



# FACE-FIT<sup>®</sup> UV POLYCARBONATE FACE SHIELD

Meets ANSI Z87.1-2020 U6

Made in the USA



- Clear UV face shields provide 100% protection from UV energy from 200 nanometers to 400 nanometers.
- Polycarbonate composition offers high ambient temperature resistance and excellent impact protection.
- Clear vision shield window has a 20% larger viewing area when compared to standard window sizes.
- Soft headgear mold conforms to the shape of the head to eliminate possible pinch points.

## FACE-FIT<sup>®</sup> UV POLYCARBONATE FACE SHIELD

MFG#	DESCRIPTION	UPC
171R	Shield with Ratchet Headgear	731406318818
171AFR	Shield with Anti-fog and Ratchet Headgear	731406318801
179R	Shield Scratch Resistant with Anti-Fog and Ratchet Headgear	731406318849

# Oberon Clear UV Face Shield



## Why should I be concerned about UV exposure and what can I do to protect myself?

Many industrial applications have the potential to emit large quantities of UV energy. UV radiation is a known cause of skin cancer, skin aging, eye damage, and may affect the immune system. UV lamps, one of the main sources for Ultraviolet exposure, are frequently used in printing for curing the ink and waste water treatment facilities to treat gray water. Oberon's UV Polycarbonate Face shield can be used when spot welding to protect against the high levels of Ultraviolet rays. It can also be used when arc welding or sterilizing equipment in medical facilities that use Ultraviolet Lamps.

The Clear UV Protective Series Face Shields provide 100% protection from UV energy from 200nm to 400nm (nm=nanometers). The face shield meets ANSI Z87.1 and is made in the USA.

*\*NOTE: The face shield provides 100% protection (minimum OD 2.7 & maximum OD 4) across the UV Spectrum from 200nm to 400nm and is not intended for high intensity laser type applications. It is not suitable for Electrical arc flash protection.*

## What wavelengths are a concern and what is the intensity of UV radiation at those wavelengths?

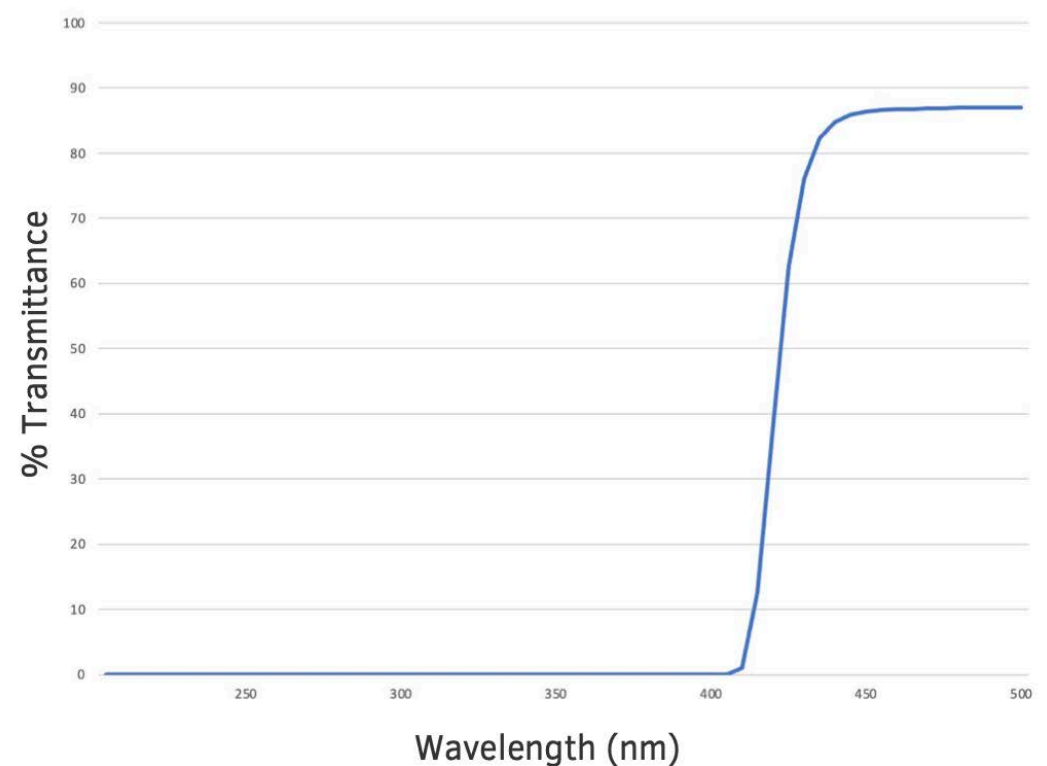
The ANSI/ISEA Z87.1 Standard calls for a range of markings for maximum effective far ultraviolet average transmission from U2 at 0.1% to U6 at 0.01% and a maximum effective near ultraviolet average transmission from U2 at 3.7% to U6 at 0.1%. The following definitions are important when analyzing the intensity of UV wavelengths.

- Far UV is defined as wavelengths between 200nm and 315nm and
- Near UV is defined as wavelengths between 315nm and 380nm.
- Luminous light begins at 380nm.
- Blue light also begins at 380nm. Blue light can also be harmful these levels.



## Is an average over a broad range adequate?

Industrial sources of Ultraviolet radiation can be wavelength specific. It can be so intense in some cases that it can cause a burn in seconds. The following is a chart of the transmission of an Oberon UV shield in increments of 5nm. For a fee of \$50 per shield, we can provide a graphical scan and chart covering each wavelength from 200nm to 410nm for a specific UV face shield.



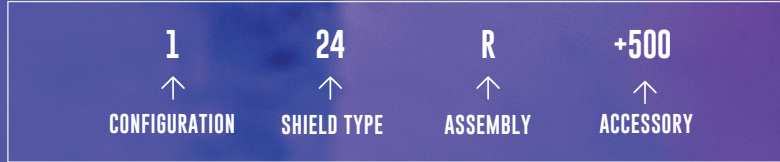
From the chart above can see that the transmission at some wavelengths are so low (below  $1 \times 10^{-5}$  power 0.000001%), they can't be measured by the spectrophotometer.

If your UV source is outdoors, you can get a burn from exposure to the sun even on a cloudy day. You are not getting the IR (infrared radiation heat), but you are getting the UV radiation that is invisible to the eye.

This exposure depends on the length of time and the time of the year. Indoor sources like fluorescent lights can also give off ultraviolet radiation.

As a result it is important that you do not just assume a U6 marking is the highest level of protection and will protect you from your specific hazardous wavelength. It is important to do a hazardous wavelength assessment. As an example, most lamp and industrial machine manufacturers can provide the information you need. You can then check the Oberon UV transmission chart and cross reference your protection level at that wavelength.

Here is how to order FaceFit Faceshields. Compose the Item Number by selecting from the table below the Basic Unit you want, then the Shield Type, then the Assembly and finally the Accessory. Leave no space between the numbers. See the following illustration.



### Basic Unit

<b>1</b>	Basic Complete Shield
<b>21</b>	w/ Lower Double Crown
<b>31</b>	w/ Lower Crown only for 3000 Aluminum Bracket
<b>41</b>	w/ Top Crown only for 4000 Aluminum Bracket
<b>241</b>	w/ Top and Bottom Crown for Aluminum Bracket

### Replacement Shields

<b>0</b>	Basic Replacement Shield
<b>20</b>	w/ Lower Double Crown
<b>30</b>	w/ Lower Crown only for 3000 Aluminum Bracket
<b>40</b>	w/ Top Crown only for 4000 Aluminum Bracket
<b>240</b>	w/ Top and Bottom Crown for Aluminum Bracket

### Shield Type

<b>24</b>	Clear Temperature Resistant Polycarbonate
<b>24AF</b>	Antifog Clear Temperature Resistant Polycarbonate
<b>25</b>	Clear Gold Heat Reflective
<b>25AF</b>	Clear Gold Heat Reflective w/Permanent Antifog inside
<b>26</b>	Clear Scratch Resistant Polycarbonate
<b>26AF</b>	Clear Scratch Resistant outside w/Permanent Antifog inside
<b>28</b>	Clear Chemical Resistant Polycarbonate
<b>28AF</b>	Clear Chemical Resistant outside w/Permanent Antifog inside
<b>46</b>	Green Glare Reduction w/Scratch Resistant
<b>48</b>	Green Gold Heat Reflective
<b>48AF</b>	Green Gold Heat Reflective w/Permanent Antifog inside
<b>56</b>	Extra Dark Green Gold Heat Reflective
<b>61</b>	Cobalt II Blue PC w/Gold Heat Reflective
<b>65</b>	Clear Gold Heat Reflective w/Cobalt II Blue PC top half
<b>71</b>	Clear UV Absorbing Polycarbonate
<b>71AF</b>	Clear UV Absorbing Polycarbonate w/Permanent Antifog
<b>79</b>	Clear UV Absorbing Scratch Resistant out/Permanent Antifog in
<b>91</b>	Didymium II Blue PC w/Gold Heat Reflective
<b>IR5</b>	Shade 5 Green Gas Welder

Shield Type

Assemblies

<b>- A3</b>	Slot-Fit Hardcap Adapters
<b>- A5</b>	Slot-Fit Hardcap Adapters
<b>- B</b>	Aluminum Bracket for Non-Slotted Hard Cap
<b>- C</b>	Slotted Hard Cap
<b>- DC</b>	Replacement Shield drilled for Double Crown Replacement
<b>- R</b>	Ratchet Adjustment Headgear
<b>- S</b>	Snap Pin Adjustment Headgear

Accessories

<b>+ 500</b>	Shield Extenders
<b>+ AGC</b>	Aluminized Gap Cover for use with Hard Cap
<b>+ LGC</b>	FR-Cotton Gap Cover for use with Ratchet Headgear
<b>+ M22</b>	Hearing Protection H earmuffs (only with "-C" assembly)
<b>+ NGC</b>	Aramid Gap Cover for use with Hard Cap
<b>+ VGC</b>	Vinyl Gap Cover for use with Hard Cap
<b>+ WCL</b>	Wire Cover Lens with Shield Extenders



**1**
**0##**


Standard Replacement Shield

**2**
**20##**


Replacement Shield w/Double Crown

**3**
**30##**


Replacement Shield Aluminum Bracket

**4**
**40##**


Replacement Shield for Aluminum Bracket

**5**
**1##-R or 1##-S**


Complete Unit w/Ratchet (R) or Snap Pin (S) Headgear

**6**
**21##-R or 21##-S**


Complete Unit w/Ratchet (R) or Snap Pin (S) Headgear &amp; Double Crown

**7**
**1##-A**


Complete Unit w/Slot-Fit Hard Cap Adapters for Slotted Hard Cap

**8**
**21##-A**


Complete Unit w/Ratchet (R) or Snap Pin (S) Headgear

**9**
**31##B**


Complete Unit w/Aluminum Bracket for Non Slotted Hard Caps

**10**
**41##B**


Complete Unit w/Aluminum Bracket for Non Slotted Hard Caps

**11**
**1##-R+500**


Complete Unit w/Ratchet Adjustable Headgear and Side Shield Extenders

**12**
**21##-R+500**


Complete Unit w/Ratchet Headgear, Double Crown and Side Shield Extenders

**13**
**41##B+500**


Complete Unit w/Aluminum Bracket &amp; Side Shield Extenders

**14**
**1##C**


Standard Shield w/Slotted Hard Cap

**15**
**1##C+M22**


Standard Shield w/Slotted Hard Cap &amp; Earmuffs

**16**
**21##C**


Shield w/Double Crown &amp; Slotted Hard Cap

**17**
**21##C+M22**


Shield w/Double Crown, Slotted Hard Cap &amp; Earmuffs

**18**
**241##B**


Completed Unit w/Double Crown &amp; Aluminum Bracket for Non-Slotted Hard Caps