



QUALITY SOFT GOODS

Footwear Quality Assurance Process/Testing Guidelines July 2015

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1.) TWL Quality Process Guidelines

Sample Submission Procedure		
Submission Documents	Submission Form	<p>All samples to be submitted to buyer with a Footwear Approval Request form (downloadable from website). Supplier to fill in all required details in the Approval Request form. All order numbers to be indicated on forms. List of all colourways/print options to be included. Specification details to be included where known. Please indicate order quantity and indicate which components are for approval. Vendor is required to fill in the internal or last lengths on the Approval Request form for all sizes required for the TWL order Please ensure all samples are clearly marked with swing ticket indicating factory, TWL order number and style reference. Allow 3-5 working days for QA sample approval.</p>
	1st sample	<p>1st samples to be submitted to buyer with a Footwear Approval Request form (downloadable from website). 1st sample checks materials, design, construction, size and fit and if possible Commercial Markings. Sample must match specification for size and construction – use a shoe last that matches the size range and fit required for the TWL order. Sample must be made in materials that are same or similar type as required by the specification. If there is an original sample it must be returned to the buyer with 1st approval for comparison. Sample must be measured by the supplier and the results recorded on approval form/spec. QA will create TWL spec, including test requirements, and will attach to 1st Approval comments for suppliers ref.</p>
	PP sample	<p>PP samples to be submitted to buyer with a Footwear Approval Request form (downloadable from website). Sample must be in actual bulk materials with all bulk accessories attached. Copy of TWL spec to be attached. All labels, tags and packaging to be attached or hard copies of approved layout enclosed. Where required (refer to testing criteria) Test reports must be submitted. S2S/Checkpoint invoices to be submitted for all TWL brands. Sample must be measured with results recorded on approval form. Do not proceed to bulk production without QA PP approval</p>
	Shipping Sample	<p>Shipping samples to be submitted to buyer with a Footwear Approval Request form (downloadable from website). Samples must be taken randomly from bulk production. Copy of TWL spec to be attached. Sample must be measured with results recorded on approval form. Where required (refer to testing criteria) Original Test reports must be submitted. Do not ship without QA approval.</p>
	Repeat Orders	<p>For repeat orders (note factory must be the same as previous order) 1st sample can be omitted.</p>
	Colour and Design	<p>QA does not comment on colour and design, please refer to buyer. QA will note any poor shade matching issues.</p>
	QC Inspections	<p>QC Inspections must be carried out by the factory for all orders. TWL may request copies of inspection reports TWL may request Inspections through their agreed service providers at their discretion.</p>

Invoices	Documents	Copies of all test results are to be submitted with PP sample All testing to be by nominated suppliers. Original copies to be sent with Shipping Samples. All TWL order numbers to be listed on report Do not proceed to bulk without test report approval
	Emails	If emailed copies of invoices are sent please ensure that shoe name, PO numbers and QA ref are stated in the email text.

Labelling		
Compliance	Standards	All labels must comply with AS/NZ Standards
	Claims	When a claim is made supplier is required to substantiate this claim with test report/certificates as part of the QA process. Test Reports or Verification Certificates are required for approval regardless of order quantity. Example: waterproof
	Wording	Must be written in English with minimum font size 2mm , To be accessible at point of sale. Wording on label and outer packaging to be consistent
Materials & Construction Content	Attachment	Labels to be permanently attached to the footwear in a visible position or to be printed on the sock or lining
	Construction	Labels must be sewn squarely into the seam with all wording visible parallel to the hem with no skewing.
	Label Content	It is a legal requirement that the Country of origin is shown on all footwear. Legally all listed material contents need to be accurate TWL also require that commercial markings are permanently attached in a visible position. All PP samples must have relevant labels, tags and commercial markings. Do not proceed to bulk without approval Country of Origin Material Contents Item Description Item Code Season Code
	Season/Code item code/Barcode	To be as per contract. Barcodes must be scannable and positioned to be accessible for a hand held scanner.
	Brand/Product description	To be as per contract.
	Nominated Supplier Policy	Full details on nominated supplier and Footwear Vendor pack can be downloaded from our supplier web page.

Sizing		
	Requirements	All measurements and dimensions are for finished products All items must measure to or above their designated dimensions stated on the contract and specification Standard sizes are minimum
	Method of Measurement	Sock length to be measured internally

Construction & Packaging		
Requirements		TACK & STAPLE FREE All TWL Footwear must be Tack/Staple Free Suppliers need to be aware that non-compliance will result in product recall or withdraw from store and that they will be liable for any costs incurred for checks or repairs.
Components		BUCKLES, EYELETS & STUDS Must be rust/corrosion resistant No sharp edges.
		BUTTONS Must be rust resistant All buttons to be 4 hole Machine Lock Stitch attached and all trims to be firmly secured. No sharp edges.
		ZIPPERS To be from TWL nominated zip suppliers or Alternative zips must be tested by Intertek No sharp edges (see our full zip policy in section 4)
		METAL COMPONENTS No sharp edges
Polybags		POLY BAGS Must have two holes and suffocation warning format Logo Reuse/Recycle To prevent suffocation Keep bag away from Babies and infants
Hangers		HANGERS Invoices from TWL Nominated Hanger Supplier must be submitted with PP sample. Supplier hanger test report required at PP sample stage
Boxes		BOXES Boxes must be approved by QA for colour and card quality. All information to be clear and legible and consistent with labelling.
Anti Mould		MICRO PACK Due to health concerns TWL will no longer accept silicon bags. Requirement is that at least one Micro-Pak tablet is included in each footwear box attached to the underside of the box lid. Micro-Pak PE Sheet must be used for each individual polybag.
Soft Tagging		TWL Footwear requires Soft Tagging at Source as per buyers order.

Condition of Goods		
Mould		Supplier must guarantee that all goods are received in good clean condition, Any orders with evidence of mould are not repairable and will result in order cancellation with all costs being charged back – no exceptions.
Glue, pen marks and dirt etc.		All glue and dirt etc.to be removed before shipping.
Condition		All goods must arrive in good clean condition

Terms of Trade		
		Full details of our Terms of Trade are available online

2.) Testing Criteria

Testing	
<p>STANDARD TESTING REQUIREMENTS – FOOTWEAR</p> <p>All testing costs to be included in unit price at tender stage. Prices are available online (TWL Quality Page) or direct from Service Provider. Prices cannot be adjusted once quote has been accepted. Any questions around requirements must be clarified before quoting. Supplier is responsible for ensuring that costing is accurate based on these Guidelines.</p> <ul style="list-style-type: none"> - All Children's (infants, boys & girls) orders to be tested regardless of category or quantity ordered. - All orders where the total order quantity is equal to or more than 3000 units , suppliers are required to test Products. - All orders nominated by buyer at tender stage which are considered to be high risk But fall under quantity threshold - including but not limited to high heels, fancy infants Styles, styles with a history of issues etc. <p>Note that if the same fabric/material is used for more than one color/style and the total quantity of the combined orders is equal to or more than 3,000 units testing is required. We reserve the right to request additional testing where we believe a standard may not be met. Please note all items not tested are required to be of a quality standard that would pass testing . All product claims must be proven with original copies of test reports regardless of quantity ordered</p>	
Nominated Service Providers	<p>All Testing to be carried out by our independent appointed testing providers Intertek or SGS.</p> <p>All vendors/Suppliers will receive a discount off the list price for tests being conducted for The Warehouse (they need to inform Intertek / SGS that the tests are for the Warehouse to receive the discount). Price Lists and full contact details including other regions & countries are available online from Intertek or SGS.</p> <p>Intertek Consumer Goods 5/F, Building No.2 Shanghai Comalong Technology Service Park 889 Yi Shan Road, Xu Hui District, Shanghai, China. 200233 Guangzhou E201, No.7-2, Caipin Road, Guangzhou Science City, GETDD Guangzhou. 510663 Website : http://www.intertek.com</p> <p>SGS-CSTC Standards Technical Services Co., Ltd. Consumer Testing Services Softline 4/F, 4th Building No. 889, Yi Shan Road, Xuhui District, Shanghai, China Website: http://www.cn.sgs.com</p>
Content	<p>All TWL order numbers must be listed. Clear description of material type with correct fibre content. The colour names must duplicate colour names on the order. Indicate if the test report is for a resubmission.</p>
Emailed copies	<p>If emailed copies of test reports are sent please ensure that shoe name, PO numbers and QA ref is stated in the email text.</p>
Standards	<p>The performance standards are minimum requirements. All fabrics and materials are required to meet our standards regardless of meeting minimum order quantity for testing.</p>

3.) Product Testing Requirements by Category

Note that the following tables outline the principal testing requirements by category. These are basic guidelines and supplier to check details with QA for each style. For full details on standards and submission requirements refer to online submission documents.

VULCANISED TESTING CATEGORY				
This category includes Men's, Women's and Children's textile upper casual footwear.				
Style includes, but not limited to: Canvas in any form except as slippers, Skate shoes and Ankle boots.				
Minimum quality requirements: <ul style="list-style-type: none"> • Minimum of 4mm sole thickness excluding cleats. • All eyelets and metallic trims to be corrosion resistant. Zip must be to TWL requirements. • Rubber sole quality must be of a standard not to allow discolouration to occur. • Heel cavities not to exceed 15mm and to have 4mm walls as a minimum. • All soles with heel cavities must adhere to the minimum quality requirements of insole board quality. 				
VULCANISED (FPS-01)	TESTING REQUIREMENTS	TEST METHOD	REQUIREMENT	Sample Requirement
	Foxing (sidewall) bond	ISO 17708	Foxing: Min. 2.0N/mm	1 pair of whole shoe
	Outsole abrasion resistance	ISO 4649	Max. volume loss 500mm ³	1 pair of outsole
	Flexing resistance for outsole	BS 5131 2.1	Max. Cut growth 6mm after 50,000 cycles. For TPR (room temperature). For others (-5C)	1 pair of outsole
	Attachment strength	BS 5131 5.11	Eyelet, strap or buckle: 200N Decorative: 70N, Loop: 200N	1 pair of whole shoe
	Colour fastness to Crocking (for textile & leather upper and lining)	ISO 105	Dry Min:3 Wet Min: 2-3	1 piece of A4 size material
	Outsole slip resistance	EN 13287	Clay tile dry & wet: Min. 0.3	1 pair of outsole

	Seam strength (for functional)	BS 5131 5.13	Min. 8N/mm	1 pair of whole shoe
	Corrosion resistance for metal	BS EN ISO	No corrosion	3~4 pieces of metal buckles
		20344 (1% salt solution)		
	Laces strength	BS 5131 3.7	Dry: Min. 200N, Wet: Min. 150N	3 pairs of shoe laces
	Peel strength for linking tape (Velcro)	BS 7271	Min. 170g/cm, 150g/cm(child) After 5,000 fatigue, Min. 136g/cm, 120g/cm ² (child)	1.5 meter tape
Shear strength for linking tape (Velcro)	BS 7271	Min. 700g/cm ² , 500g/cm ² (child) After 5,000 fatigue, Min. 560g/cm ² , 400g/cm ² (child)	Share with above 1.5 meter tape	

SLIPPERS TESTING CATEGORY			
Men's, Women's and Children's slippers which are predominately for indoor use.			
This includes footwear in soft, comfortable and warm materials, such as sheepskin, suede with fleece linings or synthetic imitation sheepskin.			
Micro suede, knits, terry towelling and other synthetic longer length fibres to provide softness and warmth.			
Outer soles are usually lightweight, flexible non slip sole materials for light indoor wear.			
Includes but not limited to stitch and turn, cement, vulcanised, injection moulded constructions.			
<p>Minimum quality requirements:</p> <ul style="list-style-type: none"> • Must meet minimum pass result for textile upper strength test, colour fastness to rub and perspiration. Zip must be to TWL requirements. • Flexible, non-slip soles. • Detailed material composition is required to ensure correct information is included in the commercial markings. • To have slip resistant soles • Any claims of 100% wool or cotton must be supported with test reports regardless of order quantity. • Textile uppers slippers must have a minimum of 2mm seam allowance. • Loose or open weave textiles may require seam strength testing to assess suitability. 			
TESTING REQUIREMENTS	TEST METHOD	REQUIREMENT	SAMPLE REQUIREMENT
Seam Strength (for upper to sole)	BS 5131 5.13	Min. 5 N/mm	1 pair of whole shoe
Sole Bond	ISO 17708	Min. 2.0N/mm (if material was torn, Min. 1.5N/mm) (for indoor shoe) 3.0N/mm (if material was torn, Min. 2.5N/mm) (for outdoor slipper)	1 pair of whole shoe
Colour fastness to Crocking (for textile & leather upper)	ISO 105	Leather: Dry Min. 3: Wet Min. 2-3 Fabric: Dry Min. 3-4: Wet Min. 3	1 piece of A4 size material
Flexing resistance for outsole	BS 5131 2.1	Max. Cut growth 6mm after 50,000 cycles	1 pair of outsole
		For TPR(room temperature) For others (-5C)	

SLIPPER (FPS-02)

Attachment strength	BS 5131 5.11	Eyelet, strap or buckle: 250N Decorative: 70N	1 pair of whole shoe
Colour fastness to Crocking (for textile & leather upper and lining)	ISO 105	Leather: Dry Min.3 Wet Min. 2-3 Fabric: Dry Min 3-4 Wet:3	1 piece of A4 size material
Outsole slip resistance	EN 13287	Min 0.3(clay tile, PVC & carpet)	1 pair of outsole
Peel strength for linking tape (Velcro)	BS 7271	Min. 170g/cm, 150g/cm(child) After 5,000 fatigue, Min. 136g/cm, 120g/cm ² (child)	1.5 meter tape
Shear strength for linking tape (Velcro)	BS 7271	Min. 700g/cm ² , 500g/cm ² (child) After 5,000 fatigue, Min. 560g/cm ² , 400g/cm ² (child)	Share with above 1.5M tape

CASUAL TESTING CATEGORY

This includes all closed Men's, Women's and Children's footwear with low heels.

All sandals with low heels.

Thongs

Minimum quality requirements:

- Minimum 4mm sock foam in forepart. Zip must be to TWL requirements.
- Heel cavities must have HD EVA fillers if cavity exceeds 15mm.
- Sole minimum thickness 4mm excluding cleats.
- 10mm min requirement solid margin for sole bond see picture. This example has preferred cavity shapes .This would not require fillers.
- If available sole has cavities more than 15mm then H/D EVA blocks must be inserted in heel impact area. - See photo



CASUAL SHOE (FPS-03)

TESTING REQUIREMENTS	TEST METHOD	REQUIREMENT	SAMPLE REQUIREMENT
Sole bond	ISO 17708	Min. 2.0N/mm for Toddlers shoes, foxing or EVA; Others; Min. 3.0N/mm (if material was torn, Min. 2.5N/mm)	1 pair of whole shoe
Outsole abrasion resistance	ISO 4649	Max. volume loss Microcellular rubber & EVA: 600mm ³ , Vulcanized rubber & hard TPR: 400mm ³ , resin rubber & PVC solid: 300mm ³ , polyurethane & soft TPR: 350mm ³	1 pair of outsole
Flexing resistance for outsole	BS 5131 2.1	Max. Cut growth 6mm after 50,000 cycles for TPR (room temperature) for others (-5 °C)	1 pair of outsole

Attachment strength	BS 5131 5.11	Eyelet, strap, buckle: 250N/150N for EVA footpad or toddlers shoe. Decorative: 70N Loop: 250N/150N for toddlers shoe	1 pair of whole shoe
Torsion test hooks	BS5131 5.11 1981 (2001)	(Modified) hooks 250N	4 pieces of metal hooks
Colour fastness to Crocking (for textile & leather upper and lining)	ISO105	Leather: Dry Min.3 Wet Min. 2-3 Fabric: Dry Min 3-4 Wet:3	1 piece of A4 size material
Seam strength (for functional)	BS 5131 5.13	Min.8 N/mm	1 pair of whole shoe
Outsole slip resistance	EN 13287	Clay tile dry & wet: Min. 0.3	1 pair of outsole
Corrosion resistance for metal	BS EN ISO 20344 (1% salt solution x 48 hours)	No corrosion	4 pieces of metal buckles
Laces strength	BS 513 3.7	Min. Dry: 250N/150N for toddlers shoe Wet: 200N/ 100N for toddlers shoe	3 pairs of shoe laces
Toe Post strength	TM181	Min. 150 for EVA footpad/Toddlers shoes Min. 250 for others	1 pair of whole shoe
Peel strength for linking tape (Velcro)	BS 7271	Min. 170g/cm, 150g/cm (child) After 5,000 fatigue, Min. 136g/cm, 120g/cm ² (child)	1.5 meter tape
Shear strength for linking tape (Velcro)	BS 7271	After 5,000 fatigue, min. 560g/cm ² , 400g/cm ² (child)	Share with above 1.5M tape

HIGH HEEL TESTING CATEGORY			
Includes all women's fashion heels 3cm and over.			
Also Sandals, Courts and Boots			
Minimum quality requirements:			
<ul style="list-style-type: none"> • Heel top pieces must be min 5mm thickness. • Heel top pieces must be non-slip material. • Zip must be to TWL requirements. • Smooth sole surfaces should be avoided. • Tempered steel shanks to be used. • Gang nail heel attachment plates used to secure heel. • Comfort panel to be fitted over gang nail plate to avoid discomfort. 			
TESTING REQUIREMENTS	TEST METHOD	REQUIREMENT	SAMPLE REQUIREMENT
Sole bond	ISO 17708	Min. toddlers shoe, foxing or EVA: 2.0N/mm Others: 3.0N/mm (if material was torn, Min. 2.5N/mm)	1 pair of whole shoe
Heel attachment strength	BS EN 12785	Pull off load: Min.600N, Heel distortion at 400N:<15%	1 pair of whole shoe
Outsole abrasion resistance	ISO 4649	Max. volume loss Vulcanized rubber and hard TPR: 350mm ³ , resin rubber & PVC solid: 250mm ³ , polyurethane & soft TPR: 300mm ³ , leather board: 400mm ³	1 pair of outsole
Flexing resistance for outsole	BS 5131 2.1	Max. Cut growth 6mm after 50,000 cycles for TPR (Room temperature) For others (-5C)	1 pair of outsole
Attachment strength	BS 5131 5.11	Eyelet, strap or buckle: 250N. Elastic:150N, Decorative:70N	1 pair of whole shoe
Colour fastness to Crocking (for textile & leather upper and lining)	ISO 105	Leather: Dry Min.3 Wet Min. 2-3	1 piece of A4 size material
		Fabric/PU/PVC: Dry Min 3-4 Wet:3	
Heel Impact test	BS 5131 4.8	No damage at 5.5 joules	3 pieces of high heels

HIGH HEEL (FPS-04)- INCLUDES SANDALS & BOOTS

	Outsole slip resistance	EN 13287	Clay tile dry & wet: Min. 0.3	1 pair of outsole
	Corrosion resistance for metal	BS EN ISO 20344 (1% salt solution x 48 hours)	No corrosion	4 pieces of metal buckles
	Peel strength for linking tape (Velcro)	BS 7271	Min. 170g/cm, 150g/cm (child) After 5,000 fatigue, Min. 136g/cm, 120g/cm ² (child)	1.5 meter tape
	Shear strength for linking tape (Velcro)	BS 7271	After 5,000 fatigue, Min. 560g/cm ² , 400g/cm ² (child)	Share with above 1.5M tape

SPORT SHOE TESTING CATEGORY			
All forms of sporting footwear, including: Walking, cross training, running, Rugby, Soccer, Cricket, Net ball, etc.			
Lifestyle active footwear which incorporates features for general comfort.			
Minimum quality requirements:			
<ul style="list-style-type: none"> • Removable foot-bed with arch support. • Some energy absorption features in both heel and forepart sections. • Max 15mm heel cavities in single density with 4mm minimum wall thickness. • Sole bottom to be 3mm min thickness excluding cleats. • Outer soles must incorporate some forms of comfort, support and cushioning. • Insole board required 1.5 - 1.75mm. Men's heavier hiking footwear 2.5 mm min thickness. 			
TESTING REQUIREMENTS			
TESTING REQUIREMENTS	TEST METHOD	REQUIREMENT	SAMPLE REQUIREMENT
Sole bond	ISO 17708	Min. Toddlers shoe, foxing or EVA: 2.5N/mm, synthetic upper: 3.0N/mm (if material was torn Min. 2.5N/mm) Leather upper: 4.0N/mm (if material was torn, Min. 3.0N/mm)	1 pair of whole shoe
Outsole abrasion resistance	ISO 4649	Max. volume loss Vulcanized rubber and hard TPR: 400mm ³ , resin rubber & PVC solid: 200mm ³ , polyurethane & soft TPR: 300mm ³ , leather board:300mm ³ Microcellular material:600 mm ³	1 pair of outsole
Outsole slip resistance	EN 13287	Clay tile dry & wet: Min. 0.3	1 pair of outsole
Flexing resistance for outsole	BS 5131 2.1	Max. cut growth 6mm after 50,000For TPR (Room temperature) For Others (-5 °C)	1 pair of outsole

SPORT SHOE (FPS-05)

	Attachment strength	BS 5131 5.11	Eyelet, strap or buckle: 250N, Decorative: 70N, Loop: 250N.	1 pair of whole shoe
	Colour fastness to Crocking (for textile & leather upper and lining)	ISO 105	Leather: Dry Min. 3 Wet: 2-3 Fabric/PU/PVC: Dry Min 3-4 Wet :3	1 piece of A4 size material
	Laces strength	BS 5131 3.7	Min. Dry: 300N, Wet: 250N	3 pairs of shoe laces
	Peel strength for linking tape (Velcro)	BS 7271	Min. 170g/cm, After 5,000 fatigue, Min. 170g/cm (child) 136g/cm, 120g/cm2 (child)	1.5 Meter Tape
	Shear strength for linking tape (Velcro)	BS 7271	Min. 700g/cm2, 500g/cm2 (child) After 5,000 fatigue, Min. 560 g/cm2, 400 g/cm2 (child)	Share with above 1.5M tape

RAIN BOOT (GUM BOOT) TESTING CATEGORY			
Category includes, but does not limit to: Clog style, shoe style, ankle or calf length boots for Men's, Women and Children.			
These can be PVC injection, Rubber compound (Vulcanised).			
Main features are to be water proof and non-slip soles.			
Minimum quality requirements: <ul style="list-style-type: none"> • Clean mould no uneven finish or variations of colour. • Sole must be 4mm minimum thickness excluding cleats. • Requires a 3mm foam foot-bed or sock insert. • Heel thickness must be graded to provide correct pitch. • No heel cavities are permitted in this type of footwear. • Lining bond must also past test requirement. 			
TESTING REQUIREMENTS	TEST METHOD	REQUIREMENT	SAMPLE REQUIREMENT
Foxing (sidewall) bond)for rubber gumboot only)	ISO 17708	Foxing: Min. 2.0N/mm	1 pair of whole shoe
Outsole abrasion resistance	ISO 4649	Max. volume loss 350mm ³	1 pair of outsole
Flexing resistance for outsole	BS 5131 2.1	Max. Cut growth 6mm after 50,000 cycles for TPR (room temperature) for others (-5C)	1 pair of outsole
Lining Bond	ISO 17708	Min. 1.0N/mm	1 pair of whole shoe
Waterproof test for whole	Satra TM 77	No penetration after 15,000 cycles	1 pair of whole shoe
Sole bond	ISO 17708	Min. Foxing or foam material: 2.0N/mm, 3.0N/mm (if material was torn, Min.2.5N/mm)	1 pair of whole shoe
Outsole slip resistance	EN 13287	Clay tile dry & wet: Min. 0.3	1 pair of outsole
Attachment strength	BS 5131 5.11	Eyelet, strap or buckle: 250N, Decorative: 70N, Loop: 200N	1 pair of whole shoe

RAIN BOOTS (FPS-06)

WORK SHOE TESTING CATEGORY			
Men's and Women's protective footwear.			
Minimum quality requirements: <ul style="list-style-type: none"> • Leather, suede or coated leather uppers. Must supply BS2780 Leather description report • Comfort features such as Padded collars and tongues. • Non-slip, shock absorbent soles. • Cement or Injection constructions. • Removable foot-beds min 4mm forepart, 6mm heel. • All lace hardware must have washer attachment. • All Safety footwear must be accredited with AS/NZS 2210.4 Standards. • Must have AS/NZS 2210.3 sewn in labels. • All Safety footwear must have Genuine Leather swing tags where appropriate. • MUST HAVE CURRENT AS/NZS 2210.4 ACCREDITATION CERTIFICATE – IF SUBMITTED NO ADDITIONAL TWL TESTING WILL BE REQUIRED 			
TESTING REQUIREMENTS	TEST METHOD	REQUIREMENT	SAMPLE REQUIREMENT
Sole bond	ISO 17708	Min. 4.0N/mm (if material was torn, Min. 3N/mm) Foxing or EVA: 2.5N/mm	1 pair of whole shoe
Attachment strength	BS 5131 5.11	Eyelet, strap or buckle: 300N	1 pair of whole shoe
Outsole abrasion resistance	ISO 4649	Max. volume loss Rubber: 150mm ³ Others: 250mm ³	1 pair of outsole
Outsole slip resistance	EN 13287	Clay tile dry & wet: Min. 0.3	1 pair of outsole
Flexing resistance for outsole	BS 5131 2.1	Max. Cut growth 6mm after 50,000 cycles for TPR (room temperature) for others (-5C)	1 pair of outsole
Impact resistance for toe cap	ASTM F2413	Min. 12.7mm (size 9 of Men's shoe), 11.9mm (size 8 of women's shoe)	1 pairs of whole shoe
Compression resistance for toe cap	ASTM F2413	Min. 12.7mm (size 9 of Men's shoe), 11.9mm (size 8 of women's shoe)	1 pairs of whole shoe
Sole puncture resistance	ASTM F2413	Min.1200N	1 pair of outsole
Oil resistance for outsole	BS EN ISO 20344	Volume swell <12% after 22 hours	1 pair of outsole
Laces strength	BS 5131 3.7	Min. Dry: 300N, Wet: 250N	3 pairs of shoe laces
Peel strength for linking tape(Velcro)	BS 7271	Min. 170g/cm, 150g/cm (child)	1.5 meter tape

WORK SHOES (FPS-07)

			After 5,000 fatigue, Min. 136g/cm, 120g/cm ² (child)	
	Shear strength for linking tape (Velcro)	BS 7271	Min. 700g/cm ² , 500g/cm ² (child) After 5,000 fatigue, Min. 560g/cm ² , 400g/cm ² (child)	Share with above 1.5m tape

WINTER BOOT TESTING CATEGORY			
Men's, Women's and Children's Winter (Snow) boots			
Minimum quality requirements:			
<ul style="list-style-type: none"> To be water resistant To be warm lined To have slip resistant soles 			
TESTING REQUIREMENTS	TEST METHOD	REQUIREMENT	SAMPLE REQUIREMENT
Colour fastness to Crocking (for textile & leather upper and lining)	ISO 105	Leather: Dry Min.3, Wet Min. 2-3 Fabric: Dry Min. 3-4, Wet 3	1 piece of A4 size material
Sole bond	ISO 17708	Min. Foxing or EVA: 2.5N/mm Synthetic upper: 3.0 N/mm (if materials are torn, in.2.5N/mm) Leather upper: 4.0N/mm (if materials are torn, Min. 3.0N/mm)	1 pair of whole shoe
Outsole abrasion resistance	ISO 4649	Max. volume loss Vulcanized rubber & Hard TPR: 400mm ³ , Resin rubber & PVC solid: 200mm ³ , Polyurethane & soft TPR 300mm ³	1 pair of outsole
Outsole slip resistance	EN 13287	Clay tile dry & wet: Min. 0.3	1 pair of outsole
Seam strength (for functional)	BS 5131 5.13	Min. 8N/mm	1 pair of whole shoe
Corrosion resistance for metal	BS EN ISO 20344	No corrosion	3 pieces of metal
Attachment strength	BS 5131 5.11	Eyelet, strap or buckle Min. 300N	1 pair of whole shoe
Lace strength	BS 5131 3.7	Min dry: 350N, Wet: 300N	3 pairs of shoe laces
Flexing resistance for outsole	BS 5131 2.1	Max. Cut growth 6mm after 50,000 cycles	1 pair of outsole
Cold insulation of whole Shoes	EN 20344	The temperature decrease on the upper surface of the insole shall be not more than 10C	1 pair of whole shoe
Water resistance for upper	EN ISO 5403	After 1 hour: water penetration≤0.2g, water absorption≤30%	1 piece of A4 size upper

WINTER BOOTS (FPS-08)

	Peel strength for linking tape (Velcro)	BS 7271	Min. 170g/cm, 150g/cm (child) After 5,000 fatigue, Min. 136g/cm, 120g/cm ² (child)	1.5 meter tape
	Shear strength for linking tape (Velcro)	BS 7271	Min. 700g/cm ² , 500g/cm ² (child) After 5,000 fatigue, Min. 560g/cm ² , 400g/cm ² (child)	Share with above 1.5m tape

AQUA SOCK TESTING CATEGORY			
Men's, Women's and Children's Aqua Socks.			
Minimum quality requirements:			
<ul style="list-style-type: none"> To have slip resistant soles. Pu/Mesh uppers Secure lace/Velcro closure No Clear soles 			
TESTING REQUIREMENTS	TEST METHOD	REQUIREMENT	SAMPLE REQUIREMENT
Sole bond	ISO 17708	Min. Foxing or EVA: 2.5N/mm Synthetic upper: 3.0 N/mm (if materials are torn, Min.2.5N/mm) Leather upper: 4.0N/mm (if materials are torn, Min. 3.0N/mm)	1 pair of whole shoe
Outsole abrasion resistance	ISO 4649	Max. volume loss: vulcanised rubber & hard TPR: 400mm ³ , Resin rubber & PVC solid: 200mm ³ , Polyurethane & soft TPR: 300mm ³	1 pair of outsole
Attachment strength	BS 5131 5.11	Eyelet, strap, buckle or loop: Min. 250N Decorative: 70N	1 pair of whole shoe
Outsole slip resistance	EN 13287	Clay tile dry & wet: Min. 0.3	1 pair of outsole
Peel strength for linking	BS 7271	170g/cm, 150g/cm (child) After 5,000 tape (Velcro)	1.5 meter tape
Shear strength for linking tape (Velcro)	BS 7271	Min. 700g/cm ² , 500g/cm ² (child) After 5,000 fatigue, Min. 560g/cm ² , 400g/cm ² (child)	Share with above 1.5m tape
Colour fastness to water (for textile & leather lining)	ISO 105	Leather: Colour change: Min.3 colour staining: Min 2-3. Fabric/PU/PVC: colour change: Min. 3-4, colour staining: Min.3	1 piece of A4 size material

WINTER SHOES (FPS-09)

INFANTS AND CHILDRENS SMALL PARTS	TESTING SMALL PARTS
	All Childrens (Infants, Boys and Girls) Shoes must be safe for use.
	All Trims to be securely attached to avoid choking hazards
	All soles to be non-slip
	No sharp edges
	For all attachments such as, but not limited to: buckles, bows, eyelets, trims, zips etc. All small parts are to be tested in accordance with relevant tests of AS/NZS ISO 8124.1
	Small parts for children's shoes ages 0 to 36 months must be tested (nominated supplier) to ensure any attachments or parts pass testing requirements. This includes:
	<ul style="list-style-type: none"> • Torque test • Tension test
	If attachment fails then either of the following must occur :-
	<ol style="list-style-type: none"> 1. The buyer and vendor may develop an alternative method of attachment, or remove the small part entirely. If there are no small parts, a second test is not required; however the new style must be submitted to TWL QA. If the new style has a new small part it must be retested and pass. The new style must be submitted to QA with a report. 2. No product within the sizes of 0-8 will be purchased with a failed small part.

This is an outline of tests required on small parts.

For further information please refer to the normal tests in 5.1 to 5.23 of the Toy Standard AS/NZS ISO 8124.1

Requirement for any part of a shoe with a projection, part or assembly that a child can grasp with at least the thumb and forefinger or the teeth, shall be submitted to the following test. The Torque test (twist) plus the Tension test (pull).

Special Note: Pompoms.

Pompoms will not be accepted as an attachment with 0-36 Months footwear and should not be submitted.

Regardless of any testing requirements supplier must ensure that all infants and children's shoes are safe and do not present a hazard for our customer.

4.) Zip Policy

Zippers	
Criteria	Standard
	<p>It is supplier's responsibility to ensure that all zippers meet TWL quality standards and requirements.</p> <p>Note that any order found to have faulty zips cannot be repaired in NZ and will result in order cancellation with all costs charged back to supplier.</p>
Requirements	<p>All zippers must meet the current AS2332 standards for mechanical tests.</p> <p>In addition all zippers must meet The Warehouse colourfastness standards.</p> <p>No sharp edges and corrosion resistant.</p> <p>Must travel freely and must not jam.</p> <p>If paint coated must withstand nominated care instruction</p> <p>For all open ended zippers a functional stopper mechanism must be placed at the top of the zipper tape to prevent the slider from being removed from the zip.</p> <p>All zippers must be branded with the registered brand name, unless this is not possible due to zip design.</p>
Submissions	<p>To ensure compliance we require a copy of the zipper invoice or a test report with the Pre - Production Sample. The Warehouse and our relevant order number must be stated as a reference.</p>
Counterfeit Brands	<p>The Warehouse will not accept orders in which counterfeit zippers have been used of any brand name.</p> <p>Any such orders with counterfeit zippers will be rejected and returned at supplier's expense for a full credit. As such it is vital that you advise your factories to purchase zips only from a nominated source as stated in this document as a way of ensuring authenticity. Zippers from any other source maybe counterfeit.</p>
Nominated Suppliers	<p>Contact details for Nominated Zipper Suppliers:</p> <p>1.) CMZ ZIPPER (WUXI) CO.,LTD Qiting Street Yixing City, Jiangsu Province 214213 PRC. Contact: Richard Chu, Marketing Manager, International Business Department Phone: 86-510-87822350 Fax: 86-510-87861608/87869660 Mobile: 13584228621 Email: richard_chu@cmz.cn Website: www.cmz.cn</p> <p>2.) YCC SHANGHAI EAST DRAGON ZIPPER MAKING CO., LTD No 8, Nanlu Road, Nanhui Industry Zone, Pudong, Shanghai, PRC Phone:86-21-68016833 Fax: 86-21-68016806</p>

5.)TWL Needle policy/Metal Contamination Guidelines

TWL Needle/Tack Free and Metal Contamination Policy

Needle Replacement Policy

Suppliers should replace needles at regular intervals. The frequency of changing needles depends on the production output, type of fabric etc. Suppliers should determine required frequency of needle change through trials on the fabric prior to commencement of production.

Needle damage to fabric and broken needles in production may be caused through sewing too fast, by the use of blunt needles, the incorrect size needle for the fabric and thread.

Non Compliance - Needle Holes/Needle damage

In the interest of our customers we have a no tolerance rule for needle damage or needle holes and will not accept goods under any circumstances. Suppliers need to be aware that any deliveries with holes or damage may result in order cancelations and that they will be liable for any costs incurred for checks or repairs.

Needle Control Policy

Manufacturers are required to ensure that products are not contaminated with needles or needle fragments during manufacturing. The procedure and the actions taken should be in written form enabling the system to be independently audited.

It is therefore mandatory that a Needle Control Procedure is adopted by all manufacturers.

Procedural elements to be included in a “Needle Control Procedure” are:

1. A designated individual/s to be responsible for issuing needles.
2. Access to needles to be limited only to designated individual/s.
3. New needles issued only on receipt of old needle.
4. Sewing operators hold no spare needle/s.
5. In the event of needle breakage, all pieces of the broken needle are to be retrieved from the product, collected and all fragments assembled and attached to a record sheet to ensure that needle is complete.
6. If the entire needle cannot be re-assembled and all fragments removed from the product, the product is to be destroyed.
7. If all the needle parts cannot be found then that particular area would need to be quarantined and all items checked. If the needle parts still cannot be found then all items from that area would need to be destroyed and not included in the final shipment.
8. All incidents of broken needles are to be recorded and actions taken documented.

Recording Needle Replacement/Control:

Factories and suppliers can create their own layout but the records should include the following information:

3. Date
4. Machine details
5. Batch No - P/O/Style No.
6. Name of operator/Operators signature
7. Supervisors signature
8. All parts of the needle/broken needle

Metal Contamination (other than needles) Policy

Metal objects other than sewing needles can also pose a metal contamination concern. These objects include pins, staples, knitting machine needles, linking pins and other sharp objects used in product manufacturing that can cause serious injury if they come into contact with the wearer.

Pins or staples should not be used at any point in the product manufacturing process. This includes all stages of cutting, accessories collation, sewing lines, inspection and packing. Staples or pins must not be used on paperwork on the manufacturing floor.

These procedures must operate in all areas of product construction including embroidery, appliqué and any outsourced sewing operations. All procedures must be documented, dated and available for inspection if requested.

Metal Detection Policy

A "Needle Control Policy" should be complimented by metal detector scanning of products providing additional security against contamination.

The following elements should be considered:

1. Metal detection should be carried out prior to the attachment of metal components (i.e. studs, zippers, rivets) and preferably at the latest stage of production.
All products are to be processed through a Tunnel Type Needle Detector. Hand held type detectors may also be used to compliment Tunnel Type Needle Detectors but not in place of the Tunnel Type Needle Detector.
2. Where components used do not interfere with needle detection equipment, metal detection may be carried out after production is completed.
3. Metal detection equipment must be calibrated daily to ensure correct sensitivity to metal.
Daily calibrations are to be recorded and documentation available for auditing purposes.
4. Products that have been inspected and scanned for metal contamination must be separated from those yet to be inspected Rejected products must be completely isolated / quarantined from the rest of the stock.

If a factory operates a Needle detector/Metal detector, the use of this machine should not replace a needle control policy; it should be used to complement the needle policy.

Non Compliance - Needle or Metal in Footwear

In the interests of our customer safety it is The Warehouse policy, that all Footwear, Apparel, Manchester and Sewn Accessories are Needle/metal free. Suppliers need to be aware that non-compliance will result in product recall or withdraw from store and that they will be liable for any costs incurred for checks or repairs.

If a needle or part of needle is found in a single item, the following action will be taken.

- 1) Product will be withdrawn from store - all stock of the style currently in all stores will be removed immediately from sale.
- 2) All Distribution Centre stock will be quarantined.
- 3) All costs will be claimed from supplier.
- 4) Offending supplier factories will be recorded and this may result in black listing for future orders.