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	± 74.78 oz
Colors	
	
	orange - blue

Upper

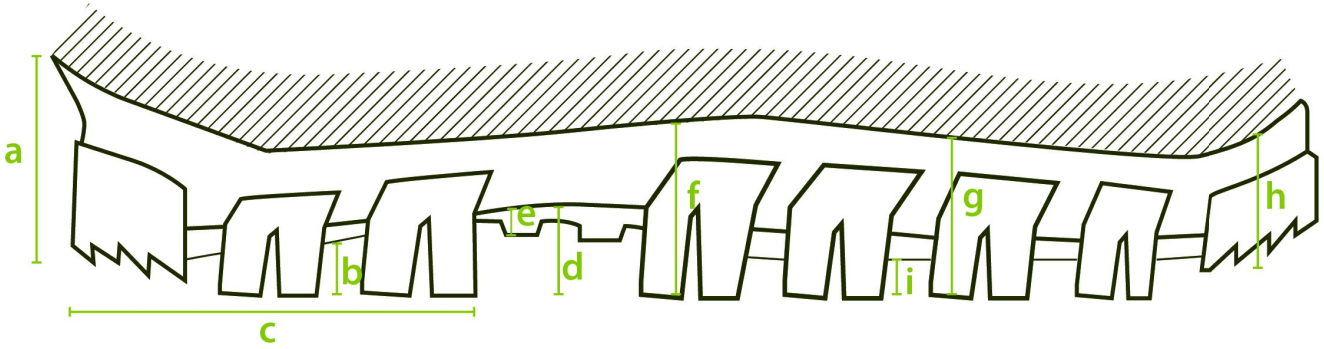
A. Dimensions	
• Height	outer measure: 14.4 - 15.6 in
	cutting edge: 10.6 - 11.6 in
• Foot length	outer measure: 12.4 in
	inner measure: 11.0 in
B. Thickness	
• Upper edge	0.10 - 0.12 in
• Calf	0.11 - 0.13 in
• Shinbone	0.11 - 0.14 in
• Ankle	0.17 - 0.21 in
• Heel	0.22 - 0.24 in
C. Raw material	
	NEOTANE (proprietary polyurethane compound)
D. Density	
	86.8 - 93.5 oz/gal (U.S.)

E. Tensile strength		
(incl. lining)	1450 ± 290 psi	
F. Elongation		
(incl. lining)	600 +/- 100%	
G. Hardness		
	43 +/- 2 Sh A	
H. Tear strength		
(incl. lining) lbf/in	57.1 ± 11.4 lbf/in	
I. Aging		
(incl. lining)	**7 days at 158 °F**	**14 days at 158 °F**
• Tensile strength	1682.4 psi	1305.3 psi
• Elongation	580 ± 20%	600 ± 20%
• Tear strength	65.1 lbf/in	51.4 lbf/in
J. Chemical resistance		
	see detailed list	
K. Environmental temperature		
• Maximum	± 212 °F	
• Minimum	Cold insulation down to -40 °F	

Lining

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

Outsole profile



A. Dimensions		
• Heel		
• Thickness	(a)	1.9 in
• Profile depth	(b)	0.50 in
• Length	(c)	4.1 in
• Width		3.4 in
• Middle foot		
• Height	(d)	0.62 in
• Ladder anti-slip grips	(e)	0.23 in
• Outsole		
• Thickness	(f)	1.7 in
	(g)	1.3 in
	(h)	1.0 in
• Profile depth	(i)	0.26 in
B. Raw material		
	NEOTANE (proprietary polyurethane compound)	
C. Density		
	6.5 - 7.0 ppg (imp.)	
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		
	0.0031 in^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	> 0.55 in	Non-metallic	0.55 in
Impact resistance (125J)	CSA Z195-14	> 0.50 in	Non-metallic	0.85 in
Impact resistance at -0.4 °F (125J)	CSA Z195-14	> 0.50 in	Non-metallic	1.1 in
Compression resistance	EN ISO 20344:2022+A1:2024 EN ISO 20345:2022+A1:2024	> 0.55 in	Non-metallic	0.71 in
Compression resistance	ASTM F2413-24	> 0.50 in	Non-metallic	0.82 in
Width of toe cap	outer measure: 1.9 in			
Height of toe cap	outer measure: 3.7 in			
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	
• Color	black	
• Thickness	0.03 in	
• Bottom	PU foam	
• Color	black	
• Thickness	0.12 - 0.28 in	
Washable at 86 °F		