



2005

Hearing, Eye, Face, Head, Chain Saw Protection



OSHA's Hearing Conservation Requirements

Whenever feasible, employers are required to reduce the noise at the source through engineering solutions. When this is not possible or economically feasible it is acceptable to use hearing protection as a temporary solution. The term hearing conservation as defined by OSHA includes the following aspects, which the employer is responsible to carry out:

- Monitoring of the noise environment. If the TWA (Time Weighted Average) noise level is exceeding 85 dB(A), a hearing conservation program is required.
- Selecting hearing protection devices appropriate for the environment or environments at hand. Several different types of hearing protectors are required to be offered to the employees in order to introduce a level of personal choice. The employer is responsible to pay for the original equipment as well as replacements. The employees are required to use the hearing protection, and the employer is responsible for the enforcement.
- Training and educating employees in the proper use of hearing protection and the importance of full time use of hearing protectors when working in a noisy environment. Education and training is considered an essential and ongoing activity.
- Establishing a baseline audiogram for each noise exposed employee, and performing annual hearing tests thereafter in order to monitor the hearing health of the employees. Have the audiograms evaluated by an audiologist or physician.
- Take corrective action when it is concluded that noise induced hearing damage is occurring. Corrective action can entail further education and training in the use and importance of full time use of hearing protection. Seeking the use of hearing protectors better suited to the environment and the individual. Using, what is called administrative controls, which simply means to reduce the exposure time for the employee in question. If these efforts fail, an employee may be transferred to a quieter job.
- The above summary of OSHA's hearing conservation requirements is not intended to be complete. The complete regulation (29CFR-1910.95) is available on the internet. You can access it from Elvex website, by clicking on "Resources" on our home page, www.elvex.com.

Some Sound Advice!

OSHA's Permissible Noise Exposure

90 dB	8.0 hours
92 dB	6.0 hours
95 dB	4.0 hours
97 dB	3.0 hours
100 dB	2.0 hours
102 dB	1.5 hours
105 dB	1.0 hours
110 dB	30 minutes
115 dB	15 minutes

How to use the NRR

When the dB(C) noise level is known, you don't have to adjust the NRR:

Noise level at ear: dB(C) - NRR \leq 90 dB

When the noise level is known in dB(A) the NRR must be reduced by 7 dB:

Noise level at ear: dB(A) - [NRR -7] \leq 90 dB

Overprotection can be a problem!

Selecting a high NRR hearing protector for an environment where only good high frequency attenuation is needed, will lead to unnecessary insulation and communication difficulties.

Field Attenuation

It has been proven in many studies that hearing protectors are not as effective in the field, as the laboratory numbers indicate. In the laboratory the hearing protectors are used correctly, while in many field situations they are not. Employees are either not trained or motivated to make the effort to use the protectors in a correct way. NIOSH recommends a de-rating of 50-70% for earplugs and 25% for earmuffs.

Is Your Program Working?

How do you know if your hearing conservation program is working? The answer is in your annual audiograms. If they do not show any new noise induced hearing damage, your program is working.

Elvex Quattro™ Ear Plugs

Quattro is a universal size reusable ear plug, designed to be used over and over again, with maintained comfort and effectiveness. Elvex Quattro offers the following features:

- A four flange design that allows this ear plug to fit almost all ear canals.
- An ultra-soft polymer provides a comfortable and effective seal.
- A sturdy and stiff handle that allows an easy grip for insertion and removal.
- Material is resistant to ear wax and body oils, and will outlast PVC ear plugs by many months.
- Polymer is non-allergenic and non-irritating to the sensitive skin in the ear canal.
- Noise Reduction Rating is 25 dB, and the test was performed to ANSI S3.19-1974 at an independent and certified laboratory, NVLAP #0427.
- Quattro has been assigned U.S. Military national stock numbers.



EP-401

Packaging Alternatives

Elvex Quattro is available in four different versions.

- EP-401** Standard Quattro ear plugs packaged in individual poly-bags. 100 per dispenser box, 4 boxes per carton.
- EP-411** Corded Quattro ear plugs packaged in individual poly-bags. 100 per dispenser box, 4 boxes per carton.
- EP-413** PVC-Corded Quattro packaged in individual poly-bags. 100 per dispenser box, 4 boxes per carton.
- EP-402** Standard Quattro ear plugs, with plastic case and chain, packaged in individual poly-bags. 50 units per box and 4 boxes per carton.
- EP-412** Corded Quattro ear plugs, with plastic case and chain, packaged in individual poly-bags. 50 units per box and 4 boxes per carton.
- EP-415** Metal detectable, corded Quattro ear plugs in individual poly-bags. 100 per box, 4 boxes per carton.

CE



NRR=25 dB

SNR=26 dB



EP-411/EP-413



EP-402



EP-412



EP-415

Frequency, Hz	125	250	500	1000	2000	3150	4000	6300	8000	H	M	L	NRR
Mean Value, dB	29.4	30.8	31.8	32.1	33.1	37.8	36.8	39.5	39.5	32	29	28	25
Std. Deviation	4.3	4.0	3.9	3.3	2.6	3.6	3.3	4.5	2.8				

A Plug for Today's Demands

Today's hearing protection users demand a high level of comfort, excellent noise reduction properties as well as ease of insertion. Elvex Blue offers all that and more.

Safety and health professionals demand a foam ear plug which is easy to administer and offers a high level of hygiene. They also require a plug which provides excellent attenuation, is visually easy to monitor as well as meets with employee acceptance. Elvex Blue satisfies all these demands and more.

Elvex Blue Features:

- Elvex Blue has a Noise Reduction Rating of 29 dB. Tested to ANSI S3.19-1974 at an independent and certified laboratory.
- Elvex Blue foam plugs are easy to insert correctly due to their tapered shape and moderately slow expansion rate.
- The smooth surface and low pressure foam provide the most comfortable fitting foam plug on the market.
- One size fits all! The dimensions of Elvex Blue allow virtually every ear canal to be correctly fitted.
- Elvex Blue's intensive color makes it easy to monitor and enforce ear plug usage.
- Multilingual Packaging, English, Spanish, Portuguese and French, assures that proper usage information is available where the plugs are dispensed.
- Available in standard and corded versions.

EP-201 Standard, 200 pairs per dispenser box, 5 boxes per carton.

EP-211 Corded, 100 pairs per dispenser box, 5 boxes per carton.



Frequency, Hz	125	250	500	1000	2000	3150	4000	6300	8000	H	M	L	NRR
Mean Value, dB	35.0	38.0	37.2	36.7	35.8	40.3	40.7	41.3	42.5	34	34	33	29
Std. Deviation	4.7	4.4	3.7	3.4	2.6	3.2	4.1	4.3	4.7				

Banded Ear Pod for Ultimate Comfort

What is the advantage of a Banded Ear Pod versus Ear Plugs or Ear Muffs?

A banded pod is easier to insert than an ear plug, and since it is kept in place by the headband force, it does not have to be as deeply inserted. Since the pod part does not have to stay in the ear canal with friction it can also use softer and more flexible composites, allowing a higher degree of comfort. An ear pod can be cooler than an ear muff, which can be very critical in some environments. Generally ear muffs provide higher noise reduction properties than ear pods or canal caps.

What is the difference between a Banded Ear Pod and a Banded Canal Cap/Plug?

Our definition of an ear pod is a device that seals the ear canal opening, but applies most of the force of the headband in the outer ear. A banded canal cap/plug on the other hand is a device which enters the ear canal or ear canal opening and the headband force is not applied in the outer ear. An ear pod has the tendency to be more comfortable than a canal cap, but the canal cap generally provides higher attenuation.

GelCaps™

Elvex New GelPods and GelCaps

Our new GelPods and GelCaps are both innovative products, that provide improvements in several respects:

- Pods/Caps are made from a unique composite three times as soft as the softest reusable silicone ear plug
- Both devices have extraordinary sound reduction properties in the low and high frequencies. Tested to ANSI S3.19-1974 and EN-352-2.
- Attenuation in the speech frequencies is flat in order to allow speech communication in noisy environments. Both GelPods and GelCaps offer this feature, but the GelCaps provide generally higher attenuation.

GP-10 GelPods, Banded Ear Pods, 18 dB NRR, 22 dB SNR

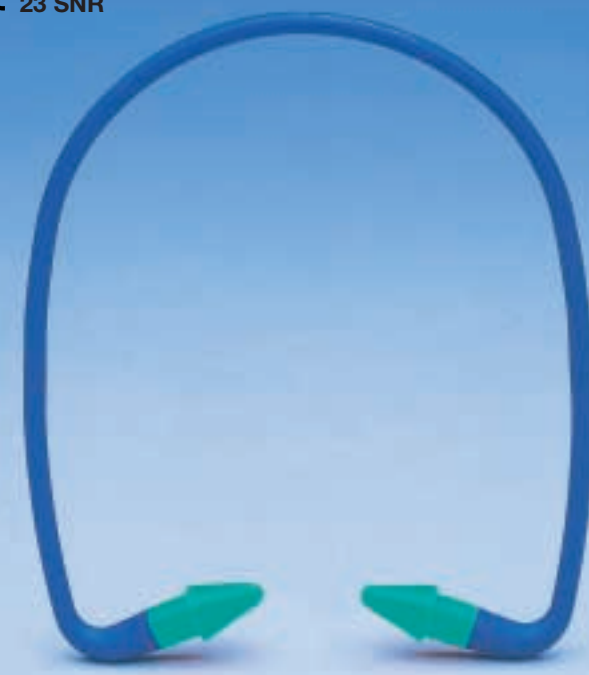
GC-20 GelCaps Banded Ear Canal Caps, 23 dB NRR, 23 dB SNR

CE 22 SNR



Frequency, Hz	125	250	500	1000	2000	3150	4000	6300	8000	H	M	L	NRR
Mean Value, dB	28.5	25.2	22.3	22.1	31.8	38.1	39.3	40.8	39.1	27	20	20	18
Std. Deviation	4.6	4.0	3.5	3.5	3.2	2.9	3.8	3.0	3.8				

CE 23 SNR



Frequency, Hz	125	250	500	1000	2000	3150	4000	6300	8000	H	M	L	NRR
Mean Value, dB	33.5	31.9	31.2	29.6	36.7	42.5	42.5	42.2	41.8	32	27	27	23
Std. Deviation	4.5	4.6	4.6	4.1	4.7	4.7	5.3	5.1	4.5				

ValueMuff™

ValueMuff™ Comfort and Protection

Most buyers and users of ear muffs are looking for a product that offers great looks, good comfort and attenuation at a reasonable price. The following features needed and wanted by most buyers are offered by Elvex ValueMuff:

- Soft and pliable SuperSeal™ ear cushions.
- Low headband force and light-weight, 6.8 oz.
- Ease of adjustments with flexible slide clips.
- Capable of multi-position use, support strap available (SS-25).
- Noise Reduction Rating of 25 dB NRR as tested to ANSI S3.19-1974. Single Number Rating of 28 dB as tested to EN-352-1. Tests performed at independent and certified laboratories.
- Dielectric construction.
- A competitive price, well below any corresponding competitive product, with similar NRR.

HB-25 ValueMuff, 25 dB NRR, 28 dB SNR

HK-25 Hygiene Kit, ear cushions & foam pads

CE 28 SNR



Frequency, Hz	125	250	500	1000	2000	3150	4000	6300	8000	H	M	L	NRR
Mean Value, dB	13.1	19.8	29.3	37.6	36.7	33.3	36.3	36.6	35.6	35	28	19	25
Std. Deviation	2.0	1.7	1.8	1.8	2.0	2.2	2.9	4.0	2.1				

MaxiMuff™

MaxiMuff™ High Performance Economy Ear Muff, 28 dB NRR

With Elvex MaxiMuff you get all the features and performance without paying the price that normally is associated with a high performance product.

- SuperSeal ear cushions for long term comfort.
- A soft cushioned headband.
- Low headband force for great comfort.
- Self-aligning suspension, and easy adjustment.
- Multi-position use with Support Strap (SS-25).
- Noise Reduction Rating of 28 dB as tested to ANSI S3.19-1974. Single Number Rating of 30 dB as tested to EN-352-1. Tests performed at independent and certified laboratories.
- Dielectric construction.
- Sophisticated design and durable materials.
- Best price in its performance class.

HB-35 MaxiMuff, 28 dB NRR, 30 dB SNR

HK-35 Hygiene Kit, ear cushions & foam pads

CE 30 SNR



Frequency, Hz	125	250	500	1000	2000	3150	4000	6300	8000	H	M	L	NRR
Mean Value, dB	17.6	24.1	32.6	39.9	37.6	37.0	37.9	40.0	40.2	36	31	23	28
Std. Deviation	2.0	2.0	2.4	3.2	2.6	1.9	2.6	2.2	2.4				

UltraSonic™ High Performance Muff

Elvex UltraSonic earmuff is our newest high performance earmuff with a Noise Reduction Rating of 29 dB. This earmuff has been designed to provide excellent full spectrum attenuation, as well as superb low frequency attenuation. UltraSonic uses a fork style headband for even distribution of pressure, and improved balance required for extra deep ear cups.

- 29 dB NRR from certified US laboratory ANSI S3.19-1974, 34 dB SNR to CE EN-352-1
- Superb full spectrum and low frequency attenuation
- Extra wide ear cushions for highest comfort
- Soft padded headband with low force
- Steel headband tolerates temperature extremes
- You get the ultimate performance and comfort with this muff



- HB-650** UltraSonic high performance muff, 29 dB NRR
- HB-550** UltraSonic Foldable high performance muff
- HK-650** Hygiene kit, ear cushions and foam absorbers

Flat-Liner™

Flat-Liner™ Flat Attenuation Muff

Elvex Flat-Liner earmuff is designed to provide flat attenuation, meaning that most frequencies from 500 Hz and above are attenuated at a very similar degree (in the low to mid 30 dB range). This allows a user to hear voice communications in noisy environments, without the distortion associated with normal hearing protection devices.

- This earmuff is designed to address the issue of “over protection”.
- Elvex Flat-Liner earmuff offers adequate protection for the vast majority of work environments in industry
- 24 dB NRR from certified U.S. laboratory to ANSI S3.19-1974, 32 dB SNR to CE EN-352-1
- Steel headband tolerates temperature extremes
- Soft ear and head cushions for a high level of comfort
- This earmuff might provide you with the right attenuation

- HB-640** Flat-Liner Muff, flat attenuation, 24 dB NRR
- HK-640** Hygiene kit, ear cushions and foam absorbers

CE 34 SNR



Frequency, Hz	125	250	500	1000	2000	3150	4000	6000	8000	H	M	L	NRR
Mean Value, dB	22.1	27.9	34.9	35.8	37.3	41.4	42.3	41.6	41.2	37	33	27	29
Std. Deviation	2.9	2.8	3.4	2.0	2.5	2.7	2.8	3.1	3.7				

CE 32 SNR



Frequency, Hz	125	250	500	1000	2000	3150	4000	6000	8000	H	M	L	NRR
Mean Value, dB	18.9	23.8	29.7	32.4	32.5	34.3	36.5	37.1	36.7	32	29	23	24
Std. Deviation	2.4	2.8	2.9	2.3	2.8	2.7	2.6	2.3	3.6				

SuperSonic™

SuperSonic™ 29

Elvex SuperSonic muff is one of only a few ear muffs that have achieved a 29 dB NRR rating at an independent and certified laboratory in accordance with ANSI S3.19-1974. SuperSonic has a European certified rating of 33 dB SNR tested to EN 352-1.

Superior performance has been achieved in these measurable criteria:

- 29 dB Certified NRR to ANSI S3.19-1974
- 33 dB Certified SNR to EN 352-1
- The SuperSonic muff has the lowest weight in its class, 8.9 oz.
- SuperSonic has the lowest headband force in its class
- Pressure equalizing headband provides even fit and seal for a wide variety of facial configurations and sizes
- SuperSeal™ ear cushions provide outstanding seal and comfort
- A flexible suspension allows muffs to automatically adjust to facial shape
- A dielectric construction for environments with exposure to high voltage situations

HB-5000 SuperSonic, 29 dB NRR, 33 dB SNR

HK-30 Hygiene Kit, ear cushions & foam pads

CE 33 SNR



Frequency, Hz	125	250	500	1000	2000	3150	4000	6300	8000	H	M	L	NRR
Mean Value, dB	17.7	24.7	35.0	38.5	38.1	37.4	40.7	41.5	42.4	37	32	24	29
Std. Deviation	1.7	1.8	2.1	2.0	3.0	2.5	2.0	3.1	4.0				

Equalizer™

Equalizer™ 26

Elvex Equalizer muff may be the ultimate compromise between comfort and performance. It offers most of the features of the SuperSonic muff, but has a lower profile ear cup, and excellent comfort. Most environments do not require maximum attenuation, and the Equalizer maximizes speech communication in moderate noise environments.

Additional features of the Equalizer muff:

- 26 dB Certified NRR to ANSI S3.19-1974
- 30 dB Certified SNR to EN 352-1
- A flexible inner headband aligns automatically to the shape of the head
- Fully dielectric construction
- Low equalized headband force
- Lightweight construction, 7.4 oz.
- Flexible Polyurethane suspension for automatic alignment, and noise insulation

HB-2000 Equalizer, 26 dB NRR, 30 dB SNR

HK-20 Hygiene Kit, ear cushions & foam pads

CE 30 SNR



Frequency, Hz	125	250	500	1000	2000	3150	4000	6300	8000	H	M	L	NRR
Mean Value, dB	15.9	21.1	30.7	38.0	38.2	39.2	41.8	41.2	41.4	37	29	21	26
Std. Deviation	2.3	2.0	2.9	2.4	2.8	2.1	2.6	2.5	2.8				

BrushGuard™

Elvex BrushGuard™

When more than one type of protection is required, the solutions can end up being cumbersome. Elvex BrushGuard is an example of Elvex combination safety products. BrushGuard is based on our Equalizer muff family, and a visor attachment, makes it possible to attach a nylon mesh face shield to the headband. The shield conveniently flips up and out of the way when it is not needed.

BrushGuard is recommended for use with outdoor power tools, such as line trimmers, power blowers and lawn mowers. The nylon shield is a convenience shield, and it does not meet ANSI requirements for impact and penetration. ANSI requires the use of suitable eye protection, in addition to the use of face shields.

- HB-7000** BrushGuard, orange earmuff with 22 dB NRR, and nylon mesh face shield (7"x14")
- HB-7000X** BrushGuard, white Equalizer earmuffs with 26 dB NRR, and nylon mesh face shield (7"x14")
- NV-3000** Replacement Nylon Visor for all BrushGuard products

CoolGuard™

Elvex CoolGuard™

CoolGuard is based on the product concept described above. Instead of a nylon mesh face shield, the CoolGuard is equipped with a Lexan face shield. This face shield meets the impact and penetration requirements of ANSI Z87.1-1989. CoolGuard is a more lightweight solution than a combination of an earmuff and a separate headgear with face shield.

CoolGuard is recommended for environments where both hearing and face protection is required to be used.

- HB-3000** CoolGuard, white Equalizer earmuff with 26 dB NRR, and a Lexan (GE Polycarbonate) face shield (8"x15"x0.04")
- FS-3000** Replacement Lexan shield for CoolGuard



DeTune™ Communications Earmuffs

"Voice communication in noisy environments has always presented a number of challenges. Workers must wear hearing protectors, and in many cases this adds to their inability to communicate effectively. Standard (passive) hearing protectors attenuate effectively in the high frequencies, and will actually help communication in environments dominated by high frequencies. However, most industrial environments contain a mixture of high, medium and low frequencies, and most users cannot communicate effectively while using a passive hearing protector.

Elvex DeTune electronic earmuff uses a new approach, and allows the user to adjust the frequency range that is transmitted through the circuitry and speakers.

- A volume control allows the user to set the sound level inside the headset, up to a maximum of 85 dB.
- Two control knobs allow the user to filter out the high and the low frequencies independently of each other. When the filters are in the neutral (inactive) position the user will hear the environment almost as if no hearing protector was worn, except for the maximum sound limiter.
- The high frequency filter allows an aggressive filtering of the high frequencies, down to about 2,000 Hz. The filter eliminates about 85% of the high frequencies within the adjustment range, and can be considered semi-transparent. If used in an environment dominated by high frequency noise, it can be clearly perceived that the headset filters out a large part of the undesirable noise. When much of the high frequencies are filtered out, the speech perception will also be affected. The most important speech frequencies are in the range of 500-3,000 Hz., and if we filter out most frequencies above 2,000 Hz., this will obviously also affect the speech perception. Elvex **DeTune** does however provide a choice to the user in how much filtering is desirable, and allows an opportunity to seek out the filtering level that is felt to be optimal for the environment.
- The low frequency filter works in a similar fashion, allowing the user to filter out frequencies up to 600 Hz. The effectiveness of the low frequency filter is not as obvious as the high filter, but in certain environments it can clearly help improve the ability to communicate.
- **DeTune** is also equipped with an impact filter. This filter is automatically activated by impact sounds, such as gunfire or rivet operations. The impact filter closes in a few microseconds and reactivates in about two milliseconds. Because of the quick recovery time, it is possible to hear speech even in an impact noise environment.



- **DeTune** is equipped with an automatic 4-hour shutoff in order to conserve batteries.
- **DeTune** uses rechargeable Nickel Metal Hydrate batteries, and a charger is included.
- It is important to understand that the electronics in the DeTune hearing protector does not improve the attenuation properties of the passive hearing protector. The electronics simply allow a level, of voice communication and speech understanding, while you continue to protect your hearing.

Com-240R NRR of 25 dB, to ANSI S3.19-1974.

HK-200 Hygiene Kit, ear cushions & foam absorbers.

Quietunes AM/FM™

Quietunes 660, a low cost AM/FM Radio Earmuff

Elvex new Quietunes AM/FM model is our response to the market's requirements for a high quality, low cost model. Quietunes 660 offers the following features:



- All components for Quietunes 660 electronics have been designed specifically for this model, and this has resulted in a contemporary and functional product. The electronics has been separated from the hearing protection cavities in order to avoid the problems associated with moisture and sweat affecting the life span of the electronics.
- A sensitive radio offers FM and AM reception so that you may listen to music, your favorite sports team or talk radio show.
- This model uses two AA alkaline batteries and they are replaceable through an external battery compartment. A fresh set of batteries provides about 150 hours of operation.
- Just in case you forget to turn off your radio head-set, we have assured that you do not come back to a dead unit, by incorporating an automatic four-hour shutoff.
- The sound generated by the speakers is limited to a safe level with the use of a gain limiter.
- Independent testing of the attenuation is ongoing at time of printing, and we estimate a Noise Reduction Rating in the range of 22-23 dB.

Com-660 Quietunes AM/FM radio earmuffs
HK-650 Hygiene Kit, replacement ear cushions and foam absorbers



Quietunes Rechargeable FM Radio Earmuffs with 25 dB Noise Reduction Rating

Elvex Quietunes earmuff with a built-in FM stereo radio offers the following features:

- Hearing protection is the primary objective and Quietunes provides 25 dB Noise Reduction Rating. Tested to ANSI S3.19-1974 by an independent and certified laboratory.
- An electronic control limits the sound produced inside the headset to 82 dB, keeping the sound level inside the headset at a safe level as mandated by OSHA.
- A sensitive stereo radio covers the wavelengths between 88MHz and 108MHz
- Quietunes is equipped with a balance control, allowing adjustment of left-right speaker balance
- An auto off switch will turn off the headset after four hours of continuous use, in order to extend the battery life.
- Quietunes comes with a charger, allowing the unit to recharge overnight for 40+ hours of use. This feature may save a user as much as \$25.00 per year in battery cost.
- The recharge port can also be used to connect other devices to the Quietunes, such as CD-players and communication radios. The input signal will override the FM radio, which cannot be heard when an auxiliary device is used.

Com-260R Quietunes FM radio earmuffs, 25 dB NRR

HK-200 Hygiene Kit, ear cushions & foam absorbers.



ComMuffs™

React™, FM Radio with Communication and Background Monitoring

Elvex React combines the features of our radio entertainment system, with communications and monitoring abilities. React can be set in three modes:

- FM Radio reception
- Communication (up to 12 dB amplification)
- Mix (60% radio/40% communication).

The mix mode is a safety feature in addition to being a convenience. In the mix mode the environment can be heard while listening to music. In the communications mode, conversations can be held without removing the hearing protector, i.e. to communicate with a supervisor or coworker. Weak sounds are amplified and loud sounds are limited in order to aid communication.

In the communications mode an impact filter is also present, clipping impulse type noise.

React, Com-100R additional features:

- 25 dB Noise Reduction Rating
- Rechargeable, 40 hours use from one charge
- Balance control
- Recharge port also works to connect Communications Radios, CD players and Tape players.

Elvex Impulse™ Protects against impact noise!

Elvex Impulse is rated 25 dB NRR and is equipped with an impulse filter, protecting against impulse or impact sounds, such as firearms and rivet guns. The electronic circuitry amplifies weak sounds and eliminates sounds exceeding 82. You are alert to warning signals and can communicate with others around you at the same time.

Features of Elvex Impulse:

- Elvex Impulse, Com-55 is equipped with an electronic gain limiter, which will reduce the processed sound to 82 dB as well as an impact noise filter (up to 30 dB). The speech processing capabilities are still active, even when impact noise is present.
- Maximum amplification is 12 dB. Battery operated.

Com-100R	React muff, 25 dB NRR
Com-105R	React cap mount muffs, 23 dB NRR
Com-55	Impulse muff, 25 dB NRR
Com-65	Impulse cap mount muff, 23 dB NRR
HK-80	Hygiene Kit, ear cushions & foam absorbers for Com-55/65/100R/105R



COM-100R



COM-105R

COM-65



COM-55

Elvex Plug-in,™ Receiver Muff

Elvex Plug-in Com muff can be connected to Com radios, CD players, FM radios and similar devices, if they are equipped with an output jack for a 3.5 mm plug. The headset is equipped with a coiled cord with a 3.5 mm plug. You will hear the sound from your device, loud and clear, up to the maximum sound level allowed by the specific Plug-in model.

Features of Elvex Plug-in:

- 25 dB NRR from certified U.S. laboratory to ANSI S3.19-1974
- Connects via 3.5 mm plug to Com radios, CD players and more
- The headset is equipped with a volume control knob, allowing the user to easily adjust the volume at the headset.
- Excellent sound quality for both music and voice communications
- Electronic limiter set at 82 dB or 85 dB for compliance with OSHA requirements.
- A model without limiter is available. Observe that this model is not considered a hearing protector, since the internal sound level can be set up to 100 dB.
- The Plug-in headsets uses Hygiene Kit (cushions and foam pads), HK-200

Com-210 Plug-in headset with 82 dB limiter, 25 dB NRR, 3.5 mm plug

Com-211 Plug-in headset with 85 dB limiter, 25 dB NRR, 3.5 mm plug

Com-212 Plug-in headset w/o limiter, 0 dB NRR, 3.5 mm plug

HK-200 Hygiene Kit, replacement cushions and absorbers

Elvex Connect™

Elvex Connect is our original plug-in headset. It is rated at 25 dB NRR, and is equipped with an 82 dB gain limiter. This quality model has been around for many years. Plug into Com radios, CD or cassette player. Coiled cord with 3.5 mm plug.

Com-25 Connect, 25 dB NRR, 3.5 mm plug

HK-80 Hygiene Kit, ear cushions & foam absorbers



COM-210



COM-25

ProGuard Safety Caps

Elvex new generation of safety caps is designed for general industry, construction as well as utility companies where additional side (lateral) protection is not required.

Features

Elvex ProGuard safety caps offer the following features and benefits:

- The lightweight shell is made from tough Polyethylene.
- ProGuard is available with pin-lock and ratchet suspensions, made from flexible Polypropylene and have wide contact areas against the head. This helps provide long term comfort and durability. A soft brow pad is standard. Both offer easy head size adjustments between 52 and 60 cm (6.5-7.75 inches).
- Model SC-30 comes with a standard pin-lock suspension.
- Model SC-30R is equipped with a ratchet suspension, allowing easy size adjustment by turning the adjustment knob, positioned at the back.
- ProGuard caps have accessory slots (30 mm) that accept hearing and face protection products. Use Elvex blades designated with suffix 29 (such as BR-29 and HM-6029).

Standards Compliance

- Elvex ProGuard caps (models SC-30 and SC-30R) comply with ANSI Z89.1-1997, Type I, Class E. Type I caps are designed to protect against falling objects (top impact) and are not designed for side protection (lateral impact). Class E (Electrical) is intended to reduce the danger of exposure to high voltage. Tested to 20,000 Volts.
- Elvex ProGuard models SC-30 and SC-30R are CE certified and comply with EN 397, CE 0086.

Competitive pricing

With Elvex newest generation of safety caps we are entering into this competitive field with a family of safety caps that are priced to compete.

Order Information

SC-30 ProGuard safety cap with pin-lock suspension

SC-30R ProGuard safety cap with ratchet suspension

Specify color: White, Yellow, Orange, Red or Blue.

CE



Four Models of Cap Mount Ear Muffs More than Muffs—Systems Solutions

Elvex QuickSnap cap mount ear muffs have for many years been the best selling brand. This is probably due to our products functionality, high noise reduction properties, dielectric construction and the ability to combine our cap mount muffs with a full range of face protection products.

New Generation of Cap Mount Muffs Highest Certified NRR's (up to 28 dB)

Our product line has been completely re-tooled and re-engineered. While we have built on our established product line, we have improved most aspects of the products both functionally and acoustically. Durability has been improved by both material and tooling changes.

- Four models available with Noise Reduction Ratings (NRR's) of 22, 24, 27 and 28 dB. Up to 28dB NRR was achieved at certified laboratory, NVLAP # 0427.
- Construction is dielectric, certified by independent testing.
- Two integrated rest positions are provided. Flip out muffs for short term break, or flip them up for permanent storage on top of safety cap.
- Most lightweight construction. Product weighs from 6.4 oz. to 8.7 oz. Competitive models often weigh substantially more (up to 40% more).
- Arm assembly with universal blade mounts to most slotted safety caps. Blade is an integrated part of the muff arm assembly and there are no separate parts to purchase. Remove slot filler for narrower slots (MSA).
- Additional specialty blades are available for certain brands of safety caps (see part number listing).
- Muffs can be mounted onto un-slotted safety caps and bump caps with our QuickSlot adaptor, that creates an accessory slot. System remains dielectric.

Why would your company's workers deserve anything less than the best? Safety equipment should be at work, helping productivity without interfering with the job at hand.

HM-2093/29/30/33	Low profile cap mount muff with 22 dB NRR, 26 dB SNR
HM-2593/29/30/33	Medium volume cap mount muff with 24 dB NRR, 26 dB SNR
HM-6093/29/30/33	Large volume cap mount muff with 27 dB NRR, 29 dB SNR
HM-8093/29/30/33	SuperSonic cap mount muff with 28 dB NRR, 32 dB SNR

Suffix "93" is for our universal blade, with removable slot filler
 Suffix "29" is for MSA and QuickSlot adaptor
 Suffix "30" is for Salisbury and select North safety caps
 Suffix "33" is for Bullard, Jackson and North safety caps

CE 26 SNR



HM-2093 with 22 dB NRR

CE 29 SNR



HM-6093 with 27 dB NRR

CE 32 SNR



HM-8033 with 28 dB NRR

QuickSnap™

Elvex QuickSnap is more than Hearing Protection, it is an Integrated System

All Elvex cap mount muffs are designed to accept our Visor Bracket (VB-10). The muffs have an accessory slot that allows the mounting of the Visor Bracket, without the use of any tools. The bracket can be adjusted forward or backward to give a perfect fit with almost every safety cap.

The Visor Bracket accepts a full range of Elvex face shields, visors, steel screens, nylon screens, hard coated shields, silver and gold coated shields. Our face shields come in different sizes and materials in order to accommodate most applications.

Illustrated on this page are Elvex QuickSlot (QS-29), that creates an accessory slot on un-slotted safety caps. Also shown is the Visor Bracket (VB-10) and the Slot Adapters (SA-93/29/33), that will make it possible to mount the VisorBracket and face shields to a safety cap, without the use of hearing protection.

- VB-10** Visor Bracket
- SA-93** Universal Slot Adapter, with removable slot filler
- SA-29** Slot Adapter for MSA caps and QS-29
- SA-30** Slot Adapter for Salisbury and select North safety caps
- SA-33** Slot Adapter for Bullard, North and Jackson caps
- QS-29** Quick Slot, creates an accessory slot
- BR-93** Replacement universal arm assembly
- BR-29** Replacement arm assembly for MSA and QS-29
- BR-30** Replacement arm assembly for Salisbury and select North safety caps
- BR-33** Replacement arm assembly for Bullard, North and Jackson safety caps

CE 26 SNR



HM-2593 muff (24 NRR) with VB-10 + FS-12L

ANSI S3.19-1974	Frequency, Hz	125	250	500	1000	2000	3150	4000	6300	8000	H	M	L	NRR
HM-20	Mean Value, dB	11.5	17.4	29.9	32.4	36.6	38.4	39.8	37.0	37.9	35	25	16	22
	Std. Deviation	2.8	2.8	3.1	2.5	2.5	2.3	1.9	2.7	2.7				
HM-25	Mean Value, dB	15.2	19.0	30.7	35.0	35.1	35.2	32.6	35.8	36.2	32	27	19	24
	Std. Deviation	2.0	2.4	2.5	2.7	2.8	1.6	2.2	2.7	3.5				
HM-60	Mean Value, dB	19.2	20.9	31.6	36.8	38.1	40.0	42.8	43.1	40.6	37	30	23	27
	Std. Deviation	1.5	1.6	2.4	1.6	2.3	2.2	2.9	4.0	3.3				
HM-80	Mean Value, dB	17.2	23.4	35.4	36.3	38.3	36.5	39.9	42.2	42.0	37	31	23	29
	Std. Deviation	1.8	1.8	2.1	1.7	2.8	2.3	2.7	2.7	3.0				

Tested to ANSI S3.19-1974



FACE PROTECTION

FaceGuard™

Heavy Duty Face Protection

Elvex proudly introduces an expanded and improved line of face protection products.

Our standard UltiMate™ headgear, has been improved with new swivel locks and a permanent sweatband is now standard. The brow guard color has been changed to a contemporary aqua (teal) color for a more general appeal. Elvex Heavy Duty headgear offers a larger brow guard and is molded in heat tolerant nylon. Elvex Visor Bracket is designed to permit mounting of our full face shield program to most safety caps, and allows simultaneous use of cap mount ear muffs.

Universal Fit

Elvex face shields have a universal hole pattern, and fit Elvex headgear HG-20, HG-30H and VB-10 as well as many competitive headgear. The CapMate welding hood and the FS-12 series shields fit only the Visor Bracket.

Face Shield Materials

Lexan is a GE brand name for their **Polycarbonate**, which is a very impact resistant and heat tolerant material (up to 375°F), with limited scratch resistance. Polycarbonate offers UV absorption characteristics, and additional UV absorbers have been added to select Elvex Lexan face shields.

Propionate is a good general purpose face shield material which offers good impact resistance and scratch resistance, but limited heat resistance. Propionate is replacing Acetate as the basic material for face shields.

PC stands for Polycarbonate, a material with similar properties to Lexan, described above.

Hard Coatings are used to provide improved chemical and abrasive resistance. Hard coatings can multiply the life expectancy of a face shield in some environments.

Chemical Resistance: Some chemicals will react with the face shield materials, which is why it is important to select the appropriate material for each application.



FS-16PC on HG-20



FS-16PC on VB-10



FS-15A on HG-20



FS-18GL



SV-75 on HG-20

FaceGuard™

Molded Face Shields

Elvex line of molded face shields represents a higher level of quality in that their optical quality is superior. The shields have a smooth edge and are delivered with a finished curvature. These features give these products a quality look and function which is vastly superior to die cut shields. All Elvex shields 15" and larger fit both Elvex UltiMate Headgear and Elvex Visor Bracket for mounting to safety caps, as well as many competitive headgear. Our 12" shields are designed exclusively to work on the Visor Bracket.

Specialty Face Shields

Elvex Specialty face shield line includes Gold Coated, Silver Coated shields with protective hard coatings, which are designed to protect against radiant heat, depending on the environment up to 2,000°F. Our Hard Coated shields protect against chemical and abrasive environments. UV absorbers have been added to several of our molded Lexan face shields (listing below), allowing only 0.1% transmission to 380 nanometers.

Electric ARC-Shields

The ARC-Shields are available in two versions, with and without a chin protector. Both models meet NFPA 70E-2000 hazard/risk category 2, and are rated at 10 cal/cm². Shields are anti-fog coated. Use with Visor Bracket (VB-1093) and approved safety cap.

Commodity Face Shields

Elvex commodity face shields are die cut to a proprietary tapered shape from flat sheet material. The tapered shape gives these shields an attractive shape in addition to the utility function they provide.

Product #	Description
HG-20	UltiMate™ ratchet, swivel-lock headgear
HG-30H	Heavy duty, heat tolerant ratchet headgear
VB-10	Visor Bracket, for cap mount, requires SA-93/29/30/33 or Elvex cap mount muffs.
FS-12A	Molded Propionate shield, 8" x 12" x .06"
FS-12L	Molded Lexan with UV absorbers, 8" x 12" x .06"
FS-12LG	Molded dark green Lexan (UV), 8" x 12" x .06"
FS-15PC	Molded Polycarbonate, 8" x 15" x .06"
FS-15P	Flat Polycarbonate, 8" x 15.5" x .04"
FS-15A	Molded Propionate shield, 8" x 15.5" x .06"
FS-15L	Molded Lexan w. UV absorbers, 8" x 15.5" x .06"
FS-15LG	Molded dark green Lexan (UV), 8" x 15.5" x .06"
FS-15CL	Super hard-coated, molded Lexan, 8" x 15.5" x .06"
FS-15WS5	Propionate welding shield, Shade 5, 8" x 15.5" x .06"
FS-16PC	Molded Aspherical Polycarbonate, 8" x 16" x .07"
FS-18L	Molded oversized Lexan shield (UV), 10" x 18" x .06"
FS-18LG	Molded dark green Lexan (UV), 10" x 18" x .06"
FS-18CL	Super hard-coated, molded Lexan, 10" x 18" x .06"
FS-18SL	Silver & hard-coated Acetate shield, 10" x 18" x .06"
FS-18GL	Gold & hard-coated Lexan shield, 10" x 18" x .06"
FS-18ARC10	ARC-Shield, Lexan, 10 cal/cm ² , 10" x 18" x .06"
FS-20ARC10	ARC-Shield with chin protector, 10 cal/cm ²
FS-21ARC10	Replacement ARC-Shield for FS-20ARC10
SV-75	Steel mesh visor for HG-20 and HG-30H
SV-15H	Heat reflecting steel visor, universal fit

Elvex face shields meet ANSI Z87.1-2003 requirements.



FS-18L on VB-10



FS-20ARC10 on VB-10



FS-12LG on VB-10



FS-18SL on HG-30H

FACE PROTECTION



OSHA Standards and Regulations

Logging, farming and work environments such as grounds maintenance that require the use of chain saws and other power equipment tools are among the occupations with the highest incidents of occupational injuries. Not only is the incidence rate high in these industries, but the severity of the accidents that occur are often very dramatic. The U.S. Consumer Products Safety Commission reported over 37,000 chain saw injuries to both professionals and amateurs during 1989.

OSHA's Logging Operation Safety Rule (29 CFR 1910.266) became effective on February 9, 1995. The logging Rule covers all aspects of logging: work rules and procedures, equipment and equipment maintenance, training, record keeping, safe work practices and the mandatory use of safety equipment. The ruling makes the employer responsible for providing the safety equipment and enforcing its use. The logging standard specifically requires the use of the following equipment by chain saw operators: gloves, boots, leg protection, safety caps, hearing, eye and face protection and first aid kits. All this equipment (except boots) shall be provided by the employer at no cost to the employee.

ASTM Leg Protection Standard

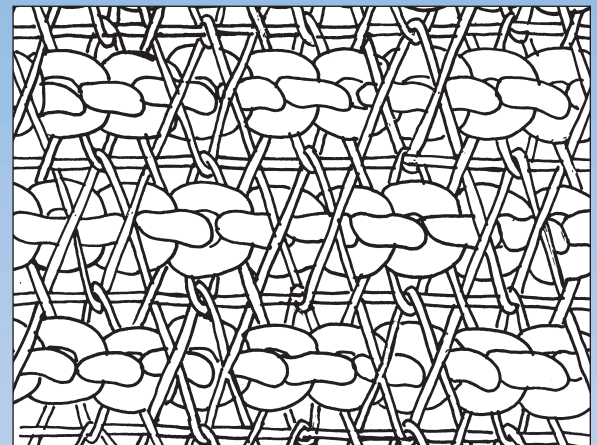
ASTM (American Society for Testing and Materials) F-1897-98 standard has established dimensional and performance requirements for Leg Protection for Chain Saw Users. There are no longer two classes of chain saw protection, which was required by the American Pulpwood Association standard, APA 92-A-12. ASTM dimensional requirements are now the same as the Class A requirements in accordance to APA 92-A-12. The performance requirements remain unchanged at 2,600 feet per minute, tested at both 45 degrees and 90 degrees to the longitudinal axis of the test sample. Compliance tests are done by Underwriters Laboratories (UL) in accordance with ASTM F-1414, Measurement of Cut Resistance to Chain Saw Lower Body Protective Clothing.

Prolar™

Prolar™ Protective Pads

Prolar is Elvex brand name for our exclusive chain saw protective pad. Prolar is not a static product, but is going through continuous development, in order to improve the compromise between comfort and performance. The Prolar protective pads combine a unique fibre composition with special weaving to create one of the most effective chain saw protective pads on the market. The unique "explosive" action of Prolar works by jamming the chain against the bar and the sprocket. Prolar combines light weight and flexibility for superior user acceptance with highly effective protection.

Elvex Prolar pads have been tested in accordance with the APA and ASTM Standards, by Underwriters Laboratories. The Prolar pads have passed the performance requirements, including the 2,600 feet per minute chain stopping capability. This test establishes a pass or fail and does not establish maximum performance. Separate testing has established a performance threshold of approximately 3,000 feet per minute, which indicates that Prolar (in its current stage of evolution) gives substantial safety margin, as compared to the requirements of the Standard.



Innovative solutions. Always a step ahead.

ProVest™

Elvex ProVest™

Elvex ProVest is the first genuine chain saw resistant upper body protection. It is intended to offer limited protection from chain saw kick back injuries. Arborists, landscapers and utility company employees are the potential beneficiaries of this protection.

- The upper body protection concept has been patented, U.S. Pat. # 5,101,511.
- Polar protection is provided on the shoulders and the front of the chest. The water resistant sleeveless jacket has extended shoulders and large front and back vents. A longer back panel helps repel water and debris.
- An inside zippered pocket is provided.
- High visibility orange top and blue bottom makes an attractive looking product. The vest is made from 420 denier Nylon.

Available in Medium, Large and Extra Large: JE-50M, JE-50L, JE-50XL

ProChaps™

90 Series ProChaps™

Elvex best selling chap model has sold in hundreds of thousands. A long list of unique standard features explains the popularity of this design.

- Patented asymmetric design provides extended protection on the left side of each leg, where most injuries occur (US Pat. #5,095,544).
- The 90 series chaps conform to ASTM requirements as well as APA Class A requirements.
- Lightweight, flexible and strong 420 denier Nylon cover fabric.
- Easy on, easy off apron-style design.
- Quick release buckles for waist and legs.
- A zippered front pocket is a standard feature not found on other brands.

Available in safety orange color in four lengths: JE-9028, JE-9033, JE-9036 and JE-9039, and in navy blue color JE-8833 and JE-8836. The last two digits of the product number indicate the length in inches, waist to bottom, not the inseam.

94 Series ProChaps™

Elvex 94 Series ProChaps, are designed for the professional chain saw user. In addition to meeting the requirements of the ASTM Standard, Elvex 94 Series chap maintains the quality and features, which have made the Elvex brand name famous.

- Lightweight Polar protective pads add comfort and prevent heat buildup.
- Patented asymmetric design
- 1,000 denier Cordura Nylon cover fabric, which is more abrasive resistant.
- Three sets of leg straps and buckles help the stiffer cover fabric conform comfortably to the legs.
- A zippered front pocket is standard.

Elvex 94 Series ProChaps are available in orange safety color in 28, 33, 36 and 39 inches lengths, model numbers JE-9428, JE-9433, JE-9436 and JE-9439. The last two digits of the product number indicate the length in inches, waist to bottom.



CHAIN SAW PROTECTION

ProChaps™

ProChaps™ with Calf Protection

Certain work conditions may require extra precaution, with regards to lower leg protection. Elvex ProChaps with wrap around calf protection, provide the solution for these situations.

- This model maintains all basic features of Elvex 94 series chaps, while it also maximizes lower leg protection.
- The outer shell is made of high strength nylon, designed for durability even in severe environments.
- Each leg is secured by a total of three sets of buckles. The wrap-around section, below knees, is secured by two sets of buckles.

Available in three sizes: JE-9133, JE-9136 and JE-9139. The last two digits describe the total length of the garment, from waist to bottom.

ArborChaps™, One-size-fits-all

Users have long asked us to provide a lower cost chap, and the trade has frequently requested a universal size chap to help control their inventory. The ArborChap may just be the answer to these requests, since it addresses both of these concerns. We stripped the ArborChap of some features such as the zippered pocket, but we maintained all the safety features that really count.



- Patented asymmetric design for better protection where most injuries occur.
- Elvex famous Polara protective pads, no compromise on safety.
- Universal size, three sets of belt loops allow length adjustment from 33 to 36 inches.
- Easy on, easy off apron style design, with two sets of leg straps and buckles.
- Hunter green 420 denier Nylon cover fabric, with attractive black Nylon edging.

Available in one universal size only: JE-8000, Elvex ArborChaps



ProGuard™

ProGuard™ Loggers Safety Caps

Elvex ProGuard Loggers Safety Cap is a uniquely integrated system, that provides protection for head, face and hearing in a workable and practical solution. Elvex offers several different ProGuard systems, based on different configuration of safety caps, earmuffs and face shields.

ProGuard, CU-20, CU-20R, Best Seller

Our best selling loggers safety cap, is based on an orange four point suspension safety cap (SC-20), low profile ear muffs (HM-2033) with 22 dB NRR, our Visor bracket (VB-10) and a nylon visor (NV-70). This model is also available with a ratchet suspension safety cap (CU-20R).

ProGuard, CU-25, our Economy Unit

Elvex newest ProGuard is our economy unit. It offers all the features required by most users, and it is priced low enough to be attractive to the homeowner or occasional user. It has an orange, four point suspension safety cap (SC-30) with a 24 dB NRR earmuff, our Visor Bracket (VB-10) and a Nylon Screen (NV-70).

ProGuard, CU-30, for the Pro

This system has been the professional's choice for many years. A Bullard six point suspension safety cap that gives an extremely secure fit and balance, is appreciated by the full time user. A black low profile ear muff (HM-2033) gives an aesthetically pleasing contrast to the orange safety cap, which comes with a "ProGuard" logo.

ProGuard, CU-60, Top of the Line

Our top of the line ProGuard System offers the same features as our CU-30, but is equipped with Elvex heavy duty cap-mount ear muffs (HM-6033), which provide a Noise Reduction Rating of 27 dB.

ProCaps™ Safety Caps

Elvex ProCaps safety caps are offered with a standard snap-lock or with a ratchet suspension. Caps can be adjusted for head sizes from 6.5 through 8. The ProCaps caps are fully dielectric, and meet the requirements of ANSI Z89.1-1996. These safety caps are equipped with universal slots, capable of accepting various accessories. The suspensions have an integrated foam padded vinyl sweatband for extended comfortable wear.

SC-20 Safety cap, snap lock suspension

SC-20R Safety cap, ratchet suspension.

Available in the following colors: orange, yellow, white, red and blue.



CU-20R



CU-25



CU-60

CHAIN SAW PROTECTION





Performance and Testing

Much is expected of safety spectacles in the 21st century. Not only do we expect impact resistance, great optics, lightweight and futuristic styling, but we also expect to pay only a few dollars for the latest and trendiest pair of safety glasses.

Complying with the performance requirements of existing standards is just the beginning. Today's safety glasses are about 10 to 20 times stronger than the safety glasses that were an industry standard just over a decade ago.

Elvex safety glasses comply with ANSI Z87.1-2003 and most models meet the requirements of CE - EN166. Required tests include among others high velocity, high mass impact, lens thickness, lens distortion and lens light transmission.

Lens Technology

Polycarbonate lenses provide some inherent features, and other features can be added to the Polycarbonate through the molding process or coated onto the Polycarbonate after the part is finished.

- **Impact resistance:** all Elvex safety glasses meet the high velocity impact requirements of ANSI Z87.1-2003.
- **UV-protection (99.9%)** between 180 and 380nm is provided by our Polycarbonate (Lexan) lenses.
- **High UV and Blue Light** protective characteristics come from special absorbers added during the lens molding process.
- **Elvex NCB™ gray lenses** (Natural Color Balance) are made with special absorbers added during the molding process. NCB lenses provide UV, Blue Light and Infrared protection (see chart above).
- **Shade 3 to 5 ANSI welding lenses** have absorbers for the undesirable wavelengths and intensity of UV, Visible and IR light, experienced when gas welding.
- **A scratch resistant hard coating** is added to all Elvex safety glasses except model SG-10.
- **Elvex SuperCoat™** treatment provides a lens that is anti-fog, anti-scratch, anti-static as well as UV-protective.
- **The Indoor/Outdoor lens** has additional UV absorbers and a light gold mirror coating, in order to reduce glare and Visible Light Transmission. This lens is a compromise for individuals moving from bright to dark environments.
- All lenses and coatings are not available in all frame styles.

Lens Light Transmission Chart

Lens Description	UV Light Protection 180-380nm	High UV Protection 380-400nm	Blue Light Protection 400-480nm	Infra Red Protection 780-1100nm	Visible Light Transmission (VLT)
Clear hard-coated Polycarbonate lens	99.9%	84%	15%	14%	91%
Clear SuperCoat™ anti-fog PC lens	99.9%	84%	15%	14%	91%
Clear UV-400 hard-coated PC lens	99.9%	99.8%	32%	14%	90%
Amber hard-coated Polycarbonate lens	99.9%	99.9%	88%	14%	85%
Ice Blue hard-coated PC lens	99.9%	86%	81%	14%	66%
Anti-glare hard-coated PC lens	99.9%	90%	50%	29%	57%
Indoor/Outdoor Polycarbonate lens	100%	100%	70%	70%	50%
Gray NCB hard-coated PC lens	99.9%	79%	82%	65%	18%
Silver mirror Polycarbonate lens	99.9%	95%	88%	55%	16%
Blue flash mirror Polycarbonate lens	99.9%	99.8%	87%	60%	20%
Gold flash mirror Polycarbonate lens	99.9%	98%	86%	60%	13%
Welding Shade 3 Polycarbonate lens	99.9%	99.93%	99.9%	97.5%	10%
Welding Shade 5 Polycarbonate lens	99.9%	99.9%	99.7%	97.5%	1.3%

RX-100

**NEW
CONCEPT**

The First Mono-lens Safety Reading Glasses!

Until now you have only been able to get traditional style reading safety glasses, or stick on lenses. Elvex RX-100 is the first bifocal safety glass with a dual curvature mono-lens and integrated side shields.

According to the 2000 U.S. Census there are just over 70 million Americans between 40 and 65 years of age. All of these individuals will require reading glasses, and a large proportion of them will need reading glasses in combination with protective safety glasses. Elvex RX-100 is meeting an unfulfilled need!

- Available in the following bifocal powers: 1.0, 1.5, 2.0, 2.5 and 3.0
- Temples adjust to four different lengths.
- Temples have angle adjustment for perfect fit.
- RX-100 is priced below the cost of traditional reading safety glasses or even the stick on reading lenses.
- Industrial buyers report cost savings exceeding \$100.00 per user with RX-100.
- Patents have been applied for this new concept.
- Tested to ANSI Z87.1-2003, CE-EN-166, AS/NZS 1337:1992

RX-100-1.0 Reading safety glasses with +1.0 Diopters

RX-100-1.5 Reading safety glasses with +1.5 Diopters

RX-100-2.0 Reading safety glasses with +2.0 Diopters

RX-100-2.5 Reading safety glasses with +2.5 Diopters

RX-100-3.0 Reading safety glasses with +3.0 Diopters

RX-100 is also available with gray lenses. To order, specify model number as above, followed by the letter G. Example: RX-100G-2.0

Now available in blister packaging, with micro-fiber protective drawstring bag!

Order information for blister packaged version:

RX-110-1.0, RX-110-1.5, RX-110-2.0, RX-110-2.5, RX-110-3.0



RX-200

**NEW
PRODUCT**

Bifocal Safety Glasses

Elvex RX-200, is our second generation of bifocal safety glasses, and we have combined the requirement for bifocal lenses with the desire for stylish, lightweight and comfortable glasses. RX-200 uses two base six lenses, in a contemporary wrap frame. This allows for both a stylish and protective product. The frame is made from transparent gray Polycarbonate and has a soft rubber nose bridge and rubber tipped temples.

- Available in the following bifocal powers: 1.0, 1.5, 2.0, 2.5 and 3.0
- Complies with ANSI Z87.1-2003 (Z87+)
- Lightweight wrap style frame
- Soft rubber nose bridge and temple tips
- RX-200 is also available with gray lenses. Specify gray lens when ordering



Elite™

Elite™ For the Style Conscious

The frame designed for our bifocal safety glasses was so well liked by our test subjects that we decided to also offer it as a standard safety glass. Styling aside, this frame offers a soft rubber nose bridge as well as rubber tipped temples. Tested to ANSI Z87.1-2003 (Z87+).

- | | |
|-------------------|---|
| SG-200C | Clear hard coated Polycarbonate lens, transparent gray frame |
| SG-200B | Clear hard coated Polycarbonate lens, transparent blue frame |
| SG-200G | Gray hard coated Polycarbonate lens, black frame with yellow accents |
| SG-200 I/O | Indoor/Outdoor hard coated Polycarbonate lens, transparent gray frame |



Xenon, Lightweight Comfort & Style

Elvex Xenon is our most lightweight safety glass, and since it is also quite stylish and comfortable, we know that we have a winner on our hands. In addition to its good looks Xenon offers a soft rubber nose bridge and colorful rubber inserts on the temples.

Tested to ANSI Z87.1-2003 (Z87+).

- SG-14C** Clear hard coated Polycarbonate lens
- SG-14 I/O** Indoor/Outdoor hard coated Polycarbonate lens
- SG-14G** Gray hard coated Polycarbonate lens



Trix™

High Style Combined With Low Cost

Today's buyers demand style, comfort and economical pricing. The Trix safety glasses meet this bill and provide style at a very affordable price.

- Available in the following lenses: clear, clear anti-fog, gray, indoor/outdoor and silver mirror.
- All lenses provide 99% UV protection
- Universal length temples.
- Complies with ANSI Z87.1-2003 (Z87+) and CE-EN-166.

- SG-17C** Clear hard coated Polycarbonate lens
- SG-17C-AF** Clear Supercoat™ anti-fog Polycarbonate lens
- SG-17G** NCB gray hard coated Polycarbonate lens
- SG-17 I/O** Indoor/Outdoor hard coated Polycarbonate lens
- SG-17M** Silver mirror hard coated Polycarbonate lens

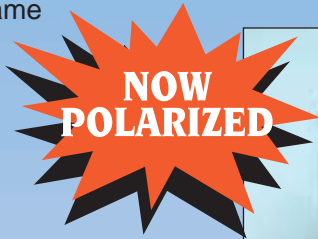


Axiom™

Axiom,™ It's a Natural Winner

Alien style glasses are often designed to fit very close to the face, and that is the most common objection to this style of glasses. With the Axiom we flattened the front curvature just enough to provide some extra space between the glasses and the face. This small design change made a huge difference on the comfort and fit for this safety glass. Axiom has rubber tipped temples. Tested to ANSI Z87.1-2003 (Z87+).

- SG-34C-blue** Clear hard coated Polycarbonate lenses, electric blue frame
- SG-34C-gray** Clear hard coated Polycarbonate lenses, metallic gray frame
- SG-34 I/O-blue** Indoor/Outdoor hard coated Polycarbonate lenses, electric blue frame
- SG-34 I/O-gray** Indoor/Outdoor hard coated Polycarbonate lenses, metallic gray frame
- SG-34G-blue** Gray hard coated Polycarbonate lenses, electric blue frame
- SG-34G-gray** Gray hard coated Polycarbonate lenses, metallic gray frame



Triad™

Triad,™ Comfort, Style and Protection

For those users that require more coverage and more style, the Triad safety glasses provide both. In addition to great style, the Triad offers excellent comfort in part due to the soft rubber nose bridge and soft rubber temple tips. You cannot find a more comfortable pair of glasses than Elvex new Triad. This model complies with ANSI Z87.1-2003 (Z87+).

- SG-35C** Clear hard coated Polycarbonate lenses
- SG-35 I/O** Indoor/Outdoor hard coated Polycarbonate lenses
- SG-35G** Gray hard coated Polycarbonate lenses
- SG-35M** Silver mirror hard coated Polycarbonate lenses
- SG-35PL** Gray Polarized Polycarbonate lenses.

SphereX™

Extreme Wrap Safety Glasses

This is one of the boldest safety glass designs to hit the market. Sphere-X offers a unique combination of style, coverage and protection. Dual lens construction (9.75 base curve) allows for excellent optics and extreme coverage.

- Available in the following lenses: clear, clear anti-fog, amber, gray, gray anti-fog, indoor/outdoor, silver mirror
- All lenses provide 99% UV protection
- Temples adjust to four different lengths
- Dual lens construction allows best possible peripheral vision
- Universal non-slip nose bridge provides secure fit
- Complies with ANSI Z87.1-2003 (Z87+) and CE-EN-166 is pending.

SG-32C	Clear hard coated Polycarbonate lens
SG-32A	Amber hard coated Polycarbonate lens
SG-32C-AF	Clear Supercoat™ anti-fog lens
SG-32G	NCB gray hard coated Polycarbonate lens
SG-32G-AF	NCB gray Supercoat™ anti-fog lens
SG-32 I/O	Indoor/Outdoor hard coated Polycarbonate lens
SG-32M	Silver mirror, hard coated Polycarbonate lens



XTS™

XTS™ Alien Style Safety

XTS stands for Extraterrestrial and it pretty much explains the style. Unlike several similar styles, our XTS frame is substantial and sturdy. It provides a close fit with the face and therefore can fill the safety requirements of a traditional safety spectacle, including the important side coverage.

Elvex XTS safety glasses comply with ANSI Z87.1-2003 (Z87+) requirements, for safety spectacles.

SG-24C	Clear, hard coated Polycarbonate lens with UV protection
SG-24AG	Anti-glare (light gray), hard coated Polycarbonate lens
SG-24 I/O	Indoor/Outdoor, hard coated Polycarbonate lens
SG-24G	NCB gray, hard coated Polycarbonate lens
SG-24M	Silver mirror, hard coated Polycarbonate lens



TNT™

TNT™ A Dynamite Safety Glass

Two factors are driving the development of new safety glass models. Styles have to be cool and contemporary and prices have to be lower for every new generation. And all this has to be accomplished without sacrificing any of the protective properties of the product. This challenge sounds pretty difficult, if not impossible!

Elvex new TNT (Trinitrotoluene stands for Dynamite) has met this challenge! It is our lowest price safety glass, and it offers style and comfort without any compromises in safety.

TNT Complies with ANSI Z87.1-2003 (Z87+).

- SG-13C** Clear hard coated Polycarbonate lens
- SG-13C-AF** Clear anti-fog hard coated Polycarbonate lens
- SG-13B** Ice Blue hard coated Polycarbonate lens
- SG-13 I/O** Indoor/Outdoor hard coated Polycarbonate lens
- SG-13G** NCB gray hard coated Polycarbonate lens
- SG-13M** Flash mirror, hard coated Polycarbonate lens



TTS™

TTS™ Truly Terrestrial Spectacle!

Since the Alien style safety glasses has become the most popular style, we felt that adding an economical, but equally protective version would be a smart move.

TTS offers sleek styling, likely to impress today's fashion oriented workers. The close fit and excellent protective features will please employers. TTS is one of our best selling styles and it is also one of our most economical safety glasses..

Elvex TTS meets the requirements of ANSI Z87.1-2003 (Z87+) and CE-EN-166.

- SG-15C** Clear hard coated Polycarbonate lens with UV protection
- SG-15A** Amber hard coated Polycarbonate lens with UV and blue light protection
- SG-15 I/O** Indoor/Outdoor hard coated Polycarbonate lens, with UV protection
- SG-15G** NCB gray hard coated Polycarbonate lens with UV and blue light protection
- SG-15M** Blue mirror hard coated Polycarbonate lens



UniWraps™

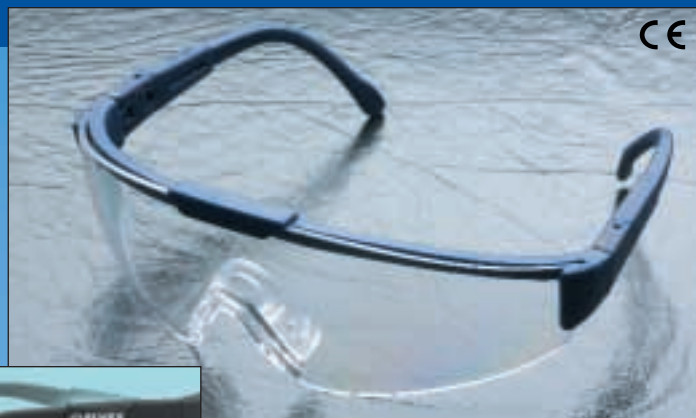
UniWraps™ Most Popular

UniWraps was one of the first wrap style safety glasses to integrate lens and side shield in a seamless design. This wrap design is hard to distinguish from a fashion sunglass, and this has proven attractive to many fashion oriented users. The wrap lens provides unparalleled coverage and protection.

This model has been re-engineered with a new frame and new temples that adjust in angle and length. An improved nose bridge makes this glass very comfortable to wear. Lenses are available to protect against most harmful lighting conditions. Transmission data is shown in lens chart on page 24.

Elvex UniWraps complies with ANSI Z87.1-2003 (Z87+) and CE-EN-166.

- SG-20C** Clear, hard coated PC lens
- SG-20C-AF** Clear Supercoat™ anti-fog PC lens
- SG-20A** Amber, hard coated PC lens
- SG-20 I/O** Indoor/Outdoor hard coated PC lens
- SG-20G** NCB gray hard coated PC lens
- SG-20M** Gold flash mirror coated PC lens



Alloy™

Alloy, Wrap Style in Metal Frame

Elvex Alloy is our first metal frame safety glass, and in order to join our line it had to meet the same requirements for outstanding design, quality and value that we offer in the rest of products.

This frame has the same kind of spring temples that you find on prescription frames. The lens has an aggressive 9 base curvature allowing it to provide full front and side coverage.

Complies with ANSI Z87.1-2003 (Z87+).

- SG-40C** Clear hard coated Polycarbonate lenses
- SG-40 I/O** Indoor/Outdoor hard coated Polycarbonate lenses
- SG-40G** Gray hard coated Polycarbonate lenses



Summit™

Summit™ Safety Sports Glasses

If mountain climbers and mountain bikers were to design safety glasses, they would have come up with something like Elvex Summit. This safety spectacle provides the wide wraparound coverage required for full protection.

Adjustable, stylish rubber temples and a mono-lens make it possible to fit these glasses to most faces.

All available lenses provide UV protective properties, and the gray and mirror lenses add blue light protection. This is important to those who work outdoors, and get exposed to too much undesirable UV light. Refer to chart on page 24 for information.

Elvex Summit safety glasses comply with ANSI Z87.1-2003 (Z87+) and CE-EN-166.

- SG-28C** Clear, hard coated Polycarbonate lens
- SG-28 I/O** Indoor/Outdoor, hard coated Polycarbonate lens
- SG-28G** NCB gray, hard coated Polycarbonate lens
- SG-28M** Silver mirror, hard coated Polycarbonate lens



Summit II™

Summit II™ Double Spherical Sports Safety Glasses

Summit II glasses offer the combination of extreme coverage and fashion styling that users are looking for today.

This safety glass has a double spherical lens construction, with a distinctive lens curvature for each eye. The frame-free design provides 180 degrees of unobstructed vision. Summit II fits smaller faces without leaving undesirable gaps in coverage. Summit II comes with adjustable rubber temples. This model fits women very well!

Elvex Summit II complies with ANSI Z87.1-2003 (Z87+) and CE-EN-166.

- SG-29C** Clear hard coated Polycarbonate lens
- SG-29C-AF** Clear SuperCoat™ anti-fog coated Polycarbonate lens
- SG-29 I/O** Indoor/Outdoor hard coated Polycarbonate lens
- SG-29G** NCB gray, hard coated Polycarbonate lens
- SG-29M** Mirror, hard coated Polycarbonate lens



Tracer™

Tracer, Full Wrap and Full Coverage

Elvex Tracer could be classified as a modern version of the best selling safety glass design in history. If you are looking for a stylish, but somewhat conservative design that offers great comfort at a very reasonable price, this may be your choice.

Tracer offers length adjustable temples. Complies with ANSI Z87.1-2003 (Z-87+) and CE EN-166.

- SG-16C** Clear hard coated Polycarbonate lens
- SG-16 I/O** Indoor/Outdoor hard coated Polycarbonate lens
- SG-16G** Gray hard coated Polycarbonate lens



Challenger II™

Challenger™, Generation Two

With Challenger II we have incorporated all the features from our successful first generations of Challenger and Challenger II. The latest generation Challenger II incorporates improved pivoting and length adjustable temples. We have also added soft rubber tips on the temples for improved long-term comfort. Challenger II has a frame-less design providing an unobstructed view.

Elvex Challenger II complies with ANSI Z87.1-2003 (Z87+).

As with other Elvex safety spectacles, all lenses have 99% UV protection. Other lens transmission data is available on page 24.

- SG-26C** Clear hard coated Polycarbonate lens
- SG-26C-AF** Clear Supercoat™ Anti-Fog PC lens
- SG-26A** Amber hard coated PC lens
- SG-26 I/O** Indoor/Outdoor hard coated PC lens
- SG-26G** NCB gray hard coated PC lens



Challenger™

Challenger™, Most Accepted Style

With the Challenger we have taken an accepted design and worked on perfecting the execution. This safety glass design has become the best selling style, and it has met with worldwide acceptance. Challenger has all the expected features, such as adjustable temples and a universal nose bridge.

Elvex Challenger meets ANSI Z87.1-2003 (Z87+) and CE-EN-166.

- SG-25C** Clear hard coated Polycarbonate lens
- SG-25G** NCB gray hard coated Polycarbonate lens
- SG-25C-AF** Clear SuperCoat anti-fog PC lens
- SG-25W3** Welding shade 3 ANSI, Green PC lens
- SG-25W5** Welding shade 5 ANSI, Green PC lens

*Specify frame color: All-American or Black!
Welding frame color: Black frame only!
Anti-fog available in All-American frame only!*

Challenger™ S, Small Size

Our small size Challenger will provide good fit for small featured females, who often have to wear safety glasses that are too large to fit well. Children also have a requirement for safety glasses, be it for school shop or mowing the lawn.

- SG-23C** Clear hard coated Polycarbonate lens
- SG-23G** NCB gray hard coated Polycarbonate lens

OVR Specs™

OVR-Spec™ Cover Spectacles

Elvex OVR-Spectacles are designed especially to be worn over prescription glasses. The frame free lens has a flatter front lens curvature, which helps minimize reflections that tend to occur when dual spectacles are worn. Temples adjust both in length and angle, in order to provide the best possible fit over almost any RX glass. The OVR-Spectacle is an excellent solution for both workers and visitors, and will help put a dent in your prescription safety glass budget.

OVR-Specs meet ANSI Z87.1-2003 (Z87+) and CE-EN-166 requirements.

- SG-27C** OVR-Spectacles with clear hard coated Polycarbonate lenses.



Visionaire™

Visionaire High Performance Goggles

Visionaire is Elvex high performance goggle. It is now available in several different versions for specialized requirements.

- Elvex Visionaire goggles offer a molded Polycarbonate lens or dual lens, all with inside anti-fog treatment.
- Frame is equipped with four indirect ventilation slots for further fog resistance
- Wide contact points between goggle and face provides a very comfortable fit.
- Unique and functional nose bridge provides excellent seal.
- Visionaire complies with ANSI Z87.1-2003 (Z-87+) and CE EN-166.

- GG-30-AF** Splash/Impact goggle with elastic strap
- GG-30G-AF** Splash/Impact goggle with light gray lens
- GG-32-AF** Splash/Impact goggle with neoprene rubber strap
- GG-35-AF** Splash/Impact goggle with dual lens for superior anti-fog properties. Outside lens is Polycarbonate and inside lens is Acetate with anti-fog treatment. Elastic strap. GG-35-AF is not CE certified.
- RL-30-AF** Replacement lens for GG-30-AF and GG-32-AF
- RL-35-AF** Replacement lens for GG-35-AF



Ranger™

Ranger™ Polycarbonate Frame/Lens

Functional safety spectacles never go out of style. Ranger safety glasses offer complete protection at a very economical price. The design incorporates side shields and brow protection. Ranger's lens is made from uncoated Polycarbonate and it provides excellent impact resistance, as well as 99.9% UV protection. Amber lens improves contrast at dusk or in overcast conditions. Fits over many prescription glasses.

Ranger complies with ANSI Z87.1-2003 (Z87+) and CE-EN-166.

- SG-10C** Ranger, Clear Polycarbonate Lens
- SG-10G** Ranger, Gray (NCB) Natural Color Balance Polycarbonate Lens
- SG-10A** Ranger, Amber/Yellow Polycarbonate Lens



Accessories

Safety Glass Cords

Safety glass cords fill two purposes. They help you to keep your glasses at hand and when they are equipped with a length adjustment, they will also allow you to secure the glasses to the face.

SGC-10 is our least expensive safety glass cord, woven from nylon. It is equipped with eyelets that attach to the temples. Available in red and royal blue.

SGC-20 is wider and sturdier and comes equipped with a length adjustment, that allows you to hold the glasses securely to your face. Available in red and royal blue.

SGC-30 is an elastic construction that slips on the temples and hold them in place comfortably. This model also comes with length adjustment. Available in red and black colors.

Safety Glass Bags

Safety glass bags help you to keep your spectacles conveniently at hand at all times, and also serves to protect the glasses when not in use.

SGB-10 is a zippered safety glass bag for smaller styles of safety glasses. It is made from neoprene and comes equipped with a belt clip.

SGB-20 is a zippered bag designed to store today's oversized and wrap style safety glasses. It is made from heavy duty nylon, and comes equipped with a belt loop and a belt clip.

Other Catalogs from Elvex

Elvex product offering includes a full line of laser safety glasses, consisting of six different frame styles and over 20 specialized laser filter lenses. We offer wavelength specific protection as well as select broadband filters. A laser safety booklet is available free of charge. You can find information about these products at our website: www.elvex.com/laser-spectacles.htm.

Website: www.elvex.com



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