

EN 407 – Protective gloves against Thermal Hazards

EN 407 is divided up into 6 tests and has the pictogram:



X - Resistance to flammability:

The glove's material is stretched and lit with a gas flame. The flame is held against the material for 15 seconds. After the flame is extinguished, the length of time it takes for the material to stop burning or glowing is measured.

Test	Measured In:	Level 1	Level 2	Level 3	Level 4
After-burn time	Seconds	≤20	≤10	≤3	≤2
After-glow time	Seconds	Infinity	≤120	≤25	≤5

X - Resistance to contact heat:

The glove's material is exposed to temperatures between +100°C and +500°C. The length of time it takes the material on the inside of the glove to increase by 10°C from the starting temperature (25°C approx.) is then measured. The minimal amount of time accepted is 15 seconds.

Test	Measured In:	Level 1	Level 2	Level 3	Level 4
Contact Heat	Temp in °C after 15 seconds	100 °C	250 °C	350 °C	500 °C

X - Resistance to convective heat:

The length of time is measured for the heat from a gas flame to increase the temperature of the gloves inside material by 24°C.

Test	Measured In:	Level 1	Level 2	Level 3	Level 4
Convective Heat	Seconds	≤4	≤7	≤10	≤18

X - Resistance to radiant heat:

The glove's material is stretched in front of a heat source with an effect of 20-40 kw/kvm. The average time is measured for heat penetration of 2.5 kw/kvm.

Test	Measured In:	Level 1	Level 2	Level 3	Level 4
Radiant Heat	Seconds	≤5	≤30	≤90	≤150

X - Resistance to small splashes of molten metal:

The test is based on the total number of drops of molten metal required to increase the temperature by 40°C between the inside of the glove and the skin.

Test	Measured In:	Level 1	Level 2	Level 3	Level 4
Drops of molten metal	Number of drops	≥5	≥15	≥25	≥35

X - Resistance to large splashes of molten metal:

Simulated skin is attached to the inside of the glove material. Molten metal is then poured over the glove material. The total number of grams is measured of how much molten metal is required to damage the simulated skin.

Test	Measured In:	Level 1	Level 2	Level 3	Level 4
Molten metal	Gram	30	60	120	200