

HEAT DISPERSION

Wearing PPE for extended periods of time can lead to an increase in body temperature, heat strain, thermal discomfort, or excessive sweating.

PURPOSE OF TEST

Measure temperature changes under the same constant heat supply (air movement and sweat)

TEST METHOD (according to the ASTM F2370 standard)

Measures the harness cooling performance to evaporative heat transfer, from a heated sweating thermal mannequin to a relatively calm environment. The higher the body temperature decrease, the better the breathability of the harness.

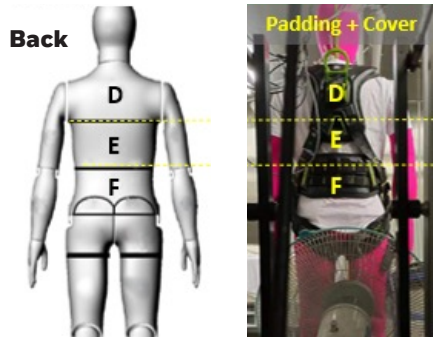
TEST CONDITIONS

Air speed= 1±0.3 m/s

T_{air} = 26°C

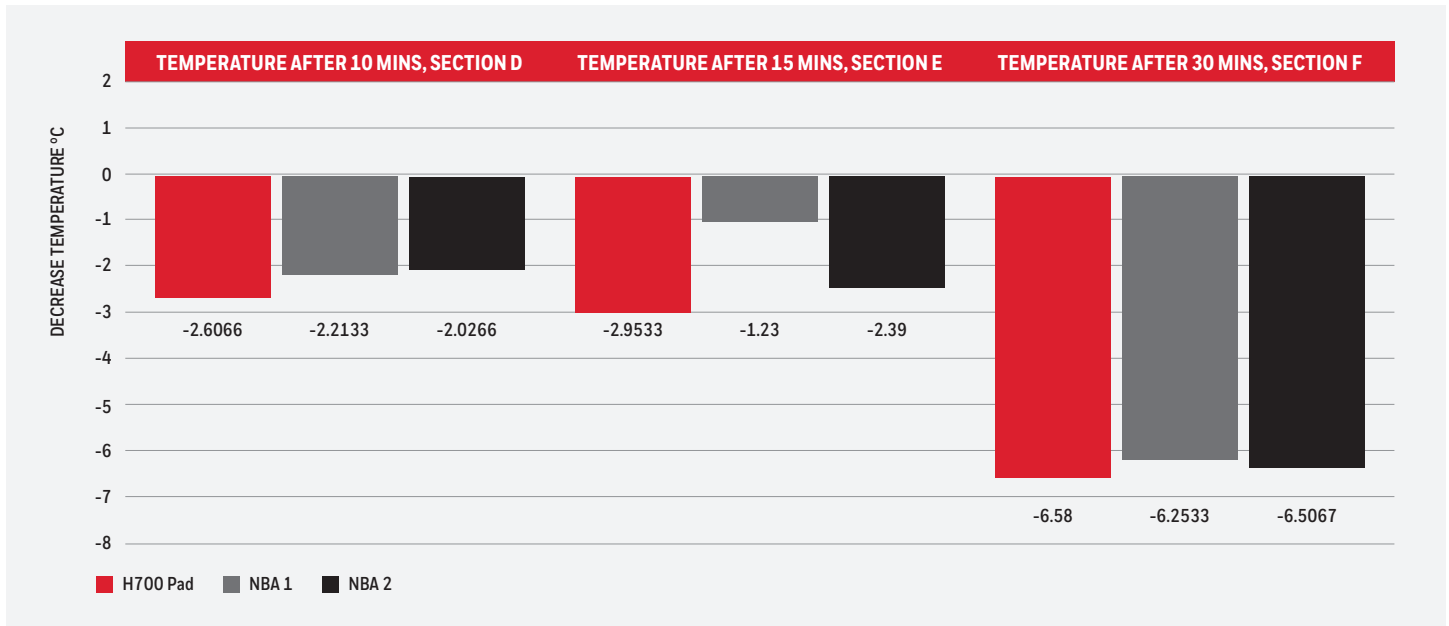
RH=50%;

H700



TEST RESULTS

After 30 mins in a room with 78.8°F (26 °C), the temperature on the back area decreases with -7.54°F (4.19°C), -7.36°F (4.09°C), -11.84°F (6.58°C), more than NBA 1 and NBA 2.



NBA = Next Best Alternative on the market.

CONCLUSION

Compared with NBA 1 and NBA 2, the H700 displays the best heat dispersion performance. The body temperature is lower, especially at the back D, E and F areas.