

Product range

WELDING PROTECTION



 **optrel**[®]
swiss made 

PROTECTING
PROFESSIONALS



TO PREVENT WORK FROM
BECOMING A HEALTH RISK,
WE MAKE LIFE EASIER FOR
EVERYONE WHO LOVES
WELDING.

Marco Koch, President of optrel AG

FULL OF INNOVATIONS AND OPPORTUNITIES. WELDING HELMETS AND CUTTING HELMETS FROM OPTREL.

Modern welding helmets have many features that go far beyond simple glare protection. A crystal-clear view of the weld seam, pure colours and super-lightweight helmet designs are just a few examples.

With innovative welding helmets from optrel, you always work efficiently, comfortably and – above all – safely.

HELIX QUATTRO

Hard work never felt so easy.



reddot winner 2023
best of the best



SLIDE-UP HELMET



PANORAMA FIELD OF VIEW



TOP MARKS IN ALL FOUR CATEGORIES



TRUE COLOUR VIEW



SHADETRONIC®
PROTECTION LEVELS
4-14*



FADETRONIC



FIVE-POINT DETECTION



OPTREL RE-CHARGE



ISOFIT® HEADGEAR



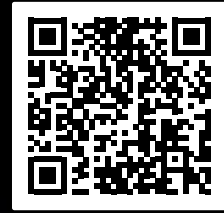
RESPIRATORY PROTECTION

A HARD-WORKING MACHINE FOR HARD WORKING CONDITIONS.

With **helix quattro**, optrel offers a welding helmet for working under the most difficult conditions. A slide-up helmet with internal ADF that has all the technical features of an optrel helmet, combined with sight protection for any accompanying work. With an EN 379 optical classification of 1/1/1/1 for optimum protection at lateral viewing angles and a maximum protection level of 14*.

The integrated, slide-up ADF minimises the weight and torques, providing the best possible relief for your neck.

The optrel helix series is available with integrated IsoFit® headgear as standard and optionally with an additional hardHat in line with industry standard EN 397.



→ All info,
accessories and
replacement
parts

Helmet system	Item no.
 <p>optrel helix quattro welding helmet black, IsoFit® headgear, optrel EN 397 hardHat, black</p>	1050.100
 <p>optrel helix pure air quattro welding helmet black, IsoFit® headgear, optrel EN 397 hardHat, black</p>	4441.940
 <p>optrel helix quattro welding helmet black, IsoFit® headgear</p>	1050.110
 <p>Ready-to-weld package helix quattro with swiss air PAPR</p>	4600.150
 <p>Ready-to-weld package helix pure air quattro with e3000X PAPR</p>	4550.610

Technical data

Protection levels	3-13/4-14*
Brightness level	Open: 1.0/ closed: 3.0/4.0*
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery service life 300 to 500 charging cycles
Sensitivity	Individually adjustable
Switching time	Bright to dark: 0.090 ms at 23 °C 0.070 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
Classification EN 379	1/1/1/1
Operating temp.	-10 °C to +55 °C
Storage conditions	Dark environment
Total weight	620 g

* with additional protection lens SN+1

HELIX CLT

Hard work never felt so easy.



reddot winner 2023
best of the best



SLIDE-UP HELMET



PANORAMA FIELD OF VIEW



CRYSTAL LENS TECHNOLOGY WITH BRIGHTNESS LEVEL 2.0



TRUE COLOUR VIEW



SHADETRONIC® PROTECTION LEVELS 4-12



FADETRONIC



FIVE-POINT DETECTION



OPTREL RE-CHARGE



ISOFIT® HEADGEAR



RESPIRATORY PROTECTION

HIGH PERFORMANCE MEETS PERFECT BRIGHTNESS AND COLOUR.

The **helix CLT** combines a slide-up helmet and internal ADF with the brightness and natural colour view of crystal lens technology. The CLT offers unrivalled brightness amongst welding helmets worldwide and ensures an outstanding visual and working experience. It provides you with the perfect basis for comfortable and easy work.

The integrated, slide-up ADF minimises the weight and torques, providing the best possible relief for your neck.

The optrel helix series is available with integrated IsoFit® headgear as standard and optionally with an additional hardHat in line with industry standard EN 397.



→ All info,
accessories and
replacement
parts

Helmet system	Item no.
 <p>optrel helix CLT welding helmet black, IsoFit® headgear, optrel EN 397 hardHat, black</p>	1050.200
 <p>optrel helix pure air CLT welding helmet black, IsoFit® headgear, optrel EN 397 hardHat, black</p>	4441.960
 <p>optrel helix CLT welding helmet black, IsoFit® headgear</p>	1050.210
 <p>Ready-to-weld package helix CLT with swiss air PAPR</p>	4600.160
 <p>Ready-to-weld package helix pure air CLT with e3000X PAPR</p>	4550.620

Technical data

Protection levels	4-12
Brightness level	Open: 1.0/closed: 2.0
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery service life 300 to 500 charging cycles
Sensitivity	Individually adjustable
Switching time	Bright to dark: 0.090 ms at 23 °C 0.070 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
Classification EN 379	1/1/1/2
Operating temp.	-10 °C to +55 °C
Storage conditions	Dark environment
Total weight	640 g

HELIX 2.5

Hard work never felt so easy.



reddot winner 2023
best of the best



SLIDE-UP HELMET



PANORAMA FIELD OF VIEW



BRIGHTNESS LEVEL 2.5



TRUE COLOUR VIEW



SHADETRONIC®
PROTECTION LEVELS 5-12



FADETRONIC



FIVE-POINT DETECTION



OPTREL RE-CHARGE



ISOFIT® HEADGEAR



RESPIRATORY PROTECTION

HIGH PERFORMANCE MEETS PERFECT BRIGHTNESS AND COLOUR.




With the **helix 2.5**, you get a slide-up helmet with internal ADF that offers all the advantages of the helix series in terms of comfort and low weight. An ADF with a protection level range from 5 to 12 covers most welding applications. It offers a brightness level of 2.5 and a clear view of all other work processes with the visor pushed up.

The integrated, slide-up ADF minimises the weight and torques, providing the best possible relief for your neck.

The optrel helix series is available with integrated IsoFit® headgear as standard and optionally with an additional hardHat in line with industry standard EN 397.



→ All info,
accessories and
replacement
parts

Helmet system	Item no.
 <p>optrel helix 2.5 welding helmet black, IsoFit® headgear, optrel EN 397 hardHat, black</p>	1050.000
 <p>optrel helix pure air 2.5 welding helmet black, IsoFit® headgear, optrel EN 397 hardHat, black</p>	4441.980
 <p>optrel helix 2.5 welding helmet black, IsoFit® headgear</p>	1050.010
 <p>Ready-to-weld package helix 2.5 with swiss air PAPR</p>	4600.140
 <p>Ready-to-weld package helix pure air 2.5 with e3000X PAPR</p>	4550.600

Technical data

Protection levels	5-12
Brightness level	Open: 1.0/closed: 2.5
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery service life 300 to 500 charging cycles
Sensitivity	Individually adjustable
Switching time	Bright to dark: 0.090 ms at 23 °C 0.070 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
Classification EN 379	1/1/1/2
Operating temp.	-10 °C to +55 °C
Storage conditions	Dark environment
Total weight	620 g

PANORAMAXX CLT

You won't believe your eyes.



PANORAMA FIELD OF VIEW



CRYSTAL LENS TECHNOLOGY WITH BRIGHTNESS LEVEL 2.0



TRUE COLOUR VIEW



SHADETRONIC® PROTECTION LEVELS 4-12



FADETRONIC



FIVE-POINT DETECTION



OPTREL RE-CHARGE



GRINDING MODE



ISOFIT® HEADGEAR



RESPIRATORY PROTECTION

XXL PANORAMIC FIELD OF VIEW.

The nose recess of the panoramaxx allows the auto-darkening filter to be moved closer to the eyes, resulting in a field of view that is up to six times larger than a standard welding helmet.







CRYSTAL-CLEAR VIEW OF THE WELD POOL.

The world-famous 'Crystal Lens Technology 2.0' is now also available in the **panoramaxx CLT** version. With it, optrel engineers have once again pushed the boundaries of what is possible to a new level. Anyone who has ever welded using CLT will not believe their eyes.



→ All info,
accessories and
replacement
parts



Helmet system	Item no.
 optrel panoramaxx CLT welding helmet black	1010.200
 optrel panoramaxx CLT welding helmet silver	1010.201
 optrel panoramaxx CLT fresh air helmet black	4441.780
 optrel panoramaxx CLT fresh air helmet silver	4441.781
 Ready-to-weld package panoramaxx CLT with swiss air PAPP	4600.010
 Ready-to-weld package panoramaxx CLT with e3000X PAPP	4550.590

Technical data	
Protection levels	4-12
Brightness level	2.0
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery life 300 to 500 charging cycles
Sensitivity	Infinitely variable
Switching time	Bright to dark: 0.090 ms at 23 °C 0.070 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
Classification EN 379	1/1/1/2
Operating temp.	-10 °C to +55 °C
Storage conditions	Dark environment
Total weight	Silver 610 g, black 600 g

PANORAMAXX QUATTRO

The best visibility in all positions.



PANORAMA FIELD OF VIEW



TOP MARKS IN ALL FOUR CATEGORIES



TRUE COLOUR VIEW



SHADETRONIC® PROTECTION LEVELS 4-13



FADETRONIC



FIVE-POINT DETECTION



OPTREL RE-CHARGE



GRINDING MODE



ISOFIT® HEADGEAR



RESPIRATORY PROTECTION

XXL PANORAMIC FIELD OF VIEW.

The nose recess of the panoramaxx allows the auto-darkening filter to be moved closer to the eyes, resulting in a field of view that is up to six times larger than a standard welding helmet.

ONE HELMET. TOP MARKS IN ALL FOUR CATEGORIES.





The **panoramaxx quattro** was developed for use in heavy-duty metal construction, where work is frequently carried out with a lot of energy and in a wide variety of welding positions.

Especially in constrained positions, you don't have a straight view of the welding point. Perfect viewing angle dependency, confirmed by the highest test mark (1) according to the EN 379 standard, guarantees that the **panoramaxx quattro** welder always has the best view of the welding process without having to manually readjust the protection level.

This results in interruption-free and fatigue-free work, which increases performance.



→ All info, accessories and replacement parts

Helmet system	Item no.
 optrel panoramaxx quattro welding helmet black	1010.100
 optrel panoramaxx quattro fresh air helmet black	4441.760
 Ready-to-weld package panoramaxx quattro with swiss air PAPR	4600.020
 Ready-to-weld package panoramaxx quattro with e3000X PAPR	4550.560

Technical data	
Protection levels	4-13
Brightness level	3.0
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery life 300 to 500 charging cycles
Sensitivity	Infinitely variable
Switching time	Bright to dark: 0.090 ms at 23 °C 0.070 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
Classification EN 379	1/1/1/1
Operating temp.	-10 °C to +55 °C
Storage conditions	Dark environment
Total weight	575 g

PANORAMAXX 2.5

As versatile as you.



PANORAMA FIELD OF VIEW



BRIGHTNESS LEVEL 2.5



TRUE COLOUR VIEW



SHADETRONIC® PROTECTION LEVELS 4-12



FADETRONIC



FIVE-POINT DETECTION



OPTREL RE-CHARGE



GRINDING MODE



ISOFIT® HEADGEAR



RESPIRATORY PROTECTION

XXL PANORAMIC FIELD OF VIEW.





The nose recess of the panoramaxx allows the auto-darkening filter to be moved closer to the eyes, resulting in a field of view that is up to six times larger than a standard welding helmet.

A HUGE CINEMA. YOU CHOOSE THE FILM.

Welcome to the big league. The **panoramaxx2.5** combines the enormous field of view with optrel's popular 2.5 technology, and offers excellent vision in every work situation. Whether for welding, cutting, grinding or straightening work. Whatever you want, the optrel **panoramaxx2.5** keeps up with your varied tasks completely automatically.



→ All info,
accessories and
replacement
parts

Helmet system	Item no.
 optrel panoramaxx2.5 welding helmet black	1010.000
 optrel panoramaxx2.5 fresh air helmet black	4441.660
 Ready-to-weld package panoramaxx2.5 with swiss air PAPR	4600.030
 Ready-to-weld package panoramaxx2.5 with e3000X PAPR	4550.550

Technical data

Protection levels	5-12
Brightness level	2.5
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Solar cells, lithium polymer battery, chargeable via micro USB cable, battery life 300 to 500 charging cycles
Sensitivity	Infinitely variable
Switching time	Bright to dark: 0.090 ms at 23 °C 0.070 ms at 55 °C Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
Classification EN 379	1/1/1/2
Operating temp.	-10 °C to +55 °C
Storage conditions	Dark environment
Total weight	575 g

CRYSTAL 2.0

You won't believe your eyes.



CRYSTAL LENS TECHNOLOGY WITH BRIGHTNESS LEVEL 2.0



TRUE COLOUR VIEW



SHADETRONIC® PROTECTION LEVEL 4 TO 12



FADETRONIC



SENSITIVITY REGULATION



GRINDING MODE



RESPIRATORY PROTECTION



HEAT-REFLECTIVE COATING

**CRYSTAL-CLEAR VIEW.
BEFORE, DURING AND AFTER WELDING.**

With **crystal2.0**, optrel offers brightness level 2.0 and CLT in the tried-and-tested sphere helmet shell. The light transmission here when inactive is 31 per cent.

The crystal-clear view when bright makes the **crystal2.0** the ideal combination helmet without having to make compromises. Colour perception when bright is already very close to the view through clear window glass. When dark, you get a detailed and high-contrast view of the weld pool with unprecedented clarity.



→ All info,
accessories and
replacement
parts



Helmet system	Item no.
 crystal2.0 welding helmet, silver	1006.900
 crystal2.0 fresh air helmet, silver	4441.900
 crystal2.0 welding helmet, black	1006.901
 crystal2.0 fresh air helmet, black	4441.901
 Ready-to-weld package crystal2.0 with swiss air PPR	4600.040
 Ready-to-weld package crystal2.0 with e3000X PPR	4530.050

Technical data	
Protection levels	4-12
Brightness level	2.0
Adjustment	ShadeTronic® or manual
Activation	Automatic on/off, sleep mode
Power supply	Battery (approx. 3000 hrs operating time)
Sensitivity	Individually adjustable
Switching time	Bright to dark: 0.10 ms at 23 °C 0.070 ms at 55 °C Dark to bright: 0.05 s to 1.0 s (with FadeTronic)
Classification EN 379	1/1/1/2
Operating temp.	-10 °C to +70 °C
Storage conditions	Dark environment
Total weight	482 g

E684

Experience the difference.



TOP MARKS IN ALL
FOUR CATEGORIES



TRUE COLOUR VIEW



SHADETRONIC®
PROTECTION LEVEL 4 TO 12



FADETRONIC



GRINDING MODE



RESPIRATORY
PROTECTION



HEAT-REFLECTIVE
COATING

THE FULLY AUTOMATIC SYSTEM WITH ULTRA-HD QUALITY.





The auto-darkening filter of the optrel **e684** demonstrates top standard "1" in all four classifications for assessing image quality. It's the extremely good viewing angle dependency in particular that highlights the quality of the optrel auto-darkening filter and makes the optrel **e684** so pleasant to work with.

The adaptive protection level regulation adjusts the protection level as necessary in the range of 5 to 13 completely automatically. This is ensured by an additional brightness sensor that measures the intensity of the welding arc. So you always stay perfectly protected, no matter what parameters you are currently welding with. Manual adjustments are no longer necessary. But still possible at the push of a button, of course.

A specially developed UV/IR filter enables the realistic colour perception typical of optrel and brings colour into the welder's world.



→ All info, accessories and replacement parts

Helmet system	Item no.	Technical data
 <p>e684 welding helmet silver matt black dark blue</p>	1006.500	Protection levels 5-13
	1006.501	Brightness level 4
	1006.502	Adjustment ShadeTronic® or manual
 <p>e684 fresh air helmet silver matt black dark blue</p>	4441.600	Activation Automatic on/off, sleep mode
	4441.601	Power supply Solar cells, battery (approx. 3000 hrs operating time)
	4441.602	Sensitivity Individually adjustable
 <p>Ready-to-weld package crystal2.0 with swiss air PAPR</p>	4600.050	Switching time Bright to dark: 0.17 ms at 23 °C 0.11 ms at 55 °C
		Dark to bright: 0.1 s to 2.0 s (with FadeTronic)
 <p>Ready-to-weld package e684 with e3000X PAPR</p>	4550.460	Classification EN 379 1/1/1/1
		Operating temp. -10 °C to +70 °C
		Storage conditions Dark environment
		Total weight 500 g
		Standards CE, ANSI, EAC, AS/NZS, complies with CSA Z94.3

VEGAVIEW 2.5

bright. brighter. vegaview.



BRIGHTNESS LEVEL 2.5



LIGHTWEIGHT



TRUE COLOUR VIEW



GRINDING MODE



PROTECTION LEVEL 8-12







RESPIRATORY PROTECTION

FOR ALL THOSE WHO WANT TO SEE BETTER WHEN WELDING.

The optrel **vegaview2.5** finally fulfils what is probably the most common wish among welders – a bright view. With its bright auto-darkening filter, which offers a view that is approximately 400% better than conventional automatic welding helmets when bright, and at protection level 2.5, the **vegaview2.5** is still at the forefront when it comes to clear visibility during welding.



→ All info, accessories and replacement parts

Helmet system	Item no.	Technical data
 <p>vegaview2.5 welding helmet</p>	1006.600	Protection levels 8–12 Brightness level 2.5 Adjustment Manual, external Activation Automatic on/off, sleep mode
 <p>vegaview2.5 fresh air helmet</p>	4441.800	Power supply Battery (approx. 3000 hrs operating time) Sensitivity Individually adjustable Switching time Bright to dark: 0.10 ms at 23 °C 0.07 ms at 55 °C
 <p>Ready-to-weld package vegaview2.5 with swiss air PAPR</p>	4600.060	Dark to bright: 0.05 s to 1.0 s (with FadeTronic)
 <p>Ready-to-weld package vegaview2.5 with e3000X PAPR</p>	4580.050	Classification EN 379 1/1/1/2 Operating temp. -10 °C to +70 °C Storage conditions Dark environment Total weight 489 g Standards CE, ANSI, EAC, complies with CSA

NEO P550

new. efficient. optimal.



TRUE COLOUR VIEW



PROTECTION
LEVEL 9-13



DELAY FUNCTION



SLIM DESIGN






LIGHTWEIGHT

NEW DESIGN. EFFICIENT WORK. OPTIMAL PRICE.

The optrel **neo p550** combines the advantages of the tried-and-tested p550 helmet shell with optrel's outstanding anti-glare technology. Experience true colour vision now – even from the mid-price segment. Now with approx. 3000 hours of operational readiness thanks to a new energy concept. And with a response time of only 0.1 ms upon switching on the arc. Perfect protection and comfort for your eyes.



→ All info,
accessories and
replacement
parts

Helmet system		Item no.
	neo p550 welding helmet black	1007.000
	neo p550 welding helmet green	1007.011
	Ready-to-weld package neo p550 with swiss air PAPR	4600.080
Technical data		
Protection levels	9–13	
Brightness level	4	
Adjustment	Manual	
Activation	Automatic on/off, sleep mode	
Power supply	Solar cells, battery (approx. 3000 hrs operating time)	
Sensitivity	Individually adjustable	
Switching time	Bright to dark: 0.10 ms at 23 °C 0.10 ms at 55 °C Dark to bright: 0.05 s to 1.0 s	
Classification EN 379	1/1/1/2	
Operating temp.	-10 °C to +70 °C	
Storage temperature	-20 °C to +70 °C	
Total weight	495 g	
Standards	CE, ANSI, EAC, AS/NZS, complies with CSA Z94.3	

WELDCAP

radical. casual.



WELDING HAS NEVER BEEN SO COMFORTABLE. JOIN THE REVOLUTION.

The optrel **weldcap**[®] series offers automatic welding caps that combine the comfort of a baseball cap with the advantages of a full welding helmet. The comfortable and quick-to-remove textile part is made of flame-retardant material, and is hygienic and easy to wash.

The ergonomic nose recess of the optical unit provides an oversized field of view and conveys a whole new sense of space. The infinitely variable protection levels 9-12 cover the majority of all welding applications. Thanks to the bright view when open, the **weldcap**[®] is also perfectly suited to grinding work and plasma cutting.



→ All info, accessories and replacement parts



PROTECTION LEVEL 9-12



SLIM DESIGN



EXTENDED FIELD OF VIEW



LIGHTWEIGHT







GRINDING MODE



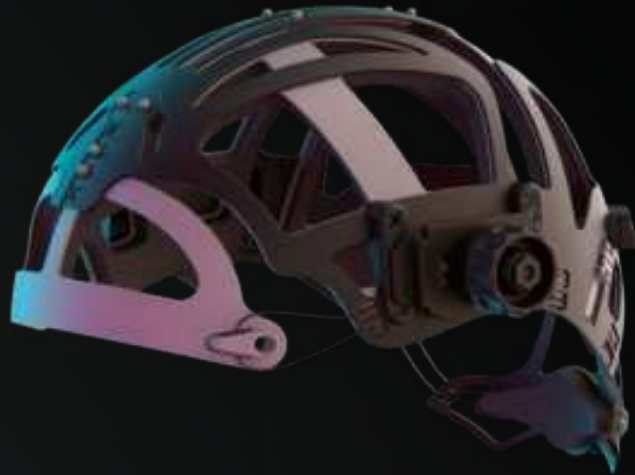
EASY HANDLING



Welding cap		Item no.	Technical data	
	weldcap® RC 3/9-12	1008.000	Protection levels	9-12
	weldcap® bump RCB 3/9-12 With integrated bump cap	1008.001	Brightness level	3
	weldcap® hard RCH 3/9-12 For use with industrial helmet	1008.002	Cartridge	Ergonomic nose recess
	Ready-to-weld package weldcap® with swiss air PAPR	4600.100	Adjustment	Manual
			Activation	Automatic on/off, sleep mode
			Power supply	Battery (approx. 2000 hrs operating time)
			Sensitivity	Individually adjustable
			Switching time	Bright to dark: 0.16 ms at 23 °C 0.11 ms at 55 °C
				Dark to bright: 0.35 s
			Classification EN 379	1/1/2
			Operating temp.	-10 °C to +60 °C
			Storage conditions	Dark environment
			Total weight	Approx. 360 g
			Standards	CE (EN 379, EN 166, EN 175), ANSI Z87.1, AS/NZS 1337/1338

HEAD PROTECTION

Fits like a glove.



Item no. 5003.290

The new optrel IsoFit® headgear is compatible with all optrel welding and grinding helmets.

The IsoFit® headgear can be adjusted in just a few seconds, and customised to any head size from S to XL.



Protection against stronger impacts and falling objects.



Item no. 5002.840

N – PPE type 1 industrial bump cap
(not compatible with IsoFit® headgear)



Item no. 5003.530

halo – the comfort insert
for all optrel helmets
(not compatible with IsoFit®
headgear)

ACCESSORIES

Item no. 8000.100
Helmet rucksack – black/green



Item no. 8000.110
e3000X bag – black/green

Item no. 5002.900
Parking buddy for weldcap
and optrel welding helmets (not
compatible with IsoFit® headgear)



Item no. 4028.016
Leather head and neck
protection – black



Item no. 4028.031
Leather head and neck protection
– black, for fresh air helmets



Item no. 4028.015
Leather chest
protection – black



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protecting professionals since 1986

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