

<b>Prod. Ref</b>	26820-000
<b>Occupational Cat</b>	SB E P HI CI WRU HRO FO SRC
<b>Size range</b>	39 - 48 (6 - 13)
<b>Weight (size 42)</b>	750 g
<b>Shape</b>	B
<b>Width (6)</b>	10
<b>Width (6,5 - 13)</b>	11

**Description:** Black water repellent full grain leather ankle boot, **SANY-DRY®** lining, anti-shock, slipping resistant, non metallic **APT Plate** midsole **Zero Perforation**, with high electrical resistance

**Plus:** Insole and sole are highly electric resistant. The whole boot has been designed in order not to have any metal parts (**100 % Metal Free**). **HEAT BARRIER** footbed made of soft and scented polyurethane, anatomic, insulating against high temperatures, covered with cloth. The thermal comfort inside the footwear is granted thanks to the special polyurethane compound devised to give high insulation. **ANTI TORSION SUPPORT** made of polycarbonate and fibreglass conveniently placed between heel and sole, which provides support and protection of the plantar arch, thus preventing harmful bendings and/or unwilling torsion. Outsole resistant to +300°C (1 minute contact). Perfumed sole

**Suggested use:** Given the high electrical resistance, it is possible to use this boot as a secondary protective equipment in addition to the primary ones (obligatory) for installation of electric plants and all activities where it is important to reduce the risk of lesions for accidental contacts with hot electric wires. **Footwear for electricians**

**Instructions:** This boot is not a primary protective equipment. It does not prevent the risk of electrical shock when working with dangerous tensions and does not insulate from high voltage. Apart from these footwear the worker must use other electrical shock protective equipment (i.e. gloves and insulating rubber carpets or alternative systems in the work place). The resistance against electric shocks fails in wet environments and when the outer surface of the sole is contaminated by chemical agents (i.e. road salt) or entrapped conductive materials (i.e. nails or metal swarf). Therefore it is necessary to check the footwear carefully. They must be replaced if damaged or too worn. The use of this shoe is absolutely not advisable in explosive stores or any place with risk of fire

**Care and maintenance:** Clean after each use and dry off away from direct heat; treat the leather with a suitable shoe-polish. Avoid contact with aggressive chemicals or extreme temperature. Avoid immersion in sea water, lime water or cement mixed with water



## MATERIALS / ACCESSORIES

## SAFETY TECHNICAL SPECIFICATIONS

		Clause EN ISO 20345:2011	Description	Unit	Cofra result	Standards Requirement
<b>Complete shoe</b>	Value of electric resistance higher than that of antistatic footwear		Resistance against electric shocks of the whole footwear	MΩ	> 2000	≥ 1000
	<b>Toe cap:</b> non metallic <b>TOP RETURN</b> toe cap, impact resistant until 200 J and compression resistant until 1500 kg	5.3.2.3	Shock resistance (clearance after shock)	mm	15	≥ 14
		5.3.2.4	Compression resistance (clearance after compression)	mm	15	≥ 14
	<b>Anti perforation midsole:</b> in multi-layers highly tensile fabric, penetration resistant, <b>Zero Perforation</b> , with high electric resistance	6.2.1	Penetration resistance	N	<b>To 1100 N</b> <b>No perforation</b>	≥ 1100
	<b>Heat insulation</b>	6.2.3.1	Heat insulation (temp. increase after 30' at 150 °C)	°C	18,5	≤ 22
	<b>Cold insulation</b>	6.2.3.2	Cold insulation (temp. decrease after 30' C at -17 °C)	°C	8	≤ 10
	<b>Energy absorption system</b>	6.2.4	Shock absorption	J	29	≥ 20
<b>Upper</b>	Black water repellent full grain leather thickness 1,8/2,0mm	5.4.6	Steam permeability	mg/cmq h	> 1	≥ 0,8
			Permeability coefficient	mg/cmq	> 15,3	> 15
		6.3.1	Water absorption		25%	≤ 30%
			Water penetration		0,1 g	≤ 0,2 g
<b>Vamp lining</b>	Textile, breathable, abrasion resistant, colour black	5.5.3	Steam permeability	mg/cmq h	> 6,3	≥ 2
	Thickness 1,2 mm		Permeability coefficient	mg/cmq	> 51,1	≥ 20

<b>Quarter lining</b>	<b>SANY-DRY®</b> , breathable, abrasion resistant, colour red	5.5.3	Steam permeability	mg/cmq h	> <b>10,3</b>	≥ 2	
	thickness 1,2 mm		Permeability coefficient	mg/cmq	> <b>82,8</b>	≥ 20	
<b>Sole</b>	Polyurethane - nitrile rubber, with high electrical resistance, directly injected in the upper:	5.8.3	Abrasion resistance (lost volume)	mm <sup>3</sup>	<b>90</b>	≤ 150	
		5.8.4	Flexing resistance (cut increase)	mm	<b>1,5</b>	≤ 4	
		5.8.6	Interlayer bond strength	N/mm	<b>4,4</b>	≥ 3	
		6.4.4	Hot resistance (300 °C)	----	<b>any melting</b>	any melting	
		6.4.2	Hydrocarbons resistance (ΔV = volume increase)	%	<b>+ 2,5</b>	≤ 12	
		CAN/CSA Z195-14	Test voltage	18.000 Volts	mA	<b>0,25</b>	≤ 1
			Test time	1 minute			
		5.3.5	SRA : ceramic + detergent solution – flat		<b>0,42</b>	≥ 0,32	
			SRA : ceramic + detergent solution – heel (contact angle 7°)		<b>0,33</b>	≥ 0,28	
			SRB : steel + glycerol – flat		<b>0,22</b>	≥ 0,18	
	SRB : steel + glycerol – heel (contact angle 7°)		<b>0,16</b>	≥ 0,13			
	Midsole: black polyurethane, made of a special compound which resists to 150°C for 30 minutes without its chemical-physical features being altered						
	Outsole: black nitrile rubber, slipping resistant, abrasion resistant, hydrocarbons resistant, and hot resistant.						
	Electric insulation of the footwear bottom in dry condition						
	Adherence coefficient of the sole						