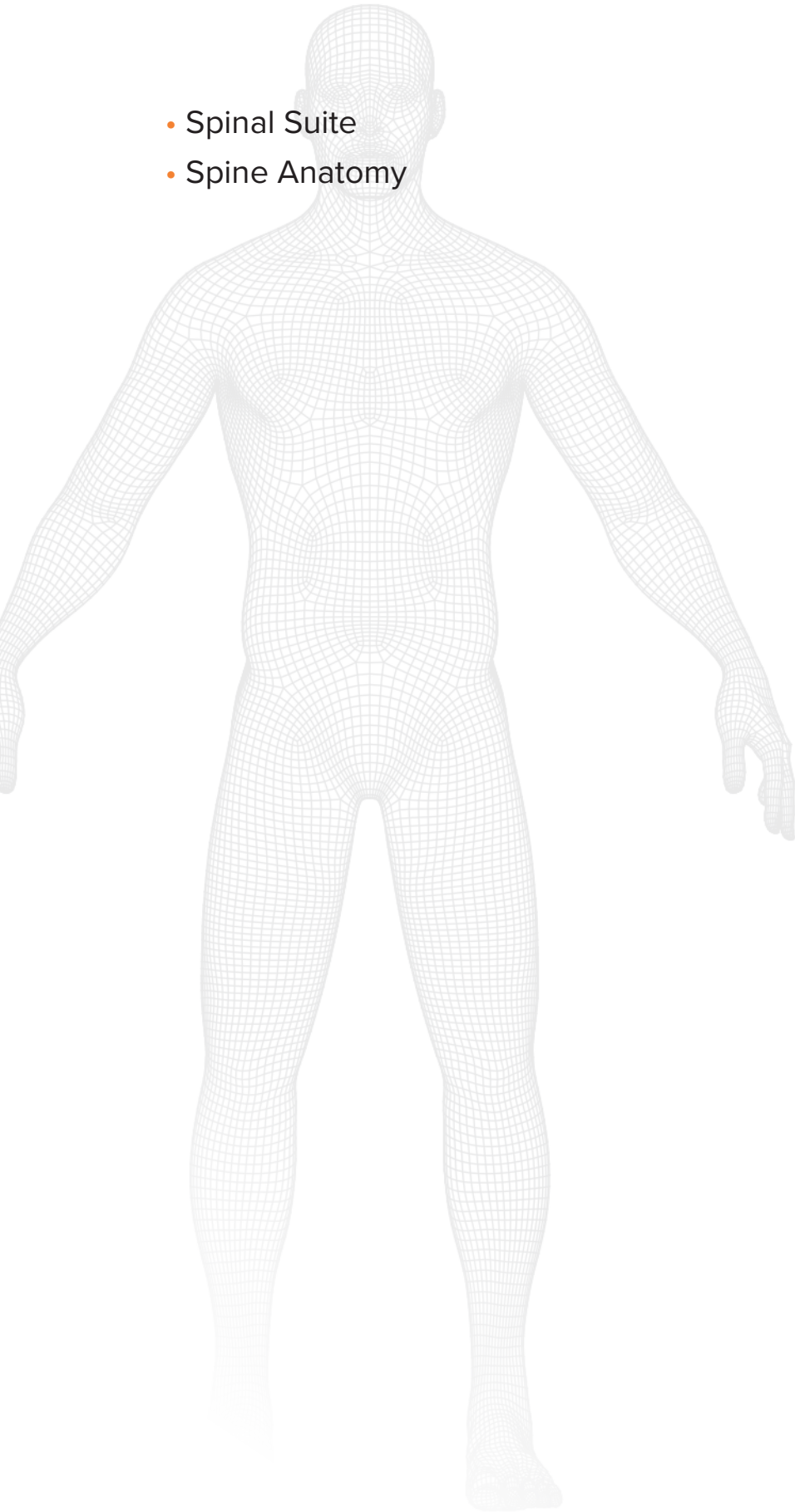
Spinal Corrections-CDC
Boston Style
Boston Extreme
Asymmetrical/GOSS Style
Day Pro I-III
Day Pro IV
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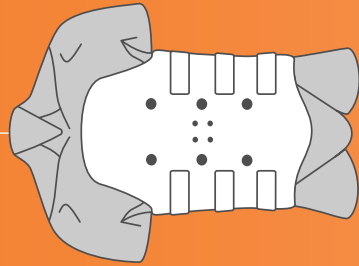
OVERVIEW

- Spinal Suite
- Spine Anatomy



SPINAL SUITE

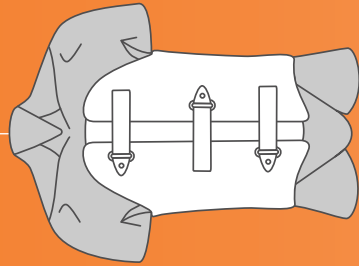
PRE-FAB/ CUSTOM FIT



PF Pre-Fab

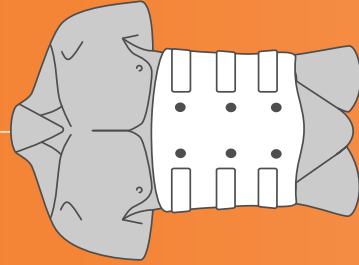
24 HR/SAME DAY
PDAC APPROVED
MALE
FEMALE
WASHABLE
ROCHESTER

TRADITIONAL



HI High Profile

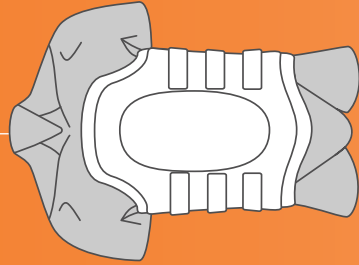
SINGLE
BI-VALVED



LO Low Profile

SINGLE
OVERLAP
BI-VALVED

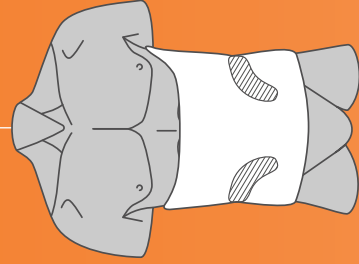
FLEX FRAME



FF Flex Frame

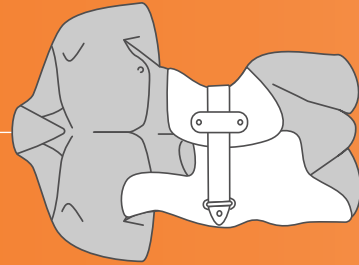
SINGLE
LOW PROFILE
HIGH PROFILE
BI-VALVED

SCOLIOSIS



DAY Scoli Designs

BOSTON STYLE
BOSTON EXTREME
ASYMMETRICAL
DAY PRO I-V

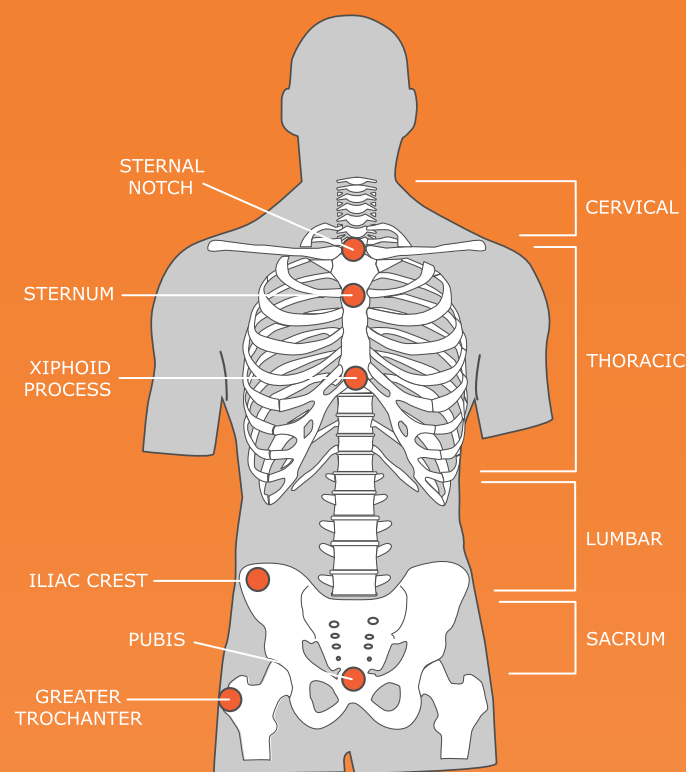


PF Scoli Designs

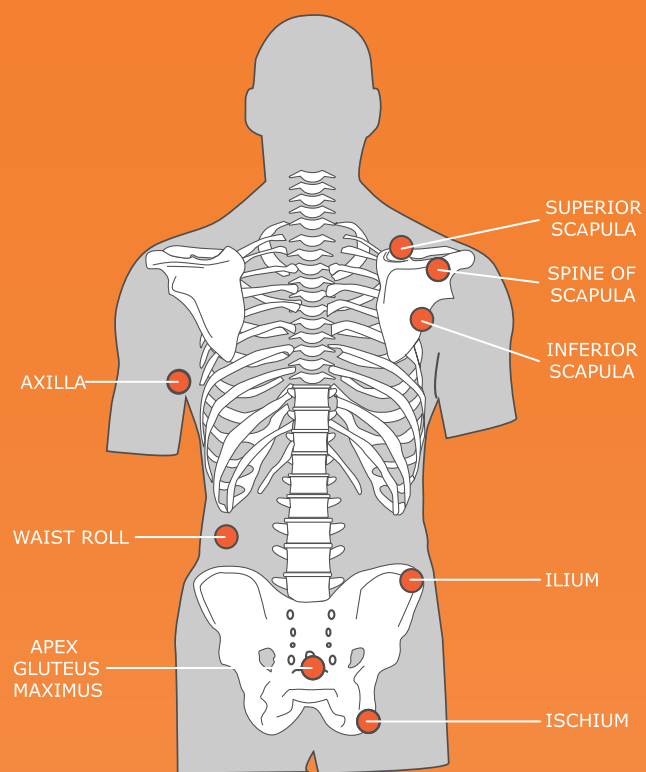
NOCTURNAL PRO I-V
NOCTURNAL
NOCTURNAL
BENDING BRACE
NBB

SPINE ANATOMY

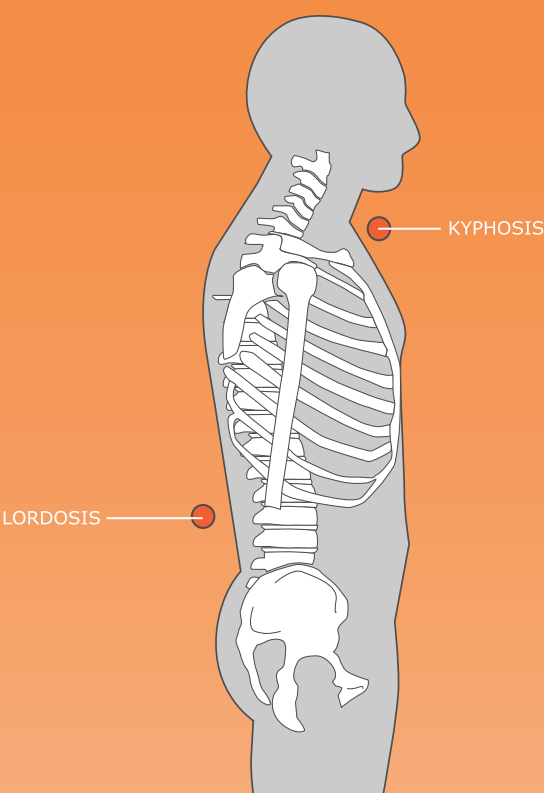
ANTERIOR VIEW



POSTERIOR VIEW



SIDE VIEW

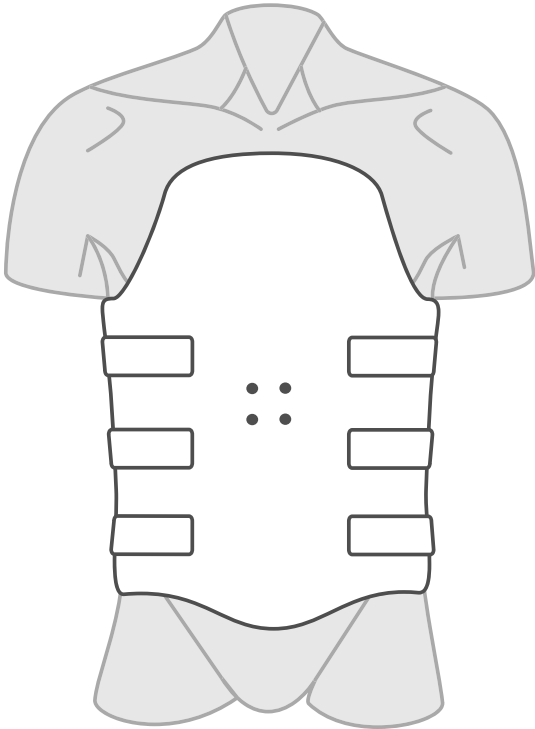


PRE-FAB TLSO SERIES (HANGER SPINAL SUITE)

- Pre-Fab Spinal Order Form (ORD015)
- Pre-Fab Spinal Male (STA016)
- Pre-Fab Spinal Female (STA017)
- Washable TLSO (STA018)
- Rochester TLSO (STA019)
- Pre-Fab Spine Shapes Male (STA020)
- Pre-Fab Spine Shapes Female (STA021)



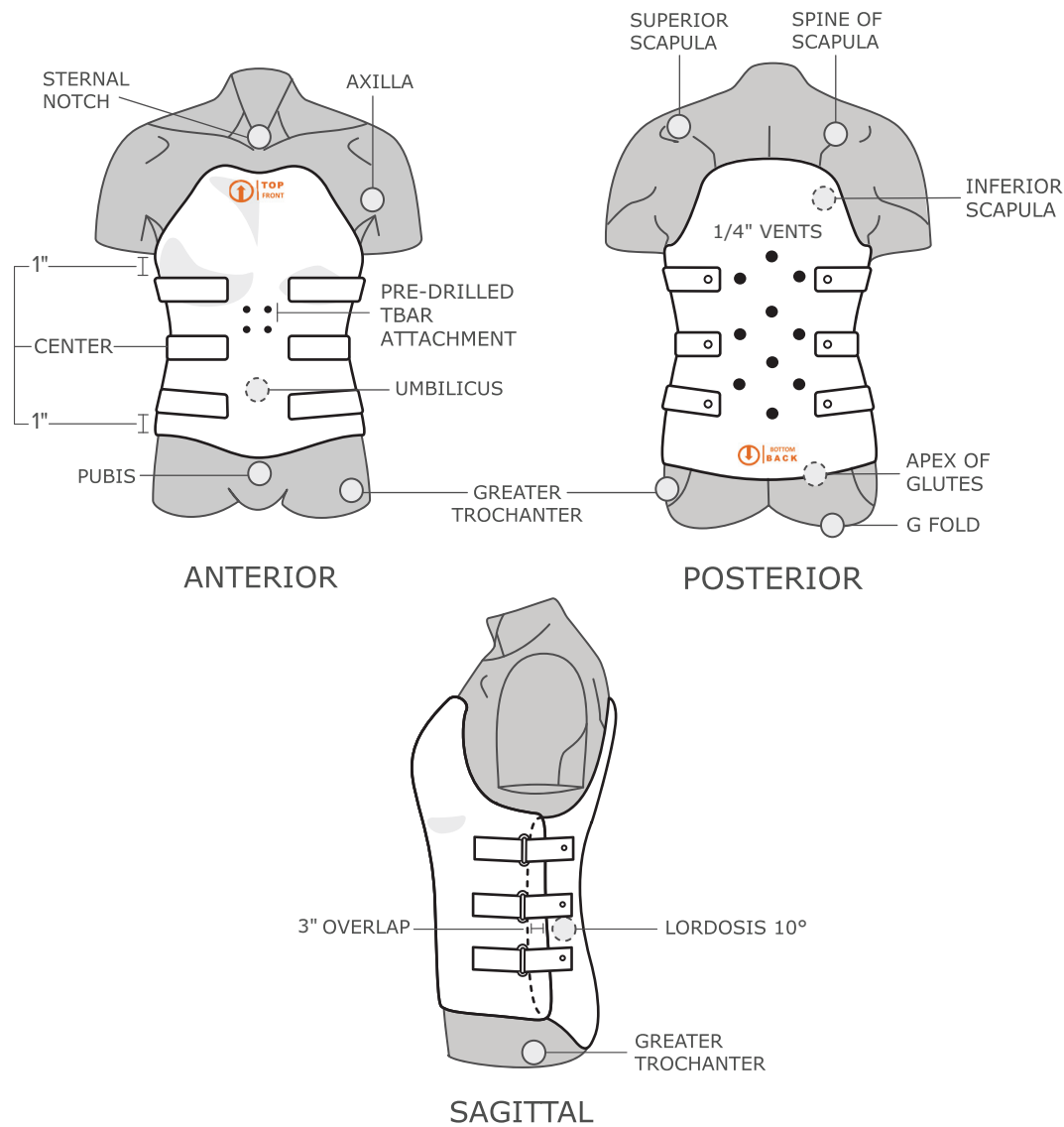
PRE-FAB SPINAL MALE
(L0460)



F0444

CTQ MEASUREMENTS CTQ = Critical to Quality		STANDARD MATERIAL /TRIMLINES	VARIATIONS
☐ Cir	☐ Length	• 1/8" Modified Polyethylene, Finished • 1/4" Aliplast Liner • 2 " White Dacron Velcro-backed Straps (6) • 2" Dacron Rollers Chafes (6) Attached on Posterior Shell • Finished/Trimmed • Proximal and Distal Trims Flare • 3" Overlap, Anterior over Posterior • 1/4" Vents (10 hole patterns, Posterior only) • Pre-drilled for T Bar attachment; Dunlap Machines, Vendor	NOTE LSO Trim on Request • Adjustable Thoracic Extension (Dunlap 20069, 20072, 20073-1, Nat Labs 20074)
Axilla	Front		
Waist	Back		
Trochanter			

PRE-FAB SPINAL FEMALE (L0460)



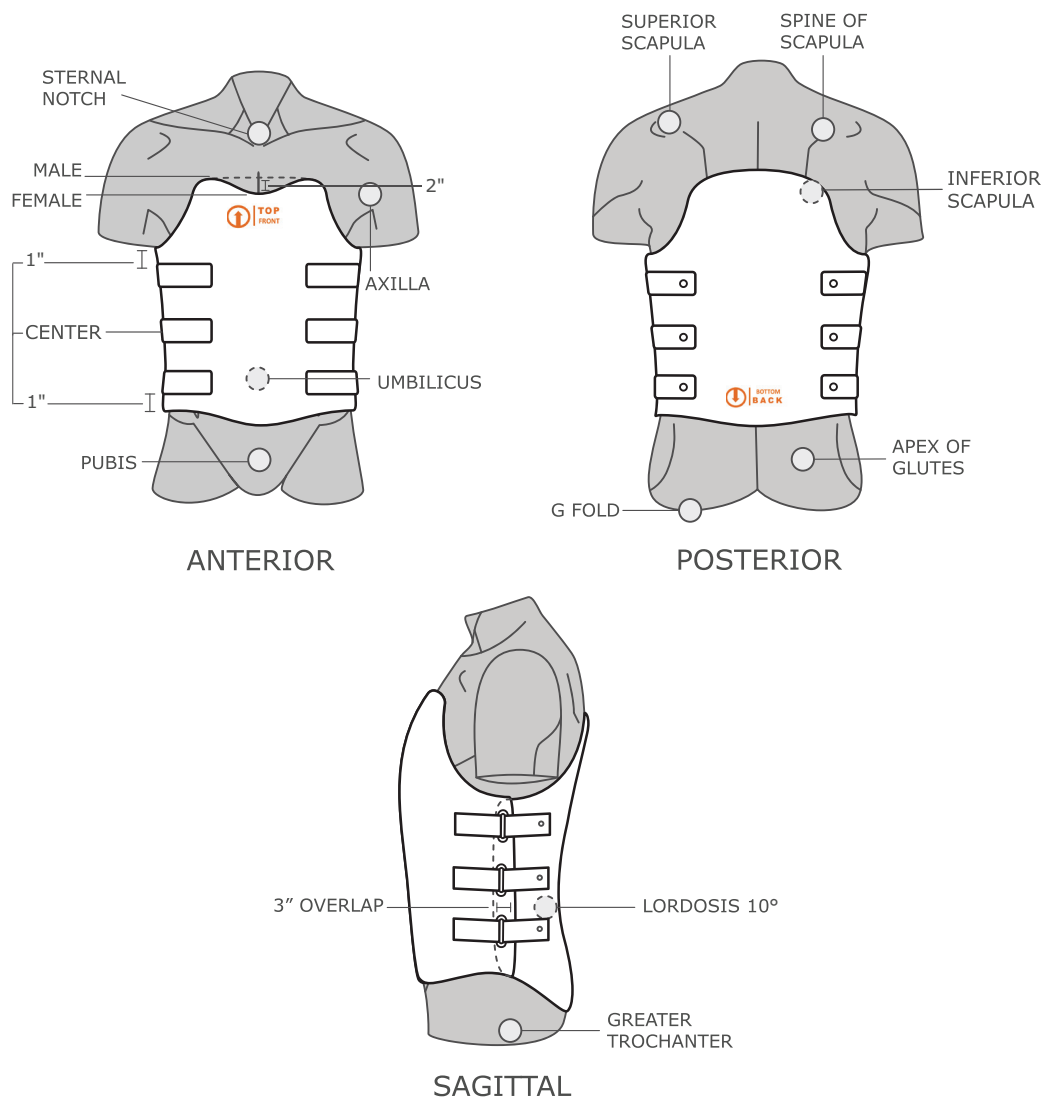
F0444

CTQ MEASUREMENTS CTQ = Critical to Quality		STANDARD MATERIAL /TRIMLINES	VARIATIONS
○ Cir	□ Length	• 1/8" Modified Polyethylene, Finished • 1/4" Alipplast Liner • 2 " White Dacron Velcro-backed Straps (6) • 2" Dacron Rollers Chafes (6) Attached on Posterior Shell • Finished/Trimmed • Proximal and Distal Trims Flare • 3" Overlap, Anterior over Posterior • 1/4" Vents (10 hole patterns, Posterior only) • Pre-drilled for T Bar Attachment	NOTE LSO Trim on Request • Adjustable Thoracic Extension (Dunlap 20069, 20072, 20073-1, Nat Labs 20074)
Axilla	Front		
Waist	Back		
Trochanter			

MODIFICATIONS/TRIMLINES – Module Shapes – See Appendix.

WASHABLE

Unlined and reduced profile
(L0460)



F0430

CTQ MEASUREMENTS CTQ = Critical to Quality		STANDARD MATERIAL /TRIMLINES – From Standard	VARIATIONS
○ Cir	□ Length	• 1/8" Modified Polyethylene, Finished • NO LINER • 2 " White Dacron Velcro-backed Straps (6) • 2" Dacron Rollers Chafes (6) Attached on Posterior Shell • Finished/Trimmed • 3" Overlap, Anterior over Posterior • No Vent Holes • Female 2" Sternal Notch Dip	NOTE LSO Trim on Request
Axilla	Front		
Waist	Back		
Trochanter			

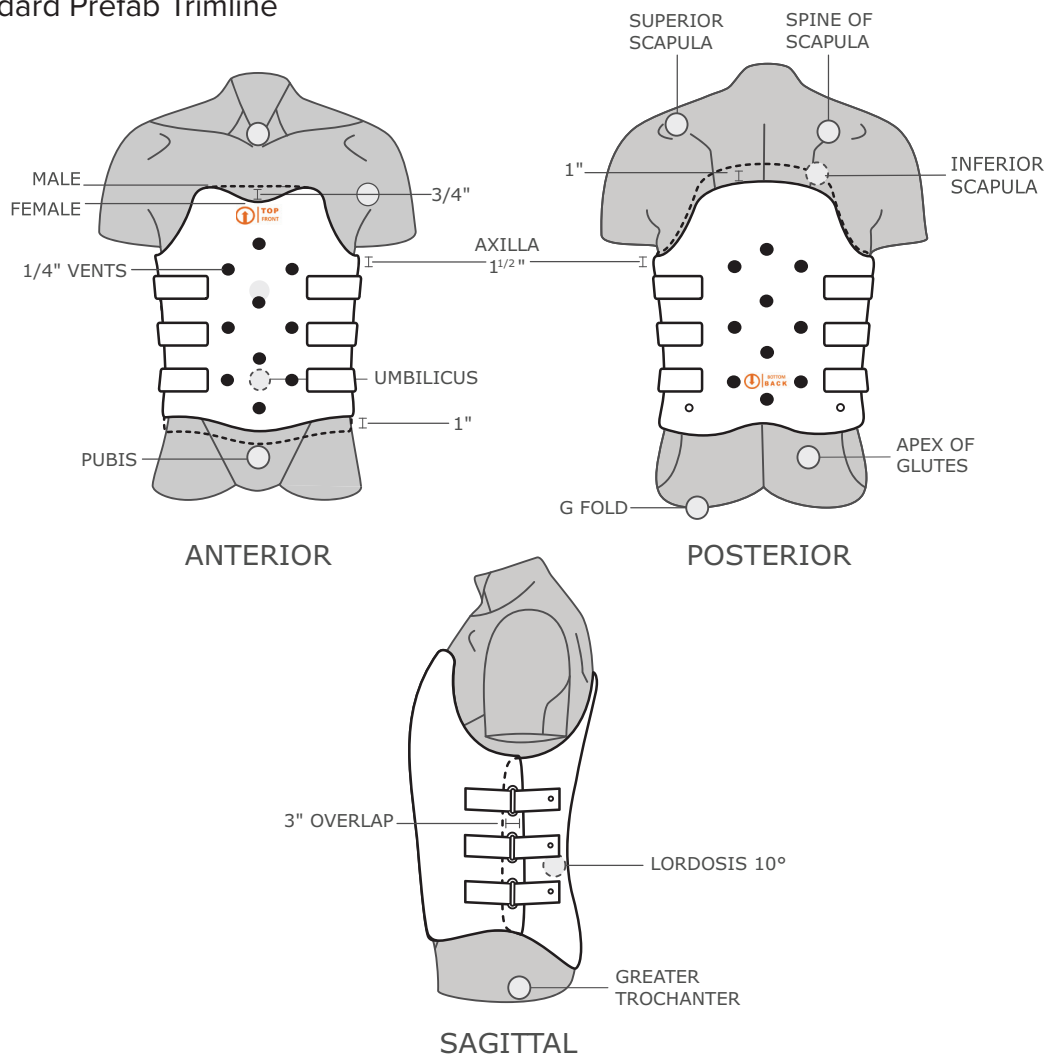
MODIFICATIONS/TRIMLINES – Module Shapes – See Appendix.

STA018 N/C

ROCHESTER

Lined anterior and reduced profile (L0640)

----- Standard Prefab Trimline



F0444

CTQ MEASUREMENTS CTQ = Critical to Quality		STANDARD MATERIAL /TRIMLINES – From Standard	VARIATIONS
○ Cir	□ Length	• 1/8" Modified polyethylene, finished • 1/4" Aliplast liner, anterior only • 2 " White Dacron velcro-backed straps (8) • 2" Dacron rollers chafes (8) attached on posterior shell • Finished/Trimmed • Flare – Posterior distal trim only • 3" Overlap, anterior over posterior • 1/4" Vents (10 hole pattern anterior and posterior) • 1" Below 'standard' proximal trim • 3/4" Sternal notch relief for female • 1" Superior to distal 'standard' trim – (anterior and posterior) Exception is the posterior distal trim which is left same length as standard and has flare. All other trimlines are reduced - flares trimmed off. • Hygiene scoop-posterior	• Adjustable thoracic extension • LSO trim on request
Axilla	Front		
Waist	Back		
Trochanter			

MODIFICATIONS/TRIMLINES – Module Shapes – See Appendix.

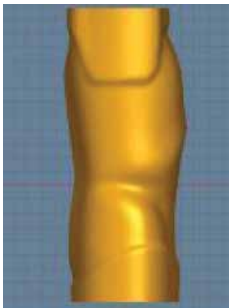
PRE-FAB SPINE SHAPES

Male

M1

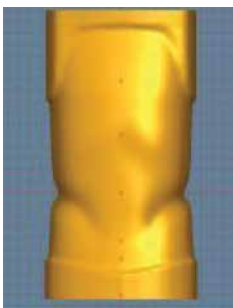


Anterior



Lateral

M2

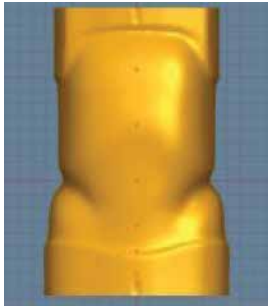


Anterior



Lateral

M3



Anterior



Lateral

M4



Anterior



Lateral

M5



Anterior



Lateral

M6

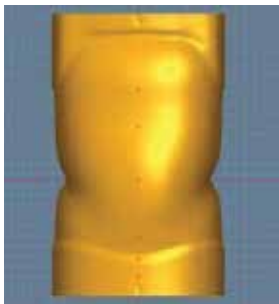


Anterior



Lateral

M7



Anterior



Lateral

M8



Anterior

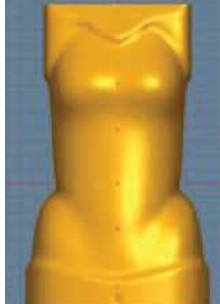


Lateral

PRE-FAB SPINE SHAPES

Female

F1



Anterior



Lateral

F2



Anterior



Lateral

F3



Anterior



Lateral

F4



Anterior



Lateral

F5



Anterior



Lateral

F6



Anterior



Lateral

F7



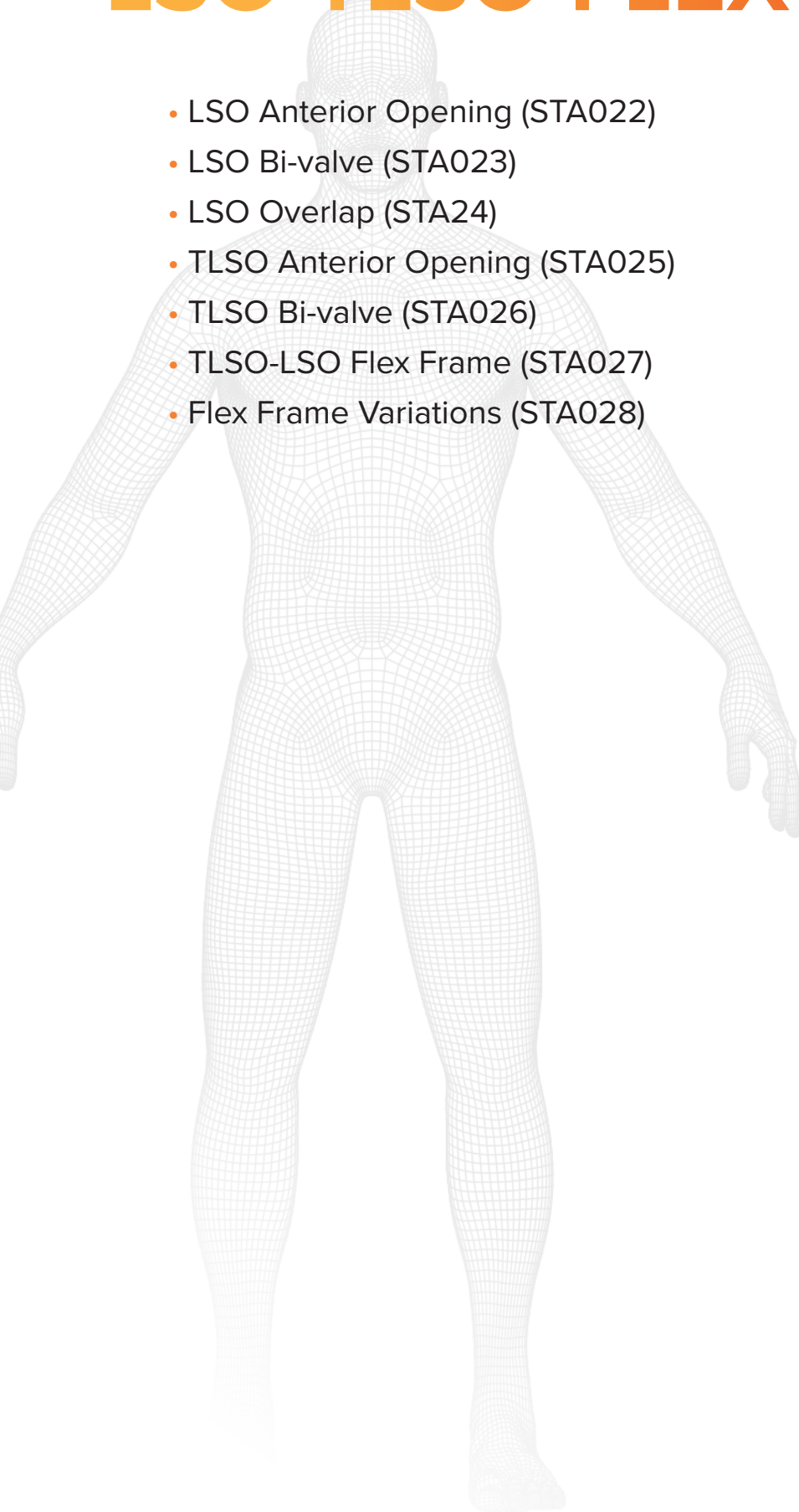
Anterior



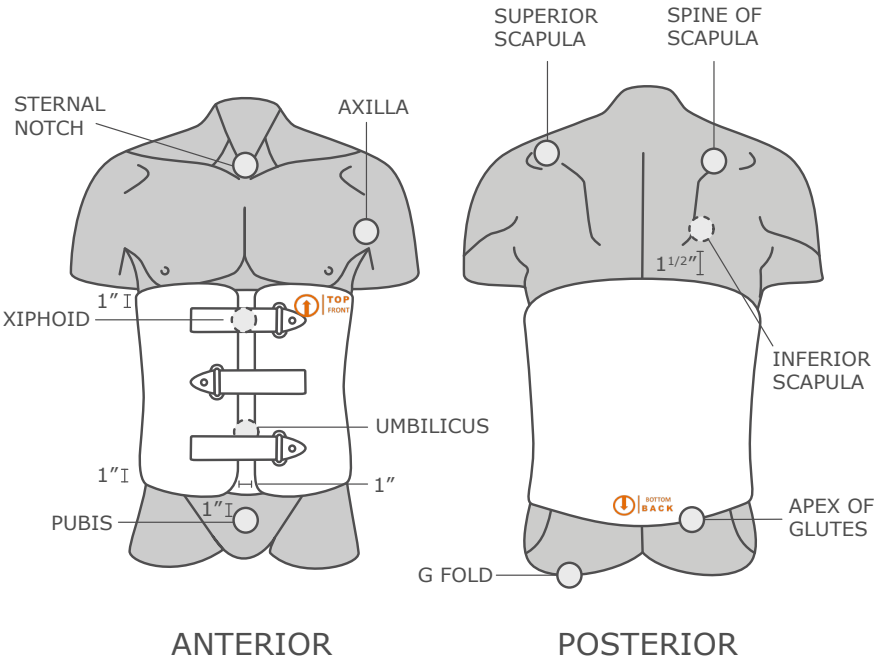
Lateral

CUSTOM LSO-TLSO-FLEX FRAME

- LSO Anterior Opening (STA022)
- LSO Bi-valve (STA023)
- LSO Overlap (STA24)
- TLSO Anterior Opening (STA025)
- TLSO Bi-valve (STA026)
- TLSO-LSO Flex Frame (STA027)
- Flex Frame Variations (STA028)

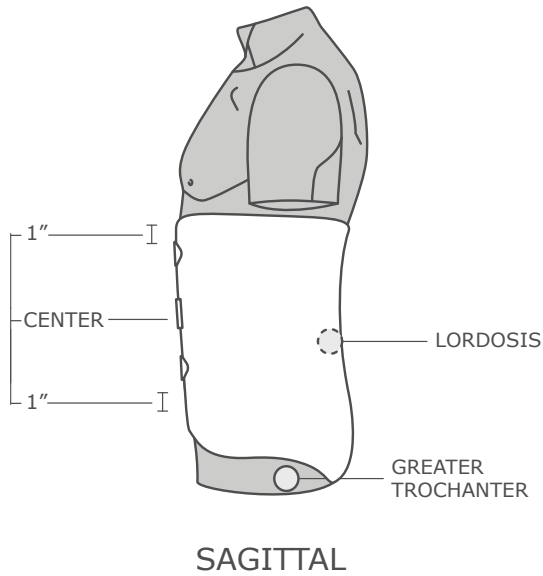


LSO ANTERIOR OPENING (L0640)



ANTERIOR

POSTERIOR



SAGITTAL

F0381

CTQ MEASUREMENTS			+ Scan or Cast
CTQ = Critical to Quality			
Curve Type			
Curve Magnitude			
○ Cir	△ ML	□ Length	
Xiphoid	Xiphoid	Waist-Inf Scapula	
Distal Rib	Distal Rib	Waist-Xiphoid	
Waist	Waist	ASIS-Waist	
ASIS	ASIS	Waist-Sym Pubis	
Trochanter		Waist-Coccyx	
		Waist-G Fold	
		Waist-Trochanter	

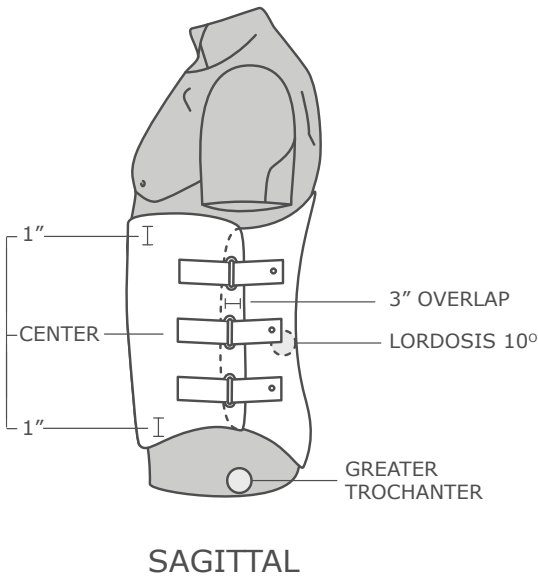
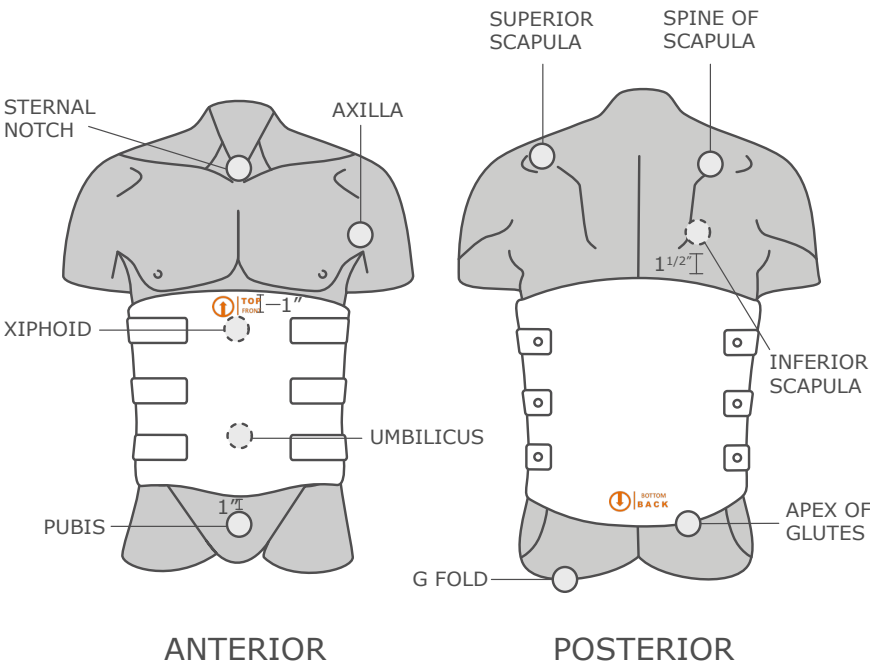
MODIFICATIONS/TRIMLINES
• 1" above Xiphoid • 1.5" below Inferior Scapula • 1" above Pubis • Apex of Glutes

STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • 1/4" Aliplast liner • 1.5" White Dacron Velcro-backed straps (3) (Strap width may vary with size of model) • 1.5" Plastic chafes (3) • Finished/Trimmed • Proximal & distal trims flare • 3/32" PE tongue • Chicago screws

OPTIONS/VARIATIONS
• Poster opening • Unfinished • Flex frame style • Vent holes

LSO BI-VALVE

(L0640)



F0421

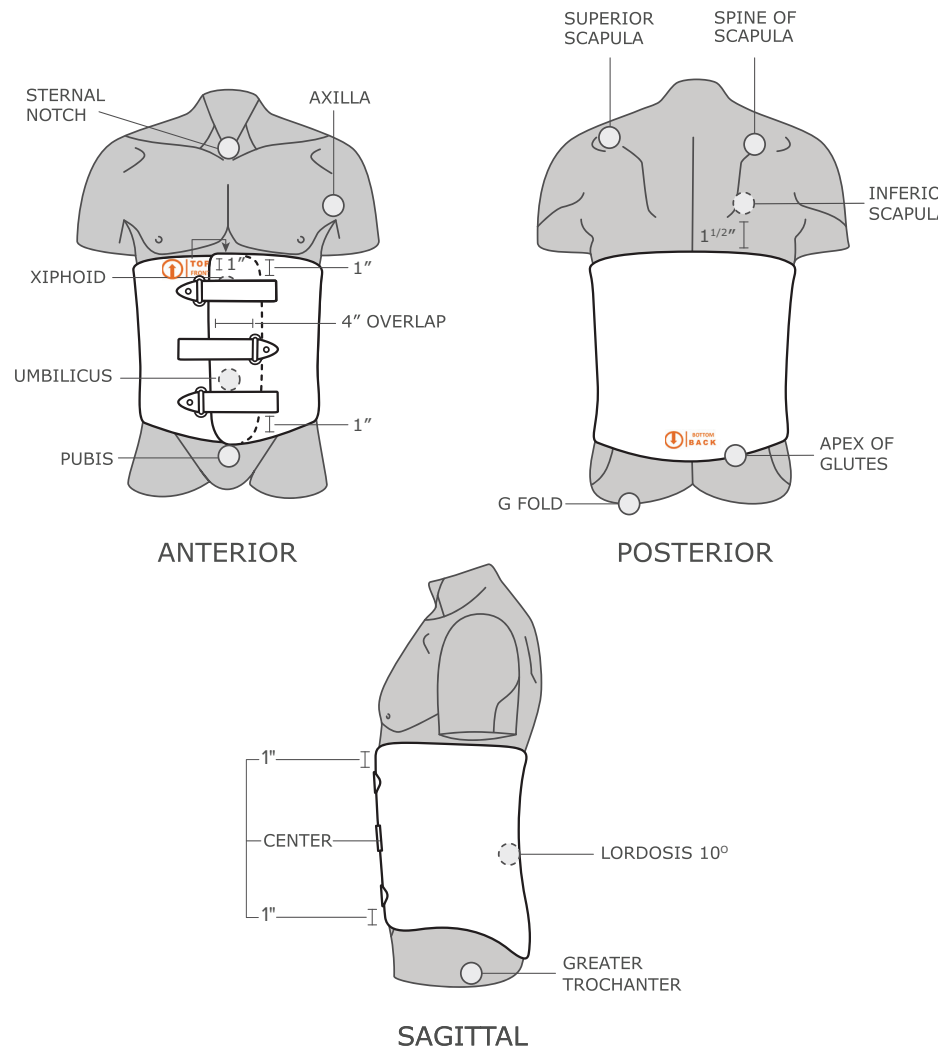
CTQ MEASUREMENTS			+ Scan or Cast
CTQ = Critical to Quality			
Curve Type			
Curve Magnitude			
○ Cir	△ ML	□ Length	
Xiphoid	Xiphoid	Waist-Inf Scapula	
Distal Rib	Distal Rib	Waist-Xiphoid	
Waist	Waist	ASIS-Waist	
ASIS	ASIS	Waist-Sym Pubis	
Trochanter		Waist-Coccyx	
		Waist-G Fold	
		Waist-Trochanter	

MODIFICATIONS
• 1" above Xiphoid • 1.5" below Inferior Scapula Note: See CDC Modifications page

STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • 1/4" Aliplast liner • 1.5" White Dacron Velcro-backed straps (6) (Strap width may vary with size of model) • 1.5" Dacron rollers chafes (6) attached on posterior shell • Finished/Trimmed • Proximal & distal trims flare • 3" Overlap • Anterior over posterior

OPTIONS/VARIATIONS
• Unfinished • Flex frame style • Vent holes

LSO OVERLAP
(L0640)



F0560

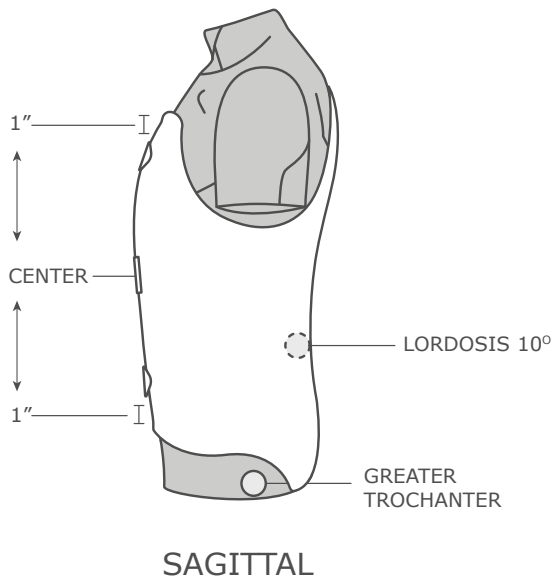
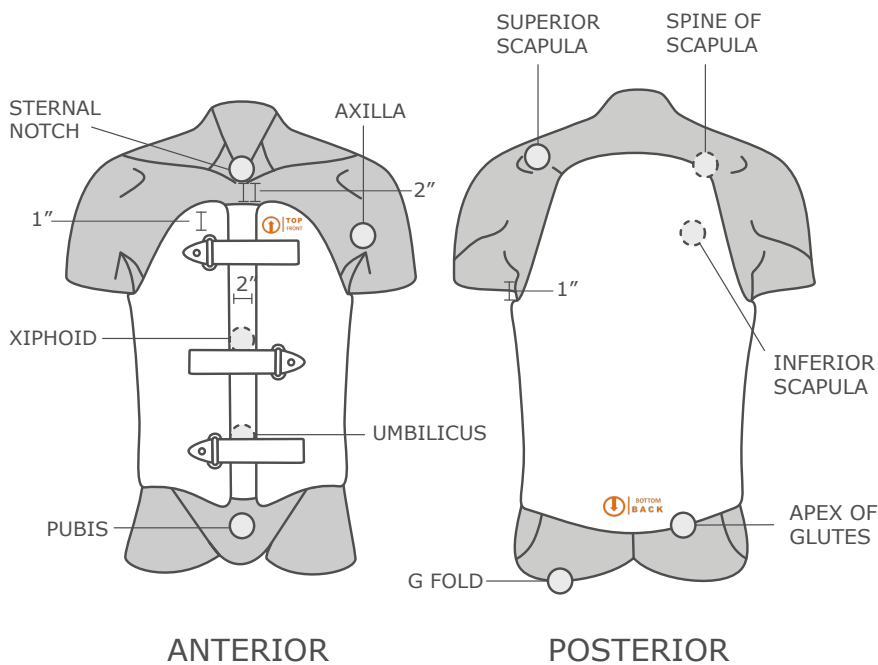
CTQ MEASUREMENTS			+ Scan or Cast
CTQ = Critical to Quality			
Curve Type			Curve Magnitude
Cir	△ ML	□ Length	
Xiphoid	Xiphoid	Waist-Inf Scapula	
Distal Rib	Distal Rib	Waist-Xiphoid	
Waist	Waist	ASIS-Waist	
ASIS	ASIS	Waist-Sym Pubis	
Trochanter		Waist-Coccyx	
		Waist-G Fold	
		Waist-Trochanter	

MODIFICATIONS/TRIMLINES
• 1" above Xiphoid • 1.5" below Inferior Scapula • 10° Lordosis Note: See CDC Modifications page

STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • 1.5" White Dacron Velcro-backed straps (3) • 1.5" Plastic chafe (3) • Finished/Trimmed • Proximal & distal trims flare • 2-3" Overlap

OPTIONS/VARIATIONS
• Unfinished • Vent holes

TLSO ANTERIOR OPENING (L0482)



F0390

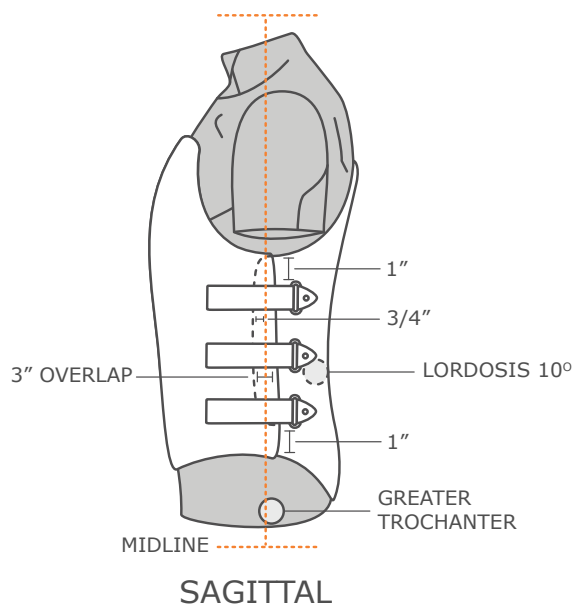
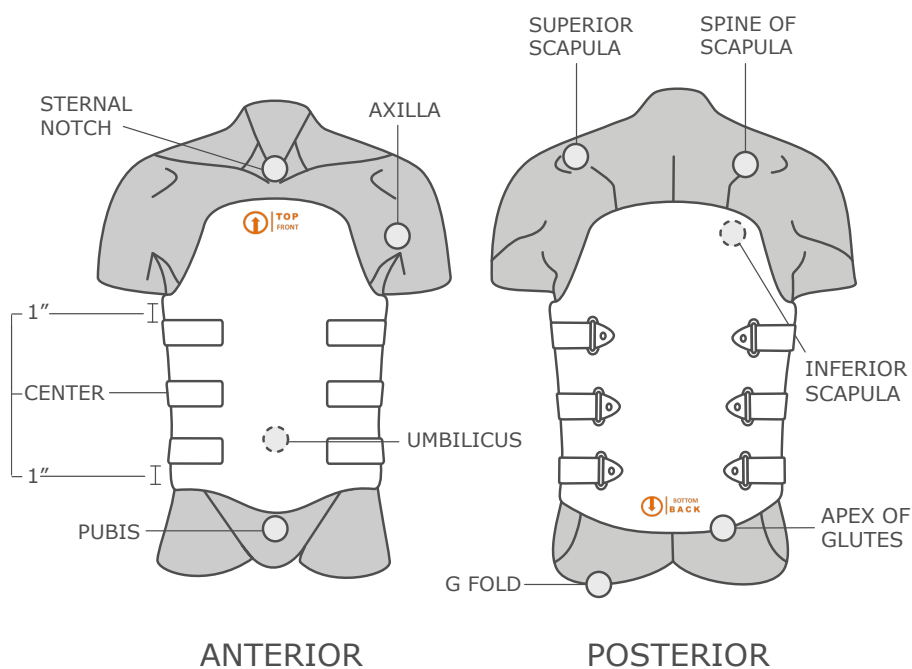
CTQ MEASUREMENTS			+ Scan or Cast
CTQ = Critical to Quality			
TLSO			
○ Cir	△ ML	□ Length	
Axilla	St Notch	St Notch-Waist	
Nipple Line	Axilla	Nipple Line-Waist	
Xiphoid	Nipple Line	Sup Scapula-Waist	
Distal Rib	Xiphoid	Waist-Inf Scapula	
Waist	Distal Rib	Waist-Xiphoid	
ASIS	Waist	ASIS-Waist	
Trochanter	ASIS	Waist-Sym Pubis	
	Trochanter	Waist-Coccyx	
		Waist-G Fold	
		Waist-Trochanter	

MODIFICATIONS/TRIMLINES
• Anterior opening • 2" Below sternal notch • 1" Superior to Scapula Spine

STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • 1/4" Aliplast Liner • 1.5" White Dacron Velcro-backed straps (3) • 1.5" Dacron roller chafes (3) • Finished

OPTIONS/VARIATIONS
• Posterior opening • Unfinished • Flex Frame Style • Unlined Finished (L0480) • Vent holes • PE Tongue - Xyphoid to Sym Pub level

TLSO BI-VALVE (L0486)



F0410

CTQ MEASUREMENTS

CTQ = Critical to Quality

+ Scan
or Cast

TLSO		
○ Cir	△ ML	□ Length
Axilla	St Notch	St Notch-Waist
Nipple Line	Axilla	Nipple Line-Waist
Xiphoid	Nipple Line	Sup Scapula-Waist
Distal Rib	Xiphoid	Waist-Inf Scapula
Waist	Distal Rib	Waist-Xiphoid
ASIS	Waist	ASIS-Waist
Trochanter	ASIS	Waist-Sym Pubis
	Trochanter	Waist-Coccyx
		Waist-G Fold
		Waist-Trochanter

MODIFICATIONS/TRIMLINES

- Posterior section trimmed 3/4" anterior to the midline
- Anterior over posterior shell w/2-3" overlap
- No ventilation holes (unless requested)

Note: See CDC Modifications page

STANDARD MATERIAL

- 5/32 Modified polyethylene, finished
- 1/4" Aliplast Liner
- 1.5" White Dacron Velcro-backed straps (6)
- Plastic chafes attached on posterior shell (6)
- Finished
- Proximal and distal trims flare
- 2-3" Overlap
- Anterior over posterior

OPTIONS/VARIATIONS

- Unfinished
- Flex Frame Style
- Unlined Finished (L0484)
- Vent holes (optional)

TLSO/LSO FLEX FRAME (L0486)

F0417

CTQ MEASUREMENTS			+ Scan or Cast
CTQ = Critical to Quality			
TLSO			
○ Cir	△ ML	□ Length	
Axilla	St Notch	St Notch-Waist	
Nipple Line	Axilla	Nipple Line-Waist	
Xiphoid	Nipple Line	Sup Scapula-Waist	
Distal Rib	Xiphoid	Waist-Inf Scapula	
Waist	Distal Rib	Waist-Xiphoid	
ASIS	Waist	ASIS-Waist	
Trochanter	ASIS	Waist-Sym Pubis	
	Trochanter	Waist-Coccyx	
		Waist-G Fold	
		Waist-Trochanter	

TRIMLINES

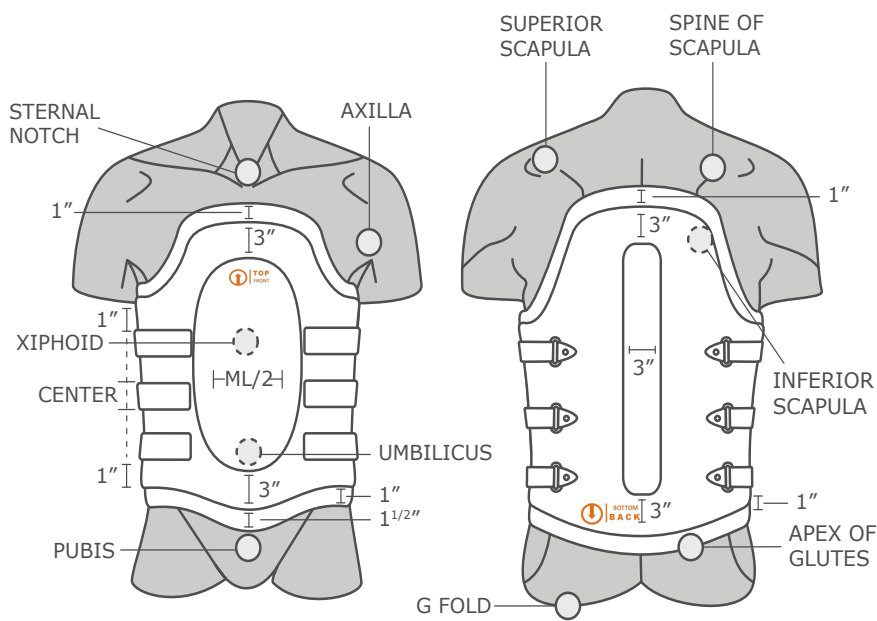
- Anterior frame 1" anterior to midline
 - Anterior foam 2" posterior to midline
 - Anterior opening waist ML/2
 - Posterior frame 1" posterior to midline
 - Posterior opening 3" wide
 - Finished/Trimmed
 - Anterior over posterior
 - Female breast accommodation
- Note:** Flex Frame variations

MATERIAL

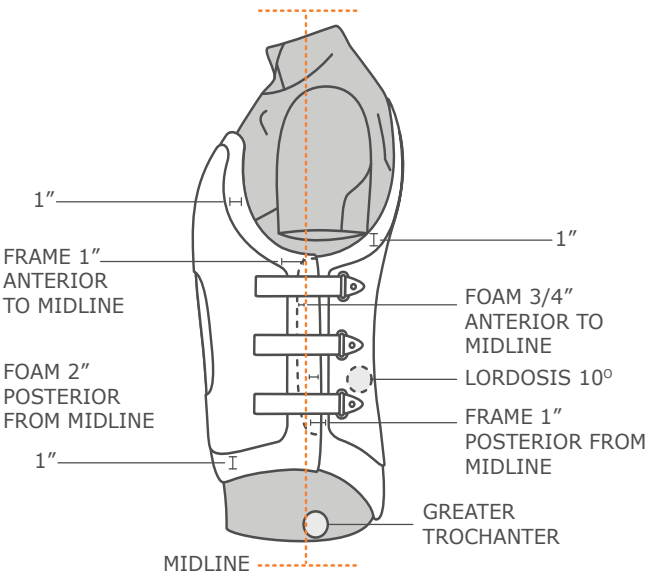
- 3/16" Aliplast Liner
- 1/8" MPE

OPTIONS/VARIATIONS

- Frame trim options
- Opening options
- Single pull options
- LSO options



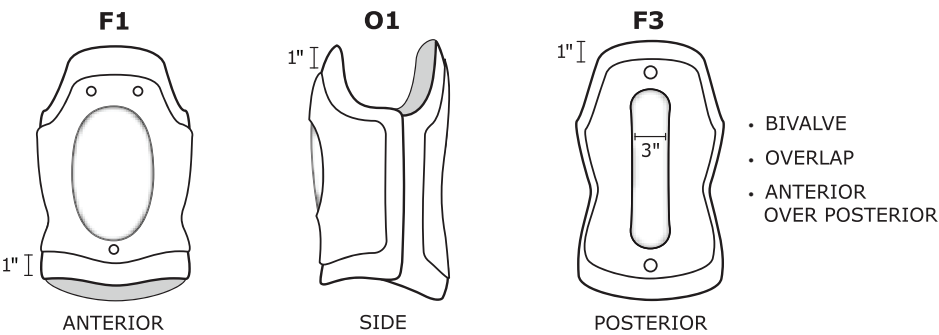
ANTERIOR



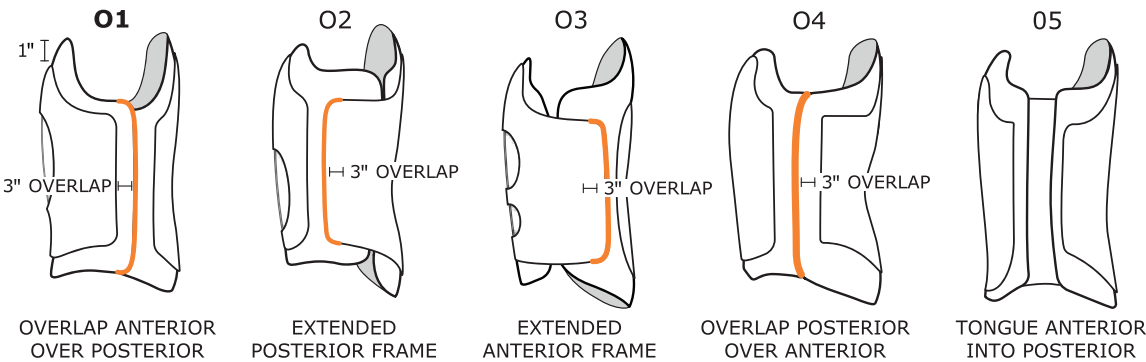
SAGITTAL

FLEX FRAME VARIATIONS

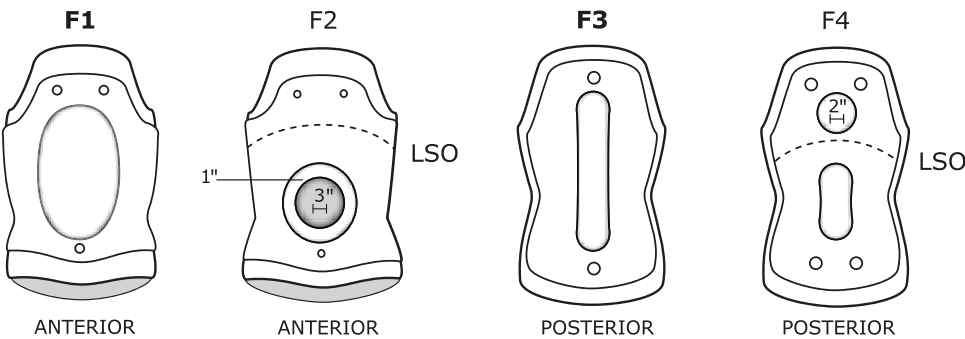
STANDARD



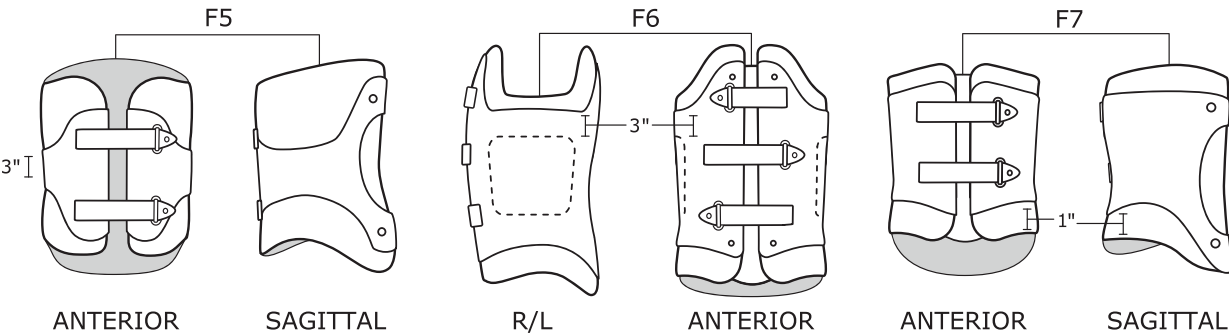
BIVALVE OPENING OPTIONS



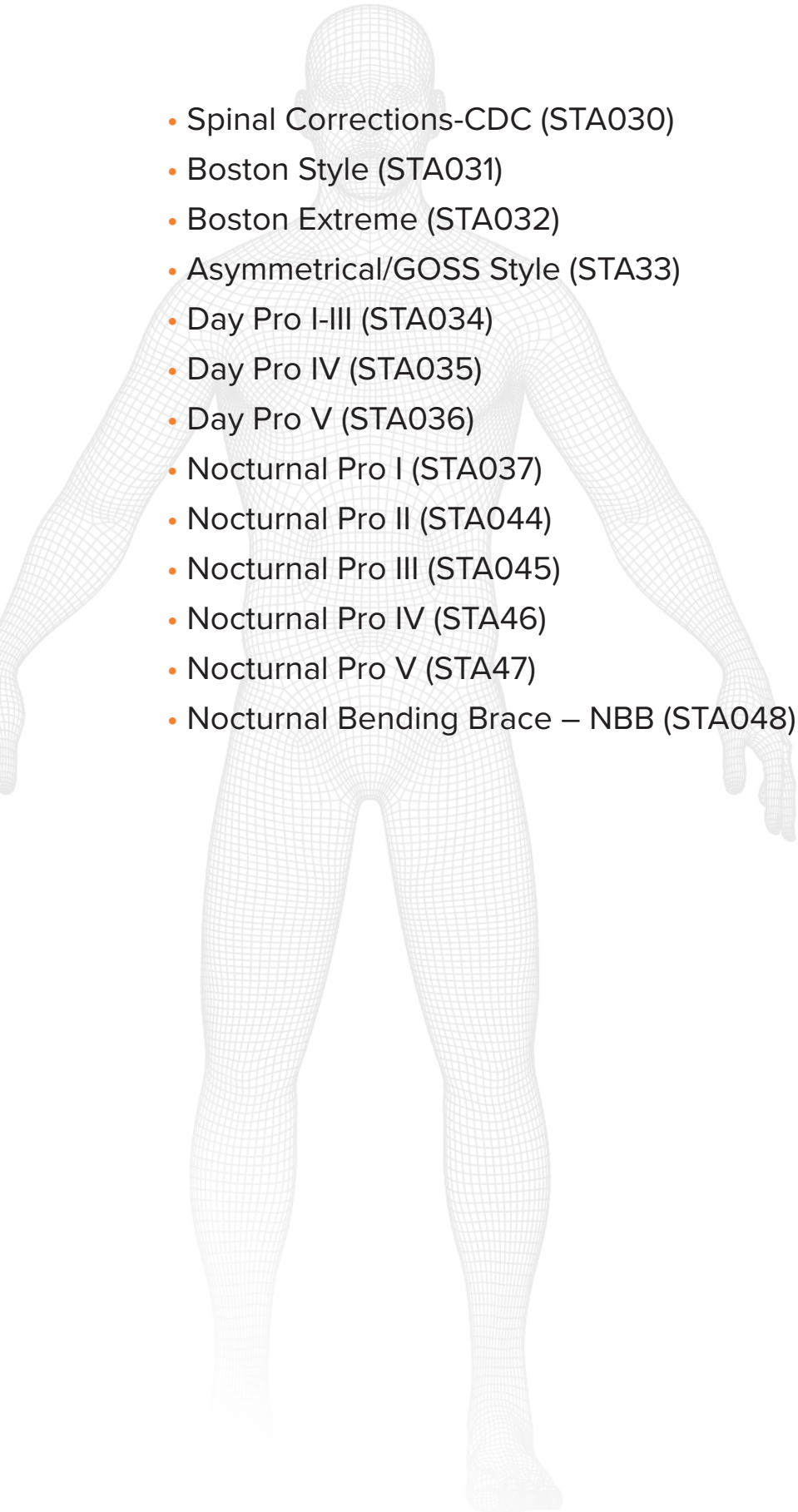
BIVALVE FRAME OPTIONS



SINGLE-PULL FRAME OPTIONS

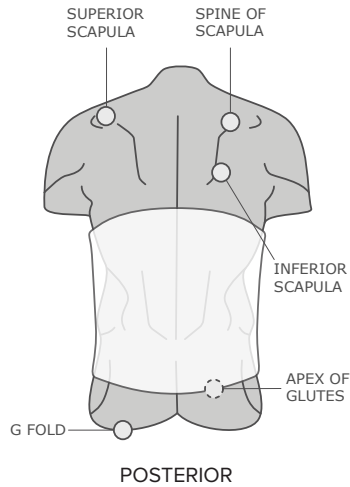


SCOLIOSIS/KYPHOSIS

- 
- Spinal Corrections-CDC (STA030)
 - Boston Style (STA031)
 - Boston Extreme (STA032)
 - Asymmetrical/GOSS Style (STA33)
 - Day Pro I-III (STA034)
 - Day Pro IV (STA035)
 - Day Pro V (STA036)
 - Nocturnal Pro I (STA037)
 - Nocturnal Pro II (STA044)
 - Nocturnal Pro III (STA045)
 - Nocturnal Pro IV (STA46)
 - Nocturnal Pro V (STA47)
 - Nocturnal Bending Brace – NBB (STA048)

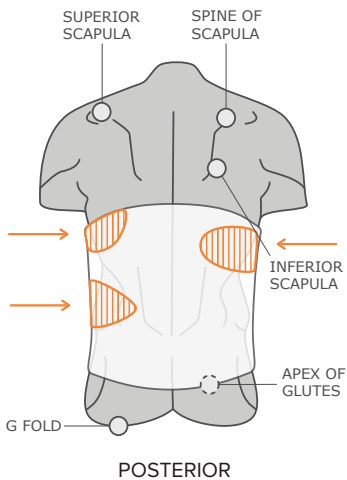
SPINAL CORRECTIONS-CDC

Applied corrective forces are patient specific and depend on curve type and magnitude.



MIN CORRECTION

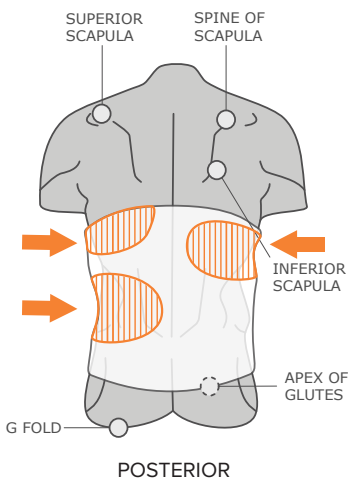
Symmetrical Module Pads recommended for additional correction.



STANDARD

Digital corrective forces built into the brace, simulating pads. Goal is to maximize correction with additional pads

- 1/4"–3/8" correction at key locations



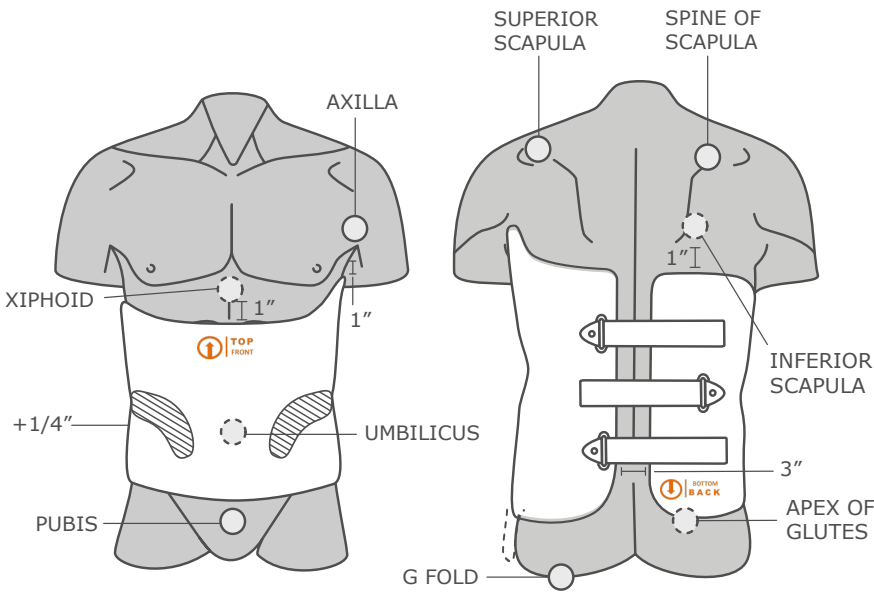
AGGRESSIVE

Maximum push, lateral shift, and derotation based upon the curve type, x-rays, and clinical evaluation.

- 3/8"–3/4" lumbar shift
- 1/4"–3/8" thoracic shift
- 1/4"–3/8" voids

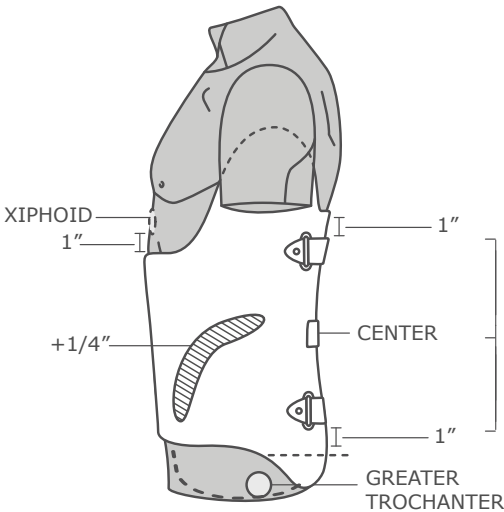
BOSTON STYLE

(L1200+)



ANTERIOR

POSTERIOR



SAGITTAL

F0590

CTQ MEASUREMENTS		
CTQ = Critical to Quality		
+ Scan or Cast		
Curve Type		
Curve Magnitude		
Cir	ML	Length
Xiphoid	Xiphoid	Nipple Line-Waist
Distal Rib	Distal Rib	Waist-Inf Scapula
Waist	Waist	Waist-Xiphoid
ASIS	ASIS	ASIS-Waist
Trochanter		Waist-Sym Pubis
		Waist-Coccyx
		Waist-G Fold
		Waist-Trochanter

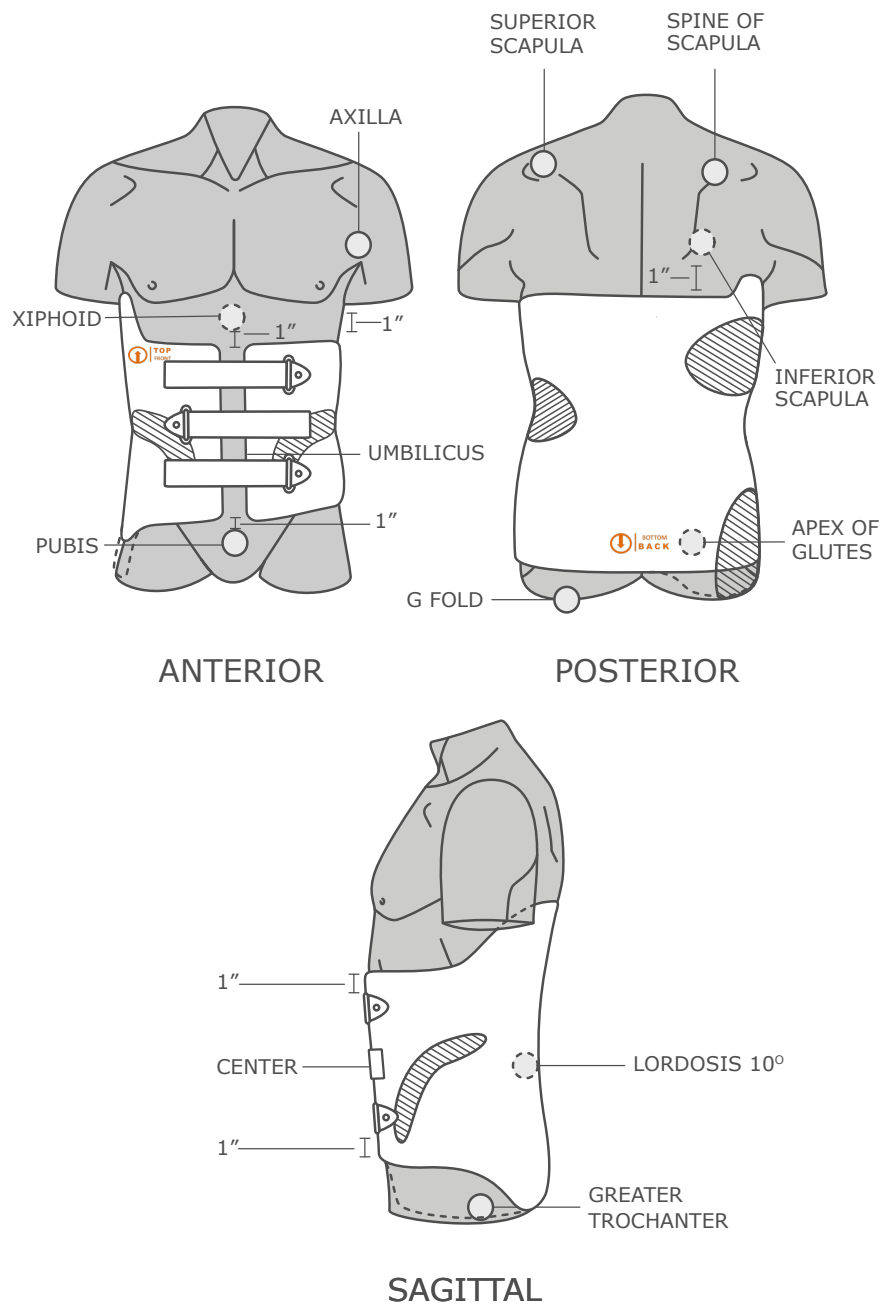
MODIFICATIONS/TRIMLINES
• CDC min correction • 1" Below Xiphoid • 1" Below Axilla • Apex of Glutes • 1" Pubis

STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • 1/4 Aliplast Liner • White Dacron straps/attached (3) • Dacron roller chafes • Posterior opening • Finished

VARIATIONS
• Unfinished Blank • Window/Gusset optional • Anterior opening • Trochanter extension • Vent holes

NOTE: Applied corrective forces are patient specific and depend on curve type and magnitude

BOSTON EXTREME
(L1300+)



F0590

CTQ MEASUREMENTS			+ Scan or Cast
CTQ = Critical to Quality			
Curve Type			
Curve Magnitude			
○ Cir	△ ML	□ Length	
Xiphoid	Xiphoid	Nipple Line-Waist	
Distal Rib	Distal Rib	Waist-Inf Scapula	
Waist	Waist	Waist-Xiphoid	
ASIS	ASIS	ASIS-Waist	
Trochanter		Waist-Sym Pubis	
		Waist-Coccyx	
		Waist-G Fold	
		Waist-Trochanter	

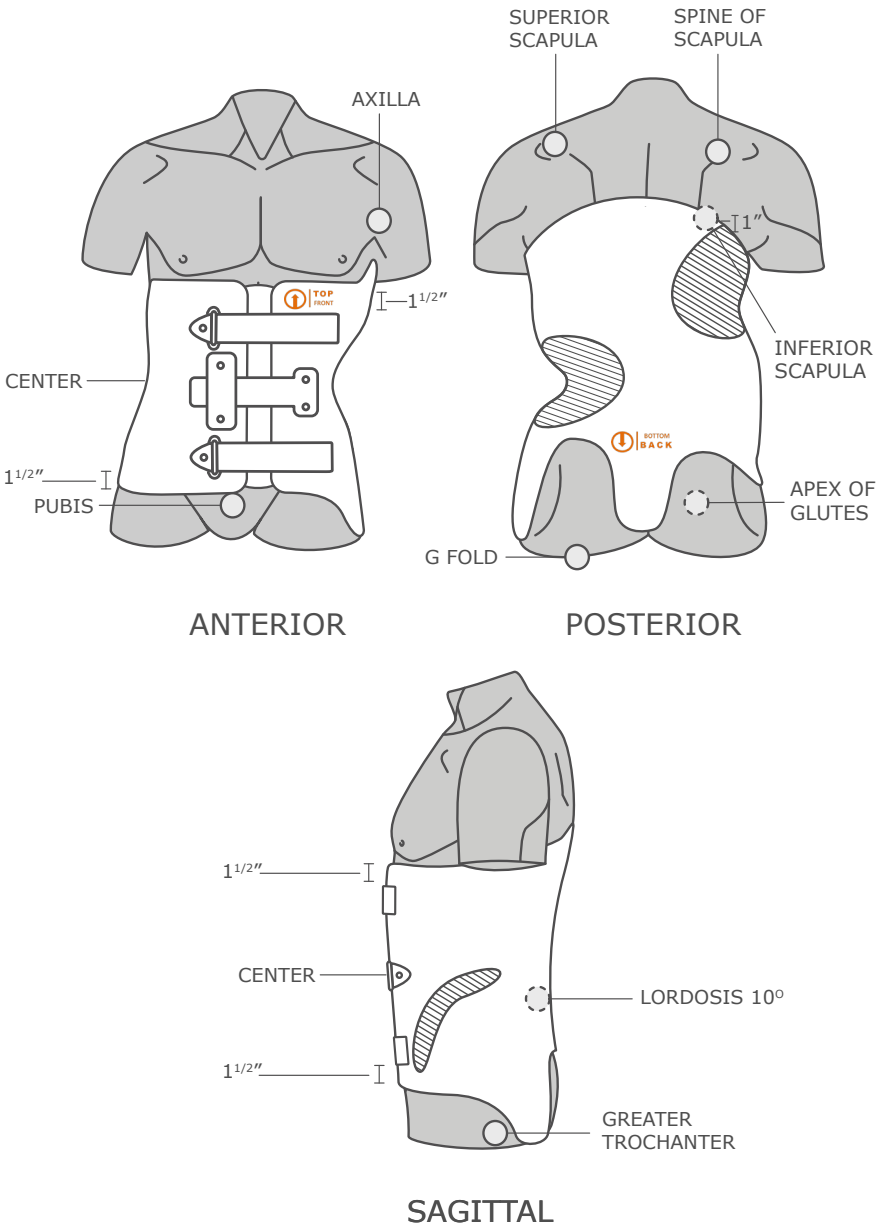
MODIFICATIONS/TRIMLINES
• 1" Below Xiphoid • 1" Below Axilla • 1" Apex of Glutes • 1" Pubis • CDC aggressive

STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • 1/4" Aliplast Liner • 1.5" White Dacron straps/attached (3) • Dacron roller chafes • Anterior opening • Window/Gusset optional

VARIATIONS
• Trochanter extension on request • 1/6" PE tongue – optional

NOTE: Corrective forces are patient specific and depend on curve type and magnitude

ASYMMETRICAL/GOSS
(L1300+)



F1201

CTQ MEASUREMENTS			+ Scan or Cast
CTQ = Critical to Quality			
Curve Type			
Curve Magnitude			
☐ Cir	☐ ML	☐ Length	
Xiphoid	Xiphoid	Nipple Line-Waist	
Distal Rib	Distal Rib	Waist-Inf Scapula	
Waist	Waist	Waist-Xiphoid	
ASIS	ASIS	ASIS-Waist	
Trochanter		Waist-Sym Pubis	
		Waist-Coccyx	
		Waist-G Fold	
		Waist-Trochanter	

MODIFICATIONS/TRIMLINES
• CDC aggressive modification • 1" below Xiphoid • 1.5" below Axilla • Apex of Glutes • 1.5" Pubis

STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • 1/4" Aliplast Liner • 1.5" White Dacron straps/attached (3) • Dacron rollers chafes • Anterior opening

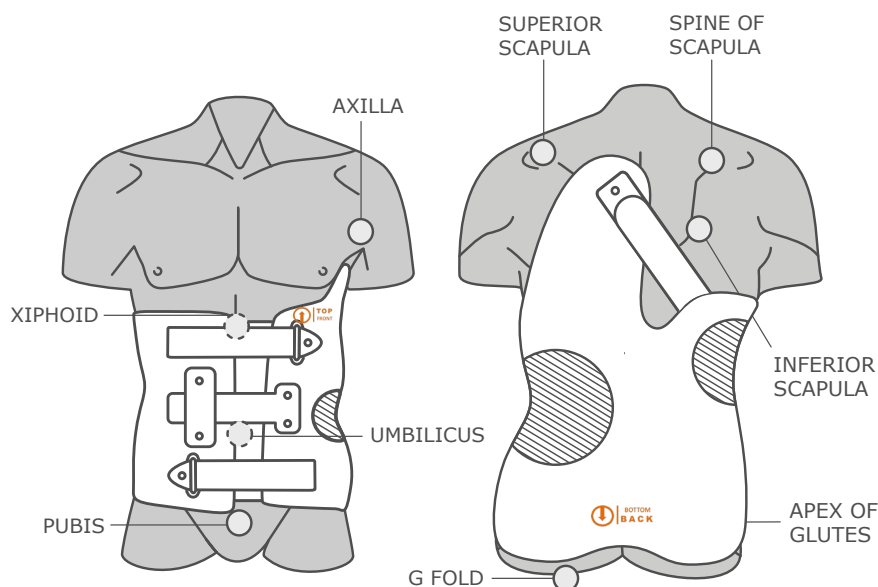
OPTIONS/VARIATIONS
• Reinforcement Trochanter (5/32) • 1/16" PE Tongue optional • Vent holes • CDC standard modification

NOTE: Corrective forces are patient specific and depend on curve type and magnitude

DAY PRO I-III

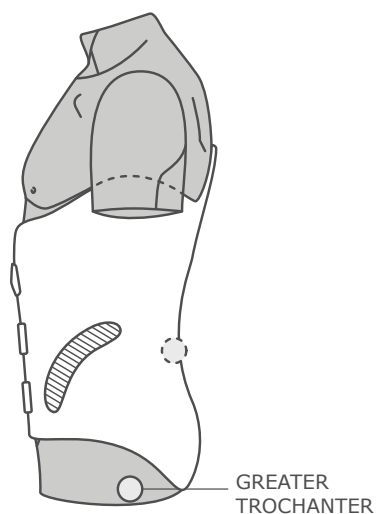
(L1300+)

F1200



ANTERIOR

POSTERIOR



SAGITTAL

CTQ MEASUREMENTS

CTQ = Critical to Quality

+ Scan
or Cast

Curve Type

Curve Magnitude

○ Cir	△ ML	□ Length
Xiphoid	Xiphoid	Nipple Line-Waist
Distal Rib	Distal Rib	Waist-Inf Scapula
Waist	Waist	Waist-Xiphoid
ASIS	ASIS	ASIS-Waist
Trochanter		Waist-Sym Pubis
		Waist-Coccyx
		Waist-G Fold
		Waist-Trochanter

MODIFICATIONS/TRIMLINES

- CDC Standard
- 1" Below Xiphoid
- 1" Below Axilla
- Apex of Glutes
- 1" Pubis

STANDARD MATERIAL

- 5/32 Modified polyethylene, finished
- 1/4" Aliplast Foam Liner
- 1.5" White Dacron straps/attached (3)
- Dacron rollers chafes
- Anterior opening
- Thoracic Sling
- 1.5" Center T strap (Outrigger)
- 1/16" Polyethylene Tongue

OPTIONS/VARIATIONS

- CDC Aggressive modification
- Vent holes

NOTE: Corrective forces are patient specific and depend on curve type and magnitude

DAY PRO IV (L1300+)

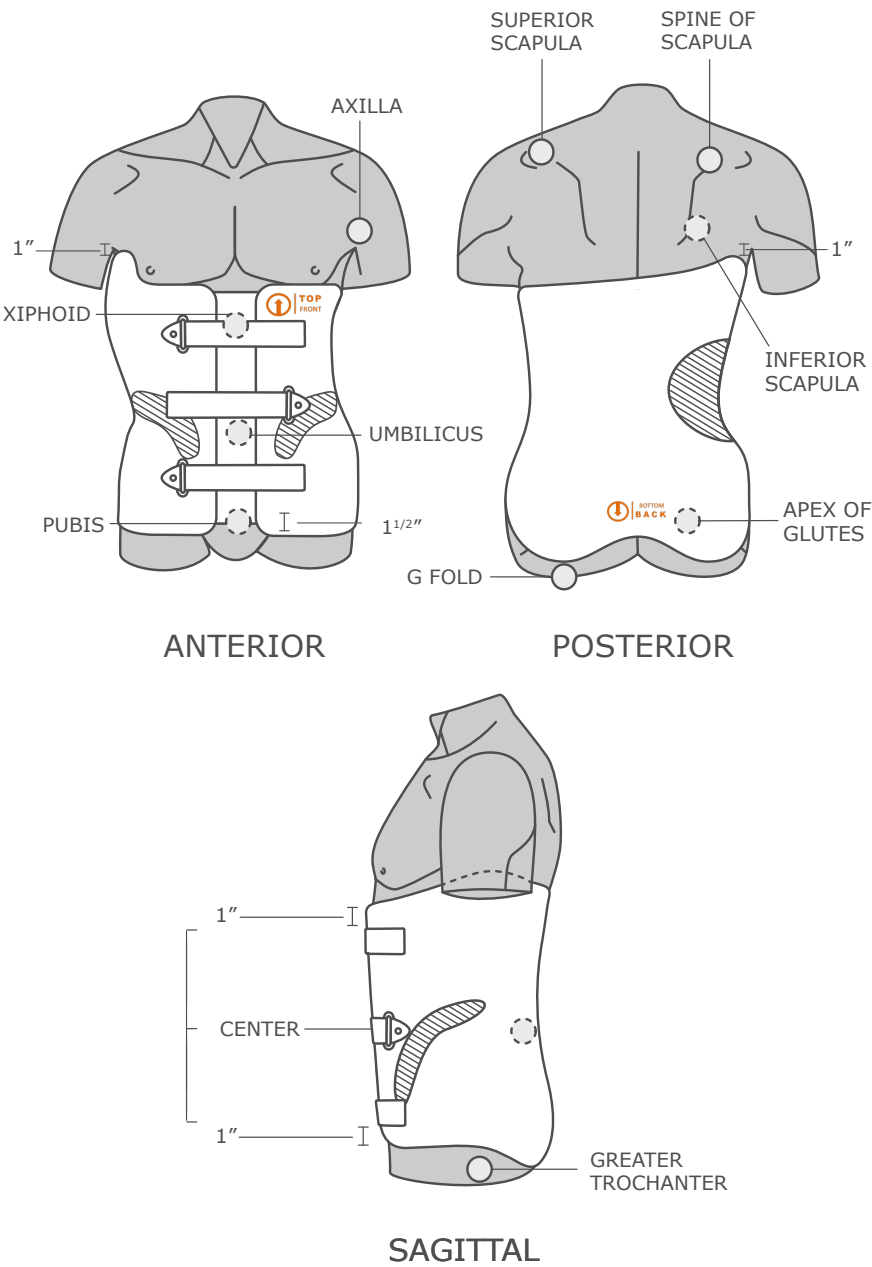
F1200

CTQ MEASUREMENTS			+ Scan or Cast
CTQ = Critical to Quality			
Curve Type			
Curve Magnitude			
○ Cir	△ ML	□ Length	
Xiphoid	Xiphoid	Nipple Line-Waist	
Distal Rib	Distal Rib	Waist-Inf Scapula	
Waist	Waist	Waist-Xiphoid	
ASIS	ASIS	ASIS-Waist	
Trochanter		Waist-Sym Pubis	
		Waist-Coccyx	
		Waist-G Fold	
		Waist-Trochanter	

MODIFICATIONS/TRIMLINES
• CDC Standard • 1" Below Axilla • Apex of Glutes • 1" Pubis

STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • 1/4" Aliplast Liner • White Dacron straps/attached (3) • 1.5" Dacron rollers chafes • Anterior opening • Center strap (Outrigger)

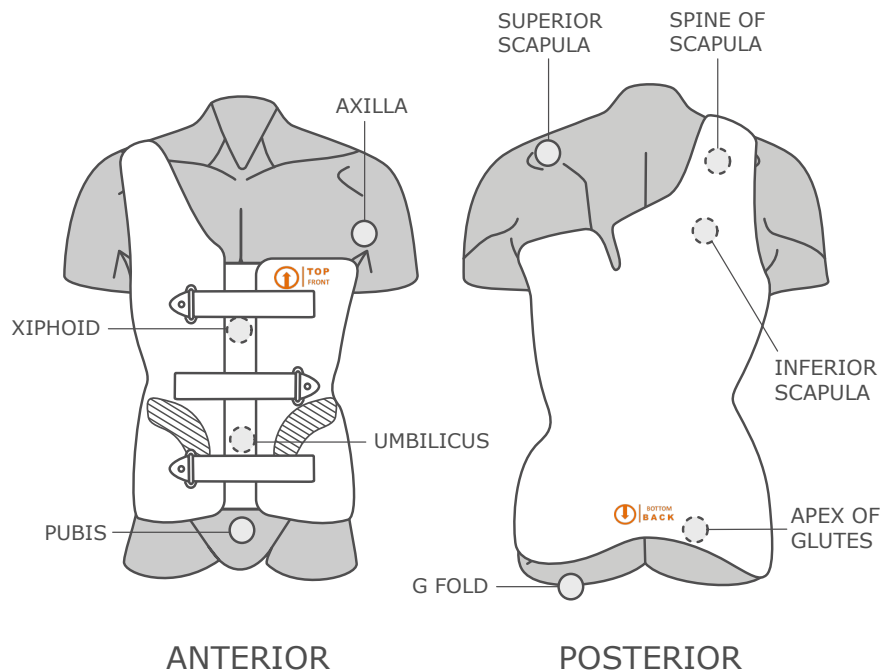
OPTIONS/VARIATIONS
• 1/16" Polyethylene tongue • CDC Aggressive modification • Vent holes



NOTE: Corrective forces are patient specific and depend on curve type and magnitude

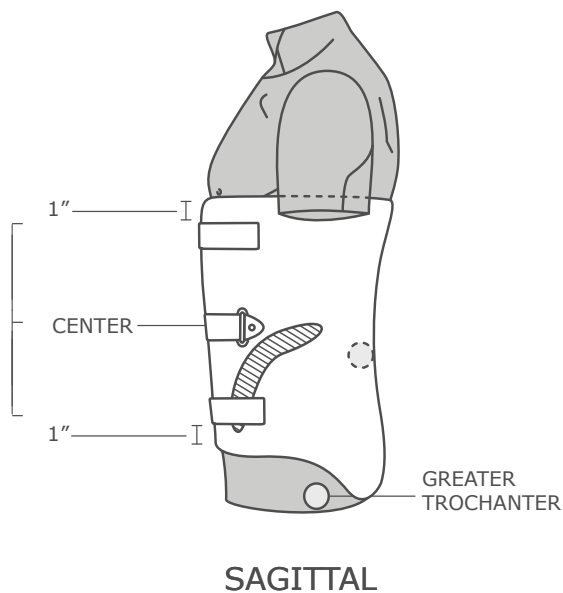
DAY PRO V (L1300+)

F1200



ANTERIOR

POSTERIOR



SAGITTAL

CTQ MEASUREMENTS

CTQ = Critical to Quality

+ Scan
or Cast

Curve Type

Curve Magnitude

○ Cir	△ ML	□ Length
Xiphoid	Xiphoid	Nipple Line-Waist
Distal Rib	Distal Rib	Waist-Inf Scapula
Waist	Waist	Waist-Xiphoid
ASIS	ASIS	ASIS-Waist
Trochanter		Waist-Sym Pubis
		Waist-Coccyx
		Waist-G Fold
		Waist-Trochanter

MODIFICATIONS/TRIMLINES

- CDC Standard
- 1" Below Axilla
- Apex of Glutes
- 1" Pubis

STANDARD MATERIAL

- 5/32 Modified polyethylene, finished
- 1/4" Aliplast Liner
- White Dacron straps/attached (3)
- 1.5" Dacron rollers chafes
- Anterior opening
- Over-the-shoulder trim

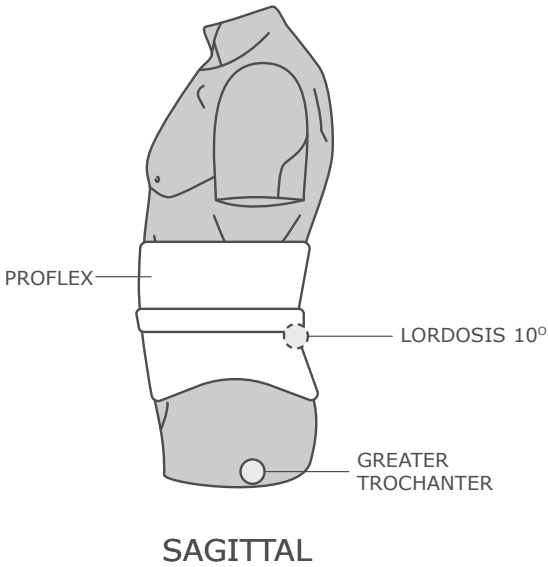
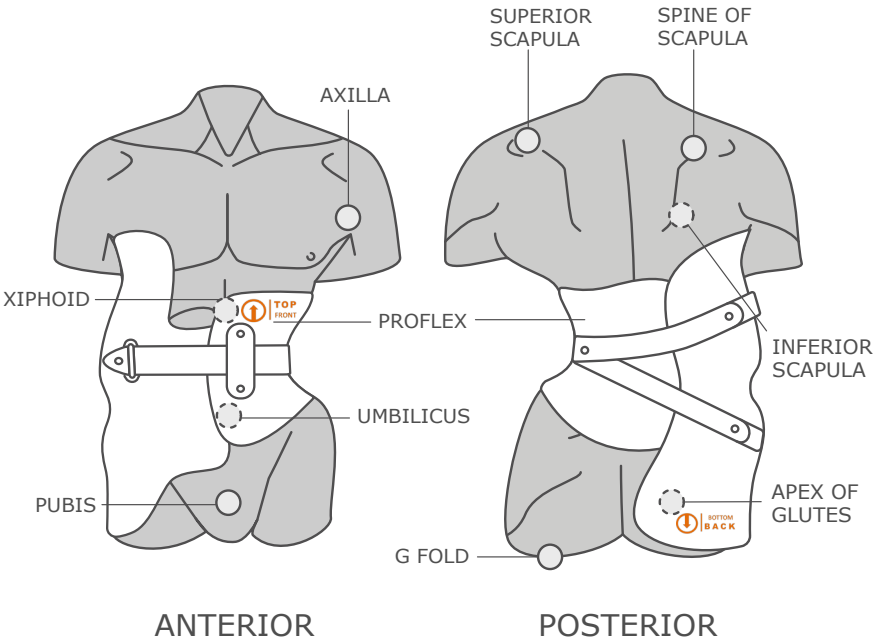
OPTIONS/VARIATIONS

- Shoulder ring
- Shoulder strap
- 1/16" PE tongue
- CDC Aggressive modification
- Vent holes

NOTE: Corrective forces are patient specific and depend on curve type and magnitude

NOCTURNAL PRO I

(L1300+)



F1200

CTQ MEASUREMENTS		
CTQ = Critical to Quality		
+ Scan or Cast		
Curve Type		
Curve Magnitude		
○ Cir	△ ML	□ Length
Xiphoid	Xiphoid	Nipple Line-Waist
Distal Rib	Distal Rib	Waist-Inf Scapula
Waist	Waist	Waist-Xiphoid
ASIS	ASIS	ASIS-Waist
Trochanter		Waist-Sym Pubis
		Waist-Coccyx
		Waist-G Fold
		Waist-Trochanter

MODIFICATIONS/TRIMLINES
• CDC Standard • 1" Below Axilla • Apex of Glutes • 1" Pubis

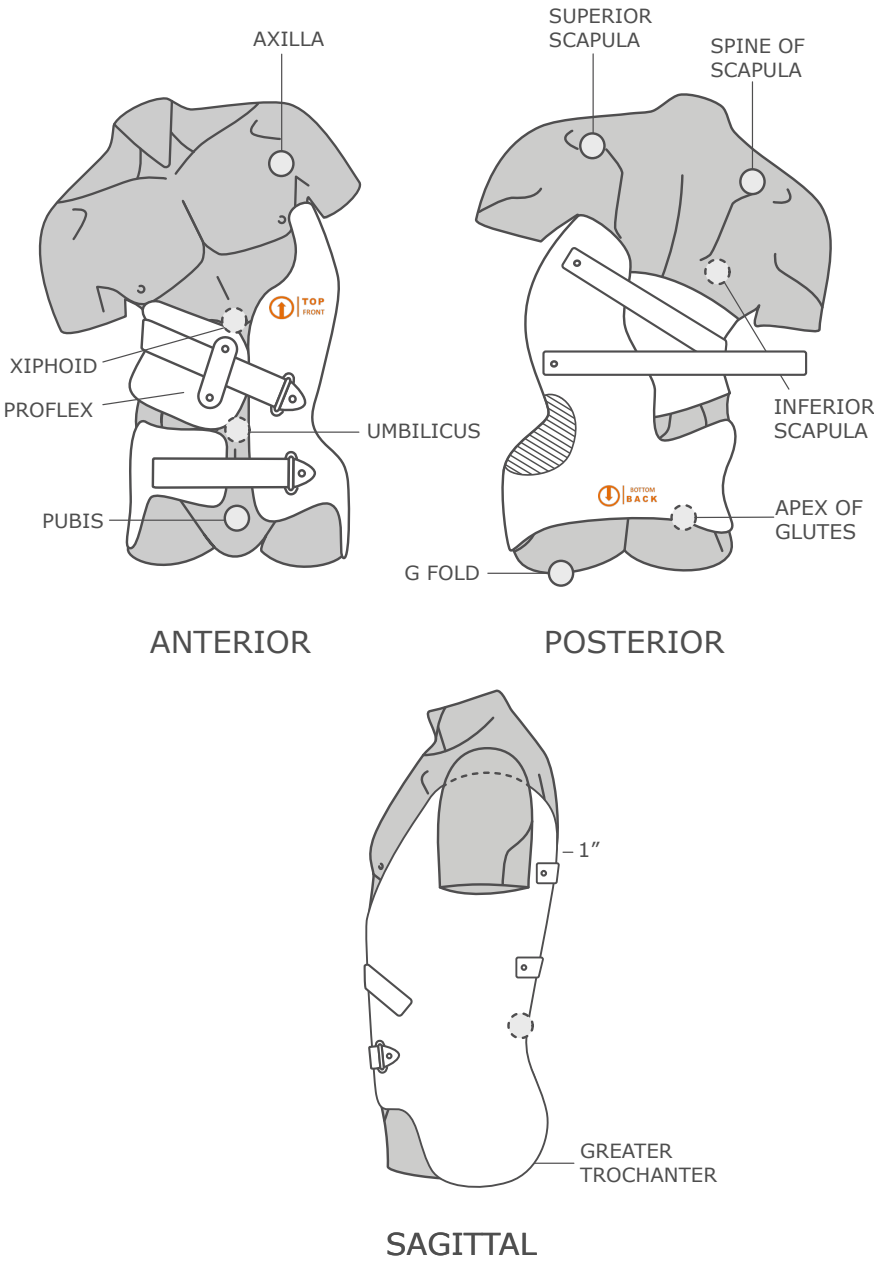
STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • 5/32 Proflex dynamic pane • White Dacron straps/attached (2) • 1.5" Plastic chafe (2)

OPTIONS/VARIATIONS
• CDC Aggressive modification • Vent holes

NOTE: Corrective forces are patient specific and depend on curve type and magnitude

NOCTURNAL PRO II

(L1300+)



F1200

CTQ MEASUREMENTS			+ Scan or Cast
CTQ = Critical to Quality			
Curve Type			
Curve Magnitude			
○ Cir	△ ML	□ Length	
Xiphoid	Xiphoid	Nipple Line-Waist	
Distal Rib	Distal Rib	Waist-Inf Scapula	
Waist	Waist	Waist-Xiphoid	
ASIS	ASIS	ASIS-Waist	
Trochanter		Waist-Sym Pubis	
		Waist-Coccyx	
		Waist-G Fold	
		Waist-Trochanter	

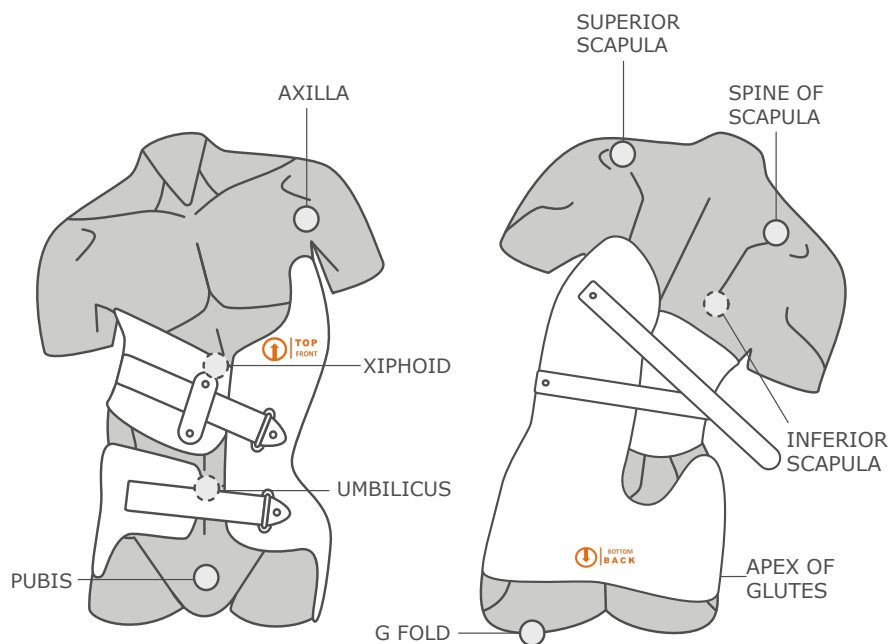
MODIFICATIONS/TRIMLINES
• CDC Standard • 1" Below Axilla • Apex of Glutes • 1" Pubis

STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • 5/32 Proflex dynamic pane • 1.5" White Dacron straps/attached (2) • Plastic chafe (2)

OPTIONS/VARIATIONS
• CDC Aggressive modification • Vent holes

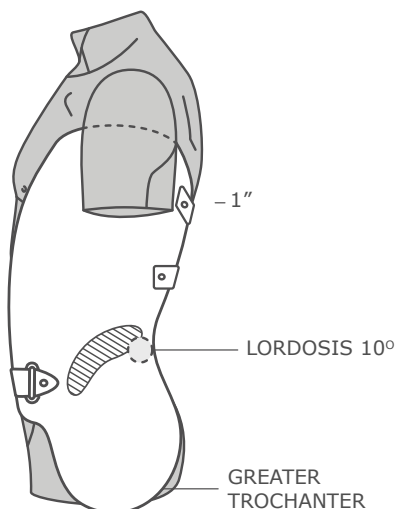
NOTE: Corrective forces are patient specific and depend on curve type and magnitude

NOCTURNAL PRO III (L1300+)



ANTERIOR

POSTERIOR



SAGITTAL

F1200

CTQ MEASUREMENTS

CTQ = Critical to Quality

+ Scan
or Cast

Curve Type

Curve Magnitude

○ Cir	△ ML	□ Length
Xiphoid	Xiphoid	Nipple Line-Waist
Distal Rib	Distal Rib	Waist-Inf Scapula
Waist	Waist	Waist-Xiphoid
ASIS	ASIS	ASIS-Waist
Trochanter		Waist-Sym Pubis
		Waist-Coccyx
		Waist-G Fold
		Waist-Trochanter

MODIFICATIONS/TRIMLINES

- CDC Standard
- 1" Below Axilla
- Apex of Glutes
- 1" Pubis

STANDARD MATERIAL

- 5/32 Modified polyethylene, finished
- 5/32 Proflex dynamic pane
- 1/4" Aliplast Liner
- White Dacron straps/attached (3)
- 1.5" Plastic chafe (2)

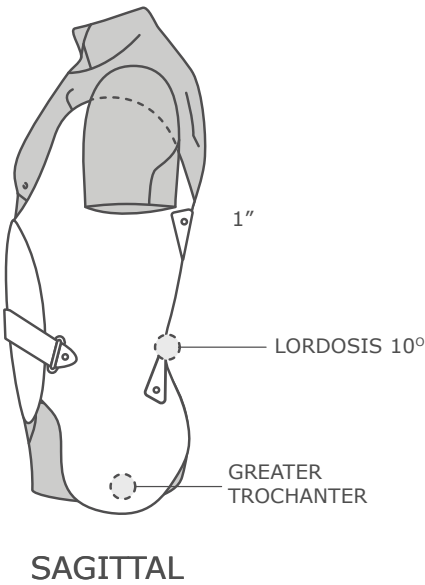
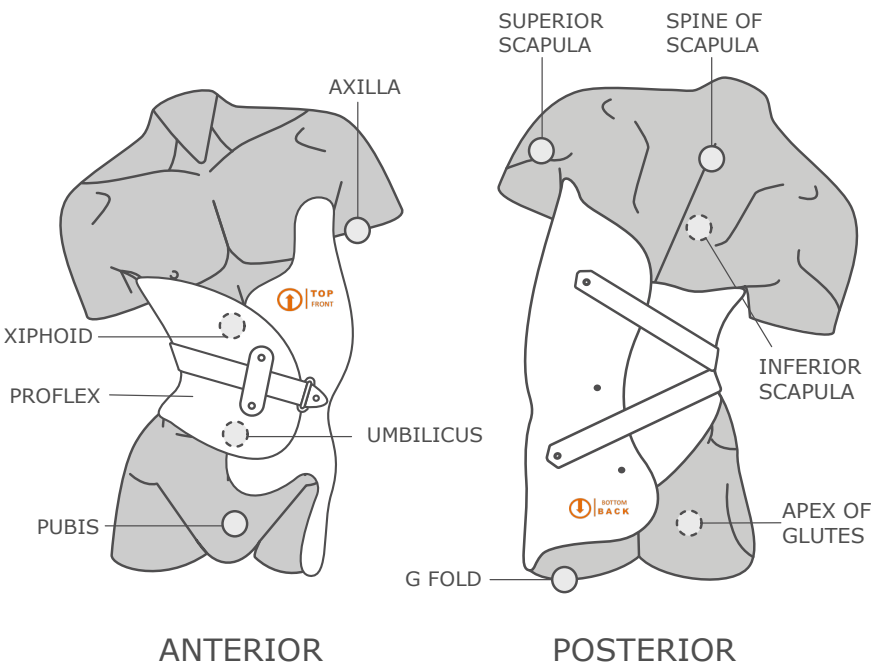
OPTIONS/VARIATIONS

- CDC Aggressive modification
- Vent holes

NOTE: Corrective forces are patient specific and depend on curve type and magnitude

NOCTURNAL PRO IV

(L1300+)



F1200

CTQ MEASUREMENTS		
CTQ = Critical to Quality		
+ Scan or Cast		
Curve Type		
Curve Magnitude		
○ Cir	△ ML	□ Length
Xiphoid	Xiphoid	Nipple Line-Waist
Distal Rib	Distal Rib	Waist-Inf Scapula
Waist	Waist	Waist-Xiphoid
ASIS	ASIS	ASIS-Waist
Trochanter		Waist-Sym Pubis
		Waist-Coccyx
		Waist-G Fold
		Waist-Trochanter

MODIFICATIONS/TRIMLINES
• CDC Standard • 1" Below Axilla • Apex of Glutes • 1" Pubis

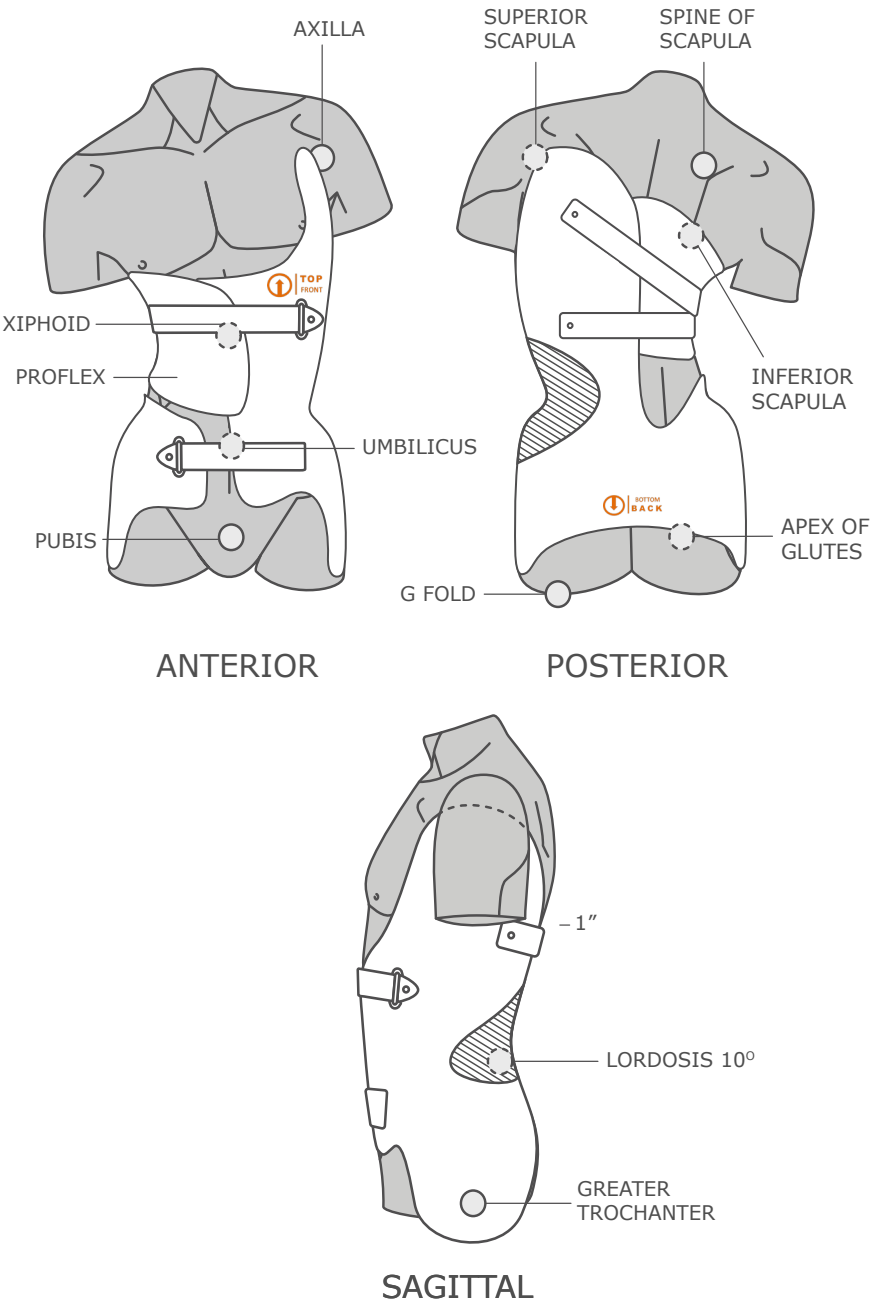
STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • 5/32 Proflex dynamic pane • White Dacron straps/attached (2) • 1.5" Plastic chafe (1)

OPTIONS/VARIATIONS
• CDC Aggressive modification • Vent holes

NOTE: Corrective forces are patient specific and depend on curve type and magnitude

NOCTURNAL PRO V

(L1300+)



F1200

CTQ MEASUREMENTS			+ Scan or Cast
CTQ = Critical to Quality			
Curve Type			
Curve Magnitude			
☐ Cir	☐ ML	☐ Length	
Xiphoid	Xiphoid	Nipple Line-Waist	
Distal Rib	Distal Rib	Waist-Inf Scapula	
Waist	Waist	Waist-Xiphoid	
ASIS	ASIS	ASIS-Waist	
Trochanter		Waist-Sym Pubis	
		Waist-Coccyx	
		Waist-G Fold	
		Waist-Trochanter	

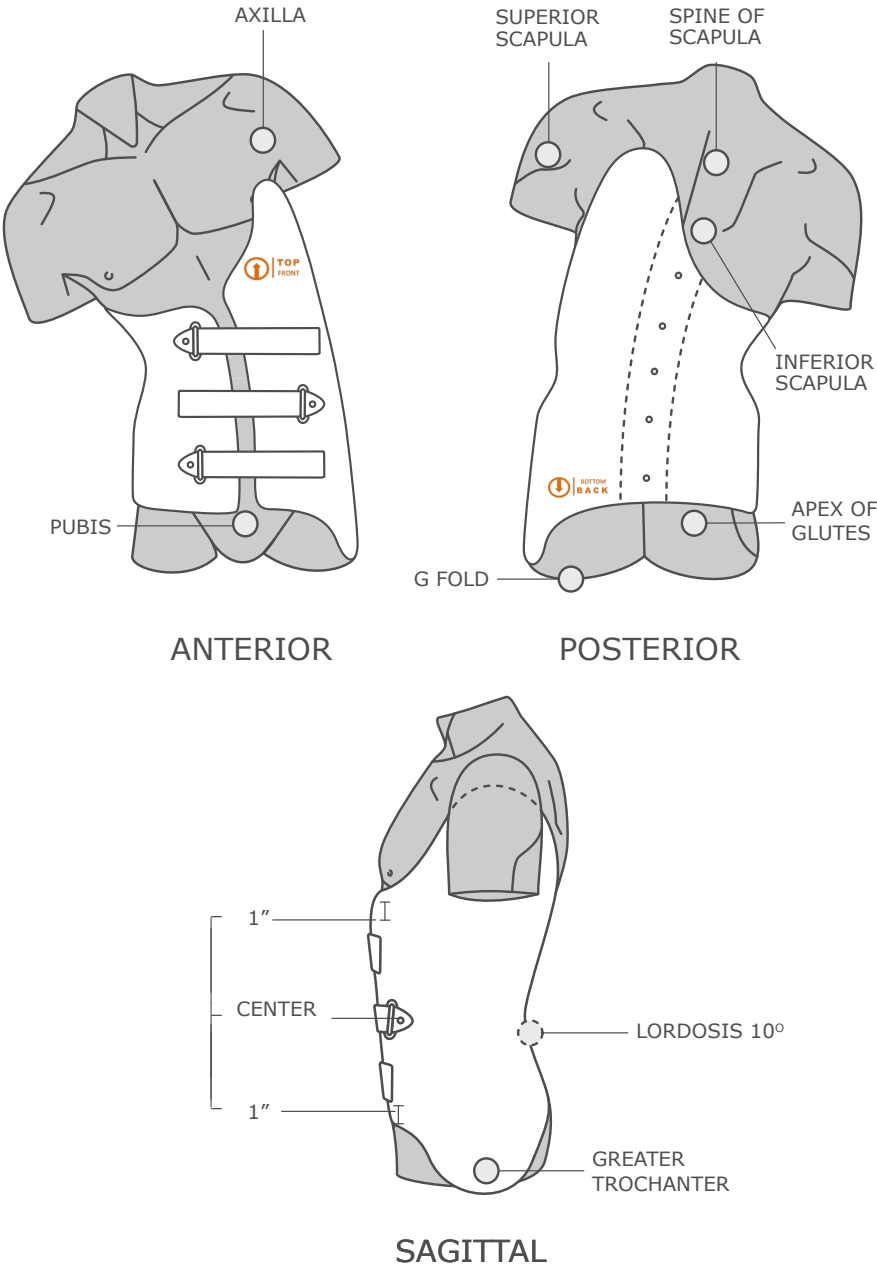
MODIFICATIONS/TRIMLINES
• CDC Standard • 1" Below Axilla • Apex of Glutes • 1" Pubis

STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • 5/32 Proflex dynamic pane • White Dacron straps/attached (2) • 1.5" Plastic chafe (1)

OPTIONS/VARIATIONS
• CDC Aggressive modification • Vent holes

NOTE: Corrective forces are patient specific and depend on curve type and magnitude

NOCTURNAL BENDING BRACE (NBB) (L1300+)



F1300

CTQ MEASUREMENTS			+ Scan or Cast
CTQ = Critical to Quality			
Curve Type			
Curve Magnitude			
○ Cir	△ ML	□ Length	
Xiphoid	Xiphoid	Nipple Line-Waist	
Distal Rib	Distal Rib	Waist-Inf Scapula	
Waist	Waist	Waist-Xiphoid	
ASIS	ASIS	ASIS-Waist	
Trochanter		Waist-Sym Pubis	
		Waist-Coccyx	
		Waist-G Fold	
		Waist-Trochanter	

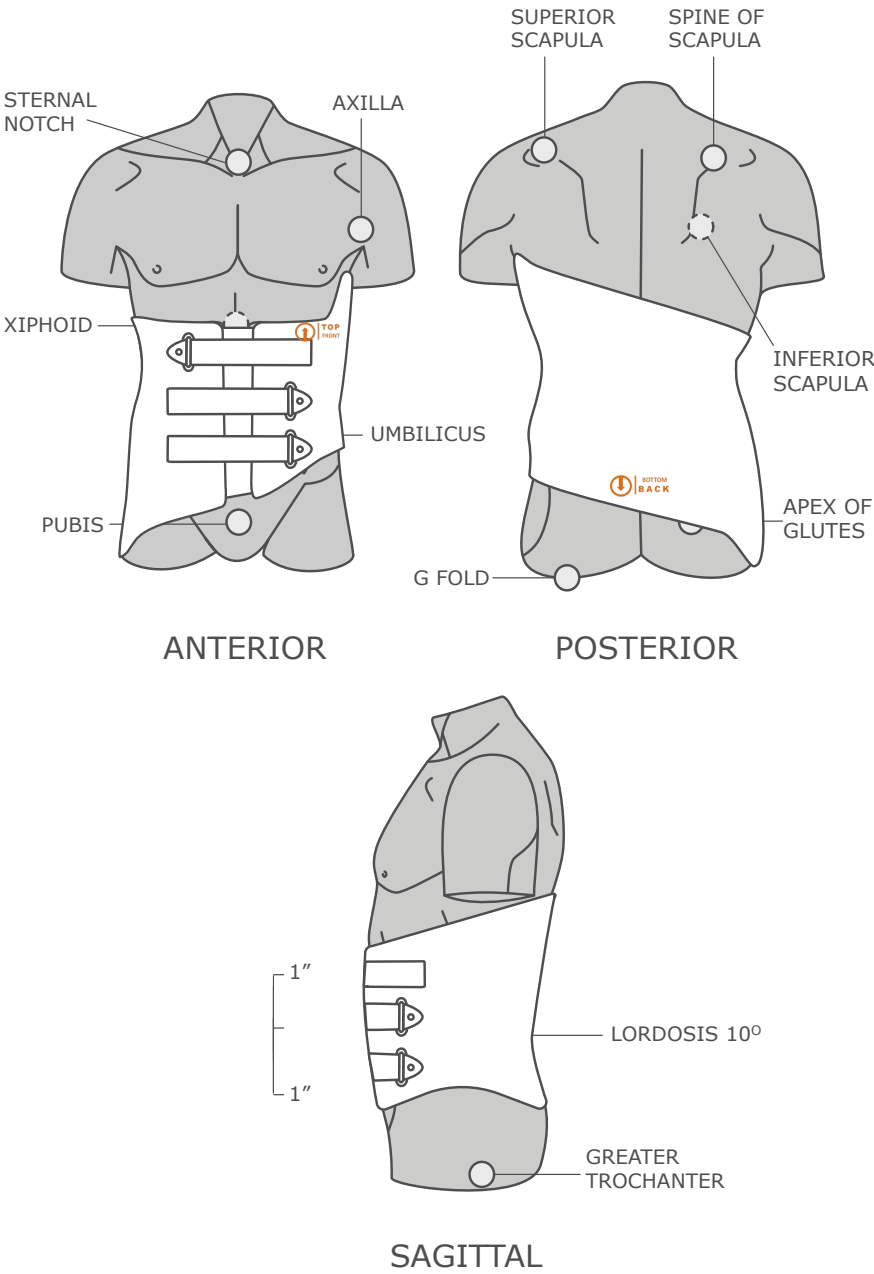
MODIFICATIONS/TRIMLINES
• CDC Standard • 1" Below Axilla • Apex of Glutes • 1" Pubis

STANDARD MATERIAL
• 1/8" Copoly, finished • 1/4" Aliplast liner • White Dacron straps alternating (3) • 1.5" Plastic chafes (3) • Anterior opening • Plastic chafes (3) • Two part, speedy rivets (5)

VARIATIONS
• NBB-II – Dynamic strap • NBB-Lite

NOTE: Corrective forces are patient specific and depend on curve type and magnitude

NOCTURNAL PROVIDENCE STYLE (L1300+)



CTQ MEASUREMENTS			+ Scan or Cast
CTQ = Critical to Quality			
Curve Type			
Curve Magnitude			
 Cir	 ML	 Length	
Xiphoid	Xiphoid	Nipple Line-Waist	
Distal Rib	Distal Rib	Waist-Inf Scapula	
Waist	Waist	Waist-Xiphoid	
ASIS	ASIS	ASIS-Waist	
Trochanter		Waist-Sym Pubis	
		Waist-Coccyx	
		Waist-G Fold	
		Waist-Trochanter	

MODIFICATIONS/TRIMLINES
• CDC Standard • 1" Below Axilla • Apex of Glutes • 1" Pubis

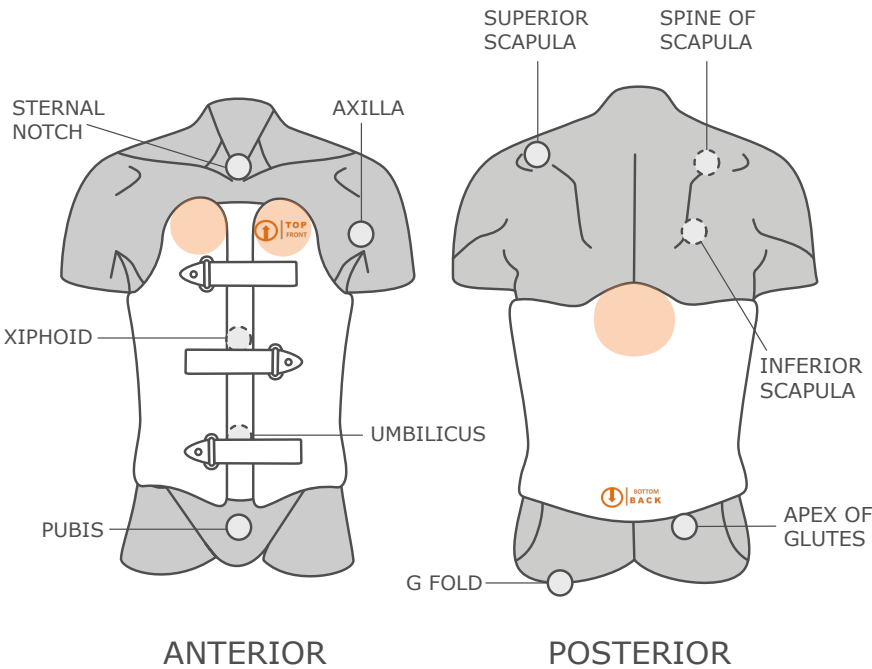
STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • 1/4" Aliplast liner • White Dacron straps/attached (3) • 1.5" Dacron rollers chafes (3) • Anterior opening • 1/16" Polyethylene Tongue

OPTIONS/VARIATIONS
• CDC Aggressive modification • Vent holes

NOTE: Corrective forces are patient specific and depend on curve type and magnitude

KYPHOSIS

(L0480)



L6900

CTQ MEASUREMENTS			+ Scan or Cast
CTQ = Critical to Quality			
Curve Type			
Curve Magnitude			
☐ Cir	<input type="triangle"/> ML	☐ Length	
Xiphoid	Xiphoid	Nipple Line-Waist	
Distal Rib	Distal Rib	Waist-Inf Scapula	
Waist	Waist	Waist-Xiphoid	
ASIS	ASIS	ASIS-Waist	
Trochanter		Waist-Sym Pubis	
		Waist-Coccyx	
		Waist-G Fold	
		Waist-Trochanter	

MODIFICATIONS/TRIMLINES
• CDC Standard Kyphosis

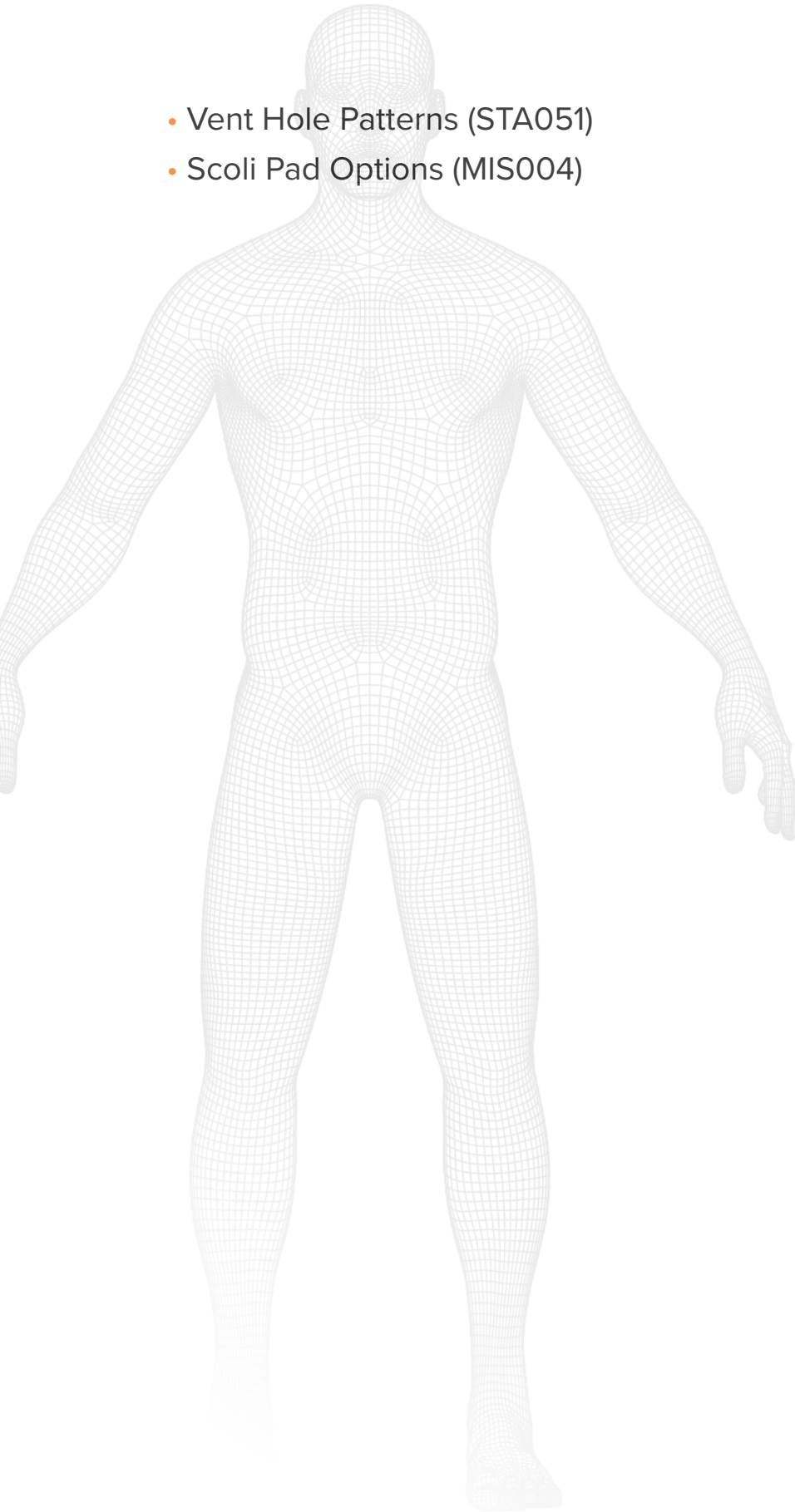
STANDARD MATERIAL
• 5/32 Modified polyethylene, finished • White Dacron straps/attached (3) • 1.5" Plastic chafes (3) • Anterior opening • 1/4" Aliplast padding at proximal anterior and posterior trimlines

OPTIONS/VARIATIONS
• Vent holes • Bi-valve LSO with T Bar • Posterior opening with T Bar

NOTE: Corrective forces are patient specific and depend on curve type and magnitude

OPTIONS

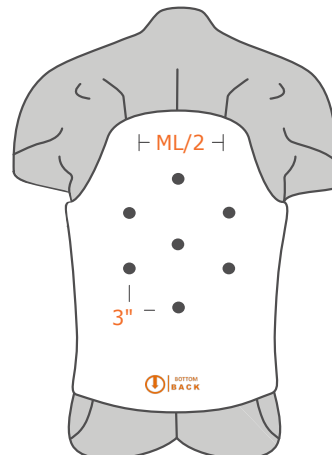
- Vent Hole Patterns (STA051)
- Scoli Pad Options (MIS004)



VENT PATTERNS



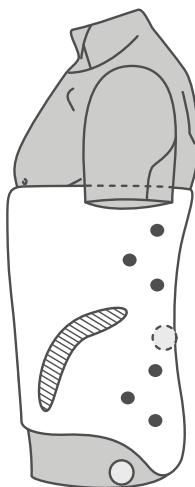
LSO
POSTERIOR



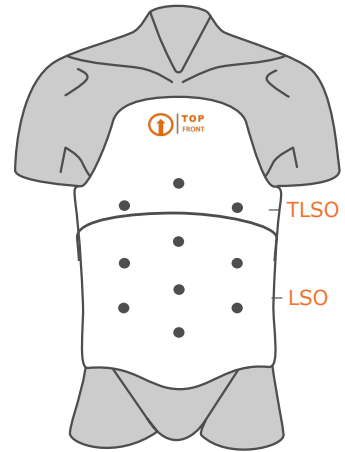
TLSO
POSTERIOR
7-Hole Pattern



PRE-FAB
POSTERIOR
10-Hole Pattern



SAGITTAL

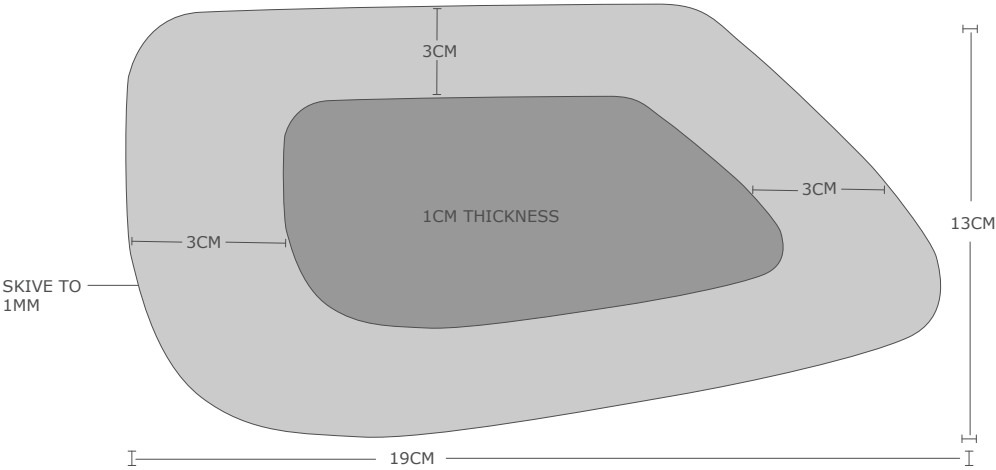


LSO
ANTERIOR
10-Hole Pattern

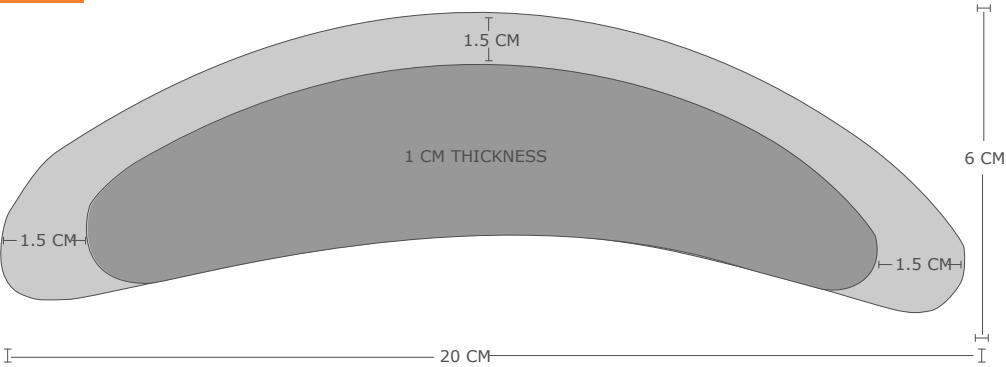
TLSO
ANTERIOR
10-Hole Pattern

SCOLIOSIS

THORACIC PAD



CREST PAD



LUMBAR PAD

