TECHNICAL DATA SHEET
StepliteX ThermoProtec S5 orange/blue

General information

Size range	
• EU	37 - 48
• UK	4 - 13
• US	5 - 15
The testresults in this technical datasheet are performed on size EU 42, UK 8, US 9	
Weight / pair	
• Safety level: Non-metallic toe cap & midsole	± 2 120 g
Colours	
	
	orange - blue

Upper

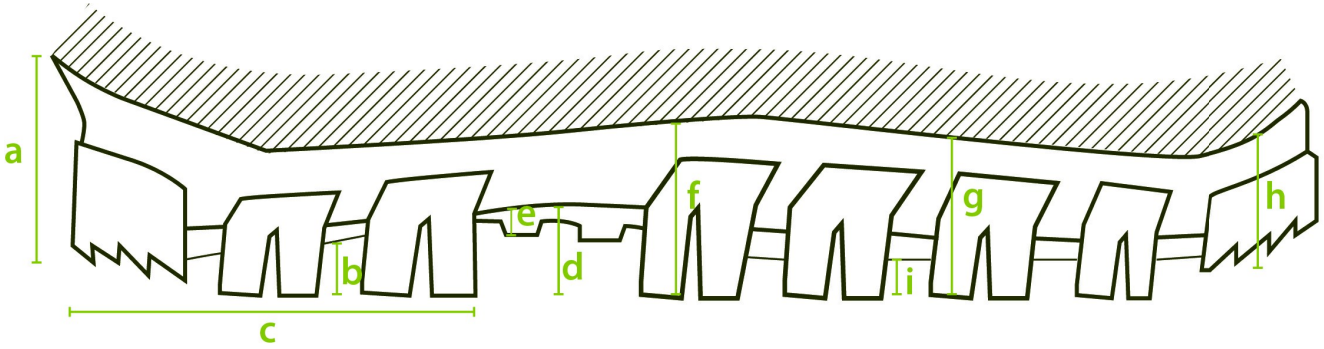
A. Dimensions	
• Height	outer measure: 36.5 - 39.5 cm
	cutting edge: 27.0 - 29.5 cm
• Foot length	outer measure: 31.5 cm
	inner measure: 28.0 cm
B. Thickness	
• Upper edge	2.6 - 3.1 mm
• Calf	2.8 - 3.4 mm
• Shinbone	2.8 - 3.6 mm
• Ankle	4.2 - 5.3 mm
• Heel	5.6 - 6.0 mm
C. Raw material	
	NEOTANE (proprietary polyurethane compound)
D. Density	
	0.65 - 0.70 g/mL

E. Tensile strength		
(incl. lining)	10 ± 2 N/mm^2	
F. Elongation		
(incl. lining)	600 +/- 100%	
G. Hardness		
	43 +/- 2 Sh A	
H. Tear strength		
(incl. lining) N/mm	10.0 ± 2.0 N/mm	
I. Aging		
(incl. lining)	**7 days at 70 °C**	**14 days at 70 °C**
• Tensile strength	11.6 MPa	9.0 MPa
• Elongation	580 ± 20%	600 ± 20%
• Tear strength	11.4 N/mm	9.0 N/mm
J. Chemical resistance		
	see detailed list	
K. Environmental temperature		
• Maximum	± 100 °C	
• Minimum	Cold insulation down to -40 °C	

Lining

A. Material	
	PU coating on polyester fabric
B. Seams	
	Welded seams

Outsole profile



A. Dimensions		
• Heel		
• Thickness	(a)	47.3 mm
• Profile depth	(b)	12.6 mm
• Length	(c)	102.9 mm
• Width		87.3 mm
• Middle foot		
• Height	(d)	15.8 mm
• Ladder anti-slip grips	(e)	5.8 mm
• Outsole		
• Thickness	(f)	43.1 mm
	(g)	33.7 mm
	(h)	26.0 mm
• Profile depth	(i)	6.7 mm
B. Raw material		
	NEOTANE (proprietary polyurethane compound)	
C. Density		
	0.65 - 0.70 g/mL	
D. Mechanical characteristics		
	See upper (E)-(F)-(H)	
E. Energy absorption of the seat region		
	40-50 J (requirement ≥ 20 J)	
F. Antistatic		
	dry: $1x10^8$ - $1x10^9$ Ohm	
	wet: $1x10^7$ - $1x10^9$ Ohm	
G. Abrasion resistance		
	50 mm^3	

H. Hardness	
	60 +/- 10 Sh A
I. Footwear slip resistance	
	SR
J. Chemical resistance	
	see detailed list

Safety

	Standard	Required	Type	Result
Toe cap & midsole				
Nail penetration resistance	EN ISO 20344:2022+A1:2024 EN ISO 20345:2022+A1:2024	> 1100 N	Non-metallic	1100 N
Impact resistance (200J)	EN ISO 20344:2022+A1:2024 EN ISO 20345:2022+A1:2024	> 14.0 mm	Non-metallic	14.0 mm
Impact resistance (125J)	CSA Z195-14	> 12.7 mm	Non-metallic	21.5 mm
Impact resistance at -18 °C (125J)	CSA Z195-14	> 12.7 mm	Non-metallic	28.1 mm
Compression resistance	EN ISO 20344:2022+A1:2024 EN ISO 20345:2022+A1:2024	> 14.0 mm	Non-metallic	18.0 mm
Compression resistance	ASTM F2413-24	> 12.7 mm	Non-metallic	20.8 mm
Width of toe cap	outer measure: 48.0 mm			
Height of toe cap	outer measure: 95.0 mm			
Toe cap	Composite material such as fiberglass			

Certificates

CE	EN ISO 20344:2022+A1:2024 EN ISO 20345:2022+A1:2024 2410093-02-86
UKCA	EN ISO 20345:2011 AB0321/19224-01/E00-00
CSA	CSA Z195-14 70048629
	ASTM F2413-24 70048629

Accessories

Thermo-moulded footbed		
Two layers		
• Toplayer	woven textile	
• Colour	black	
• Thickness	0.70 mm	
• Bottom	PU foam	
• Colour	black	
• Thickness	3.0 - 7.0 mm	
Washable at 30°C		