

Hard Hat Replacement and Inspection

Replacement

Protective headwear (hard hats) consists of two components that require regular inspection: the shell and the suspension. Ultraviolet (UV) light is the shell's worst enemy in that it is susceptible to deterioration from UV exposure over time. If the hat is exposed on a regular basis to temperature extremes, sunlight or chemicals, it should be replaced routinely after two years of use. Many employers routinely replace all hats every five years. Most hard hats have a date code stamped by the manufacturer on the underside of the brim so that their age can be easily determined. Regardless of length of use, if a hard hat has been struck by a forcible blow of any magnitude or has been dropped more than eight to ten feet, it should be replaced immediately, even if no damage is visible. The following actions should be performed regularly to ascertain that a hard hat is in good condition.

Shell Inspection

- Inspect the shell and replace it if it shows signs of cracks, nicks, dents, gouges, penetration or abrasions.
- Replace shells made of thermoplastic (polyethylene, polycarbonate, etc.) materials if they show signs of stiffness, brittleness, fading, dullness of color, or a chalky appearance.
- Field-test the hat by compressing the shell inward from the sides about one inch (2.54 cm) with both hands, then releasing the pressure without dropping the shell. The shell should quickly return to its original shape, exhibiting elasticity — there should be no residual deformation.
- Check that extra holes have not been drilled in the shell for ventilation purposes.
- Ensure that stickers on the shell do not interfere with the inspection. (Although stickers will not harm a hard hat's performance under normal conditions, their application can prevent the hard hat from being properly inspected for signs of damage.)
- Ensure that adhesive stickers are placed at least 3/4 inch (1.9 cm) away from the edge of the hat. If the stickers were to wrap around the brim, they could act as an electrical conductor between the outside and inside of the shell.

Suspension Inspection

- Inspect the suspension for cracks or tears, frayed or cut straps, loss of pliability, or other signs of wear. Remove from service and replace immediately any suspension that shows signs of damage.
- Ensure that all keys (i.e., the devices that attach the suspension to the shell) fit tightly and securely into their respective key slots.
- Refer to the manufacturer's instructions to ensure that the suspension was properly assembled.
- Ensure that the suspension is intended for use with that particular shell and has not been substituted with one made by a different manufacturer.
- Ensure that nothing is stored inside of the hard hat between the suspension and the shell.