

The CE Marking System

Helly Hansen makes workwear which falls under the definition of personal protective equipment (PPE), and is therefore marked in accordance with the CE marking regulations (EN standards). Such workwear is intended to protect against accidents or injuries when working under conditions involving cold, heat, flame, rain and reduced visibility.



The EU directives classify PPE in three categories:

Category 1 covers the lowest level of PPE. The user is assumed to assess the needs for protection himself, and there is a limited risk of severe consequences of not using appropriate clothing. The products under this category are self declared by the marketer to comply with the standards. HH products under this category are water-proof clothing (EN 343) and clothing protecting against cold (EN 342).

Category 2 covers products intended to be used in environments with risk for severe, but not fatal consequences (not category 1 or 3). The products must be tested and certified by a notified body. Products under this category are flame retardant clothing (EN 531/533), clothing for high visibility (EN 471) and lifejackets (EN 395, 396 and 399) and buoyancy aids (EN 393).

Category 3 covers products and environments where the user can be exposed to mortal danger or to dangers that may seriously and irreversibly harm health.

Product Performance

The CE mark provides documentation that the product complies with performance standards set for a product of such nature. It is not an assurance that the product will prevent risk of accidents or severe injuries when the user is exposed to such risks in a working environment. Below is a condensed presentation of the EN standards used in the HH Workwear-collection. For complete information about the CE marking system, please contact our representative or the local authorities.

* The test data is given as an integral part of the symbol as measured to prescribed methods or on a scale from 1 to 3, whereby 3 is the highest level.

* The actual data for a HH product is given on the inseam label and on the booklet attached to the garment as well as in the product section of this brochure.



EN 342 Protection against cold

The standard specifies test methods and demands on performance of clothing which is intended to protect against cold. Helly Hansen has tested the products in accordance with a method (B) whereby the insulation (X) is measured for an ensemble (jacket/trouser) worn with a base layer. Also air permeability (Y) and water vapour resistance (Z) are measured.

- X Insulation, actual data (higher figure is best)
- Y Air permeability, level 1, 2 or 3
- Z Water vapour resistance, level 1, 2 or 3



EN 343 Protection against foul weather

The standard specifies test methods and demands on fabrics and seams in garments intended to protect against foul weather, i.e. weather conditions with combinations of precipitation (rain, snow), fog, humidity and wind at temperatures down to 5°C. The garments are tested for waterproofness (X) and water vapour resistance (Y).

- X Waterproofness, level 1, 2 or 3
- Y Water vapour resistance, level 1, 2 or 3



EN 531 Protection against heat and flame

The standard specifies the performance requirements for protective clothing for workers exposed to heat. Limited flame spread (A) (Pass/Fail) is tested in accordance with a test method defined by EN 532. To pass the EN 531 requirements the clothing must also protect against at least one form of heat. The heat may be in the form of convective heat B (level B1-B5) according to EN 367, radiant heat C (level C1-C4) according to EN 366, molten aluminium splash (D) according to EN 373, molten iron splash (E) according to EN 373. HH products subjected to EN 531 are tested on radiant- and convective heat.

EN 533 Protection against heat and flame

Protection against heat and flame. The standard specifies the performance requirements for the limited flame spread properties of materials and material assemblies used in protective clothing. The material(s) is classified in accordance with an index for limitation of flame spread (X) before and after a standard washing procedure (Y).

X/Y Flame spread index, index 1,2 or 3.

Y Number of washes at a given temperature.

If the index is 1 (lowest level), the garment can only be used outside a garment with index 2 or 3.



EN 471 High visibility clothing

The standard specifies requirements for clothing intended to provide visibility of the user in hazardous situations under any light conditions by day and under illumination by vehicle headlights in the dark (24 hours, visibility). Effective visibility is to be provided by a fluorescent fabric and reflective stripes. The visibility is measured as a combination of the area and positioning of the reflective materials (X) and the quality of same (Y).

X Area reflex/fluorescent fabric, level 1, 2, 3

Y Reflex type/quality 1 or 2



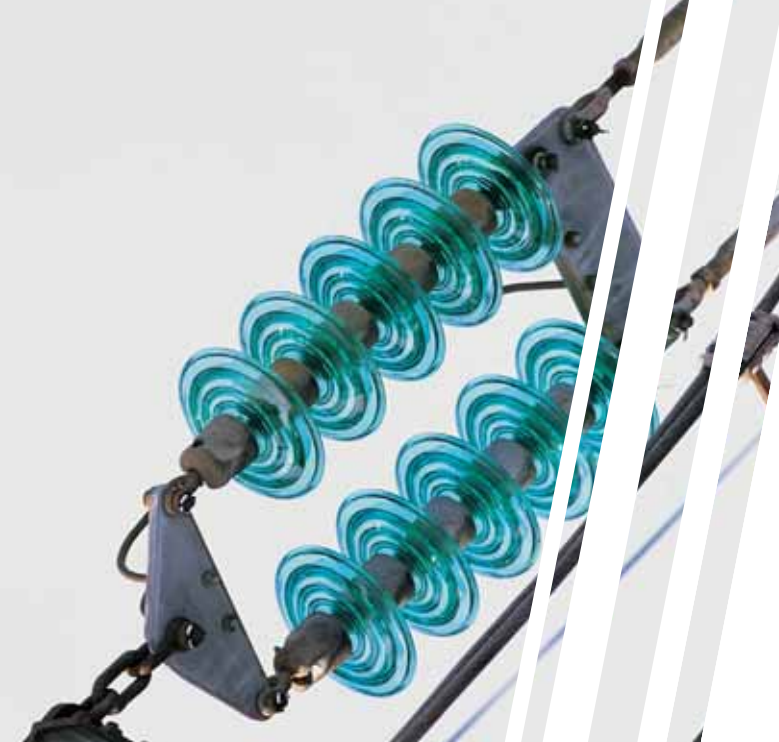
EN 393 Buoyancy Aids 50N

The standard specifies test methods and requirements for design and performance of buoyancy aids with 50N buoyancy for adult sizes. Buoyancy aids include vests and suits/garments providing buoyancy or flotation; these products do not bring the person into a stable position in the water. EN ISO 15027-3 Class D provides a standard for a flotation suitable to protect against hypothermia.

EN 395 Life Jackets 100N

The standard specifies as above for life jackets with 100N buoyancy. In the HH collection the standard covers life jackets with floatation foam. Life jackets bring an unconscious person into a defined and stable position which prevents water from penetrating mouth and nose.





EN 1149 Electrostatic properties

EN 1149 constitutes a set of requirements and test methods to measure protection against static electricity or charge decay. EN 1149-1 specifies electrostatic requirements and test methods for electrostatic dissipative protective clothing to avoid incendiary charges. This standard is used for measuring surface resistivity of woven or knitted fabrics with metal fibres providing grounding.

EN 1149-2 specifies a test method for measuring the electrical vertical resistance of protective clothing materials. This European standard is not applicable for specifying protection against main voltages.

ENV 1149-3 specifies methods for measuring the dissipation of electrostatic charge from the surface of materials for garments. This standard is used for surface conducting or core conducting fibres, i.e. fibres without grounding.



ENV 50354 Electrical arc protection

This standard specifies tests and classification for materials and clothing for wearing when at risk of exposure to an electrical arc. Such clothing shall not aggravate the electrical arc consequences, by catching fire or by melting onto the skin.

The protection provided by the clothing is classified as
Class 1: 4kA
Class 2: 7kA

Specific dangers from accidental electrical arcs arise from the high temperature, the pressure surge and the evaporation and spatter of hot and molten metal, the effects of heat flux, noise, UV-emission, hot oil or the consequences of physical and mental shock.



ENV 470-1 Protective clothing during welding and similar operations

The clothing is intended to protect the user against small splashes of molten metal (EN 348), short contact time with flame (EN 532), and ultra violet radiation, and to be worn continuously for up to 8 hours at ambient temperature.ar.