

### DUROWALL" BELTING CATALOG

APACHE | TRICO INDUSTRIAL DIVISION



## INNOVATIVE MATERIAL HANDLING SOLUTIONS

DUROWALL™ SIDEWALL BELTING HAS A PROVEN TRACK RECORD SPANNING ALMOST 30 YEARS IN LIGHTWEIGHT AND HEAVY-DUTY CONVEYING APPLICATIONS. Our belting provides exceptional performance and long life on all types of conveyors.

The Apache | Trico Industrial Division has provided thousands of Durowall belts to the food, recycling, agricultural, metals, steel, cement, energy, and construction industries.

#### CONTINUOUS IMPROVEMENT

Durowall is committed to being the market leader for both heavy-duty and lightweight sidewall belting. We are continually investing in equipment and personnel, devoting considerable resources to research and development.

Apache conducts rigorous quality testing. We benchmark our products against the competition, ensuring we always provide our customer with the highest quality products.

#### BENEFITS THAT MATTER

Durowall belts can be configured to meet the unique needs of your application, no matter how large or small your conveying needs. In addition, the belts have lower power requirements, which reduce energy costs, require less lifetime maintenance, and can handle a wide range of materials.

#### COMPANYWIDE SUPPORT

Durowall belting products are supported by experienced and skilled teams – including manufacturing, engineering, field services, product specialists, and our nationwide sales force. We have the expertise you need!

Dedicated to providing first rate service and dependable products, the Apache | Trico Industrial Division is one of the largest conveyor belting fabricators in North America. The result? Customers always get the right belting for the right application. Built to last and designed to work.

 That's the value and dependability you've come to expect from Apache.

# DESIGNING CONVEYOR BELTING IS A COLLABORATION

## ENGINEERING STRENGTH

Whether your Durowall™ application is heavy-duty or lightweight, new or existing, horizontal or vertical, we will find the right combination of sidewall, cleats, and belting needed for your specific application every time.

## DESIGNING PERFORMANCE

Our exclusive sizing program can engineer a belt for any conveying system. Helping us understand the conveyor's operating conditions – including pulley size, belting speed, incline angle, temperature, and material being conveyed – allows us to design solutions that work.

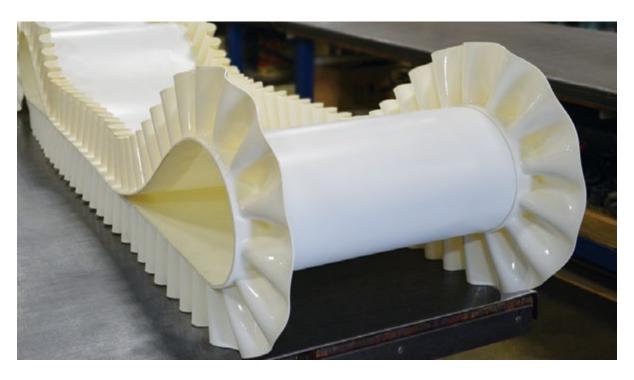
## **FABRICATING**

Durowall Sidewall Belting is built to the highest industry standards. Our quality components – crossrigid base belting, corrugated sidewalls, and cleats – combined with our superior fabrication methods, ensure you're getting a product that will meet your needs and exceed your expectations.

Whatever your conveyor needs – steep-angled or flat, lightweight or heavy-duty – Apache can work with you to design a belting solution that works and lasts.



APACHE TRICO



## LIGHTWEIGHT DUROWALL SIDEWALLS

LIGHTWEIGHT

Apache | Trico Industrial Division offers a wide variety of material and fabrication solutions to tackle your most challenging conveying applications, and our lightweight Durowall corrugated sidewall belting is your problem solver for light-duty, steep-angle conveying.

- Our lightweight Durowall is offered in polyurethane, thermoplastic, and conventional rubber compounds for belting, cleats, and sidewalls
- These belts are suitable for applications requiring FDA/USDA/3A certifications, oil resistance, and anti-static properties

#### LIGHTWEIGHT CORRUGATED SIDEWALLS

Polyurethane corrugated sidewalls are available when food-grade requirements apply, and they provide consistent dependability. Black rubber sidewalls are used when more durability is needed or in applications that require a more robust construction.





HEIGHT		MINIMUM PULLE	Y DIAMETER
1-3/16"	30 mm	2-3/8"	60 mm
1-1/2"	40 mm	3-1/8"	80 mm
2"	50 mm	3-1/2"	90 mm
2-3/8"	60 mm	4-3/8"	110 mm
3-1/8"	80 mm	5-1/2"	140 mm
3-15/16"	100 mm	6-19/64"	160 mm

LIGHTWE	LIGHTWEIGHT RUBBER SIDEWALL							
HEIGHT		BASE WID	гн	MINIMU	MINIMUM PULLEY DIAMETER			
1"	25 mm	1-1/2"	40 mm	2"	50 mm			
1-1/2"	40 mm	1-1/2"	40 mm	3"	75 mm			
2"	50 mm	1-1/2"	40 mm	3"	75 mm			





Various cleat sizes and styles are available. Sidewalls and cleats are also available in various colors.



#### LIGHTWEIGHT CROSS-RIGID BELTING

STYLE	TOTAL PLIES	TENSION PLIES	PIW RATING	CROSS- RIGID PLIES	COVERS	PIW WEIGHT	OVERALL GAUGE (OAG)	MINIMUM PULLEY	COLOR	COMPOUND
AXB 150 (Anti-static)	3	3	150	3	1/32 x Bare	0.100	0.156	3"	White	RMV
AXB 150 (Anti-static)	3	3	150	3	1/32 x Bare	0.100	0.156	3"	Black	RMV
AXB 160	3	2	160	1	1/16 x Bare MOR	0.140	0.25	4"	Black	Rubber
AXB 200 (Anti-static)	4	4	200	4	1/32 x Bare	0.140	0.22	6"	White	RMV
AXB 200	4	4	200	4	1/32 x Bare	0.140	0.22	6"	Black	RMV



Durowall lightweight belts are popular for operating in confined areas, particularly when products need to be quickly elevated.

Belt components are attached to the base belts by hot air and high frequency (HF) welding or hot bonded for rubber components. The base belts are engineered to provide the features needed for maximum performance – transverse stiffness prevents bowing at conveyor transition/change-ofdirection points, while also remaining flexible in the longitudinal direction to negotiate small pulleys.

#### POPULAR APPLICATIONS INCLUDE:

- Bakeries
- Cereals
- Confection
- Wood products
- Recycling
- Glass
- Dairies
- Warehousing
- Injection molding
- Metal parts
- Plastics
- Light
- manufacturing

**MOR** = Moderate Oil Resistance

**RMV** = Rubber Modified Vinyl CLEAT MODIFICATION OPTIONS

#### LIGHTWEIGHT DUROWALL CLEAT OPTIONS

Cleats are used to convey materials up an incline and prevent product rollback, as well as to create separation between the products or materials that are being conveyed. Other names for cleats include flights, lugs and profiles. We offer a wide variety of cleat styles and patterns to fit every application need.

We have the cleat profiles to fit your application:



Cut-out

Notched

Indented







C-Cleat (Scoop Cleat) for steeper angles



Thin Line Cleat for smaller pulley diameters and lower tonnages

### Full-width

MINIMUM PULLEYS							
ТҮРЕ	RUBBER SOLID	PVC-RV SOLID	URETHANE SOLID	ТҮРЕ	RUBBER SOLID	PVC-RV SOLID	URETH/ SOLID
O Lug	3"	2-1/2"	2-1/2"	1-1/2" (40mm) Thin Line			3.5"
A Lug	3"	2-1/2"	3"	2" PVC Heavy-Duty		5.5"	
B Lug	3-1/2"	3"	3-1/2"	2" T-cleat	6"	5"	5"
C Lug	4"	4"	4"	2" (50mm) Thin Line			3.5"
1/4" x 1/4" Lug	3"	2-1/2"	2-1/2"	2" Urethane Heavy-Duty			8"
1/2" x 1/2" Lug	3-1/2"	3"	/ _	2" C-cleat	6"	6"	
1/2" T-cleat	3"	3"	3"	2-1/2" T-cleat	8"	6"	
1" T-cleat	3 4"	3"	3"	2-1/2" C-cleat	8"	7"	
		-	3	3" PVC Heavy-Duty		6.5"	
1" C-cleat	4"	4"		3" T-cleat	10"	8"	
1" (25mm) Thin Line			3.5"	3" C-cleat	10"	9"	
1-1/4" (30mm) Thin Line			3.5"	4" T-cleat	12"	10"	
1-1/2" T-cleat	5"	4"	4"	5" T-cleat	18"		
1-1/2" Urethane Heavy-Duty			6"	6" T-cleat	18"		

Tapered

When a belt involves multiple components (ie. base belt, V-guide, sidewall, flange, lacing, etc.) it is important to consider the minimum pulley dimensions of all components when determining an appropriate minimum pulley dimension for the entire conveyor system.

#### NOTE:

HF welding can be done on any thermoplastic belt.

#### LIGHTWEIGHT HF WELDED CLEATS

High frequency (HF) welded profiles combine advanced technological features to optimize productivity, and provide quality custom products to meet your customers' unique application needs. The HF welding process creates a strong, consistent bond between two polymers. This strong bond helps ensure food safety while offering protection from bacteria contamination. It's also ideal for small parts, metals and plastics. HF welded features include:

Longer service life

Thin line and footless cleats available

A variety of sizes and thicknesses available

Easy cleaning

- Stronger bond than traditional welding methods
- Custom profiles available for specialty applications
- Narrow-base widths to wrap smaller pulleys
- Precision placement of cleats







#### HEAVY-DUTY

HEAVY-DUTY

## **HEAVY-DUTY DUROWALL<sup>™</sup> SIDEWALLS**

Apache | Trico Industrial Division has sold thousands of heavy-duty sidewall belts utilized in numerous applications including mining, power, waste water treatment, recycling, cement, tunneling, steel manufacturing, and food processing. Our exclusive sizing program can engineer a belt for any system.

#### HEAVY-DUTY CROSS-RIGID BASE BELTING

- Cross-rigid base belting helps deliver material in an efficient, cost-effective manner for applications that may challenge standard belts. That means a leaner, more efficient system without worry of belt failure or downtime.
- Our Durowall cross-rigid belting is specifically designed to provide lateral stiffness and eliminate belt bowing and cupping at directional change points on the conveyor. It also helps reduce belt sag on the return run.
- Although the belt is rigid in the transverse direction, it remains flexible in the longitudinal direction. This unique design allows the belt to operate on standard pulleys and not interfere with the conveyor structure.





**Conventional Belting** 

Carrying Side



Cross-Rigid Belting Carrying Side





**MOR** = Moderate Oil Resistance

HEAVY-DU	TY CROS	S-RIGID	BELTIN	G						
STYLE	TOTAL PLIES	TENSION PLIES	PIW RATING	CROSS- RIGID PLIES	COVERS	PIW WEIGHT	OVERALL GAUGE (OAG)	MINIMUM PULLEY	COLOR	COMPOUND
AXB 150	3	2	150	1	1/16" x Bare MOR	.14	.25	4"	Black	Rubber
AXB 220	4	2	220	2	1/8" x 1/16" *	.295	.465	14"	Black	Rubber
AXB 225	3	1	225	2	1/8" x Bare MOR	.160	.25	8"	Black	Rubber
AXB 330	5	3	330	2	1/8" x 1/16" *	.325	.510	16"	Black	Rubber
AXB 440	6	4	440	2	3/16" x 1/16" *	.360	.605	24"	Black	Rubber
AXB 550	7	5	550	2	3/16" x 1/16" *	.400	.700	30"	Black	Rubber

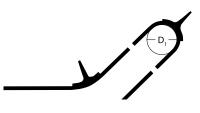
\* Available Rubber Compounds: Black Standard, Black-Oil-Resistant, Black Static-Conductive, Black (MSHA) and Black Heat-Resistant (400°F)

#### **CLEAT OPTIONS**



#### HEAVY-DUTY DUROWALL™ CLEAT OPTIONS

We designed our Durowall belting with a variety of cleating styles and compounds to allow for maximum operational efficiency based on the required capacity and angle of inclination. Belting is available with both single-piece and two-piece combination cleats. Many of the larger cleats we provide are fabric reinforced to withstand punishment at loading points (two-piece cleat compounds include rubber, polyurethane, hightemp polyurethane and UHMW). Taller cleats are normally bolted to the sidewalls for additional strength and flexibility.





T-CLEAT Add 25% to min. pulley diameters for special compounds									
Cleat height	1"	1.5"	2"	2.5"	3"	3.5"	4"	5"	6"
Min. Pulley Dia. (D1)	4"	5"	6"	8"	10"	14"	14"	18"	18"



C-CLEAT (SCOOP CLEAT) Add 25% to min. pulley diameters for special compounds								
Cleat height	2"	2.5"	3"	3.5"	4"	4.5"		
Min. Pulley Dia. (D1)	6"	8"	8"	10"	12"	12"		

$\square$	

S-CLEAT Add 25% to min. pulley diameters for special compounds									
Cleat height	3"	3.5"	4"	4.5"	5"	5.5"	7"	9"	
Min. Pulley Dia. (D1)	8"	11"	12"	12"	16"	16"	16"	20"	

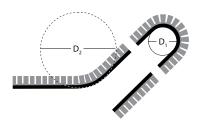


BOLTED CLEAT (S OR T) STYLE PADDLE Add 25% to min. pulley diameters for special compounds								
Cleat height	4.5"	5"	5.5"	6"	7"	9"		
Min. Pulley Dia. (D1)	14"	14"	14"	14"	14"	14"		

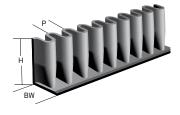
#### HEAVY-DUTY

#### HEAVY-DUTY CORRUGATED SIDEWALLS

Durowall<sup>™</sup> Corrugated Sidewalls (available in heights from 1" to 12") are manufactured in a variety of compounds to best suit your application needs. All of our corrugated sidewalls have high tensile strength properties for added flexibility and toughness in order to withstand cutting, tearing and abrasion. We also offer fabric reinforced sidewalls for products greater than 6" tall to provide additional strength and tear resistance.









#### DUROWALL CORRUGATED SIDEWALLS

Add 25	Add 25% to min. pulley diameter for other than black standard							
HEIGHT (H)	BASE WIDTH (BW)	PITCH (P)	WEIGHT (Per Foot/Lbs.)	CLEAT HEIGHT (Recommended)	D1 (Min. Pulley Dia.)	D2 (Min. Deflection Dia.)		
2"	2"	1-5/8"	.80	1-1/2"	6"	10"		
2-1/2"	2"	1-5/8"	.95	2"	6"	12"		
3"	2"	1-5/8"	1.10	2-1/2"	8"	16"		
4"	2"	1-5/8"	1.40	3-1/2"	10"	18"		
5"	2"	1-5/8"	1.75	4-1/2"	12"	20"		
6"	2"	1-5/8"	2.20	5-1/2"	14"	24"		

Any height available between 2" high and 6" high

H	
BV	

Add 25% to min. pulley diameter for other than black standard									
HEIGHT (H)	BASE WIDTH (BW)	PITCH (P)	WEIGHT (Per Foot/Lbs.)	CLEAT HEIGHT (Recommended)	D1 (Min. Pulley Dia.)	D2 (Min. Deflection Dia.)			
6"	3"	2-13/32"	3.0	5-1/2"	14"	24"			
8"	3"	2-13/32"	4.3	7"	16"	32"			
10"	3"	2-13/32"	5.5	9"	20"	40"			
12"	3"	2-13/32"	6.8	11"	24"	48"			

DUROWALL FABRIC REINFORCED CORRUGATED SIDEWALLS



## LIGHTWEIGHT DUROWALL™ DESIGN WORKSHEET

NAME:		
COMPANY:		
PHONE #:		
EMAIL:		
DATE:		

#### Here's what we need from you.

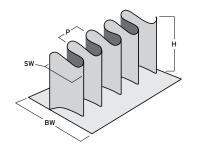
To ensure your belt is manufactured with a proper sidewall specification, please refer to the below diagrams and complete the following:

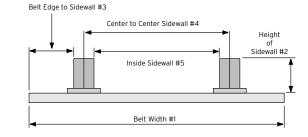
в	ELT STYLE						
►	Part number:						
►	Description:						
в	ELT LENGTH AND WIDTH:						
	Length:						
►	Width (see illustration, #1):						
М	INIMUM PULLEY DIAMETER:						
SI	ZE OF SIDEWALL (#2):						
Ρl	PLEASE NOTE PLACEMENT OF SIDEWALL:						
►	Flush with edge of belt:						
►	Indent from belt edge to corrugation (#3):						
IN	SIDE SPACE BETWEEN SIDEWALL:						
►	Center to center of sidewall (#4):						
►	Inside corrugation to inside corrugation (#5):						
N	NOTE PLACEMENT OF CLEATS (IF APPLICABLE):						
►	Cleat height:						
►	Cleat spacing:						
►	Cleat width:						
►	Style: T-cleat, scoop, lug:						
	This has been a finally filled the assumption of indext frame side well also to						

- Flush to foot of wall / flush to corrugation / indent from sidewall cleat?
- Additional sidewall to be left loose for field joining?

#### DUROWALL™ DIMENSIONS

	INCH	MM	INCH	MM								
HEIGHT "H"	1-1/4	30	1-1/2	40	2	50	2-3/8	60	3-1/8	80	3-15/16	100
BASE WIDTH "BW"	1-3/16	30	1-3/16	30	2-3/8	60	2-3/8	60	2-3/8	60	2-11/64	55
SIDEWALL WIDTH "SW"	3/4	19	3/4	19	1-1/2	40	1-1/2	40	1-1/2	40	1-49/64	45
PITCH "P"	7/8	22	7/8	22	1-9/16	40	1-9/16	40	1-9/16	40	2	50





Note: All lightweight, white Durowall sidewall is measured using the standard metric system.



Scan with smartphone or visit www.apache-inc.com to download worksheets

APACHE |

## HEAVY-DUTY DUROWALL™ DESIGN WORKSHEET

NAME:
COMPANY:
PHONE #:
EMAIL:
DATE:

#### Here's what we need from you.

Copies of this data sheet can be used to help determine your belting requirements. Accurate and complete information is necessary to recommended the proper solution for your application.

۲	City:	State:		Zip:				
►	Contact:	Phone:		Fax:				
►	Reference Info.:							
۲	Material:							
►	Density:	Size:	Min:		Max:			
►	Surcharge:	Temperature:	Min:	Max:				
۲	Capacity:		Belt speed (chec	kif maximum):				
►	Width preference:		Pulley diameter	(checkif maximu	um):			
۲	Oil resistance required?  Yes	s 🗌 No						
E)	(ISTING BELT SPECIFICATION FOR	REPLACEMENT PART/PF	RICING					
	CROSS SECTION OF BELT	SW R C R T WIDTH ME C Type S						
•	Belt length:	Belt type:	►	Horizontal of inclin	ie ( <mark>A</mark> ):			
•	Belt width:	Pulley dia.:	•	Lift (B):				
►	Sidewall height (H):	Defl. dia.:	•	Infeed/or horiz. conv. (C):				
►	Sidewall recess (R):	F	Discharge (D):					
►	Sidewall width (SW):	Cleat spacing:	Þ	Incline length (E):				
►	Effective width (EW):	<ul> <li>Cleat fastened to wall</li> </ul>	ll?: ►	Incline angle (F):				
►	Cleat height (C):	► Fasteners:	Þ	Horizontal length (	G):			



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