# CROWNED CERAMIC LAGGING







Version 20240821 Page 1 of 8 Phone: +61 2 8987 1922 | www.elastotec.com.au

## **CROWNED CERAMIC LAGGING**





Elastotec Crowned Ceramic Lagging is designed to be applied to flat pulley shells, to provide a crowned profile which will improve belt tracking.

The strips are molded with a built in CN bonding layer, which eliminates the need for additional rubber layers. The lagging is buffed after molding to taper the thickness towards the edges, creating the crowned effect.



Elastotec Crowned Ceramic Lagging is designed to be applied to conveyor 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.





# **CROWNED CERAMIC LAGGING**



# **KEY FEATURES AND BENEFITS**

- Designed to be applied to flat pulley shells which eliminates the need for machining.
- Improved belt tracking.
- Available in 250mm wide strips that can be made 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 logos (Blue for SBR and Red for FRAS).
- High quality rubber formulations designed for good bonding, resistance to degradation by out door exposure, and good abrasion resistance.

- Buffed CN Bonding layer for increased adhesion for Cold Bonded application.
- Available with uncured bonding layer for Hot Vulcanised application.
- Quicker and easier to apply
- Uniform bonding surface no gaps
- Uniform crown trasition kinder to the belt
  - Standard offering tapers from 15mm through the centre down to 12mm on the ends. (Other thicknesses available)
- Suitable for long term service at temperatures from 40°C to +70°C.





Version 20240821 Page 3 of 8 Phone: +61 2 8987 1922 | www.elastotec.com.au

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Crowned ceramic lagging strips are designed to ensure outstanding durability while helping to maintain belt alignment without the need for a machined crowned pulley shell.

The central portion of the strips has maximum thickness that gradually decreases towards the ends. Tiles are bonded to rubber on 5 sides to ensure maximum tile to rubber adhesion strength and reduce the risk of breakage.





Version 20240821

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# **RUBBER SPECIFICATIONS**

Typical values

	ΝΑΤ	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 <sup>3</sup>	150mm <sup>3</sup>
FRAS - MDG3608 and MSHA Standards	N/A	PASS/ACCEPTED
Heat ageing (Property change after 70°C 168hs)	Tensile strength +1% Elongation -15% Hardness 5 points	Tensile strength +5% Elongation -1% 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	





# **CROWNED CERAMIC LAGGING**



# LAGGING SPECIFICATIONS - CROWNED CERAMIC 80% LAGGING

## COLD BONDED - NAT

#### DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH
Crowned Ceramic Lagging 15mm Smooth Tiles	ELA-CWDRC80-N-15P	250mm-252mm	15mm middle 12mm ends	fit to pulley size

## **COLD BONDED – FRAS**

#### DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH
Crowned Ceramic Lagging 15mm Smooth Tiles	ELA-CWDRC80-F-15P	250mm-252mm	15mm middle 12mm ends	fit to pulley size

## HOT VULCANISED - NAT

#### DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH
Crowned Ceramic Lagging 15mm Smooth Tiles	ELA-CWDRC80-N-15PV	251mm-255mm	15mm middle 12mm ends	fit to pulley size

#### **HOT VULCANISED – FRAS**

#### DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH
Crowned Ceramic Lagging 15mm Smooth Tiles	ELA-CWDRC80-F-15PV	251mm-255mm	15mm middle 12mm ends	fit to pulley size

Thickness variation (all strips/pulley) +/-0.5mm.

Product code for different lengths: Add 5 digits indicating the overall strip length in mm. Strip length to always be 100mm longer than face width to allow overhang for trimming after application.



# **CROWNED CERAMIC LAGGING**

#### Example:

Strip: Crowned 80% Ceramic Lagging, smooth tiles, for pulley face width 1900mm natural rubber, hot vulcanised: ELA-CWDRC80-DIA-F-15P-1900



Crowned Ceramic Lagging is available in other ceramic coverage options (i.e. 20% or 80%), and other lagging thicknesses. Please contact your Elastotec representative for more information.



For more information, please contact:



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