

Section 5

Performance Testing Requirements

Performance Testing Requirements

5.1.1 Performance Testing Requirements

The following performance test matrix outlines the minimum performance requirements that all items must meet. All test reports must be available upon request. Refer to Quality Specialist for each Division's test report submission requirements.

Note that pull force attachment strength test reports and mandatory test reports as required in the Children's nightwear and limited daywear having reduced fire hazard standard, are required to be submitted for approval (for applicable styles).

All testing is to be performed on finished fabrics and trims, which include all finishes and treatments for example sand blasting, enzyme wash and over dyes.

Testing is required on bulk production fabric for each style.

Testing must be performed at a Woolworths approved 3rd party test laboratory.

All test reports must include the following:

- Digital e-signature
- Test house name and location
- Test report number
- Date
- Vendor and factory name
- Woolworths Division eg: Big W
- Description of item tested
- Style Number and / or order number
- Keycode/s or article number/s – mandatory for Children's nightwear and limited daywear
- Fibre content (stated in fabric description on test report)
- Fabric construction and weight (stated in fabric description on test report)
- Colours
- Fabric finishes or treatments
- Test result summary
- Test performed
- Test method used
- Woolworths minimum test requirement
- Test results
- Clear colour photograph (before and after photos required for durability and appearance after wash test reports)

Test reports are to be submitted at pre-production / silver stage, together in one email per style. Pre-production / silver sample must be submitted at the same time.

Test reports for replenishment lines are valid for 12 months from date of testing as stated on test report.

Pull force attachment strength testing is also required to be performed at a Woolworths approved 3rd party test laboratory. These test reports are to be submitted at production / gold stage.

5.1.2 Woolworths Approved 3rd Party Test Laboratories

Woolworths will only accept test reports from the following approved test laboratories:

- ARPANSA
- AWTA - Australian Wool Testing Authority
- Bureau Veritas
- Intertek
- Jin Ao Testing Co Ltd (AWTA – JSIC)
- MTS - Modern Testing Services
- NQA - Ningbo Quality Assurance
- Qualspec
- Satra
- SGS
- TQR TM - Textile Quality Research Trademark Management

5.1.3 Woolworths Test Methods

Woolworths test methods are used throughout the performance testing matrix and are stated as WWTM (Woolworths Test Methods).

Woolworths test methods can be found in clause 5.2.

5.1.4 Claim Verification Testing Requirements

All claims made must have verification in the form of test reports, certificates, government documents etc.

5.1.4.1 Licensed Claims

All licensed claims, for example Lycra, Woolmark, Coolmax, must be supported with documentation from the relevant license holders.

All documentation must include information that relates it back to the item tested. For example: style or order number.

5.1.4.2 Australian Flag Use

All items which carry the Australian flag, must have government approval in the form of a letter.

This letter must state, at a minimum, the style or order number, description of item, colour and print.

Details of the Australian flag, for example design and colours, can be found at: <http://www.itsanhonour.gov.au/symbols/flag.cfm>

5.1.4.3 UPF

All items which carry ARPANSA UPF rating swing tag, logo or related information must be tested through ARPANSA.

The Vendor must hold a current ARPANSA approval license for the use of the ARPANSA UPF rating swing tag, logo or related information. This license must remain current whilst the ARPANSA UPF labelled item is being offered for sale in store.

If the ARPANSA UPF logo is being used on prepacked items, other than on the ARPANSA UPF rating swing tag, a 'Special Use License' must also be obtained and remain current whilst the ARPANSA UPF labelled item is being offered for sale in store.

Where a UPF rating is claimed and an ARPANSA UPF swing tag is not used, UPF testing can be performed through any of the Woolworths approved 3rd party test laboratories that are certified to perform UPF testing.

5.1.5 Test Report Submissions

Refer to Quality Specialist for each Division's test report submission requirements. Note that pull force attachment strength test reports and mandatory test reports as required in the Children's nightwear and limited daywear having reduced fire hazard standard, are required to be submitted for approval (for applicable styles).

5.1.6 Performance Testing Matrix

Test	Test Method	Requirements / Tolerance
Aglet / Shoe Lace End Attachment Strength	SATRA TM175 Attachment for shoe lace ends	≥ 8kgf / 80N
Appearance After Wash	3 x as per care instruction To be tested in finished form	Visual assessment with no significant (falling below minimum requirements stated in testing matrix) changes on the following: <ul style="list-style-type: none"> - Colour change - Cross staining - Dimensional stability - Spirality - Fraying - Pile loss - Pilling - Delamination - Print durability - Deterioration of embellishments and trims - Label durability - Any other significant changes
Appliqué and Embroidery Durability	3 x as per care instruction	Visual assessment with no significant (falling below minimum requirements stated in testing matrix) changes on the following: <ul style="list-style-type: none"> - Colour change - Cross staining - Distortion - Fraying - Pile loss - Deterioration of embellishments and trims - Any other significant changes
AZO Dyestuff	EN 14362-1: 2012 (for textile material) Methods for determination of certain aromatic amines derived from azo colorants Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres EN ISO 17234-1: 2010 (for leather) Leather – Chemical tests for the determination of certain azo colorants in dyed leathers Part 1: Determination of certain aromatic amines derived from azo colorants EN 14362-3: 2012 (textile) and EN ISO 17234-2: 2011 (leather) for p-Aminoazobenzene	< 30ppm

Test	Test Method	Requirements / Tolerance
Breaking Strength of Fabric	AS 2001.2.3.2:2001 Determination of maximum force using the grab method	110N minimum – fabrics up to and including 150gsm 150N minimum – fabrics 151gsm – 190gsm 200N minimum – fabrics 191gsm and over
Breaking Strength of Seams	AS 2001.2.20:2004 Determination of seam breaking force	120N minimum
Breathability - Water Vapour Permeability	BS 7209: 1990 Specification for water vapour permeable apparel fabrics	65% WVPI minimum after 1 wash
Bursting Strength	AS 2001.2.4:1990 Determination of bursting pressure of textile fabrics - Hydraulic diaphragm method	180kPA minimum – lace fabrics 250kPA minimum – all other fabrics
Close-Open-Close Press Stud Testings	WWTM05: 2014 <i>Note: Refer to clause 5.1.7.1 for testing requirements</i> <i>Refer to 5.2 for test method</i>	Pass
Corrosion Resistance to Salt Water	ISO 22775: 2004 Footwear – Test methods for accessories: Metallic accessories – Corrosion resistance Use Method 2	No worse than 4 – Slight uniform change
Dimensional Change – to drycleaning	Commercial Dryclean 1 x as per care instruction To be tested in finished form	+ / - 5% - Knits + / - 4% - Wovens
Dimensional Change – to laundering	AS 2001.5.4:2005 ISO 6330:2012 Domestic washing and drying procedures x 3 as per care instruction True knitwear / fully fashioned knitted apparel and items to be tested in finished form	+ / - 5% - Knits + / - 4% - Wovens
Drying Time	AATCC 199: 2011 Drying Time Of Textiles: Moisture Analyzer Method	30% within 30 minutes after 1 wash

Test	Test Method	Requirements / Tolerance
Fabric Weight	AS 2001.2.13:1987 Determination of mass per unit area	+10% / - 5%
Fibre Content Analysis	AS 2001.7:2005 Quantitative analysis of fibre mixtures	+ / - 3%
Fire Label Durability and Attachment – Children’s Nightwear and Limited Daywear	AS/NZS 1249:2003 Children’s nightwear and limited daywear having reduced fire hazard including all Trade Practices Regulations updates and New Zealand updates AS2001.4.15 Test J1 Determination of colourfastness to washing	Must meet requirements of the standard AS/NZS 1249:2003 Children’s nightwear and limited daywear having reduced fire hazard including all Trade Practices Regulations updates and New Zealand Product Safety Standards Regulations updates
Flame Spread – Children’s Nightwear and Limited Daywear	ISO 6941: 2003 Burning behaviour - Measurement of flame spread properties of vertically oriented specimens	Must pass requirements of AS/NZS 1249:2003 Children’s nightwear and limited daywear having reduced fire hazard including all Trade Practices Regulations updates and New Zealand Product Safety Standards Regulations updates
Flammability – Children’s Dress Up Costumes	AS/NZS ISO 8124: 2009 Part 2 Safety of toys - Flammability	Must pass requirement of standard
Formaldehyde	ISO 14184-1:2011 Determination of formaldehyde – Part 1: Free and hydrolysed formaldehyde (water extraction method)	< 30ppm / <30mg/kg – infants up to and including 36 months < 30ppm / <30mg/kg – for items marketed for sensitive skin < 30ppm / <30mg/kg – all other items with direct skin contact < 300ppm / 300mg/kg – other items without direct skin contact 0ppm / 0mg/kg / None detected (ND) – if claimed as formaldehyde free
High Visibility	AS/NZS 1906.4: 2010 including Amdt 1 AS/NZS 4602.1: 2011	Must pass requirements of both standards

Test	Test Method	Requirements / Tolerance
Label Durability	10 x as per care instruction	Visual assessment with no significant (falling below minimum requirements stated in testing matrix) changes on the following: - Colour change - Cross staining - Print durability - Words must be legible
Mass Per Unit Length (Piece Weight)	AS 2001.2.13:1987 Determination of mass per unit length	+ / - 5% + 3% / - 0% - If claimed on packaging
Migration of Certain Elements (Heavy Metals)	AS/NZS ISO 8124: 2003 Part 3 Migration of certain elements Including Consumer Protection Notice No. 1 of 2009	Must pass requirement of standard
Moisture Wicking	AATCC 197: 2012 Vertical wicking of textiles	≥8cm within 15 minutes after 1 wash
Nickel Leaching	BS EN 1811:2011 Reference test method for release of nickel	≤ 0.5 ug/cm ² /week 0 ug/cm ² /week – claimed nickel free
Occupational Protective Gloves	AS/NZS 2161 Set: 2008 Occupational Protective Gloves Set	Must meet requirements of standard
Phthalates	By an extractive technology followed by gas chromatograph – mass spectrometer (GC-MS) Also refer to the Australian Consumer Protection Notice No. 6 of 2010 <i>Note: Test for the following:</i> DEHP - Diethylhexyl Phthalate DIDP – Diisodecyl Phthalate DINP – Diisononyl Phthalate DBP – Dibutyl Phthalate BBP – Butylbenzyl Phthalate DnOP – Di-n-octyl Phthalate	< 1% by weight
pH Value	AS 2001.3.1:1998 Method A Determination of pH of aqueous extract	4 - 7.5pH

Test	Test Method	Requirements / Tolerance
Pilling	<p>Knits: ISO 12945-1:2000 Determination of fabric propensity to surface fuzzing and to pilling - Part 1: Pilling box method 10 800 revolutions Wash x 1 as per care instructions before testing</p> <p>Woven: ISO 12945-2:2000 Determination of fabric propensity to surface fuzzing and to pilling - Part 2: Modified Martindale method 1000 revolutions Wash x 1 as per care instructions before testing</p>	<p>3 minimum 4 minimum for low pill</p>
Print Durability – Yardage and Placement Including flocking, transfers, glued diamonties and nailheads	<p>3 x as per care instruction</p>	<p>Visual assessment with no significant (falling below minimum requirements stated in testing matrix) changes on the following: - Colour change - Cross staining - Lifting - Peeling - Cracking - Delamination</p>
Pull Force Attachment Strength	<p>WWTM01: 2014 – for small parts WWTM02: 2014 – for press studs <i>Note: Refer to clauses 5.1.7 and 5.1.7.1 for testing requirements. Refer to 5.2 for test method</i></p>	<p>≥ 8kgf / 80N</p>
Resistance to Damage of Coated Surface on Curtains	<p>AS 2663.2: 1999 Coated curtain fabrics Using classification 2</p>	<p>To washing – requirements of classification 2 To cold cracking – requirements of classification 2</p>
Seam Slippage	<p>AS 2001.2.21:1989 Determination of seam opening due to the application of force in the traverse direction Seams stitched as per item</p> <p>80N – light stress items: loose fitting items 120N – medium stress items including coats, suits, pants, foundation garments, activewear and fitted sheets 180N – high stress items including upholstery</p>	<p>6mm maximum total seam opening 2mm maximum residual total seam opening</p>

Test	Test Method	Requirements / Tolerance
<p>Sharp and Rough Edges and Sharp Points</p>	<p><i>For ages up to and including 36 months:</i> AS/NZS ISO 8124: 2002 Part 1 Safety of toys - Safety aspects related to mechanical and physical properties including Consumer Protection Notice No. 14 of 2003, as amended by Consumer Protection Notice No. 1 of 2005</p> <p><i>For ages 4 and above:</i> AS/NZS ISO 8124: 2013 Part 1 Safety of toys - Safety aspects related to mechanical and physical properties</p>	<p>Must meet requirements of standard</p>
<p>Skew or Bow</p>	<p>ASTM D3882-08 (2012) Standard test method for bow and skew in woven and knitted fabrics</p>	<p>$\leq 3^\circ$ or $\leq 5\%$</p>
<p>Soil Release – Stain Release</p>	<p>AATCC 130:2010 Soil Release: Oily Stain Release Method</p>	<p>4 minimum - soil resist finish after 1 wash</p>
<p>Spirality – cellulose or cellulose rich single jersey french terry in all fibres</p>	<p>WWTM04: 2013 <i>Refer to 5.2 for test method</i></p>	<p>10% maximum – up to 30cm in length 7% maximum – up to 75cm in length 5% maximum – over 75cm in length</p>
<p>Surface Burn – Children’s Nightwear and Limited Daywear</p>	<p>ISO 10047: 1993 Determination of surface burning time of fabrics</p>	<p>Must pass requirements of AS/NZS 1249:2003 Children’s nightwear and limited daywear having reduced fire hazard including all Trade Practices Regulations updates and New Zealand Product Safety Standards Regulations updates</p>
<p>Tear Strength</p>	<p>AS 2001.2.8:2001 Determination of tear force of fabrics using the ballistic pendulum method</p>	<p>8N minimum – woven fabrics up to and including 150gsm 10N minimum – woven fabrics 151gsm and over</p>
<p>Thread Count</p>	<p>AS 2001.2.5:1991 Determination of the number of threads per unit length in woven fabric Also thread calculation required</p>	<p>Thread Count Calculation Tolerance: + / - 3% + 3% / - 0% - If claimed on packaging</p>

Test	Test Method	Requirements / Tolerance
Tuft Withdrawal Force	ASTM D1335 (2005) Standard Test Method for Tuft Bind of Pile Yarn Floor Coverings Tensile testing machine CRE	0.2kg
UPF	AS/NZS 4399:1996 including Amdt 1:1998 Sun protective clothing - Evaluation and classification	50+ minimum – children up to and including size 16
Water Proof	AS 2001.2.17: 1987 Determination of resistance of fabrics to water penetration - Hydrostatic pressure test	3000 mmH ₂ O / 294 mbar / 29.4 kPa - before wash 3000 mmH ₂ O / 294 mbar / 29.4 kPa - after 3 washes as per care instructions
Water Resistant – Shower Proof	AS 2001.2.16: 1987 Determination of water repellency of textile surfaces - Spray rating test	100 - before wash 90 - after 3 washes as per care instructions
Wind Resistant / Wind Proof	ASTM D737 (2012) Air Permeability of Textile Fabrics (result unit stated as: cfm) ISO 9237: 1995 Determination of the permeability of fabrics to air (result unit stated as: mm/s)	< 1 cfm - wind proof 4 mm/s - wind proof 1 - 20 cfm - wind resistant 4 - 80 mm/s - wind resistant
Zippers	AS 2332: 2003 Slide fasteners <i>Note: Ultra light class zippers are to be tested to 'light' class requirements</i>	Must meet requirements of standard <i>Note: Testing to table 3 required only when a contrast colour zipper is used</i>

Test	Test Method	Ratings For:	Minimum Requirement Light, Medium and Fluorescent Colours	Minimum Requirement Dark Colours	Minimum Requirement For Contrast Colours	Minimum Requirement Corduroy, Denim, Flannelette, Pigment and Over Dyed and Pigment Printed
Colourfastness to Chlorinated Water	AS/NZS 2001.4.5: 1998 Determination of colourfastness to chlorinated swimming pool water	Colour Change:	4 Fluorescent: 3	4	4	4
	Swimwear, Rash Vests and Boardshorts: Test using 50mg / L Beach Towels: Test using 20mg / L	Staining:	3-4	3	4	2-3
Colourfastness to Drycleaning	AS 2001.4.16: 1981 Determination of colourfastness to dry cleaning solvents Test using multi fibre cloth	Colour Change:	4	4	4	4
		Staining:	4	3-4	4	3 Home Textiles: 4
Colourfastness To Light	AS 2001.4.B02: 2005 Determination of colourfastness to daylight of textile materials	Colour Change:	3-4 – Medium 2-3 – Light 2-3 – Fluorescent	4	4 – Dark 3-4 – Medium 2-3 – Light 2-3 – Fluorescent	4 – Dark 3-4 – Medium 2-3 – Light 2-3 – Fluorescent

Test	Test Method	Ratings For:	Minimum Requirement Light, Medium and Fluorescent Colours	Minimum Requirement Dark Colours	Minimum Requirement For Contrast Colours	Minimum Requirement Corduroy, Denim, Flannelette, Pigment and Over Dyed and Pigment Printed
Colourfastness to Light - Curtains	AS 2663.1: 1997 including Amdt 1: 1999 Uncoated curtain fabrics Using classification 2 AS 2663.2: 1999 Coated curtain fabrics Using classification 2	Colour Change:	4	4-5	4-5 – Dark 4 – Medium 4 – Light 4 – Fluorescent	4-5 – Dark 4 – Medium 4 – Light 4 – Fluorescent
Colourfastness to Perspiration	AS 2001.4.E04: 2005 Determination of colourfastness to perspiration	Colour Change:	4	4	4	4
		Staining:	3-4	3	4	2-3 Home Textiles: 3-4
Colourfastness to Rubbing	AS 2001.4.3: 1995 Determination of colourfastness to rubbing	Dry Staining:	4	4	4	3-4 Home Textiles: 4
		Wet Staining:	3-4	3 Home Textiles: 3-4	4	2-3 Home Textiles: 3-4
Colourfastness to Sea Water	AS 2001.4.E02: 2001 Colourfastness to sea water	Colour Change:	4	4	4	4
		Staining:	3-4	3	4	2-3

Test	Test Method	Ratings For:	Minimum Requirement Light, Medium and Fluorescent Colours	Minimum Requirement Dark Colours	Minimum Requirement For Contrast Colours	Minimum Requirement Corduroy, Denim, Flannelette, Pigment and Over Dyed and Pigment Printed
Colourfastness to Washing	AS 2001.4.15: 2006 Determination of colourfastness to washing Test J1 using multi fibre cloth	Colour Change:	4	4	4	4
		Staining:	3-4	3 Home Textiles: 3-4	4	2-3 Home Textiles: 3-4
Colourfastness to Water	AS 2001.4.E01: 2001 Colourfastness to water	Colour Change:	4	4	4	4
		Staining:	3-4	3 Home Textiles: 3-4	4	2-3 Home Textiles: 3-4
Phenolic Yellowing	ISO 105-X18: 2007 Assessment of the potential to phenolic yellowing of materials	Colour Staining:	Applicable to white only 4	Not Applicable	Not Applicable	Not Applicable
Shading Across an Order	Using light box using TL84 and D65	Colour Change:	4	4	4	4

5.1.7 Pull Force / Attachment Strength Testing

All attachments that are considered a small part, (a small part is any object that fits entirely within the small parts cylinder without compression, as per *AS/NZS ISO 8124.1 Safety of toys, Part 1*) for items intended for sizes up to and including size 3, items intended for ages up to and including 3 years / 36 months, nursery home textiles and maternity feeding apparel, must be tested for pull force attachment strength. Also refer to safety matrix for attachments which require pull force attachment strength testing. Refer to Woolworths' Vendor Pack for children's nightwear and limited daywear requirements.

The minimum requirement is 8kgf.

All mechanical pull force attachment strength testing of final production must be performed by a Woolworths' approved 3rd party test laboratory on finished bulk production items.

Pull force attachment strength testing, visual and manual checks should be included in the factories internal QA process to ensure final bulk production will meet minimum requirements.

Records of the factories' inline checks must be kept and produced if requested.

Ensure all in-house testing equipment is calibrated a minimum of every 6 months. Calibration records must be kept and produced if requested.

Refer to Woolworths Pull Force Attachment Strength test methods WWTM01:2013 and WWTM02: 2013 in clause 5.2.

Refer to the table on the following page for minimum units required for testing.

5.1.7.1 Woolworths' Sample Selection Table

Column A	B	C	D
Total Unit Order Quantity	Minimum Attachments to be Randomly Selected Per colour, Per attachment type and position, Per size set (where applicable)	Minimum Attachments to be Mechanically Tested Per colour, Per attachment type and position, Per size set (where applicable)	Minimum Attachments to be Manually Tested for "close-open-close" for Studs and Snaps Only Per colour, Per stud or snap position, Per size set (where applicable)
Up to 150	8	1	7
151 to 280	13	1	12
281 to 500	20	2	18
501 to 1,200	32	5	27
1,201 to 3,200	50	10	40
3,201 and above	85	15	70

Column A

Indicates the total number of units across all colours in the order

Column B

Indicates the minimum number of attachments, per attachment type and position, to be randomly selected per colour, across the size set, where applicable

All garments or items selected must be visually and manually checked for safety and quality. This check is to be done on garments or items from bulk production and not from the sample room

Column C

Indicates the minimum number of attachments, per attachment type and position, to be tested from the garments or items selected in column B and mechanically tested. This testing is to be performed by a Woolworths' approved 3rd party test laboratory

All garments or items mechanically tested must be destroyed and not returned to production

Column D

To be used for studs and snaps only

Indicates the minimum number of attachments, per stud or snap position, to be tested from the garments or items selected in column B and manually tested for close-open-close. This testing can be performed in the factory and is not required to be tested by a Woolworths' approved 3rd party test laboratory

All garments or items tested for close-open-close may be returned to production if they have not been damaged and have passed the close-open-close test

Refer to the following page where an example is given.

For example:

Product type: Infants sizes 00-2 t-shirt with 2 button neck placket with small bow in black and mid pink colourways

Units: Black - 2000, Mid Pink - 2000 = Total units across all colours = 4000 units



Using the Woolworths' Sample Selection Table from 5.1.7.1, the below shows how many attachments must be tested per colour

Colour	Attachments to be selected from bulk production Per size set (all sizes must be represented in the selected garments)	Attachments to be mechanically tested Per size set (all sizes must be represented in the tested garments)	Number of garments to be returned to bulk production
Black	85 attachments (85 garments)	Buttons: 15 (8 garments) Bows: 15 (15 garments)	70 garments (85 – 15 = 70 garments)
Mid Pink	85 attachments (85 garments)	Buttons: 15 (8 garments) Bows: 15 (15 garments)	70 garments (85 – 15 = 70 garments)
	All the above selected garments are to be visually and manually checked for safety and quality	Mechanically tested garments must be destroyed. A total of 15 garments in each colourway will be destroyed	Garments that have not been mechanically tested and have passed visual manual and quality checks are to be returned to bulk production

Woolworths' Test Methods

5.2 Woolworths' Test Methods

Where there is no relevant Australian or International standard for testing requirements, Woolworths has developed in-house test methods.

Woolworths' test methods are quoted as WWTM.

5.2.1 Woolworths' In-House Test Methods

Test Method Code	Test Method
WWTM01	Pull force attachment strength
WWTM02	Pull force attachment strength for press studs
WWTM03	Hand washing
WWTM04	Spirality
WWTM05	Press Stud Close-Open-Close

WWTM01 - Pull Force Attachment Strength

Woolworths' Test Method		Test Method: WWTM01: 2014
Pull Force Attachment Strength		
Scope:	<p>This test method is used to determine the force required to remove the attachment from the item.</p> <p>This test method can be used to determine the force required to remove attachments such as, but not limited to, buttons, bows, eyelets and rivets</p> <p>For press stud testing, refer to WWTM02: 2014</p>	
References:	5.1.7.1 Woolworths' Sample Selection Table	
Apparatus and Equipment:	<p>Universal Mechanical Safety Tester, which includes:</p> <ul style="list-style-type: none"> • Imada Force Gauge model FB-30Kg • Bench Top Stand eg: SafGuard brand • Lower Fabric Clamp, Level Arm Locking • Upper Long Nose Vice Grip • Three Pronged Grip or Upper Grasp Button Grip (preferred) <p>Safety Glasses</p>	
Procedure:	<ol style="list-style-type: none"> 1. Secure the specimen in place in the lower fabric clamp, ensuring it is centred 2. Lower the top grip to a position where it is tension free, and secure the grip to the attachment 3. Switch the force gauge to the Off position and zero the dial by turning the face until the needle is aligned to zero 4. Switch the force gauge to the On position 5. Move the side lever in an upward direction, using a smooth motion, to engage the tension of the clamp. Continue this upward motion until the attachment separates from the specimen. The kilogram force will be registered on the force gauge dial 6. This kilogram force is to be recorded on the report 7. Also record on the report the type of separation from the item eg: component breakdown, stitching breakdown or fabric breakdown 8. Specimen must be destroyed after testing <p>Note:</p> <ol style="list-style-type: none"> a. If the procedure cannot be completed, for example due to grip slippage, the procedure must start again on a new specimen b. If the force reaches 30KgF without separation, the result shall be recorded as >30KgF 	
Reporting:	<p>The following shall be included on the report:</p> <ul style="list-style-type: none"> • Woolworths' Test Method • Woolworths' Minimum Kilogram Force (KgF) Requirement • Item Description including Style and/or Order Number and Shipment Date • Vendor and Factory Names • Report Result Summary • Colour and Sizes Tested (if applicable) • Results • Colour Photograph of Item 	

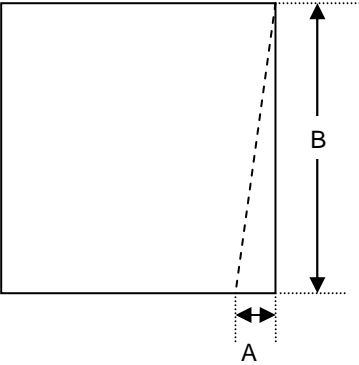
WWTM02 - Pull Force Attachment Strength For Press Studs

Woolworths' Test Method		Test Method: WWTM02: 2014
Pull Force Attachment Strength For Press Studs		
Scope:	<p>This test method is used to determine the force required to remove the press stud from the item.</p> <p>This test method can be used to determine the force required to remove press studs, snaps, ring snaps and studs</p> <p>For attachment testing of buttons, bows etc refer to WWTM01: 2014</p>	
References:	5.1.7.1 Woolworths' Sample Selection Table	
Apparatus and Equipment:	<p>Universal Mechanical Safety Tester, which includes:</p> <ul style="list-style-type: none"> • Imada Force Gauge model FB-30Kg • Bench Top Stand eg: SafGuard brand • Lower Fabric Clamp, Level Arm Locking • Upper Universal Grip <p>Safety Glasses</p>	
Procedure:	<ol style="list-style-type: none"> 1. Secure the specimen in place in the lower fabric clamp, ensuring it is centred 2. Lower the top grip to a position where it is tension free, and secure the grip to the press stud (male and female component to be tested separately) 3. Switch the force gauge to the Off position and zero the dial by turning the face until the needle is aligned to zero 4. Switch the force gauge to the On position 5. Move the side lever in an upward direction, using a smooth motion, to engage the tension of the clamp. Continue this upward motion until the press stud separates from the specimen. The kilogram force will be registered on the force gauge dial 6. This kilogram force is to be recorded on the report 7. Also record on the report the type of separation from the item eg: component breakdown or fabric breakdown 8. Specimen must be destroyed after testing <p>Note:</p> <ol style="list-style-type: none"> a. If the procedure cannot be completed, for example due to grip slippage, the procedure must start again on a new specimen b. If the force reaches 30KgF without separation, the result shall be recorded as >30KgF 	
Reporting:	<p>The following shall be included on the report:</p> <ul style="list-style-type: none"> • Woolworths' Test Method • Woolworths' Minimum Kilogram Force (KgF) Requirement • Item Description including Style and/or Order Number and Shipment Date • Vendor and Factory Names • Report Result Summary • Colour and Sizes Tested (if applicable) • Results of male and female components • Colour Photograph of Item 	

WWTM03 – Hand Washing

Woolworths' Test Method		Test Method: WWTM03: 2013
Hand Washing		
Scope:	<p>This test method specifies the hand washing procedure for textile testing.</p> <p>This procedure is applicable to textile fabrics, garments and other textile items which are to be subjected to domestic hand washing as advised by care instructions.</p>	
References:	Garment or Item Care Instruction	
Apparatus and Equipment:	<p>Wash Tub or Basin Washing Detergent Top Loading Washing Machine (if required)</p>	
Procedure:	<ol style="list-style-type: none"> 1. For cold wash use water from the cold tap (30°C) . For warm wash heat water to 40°C 2. Add item to wash tub or basin 3. Fill wash tub or basin to 10cm above immersed item 4. Dissolve detergent (amount as stated on packaging for hand wash) in a separate beaker with 250ml of water from the basin 5. Add dissolved detergent to the basin 6. Hand agitate and squeeze the item for 1 minute 7. Soak item for 5 minutes 8. Hand agitate and squeeze the item for 1 minute 9. Remove item and squeeze out excess water 10. Refill wash basin or tub with fresh water at the same temperature and level as washing process 11. Add item into fresh water and hand agitate and squeeze the item for 2 minutes 12. Under a running tap, with water at the same temperature as the washing process, rinse and squeeze the item for 1 minute 13. Squeeze excess water from item without wringing or if care instructions state spin dry, then spin item in washing machine for 1 minute 14. Line dry unless otherwise stated on care instructions 	
Reporting:	Test method to be stated when used in conjunction with performance reports	

WWTM04 – Spirality

Woolworths' Test Method		Test Method: WWTM04: 2013
Spirality		
Scope:	This test method specifies the procedure to calculate spirality for textile testing.	
References:	Garment or Item Care Instruction	
Apparatus and Equipment:	Tape Measure Calculator	
Procedure:	<p>Note: Procedure can be performed on a finished item or fabric sample. Item or fabric which has been tested for dimensional stability can also be used for this procedure.</p> <ol style="list-style-type: none"> 1. If using a fabric sample for testing, mark test square onto fabric 2. Launder 3 times and dry item or fabric as per care instructions 3. Measure the length of the side seam or test square side length 4. Measure the deviation of the side seam from the side fold or the deviation of the side length from the right angle of the square 5. Calculate percentage of deviation <div style="text-align: center;">  </div>	
Calculation:	$\text{Deviation} \div \text{Side Length} \times 100 = \text{Deviation \%}$ $A \div B \times 100 = \text{Deviation \%}$	
Reporting:	<p>The following shall be included on the report:</p> <ul style="list-style-type: none"> • Woolworths' Test Method • Woolworths' Minimum Spirality Requirement • Item Description including Style and/or Order Number and Shipment Date • Vendor and Factory Names • Report Result Summary • Colour Tested • Results • Colour Photograph of Item 	

WWTM05 – Press Stud Close-Open-Close

Woolworths' Test Method		Test Method: WWTM05: 2014
Press Stud Close-Open-Close		
Scope:	This test method is used to determine the fit for purpose workings of press studs, snaps, ring snaps and studs	
References:	5.1.7.1 Woolworths' Sample Selection Table	
Apparatus and Equipment:	Safety Glasses	
Procedure:	<ol style="list-style-type: none"> 1. Test garments or items selected from the garments or items taken from Woolworths' Sample Selection Table 2. Manually test stud by pressing the male and female matching components together, then separate then close again 3. Note results (as listed below) 4. Continue to test all stud components on garment or item 5. Discard any garments or items with failed results 	
Results:	<p>Studs which open and close with normal force – Pass Studs which remain secured when closed and do not open without normal force - Pass</p> <p>Studs which open without force – Fail Studs which damage the garment or item when opened – Fail Studs which cannot be opened or closed – Fail Studs which are distorted or misaligned - Fail</p>	
Reporting:	<p>The following shall be included on the report:</p> <ul style="list-style-type: none"> • Woolworths' Test Method • Item Description including Style and/or Order Number and Shipment Date • Vendor and Factory Names • Colour and Sizes Tested (if applicable) • Results of each stud set 	