

Eye & Face Protection Standards

The main relevant standard for personal eye protection is **EN166: 2001**, which tests for:

- Impact Protection (**S, F or B**)
- Optical Quality (**1, 2 or 3**)
- Liquid Protection (**3**)
- Dust Protection (**4**)
- Molten Metal Protection (**9**)



Impact Protection Ratings:

S: 22m ball at 5.1 m/s (11mph)

F: 6mm ball at 45 m/s (101mph)

B: 6mm ball at 120 m/s (268mph)

The initials or numbers above are used to indicate what type of protection the eyewear provides.

As an example, if a goggle is rated: **EN166 1 B 3 4**. Then it has passed the test for optical class 1 quality, has stopped a 6mm ball at 268mph, and protects against liquids and large dust particles.

Related Standards

EN170: UV Filters

EN171: IR Filters

EN172: Sun Glare Filters

EN175: Eye Protection During Welding

EN379: Automatic Welding Filters

EN1731: Mesh Eye & Face Protection

Choosing Eye Protection

Additional features should always be considered when choosing safety eyewear. Lenses with an **anti-fog coating** are extremely useful, as if eyewear fogs-up then the wearer may have to remove it to clear, putting themselves at risk.

Likewise, an **anti-scratch coating** can prevent damage which might otherwise have caused the wearer to have to remove eyewear to improve visibility. Without an anti-scratch coating, eyewear may need to be replaced more often due to lens damage.



As an extra option, many safety spectacles are available with **different coloured lenses**. These different tints can aid vision in circumstances such as bright sunshine.