

TECHNICAL PERFORMANCE STANDARDS

BASIC STANDARDS		STANDARDS BY TYPE OF PRODUCT	
EN 166	Technical performance standards	EN 169	Welding filters
EN 167	Methods for optical tests	EN 170	Ultraviolet filters
EN 168	Methods for tests other than optical	EN 171	Infrared filters
		EN 172	Sun glare filters for industrial use

WELDING			
EN 175	Equipment for eye and face protection during welding and allied processes	EN 207	Filter and Eye protection during welding
EN 379	Welding filters with switchable luminous transmittance and dual luminous transmittance	EN 208	Eye protectors for adjustment work on lasers and laser systems

The EN166 standard is applicable to all types of personal eye protectors used against various dangers liable to damage the eye or to alter the vision, with the exception of radiation of nuclear origin, X rays, laser beams, infrared rays emitted by sources at low temperature. The specifications of this standard are not applicable to eye protectors for which separate and complete standards exist, such as anti-laser eye protector, all-purpose solar spectacles, etc. The eye protectors fitted with corrective lenses are not excluded from the application field.

MEANING OF LENS MARKING	
3	Code number: indicates the type of filter 2 & 3 = UV, 4 = IR, 5 & 6 = solar
1.2	Filter number: indicates the filter of the lens between 1.2 and 7 for spectacles and goggles Without numeric code: Welding filter
	2: filter for ultraviolet rays, the recognition of colours may be altered
	3: filter for ultraviolet rays, good recognition of colours
	4: filter for infrared rays
	5: solar filter without specification of infrared
	6: solar filter with specification of infrared
D	Identification of Manufacturer eg. (D = Pulsafe)
1	Optical class 1 = +/-0.06 dioptres permanent wear 2 = +/-0.12 dioptres sporadic wear 3 = +/-0.25 dioptres occasional work with prohibition of permanent wear
F	Symbol for mechanical strength (F for low impact - see others below) No symbol = minimal solidity (resistance to the application of a 22mm steel with a pressure of 100N) A = impact at high energy (resistance to the impact of a 6mm steel ball at 190m/s) B = impact at medium energy (resistance to the impact of a 6mm steel ball at 120m/s) F = impact at low energy (resistance to the impact of a 6mm steel ball at 45m/s) S = increased robustness (resistance to the impact of a 22mm steel ball at 12m/s)
(F)T	Symbol of resistance to high speed particles at extremes of temperature (-5°C, +55°C)
8	Symbol of resistance to short term electrical arc
9	Symbol for non-adherence to molten metal and resistance to penetration of hot solids
K	Symbol for resistance to surface damage by fine particles
N	Symbol for resistance of fogging of lens
R	Symbol for enhanced reflectance
0	0 = original lens V = replacement lens

OTHER SPECIFIC MARKINGS	
3	Symbol for resistance to liquids
4	Symbol for resistance to large dust particles
5	Symbol for resistance to gas or fine dust particles

MEANING OF FRAME MARKING	
D	Identification of manufacturer (D = pulsafe)
166	Standard number
xxx	Field(s) of use
3	Liquids (droplets or splashes)
4	Large dust particles (dust with a particle size >5µm)
5	Gas and fine dust particles (gases, vapours, sprays, smoke and dust with a particle size <5µm)
8	Short circuit electric arc
9	Molten metals and hot solids
F	Symbol for mechanical strength
(F)T	Symbol of resistance to high speed particles at extremes of temperature (-5°C, +55°C)
H	Symbol to indicate that the eye protector is designed to fit a small head
2.5	Number indicates the highest lens scale number(s) compatible with the frame

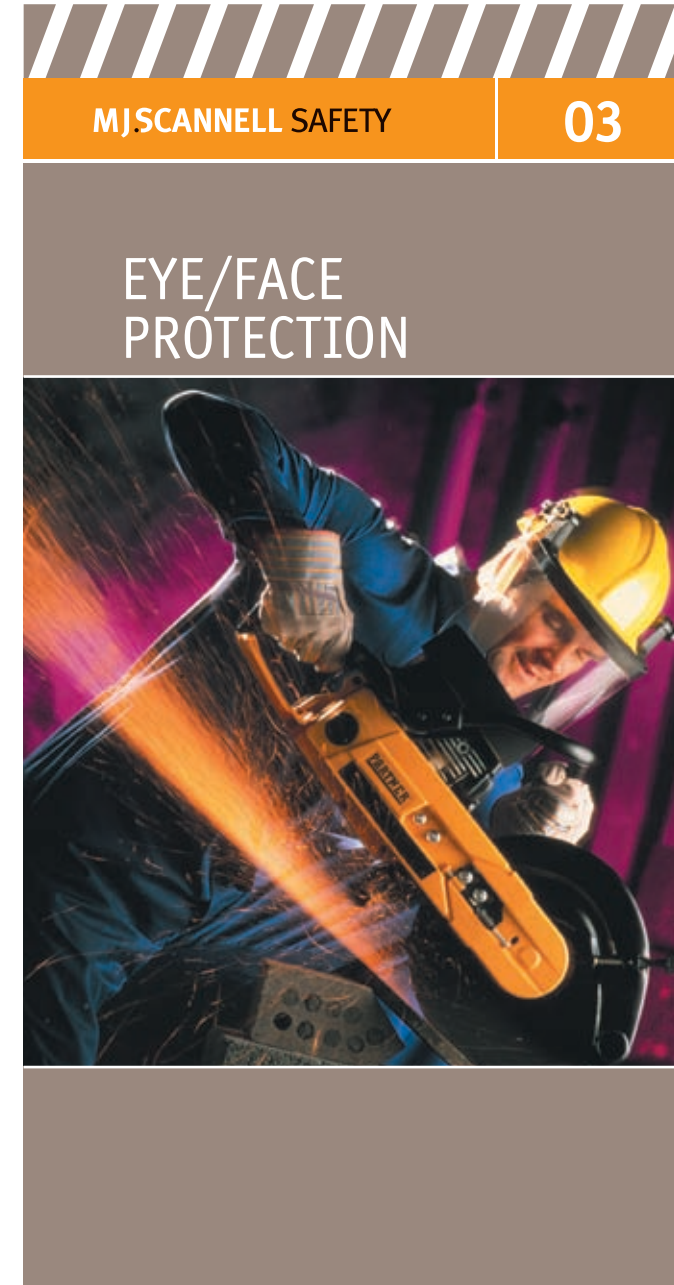
PROTECTION AGAINST RADIATION				
	Code N°.	Shade Filtration N°.*	EN Standard	Application
Ultraviolet (UV)	2 to 3	1.2 to 5	EN170	Welding - short circuit Electric arc - sunlight
Infrared (IR)	4	1.7 to 7	EN171	Arc Welding Glass Manufacturing Foundry works sunlight
Solar filter	5 to 6	1.7 to 4	EN172	High intensity solar glare Outdoor work
Welding filter	1.7 to 7	1.7 to 7	EN169	Welders assistant shade 1.7 Braze welding shade 3 to 5 Oxy-cutting shade 5 to 7 Arc welding shades >7 require face shield

The EN169 standard gives the grade numbers and the transmission specifications of the filters intended to ensure the protection of users carrying out welding, brazing, arc gauging and plasma arc cutting works. The other requirements applicable for this type of filter are featured in the EN166 standard. The specifications for the welding filters with variable protection grade or double protection grade are contained in the EN379 standard.

The EN175 standard specifies the safety requirements and test methods relating to personal protective equipment used to protect the user's eyes and face against harmful optical radiation and against other specific risks due to usual welding processes, cutting or other related techniques. The standard specifies the protection against different types of risks or dangers:

- RADIATION
- FLAMMABILITY
- MECHANICAL RISKS
- ELECTRICAL RISKS

The equipment is designed to adjust protective filters with or without guard lenses or eyepiece of reinforcement, according to the recommendations of the protective equipment manufacturer for welding operations, in conformity with EN166 and EN169 standards or with EN379 standard.



▼ SAFETY GLASSES

ATLAS SAFETY GLASSES

Lightweight, single view lens. Soft adjustable nosepiece. Abrasion-resistant polycarbonate lens. Comes with convenient flexicord.

AVAILABLE IN 2 MODELS
EYAC Clear Lens
EYACAM Anti-Mist Lens

STANDARD
EN170, EN166 2-1.2 Redback 1FT
EN170, EN166 2-1.2 Redback 1FT



POKELUX

Extremely lightweight. Single moulding polycarbonate surround lens and frame. Snug sporty style. Full field of vision. Anti-mist lens.

AVAILABLE IN 2 MODELS
EYPOKE Clear Lens
EYPOKET Dark Tinted Lens

STANDARD
EN170, EN166 2-1.2 Lux.0 1F K
EN172, EN166 5-2.5 Lux.0 1F K

A800

Sports style glasses. Slim profile provides an ideal fit for workers with smaller faces. 9-base polycarbonate abrasion resistant lens provides a 180 degree field of distortion-free vision.

AVAILABLE IN 2 MODELS
EY1015369 Anti-Mist Lens
EY1015350 I/O Silver Lens (Int./Ext.)

STANDARD
EN170, EN166 2C-1.2 B-D 1 F
EN172, EN166 5-1.7 B-D 1 F

PROTÉGÉ ANTI-MIST

Sports style ultra lightweight design. Wrap-around brow. Ideal for construction, heavy manufacturing, utilities and waste industries.

AVAILABLE IN 2 MODELS
EY1015364 Anti-Mist Lens
EY1015689 I/O Silver Lens (Indoor/Outdoor)

STANDARD
EN170, EN166 2C-1.2 B-D 1FT
EN172, EN166 5-1.7 B-D 1FT



METALITE

Stylish, lightweight wrap-around design. Spring hinge temples. Bendable temples to fit your ears. Soft nose bridge.

AVAILABLE IN 2 MODELS
EY1014290 Clear Lens
EY1014293 TSR Grey Lens

STANDARD
EN170, EN166 2C-1.2 B-D 1F
EN172, EN166 5-2.5 B-D 1F

XC ANTI-MIST

Large 9 base-curved lens offers total wrap around coverage and provides exceptional peripheral vision along with complete protection. Choice of 13 different lenses. Blue Frame.

AVAILABLE IN 2 MODELS
EY1011027 Anti-Mist Lens
EY1011026 TSR Lens

STANDARD
EN170, EN166 2C-1.2 B-D 1 FT
EN172, EN166 5-2.5 B-D 1 FT

▲ SAFETY GLASSES

▼ SAFETY GLASSES



MILLENNIA SPORT

Virtually weightless feel. Comfortable universal nose bridge. Moulded-in lens gives improved vision and comfort. A full unobstructed field of vision. Adjustable break-away flexicord. Weight 32g.

AVAILABLE IN 3 MODELS	STANDARD
EY1005987 Clear Lens	EN170, EN166 2C-1.2 B-D 1 FT
EY1005985 Anti Mist Clear Lens	EN170, EN166 2C-1.2 B-D 1 FT
EY1005982 TSR Grey Lens	EN172, EN170, EN166 5-2.5 B-D 1 FT



OP-TEMA

Lightweight, single full-view lens. Soft, adjustable nosepiece. Adjustable temple length and lens angle. Abrasion-resistant polycarbonate lens. Comes with convenient flexicord.

AVAILABLE IN 2 MODELS	STANDARD
EY1000016 Clear Lens	EN170, EN166 2C-1.2 D 1FT
EY1004947 Anti-Mist Clear Lens	EN170, EN166 2C-1.2 D 1FT



IGNITE

Nine base, wrap around lens design provides close to the face protection. Lightweight frameless design.

AVAILABLE IN 3 MODELS	STANDARD
EY1017085 Black/Silver Frame Clear Lens	EN170, EN166 2C-1.2 B-D 1FT
EY1017087 Black/Silver Frame TSR Lens	EN170, EN166 5-2.5 B-D 1FT
EY1017089 Black/Silver Frame I/O Silver Lens	EN170, EN166 5-1.7 B-D 1FT



VRILUX

Lightweight, single full-view lens. Integral nosepiece. Adjustable temple length and lens angle. Abrasion-resistant polycarbonate lens.

AVAILABLE IN 4 MODELS	STANDARD
EYVERI Clear Lens	EN170, EN166 2-1.2 Lux.01.FK
EYVERIAM Anti Mist	EN170, EN166 2-1.2 Lux.01.FK
EYVERIT Dark Tinted Lens	EN172, EN166 5-2.5 Lux.01.FK
EYVERIA Yellow Tinted Lens	EN170, EN166 2-1.2 Lux.01.FK



VISITORS SAFETY OVERSPECTACLES

EYVOS

Wide vision wraparound design with an integral moulded nose bridge and protective side shields. Low cost. Fits over most prescription eyewear.

STANDARD	EN170, EN166 2-1.2 1FTK
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GENERAL PURPOSE GOGGLE

EYGPG

Lightweight, economically priced safety goggles. Adjustable side strap. Clear lens.

STANDARD	EN170, EN166 BT 2-1.2 1BT
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CHIMILUX GOGGLE

EYCHIM

Lightweight low cost anti-mist safety goggle. Protects against liquids, dust and molten metal. Adjustable elasticated head strap.

STANDARD	EN170, EN166 3.4B 2-1.2 1BN
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JUPITER WIDE VISION GOGGLE

EYJWWG

Wide-fit box vision goggle. Indirectly vented with adjustable side straps. Protects against liquid, dust, molten metal and mild chemicals.

STANDARD	EN170, EN166 1BT 9Z87+
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▲ SAFETY GLASSES

▲ SAFETY GOGGLES

▼ SAFETY GOGGLES

V-MAXX GOGGLE

180 degree field of vision for distortion free vision. Rotating, adjustable strap. Indirect ventilation and chemical splash resistant. Anti-scratch lens. Special purpose versions of this goggle also available (not illustrated).

TYPE
 EY1006192 Standard polycarbonate lens
 EY1006193 Anti-fog polycarbonate lens

STANDARD
 EN170, EN166 3-1.2 D1B 9
 EN170, EN166 3-1.2 D1B 9



▼ GLASSES CLEANING & ACCESSORIES



LENS CLEANING TISSUES EY1011379

500 per pack. Tissues to be used with lens cleaning solution. Alcohol and silicone free



LENS CLEANING TOWELETTES EY1011332

100 per box. Lens cleaning towelettes suitable for all lens.



LENS CLEANING SOLUTION EY1011378

Solution designed for cleaning glasses lens. Alcohol and silicone free. Used with tissues above.



SPECTACLE CORD EYSC

Black spectacle safety cord, 60cm in length. Fits all types of safety spectacles.



GLASSES PROTECTIVE CASE EYGPC

PVC slip in case for safety glasses with a belt fixing.

MAXX-PRO GOGGLE

EY1011072

Lightweight goggle that fits under welding helmets, and hard hats and with most respirators. Provides enhanced peripheral vision. Superior splash and impact protection.

STANDARD EN170, EN166 2C-1.2 B-D 1 FT 9



DURAMAXX

EY1017750

Ultimate comfort and performance soft seal goggle. Low profile ergonomic fit. Wrap-around lens providing excellent panoramic vision. Anti-mist, anti-scratch lens with high quality strap.

STANDARD EN170, EN166 2C-1.2 1BT 34 KN



UVEX LENS CLEANING STATION

EYULCS

Grey/white colour which is 60cm by 32cm. Comes complete with a mirror, mounting screws and double-sided adhesive tape for wall mounting. Contains 1 bottle of 500ml cleaning fluid and 4 boxes of the Uvex cleaning tissues (box of 500).



ULTRAVISION GOGGLE

EYUUVG

Comfortable hi-spec goggle with a full field of vision. Anti-Mist Lens. A 180 degree panoramic lens which gives 100% UV protection. High grade adjustable strap. Special purpose versions of this goggle also available. (Not illustrated)

STANDARD EN170, EN166 2-1.2 1B 349 KN



ULTRAVISION FACE SHIELD

EYUFS

Provides neat additional face protection. Quickly and securely mounts onto the Ultravision goggle. Exhale vents.



▲ SAFETY GOGGLES

▲ GLASSES CLEANING & ACCESSORIES

▼ WELDING GOGGLES



VENUS WELDING GOGGLE EYWWG

PVC outer welding goggle. Adjustable elasticated strap. Gas weld 5.

STANDARD EN175, EN166 1.F EN169



FLIP-UP WELDING GOGGLE EYFUWG

PVC outer welding goggle. Can be used as a standard safety goggle and as a welding goggle. Easy flip-up system. Adjustable elasticated strap. Gas weld 5.

STANDARD EN175 EN169 EN166 3.4.F

▼ FACE SHIELDS



CLEARWAYS FACESHIELD

Offers strength, durability & practicality. Lightweight at only 160g. Integral visor fitting ensures extra protection against chemical seepage. Sold as component parts:

TYPE	STANDARD
FV1002346 Browguard with Elastic Headband	EN166 D.3.B
FV1002341 Browguard with Ratchet Headband	EN166 D.3.B
FV1002360 200mm Clear Acetate Visor	EN166 D.1.F



BIONIC EXTREME FIT VISORS

Large visors with extended top of head and chin protection. Comfortable fit with goggles and respirators. Multiple tilt positions.

AVAILABLE IN 2 MODELS
 EY1011623 Uncoated Polycarbonate Visors
 EY1011624 Anti-Mist Polycarbonate Visors/Anti-Scratch Visor
STANDARD
 EN169, EN170, EN166 2C-1.2 B-D 1 BT 3
 EN169, EN170, EN166 2C-1.2 B-D 1 BT 3



INVINCIBLE WIRE MESH VISOR FVBGMVB

Heavy duty wire mesh gauge protective browguard & faceshield. Increased robustness. 8" (20cm) length

STANDARD EN1731.S



INVINCIBLE BROWGUARD & VISOR FVBGPVB

Offers practicality at an economical price. Lightweight and strong. Ratchet headband closure ensures ease of use. Complete with 8" polycarbonate Visor.

STANDARD EN166 1.3.B.9



INVINCIBLE BROWGUARD & CHINGUARD VISOR FVBGPVBCG

Practical, lightweight and strong. Ratchet headband closure ensures ease of use. Complete with 8" polycarbonate visor and chinguard.

STANDARD EN166 1.3.B.9



INVINCIBLE VISOR C/W HELMET ADAPTOR FVVCVB

Simple, easy to use product. Visors can be sold separately. 8" (20cm) Visor.

STANDARD EN166 1.3.B.9



FIT LOGIC READY READERS EYVOS

The Sperian FitLogic offers a custom fit for your face. With four unique fitting points you can adjust the FitLogic to match your exact fit profile. Extended wrap around lens provide extra cheek and side coverage.

AVAILABLE IN 4 MODELS	STANDARD
EY1014002 FitLogic with Ready Reader + 1.5	EN170, EN172, EN166 2C-1.2 B-D-1FT
EY1014005 FitLogic with Ready Reader + 2.0	EN170, EN172, EN166 2C-1.2 B-D-1FT
EY1014006 FitLogic with Ready Reader + 2.5	EN170, EN172, EN166 2C-1.2 B-D-1FT



INVINCIBLE POLYCARBONATE VISOR

Polycarbonate replacement visor protector. 8" (20cm) length. Can be attached to faceshield or helmet carriers.

STANDARD EN166 1.3.B.9 FVPVB

▲ SAFETY GLASSES

▲ FACE SHIELDS

MJ Scannell Safety use Sperian for Prescription Eyewear

SAFETY - SERVICE - STYLE

MJ Scannell Safety offers the complete service for prescription safety spectacles through this **Sperian** programme, from the point where a need is identified, to the supply of high quality products to the end user.

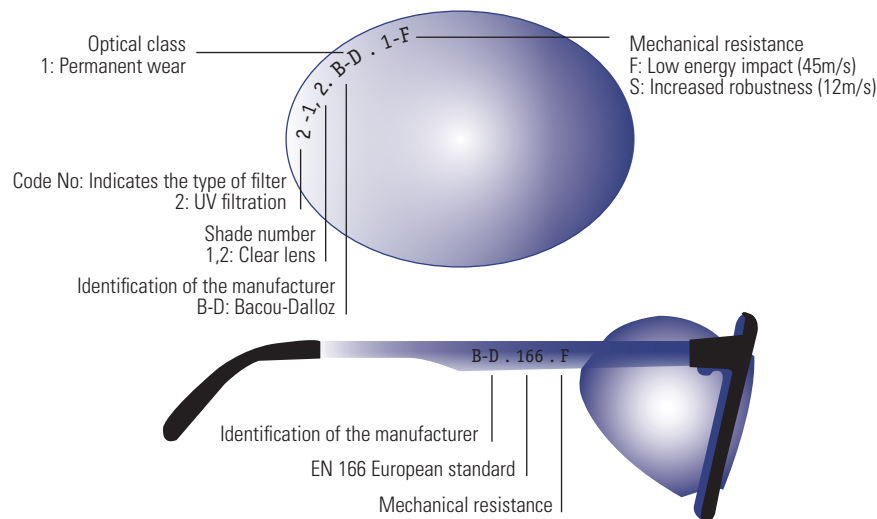
This brochure has been designed to provide the optician, the safety specifier and the wearer with a straightforward guide to our products and services. For further assistance a step-by-step guide to ordering procedure is included.

World leader in personal protective equipment, **Sperian** protects men and women at work or wherever they are at risk of injury. **Sperian** designs, manufactures and sells high quality, innovative products under leading, premium brands such as **Sperian**.

Sperian extensive experience has shown that people rely on our high quality to be safe and sure, but they also value our commitment to a choice of designs and colours too. With total control over the concept, quality and manufacture of our range, our computerised system can identify the exact location of every single pair of prescription spectacle ordered - and provide a progress report whenever required. So service is swift and the product is right for the job - providing complete eye protection with the kind of styling that makes users happy to wear **Sperian prescription spectacles**.

MEANING OF LENS AND FRAME MARKINGS

All **Sperian** prescription safety spectacles comply with EN 166 European standard.



LENS MATERIAL

Polycarbonate Lens (with abrasion resistant coating). Polycarbonate lenses have the advantage of being very lightweight, with a hard-finish coating, which gives advantageous abrasion resistance. Polycarbonate is the only lens material which fully satisfies the European standards EN166-F low energy impact requirements, giving extra protection.

CR39 Plastic Lens. An extremely lightweight plastic lens, CR39 gives excellent all day wearability. Far stronger than Toughened Glass, CR39 gives impact protection to EN166-S.

Toughened Glass. Offering impact resistance to EN166-S, Toughened Glass is comparatively heavier to wear than most plastic lenses, but does offer greater resistance to abrasion. (Toughened Glass lenses are not suitable for all frame styles).

Sperian Spectacles offer a full range of corrective lenses available as single vision, bifocals, varifocals or even trifocals. A full range of lens tints can also be provided as required including graduated tints. Specific options include: **Photochromic, U-V Absorbing and Didymium**.

Your optician will prescribe the correct lenses and frame size.

FRAME COLOUR OPTIONS

Frames are available in a variety of colours in metal and plastic, as noted next to each frame.

Colour Integrity

Please note that due to the photographic and printing processes involved, the colours of spectacle frames as shown in this brochure, may differ slightly from the frames themselves as seen with the naked eye.

EASY ORDERING

Contact us for a supply of order forms. We'll have these printed with all your company details already completed, to save time and money all round.

When one of your people requires prescription safety spectacles, you complete the form as indicated in the shaded area, retaining the green copy for your files. You send the remaining copies of the form with the person visiting the optician.

The optician will prescribe the correct lenses and frame sizes. Should a sight test* also be required, the optician will require additional payment for this service. This can be paid on your behalf and included in the final invoice from your distributor.

The optician then completes your order form, and sends it direct to Sperian by post, or for speed, by fax.

Our laboratories manufacture the spectacles to the specific order, and return them to the optician.

The wearer revisits the optician to have the spectacles fitted.

To save you time and trouble, you will receive only one invoice, covering both the spectacles and the optician's dispensing fees**. For further advice on absolutely any aspect of prescription safety spectacles, just call our Prescription Service anytime during office hours.

01 2952361 - 021 4355377

Or your local MJ Scannell area Sales Executive

* Sight Test Fee

Examination of the eyes to determine visual defects and identification of prescription requirements.

** Dispensing Fee

Transfer of Prescription requirements to the suitable spectacle frame to which suit the individual's need, and the final fitting of the spectacle.

ORDER FORM

**SPERIAN PROTECTION
(UK) LIMITED**
PO Box 7495
Halesowen
West Midlands
B63 3LG



Telephone: 0121 585 5655 for enquiries
Safety Officer to Complete

Distributor

(Obtain green copy for your records)
Company name and address

A/C No. XP No.

A/C No.

Employee/Patient

Telephone No.

Contact Name Order No.

Optician please complete all necessary sections below. Frame size details are shown on the reverse of the blue copy of this form, retain blue copy and send remaining copies to above address.

	Sphere	Cylinder	Axis	Prism	Base	Addition	Height
R							
L							

Lens Material

Polycarb EN166 - F GC*

CR39 Plastic EN166 - S Lens Type

Toughened Glass EN166 - S Tint/Coating

Frame Model Frame Colour Frame Size

Special Instructions

Opticians Address Label Account No.

Opticians Fees

Dispensing Fee	
Examination Fee	
Total	

Telephone

FRAME SIZES DETAILED ON REVERSE SIDE OF BLUE COPY

THE COMPLETE PRESCRIPTION LABORATORY

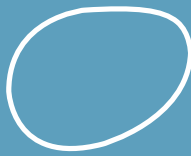
Sperian offer consistently high quality as they have all the relevant processes under control through their own dedicated prescription laboratory. This is your guarantee of quality and reliability.

The highest possible number of stock lenses are available - ensuring true off-the shelf delivery both for standard items and lenses which require surfacing. A fully computerised order system is unique within the industry for its speed and accuracy.

Further, MJ Scannell Safety will answer every request for help or information on prescription safety spectacles either immediately by telephone or within 24 hours if the enquiry requires more research. You can order from MJ Scannell Safety in complete confidence, secure in the knowledge that you are dealing with Ireland's number one eye and face company.

Lens Types

Single Vision



Round 24/25 Seg Bifocal



Flat Top/'D' - Seg Bifocal



Round 38/45 - Seg Bifocal
Not Polycarbonate



E-Style/ Executive Bifocal
Not Polycarbonate



Progressive/ Varifocal



The optician will specify the lens type the patient requires

FRAME	PRODUCT NAME	FRAME COLOUR
	RX insert for XC	Silver
	FC708	Gold Silver
	FC707	Dark Gunmetal Brown Mat Finish
	BC101	Gold/Brown Tortoiseshell Silver/Black Tortoiseshell
	BC109	Gold Mat Finish Gold/Red Tortoiseshell Gold/Brown Tortoiseshell
	Apollo	Bronze Gunmetal Mat Finish
	1200	Black Silver Gold
	1100	Bronze Gunmetal Mat Finish
	8000	Black Gold/Brown Tortoiseshell
	Horizon	Clear with Blue Temples Clear with Red Temples
	RX220	Clear with Blue Temples
	FC705	Grey Brown
	Hi-Style 6000	Blue Brown Tortoiseshell