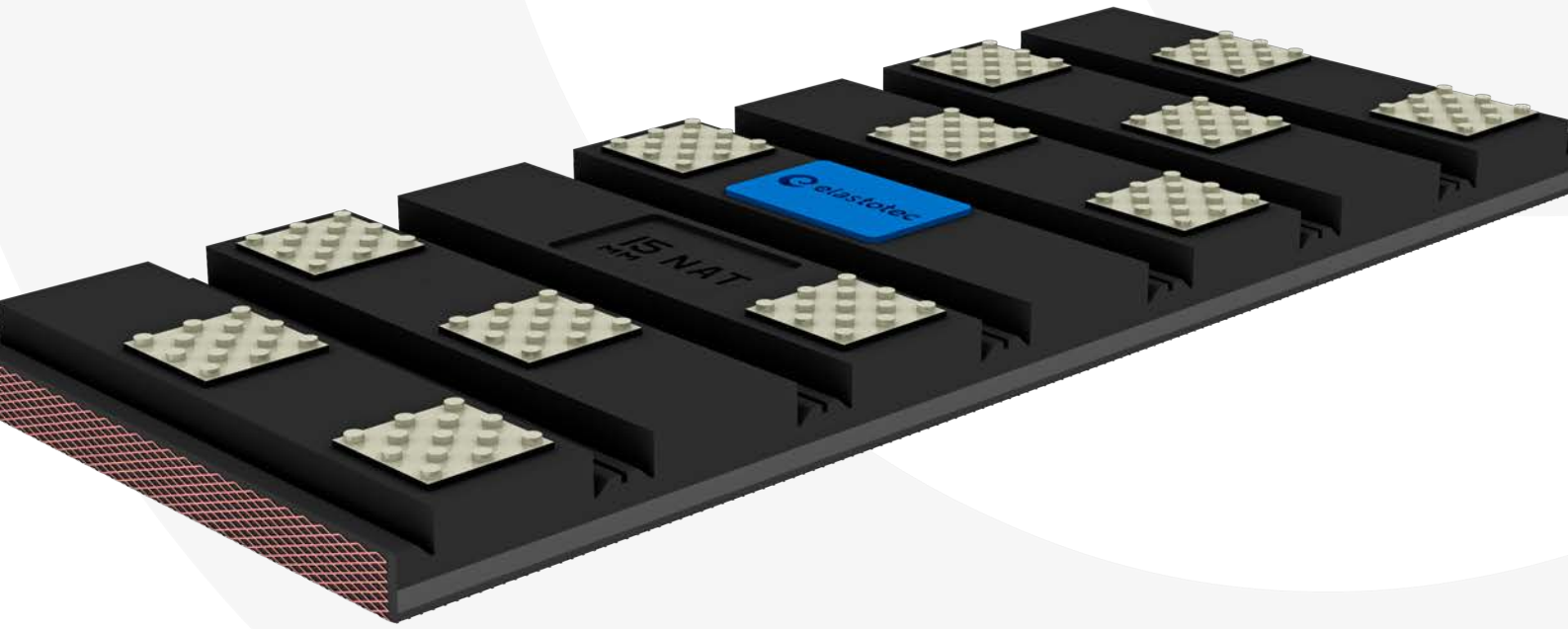
# CHECKERBOARD 20%
# CERAMIC LAGGING

elastotec
ENGINEERED TO PERFORM



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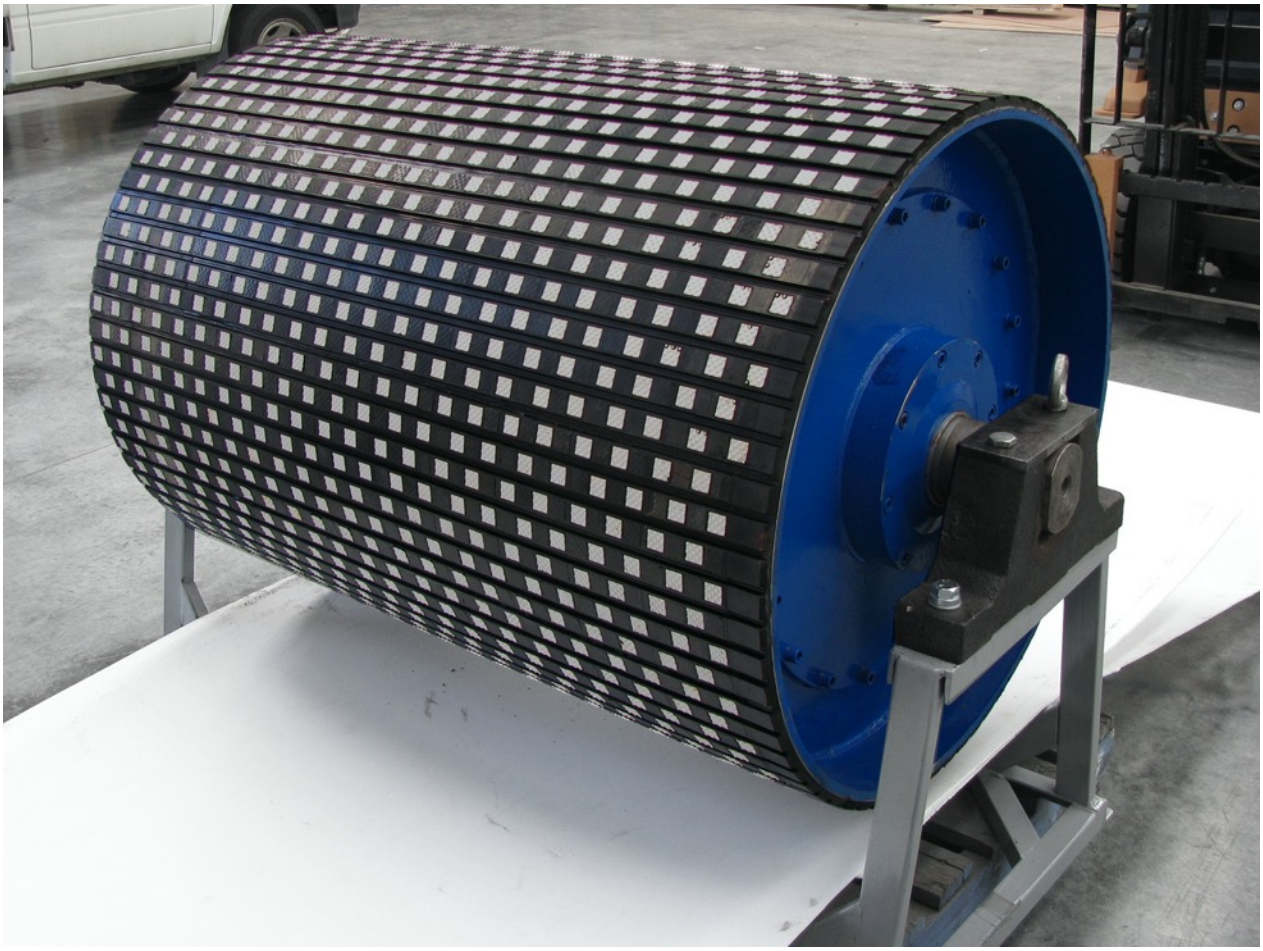


## DESCRIPTION

Elastotec Checkerboard 20% Ceramic Lagging is designed to provide additional grip in low to medium tension applications and extra wear protection compared to Rubber Lagging.

Checkerboard 20% Ceramic Lagging is used where existing Rubber Lagging is experiencing problems due to slippage or there's a need for extra protection against wear. Checkerboard 20% Ceramic Lagging has 20% ceramic coverage.

## APPLICATION

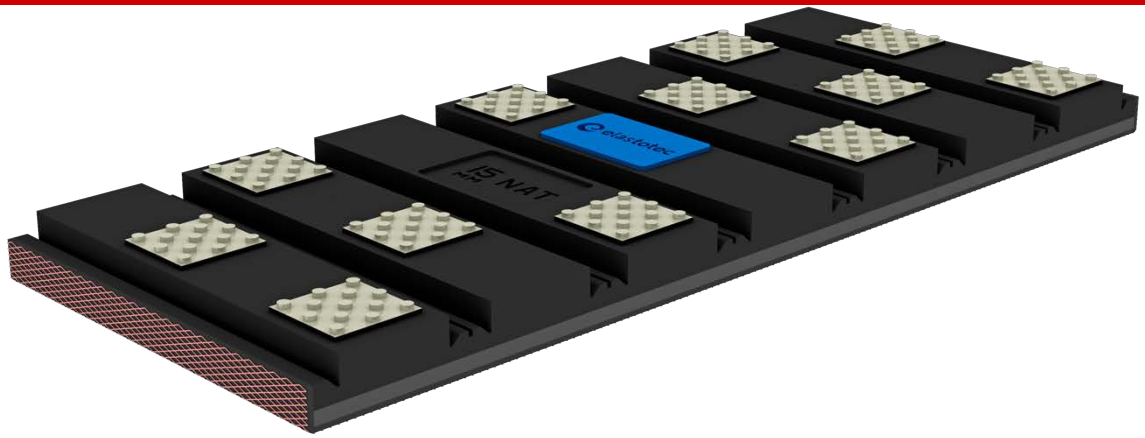
Elastotec Checkerboard 20% Ceramic Lagging is designed for use in medium belt tension applications and can be applied to conveyor drive, tail, snub, bend or take-up pulleys. It is used for conveyor system applications in the mining, quarrying, mineral and metal processing industries but can be used on any conveyor pulley.

# CHECKERBOARD 20% CERAMIC LAGGING

## KEY FEATURES AND BENEFITS

- Increased grip and traction for applications where rubber lagging is experiencing slippage.
- Suitable for low and medium belt tension applications.
- Available in 250mm wide rolls that can be cut to suit any pulley size and make it easy to install.
- Available in highly abrasion resistant SBR for above ground applications and FRAS for underground and high-risk applications.
- Coloured wear indicator (Blue for SBR and Red for FRAS).
- High quality rubber formulations designed for good bonding, resistance to degradation by outdoor exposure and good abrasion resistance.
- Buffed CN Bonding layer for increased adhesion.
- Can be supplied in a range of thicknesses (12,15 and 20mm).
- Suitable for long term service at temperatures from - 40°C to +70°C.
- No tile debonding from the rubber backing.

# CHECKERBOARD 20% CERAMIC LAGGING

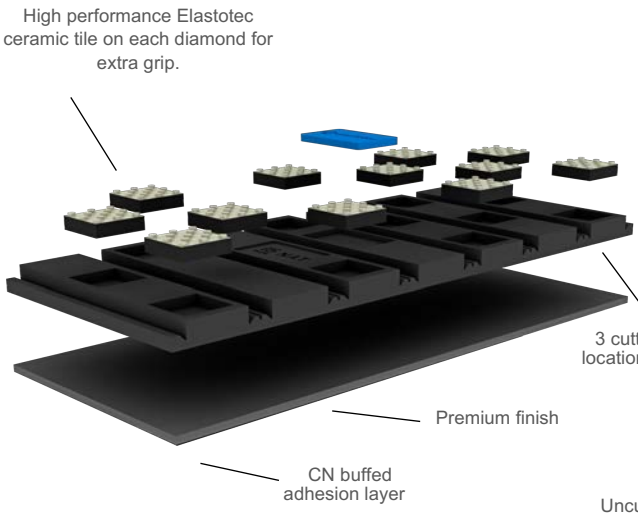


## DESIGN

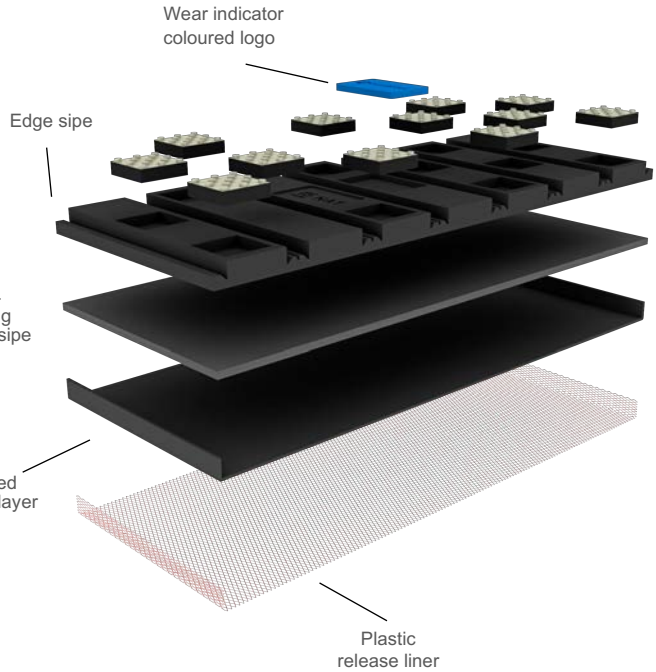
Elastotec 20% Ceramic Lagging cost efficient ceramic lagging version.

Same design as the Medium Single Row 38% Ceramic Lagging but with every second tile removed.

## COLD BONDED




## HOT VULCANISED



# CHECKERBOARD 20% CERAMIC LAGGING

## RUBBER SPECIFICATIONS

*Typical values*

| | NAT | FRAS |
|---|---|---|
| **Polymer** | SBR | Blend |
| **Tensile strength (MPa) min ISO37** | 18.0 | 16.0 |
| **% Elongation min ISO37** | 550% | 500% |
| **Hardness (shore A) ISO868** | 65+/-5 | 65+/-5 |
| **Abrasion resistance max vol. loss ISO 4649 method A (non-rotating)** | 70mm$^3$ | 150mm$^3$ |
| **FRAS - MDG3608 and MSHA Standards** | N/A | PASS/ACCEPTED |
| **Heat ageing (Property change after 70°C 168hs)** | Tensile strength +1%<br>Elongation -15%<br>Hardness 5 points | Tensile strength +5%<br>Elongation -1%<br>Hardness 3 points |
| **Continuous operating temperature** | -40/+70°C | -40/+70°C |

## CERAMIC SPECIFICATIONS

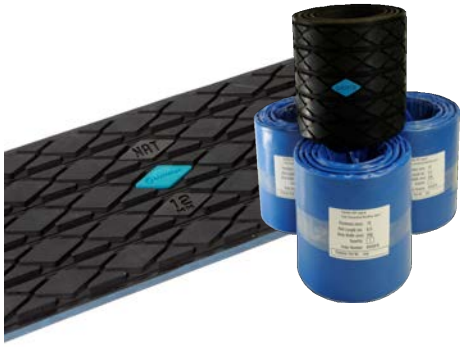
*Typical values*

| | |
|---|---|
| **Aluminium oxide** | 96% |
| **Specific gravity g/cm3** | 3.7 |
| **Vickers hardness HV (10)** | 1000 plus |
| **Flexural strength (Mpa)** | 300 |
| **Compressive strength (Mpa)** | 1800 |
| **Fracture Toughness (Mpa m1/2)** | 3.5 |

## CHECKERBOARD 20% CERAMIC LAGGING

### NAT AND FRAS

Elastotec Rubber and Ceramic Laggings are available in both SBR (NAT) and FRAS approved compounds. FRAS lagging is MDG3608 certified and MSHA accepted, made of a fire resistant and antistatic compound that is primarily used in applications where there is a risk of fire and/or explosion as a safety precaution. These applications include underground coal mines, power stations, grain handling facilities and sugar terminals. Elastotec uses blue coloured inserts to identify SBR (NAT) rubber products and red coloured inserts to identify FRAS rubber products.


### Elastotec lagging can be applied to pulleys by cold bonding or by hot vulcanisation.

#### ELASTOTEC COLD BONDING RUBBER LAGGING

Elastotec Cold Bonding Rubber Lagging has the CN buffed bonding layer packed in plastic to protect and keep it fresh and free from contamination until application to the pulley.

A rubber tear bond is achieved by using Elastotec Metal Primer 2205 and Elastotec Cold Bonding Adhesive to chemically interlock with the CN bonding layer, making a strong interface between the layers.

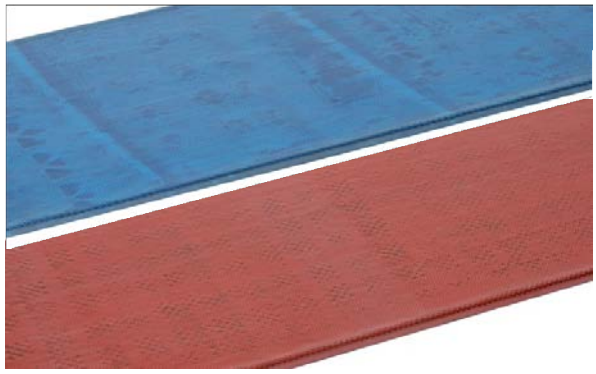
An Elastotec approved applicator using the Elastotec application procedure will achieve reliable adhesion levels that exceed the 9 N/mm industry standard and are typically at 12 N/mm.

#### ELASTOTEC HOT VULCANISING RUBBER LAGGING

Elastotec Hot Vulcanising Rubber Lagging has a 1.2mm thick uncured rubber layer applied to the back and sides of the lagging.

Hot Vulcanising Lagging is supplied packed in plastic to protect and keep the uncured bonding layer fresh and free from contamination until application to the pulley.

Application by a trained Elastotec approved applicator using the Elastotec application procedures will guarantee a 100% rubber tear bond between the lagging and the pulley shell with typical adhesion values exceeding 20 N/mm.



# CHECKERBOARD 20% CERAMIC LAGGING

## LAGGING SPECIFICATIONS – CHECKERBOARD 20% CERAMIC LAGGING

### COLD BONDED – NAT

**DIMENSIONS**

| PRODUCT | CODE | WIDTH | THICKNESS | LENGTH | WEIGHT/lm |
|---|---|---|---|---|---|
| **Checkerboard 20% Ceramic Lagging 12mm** | ELA-SRC20-N-12K | 250mm-252mm | 12mm-13mm | 58.2m | 4.35kg |

### COLD BONDED – FRAS

**DIMENSIONS**

| PRODUCT | CODE | WIDTH | THICKNESS | LENGTH | WEIGHT/lm |
|---|---|---|---|---|---|
| **Checkerboard 20% Ceramic Lagging 12mm** | ELA-SRC20-F-12K | 250mm-252mm | 12mm-13mm | 58.2m | 4.50kg |

### HOT VULCANISED – NAT

**DIMENSIONS**

| PRODUCT | CODE | WIDTH | THICKNESS | LENGTH | WEIGHT/lm |
|---|---|---|---|---|---|
| **Checkerboard 20% Ceramic Lagging 12mm** | ELA-SRC20-N-12KV | 251mm-255mm | 13mm-14.2mm | 9.7m | 5.40kg |

### HOT VULCANISED – FRAS

**DIMENSIONS**

| PRODUCT | CODE | WIDTH | THICKNESS | LENGTH | WEIGHT/lm |
|---|---|---|---|---|---|
| **Checkerboard 20% Ceramic Lagging 12mm** | ELA-SRC20-F-12KV | 251mm-255mm | 13mm-14.2mm | 9.7m | 5.80kg |

Product code for different lengths: Add 5-digit number indicating length in mm.
Roll: 12mm cold bonded 58.2m roll product code: ELA-SRC20-F-12K
Strip: 12mm hot vulcanised 1.2m strip length product code: ELA-SRC20-F-12KV-01200
Thickness variation (all strips/pulley) +/-0.5mm.

STORAGE

## STORAGE RECOMMENDATIONS

- Stock usage based on a first-in first-out method (FIFO).
- The storage room for lagging must be cool, dry and dust-free.
- Avoid storage places near sources of ozone generating equipment.
- Do not store outside.
- Avoid storage in direct sunlight and strong artificial light as UV light can damage the products and may lead to a premature ageing.
- Under no circumstances should fuels, lubricants, acids, disinfectants, solvents or other chemicals be stored in the same storage area.
- Keep the storage place clean. Protect the material from dust, water etc. with suitable coverings.
- Allow 24 hours before use when lagging is removed from cold storage.

## SHELF LIFE

### COLD BONDING LAGGING AND WEAR PANELS

- Stored <25°C 3 years shelf life
- Light buffing of bonding surfaces is recommended if over 4 months from production date

### HOT VULCANISED LAGGING AND WEAR PANELS

- <7°C and away from UV and ozone generating equipment 12 months. Products stored for longer than 6 months will need to be re-tested for adhesion before being used, and the recommended shelf life is 12 months.

### ADHESIVES AND PRIMERS

- Store in flammable goods cabinet
- Stored <25°C
- Shelf life:
  - Primers: 2 years
  - Cold bonding adhesive: 2 years
  - Hot vulcanising adhesive: 12 months
  - Direct bond adhesive: 2 years

Products stored under the above conditions for longer periods of time than recommended need to be re-tested for adhesion before being used.

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