TECHNICAL DATA SHEET
Thermolite IceShield S5 green/black

General information

Size range	
• EU	39 - 47
• UK	6 - 12
• US	6 - 14
The testresults in this technical datasheet are performed on size EU 42, UK 8, US 9	
Weight / pair	
• Safety level: Steel toe cap & midsole	± 2 840 g
Colours	
	
	green - black

Upper

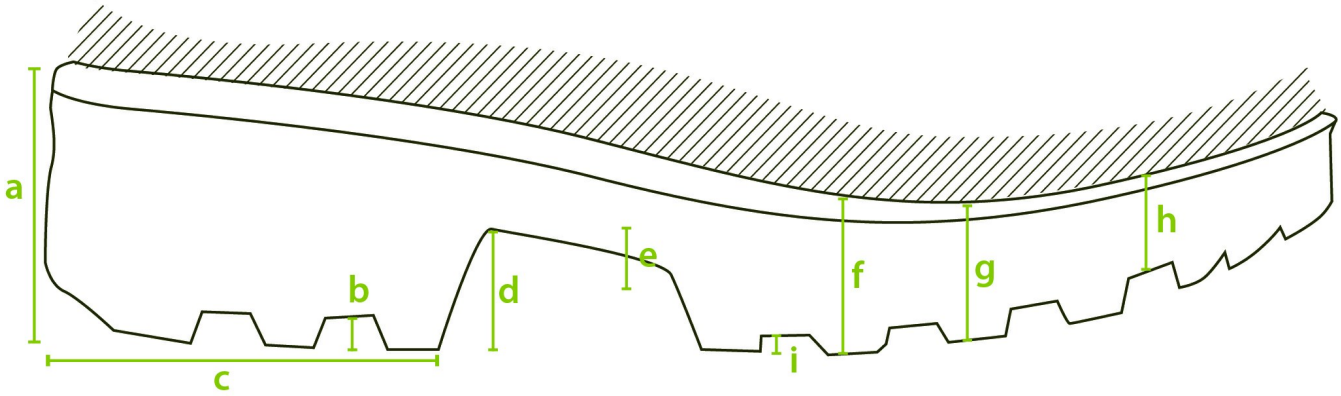
A. Dimensions	
• Height	outer measure: 40.0 cm
• Foot length	outer measure: 31.0 cm
	inner measure: 28.0 cm
B. Thickness	
• Upper edge	4.5 mm
• Calf	7.6 - 8.4 mm
• Shinbone	6.1 - 9.0 mm
• Ankle	11.7 mm
• Heel	12.9 - 13.1 mm
C. Raw material	
	NEOTANE (proprietary polyurethane compound)
D. Density	
	0.55 - 0.60 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 -50 °C	

Lining

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

Outsole profile



A. Dimensions		
• Heel		
• Thickness	(a)	55.0 mm
• Profile depth	(b)	10.0 mm
• Length	(c)	99.0 mm
• Width		99.0 mm
• Middle foot		
• Height	(d)	29.0 mm
• Ladder anti-slip grips	(e)	1.8 mm
• Outsole		
• Thickness	(f)	30.8 mm
	(g)	29.5 mm
	(h)	18.0 mm
• Profile depth	(i)	5.0 mm
B. Raw material		
	NEOTANE (proprietary polyurethane compound)	
C. Density		
	0.55 - 0.60 g/mL	
D. Mechanical characteristics		
	See upper (E)-(F)-(H)	
E. Energy absorption of the seat region		
	60-70 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	Metallic	1503 N
Impact resistance (200J)	EN ISO 20344:2022+A1:2024 EN ISO 20345:2022+A1:2024	> 14.0 mm	Metallic	14.5 mm
Compression resistance	EN ISO 20344:2022+A1:2024 EN ISO 20345:2022+A1:2024	> 14.0 mm	Metallic	15.0 mm
Width of toe cap	outer measure: 48.0 mm			
Height of toe cap	outer measure: 95.0 mm			
Toe cap	Steel			

Certificates

CE	EN ISO 20344:2022+A1:2024 EN ISO 20345:2022+A1:2024 2501543-02-86
UKCA	EN ISO 20345:2011 AB0321/19223-01/E00-00

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	

