RUBBER SHEETING FOR MINING INDUSTRY

Quality Rubber Solutions



CONTENT

Introduction	1				
Abra-Super® Rubber Sheeting					
Abra-Line Rubber Sheeting	3				
Abra-Max Rubber Sheeting	4				
Abra-Tuff Rubber Sheeting	5				
Abra-Wear Rubber Sheeting	6				
Abra-Eco Rubber Sheeting	7				
Specialised Abrasion resistance rubber sheeting					
- Abra-Prene FR Sheeting	8				
- Abra-Super OZ Sheeting	9				
- Abra-Super FG Sheeting	10				
- Abra-Trile Sheeting	11				
- Abra-FRAS Sheeting	12				
Combi Rubber Sheeting	13				
Skirtboard Rubber Sheeting	14				
Zen Star - Pulley Lagging Rubber Sheeting	15-16				
Zen Star - Ceramic Pulley Lagging	17				
Zen-Star Ceramic Wear Pad	18				
Indication Layer Rubber Sheeting	19				
Rubber Sheeting with Steel Backing	20				
Conveyor Repair Patches and Strips	21				
Abra Impact Bar	22				
Abra Lifter Bar	23				
Abra Glide Bar	24				
Storage and Tolerance Chart					

INTRODUCTION

Zenith Rubber has been at the forefront of manufacturing industrial rubber products since 1965.

Zenith Industrial Rubber Products Private Limited, has been a leading manufacturer and exporter of high-quality industrial rubber sheeting products since its establishment in 1965. Over the years, Zenith has achieved remarkable success in the global market and has become recognized as a trusted supplier.

With an installed **capacity of 90 tons of rubber compounds per day**, Zenith continues to strengthen its position in both domestic and international markets.

Wear-resistant rubber products are designed to withstand abrasion, impact, and other forms of wear in various industrial applications. Wear-resistant rubber products play a vital role in mining industry, providing effective solutions for minimizing wear and extending the lifespan of equipment and components. These products are engineered with specialized rubber compounds that offer exceptional resistance to dry & wet abrasion, impact, cuts, and other forms of wear. It enhances the durability to withstand harsh operating conditions, Improves performance by minimising and maintaining the surface integrity, reduce down time and lead to significant cost saving.

Zenith Rubber manufactures wide range of High Wear-resistant rubber products like Rubber lining sheets, Skirtboard rubber, Rubber pulley lagging, Ceramic pulley lagging, Ceramic wear pads, Impact bars, Glide bars, Lifter bar, Conveyor repair patches & strips, Steel backing rubber pads etc.



Premium natural rubber is excellent for abrasion, impact, and corrosion resistance. The Abra-Super® range provides unmatched wear performance in the toughest abrasion environments.

Pure natural rubber is outstanding, particularly for handling slurries. The inherent properties of strength, resilience, and cut resistance have a direct effect on wear performance. The Abra-Super® range is suitable for rubber lining in Mining, Sand, Gravel and Glass Industry for Equipment protection and Noise dampening.

Abra-Super® rubber sheet with CN bonding layer offers excellent durability, ensuring that the adhesion remains intact over an extended period. This long-lasting bond provides reliable performance, even in demanding environments or under challenging conditions. It enhances the overall strength of the bonded materials and surfaces.

Standard Dimensions

Thickness	: 1mm to 50mm
Width	: 1.2 / 1.4 / 1.5 Mtr, & 2 mtr.
Length	: 10Mtr, 33 Ft, 11 Yard
Finish Type	: Both side smooth, both side fabric and
	buffed finish, One side smooth other side
	fabric or buffed finish, CN Bonding Layer.
Color	

Applications

- Lining of slurry chutes Pipes
- Tanks Cyclones
- Flat cells Launders
- Storage bins



Features

Premium Resistance to abrasion with excellent tensile strength and high elasticity.

TECHNICAL SPECIFICATION							
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)		mm3
Abra-Super 35	Red	1.10	35 ± 5	255	800	Natural Rubber	80-90
Abra-Super 40	Red	0.98	38 ± 5	255	900	Natural Rubber	80-90
Abra-Super 60	Red, Black	1.10	60 ± 5	270	800	Natural Rubber	90-100

ABRA-LINE RUBBER SHEETIN

ABRA LINE is a highly versatile rubber material specifically designed to excel in both wet and dry applications. Its exceptional properties make it suitable for various industrial uses, demonstrating its ability to withstand the abrasive nature of this material.

It's remarkable resistance to tearing ensures durable protection even in challenging environments. Overall, ABRA LINE is a reliable rubber material that offers outstanding performance in wet and dry scenarios, making it a sought-after choice in various industries. Its durability, tear resistance, and anti-build-up properties contribute to its value as a protective and efficient solution for demanding applications.

Abra-Line rubber sheet with CN bonding layer offers excellent durability, ensuring that the adhesion remains intact over an extended period. This long-lasting bond provides reliable performance, even in demanding environments or under challenging conditions. It enhances the overall strength of the bonded materials and surfaces.

Standard Dimensions

Thickness	: 1mm to 50mm				
Width	: 1.2 / 1.4 / 1.5 Mtr, & 2 mtr.				
Length	: 10Mtr, 33 Ft, 11 Yard				
Finish Type	: Both side smooth, both side fabric and				
	buffed finish, One side smooth other side				
	fabric or buffed finish, CN bonding Layer.				
Color					

Applications

- Chute lining
- Pipe lining
- Tank lining
- Hydro cyclones
- Launders Lining
- Valve liners
- Belting
- Lagging of conveyor belt

Features

Premium Resistance to abrasion with excellent tensile strength and high elasticity.

TECHNICAL SPECIFICATION							
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)	-	mm ³
Abra-Line 38	Red, Honey, Blond	1.05	38 ± 5	190	650	Natural Rubber	100-110
Abra-Line 40	Pink, Orange	1.10	40 ± 5	165	600	Natural Rubber	100-110
Abra-Line 60	Black, Pink	1.15	60 ± 5	200	550	Natural Rubber	100-110

ABRA-MAX RUBBER SHEETING

Abra-Max rubber sheeting features excellent resistance to abrasion. Proven "Best in Field" performance in fine slurry applications with its high Resilience & Low Modulus. Its provide excellent corrosion resistance. Its exceptional properties make it suitable for various industrial lining applications, demonstrating its ability to withstand the abrasive nature of this material.

Abra-Max rubber sheet with CN bonding layer offers excellent durability, ensuring that the adhesion remains intact over an extended period. This long-lasting bond provides reliable performance, even in demanding environments or under challenging conditions. It enhances the overall strength of the bonded materials and surfaces.

Standard Dimensions

Thickness	: 1mm to 50mm
Width	: 1.2 / 1.4 / 1.5 Mtr, & 2 mtr.
Length	: 10Mtr, 33 Ft, 11 Yard
Finish Type	: Both side smooth, both side fabric and
	buffed finish, One side smooth other side
	fabric or buffed finish, CN bonding Layer.
Color	

Applications

- Chute lining
- Pipe lining
- Tank lining
- Hydro cyclones
- Launders Lining
- Valve liners
- Belting
- Lagging of conveyor belt

Features

Good Resistance to abrasion with excellent tensile strength and high elasticity.

TECHNICAL SPECIFICATION							
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)	,,	mm ³
Abra-Max 45	Orange	1.10	45 ± 5	150	600	NR/SBR	110-120
Abra-Max 60	Black	1.15	60 ± 5	150	500	NR/SBR	110-120

ABRA-TUFF RUBBER SHEETIN



Zenith's Abra-Tuff Rubber Sheeting is a superior, long-life product offering high abrasion resistance making it perfect for a variety of heavy wear and tear applications. It contains reinforcing fillers which gives it extra resistance to cutting by sharp particles.

Zenith's Abra-Tuff Rubber Sheeting has excellent physical properties including cut and tear resistance and is very flexible and exhibits resistance to mild acids, alkalis in mineral processing industry.

Abra-Tuff rubber sheet with CN bonding layer offers excellent durability, ensuring that the adhesion remains intact over an extended period. This long-lasting bond provides reliable performance, even in demanding environments or under challenging conditions. It enhances the overall strength of the bonded materials and surfaces.

Standard D	Standard Dimensions				
Thickness	: 1mm to 50mm				
Width	: 1.2 / 1.4 / 1.5 Mtr, & 2 mtr.				
Length	: 10Mtr, 33 Ft, 11 Yard				
Finish Type	: Both side smooth, both side fabric and				
	buffed finish, One side smooth other side				
	fabric or buffed finish, CN bonding Layer.				
Color					

Applications

- Chute lining
- Pipe lining
- Tank lining
- Hydro cyclones
- Launders Lining
- Valve liners
- Belting
- Lagging of conveyor belt

Features

Good Resistance to abrasion with excellent tensile strength and high elasticity.

TECHNICAL SPECIFICATION							
Code	Code Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)	-	mm ³
Abra-Tuff 45	Black,Red, Yellow	1.20	45 ± 5	130	500	NR/SBR	130-140
Abra-Tuff 60	Black	1.17	60 ± 5	125	450	NR/SBR	130-140

ABRA-WEAR RUBBER SHEETING

Abra-wear Rubber Sheet is designed to be used in dry applications with good resistance to abrasion and impact. It provides protection against wear and material build up and display resistance to some mild chemicals, including acids and alkalis used in mineral processing.

Abra-wear rubber sheet with CN bonding layer offers excellent durability, ensuring that the adhesion remains intact over an extended period. This long-lasting bond provides reliable performance, even in demanding environments or under challenging conditions. It enhances the overall strength of the bonded materials and surfaces.

Standard Dimensions

Thickness	: 1mm to 50mm
Width	: 1.2 / 1.4 / 1.5 Mtr, & 2 mtr.
Length	: 10Mtr, 33 Ft, 11 Yard
Finish Type	: Both side smooth, both side fabric and
	buffed finish, One side smooth other side
	fabric or buffed finish, CN bonding Layer.
Color	

Applications

- Chute lining
- Pipe lining
- Tank lining
- Hydro cyclones
- Launders Lining
- Valve liners
- Belting
- Lagging of conveyor belt

Features

Fair Resistance to abrasion with excellent tensile strength and high elasticity.

TECHNICAL SPECIFICATION							
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)		mm ³
Abra-Wear 45	Brick Red	1.25	45 ± 5	100	450	NR/SBR	150-160
Abra-Wear 50	Black	1.25	50 ± 5	100	350	NR/SBR	150-160
Abra-Wear 60	Black	1.25	60 ± 5	100	350	NR/SBR	150-160

ABRA-ECO RUBBER SHEETING

Abra-Eco grade is the economical wear protection solution for a variety of applications. This is designed to be used in dry applications with a fair resistance to wear and tear. The economy grade ensures that customers can achieve reliable performance and meet their rubber sheeting needs without compromising on quality.

Abra-Eco has "Best in Field" performance in Shot blasting applications with its good Tensile strength and Tear. Its provide good corrosion resistance. Its exceptional properties make it suitable for various industrial lining applications, demonstrating its ability to withstand the abrasive nature of this material.

Abra-Eco rubber sheet with CN bonding layer offers excellent durability, ensuring that the adhesion remains intact over an extended period. This long-lasting bond provides reliable performance, even in demanding environments or under challenging conditions. It enhances the overall strength of the bonded materials and surfaces.

Standard Dimensions

Thickness	: 1mm to 50mm
Width	: 1.2 / 1.4 / 1.5 Mtr, & 2 mtr.
Length	: 10Mtr, 33 Ft, 11 Yard
Finish Type	: Both side smooth, both side fabric and
	buffed finish, One side smooth other side
	fabric or buffed finish,CN bonding Layer.
Color	

Applications

- Chute lining
- Pipe lining
- Tank lining
- Hydro cyclones
- Launders Lining
- Valve liners
- Belting
- Lagging of conveyor belt

Features

Moderate dry and wet resistance, Light weight, Good sealing properties, Easy installation, Impact & vibration absorption

TECHNICAL SPECIFICATION							
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)		mm ³
Abra-Eco 45	Red	1.28	45 ± 5	80	450	NR/SBR	180-200
Abra-Eco 50	Red	1.28	50 ± 5	80	350	NR/SBR	180-200
Abra-Eco 65	Black	1.28	60 ± 5	80	350	NR/SBR	180-200

ABRA-PRENE SHEETIN



AbraPrene rubber stands out from other chloroprene compounds due to its exceptional qualities tailored to the needs of the oil sands industry. Its key differentiators include:

- **Unmatched Abrasion Resistance**: Abra-Prene rubber offers superior durability, making it highly resistant to wear and tear, ideal for harsh environments and heavy-duty applications.

- **Enhanced Oil and Chemical Resistance**: Unlike conventional polychloroprene compounds, Abra-Prene rubber provides resistance to oil and chemicals , ensuring reliable performance even in challenging conditions.

- Weather Endurance: This specialized rubber compound can withstand various weather conditions, including extreme temperatures and exposure to UV rays, ensuring consistent performance over time.

Standard Dimensions

Thickness	: 1 mm to 50 mm					
Width	: 1.2 / 1.4 / 1.5 Mtr, & 2 mtr.					
Length	: 10Mtr, 33 Ft, 11 Yard					
Finish Type	: Both side smooth, one side smooth and other side fabric or buffed finish,					
	CN bonding Layer.					
Color						

Applications

- Oil sands
- Mining Hose
- High Temperature Resistant
- Chemical Tank Lining.

Features

Good abrasion resistance, Flame Resistant, High Temperature resistant. Weather, chemical, oil resistant.

TECHNICAL SPECIFICATION							
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)		mm ³
Abra-Prene 55	Black, Blue	1.35	55 ± 5	150	400	Chloroprene	160 -170
Abra-Prene 65	Black	1.35	65 ± 5	150	400	Chloroprene	160 -170

ABRA-SUPER OZ SHEETIN



Abra-super OZ stands out specialized as a combination of Natural rubber and EPDM designed to excel in demanding conditions. Its notable features include:

- **Outstanding Abrasion Resistance**: Abra-super OZ rubber demonstrates remarkable resilience against abrasion, making it ideal for applications subject to high levels of wear and tear.

- UV and Ozone Resistance: This rubber compound is formulated to endure prolonged exposure to sunlight and high ozone concentrations, safeguarding it against surface deterioration in environments where unprotected natural rubber might be vulnerable.

- Versatile Protection: Unlike regular natural rubber, Abra-super OZ eliminates the need for additional surface painting or shielding. It releases its own 'antiozonant' for protection, ensuring reliability without requiring extra maintenance.

Standard Dimensions

Thickness	: 1 mm to 50 mm
Width	: 1.2 / 1.4 / 1.5 Mtr, & 2 mtr.
Length	: 10Mtr, 33 Ft, 11 Yard
Finish Type	: Fabric, Smooth, Buff, CN bonding Layer.
Color	

Applications

- Used in areas which requires ozone resistance and resilience
- Rubber lining for Agitators
- Cover rubber for granulate bullet traps
- Ducts Centrifuge Basket
- Pumps Shell rubber lining
 - Vibrator bowl lining
- MS Pipes

- Tanks

Features

Excellent weathering and ozone, high resilience and tear strength, good sound absorption and vibration dampening properties.

TECHNICAL SPECIFICATION							
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)		mm ³
Abra-Super OZ 40	Black,Green	1.05	40 ± 5	220	750	Natural Rubber	130-140
Abra-Super OZ 60	Black,Green	1.50	60 ± 5	220	750	Natural Rubber	130-140



Abra-Super FG rubber represents a premium natural rubber compound meticulously manufactured to meet the stringent regulatory standards of both the FDA (USA Food & Drug Administration CFR 21 177.2600) and the European Union (EU regulations 1935/2004)

This high-quality rubber compound is specifically formulated to excel in wear resistance, making it an ideal choice for applications requiring a protective covering for process equipment and belt coverings that occasionally come into contact with food.

Abra-Super FG rubber is suitable for handling both aqueous and dry foods, ensuring a safe and reliable solution for various food-related industries. However, it should not be utilized with food oils, fatty foods, or foods that contain free oil on their surface.

Standard Dimensions

Thickness	: 1 mm to 50 mm
Width	: 1.2 / 1.4 / 1.5 Mtr, & 2 mtr.
Length	: 10Mtr, 33 Ft, 11 Yard
Finish Type	: Fabric, Smooth, Buff, CN bonding Layer.
Color	

Applications

- Food Processing Industry
- Gasket Industry
- Pharmaceutical Industry
- Cosmetic Industry

Features

Abra-Super FG rubber is only suitable for handling aqueous & dry foods products, wear and tear resistance, non-marking.

TECHNICAL SPECIFICATION							
Code Colour	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)		mm ³
Abra-Super FG 40	White	1.10	40 ± 5	220	700	Natural Rubber	130-140
Abra-Super FG 60	White	1.10	60 ± 5	220	700	Natural Rubber	130-140

ABRA-TRILE SHEETING

Abra-Trile is the ideal lining material for applications which require oil, chemical and Abrasion resistance. While natural rubber boasted good abrasion resistance, it fell short in oil immersion applications. Meanwhile, typical nitrile-based rubbers excelled in oil resistance but lacked wear performance, limiting their use in high abrasion settings.

Enter Abra-Trile rubber, a specially formulated nitrile-based compound designed to deliver exceptional abrasion resistance even in the presence of oils and chemicals. Notably, Abra-Trile rubber also exhibits outstanding high-temperature performance, making it suitable for use up to 110°C (230°F).

Standard Dimensions

Thickness	: 1 mm to 50 mm
Width	: 1.2 / 1.4 / 1.5 Mtr, & 2 mtr.
Length	: 10Mtr, 33 Ft, 11 Yard
Finish Type	: Both side smooth, one side smooth and other side fabric or buffed finish CN bonding Layer.
Color	-

Applications

- Grain Handling Systems
- Linings in Fertilizer Works
- Pump Linings and Impellers
- Sand Processing Circuits Where Oil-based Reagents are Used

Features

Resistance to oils, minerals, chemicals, greases, Abrasion, aliphatic hydrocarbons, Low permeability to gases

TECHNICAL SPECIFICATION							
Code Colour	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer Content	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)		mm ³
Abra-Trile 55	Orange	1.10	55 ± 5	130	700	Nitrile Rubber	160 -170
Abra-Trile 70	Orange	1.10	70 ± 5	130	700	Nitrile Rubber	160 -170

ABRA-FRAS SHEETING



Abra-FRAS rubber sheet boasts a superior grade synthetic rubber sheet, The rubber sheet is certified for its Fire Resistant and Anti-static properties, having undergone rigorous testing and approval by the Mine Safety Technology Centre, aligning with the strict standards of MDG 3608 for Non-Metallic Materials used in Underground Coal Mines.

This specialized FRAS (Fire-Resistant, Anti-Static) rubber sheet exhibits excellent physical characteristics, including robust mechanical strength and moderate resistance to abrasion, impact, and UV exposure. As a result, it proves to be highly suitable for sealing, insulating, and isolating applications in underground environments or areas with a heightened risk of ignition and fire, such as coal mines, grain handling, and processing facilities.

Standard Dimensions

Thickness	: 1 mm to 50 mm
Width	: 1.2 / 1.4 / 1.5 / 2 mtr.
Length	: 10Mtr, 33 Ft, 11 Yard
Finish Type	: Both side smooth, one side smooth and other side fabric or buffed finish, CN bonding Layer.
Color	

Applications

- Fire Resistant Skirting Rubber
- Anti-static Skirting Rubber
- Impact Curtains
- Ballistic Rubber Curtains
- Underground Mining Equipment Curtains
- Insulating Strip and Isolation Barriers.
- Transfer and Joining Sleeves
- Flange Gaskets and Seals
- Ventilation Ductwork Seals.

Features

Certified Fire Resistant Anti-Static Rubber Sheet, good mechanical properties, Fire & Electrical resistance, Good Abrasion and Tear resistance.

TECHNICAL SPECIFICATION							
Code Colour	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer Content	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)		mm ³
Abra- FRAS	Black	1.40	70 ± 5	180	500	Chloroprene	160 -170
Abra- FRAS ECO	Black	1.40	70 ± 5	150	400	NR/SBR	180-200

COMBI RUBBER SHE

Combi rubber is a multi-layer rubber sheet design specifically for the mining/quarry industry to protect the material handling plant and equipment from wear, tear, and impact.

The top and bottom layers have high abrasion resistance and are cut to withstand rough mining materials. The inner layer provides extra support and increased glide while moving materials. It can be used as a belt cleaning device on either side conveyor belt to wipe off dust and wet slurries to avoid carrying back and building up on rollers. The harder black rubber protects the softer red rubber to provide a durable and hard-wearing solution.

Standard Di	Applications		
	- Scrapper System		
Thickness	: 6 mm to 50 mm	- Vibratory feeders	
Width	: 1.2 / 1.4 / 1.5 / 2 mtr.	- Distribution bins	
Length	: 10Mtr, 33 Ft, 11 Yard	- Sumps	
Finish Type	: Both side smooth finish, CN bonding Layer.		
Color			

Features

Superior resistance to dry abrasion and high impact. Low friction on conveyor belt, Excellent cut and gouge properties when sharp, heavy coarse particles are present. Unique two colour abrasion-resistant compounds enable handling mining material and inner layer support to mining material.

TECHNICAL SPECIFICATION							
Code	Code Colour		Hardness	Tensile Strength	Elongation	Polymer	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)	content	mm ³
Abra-Combi 6045	Black-Red-Black	1.15	60/45/60	150	500	NR/SBR	120-130
Abra-Combi 7550	Black-Red-Black	1.25	75/50/75	70	300	NR/SBR	180-200

SKIRT BOARD RUBBER SHEETING



Skirt Board rubber sheets play a crucial role in the mining industry, serving as a sealing and protective solution. Made from durable rubber compounds, they resist wear and tear, providing an effective barrier against material spillage and dust emission from conveyor belts. The sheets are highly flexible, adapting to conveyor contours, and exhibit excellent impact and chemical resistance. Skirt rubber sheets find widespread application as conveyor belt skirting, creating a tight seal between the belt and loading chutes, preventing material escape and reducing dust generation.

Skirt Board rubber sheets act as shield against impact damage, prolonging the conveyor belt's life. Moreover, their noise reduction properties contribute to a safer and healthier work environment. In summary, skirt rubber sheets are indispensable in mining operations, ensuring efficient material handling, dust control, and environmental protection.

Standard Dimensions				
Thickness	: 6 mm to 50 mm			
Width	: 100 mm to 2000 mm			
Length	: 10Mtr, 33 Ft, 11 Yard			
Finish Type	: Both sides smooth finish, CN bonding Layer.			
Color				

Applications

- Skirting Rubber Seal
- Mounting Pad
- Sealing Strips
- Flapping

Features

Good abrasion & wear resistance, Low friction, Resistance to chemicals & good flexibility.

TECHNICAL SPECIFICATION								
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer	Abrasion	
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)		mm ³	
Abra-Skirt 45	Green, Black Orange	1.18	45 ± 5	120	400	Natural Rubber	130-140	
Abra-Skirt 50	Yellow, Red	1.20	50 ± 5	100	450	Natural Rubber	160-180	
Abra-Skirt 55	Black	1.25	55 ± 5	80	350	Natural Rubber	180-200	
Abra-Skirt 60	Black	1.25	60 ± 5	70	350	Natural Rubber	180-200	
Abra-Skirt 65	Black	1.35	65 ± 5	60	300	Natural Rubber	220-230	



Zen-Star Rubber pulley lagging sheets are essential components used in the mining industry for wet and dry application and can be universally applied as a lagging for drive pulleys for low to high-loaded conveyor belts, to enhance the performance and lifespan of conveyor pulleys.

Zen-Star Rubber pulley lagging sheets are made from high-quality rubber with a patterned surface to improve traction and grip. The primary purpose of rubber pulley lagging is to increase the friction between the conveyor belt and the pulley, reducing belt slippage and preventing material spillage.

Zen-Star Rubber pulley lagging sheets are custom-engineered rubber sheets crafted to optimize the functionality of conveyor pulleys across diverse industrial applications. Their unique formulation enables them to withstand a variety of conditions like general purpose, oil, food grade, fire etc.

	Stand	ard	Dime	ensions
--	-------	-----	------	---------

Thickness	: 6.6 mm to 20 mm
Width	: 0.5 / 1.2 / 1.4 / 1.5 / 2 Mtr.
Length	: 10 Mtr, 33 Ft, 11 Yard
Finish Type	: Square & Diamond Design with CN bonding Layer.
Color	

Applications

- Fire resistance-Anti Static (FRAS) Drive Pulley Lagging
- General Purpose
- Food Grade
- Oil resistance



Features

High tensile, Excellent Abrasion resistance, oil resistance, Fire resistance- Anti static (FRAS), eliminate slippage etc.

TECHNICAL SPECIFICATION							
Code Colour	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)		mm ³
Zen-Star 45 Max	Red	1.10	45 ± 5	150	600	NR/SBR	110-120
Zen-Star 60 Max	Black	1.15	60 ± 5	150	500	NR/SBR	100-120
Zen-Star 60 Tuff	Black	1.17	60 ± 5	125	450	NR/SBR	130-140
Zen-Star 65 Wear	Black	1.25	65± 5	100	350	NR/SBR	150-170
Zen-Star 65 Eco	Black	1.35	65± 5	60	300	NR/SBR	220-250

ZEN-STAR PULLEY LAGGING RUBBER SHEET =

TECHNICAL SPECIFICATION							
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Polymer Content	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)		mm ³
Zen-Star 55 FG	White	1.10	55 ± 5	150	600	NR/SBR	110 -120
Zen-Star FG OIL	White	1.15	55 ± 5	150	600	Chloroprene	120-130
Zen-Star FRAS	Black	1.40	70 ± 5	180	500	Chloroprene	160-170
Zen-Star FRAS ECO	Black	1.40	70 ± 5	150	400	NR/SBR	180-200

DIMENSIONS

Code	Thickness (mm)	Width (mm)	Zen-Star Pulley Size (mm)	Zen-Star Pulley Depth (mm)
Mini Diamond Design 2.5	6.6	2000	19 X 35.5	2.5
Mini Diamond Design 3.5	8, 10, 12, 15	2000	19 X 35.5	3.5
Maxi Diamond Design 6.0	12	2000	47 x 81	6
Maxi Diamond Design 8.0	15, 20	2000	47 x 81	8
Medium Diamond Design 4.0	10, 12, 15	1500	26 X 46	4
Medium Diamond Design 4.5	15, 18, 20	500	25 X 47	4
Square Design 3.5	8, 10, 12	1500	19 x 19	3.5
Moulded Pulley Lagging	12, 15	500	36 x 62	5

Technical Diaphragm





Ceramic lagging rubber sheet with chloroprene bonding layer is used as protective surface to improve and extend pulley life in applications for extreme conditions in wet and muddy areas. Zenith Rubber has developed high quality ceramic lagging with chloroprene bonding layer for easy and quick installation. It applied as a lagging for drive pulleys.

Zenith's ceramic lagging is made with high quality alumina tiles, high quality abrasion resistant rubber and backed with chloroprene bonding layer.



The USP of Zenith's Ceramic Lagging is its 500mm width and 10 Meter Length.

ΝΙΟΛΙ	CDEC	ΙΕΙΟΛ	τιοκι
NICAL	SPECI	IFICA	HON

Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Abrasion
		Gm/cm ³	Shore A	Kg/cm ²	% (min)	mm ³
Zen-Star CL	Black	1.12	70 ± 5	170	450	100-120
Zen-Star CL FRAS	Black	1.40	70 ± 5	180	500	160-170
Zen-Star Green CL	Black with Green Ceramic Tiles	1.12	70 ± 5	170	450	100-120

DIMENSIONS							
Code	Thickness (mm)	Width (mm)	Zen-Star Pulley Size (mm)				
ZenaCL 5-12	12	500	5/10				
ZenaCL 5-13	13	500	5/10				
ZenaCL 5-15	15	500	5/10				
ZenaCL 5-17	17	500	5/10				
ZenaCL 5-20	20	500	5/10				

COMPARISON TABLE FOR CO-EFFICIENT OF FRICTION						
Co -efficient of Friction	Rubber Lagging	Ceramic Lagging				
Dry	0.4	0.7				
Wet	0.3	0.5				

CERAMIC SPECIFICATIONS				
Aluminum Oxide Al2O3	92 % (min)			
Density (g/cc)	3.65 (min)			
Hardness (R45N)	77 (min)			
Flexural Strength (Mpa)	240 (min)			
Abrasion By Rubbing (g)	0.1 (max)			

Features

- Improves Belt Traction.
- Non-Slip Grip between Ceramic Lagging & Belt.
- Reduces Belt Slippage.
- Increases Belt and Pulley Life.
- Minimizes System downtime.
- Increases Productivity.
- High Resistance to Wear.



Zen-Star CP Ceramic wear pads are vital components in the mining industry, serving as robust solutions to combat abrasive wear and impact on critical equipment. These wear-resistant pads are crafted from high-quality ceramic materials known for their exceptional hardness and durability. They are specifically designed to protect surfaces, such as conveyor systems, chutes, and hoppers, from the erosive forces of abrasive materials like ores, coal, and minerals commonly encountered in mining operations.

Properties

Ceramic wear pads exhibit remarkable properties, including high hardness, wear resistance, and impact resistance, ensuring prolonged equipment life under harsh mining conditions. They can effectively withstand the abrasive effects of materials while providing excellent resistance to chemical corrosion, making them ideal for diverse industrial settings.

Applications

In mining, ceramic wear pads find extensive use in conveyor systems, chutes, feeders, and other equipment involved in material handling processes. By safeguarding these critical components, ceramic wear pads contribute significantly to minimizing downtime, reducing maintenance costs, and optimizing mining operations overall.

TECHNICAL SPECIFICATION							
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Abrasion	
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)	mm ³	
Zen-Star CP	Black	1.12	70 ± 5	170	450	100-120	
Zen-Star CP FRAS	Black	1.40	70 ± 5	180	500	160-170	

DIMENSIONS								
Code	Thickness (mm)	Width (mm)	Length (mm)					
Zen-Star CP - A	8	500	500					
Zen-Star CP - B	14	500	500					
Zen-Star CP - C	20	500	500					
Zen-Star CP - D	30	500	500					

CERAMIC SPECIFICATIONS					
Aluminum Oxide Al2O3	92 % (min)				
Density (g/cc)	3.65 (min)				
Hardness (R45N)	77 (min)				
Flexural Strength (Mpa)	240 (min)				
Abrasion By Rubbing (g)	0.1 (max)				

INDICATION LAYER RUBBER SHEETING



Abra-Line IL Rubber Sheet is an indication layer wear resistance rubber sheet, is a specialized type of rubber sheet designed with an indication layer to monitor and assess wear resistance.

The indication layer wear resistance rubber sheet contains a layer of contrasting color or material beneath the top surface. As the rubber sheet wears over time due to abrasion and contact with abrasive materials, the indication layer becomes visible, providing a clear visual indication of the degree of wear.

This type of rubber sheet is particularly useful in predicting and monitoring the wear on equipment surfaces, conveyor belts, chutes, and other components exposed to abrasive environments. By using these sheets, main-tenance personnel can identify areas with excessive wear and plan timely replacements or repairs, thus reducing unexpected downtime and optimizing equipment performance.

otariaara Di	
Thickness	: 4 mm to 50 mm
Width	: 1.2 / 1.4 / 1.5 / 2 Mtr
Length	: 10 Mtr, 33 Ft, 11 Yard
Finish Type	: Fabric, Smooth, CN bonding Layer.
Color	

Standard Dimensions

Applications

- Skirt rubber Seal
- Drains Lining and Pipes
- Hydro Cyclones
- Tanks
- Floating Cells
- Lining of Excavator Buckets
- Slurry Handling

Features

Indication layer wear resistance rubber sheets possess all the typical properties of high-quality wear-resistant rubber, including abrasion resistance, impact resistance, and flexibility. The addition of the indication layer enables proactive wear monitoring, enhancing the sheet's value in industrial settings.

TECHNICAL SPECIFICATION						
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)	mm ³
Abra-Line IL 40	Black-Orange-Grey	1.10	40 ± 5	165	600	100-110
Abra-Max IL 45	Red-Orange-Grey	1.10	45 ± 5	150	600	110-120
Abra-Max IL 60	Black-Orange-Grey	1.15	60 ± 5	150	500	100-120
Abra-Tuff IL 65	Black-Red-Grey	1.17	60 ± 5	125	450	130-140

RUBBER SHEETING WITH STEEL BACKING



Rubber sheets with steel backing are specialized products used in the mining industry for various applications where high abrasion resistance and impact protection are required. These composite sheets combine the benefits of rubber's wear resistance and flexibility with the strength and durability of steel.

Rubber sheets with steel backing consist of a layer of wear-resistant rubber bonded to a steel plate. The rubber layer faces the material being conveyed or handled, providing excellent resistance to abrasion and impact, while the steel backing adds structural support and strength to the sheet.

Standard Dimensions

Thickness	: 10 mm to 150 mm
Width	: 300mm, 1 meter & 1.5 meter
Length	: 300mm, 1 meter, 2 meter & 3 meter
Color	
Steel Thickness	: 3mm to 10mm

Applications

- Chute Liners Conveyor Belt Skirting
- Wear Pads and Impact Panels
- Installed in areas where materials like ores, rocks, coal, and other abrasive substances come into contact with the equipment surfaces.

Features

High abrasion resistance, Impact resistance, Structural integrity, Flexibility.

TECHNICAL SPECIFICATION						
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)	mm ³
Abra-Max Steel 60	Black	1.15	60 ± 5	150	500	100-120
Abra-Tuff Steel 60	Black	1.17	60 ± 5	125	450	130-140
Abra-Max Steel 45	Red	1.10	45 ± 5	150	600	110-120
Abra-Tuff Steel 45	Red	1.20	45 ± 5	130	500	130-140

CONVEYOR REPAIR PATCHES AND STRIPS

Conveyor repair patches and strips are essential components used in the maintenance and repair of conveyor belts in industrial settings, including mining, manufacturing, and material handling industries. These patches and strips are designed to quickly and effectively repair damaged or worn areas on the conveyor belt, ensuring the smooth and continuous operation of the conveyor system.

Conveyor repair patches are pre-cut pieces of high-quality Natural Rubber on top featuring a strong adhesive backing layer made of Chloroprene. They are available in various sizes and shapes to match different belt repair needs. Conveyor repair strips are longer pieces of the same material, often used for larger or longer sections of belt repair.

Properties

- High Adhesion: The strong adhesive backing ensures reliable bonding to the conveyor belt surface.

- Wear Resistance: Conveyor repair patches and strips are made from durable materials to withstand the abrasive forces of bulk materials during conveying.

- Flexibility: These patches and strips are flexible, allowing them to conform to the contours of the belt, ensuring a secure repair.

- Quick Application: Their easy-to-use design enables rapid and hassle-free application, minimizing conveyor downtime.

Applications

When a conveyor belt experiences cuts, gouges, or tears, conveyor repair patches and strips provide an efficient solution. They are applied to the damaged areas, effectively sealing the damage and restoring the integrity of the belt. This prevents further damage and extends the belt's lifespan, reducing downtime and maintenance costs.

TECHNICAL SPECIFICATION							
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Abrasion	
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)	mm ³	
Abra-Patch	Black	1.12	60 ± 5	170	450	120-130	
Abra-Strip	Black	1.12	60 ± 5	170	450	120-130	

ABRA IMPACT BAR

Impact bars are developed and designed for absorbing the impact damage that could occur at the material loading points of the conveyor belt.

The characteristics of high energy absorption and low friction are of prime importance to mitigate the impact at the loading areas.Impact bars are installed under the conveyor belt in the form of a cradle at the loading zones and act as an anti-friction slider bed to absorb the drop energy of material impact.

In the absence of impact bars conveyor belts are often damaged due to the inadequate and uneven support to the belt. Zenith offers impact bars as a solution to eliminate such problems.

Components of the Impact Bar

- Belt Contact Strip
- The top layer is made of Ultra High Molecular Weight Polyurethane offering a low coefficient of friction with the conveyor belt.
- Acts as an energy absorber for the load dropped at the material feeding points.
- Facilitates the quick mounting of the impact bar serving as fastening units & is made from an Aluminium alloy
- Slot Profile

TECHNICAL SPECIFICATION							
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Abrasion	
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)	mm ³	
Abra-Impact Bar	Red, Blue, Green	1.20	60 ± 5	130	450	120-130	
Abra-Impact Bar	Red, Blue, Green	1.20	45 ± 5	130	450	120-130	

ABRA IMPACT BAR RANGE (HEIGHT X WIDTH X LENGHT)
50/75mm X 100mm X 1200mm
50/75mm X 100mm X 1220mm
50/75mm X 100mm X 1300mm
50/75mm X 100mm X 1400mm
50/75mm X 100mm X 1500mm
50/75mm X 100mm X 1528mm

Benefits

- Prevents tear and puncture damage to the belt, hence increasing its operating life.
- Easy and quick installation.
- Acts as a shock absorber at loading points due to the high-quality energy absorbing rubber.
- Abrasion resistant.
- Minimum maintenance required.
- Prevents conveyor belt sagging.
- Reduction in spillage in conjunction with skirt sealing arrangement.
- Minimum friction with the belt
- Centralising effect and belt alignment.



A conveyor lifter bar, also known as a skirt lifter or belt lifter, is a specialized component used in conveyor systems to assist in maintaining proper material flow and prevent spillage along the conveyor belt's sides. These bars are designed to lift the edges of the conveyor belt slightly, creating a seal to contain material and minimize dust emissions at transfer points.

They help improve material containment, reduce spillage, and enhance the overall efficiency and cleanliness of the conveyor system.

Properties

- **Durability:** Conveyor lifter bars are made from robust materials like high-quality rubber and Metal, ensuring longevity and wear resistance
- **Easy Installation:** Conveyor lifter bars are typically easy to install and can be retrofitted to existing conveyor systems.
- **Effective Sealing:** By creating a seal at the transfer points, they prevent material from escaping and reduce the generation of dust.

TECHNICAL SPECIFICATION						
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Abrasion
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)	mm ³
Abra-Lifter Bar	Black	1.12	60 ± 5	180	450	120-130

ABRA LIFTER BAR RANGE (HEIGHT X WIDTH X LENGHT)

75mm X 50mm X 1500mm 75mm X 75mm X 1500mm

75mm X 100mm X 1500mm

Application

In conveyor systems, especially in bulk material handling applications like mining, aggregate processing, and cement plants, the proper containment of material and prevention of spillage are essential. Conveyor lifter bars play a critical role in achieving these objectives by lifting the edges of the conveyor belt, providing a controlled flow path for the material.



Introducing Zenith's Glide Bars - the perfect solution for creating a sealed surface against the conveyor belt while providing impact absorption. Designed to be used on the sides of the conveyor belt, these glide bars offer excellent support, preventing sagging between rollers and ensuring a smooth surface for a tight seal.

With the combination of sealing systems, Zenith Glide Bars efficiently prevent dust and material spillage, maintaining a clean and safe working environment.

Properties

Zenith Glide Bars are crafted with a unique composition of sandwiched polyurethane and rubber, securely bonded with a vulcanized aluminium profile, making them easy to fix with T-bolts. The top layer is vibrant Blue, made from ultra-high molecular weight polyurethane, offering low friction and exceptional wear resistance. Beneath it, the rubber material absorbs energy, providing added protection to the conveyor belt and equipment from potential damage.

TECHNICAL SPECIFICATION									
Code	Colour	Specific Gravity	Hardness	Tensile Strength	Elongation	Abrasion			
		Gm/cm ³	Shore A	Kg/cm² (min)	% (min)	mm ³			
Abra-Glide Bar	Blue	1.12	60 ± 5	180	450	120-130			

ABRA GLIDE BAR RANGE (HEIGHT X WIDTH X LENGHT) 33mm X 200mm X 1200mm

33mm X 250mm X 1200mm

33mm X 300mm X 1200mm

Application

These versatile Glide Bars can be seamlessly combined with impact bars on a cradle in the loading zone or, for lighter-weight applications, on a formed plate that replaces the outer rollers.

Storage of the Product

- Storage conditions should be maintained according to DIN7716 standards.
- Products must be stored in cool, dry places.
- Temperature between 10°C /20°C Sheltered from Sun and free from ozone's.
- Avoid contact with Hydrocarbons, Solvents, Acids and Alkalis.

Standard Finish and Textures

While emphasizing on the quality and function, we have developed different looks/textures to meet different customer requirement. All textures are made with high embossing technique. Heavier density characteristic also provides the products with a better strength and abrasion resistance than plain cell surface. Unless Otherwise noted all rubber sheet has a standard smooth finish

- Both Side smooth finish (Plate Finish)
- Both Side fabric finish (nylon fabric finish KS-61 deep fabric)
- Both Side fabric finish (nylon fabric finish KS-38 fine fabric)
- One side smooth other side fine fabric finish (KS-38 nylon Finish)
- One side smooth other side rough fabric finish (KS-61 nylon finish)
- One side smooth other side buffed finish
- One side Smooth other Side CN Bonding layer



Both Side Smooth



Fine Fabric (KS 38)



Rough Fabric (KS 61)



Buffed



Neoprene Bonding Layer Backing

Product Dimension

Depending on clients requirement and area of application, we can supply rubber sheets in customised widths and length.

THICKNESS TOLERANCES									
	Tolerand	ces ±	Sizes	Tolerances ±					
Fractions Inches	Decimals Inches	Inches	Millimeters	Millimeters					
Under 1/32"	Under 0.031	0.01	1	± 0.1					
1/32" to but not including 1/16"	0.031 to 0.062	0.012	2	± 0.2					
1/16" to but not including 1/8"	0.062 to 0.125	0.016	3	± 0.3					
1/8" to but not including 3/16"	0.125 to 0.187	0.02	5	± 0.5					
3/16" to but not including 3/8"	0.187 to 0.375	0.031	10	± 1.0					
3/8" to but not including 9/16"	0.375 to 0.562	0.047	15	± 1.4					
9/16" to but not including 3/4"	0.562 to 0.750	0.062	20	± 1.5					
3/4" to but not including 1"	0.750 to 1.000	0.094	25	± 10%					
1" and over	1.000 and Over	10%	30/40/50	± 10%					
Width Tolerance	<u>+</u> 2%								
Length Tolerance	<u>+</u> 2%								



Zenith Rubber enjoys the leadership status with their wide Presence & Network across the globe





141-144, Free Press House, Free Press Journal Marg 215, Nariman Point, Mumbai - 400 021 Contact No : +91-22 22885888 / 31001400 | Fax : 91-22 22885222 Email: info@zenithrubber.com (International) | sales@zenithrubber.com (Domestic)



www.zenithrubber.com

