

# DIELECTRIC BOOTS



**workMaster™**  
by RESPIREX

Power Generation

Power Distribution

Construction

Telecommunications

Transport

An electrically insulating dielectric boot with an integral steel toe cap and vulcanized rubber sole for superior slip resistance. The Respirex Dielectric boot provides protection of up to 20kV over the complete boot for over 8 hours, and 35kV over the sole for 3 minutes.



**CLASS 2**  
**EN50321**  
17kV Working Voltage



## Boot Shaft

- Yellow dielectric compound shaft
- 200 Joule Epoxy coated Steel toe cap to EN ISO 20345
- Seamless construction
- Kick off lug
- Extra shin protection
- Adjustable height
- Ankle guard
- Non-wicking knitted nylon lining
- Comfort insole (removable and machine washable)
- REACH Compliant

## Boot Sole

- Blue vulcanized rubber sole for maximum grip - 30% better than a conventional safety boot sole
- Slip resistance twice that required by SATRA TM144 standards
- Cleated outsole for maximum grip
- Two to three times the wear resistance of conventional soles
- Fuel and oil resistant
- Greater cut resistance than conventional soles
- Resistance to hot contact 60 seconds 300°C.
- Energy absorbing tunnel system conforms to EN 20345 E
- Cold insulation to EN ISO 20345

## Care

- Machine washable at up to 40°C
- Shelf life of over 10 years

## Electrical Protection

Complete boot: 20 kV.....8 hours no damage  
5 kV.....<5mA Leakage current

Sole: 35 kV.....3 minutes no damage

## Certification

Safety Footwear EN ISO 20345:2011  
- SB E CI HRO SRC FO  
Electrically Insulating Footwear EN 50321:2018 Class 2  
Dielectric Footwear ASTM F1117  
Personal Protective Equipment PPE Regulation (EU) 2016/425

## Sizes

UK	3	4	5	6	7	8	9	10	11	12	13	14	15
EU	35	36	37	39	41	42	43	44	45	46	47	49	50
US	4	5	6	7	8	9	10	11	12	13	14	15	16



Vulcanized Rubber Sole

# DIELECTRIC BOOTS

## CLASS 2



RESPIREX™

Power Generation

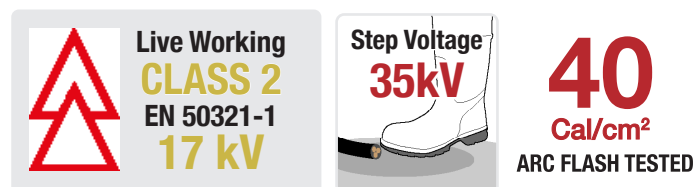
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An electrically insulating dielectric boot with an integral steel toe cap and vulcanised rubber sole for superior slip resistance. The Respirex Dielectric boot allows high-voltage live working at up to **17kV**, with every boot tested at 20kV AC, with optional DC testing at 40kV (Class 1).



### Features

- Injection moulded using our proprietary **Dielectric compound** for a seamless boot with excellent electrical insulation properties
- **Step voltage protection** up to 35kV\*
- **Arc flash protection** – Meets the requirements of ASTM F2621-2019 at 40Cal/cm<sup>2</sup>\*\*
- 200 Joule epoxy coated steel **toe cap** (soft toe version also available)
- **Vulcanized rubber sole** for improved slip resistance - 30% better than a conventional safety boot sole
- **Durable, cut-resistant** vulcanised rubber sole, significantly extends working life, even in harsh terrain
- Cleated outsole for **maximum grip** in wet and oily conditions (**SR**)
- **Heat resistant sole** EN 20345:2022 **HRO**, 60 seconds at 300°C
- **Cold insulation** to EN ISO 20345:2022 **CI**
- **Fuel and oil resistant** sole
- Ergonomic **cushioned insole** (removable & machine washable) for greater wearer comfort
- **Energy absorbing** tunnel system in heel to EN 20345:2022 E
- Non-wicking knitted nylon lining
- Kick-off lug
- Adjustable height
- CE marked on the shaft with date and year of manufacture
- REACH Compliant

### Care

- Machine washable at up to 40°C
- Shelf life of over 10 years

### Options

- Additional DC high voltage test
- Removable thermal liner

### High Voltage Test

Each boot: **20kV AC** - Leakage current <18mA over the three minute test cycle

### Sizes

US	4	5	6	7	8	9	10	11	12	13	14	15	16
EU	35	36	37	39	41	42	43	44	45	46	47	49	50
UK	3	4	5	6	7	8	9	10	11	12	13	14	15



### Certification

- **EN ISO 20345:2022 SB E CI HRO SR FO**  
Safety Footwear
- **EN 50321-1:2018 Class 2 AC**  
Electrically Insulating Footwear for Live Working
- **ASTM F1117 (20kV)**  
Dielectric Footwear
- **ASTM 2413 EH (18kV)**  
Step Voltage Protection
- **PPE Regulation (EU) 2016/425**  
Personal Protective Equipment

\*Tested using the ASTM 2412-18a step voltage test method at 35kV with leakage current less than 1mA.

\*\*The Respirex Dielectric boot has been independently tested and meets the test requirements of ASTM F2621-2019.

Specifications, configurations and colours are subject to change without notice.