

# The importance of wearing the correct eye protection

Eye injuries can occur in many settings, but in working environments that have a high risk of flying particles, scratches, abrasions and foreign bodies entering the eye, ensuring the health and safety of employees' eyes during working hours is of paramount importance.

Of the reported non-fatal injuries to employees during the period 2013-2016, 2096 ere to the eye an other parts of the face and 131 were for loss or reduction of sight\*.

Something as fundamental as the correct eye protection could have lessened the severity, or have prevented up to 90% of eye injuries.

# **HAZARD ANALYSIS**

Anyone responsible for worker safety should carry out a detailed survey of the workplace to determine the correct eye protection required for the specific jobs being undertaken and the potential hazards that workers face.

Chemicals or foreign objects in the eye and cuts or scrapes on the surface of the eye are common workplace injuries. Other common eye injuries can include splashes and contact with grease and burns from steam, ultraviolet or infrared radiation exposure, a flying wood or metal chips.

Lloyd & Jones in association with Globus Group can offer advice and support in carrying out a site survey of your workplace and to discuss your safety eyewear requirements.

T: 0151 955 4700 • E: sales@lloyd-jones.com

\*Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)





## **GUIDE TO LENS MARKINGS**

### Optical Class

1	± 0.06 dioptres	Can be worn at all times
2	± 0.12 dioptres	Should only be worn for occasional use
3	± 0.25 dioptres	Should not be worn for long periods

Please Note: The complete Benchmark range is Optical Class 1

### **Optional Requirements**

K	Resistance to surface damage by fine particles
N	Resistance to lens fogging
Т	Extreme temperature of -5°C and +55°C

### Filter Type Code

2	UV filter
2C or 3	UV filter with good colour recognition
4	Infrared filter
5	Sunglare filter
6	Sunglare filter with IR specification

# Manufacturer identity © 2C 1.2 © 1 F KN C € Scale Number (shade) 1.2 Clear or Amber 1.4 Blue or I/O Waterproof 1.7 Minimises or I/O 2.5 Grey or Revo

### Mechanical Resistance

IMPACT LEVEL	MAX. SPEED	EYE PROTECTION TYPE
A (T) High Energy Impact	190 m/s	Faceshields
B (T) Medium Energy Impact	120 m/s	Faceshields and Goggles
F (T) Low Energy Impact	45 m/s	Faceshields/Goggles/Spectacles
S Increased Robustness	5.1 m/s	Spectacles (CR39 lenses)

(T) : The frame/lens has had an additional extreme temperature test at -5  $^{\circ}\text{C}$  and +55  $^{\circ}\text{C}$ 

### Welding Filter

Dark Grey or Mirror

1.7	Welding Assistant
3-5	Brace Welding
5-7	Oxy Cutting
7+ Other Welding	Other Welding

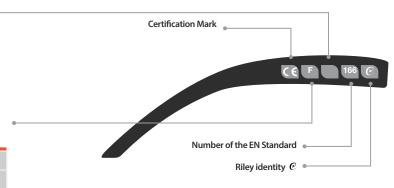
### Fields(s) of use (where applicable)

None	General Use
3	Liquid droplets or splashes
4	Large dust particles < 5 μm
5	Gases and small dust particles $< 5  \mu m$
8	Short circuit electric arc
9	Molten metal and hot solids

### Mechanical Strength

S	Increased strength
F	Low energy impact, resists a 6mm, 0.86g ball at 45m/s
В	Medium energy impact, resists a 6mm, 0.86g ball at 120m/s
Α	High energy impact, resists a 6mm, 0.86g ball at 190m/s

# **GUIDE TO TEMPLE MARKINGS**



If protection against high-speed particles at extreme temperatures is required then the selected safety eyewear product should be marked with the letter T immediately after the 'Mechanical Strength' letter; eg: FT, BT or AT. If the 'Mechanical Strength' letter is not followed by the letter T, the safety eyewear product shall only be used against high-speed particles at an ambient temperature.

If the frame and lens display different certification marks ( $F_iB$  or A), the lowest level should be assigned to the entire safety eyewear product.



# LENS TECHNOLOGY

The robust polycarbonate lenses in Riley eyewear provide high performance protection from impacts and deliver perfect optical quality for every wearer in accordance with EN 166.

Each model in the glasses portfolio is available with a variety of lens tint options to allow safe working in a wide array of applications and conditions. Selected models also protect up to 400nm to provide maximum protection from both UVA and UVB light regardless of lens tint, absorbing the lower part of the blue light in the visible spectrum.

LENS TYPE		APPROXIMATE VLT*	PROTECTION AGAINST:	FEATURES:
AMBER	8	90%	UV	Amber lenses block blue light to heighten contrast, improve depth perception and provide you with a brighter view in poorly-lit working conditions. Also filters out blue light from monitors and electronic devices that can cause eye fatigue. Great for overcast and foggy conditions.
BLUE	8	65%	UV	Blue lenses enhance vision in the presence of excessive sodium vapour or yellow light. They reduce yellow light and enhance contrast. Commonly used indoors but can be used outdoors as well to improve contrast levels.
GREY	8	14%	UV	Grey lenses reduce brightness to minimise eye fatigue in moderate to bright environments, making them ideal for daytime wear and outdoor tasks. The dark-tinted lenses decrease glare without distorting colours.
INDOOR/ OUTDOOR	8	60%	UV	Indoor/Outdoor lenses provide clarity of vision in both interior and exterior lighting environments making them an ideal choice for transport and logistics workers who can move quickly between the two environments.
POLARISED	8	10%	UV	Polarised lenses sharpen the vision and protect the eyes from harmful rays by filtering out glare from reflective surfaces. This makes them ideal for activities near water.
REVO	<b>S</b>	26%	UV	Revo lenses have a reflective coating on the surface of the lens and similar to polarisation, they reduce glare.
CLEAR	\$	92%	UV	Clear lenses provide true colour recognition and are ideal for general purpose indoor and outdoor work in normal to low light conditions.
TWILIGHT	8	55%	UV	Improves contrast and colour perception in low light conditions, great for outdoor workers at dusk or dawn. Will also filter out more then 75% of blue light, reducing the stress to the eye.
ANTI-REFLECTIVE	8	90% Approx	UV	This specialised lens is ideal for electronic applications to provide optimum colour perception as well as extremely bright environments. The high performance anti-reflective coating lenses reduce internal lens reflection which enhancing clarity.
LED		69% Approx	UV	Designed to improve contrast and reduce stress to the eye, the lens is ideal for indoor LED lit environments such vehicle manufacture and engineering sectors. Featuring a soothing light brown tint, the lens offers full clarity with a high visible light transmission percentage.

 $<sup>^*</sup>$ Visible light transmission is the approximate amount of visible light that can pass through a lens.

# **LENS COATINGS**

Three coating technologies feature across the Riley range and each coating has the same properties on both the inside and outside of the lens.

Each is designed to enhance the Riley experience by maximising longevity and wearer acceptance.







Models with the TECTON coating offer exceptional resistance to fogging as well as excellent scratch and abrasion resistance (EN 166 markings: K and N).

This coating is applied to both sides of the lens and features on the majority of the Riley range as standard.

Lenses coated with the TECTON 400 coating will eliminate harmful UV rays passing through the eyewear from the sun.

This high performance coating still contains the anti-fogging and anti-scratch properties of TECTON and is applied to both sides of the lens.

The moisture-repellent ARIDA coating stops water droplets from sticking to the lenses. The minuscule angle of the coating allows water to escape the surface of the lens in an extremely efficient way and thus prevents rainwater from obscuring the line of vision. ARIDA lens coatings also include high quality abrasion resistance properties (EN 166 marking: K).