LIGHTWEIGHT Conveyor Belting – PVC and Rubber









GOODYEAR GOODYEARBELTING.COM



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Reference Guide

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PVC and Rubber Belting

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General Application Use – Quick Reference Guide*

	Food Handling	Agriculture & Harvesting	Package Handling	Light Industrial & Automation
PVC Conveyor Belt Products				
Chevron™		•	•	
Cleated Incline		•	•	
Griptite™			•	
Griptop®		۲	•	•
Korowhite™	•	٠		•
Pack-EZ S/Weave			•	
Herringbone		•	•	
Rubber Conveyor Belt Products				
Big Red™ Silicone				•
Butyl (Hot'N Cold)	•			•
Caripack®			•	•
Cleat-Rite "OSM"				•
Diamond Incline		٠	•	•
Gin Flashing				
Griptop® – Gum		•		
Griptop® – Nitrile	•	•		
Griptop® – Rubber				۲
Hot Stock & Water			•	•
Nitrile – Black	•	•	•	•
Pack-EZ Prem			•	
Potato Belt		•		
Ribflex®				•
Ridgetop™	•	•		•
Sani-Brite™	•			•
SaniWhite®	•			•
Sheeting		•	•	
Slide-A-Pack®			•	•
Sliptop™			•	
Teflon White	•			•
V-Cleat			•	•

* NOTE: For complete application use details on each conveyor belt, see pages 8 and 9 for general use details and/or refer to the individual conveyor belt product descriptions.

Selecting the correct conveyor belt product can be difficult. To help you determine the correct products for





HBD/Thermoid, Inc. ... THE LEADING EDGE IN LIGHTWEIGHT BELT TECHNOLOGY

HBD/Thermoid[®], Inc. has been a leading innovator in lightweight belt technology for decades. Many improvements that have now become industry standards were pioneered in our research laboratories.

We were the first to use 100% polyester and 50-50 polyester-cotton blends for greater strength and moisture resistance in our lightweight fabrics...the first to use a nitrile rubber to dramatically improve the oil resistance in our food belts. We developed the special adhesive treatment for synthetic carcasses that helps keep plies from separating.

When it comes to conveyor belt technology, HBD/Thermoid never lets down, which is why so many customers look up to us for engineering excellence.



SPECIALLY DESIGNED FABRICS AND COVERS FOR CONVEYOR SERVICE

We don't have to rely on commercial fabrics. Instead, our textile engineers develop special weaves designed to handle a wide range of tensions, loads, pulley sizes and troughing angles. Our cover compounds are developed by our own experienced research chemists to cope with conditions like oil and grease, heat and cold, chemicals, acids, moisture and abrasion. So every Made-In-USA Thermoid belting is designed to give you maximum service for your dollar.



UP-TO-DATE MANUFACTURING CONDITIONS

The HBD/Thermoid plant in Oneida, Tennessee, has more than 300,000 square feet, and is a modern belt-making plant using state of the art equipment. We manufacture a full-line of lightweight rubber and PVC conveyor belting under the cleanest conditions. We've invested heavily in this lightweight belting plant because we intend to make our belts the very best available.



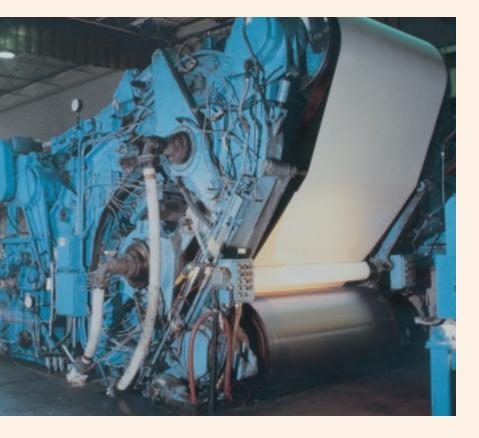




PVC AND RUBBER BELTING

No other manufacturer offers both in such a complete range of tensions and a wide choice of textures.

When HBD/Thermoid recommends a belt, you can be sure we have nothing to gain by suggesting any one type over another. We manufacture both types: PVC and rubber. So you can trust us to recommend the belt that's really best for you.



Thermoid lightweight belting comes in a wide variety of tensions, fabrics and cover compounds. Each belt has two things in common: efficiency and economy. Our lightweight belting also features colors that are scientifically developed in one of the



world's leading laboratories, so they're easy on the eyes under all types of illumination. Plus we offer special surfaces from extrasmooth to deeply textured. So whatever your particular requirement, you can find a Thermoid lightweight belt to match. Here are the features that make our belts a better value.

FLEXIBILITY

Our Customers can be confident when using our belt products in all applications. Our lightweight belting offers lower cost plus endurance when used in shorter centers and smaller pulleys.

LIGHTWEIGHT CONSTRUCTION

It takes less power to drive our belts. That can result in savings with today's high energy costs.

EXCELLENT DIMENSIONAL STABILITY

There's little need to take-up adjustments and few work stoppages. The drop in downtime means a rise in profitability.

HIGH STRENGTH AND ABRASION RESISTANCE

Adds up to a long, useful service life and a great return on your investment dollar.







Call Toll Free: 1-866-711-4673 International:+1-727-342-5086

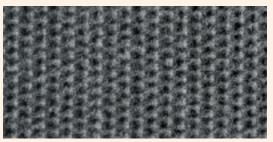
BIG RED™ SILICONE



GRIPTITE™



NYLOCK® - BLACK, SBXSB



GRIPTOP®

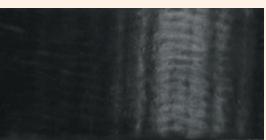






SANIWHITE[®] & SANI-BRITE[™] NITRILE – WHITE

NYLOCK® COS











GRIPTOP® – BLUE & ORANGE, CARBOXYLATED



PVC HERRINGBONE



SUPERIOR FABRICS

Designed and woven specifically for our conveyor belting products.

SPECIAL TREATMENT FOR SYNTHETIC FABRICS

We apply a special adhesive treatment to most synthetic fabrics. This increases adhesion by 50%, so covers and plies resist separation far better than they would in an untreated belt. This improves service life and increases overall cost effectiveness. (Letter "T" in fabric name designates such treatment, as in APT35 or PNT50.)

POLYESTERS (AP, APT)

These polyester belts are the most dimensionally stable for wet service. Polyesters won't shrink, stretch, rot or mildew when exposed to moisture, which makes them especially effective where wetness is a problem. Strong and tough, these polyester belts will hold mechanical fasteners particularly well.

POLYESTER-NYLON (PN, PNT)

Polyester warp members running longitudinally give this fabric low elongation for minimum stretch. Resilient nylon filler members run transversely to hold fasteners tightly, especially where shock is involved. PN's perform well under frequent stop-and-go conditions or where products may jam.

SPECIAL COTTON-POLYESTER BLENDS (SCP)

A 50-50 blend, SCP's are 40-50% stronger than cotton belts and more dimensionally stable. They won't stretch or shrink in the presence of moisture like cotton or cottonnylon belts and have little or no camber. These fabrics have more bulk than straight



polyesters for customers who prefer a heavier feel. SCP's can be used without a cover for a lower coefficient of friction.

POLYESTER-COTTON BLENDS (PCB)

A heavy-duty version of the SCP, better suited for heavier, textured surfaces; 50-50 blends of polyester and cotton run both longitudinally and transversely. PC's are stronger and tougher than cotton and cotton-nylon fabrics. They also hold fasteners better.

NYLOCK®

Designed exclusively by HBD/Thermoid, Nylock belting has a tough, interwoven single-ply polyester body, 20% lighter in relation to its strength than equally-rated fabrics. Polyester tension filaments are interlocked with 100% staple polyester fillers, then these are fully protected with 100% staple polyester face and back warps. Nylock belting has excellent resistance to impact, 6½ times more resistance to tear than belting with ordinary fabrics. It works well in the most demanding applications.





SUPERIOR COVERS

Compounded specially by the rubber and chemical experts at HBD/Thermoid.

PVC NYLOCK®

This is a proprietary premium PVC belting product. This belting has excellent resistance to chemicals and acids. It cleans easily, doesn't stain as readily as most other types. It's available in highly oil resistant tan and white, and is USDA-approved for carrying meat and poultry. It also meets all FDA requirements for food processing.



NITRILE RUBBER

Nitrile rubber belting is our most popular belting for food handling. Nitrile rubber has excellent oil resistance and withstands grease, fats and acids. It's USDA-approved for carrying meat and poultry, plus it meets all the requirements of the FDA. Nitrile rubber belting is available in white, tan, reddish brown and black (non FDA and USDA).

CARBOXYLATED NITRILE

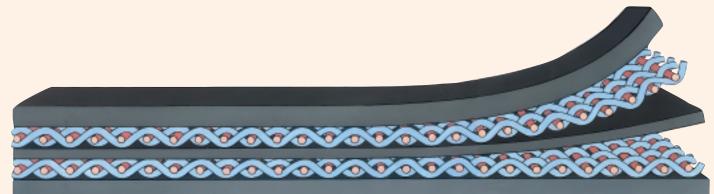
An abrasion resistant rubber that is used in our blue and orange Griptop[®] belts. This compound also offers good oil and chemical resistance.

RUBBER

HBD/Thermoid is one of the nation's most experienced rubber compounders. Rubber covers are especially useful for carrying frozen goods or in low-temperature environments. Our rubber covers meet FDA requirements and are available in white and tan.

BUTYL

This all-temperature belt compound is suitable for temperatures as high as 300°F and as low as -65°F. It is particularly suitable for food processing lines involving both cooking and freezing operations. Available in white.







BELTING SELECTION GUIDE

A quick easy-to-read reference for matching our lightweight conveyor belts to your particular applications.

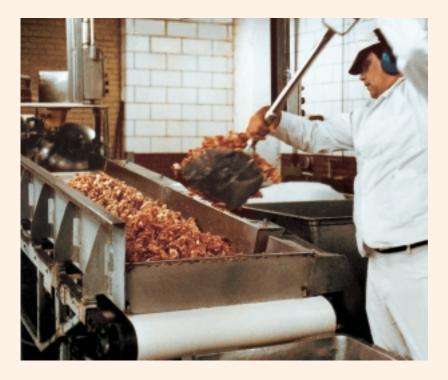
FOOD HANDLING

MEATS & POULTRY (USDA, FDA)

Saniwhite[®] & Sani-Brite[™] nitrile rubber (all fabrics) Korowhite[™] (125, SMC x F covers & CHV x F) Hot 'n Cold[™] butyl (Polyester fabrics) PVC (Polyester fabrics) Ridgetop[™] Nitrile

HOT, OILY FOODS (FDA)

Saniwhite[®] & Sani-Brite[™] nitrile rubber (all fabrics) Butyl (Hot 'n Cold[™]) Teflon



FROZEN FOODS (SUB-ZERO TEMPERATURES) Butvl (Hot 'n Cold™)



FRUIT & VEGETABLE PROCESSING (FDA)

Saniwhite[®] & Sani-Brite[™] nitrile rubber (all fabrics)
Rubber, if oil-resistance not required (all fabrics)
Korowhite[™] 125, 150

NUT PROCESSING (FDA)

Nitrile rubber (all fabrics) PVC (Polyester fabrics)

AGRICULTURE

INCLINE SERVICE (FDA)

Griptop[®] for 35 degree inclines (PCB, SCP, PNT fabrics. Tan rubber and reddish-brown nitrile) Korowhite[™] Chevron[™] (USDA & FDA) Korowhite[™] Cleated Incline (USDA & FDA) Ridgetop[™] (USDA & FDA) Korowhite[™] Herringbone (USDA & FDA) for up to 30 degree inclines Korowhite[™] Griptite

POTATO HARVESTING & UTILITY SERVICE

Potato (2-ply synthetic fabrics) PVC Nylock®

HARVESTING EQUIPMENT

Potato PVC Nylock[®] Chevron[™] PVC Nylock[®] Cleated Incline PVC Herringbone for 30 degree inclines (USDA & FDA)





TUBE CONVEYOR AND BUNK FEEDER SYSTEMS

PVC Herringbone for 30 degree inclines (USDA & FDA) PVC Nylock[®] Chevon[™]

- PVC Nylock® Cleated Incline
- PVC Nylock[®] low-temp

Cotton processing equipment

Gin flashing material

PACKAGE HANDLING

BELTS FOR INCLINES(1)

Griptop® — 35 degree inclines

- Gripper[™] Light impression for up to 20 degree inclines
- PVC Chevron[™] and Cleated Incline Molded pattern helps move loose material on moderate inclines to 35 degrees depending on product
- PVC Nylock[®] for up to 18 degree inclines at normal temperatures; up to 15 degree inclines at low temperatures
- PVC Herringbone for up to 30 degree inclines Griptite[™] for up to 20 degree inclines



BELTS FOR STEEP INCLINES OF 45 DEGREES

Diamond Incline V-Cleat Ribflex

BELTS FOR HORIZONTAL SERVICE

Caripack® Slide-A-Pack® Sliptop® Sheeting Belt Hot Stock & Water



LIGHT INDUSTRIAL & AUTOMATION

BELTS WHEN OIL IS PRESENT

Saniwhite[®] & Sani-Brite[™] nitrile rubber (Polyester, PNT, SCP) Griptop® (Nitrile & Carboxylated Nitrile) for 35 degree inclines Sliptop® Teflon

BELTS FOR OIL-FREE SERVICE

PVC Nylock[®] & Korowhite[™] Hot Stock & Water Caripack® Slide-A-Pack® Potato (Utility)

SPECIAL APPLICATION BELTS

Big Red[™] — Hot or Cold Tacky Material Plywood processing — Tray Lumber service — Lumber Rubber processing — Hot Stock & Water Cotton gins — Flashing material







FOOD HANDLING

From fruit to nuts to frozen fish. We can serve up a belt that's correct with any type of food you're processing.

Some foods are oily, greasy or wet. Some are carried frozen, some steaming hot. Many leave juices, acids or particles that can stain or contaminate. Some foods grind at a belt cover and wear it away.

Because different foods behave so differently, HBD/Thermoid offers a wide selection of lightweight carcasses and specially-compounded covers designed to deal with a variety of conditions. All meet the very latest FDA and USDA requirements for food, drugs and cosmetics, with the exception of black nitrile.



SANIWHITE[®] AND SANI-BRITE[™] NITRILE RUBBER BELTS Our most popular belting for general food handling.

Saniwhite[®] and Sani-Brite[™] nitrile rubber belts are a truly all-around belting with



rubber belts stand up to temperatures from 20°F to 212°F. Their smooth cover finishes resist abrasion, chipping and pitting, and help make cleaning easy and fast.

Saniwhite and Sani-Brite nitrile rubber belts come with special white covers developed to lower eye strain on inspection lines. Customer can choose fabrics from polyesters, SCPs and PNs, plus ply and cover constructions for light or medium duty.

WHITE TEFLON BELT For easy product release.

Our Teflon covered food belt will convey food and confectionary products during processing and prevent them from sticking to the belt. The easy release of hot or sticky materials from the belt makes it ideal for many light industrial applications as well.

KOROWHITE[™] BELTS

The most effective combination of high strength and maximum resistance for your most demanding applications.

A tough, single-ply construction of interwoven polyester cords, fully protected by 100% staple polyester face and back warps. Korowhite belting is at least 20% lighter than equally-rated belts, yet it has greater impact resistance and up to 6½ times more tear resistance than ordinary belting. It has very low stretch and won't camber in service or in storage. Totally saturated with a white, premium PVC compound, it is oil resistant and has excellent resistance to moisture, chemicals and food acids. It's also stain resistant...the





HOT'N COLD[™] BELT All-temperature belt for extreme hot and cold conditions.

White butyl belt is designed for hot service applications up to 300°F and freezing cold ones down to -65°F. Its 3-ply APT 35 polyester body has excellent fastenerholding power and resists effects of heat, cold and moisture.

Hot'N Cold is ideal for food processing plants, dairies or bakeries where extreme temperature conditions exist.

GRIPPER[™] BELT The economical belt for inclines up to 20°.

Gripper is an advanced HBD/Thermoid belt design manufactured in fabric impression. Its lightly-textured impression surface is excellent for carrying products or packaged goods up inclines up to 20°. It's normally constructed with white nitrile rubber with 2 or 3 plies of APT 35 fabric, and is also available in other carcass constructions.



CHEVRON[™], CLEATED INCLINE, HERRINGBONE, PVC, AND RUBBER GRIPTOP[®] BELTS For inclines of 30° and 35°.

Chevron has a molded chevron pattern in the PVC cover for handling inclines up to 30°, depending upon products carried. The chevrons help resist food material trapping and carrying back. They also drain off juices or liquids very easily. These belts conform well to either flat or troughed conveyors.

PVC Cleated Incline belt's bucket-shaped pattern provides a firmer grip, moving bulk or packaged materials up inclines as great as 35°, depending upon product carried. Flexing provides self-cleaning action and helps prevent carry-back.

Available in white food grade and in black. Herringbone has a molded herringbone cleat pattern in its PVC cover for handling product up to 20 degree inclines.

Griptop belting has a deeply-textured surface with thousands of tiny fingers that can cope with angles up to 35°. While not available with a white cover, Griptop belting does meet FDA requirements in tan rubber or reddish-brown nitrile for added oil resistance.

RIDGETOP™ BELT The incline belt for meat and food products.

Ridgetop belting has a molded cleat ¹/₈" high on 1" centers running across the width of the belt. The Ridgetop cleat design enables the belt to carry meat and food products up 20-30° inclines. The cleat design also prevents wet or moist products from sticking to the belt by allowing the product's surface to rest on the cleats. Any suction effect between the product and the







AGRICULTURE

Custom orders for the OEM. Replacement belts for the farmer. Either way, we work with customers closely to keep America's crops on the move.

HBD/Thermoid offers dependable, cost-saving lightweight belts for farm implements, harvesting equipment, and storage and retrieval systems.



OEM's can order through our Oneida location. We offer a broad range of fabrics, covers and special cover surfaces to meet nearly all field equipment and systems needs. We also offer products to meet USDA and FDA requirements.

If you need a specially-designed, made-toorder belt, our technical staff at Oneida is well equipped to handle your requirements



designers to draft precise material and dimensional specs. Our sales staff will coordinate and follow through to be sure you get exactly what you order...on time and on budget.

In addition, your HBD/Thermoid Industrial Distributor is within easy reach, providing not only the lightweight belting you need, but important services like slitting, cleating, splicing and repair.

Your distributor usually carries a complete stock of the types of belting used around the farm. But if you have a special request, he'll be happy to order it for you.

NYLOCK[®] AND KOROWHITE[™] BELTS Great strength with moderate oil and excellent chemical resistance, for those tough applications that demand both.

Strong enough to measure up to harvesting equipment and other heavy-duty implements. Resistant enough for fertilizers, feed and any oily crops you may be handling. Both belts have a unique carcass...a special weave of polyester cords that provides greater strength for its weight, plus added resistance to impact and up to 61/2 times the tear resistance of ordinary belting. The PVC top and bottom covers provide superior resistance to chemicals, food acids and moisture. What's more, both belts are economical because they're reasonably priced and give long service life. Nylock comes with black covers; Korowhite with an easy-to-clean white cover. Either can have a molded chevron or cleated pattern added during manufacture for carrying up

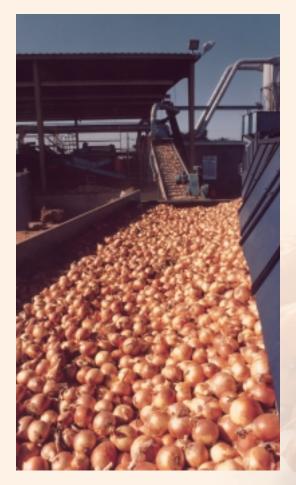
We Ship

World Wide



CHEVRON™, HERRINGBONE AND CLEATED INCLINE BELTS For bulk material and tube conveyor systems.

The molded chevron, herringbone or the bucket shaped pattern in the PVC cover helps move bulk materials like grain, feed and fertilizer efficiently up inclines as steep as 35°. The impressions resist the trapping or carry-back of material and readily drain off liquids. What's more, they're easy to clean. The covers have added abrasion resistance for longer service life with coarse materials. These belts are made with a thin, tough woven polyester carcass that can travel flat over head and tail pulleys, yet conform well to deep troughs and tubes to prevent the load from dusting and spilling.





POTATO BELTS The economical belting made especially for potato harvesting.

Excellent for the harvesting, processing and storage conveyors that handle potatoes. Potato belts have two plies of synthetic fabrics with black, abrasion-resistant top and bottom covers. For slider beds, they're available with a rubber top cover and a treated duck bottom to reduce the drag over the slider bed surfaces. The perfect low-cost solution to this specialty application.

GIN FLASHING MATERIAL The highest quality and most durable product available for gin flashing.

The body of this material is three strong plies of cotton fabric protected by a heat resistant cover compound. The all cotton fabric makes the material rigid enough for good seals and provides excellent bolt holding strength.





PACKAGE HANDLING

We have a belt that can help you get a better grip on your business.

In every situation, it's important to weigh original cost against expected service life to determine which belt will be the most cost-effective. For these reasons, HBD/Thermiod gives you an ample range of fabrics, weights and textures.



Surface friction requirements and economics are the biggest factors in belt selection for package handling.

For sharp inclines and declines, speciallydesigned gripping surfaces are a must to keep loads from slipping. Even flat applications put specific demands on

a belt, depending on the amount of on-and-off loading and the nature of material handled.

PACKAGE HANDLING BELTS Caripack[®], Slide-A-Pack[®], Sheeting and Sliptop[®] Belts.

These belts have good all-around properties for horizontal handling. The rubber friction surface helps keep even slippery packages moving along at belt speed. The black Caripack and tan Slide-A-Pack are good general purpose rubber belts for slider bed and live roller conveyors where there is no oil present. The reddish-brown nitrile sheeting belt is a good belt for those applications where oil is present. The Sliptop belt is manufactured with a treated nylon top ply to provide for easy package release or transfer from the belt. The tan nitrile compound gives the Sliptop belt excellent oil resistance as well.

SPECIALTY PACKAGE HANDLING PRODUCTS

Pack-EZ S/Weave belts are approved and preferred by all major, package our rugged PVC, low stretch belts have a single ply carcass of special S/Weave interwoven polyester fabric. Built tough, these belts are designed to resist stretching and fire. Pack-EZ special S/Weave fabric comes in various operating tension ratings, including 120#, 150# and 200#.

HBD/Thermoid®, Inc. manufactures a wide variety of package handling belts. These belts are product engineered to meet your service requirements. Our Pack-EZ Prem PH belts are another very popular package handling product group. Constructed of rubber/ monofilament fabrics, Pack-EZ Prem PH belts deliver solid performance while standing up to the rough, everyday demands required in package handling. These belts resist fire and stretching. The Pack-EZ Prem PH series is available in a wide range of product types to meet the many unique applications required in package handling. Choose from these options: 2 Ply 90#, 2 Ply 160#, 3 Ply 1354# and/or 3 Ply 200# with Bare X Bare or Light Impression X Bare.

GRIPTOP® INCLINE BELTS

The deep textured surface with raised rubber peaks grips each package and carries it up inclines as steep as 35°. Griptop belts are our most popular line of incline belts. They are available in black or non-marking tan rubber for general service and reddish-brown nitrile for applications where oil is present. Pure gum rubber works best where abrasion, tearing or gouging are problems with the general service Griptop belts. For the most severe abrasion applications choose blue or orange Griptop carboxylated nitrile belts.

STEEP INCLINE BELTS

Our full line of molded impression top, steep incline belts are ideal for carrying packages, cases, cartons, luggage and many products up inclines as steep as 45 degrees. The steep incline belts are available in the following three cover impressions: V-Cleat, Diamond Incline and Ribflex[®]. These belts are available in general service black rubber compounds, and some are stocked in non-marking tan or pure gum compounds. Our V-Cleat belt is also available in an oil





LIGHT INDUSTRIAL USES

Where productivity adds up to profit, our belts can help you step up the pace.

More and more manufacturers of automated equipment are looking to conveyor belts as an integrated part of their systems and products. Today's belts must often resist attack by industrial oils, grease and chemicals. They often need to operate effectively in low or high temperatures. The covers must be built tough enough to stand up to persistent impact and abrasion from all sizes and shapes of small parts. HBD/Thermoid belts serve all of these needs.

On assembly lines, our belts can move things from station-to-station as fast or slow as the schedule demands. Soft but contrasting colors go easy on the eyes while improving the level of quality control at inspection stations. The belts can be slit narrow enough to carry a single part at a time cost-effectively, or we can make them wide enough to move whole masses of parts at a steady rate.

To satisfy a variety of industry's needs, we offer general purpose and specialty belts with plenty of options.



"BIG RED™" SILICONE COVERED HOT STOCK & WATER BELT

"BIG RED" silicone covered Hot Stock & Water is designed for conveying hot or cold tacky material such as rubber or plastic stock in various stages of manufacturing. This special silicone treatment allows the cover of the belt to withstand material in

excellent release characteristics. The silicone covered top ply enables materials to be conveyed on gradual inclines without slipping back and yet, releasing from the cover at the end. BIG RED has a proven track record of performing exceptionally well in difficult applications such as conveying tire and hose stock, and plastics and vinyl materials.

NITRILE RUBBER BELTS For general utility.

Nitrile rubber belting offers a good combination of properties for a wide range of industrial uses. The cover offers superior resistance to oils, grease, alkalies, acids and moisture. It can withstand high surface temperatures up to 212°F. In the off-white color, it's well-suited for inspection lines and cleans up very easily. Also available in tan, green, black and reddishbrown. Carcass constructions can be chosen for light or medium duty from the polyesters, SCPs and PNs.

GRIPTOP® CARBOXYLATED NITRILE BELTS

For those applications where excellent abrasion, oil and chemical resistance is required. These belts are commonly used in the processing of paper and cardboard products, and some wood processing applications. The bright blue and orange colored impression covers allow for easy identification when color coding belts for certain applications in a plant.

HOT STOCK & WATER BELTS

Conveys the hot rubber stock while it's cooled with water in the various stages of rubber processing. The bare cotton, silver hard-duck top ply prevents the hot rubber stock from sticking to the belt. This belt is also ideal for other general service horizontal conveyors







CONVEYOR BELTING AND DATA SPECIFICATION SHEET

Customer		Dat	e
	DATA AND SP	ECIFICATIONS	
*Belt Width (inches)		Drive Details:	
*Length (ft.)one of three required: Belt Length Conveyor Centers Horizontal Centers		TypeSingle (S), Tandem (T), Dual (D) **Motor Horsepower Pulley SurfaceBare (B) or Lagged (L) Belt Wrap (Degrees) Location from Head (ft.)	
Elevation Lift (ft.) Lift (ft.) Slope (Degrees) *Belt Speed (ft./min.)	or Drop (ft.)	Material Info: Type Weight (PCF) Maximum Lump Size (inches)	
Capacity (tons/hr.): Average Maximum		Temperature (Degrees F.) OilNone (N), Some (S), Much (M) Drop to Belt (ft.)	
Pulley Diameters (inches): Head Drive Snub Tail Take-up Other		Idlers: Degree Trough Roll Diameter (inches) Trough Spacing (ft.) Take-up: TypeAuto (A) or Manual (M) Movement (ft.)	
Belt SpliceVulc (V) or Mech (M)		Location from Head (ft.)	
	CALCUL	ATIONS	
Maximum Operating Tension (lbs.) Unit Operating Tension (PIW) Horsepower Required		Load Support, Q (Ib./ft.) Wrap Factor, K	
	COMM	MENTS	
Previous Belt Spec Image: Constraint of the sector of			
·	BELT RECOM	MENDATIONS	
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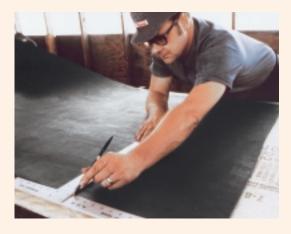
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BELT SPLICING

Either vulcanized splices or mechanical fasteners are recommended for HBD/Thermoid conveyor belts. The fastening method you select depends on the particular requirements of the conveyor system. Here are some reasons for and against each method-



VULCANIZED SPLICES

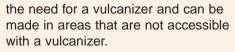
- The belt surface is smooth, an important consideration in many applications where other equipment operates in conjunction with the belt.
- If fine material is being handled, a vulcanized splice is necessary to prevent leakage at the joint.
- 3. Vulcanized splices allow the full rated working tension of the belt to be utilized.



AIR CURING CHEMICAL SPLICES Chemical systems of splicing provide an

GOODYEA

GOODYEARBELTING.COM



One company offering cold splice materials and instructions is: REMA-TIP-TOP North America, 200 Paris Ave., Northvale, NJ. Phone: 201/768-8100.

MECHANICAL FASTENERS

- 1. Require the least amount of time for splicing.
- The splice can be taken apart and rejoined if pin style fasteners are used. This should be considered if there is any possibility the belt or the system will be lengthened or shortened.



WIDTH TOLERANCES

Cut Edge Belts	Plus or Minus
Up to 24" inc.	1⁄8"
Over 24" to 36" incl.	3⁄16"
Over 36"	½ of 1%

THICKNESS TOLERANCES

Finished Belts	Plus or Minus
Overall Gauge	
Up to .094 (3/32)	.016
.095 to .156 (5⁄32)	.020
.157 to .344 (11/32)	.031



TROUBLESHOOTING

PF	ROBLEM	CAUSE	SOLUTION			
1.	Fastener fails	Improper fastener or technique	Check with fastener manufacturer comparing tension, overall belt gauge, pulley size. Recalculate tension requirement.			
2.	Belt stretching	Underbelted	Recalculate tension requirement. Double-check peak loads.			
3.	Belt shrinking	Water absorption	Cotton belting shrinks when water-saturated.			
		Heat memory of synthetic fabrics	All synthetic belting tends to show this characteristic. Check maximum temperature especially in cleaning and periodically adjust take-up.			
4.	Belt not	Mechanical malfunction	Improper alignment of pulleys or conveyor frame.			
	training properly	Crooked splice	Resplice. If mechanical splice, be sure ends are cut square.			
		Off-center loading	Adjust loading conditions to permit center load.			
5.	Edge fraying and wearing	Material build-up	Redesign or adjust loading, scraper, plows and/or cleaning mechanisms.			
6.	Belt becoming	Underbelted	Recalculate tension requirement.			
	too narrow	Fabric instability	Consider improved fabric.			
7.	Belt slipping	Insufficient slack-side tension	Adjust take-up toward maximum stop and/or shorten belt.			
8.	Belt cracking	Underbelted	Recalculate tension.			
	across top of belt	Pulleys too small	Recalculate tension and check minimum pulley requirements.			
		Ozone cracking	Check compound resistance.			
		Heat; extreme cold	Check compound resistance and system design.			
9.	Belt cracking	Underbelted	Recalculate tension.			
	across bottom of belt	Slipping on drive pulley	Adjust take-up to maximum stop.			
		Undersized pulley(s)	Check all pulley sizes – especially snub or reverse bend pulleys.			
10	Belt fasteners pull out	Fasteners too large	Follow fastener manufacturer's recommendations based on belt thickness.			
		Undersized pulleys	Use larger pulleys or thinner belts with strong synthetic fabrics.			
		Belt too tight	Check tension. Consider vulcanized splice.			
11	Excessive top cover wear	Skirt board/plow contact or material buildup	Adjust or redesign.			
		Frozen return idlers or material buildup on return side	Replace of free idlers or check cleaning devices or procedures.			
		Improper compound	Check with supplier.			





PROBLEM	CAUSE	SOLUTION
12. Excessive bottom cover	Material buildup on idlers or pulleys	Check cleaning devices.
wear	Belt slipping on drive pulley	Increase tension adjustment.
	Frozen idlers or pulley	Replace.
	Rough or worn slider bed or material buildup on bed	Replace or clean. Check procedures.
13. Belting deteriorating	Mildew and rot	Store in cool, dry, dark area, preferably on racks supported by rod through belt core.
in storage	Compound and fabric	Change cotton and rayon fabric belts to polyester.
14.Belt running in jerks or stalls	Suction created by flat belting on slider bed in presence of moisture	Interrupt surface of bed by welding or adhering 1/4 to 1/2 round rods.
15.Belt cover	Water impurity deposits	Improve or change water treatment procedure.
discoloration	Food stains	Change color to minimize. Check with manufacturer.
	Inadequate cleaning procedures	Daily cleaning with mild detergent and hot water usually sufficient. If additional cleaning is required mix a weak concentration of an oxidizing agent (Chlorox) with water and scrub belt. Rinse belt immediately after application.
16. Objectional	Inadequate cleaning	See #15.
taste or color	Particular customer standard	Check with manufacturer. FDA and MIS are concerned with toxicity. Taste and odor are subjective factors and standards are difficult to establish.
17.Cover becoming soft and tacky	Improper compound for service	Check with supplier.
18. Load slipping or sticking	Cover compound or type or surface not compatible with service	Check with supplier.

GENERAL RESISTANCE QUALITIES

	Resistance To							
Belt Specification	Acid	Alkali	Animal Oil	Vegetable Oil	Mineral Oil			
Butyl	Е	E	G	F	Р			
Nitrile	G	G	E	E	E			
Natural – SBR	G	G	Р	Р	Р			
Korowhite™– Interwoven Single Ply	G	G	G	G	G			





PVC BELTING DATA



PVC Nylock® (COS x SB)



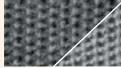
Griptop®



Chevron[™]



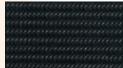
Cleated Incline



Package Handling



Griptite™



Pack-EZ PVC





1							
		PIW	Temperature	Nomi	Nominal Thickness (Inches)		Min.
Product	Color	Tension Rating	Range °F	CBS	COS x SB	SB x SB	Pulley Diameter
PVC Nylock							
Industrial Weight Belts							
KN 120	Black	120	0 to +180	5/32	9/64	1/8	3"
KN 150	Black	150	0 to +180	13/64	11/64	5/32	6"
KN 200	Black	200	0 to +180	16/64	7/32	7/32	8"
KN 120 Low Temp.	Black	120	-30 to +180	5/32	9/64		3"
Incline Belts							
KN 120 Griptop x SB	Black	120	0 to +180		17/64		3"
KN 150 Griptop x SB	Black	150	0 to +180		9/32		3"
KN 120 Chevron x SB	Black	120	0 to +180		7/32		3"
KN 120 Cleated Incline x SB	Black	120	0 to +180		1/4		3"
KN 120 Herringbone x SB	Black	120	0 to +180		1/4		3"
Package Handling Belts							
KN 120 SB x SB	Black	120	0 to +180		5/32	9/64	3"
KN 150 SB x SB	Black	150	0 to +180		3/16	11/64	6"
KN 120 Griptite x SB	Black	120	0 to +180		9/64		3"
Pack-EZ PVC S/Weave	Black	150	0 to +180			11/64	6"
Pack-EZ PVC S/Weave	Black	200	0 to +180			7/32	10"
Korowhite Belts							
KW 125 SMC x F	White	125	0 to +180		9/64		3"
Korowhite Incline Belts							
KW 125 Chevron x F	White	125	0 to +180		7/32		3"
KW 125 Cleated Incline x F	White	125	0 to +180		1/4		3"
KW 120 Herringbone x F	White	125	0 to +180		1/4		3"
KW 125 Griptite x F	White	125	0 to +180		9/64		3"

- COS = Coat One Side
- = Alligator Staple = Alligator Lacing
- = Clipper CBS = Coat Both Sides

AS

AL

С

- F = Friction Surface SB = Slider Bed
- SMC = Smooth Cover





Approx. Wt. Per Sq. Ft. (Lbs.)				Suggested Mechanical Fasteners									
		Meets	Meets	CBS				COS x SB			SB x SB		
CBS	COS x SB	SB x SB	FDA	USDA	AS	AL	C	AS	AL	C	AS	AL	C
1.0	.9	.70	No	No	125	20	1	125	20	1, 2 SP	125	20	1
1.3	1.1	.80	No	No	187	25	3	187	25	3	187	25	1, 2 SP
1.7	1.4	1.00	No	No	187	27	4	187	27	4	187	27	3, 4
1.0	.9	.70	No	No				125	20	1, 2 SP			
	1.2		No	No				125	20	1, 2 SP			
	1.3		No	No				310	35	4			
	1.1		No	No				125	20	2 SP			
	1.1		No	No				125	20	1, 2 SP			
								125	20	1, 2 SP			
	.9	.70	No	No							125	20	1
	1.1	.80	No	No							187	25	1, 2
	.9		No	No				125	15	1A			
		1.02	No	No							187	25	1, 2
		1.17	No	No									4
	1.0		Yes	Yes				125	20	1, 2 SP			
										, -			
	.9		Yes	Yes				125	20	2 SP			
	1.0		Yes	Yes				125	20	1, 2 SP			
			Yes	Yes				125	20	1, 2 SP			
	1.0		Applied For	Applied For				125	20	1, 2 SP			
	1.0		For	For				120	20	1,201			





RUBBER BELTING DATA

	Product	Color ⁽¹⁾	Standard Cover Gauge	Fabric	Standard Skim Coats	Nominal Overall Thickness	Approx. Wt. per Sq. Ft. (Lbs.)
	2 Ply APT35 Nitrile	W, T, B	3/64 x FS	Treated Polyester	.060"	9/64"	1.010
	2 Ply APT35 Nitrile	W, T, B	^{3/64} x FS	Treated Polyester	.010"	3/32"	.684
	3 Ply APT35 Nitrile	W, T, B	3/64 x FS	Treated Polyester	.020"	9/64"	.949
SaniWhite® & Sani-Brite™	3 Ply APT35 Nitrile	W, T, B	^{3/64} x FS	Treated Polyester	.010"	1/8"	.882
Nitrile White	2 Ply PNT50 Nitrile	W, T, B	^{3/64} x FS	Treated Polyester/Nylon	.010"	7/64"	.738
	3 Ply PNT50 Nitrile	W, T, B	^{3/64} x FS	Treated Polyester/Nylon	.010"	5/32"	.980
	3 Ply SCP23 Nitrile	W, T, B	3/64 x FS	Cotton/Polyester	.010"	3/32"	.670
	2 Ply SCP23 Nitrile	W, T, B	^{3/64} x FS	Cotton/Polyester	.010"	7/64"	.755
	3 Ply SCP23 Nitrile	W, T, B	3/64 x FS	Cotton/Polyester	.010"	9/64"	.913
	4 Ply SCP23 Nitrile	W, T, B	3/64 x FS	Cotton/Polyester	.010"	11/64"	
Hot 'N Cold™–Butyl	3 Ply APT35 Butyl	w	1/32 x FS	Treated Polyester	.010"	7/64"	.750
	2 Ply APT35 Teflon	W	.002 TEF x FS	Treated Polyester	.010"	1/16"	.372
Teflon White	3 Ply APT35 Teflon	W	.002 TEF x FS	Treated Polyester	.010"	3/32"	.579
Gripper™–Fabric	3 Ply APT35 Nitrile	W	^{3/64} x FS	Treated Polyester	.010"	1/8"	.880
Ridgetop™	3 Ply PNT50 Nitrile	W	^{3/64} x FS	Treated Polyester/Nylon	.010"	9/64"	1.290

⁽¹⁾Color Code: B–Black, T–Tan, W–White



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Food Handling (Incline Service)

Meets			Temperature Workin Range (°F) (Lbs./		Working	Tension hch/Ply)	Tension hch/Ply) Minimum		Mechanical	Fastener ⁽²⁾
FDA Requirements	USDA Approval	Resistance to Oils	Min.	Max.	Vulc.	Mech.	Pulley Diameter	Staple	Alligator Lacing	Clipper
W	W	Excellent	20	212	35	25	2"	62	7	1, 2 SP
W	W	Excellent	20	212	35	25	2"	62	7	1 A
W	W	Excellent	20	212	35	25	3"	125	7	1, 2 SP
W	W	Excellent	20	212	35	25	3"	125	7	1, 2 SP
W	W	Excellent	20	212	45	35	3"	125	7	1, 2 SP
W	W	Excellent	20	212	45	35	4"	125	25	2
W	W	Excellent	20	212	23	23	3"	62	7	1 A
W	W	Excellent	20	212	23	23	2"	62	7	1 A
W	W	Excellent	20	212	23	23	3"	125	7	1, 2 SP
W	W	Excellent	20	212	23	23	4"	125	15	
Yes	Yes	Fair	-65	300	35	25	2" (4" below 0°F)	62	7	1 A
Yes	Yes	Excellent	-65	300	35	25	2"	62	1	25, 25 LP
Yes	Yes	Excellent	-65	300	35	25	3"	62	7	1 A
Yes	No	Excellent	20	212	35	25	3"	125	7	1, 2 SP
Yes	Yes	Excellent	20	212	45	35	4"	125	25	2

⁽²⁾Follow manufacturers' recommendations for size, depending on belt thickness and pulley diameter.





RUBBER BELTING DATA (Continued)

	Product	Color ⁽¹⁾	Standard Cover Gauge	Fabric	Standard Skim Coats	Nominal Overall Thickness	Approx. Wt. per Sq. Ft. (Lbs.)
	3 Ply PN 50 Nitrile	Т	Nylon TD x FS	Treated Polyester/Nylon	.010"	1/8"	.62
Sliptop™	4 Ply SCP23 Nitrile	Т	Nylon TD x FS	Cotton/Polyester	.010"	1/8"	.74
	3 Ply SCP14 Nitrile	R/B	FS x FS	Cotton/Polyester	.008"	1/16"	.40
	5 Ply SCP14 Nitrile	R/B	FS x FS	Cotton/Polyester	.008"	7/64"	.71
Sheeting	7 Ply SCP14 Nitrile	R/B	FS x FS	Cotton/Polyester	.008"	9/64"	1.00
	3 Ply PCB35 Rubber	Т	FS x FS	Cotton/Polyester	.008"	9/64"	.68
Slide-A-Pack®	4 Ply PCB35 Rubber	Т	FS x FS	Cotton/Polyester	.008"	3/16"	.92
	3 Ply PCB35 Rubber	В	FS x FS	Cotton/Polyester	None	1/8"	.60
Caripack [®]	4 Ply PCB35 Rubber	В	FS x FS	Cotton/Polyester	None	5/32"	.90
	Pack-EZ Prem-PH2-90▲	В	B x B	Polyester/Monofilament	.050"	7/64"	.49
	Pack-EZ Prem-PH2-160▲	В	B x B	Polyester/Monofilament	.050"	1/8"	.85
	Pack-EZ Prem-PH3-135▲	В	B x B	Polyester/Monofilament	.030"	1/8"	.81
Package Handling Rubber/Mono	Pack-EZ Prem-PH3-200▲	В	B x B	Polyester/Monofilament	.040"	5/32"	.96
FFF	2 Ply APT110	В	5/32 x 3/32	Polyester	.020"	NA	2.30
Cleat-Rite "OSM"	3 Ply APT110	В	5/32 x 3/32	Polyester	.020"	NA	3.30

 \blacktriangle All are available LI x B. Contact the Oneida Plant.

⁽¹⁾Color Code: B–Black, R–Red, T–Tan, W–White





Meets			Temperature Range (°F)		Working Tension (Lbs./Inch/Ply)		Minimum	Suggested Mechanical Fastener ⁽²⁾		
FDA Requirements	USDA Approval	Resistance to Oils	Min.	Max.	Vulc.	Mech.	Pulley Diameter	Staple	Alligator Lacing	Clipper
No	No	Excellent	20	212	45	35	4"	125	7	1, 2 SP
No	No	Excellent	20	212	23	23	4"	125	7	1, 2 SP
No	No	Excellent	20	212	23	23	11/2"	62	1	25, 25 LP
No	No	Excellent	20	212	23	23	21/2"	62	7	1 A
No	No	Excellent	20	212	23	23	31/2"	125	7	1, 2 SP
Yes	No	Poor	-30	180	35	27	4"	125	15	1, 2 SP
Yes	No	Poor	-30	180	35	27	6"	125	25	2
No	No	Poor	-30	180	35	27	4"	125	15	1, 2 SP
No	No	Poor	-30	180	35	27	6"	125	25	1, 2
No	No	Poor	-20	180			2"	62		1 A
No	No	Poor	-20	180			4"	125		1
No	No	Poor	-20	180			4"	125		1
No	No	Poor	-20	180			6"	RS125S		3-1
No	No	Medium	-30	180			12"			
No	No	Medium	-30	180			14"			

⁽²⁾Follow manufacturers' recommendations for size, depending on belt thickness and pulley diameter.





RUBBER BELTING DATA (Continued)

		Product	Color ⁽¹⁾	Standard Cover Gauge	Fabric	Standard Skim Coats	Nominal Overall Thickness	Approx. Wt. per Sq. Ft. (Lbs.)
Package Handling (Incline Service up to 35°)	Griptop™–Nitrile	3 Ply PN 50 Nitrile	R/B	³ /32 x FS	Treated Polyester/Nylon	.010"	5/16"	1.13
	Griptop®–Pure Gum	3 Ply PCB35 Gum		³ /32 x FS	Cotton/Polyester	None	21/64"	1.20
	Griptop®-Rubber	2 Ply APT75 Rubber	Т, В	^{3/32} x TD	Treated Polyester	.030"	19/64"	1.20
		3 Ply PCB35 Rubber	T, B	^{3/32} x FS	Cotton/Polyester	None	21/64"	1.10
45°)		3 Ply PCB35 Rubber	В	³ /32 x FS	Cotton/Polyester	.010"	21/64"	1.26
up to		3 Ply PNT50 Gum	А	³ /32 x FS	Treated Polyester/Nylon	.010"	19/ ₆₄ "	1.07
Service	V-Cleat	3 Ply PNT50 Nitrile	R/B	³ /32 x FS	Treated Polyester/Nylon	.010"	19/64"	1.14
Package Handling (Steep Incline Service up to 45°)	Diamond Incline	2 Ply APT75 Rubber	В, Т	^{3/32} x TD	Treated Polyester	.050"	9/32"	1.08
	Ribflex®	3 Ply PCB35 Rubber	В	9/64 x FS	Cotton/Polyester	None	9/32"	1.42

⁽¹⁾ Color Code: A–Amber, B–Black, R/B–Reddish Brown, T–Tan, W–White





Meets		Resistance to Oils	Tempe Rang	erature e (°F)	Working Tension (Lbs./Inch/Ply)		Minimum	Suggested Mechanical Fastener ⁽²⁾		
FDA Requirements	USDA Approval		Min.	Max.	Vulc.	Mech.	Pulley Diameter	Staple	Alligator Lacing	Clipper
Yes	No	Good	20	212	45	35	3"	125	20	2
No	No	Poor	-30	180	35	27	4"	187	25	2
Tan	No	Poor	-30	180	75	75	4"	125	20	2
Tan	No	Poor	-30	180	35	27	4"	187	25	2
No	No	Poor	-30	180	35	27	4"	187	25	2
No	No	Poor	-30	180	45	35	4"	125	25	2
Yes	No	Excellent	20	212	45	35	4"	125	25	2
Tan	No	Poor	-30	180	60	60	4"	125	20	2
No	No	Poor	-30	180	35	27	4"	187	25	2

 ${}^{\scriptscriptstyle (2)}\mbox{Follow}$ manufacturers' recommendations for size, depending on belt thickness and pulley diameter.





RUBBER BELTING DATA (Continued)

		Product	Color ⁽¹⁾	Standard Cover Gauge	Fabric	Standard Skim Coats	Nominal Overall Thickness	Approx. Wt. per Sq. Ft. (Lbs.)
	Potato Belt 1/32 x 1/32	2 Ply APT75 Rubber	В	1/32 x 1/32	Treated Polyester	.040"	11/64"	1.10
Agriculture	Potato Belt 1/32 x TD	2 Ply APT75 Rubber	В	1/32 x TD	Treated Polyester	.040"	9/64"	.81
	Gin Flashing	3 Ply 28 oz. Rubber	В	1/16 x 1/16	Cotton	.010"	5/16"	1.80
	Hot Stock & Water	3 Ply PCB35 Rubber	В	Bare SHD x FS	Cotton/Polyester	.008"	9/64"	.71
		4 Ply PCB35 Rubber	В	Bare SHD x FS	Cotton/Polyester	.008"	3/16"	.96
		2 Ply SCP23 Nitrile	В	^{3/64} x FS	Cotton/Polyester	.010"	7/64"	.69
		3 Ply SCP23 Nitrile	В	3/64 x FS	Cotton/Polyester	.010"	9/64"	.89
	Nitrile-Black	4 Ply SCP23 Nitrile	В	3/64 x FS	Cotton/Polyester	.010"	11/64"	1.10
Light Industrial	Griptop®–Blue, Carboxylated Nitrile	3 Ply PNT50 Nitrile	BL	³ /32 x FS	Treated Polyester/Nylon	.030"	11/32"	1.38
	Griptop®–Orange, Carboxylated Nitrile	3 Ply PNT50 Nitrile	0	³ /32 x FS	Treated Polyester/Nylon	.015"	5/16"	1.20
		3 Ply PCB35 Rubber	B (R– Cover)	Silicone Cover x FS	Cotton/Polyester	.008"	9/64"	.65
	Big Red™ Silicone Covered	4 Ply PCB35 Rubber	B (R– Cover)	Silicone Cover x FS	Cotton/Polyester	.008"	3/16"	.91





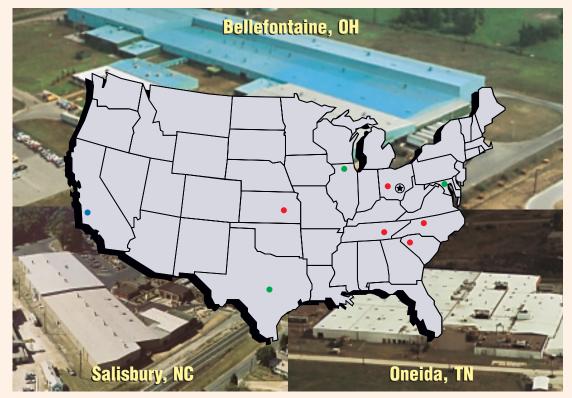
Meets			Temperature Range (°F)		Working	Tension nch/Ply)	Minimum	Suggested Mechanical Fastener ⁽²⁾			
FDA Requirements	USDA Approval	Resistance to Oils	Min.	Max.	Vulc.	Mech.	Pulley Diameter	Staple	Alligator Lacing	Clipper	
No	No	Poor	-30	180	75	75	4"	125	20	2	
No	No	Poor	-30	180	75	75	4"	125	20	2	
No	No	Poor	0	250							
No	No	Poor	-20	250	35	27	4"	125	15	2	
No	No	Poor	-20	250	35	27	6"	187	25	3	
No	No	Excellent	20	212	23	23	2"	62	7	1 A	
No	No	Excellent	20	212	23	23	3"	125	7	1, 2 SP	
No	No	Excellent	20	212	23	23	4"	125	15		
No	No	Excellent	20	212	45	35	4"	125	20	2	
No	No	Excellent	20	212	45	35	4"	125	20	2	
No	No	Poor	-20	250	35	27	4"	125	15	2	
No	No	Poor	-20	250	35	27	6"	187	25	3	





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Your local distributor stocks nearly every item you'd need, and his staff will gladly offer you advice on specifying. He'll also see to it that you receive goods when and as you need them, cutting your inventory and storage costs.

Plus, he's a ready line of communications between you and us, keeping us informed of the needs and wants of our customers. Your local distributor can set you up completely.



WARNING: Failure to follow listed instructions and/or product limitations may result in serious personal injury or death, or product failure. Data is based on tests believed to be reliable. However, these are laboratory tests that may not reflect actual conditions. The data is for your information and no warranty, express or implied, is made as we cannot guarantee the results of operations not under our direct control. The information in this publication is not intended as permission or recommendation to practice a patented invention without permission of the patent owner.

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