

Laboratory Accreditation Programmes

Schedule to
CERTIFICATE OF ACCREDITATION

Laboratory	New Zealand Leather & Shoe Research Association	
Address	PO Box 8094, Hokowhitu, Palmerston North, 4446 Fitzherbert Science Centre, 69 Dairy Farm Road , RD 4, Palmerston North, 4474	
Telephone	06 355-9028	
URL	www.lasra.co.nz	
Authorised Representative	Mr Peter Roy Senior Technical Officer	
Client No.	251	
Programme	Mechanical Testing Laboratory	
Accreditation Number	578	
Initial Accreditation Date	2 October 1995	
Conformance Standard	ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories	
Testing Services Summary	4.30 Safety Equipment 4.62 Textiles 4.64 Leather and Leather Products	
Signatories	Mr Peter Roy	4.30, 4.62, 4.64

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4.30 Safety Equipment

(e) Safety Footwear

The following tests on protective footwear for fire fighters to AS/NZS 4821:2014 and referenced tests

General

clause 2.2.1 Type and classification
 Design (Design A excluded)
 Height of upper

Whole Footwear

clause 3.5.1 Contact heat
 clause 3.13 Slip resistance
 clause 3.5.3 Flame resistance

Toe Protection

clause 3.7 Rigidity of toe at 500 N, mm

Resistance to Inimical Environments

clause 3.2 Laces melting
 clause 3.4 Heat resistance test
 clause 3.9 Chemical resistance
 clause 3.10 Micro-organism resistance
 clause 3.11 Zipper
 clause 3.12 Eyelet and stud post attachment

Upper

clause 3.3.1 Thread strength
 clause 3.3.2 Thread melting
 clause 3.5.2 Radiant heat
 clause 3.5.3 Flame resistance

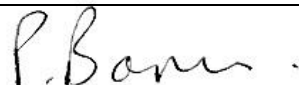
Outsole

clause 3.8.1 Cleat design
 clause 3.8.2 Cleat height
 clause 3.8.3 Breast heel

The following tests on protective footwear for firefighters to BS EN15090:2012 *Footwear for Firefighters* and AS/NZS 4821:2014 Protective footwear for firefighters – Requirements and test methods (EN 15090:2012, mod)

5 Sampling and conditioning
 6.3.1 Insulation against heat

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- 6.3.2 Radiant heat
- 6.3.3 Flame resistance
- 6.4 Rigidity of the toepuff
- 6.5 Resistance to chemicals
- 6.6.3 Antistatic footwear
- 6.6.4 High electrical resistance outsoles
- 6.7 Outsole
- 6.8 Zipper

The following to ASTM F2412:2005 and ASTM F2412:2011 Standard test method for foot protection

- clause 5 Impact Resistance
- clause 6 Compression Resistance
- clause 7 Metatarsal Impact Resistance
- clause 11 Puncture Resistance

The requirements defined in ISO 11999.6 (2016) in accordance with the test methods of: EN 13832.3 (2006) or ISO 20344 (2011) or ISO 20345 (2011) or ISO 6942

- 6.2.1 Insulation against Heat
- 6.2.2 Radiant Heat
- 6.2.3 Flame Resistance
- 6.3.1 Degradation Resistance
- 6.3.2 Permeation Resistance
- 6.5 Water Resistance
- 6.6.2 Cleat Height
- 6.7.3 Zipper Attachment Strength
- 6.7.3 Zipper Lateral Strength

And the following tests on protective footwear for fire fighters in accordance with ISO 11999.6 (2016)


- Test 7.1 Insulation against Heat
- Test 7.2 Radiant Heat
- Test 7.3 Flame Resistance
- Test 7.4.1 Zipper Attachment Strength
- Test 7.4.2 Zipper Lateral Strength

The following tests on protective footwear to CAN/CSA Z195-14

- Clause 5.1.1 Protective toe cap impact resistance
- Clause 5.2.1 Protective sole penetration test

The following tests on protective footwear for fire fighters to ISO 20345:2004/Amd.1:2007 (including referenced tests), ISO 20345:2011 and ISO 20344:2004 and ISO 20344:2011

The following standards are identical.

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MS ISO 20345:2008	is identical to ISO 20345:2004
SS513 Part 1	is identical to ISO 20345:2004
SS513 Part 2	is identical to ISO 20344:2004

Therefore the laboratory's accreditation also includes the above Malaysian and Singaporean Standards for the tests for which the identical ISO Standard above is mentioned

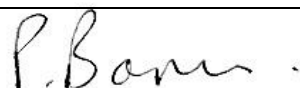
General

clause 5.2.2	Height of upper, mm (ISO 20344:2004 clause 6.2.2)
clause 5.2.3	Seat region

Whole Footwear

clause 5.3.1.1	Construction Upper/outsole bond strength (ISO 20344:2004 clause 5.2) (ISO 20344:2011 clause 5.2)
clause 5.3.1.2	
clause 5.3.4	Specific ergonomic features ISO 20344:2004 clause 5.1) (ISO 20344:2011 clause 5.1)
clause 6.2.2	Electrical properties ISO 20344:2004 clause 5.10) (ISO 20344:2011 clause 5.10)
clause 6.2.4	Energy absorption of seat region (ISO 20344:2004 clause 5.14) (ISO 20344:2011 clause 5.14)
clause 6.2.6	Metatarsal protection (ISO 20344:2004 clause 5.16) (ISO 20344:2011 clause 5.16)
clause 6.2.1	Penetration resistance (ISO 20344:2004 clause 5.8.2) (ISO 20344:2011 clause 5.8.2, including dimensional conformity)
clause 5.3.2.1	General Toe cap length, mm (ISO 20344:2004 clause 5.3) (ISO 20344:2011 clause 5.3)
clause 5.3.2.2	
clause 5.3.2.3	Impact resistance (ISO 20344:2004 clause 5.4) (ISO 20344:2011 clause 5.4)
clause 5.3.2.4	Compression resistance (ISO 20344:2004 clause 5.5) (ISO 20344:2011 clause 5.5)
clause 5.3.2.5	Corrosion resistance of metal toecaps (ISO 20344:2004 clause 5.6.1) (ISO 20344:2011 clause 5.6)
clause 5.6.2	Resistance of non metallic toecaps (EN 12568)

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Resistance to Inimical Environments

- clause 6.2.3.1 Heat insulation of sole complex
(ISO 20344:2004 clause 5.12)
(ISO 20344:2011 clause 5.12)
- clause 6.2.3.2 Cold insulation of sole complex
(ISO 20344:2004 clause 5.13)
(ISO 20344:2011 clause 5.13)
- clause 6.2.5 Water resistance
(ISO 20344:2004 clause 5.15.1)
(ISO 20344:2011 clause 5.15.1)
- clause 5.3.3 Leakproofness
(ISO 20344:2004 clause 5.7)
(ISO 20344:2011 clause 5.7)

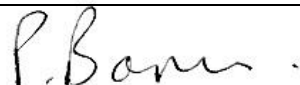
Metatarsal Protection

- clause 6.2.6.2 Impact resistance of metatarsal protective device
(ISO 20344:2004 clause 5.16)
(ISO 20344:2011 clause 5.16)

Upper

- clause 5.4.2 Thickness
(ISO 20344:2004 clause 6.1)
(ISO 20344:2011 clause 6.1)
 - clause 5.4.3 Tear strength
(ISO 20344:2004 clause 6.3)
(ISO 20344:2011 clause 6.3)
 - clause 5.4.4 Tensile properties
(ISO 20344:2004 clause 6.4)
(ISO 20344:2011 clause 6.4)
 - clause 5.4.5 Flexing resistance
(ISO 20344:2004 clause 6.5)
(ISO 20344:2011 clause 6.5)
 - clause 5.4.6 Water vapour Class 1 only
(ISO 20344:2004 clause 6.6 & 6.8)
(ISO 20344:2011 clause 6.6 & 6.8)
 - clause 5.4.8 Hydrolysis
(ISO 20344:2004 clause 6.10)
(ISO 20344:2011 clause 6.10)
 - clause 6.3.1 Water penetration
(ISO 20344:2004 clause 6.13)
(ISO 20344:2011 clause 6.13)
 - clause 6.3.2 Upper construction
- Vamp lining & Quarter lining**
- clause 5.5.1 Tear strength
(ISO 20344:2004 clause 6.3)
(ISO 20344:2011 clause 6.3)
 - clause 5.5.2 Abrasion resistance

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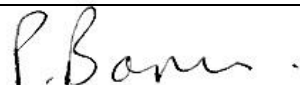
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clause 5.5.3	(ISO 20344:2004 clause 6.12) (ISO 20344:2011 clause 6.12) Water vapour (ISO 20344:2004 clause 6.6 & 6.8) (ISO 20344:2011 clause 6.6 & 6.8)
Tongue clause 5.6.1	Tear strength (ISO 20344:2004 clause 6.3) (ISO 20344:2011 clause 6.3)
Insole clause 5.7.1	Thickness (ISO 20344:2004 clause 7.1) (ISO 20344:2011 clause 7.1)
clause 5.7.3	Water absorption
clause 5.7.4	Abrasion resistance (ISO 20344:2004 clause 7.3) (ISO 20344:2011 clause 7.3)
Outsole clause 5.8.1	Thickness (ISO 20344:2004 clause 8.1) (ISO 20344:2011 clause 8.1)
clause 5.8.2	Tear strength (ISO 20344:2004 clause 8.2) (ISO 20344:2011 clause 8.2)
clause 5.8.3	Abrasion resistance (ISO 20344:2004 clause 8.3) (ISO 20344:2011 clause 8.3)
clause 5.8.4	Flexing resistance (ISO 20344:2004 clause 8.4) (ISO 20344:2011 clause 8.4)
clause 5.8.5	Hydrolysis (ISO 20344:2004 clause 8.5) (ISO 20344:2011 clause 8.5)
clause 5.8.6	Interlayer bond strength (ISO 20344:2004 clause 5.2) (ISO 20344:2011 clause 5.2)
clause 5.8.7	Resistance to fuel oil (ISO 20344:2004 clause 8.6) (ISO 20344:2011 clause 8.6)
clause 6.4.1	Cleated area
clause 6.4.2	Thickness of cleated outsoles (ISO 20344:2004 clause 8.1) (ISO 20344:2011 clause 8.1)
clause 6.4.3	Cleat height (ISO 20344:2004 clause 8.1)

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clause 6.4.4 (ISO 20344:2011 clause 8.1)
 Resistance to hot contact
 (ISO 20344:2004 clause 8.7)
 (ISO 20344:2011 clause 8.7)

The following tests on protective clothing for users of hand-held chain saws

ISO 11393-3:1999 (E) Part 3: Test methods for footwear
 BS EN 381-3:1996 Part 3: Test methods for footwear
 ISO 17249:2013 Resistance to chainsaw cutting

(f) Other safety products

The following tests on Occupational protective gloves to AS/NZS 2161.3:1998
 Protection against mechanical risk

clause 6.2 Blade cut resistance

The following tests on protective clothing for users of hand-held chain saws

ISO 11393-2 Part 2: Test Methods and performance requirements for leg protectors
 – Clause 9.3 Testing of resistance to cutting.

BS EN 381-2 Part 2: Test Methods for leg protectors – Clause 8 Testing of
 resistance to cutting.

AS/NZS 4453.2:1997 Part 2: Test Methods for leg protectors – Clause 8 Testing of
 resistance to cutting.

The following tests to the methods shown:

ISO 7619.1:2004 Hardness of rubber and plastics to Shore A using a Durometer
 AS/NZS 3744 Furniture – Assessment of the ignitability of upholstered furniture
 Part 1: 1998 Ignition source – Smouldering cigarette
 Part 2: 1998 Ignition source – Match-flame equivalent
 Part 3: 1998 Ignition sources – Nominal 160 mL/min gas flame and nominal
 350mL/min gas flame
 BS 5852:2006 Methods of test for assessment of the ignitability of upholstered
 seating by smouldering and flaming ignition sources

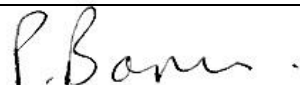
4.62 Textiles

Fabrics

(a) Tension tests

ISO 13934-1 Tensile properties of fabrics - maximum force and elongation at

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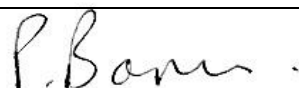
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ISO 13934-2	maximum force using the strip method Tensile properties of fabrics - Determination of maximum force using the grab method
ISO 13935-1:2014	Seam tensile properties - Part 1: maximum force to seam rupture Using the strip method
ISO 13935-2:2014	Seam tensile properties - Part 2: maximum force to seam rupture Using the grab method
ISO 13936-2	Slippage resistance of yarns at a seam in woven fabrics - Fixed load method
 (b) Tear tests	
AS 2001.2.10	Tear resistance of woven textile fabrics by the wing-rip method
 (c) Burst tests	
ASTM D3787	Bursting Strength—Constant-Rate-of-Traversal (CRT) Ball Burst Test
 (d) Wear tests	
ISO 12947-1	Abrasion resistance of fabrics - Martindale abrasion testing apparatus
ISO 12947-2	Abrasion resistance of fabrics - Determination of specimen breakdown
ISO 12947-3	Abrasion resistance of fabrics - Determination of mass loss
ISO 12947-4	Abrasion resistance of fabrics – Assessment of appearance change
ISO 12945-2	Fabric propensity to surface fuzzing and to pilling - Modified Martindale method
 (e) Other tests	
ISO 105-C06:2010	Colour fastness to domestic and commercial laundering.
ISO 105-D01:2010	Colour fastness to drycleaning using perchlorethelyne solvent.
ISO 105-E04	Colour fastness to perspiration
ISO 105-E01	Colour fastness to water
ISO 105-X12	Colour fastness to rubbing
ISO 3801	Mass per unit length and mass per unit area
ISO 3759:2011	Preparation, marking and measuring of fabric specimens and garments in tests for determination of dimensional change
ISO 5077:2007	Determination of dimensional change in washing and drying
ISO 6330:2012	Domestic washing and drying procedures for textile testing
ISO 7211/1	Construction – Weave diagram only
ISO 12945-1:2000	Determination of fabric propensity to surface fuzzing and to pilling – Part 1: Pilling Box method.

4.64 Leather and Leather Products

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The following tests to ISO 105-B02:1994(E)

Method 1 to 4 Colour fastness to artificial light: Xenon arc fading lamp test

The following tests to ISO 11644:1993(E)

Appendix A Finish adhesion
 (also referred to as SLF11)

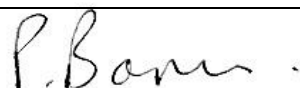
The following tests to ISO methods listed

- | | |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| ISO 2418 | Sampling
(also referred to as IUP2/SLP2) |
| ISO 2419 | Conditioning
(also referred to as IUP3/SLP3) |
| ISO 2589 | Thickness
(also referred to as IUP4/SLP4) |
| ISO 3376 | Tensile strength and percent elongation
(also referred to as IUP6/SLP6) |
| ISO 3377 | Measurement of tearing load
(also referred to as IUP8/SLP7) |
| ISO 3379 | Ball burst test |
| ISO 5403:2002 | Dynamic waterproofness for upper leather
(also referred to as IUP10/SLP22) |
| ISO 5402 | Measurement of the flexing endurance of light
leathers and their surface finishes
(also referred to as IUP20/SLP14) |
| ISO 11640 | Colour fastness to cycles of to – and fro rubbing
(also referred to as IUF450/SLF470) |
| ISO 11642:2012 (IULTCS/IUF 421) | Colour fastness to water |

The following tests to Other methods specified

- | | |
|-----------------------|-----------------------------------------|
| AATCC method 8:1989 | Colour fastness to crocking |
| ASTM D 1813:00 | Thickness of leather |
| ASTM D 1516:00 | Width of leather |
| ASTM D 1913:00 | Wetting of garment leather (spray-test) |
| ASTM D 2209:00 | Tensile strength |
| ASTM D 2208:00 | Breaking strength |
| ASTM D 2211:00 | Elongation of leather |
| ASTM D 2212:00 (2005) | Slit tear resistance |
| ASTM D 2813:86 | Sampling leather |
| ASTM D 4704:00 | Tear strength – tongue tear |
| ASTM D 4705:00 | Stitch tear – double hole |
| ASTM D 4786:00 | Stitch tear – single hole |
| ASTM D5053:00 | Colourfast of crocking of leather |
| SATRA PM36: 1999 | Break/Pipiness |

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