

TECHNICAL BULLETIN

FACE SCREENS IN
ALL SETTINGS



INTRODUCTION

This is a general document and is not specific to any contaminant, including viruses and bacteria.

During these unprecedented times face screens may be a preferred protection for certain workers in all settings. The recommendations often focus on approved respirators but forget the wider benefits of face screens. When the correct face screen is used they offer good protection, excellent optical class and when used correctly, can help reduce wearers' exposures to aerosol spread, however, they should be used in conjunction with local social distancing rules and good hygiene as this is still the best way to control the spread of any disease. They are not a substitute for face coverings but may be used in instances where social distancing is not possible or where added precautionary measures are required. Please remember that PPE is still the last line of defence and all other means of controlling the risk should also be explored.

This document will guide you through Face screens.

FACE SCREENS – WHAT ARE THEY?

Simply put they are a screen for shielding the face, normally made up of a plastic screen and some type of holder that allows for attachment to the brow or in some cases a safety helmet/hard hat. Face screens have been used in industrial applications for a while now and eye protection has been around since the 1880's.

FACE SCREENS – THE WEARER

Until recently it was alien for most people to wear a face covering so it may seem even more alien to wear a face screen but there are many benefits. A face screen can serve as a physical barrier to the particles you emanate when you breathe, and as a physical barrier to particles hitting you when someone coughs or sneezes. It protects not only the mouth and nose area but also the eyes, giving you a more complete physical barrier than a face mask. Face screens are easier to disinfect, and it is easier to breathe while wearing one. Face screens prevent the wearer from touching much if not all their face. There is also no need to remove a screen when you are talking to someone. The use of a face screen is also a reminder to maintain social distancing but allows visibility of facial expressions and lip movements for speech perception.

FACE SCREENS – MASK REPLACEMENTS?

Face screens are not mask replacements but are there as an added layer in protection against aerosol spread. Most importantly, face screens do not provide as complete a barrier to block respiratory secretion aerosols from the wearer compared with a mask. A mask creates a complete or near-complete barrier on the sides of the wearer's face, while a screen is open on the sides, which may allow some small particles and aerosols to enter. Wearing both a mask and a screen may be excessive in the public domain but in other settings such as healthcare, beauty, retail or even perhaps construction where social distancing cannot be observed may be a necessity. Reducing the risk of spreading a virus among asymptomatic individuals is extremely important. How you choose to protect yourself and others when you are out and about is entirely up to you. The point of a face screen is to provide an extra layer of protection and to protect the eyes when in close contact with someone that has or is suspected to have a viral infection. When talking to someone very close, or sneezing, this can be transmitted through the eyes so social distancing should always be observed along with good hygiene.

FACE SCREENS – WHILST AT WORK

You may have been provided with or provided yourself with a face screen to wear at work. Whilst this may be an added benefit giving you an extra layer of protection it is also proving for some an added challenge. There is a plethora of face screens available at present, some standalone headband examples and other safety helmet mounted versions. Some are called cough guards whilst others are face guards or sneeze protection but whilst they do what they say, they do not do what they could be used for. Face screens are normally certified to a standard called EN166 and within this there are mandatory requirements that a face screen must comply to. When COVID-19 hit there was a version released to allow fast tracking of certification of face screens. This fast tracking would allow face screens to get to market much quicker than they would normally, providing much needed PPE to frontline services. Whilst many would agree with this, it has thrown up some issues for people that have purchased these types of screens to protect them at work. The first issue is around optical clarity. In EN166 there are classifications of optical clarity, but this is not the case in the COVID-19 version. This means that you may suffer some visual side effects such as eye strain from your chosen screen if you are wearing it all day, this effect may also increase if you wear spectacles. The second issue is impact rating. Face screens along with protective eyewear are tested for impact in EN166, either low, medium or high impact. Whilst this may not affect those working in the beauty industry for instance, it may affect those working in construction. The concern is the wearer may try to complete a task like brick cutting, drilling or concrete breaking thinking that the screen offers them the same level of protection, but it does not. In fact, in the COVID-19 certification there is no impact rating for the screen. The answer is to think before you purchase these types of screens do, they represent value for money? Evaluate the risk first as not all face screens currently are equal.

FACE SCREENS – ENVIRONMENTAL IMPACT

Air pollution levels have dropped significantly since measures such as quarantines and shutdowns were put in place to contain COVID-19. Around the world, levels of harmful pollutants like NO₂ (nitrogen dioxide), CO (carbon monoxide), SO₂ (sulfur dioxide) and PM_{2.5} (small particulate matter) have plummeted, at least, while some shutdowns continue. But environmental benefits will only be temporary unless we implement long-term measures to cut emissions. It is a stark reminder that air pollution, including greenhouse gas emissions, is a global threat that cannot be forgotten, even in these challenging times.

Another major issue that we will face is the environmental impact of a sudden surge of single-use plastics and how this is disposed of. The increase in single-use plastics will have long-term impacts on the environment. Versatile, affordable, and ever-present, plastics have been essential to keeping hospitals running and protecting our frontline workers during the COVID-19 pandemic. They are the bedrock of medical equipment and protective gear. They're even at the heart of innovative cross-industry collaborations to combat the virus, the luxury auto brand Ferrari, for instance, produced the thermoplastic components needed for respiratory valves, while Apple designed plastic face shields for medical professionals and shipped millions of them across the United States.

Medical experts believe reusable materials pose no additional risk if they are routinely sanitised giving a good reason to steer clear of single use or cheap plastic face screens. Industry groups have sought to capitalise on health concerns, arguing that "plastics are essential in the effort to stop the spread of this virus." We can only hope the spikes in use of disposables in certain sectors are only temporary and will not reverse hard-won gains to reduce plastic pollution.

FACE SCREENS – CLEANING

Our face screens can be disinfected using a $\geq 1\%$ to $< 2.5\%$ Sodium Hypochlorite (NaOCl) and/or Sodium Hydroxide (NaOH) solution in order to disinfect and prevent cross contamination.

Compatible branded cleaning/disinfection agents include: -

- Distel solution/wipes and Jet Foam (manufactured by Tristel Solutions Ltd). The solution should be at a dilution in accordance with manufacturer's recommendations.
- Chemgene HLD4H solution/wipes can be used. The solution should be at a dilution in accordance with manufacturer's recommendations, this is generally 1:50 or 1:100 but contains benzalkonium chloride an antimicrobial agent which when used over time could cause premature ageing of certain components.

- Clinell general purpose wipes are also suitable but contain benzalkonium chloride an antimicrobial agent which when used over time could cause premature ageing of certain components.
- Isopropyl and Ethanol solutions or wipes may also be used but they should not contain >80% concentration level.

Care and consultation with Centurion Safety Products should be considered when choosing an alternative disinfecting or cleaning agent for any of our products.

External surface disinfecting/cleaning only is recommended.

Prolonged exposure to, and or immersion in bleaches or any other product is not recommended.

The products are not suitable for cleaning by Autoclave process.

CENTURION FACE SCREENS – CONTACT

If you would like further technical information, or any clarification regarding our Face Screens please contact:

techsupport@centurionsafety.co.uk or go to:

<https://centurionsafety.eu/>

Cleaning Video: <https://www.youtube.com/watch?v=OO9jyV0qE6s>

How to video: <https://www.youtube.com/watch?v=pcm2A7Xkr-U>



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