

Revalidation Cover Letter

Customer

NAME Parchem Construction Supplies
Pty Ltd
ADDRESS 1956 Dandenong Rd
Clayton
VIC 3168
CONTACT PERSON Phil Jones
EMAIL Phil.Jones@fosroc.co.nz

Report Number

AMTS216-4 AS 4654.1

Revalidation of AMTS216 AS 4654.1

Project

Revalidation Assessment of Test Report AMTS 216 Durability controls & Cyclic Movement.

Internal revalidation testing conducted on **Proofex Torchseal A700 AMTS 623** against original sample **AMTS216** tested by XTec Gen. Test results deemed acceptable for extension of original test report.

Revalidation granted for test report:

AMTS216 AS 4654.1

Expiry Date:

19/05/2028

Name of test material

Proofex Torchseal A700

Date of receipt of test material

11/06/2026

"This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories"

Report number	Issue Date	Expiry Date
216-4 AS 4654.1	03/07/2026	19/05/2028

Revalidation Cover Letter



Testing Facility and Location

NAME	XTec Gen Pty Ltd
ADDRESS	30-32 Park Avenue Woodville North 5012
ABN	22634729294

TERMS AND CONDITIONS

This report is issued in accordance with the Terms and Conditions as detailed and agreed in the *XTecGen Test Request and Sample Submission Form*

"This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories"

Report number	Issue Date	Expiry Date
216-4 AS 4654.1	03/07/2026	19/05/2028

TEST REPORT



Accredited for compliance with ISO/IEC 17025 – Testing
20678

TEST SUMMARY

Objective

Assessment of Proofex Torchseal A700 Batch number (16565) to AS4654.1-2012

Project

Evaluation of Proofex Torchseal A700 Batch number (16565) to AS 4654.1-2012

Report Number

216-1 AS4654.1-2012

Customer

NAME	Parchem Construction Supplies Pty Ltd
ADDRESS	1956 Dandenong Rd Clayton VIC 3168
CONTACT PERSON	Phil Jones
EMAIL	Phil.Jones@fosroc.co.nz

Name of test material

Proofex Torchseal A700

Description of test material

Torch applied 4.5 mm thick 'plant root repellent' bituminous waterproofing membrane.

Date of receipt of test material

1/11/2022

"This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories"

Report number	Issue Date	Expiry Date
216-1 AS 4654.1-2012	19/05/2023	19/05/2026

TEST REPORT



WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 – Testing
20678

Testing Facility and Location

NAME	XTec Gen Pty Ltd
ADDRESS	30-32 Park Avenue Woodville North 5012
ABN	22634729294

LIMITATION

The test results reported here relate only to the items tested.

CUSTOMER SUPPLIED INFORMATION & DATA

Supplied sheet membrane at 4.5 mm thickness.

TERMS AND CONDITIONS

This report is issued in accordance with the Terms and Conditions as detailed and agreed in the *XTecGen Test Request and Sample Submission Form*.

SIGNATORIES

Author

Hemakshi Valera

Head Laboratory Technician

Reviewer

Eric Scardigno

Laboratory Manager

"This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories"

Report number	Issue Date	Expiry Date
216-1 AS 4654.1-2012	19/05/2023	19/05/2026

TEST REPORT



WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 – Testing
20678

SUMMARY OF TESTS

AS4654.1 Requirements:

PROPERTY	METHOD	RESULT	ASSESSMENT CRITERIA	ASSESSMENT
Bond Strength	ASTM C794	34.48N	State result	
Acceptance of Cyclic movement	AS 4654.1 Appendix B	Failure not observed	AS 4654.1 Appendix B, Paragraph B4	PASS
Dimensional Stability	ASTM D6207	No changes observed	State result	
Durability: Control Elongation at Break	AS1145.3	41 %	AS 4654.1 Appendix A, Table A1	CLASS I
Durability: Control Tensile Strength		2.34 MPa	State result	
Durability: Water Immersion Elongation at Break	AS 4654.1 Appendix A	45 %	AS 4654.1 Appendix A, Table A4	PASS
Durability: Water Immersion Tensile Strength		2.08 MPa	State result	
Durability: Detergent Immersion Elongation at Break		37 %	AS 4654.1 Appendix A, Table A4	PASS
Durability: Detergent Immersion Tensile Strength		2.70 MPa	State result	
Durability: Heat Aging Elongation at Break		42 %	AS 4654.1 Appendix A, Table A4	PASS
Durability: Heat Aging Tensile Strength		2.27 MPa	State result	
Field Seam Strength	AMTM005	258.51N/25mm	State result	
Temperature Resistance: Water Vapour Transmission	AMTM004	0.42 g/m²/24 hours	State result	
Puncture Resistance	BS EN 12691:2018	Failure not observed	State result	

"This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories"

Report number
216-1 AS 4654.1-2012

Issue Date
19/05/2023

Expiry Date
19/05/2026

TEST REPORT



WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 – Testing
20678

Water Vapour Transmission	ASTM E96	0.42 g/m ² /24 hours	State result	
------------------------------	----------	------------------------------------	--------------	--

BOND STRENGTH

Date of test: 03/04/2023

Testing

Testing carried out in accordance with ASTM C794.

Additions, deviations and/or exclusions from ASTM C794:

Nil

Specimen Preparation:

PARAMETER	VALUE
Substrate	Concrete block
Substrate preparation	Wiped with damp cloth
Substrate primer	Unprimed
Mesh preparation	Wiped with damp cloth
Mesh primer	Unprimed

Test Results:

READING	PEAK PEEL FORCE (N)	MODE OF FAILURE			
		SUBSTRATE FAILURE (%)	ADHESIVE FAILURE (%)	COHESIVE FAILURE (%)	SCREEN DELAMINATION (%)
Specimen 1 Reading 1	37.38	0	20	80	0
Specimen 1 Reading 2	35.83	0	0	20	80
Specimen 1 Reading 3	34.18	0	0	90	10

*"This report shall not be reproduced except in full without prior approval of XTec Gen
Laboratories"*

Report number 216-1 AS 4654.1-2012	Issue Date 19/05/2023	Expiry Date 19/05/2026
--	---------------------------------	----------------------------------

TEST REPORT



Accredited for compliance with ISO/IEC 17025 – Testing
20678

Specimen 1 Reading 4	34.46	0	0	90	10
Specimen 2 Reading 1	36.32	20	0	80	0
Specimen 2 Reading 2	36.72	20	0	40	40
Specimen 2 Reading 3	44.99	0	0	30	70
Specimen 2 Reading 4	35.00	0	0	40	60
Specimen 3 Reading 1	33.25	0	0	40	60
Specimen 3 Reading 2	29.08	0	0	20	80
Specimen 3 Reading 3	27.36	0	0	10	90
Specimen 3 Reading 4	29.14	0	0	70	30
Average	34.48				
Std Dev	4.67				

Result: 34.48N

"This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories"

Report number
216-1 AS 4654.1-2012

Issue Date
19/05/2023

Expiry Date
19/05/2026

TEST REPORT



Accredited for compliance with ISO/IEC 17025 – Testing
20678

CYCLIC MOVEMENT

Date of test: 19/12-23/12/2022

Testing:

Testing carried out in accordance with AS 4858.1 Appendix B “Assessment of resistance of waterproofing membranes to cyclic movement”

Additions, deviations and/or exclusions from AS 4858.1 Appendix B:

Nil

Test Parameters:

PARAMETER	VALUE
Membrane class	I
Number of cycles	50
Cycle time	2 Hours
Cycle expansion	2.44 mm
Sample Size	65 mm x 25 mm
Sample span	2 mm between plates
Sample thickness	4.503 mm

Test Results:

TEST RESULT	VALUE
Number of cycles completed	50
Surface crazing	Nil
Surface tears	Nil
Membrane rupture	Nil

Test Observations:

DAY	DATE	NUMBER OF CYCLES	Failure Observed	
			RUPTURE/HOLING	OTHER
1	19/12/2022	0	☐ Yes ☒ No	
2	20/12/2022	11	☐ Yes ☒ No	
3	21/12/2022	24	☐ Yes ☒ No	
4	22/12/2022	37	☐ Yes ☒ No	
5	23/12/2022	50	☐ Yes ☒ No	

Passing requirement: “Any rupture holing the specimen or extending through the thickness for more than 1mm in from the edge of the specimen shall be taken as a failure and the number of cycles to failure shall be reported. If failure does not occur after 50 cycles it shall be reported together with the

“This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories”

Report number
216-1 AS 4654.1-2012

Issue Date
19/05/2023

Expiry Date
19/05/2026

TEST REPORT



Accredited for compliance with ISO/IEC 17025 – Testing
20678

types of any surface defects that have been induced and the number of cycles at which onset of the defect occurred”

Result: Meets the requirement for CSIRO moving joint test as per AS 4858.1 Appendix B.

“This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories”

Report number	Issue Date	Expiry Date
216-1 AS 4654.1-2012	19/05/2023	19/05/2026

TEST REPORT



WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 – Testing
20678

DIMENSIONAL STABILITY

Date of test: 03/04-06/04-2023

Testing:

Testing carried out in accordance with ASTM D6207 “Standard Test Method for Dimensional Stability of Fabrics to Changes in Humidity and Temperature”

Additions, deviations and/or exclusions from ASTM D6207:

Nil

Test Parameters:

PARAMETER	MEASUREMENT INSTRUMENT	
Preconditioning temperature at 24Hrs	32°C	AMTE042A
Precondition humidity at 24Hrs	15%RH	AMTE042A
Method of sampling used	Test Specimens 150 by 1000mm from lengthwise direction and width wise direction of the roll	

MEASUREMENT

			Cycle 1				Cycle 2				sign
	Initial Point Setting	Date	Pointer Reading at 95% RH & 20°C	Date	Pointer Reading at 15% RH & 32°C	Date	Pointer Reading at 95% RH & 20°C	Date	Pointer Reading at 15% RH & 32°C	Date	
Width wise	150	03/04/2023	150	04/04/2023	150	05/04/2023	150	05/04/2023	150	06/04/2023	HV
Length wise	800	03/04/2023	800	04/04/2023	800	05/04/2023	800	05/04/2023	800	06/04/2023	HV

† XTecGen Laboratory was not NATA accredited for at time of testing.

“This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories”

Report number
216-1 AS 4654.1-2012

Issue Date
19/05/2023

Expiry Date
19/05/2026

TEST REPORT



WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 – Testing
20678

DURABILITY OF MEMBRANE

CONTROL SET

Date of test: 10/12/2022

Testing: Test carried out in accordance with AS1145.3.

Additions, deviations and/or exclusions from AS1145.3: Nil

Test Parameters:

PARAMETER	VALUE
Ambient temperature (conditioning)	21.8-23.9°C
Ambient humidity (conditioning)	37.6-61.9% RH
Ambient temperature (testing)	24°C
Ambient humidity (testing)	45% RH
Accuracy grading of test machine	A
Specimen type	Type 2
Elongation measurement type:	Electronic internal measurement
Method of preparation of specimens	Cast
Orientation of specimens to direction of cast	Parallel to direction of casting blade
Clamping device:	Pneumatic jaws
Testing speed:	50mm/min

Test Results:

Replicate	Sample thickness (mm)	Maximum Extension (mm)	Tensile Strength (MPa)	Elongation at Break (%)
1	4.52	53.3	2.23	58
2	4.57	48.2	2.32	33
3	4.67	47.6	2.32	35
4	4.49	47.2	2.59	32
5	4.58	46.5	2.26	46
Mean	4.57	48.6	2.34	41
Std Deviation	0.07	2.7	0.14	11

Requirement for Class III (high extensibility): ≥300% elongation at break

Requirement for Class II (medium extensibility) 60-299% elongation at break

Requirement for Class I (low extensibility) <60% elongation at break.

Classification: Class I

*"This report shall not be reproduced except in full without prior approval of XTec Gen
Laboratories"*

Report number
216-1 AS 4654.1-2012

Issue Date
19/05/2023

Expiry Date
19/05/2026

TEST REPORT



WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 – Testing
20678

DURABILITY OF MEMBRANE

WATER IMMERSION

Date of test: 14/12/2022-01/02/2023

Testing:

Test carried out in accordance with AS 4654.1 Appendix A.

Additions, deviations and/or exclusions from AS 4654.1 Appendix A:

Nil

Test Parameters:

PARAMETER	VALUE
Ambient temperature (conditioning)	21.8-23.9°C
Ambient humidity (conditioning)	37.6-61.9% RH
Ambient temperature (testing)	24-26°C
Ambient humidity (testing)	25-46% RH
Minimum accuracy grading of test machine	A
Specimen type	Type 2
Elongation measurement type:	Electronic internal measurement
Method of preparation of specimens	Cast
Orientation of specimens to direction of cast	Parallel to direction of casting blade
Clamping device:	Pneumatic jaws
Testing speed:	50mm/min

Test Results:

Sample Number	Sample thickness (mm)	Maximum Extension (mm)	Tensile strength (MPa)	Elongation at break (%)
1	4.51	53.7	2.14	50
2	4.58	52.5	2.17	50
3	4.49	56.0	2.17	37
7 Day Means	4.53	54.1	2.16	45
7 Day Std Devs	0.05	1.8	0.02	7
4	4.52	58.6	2.35	49
5	4.50	51.1	2.15	35
6	4.52	63.9	2.23	57
28 Day Means	4.51	57.9	2.24	47
28 Day Std Devs	0.01	6.5	0.10	11
7	4.51	61.8	2.17	49

"This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories"

Report number
216-1 AS 4654.1-2012

Issue Date
19/05/2023

Expiry Date
19/05/2026

TEST REPORT



WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 – Testing
20678

8	4.52	39.6	1.96	32
9	4.51	67.9	2.10	54
56 Day Means	4.51	56.4	2.08	45
56 Day Std Devs	0.01	14.9	0.10	11

Passing Requirement: *“Elongation at break shall not be less than 25% retention of elongation at break of the controls”* 58] Table 6.1. A failure is for less than 25% retention of elongation at break of the controls”.

To pass this condition an elongation at break value of 11% or greater is required.

Result: 45% PASS

“This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories”

Report number	Issue Date	Expiry Date
216-1 AS 4654.1-2012	19/05/2023	19/05/2026

TEST REPORT



WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 – Testing
20678

DURABILITY OF MEMBRANE

DETERGENT IMMERSION

Date of test: 14/12/2022-01/02/2023

Testing:

Test carried out in accordance with AS 4654.1 Appendix A.

Additions, deviations and/or exclusions from AS 4654.1 Appendix A:

Nil

Test Parameters:

PARAMETER	VALUE
Ambient temperature (conditioning)	21.8-23.9°C
Ambient humidity (conditioning)	37.6-61.9% RH
Ambient temperature (testing)	24-26°C
Ambient humidity (testing)	25-46% RH
Minimum accuracy grading of test machine	A
Specimen type	Type 2
Elongation measurement type:	Electronic internal measurement
Method of preparation of specimens	Cast
Orientation of specimens to direction of cast	Parallel to direction of casting blade
Clamping device:	Pneumatic jaws
Testing speed:	50mm/min

Test Results: Detergent Immersion

Sample Number	Sample thickness (mm)	Maximum Extension (mm)	Tensile strength (MPa)	Elongation at break (%)
1	4.39	55.8	2.68	38
2	4.57	46.7	2.50	34
3	4.40	55.2	2.70	41
7 Day Means	4.45	52.6	2.63	38
7 Day Std Devs	0.10	5.1	0.11	4
4	4.51	51.7	2.41	44
5	4.52	58.6	2.55	44
6	4.51	54.7	2.70	48
28 Day Means	4.51	55.0	2.55	45
28 Day Std Devs	0.01	3.4	0.15	2
7	4.52	59.3	2.82	41

"This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories"

Report number
216-1 AS 4654.1-2012

Issue Date
19/05/2023

Expiry Date
19/05/2026

TEST REPORT



WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 – Testing
20678

8	4.52	50.4	2.74	37
9	4.54	53.1	2.53	34
56 Day Means	4.53	54.3	2.70	37
56 Day Std Devs	0.02	4.5	0.15	3

Passing Requirement: *“Elongation at break shall not be less than 25% retention of elongation at break of the controls”.*

To pass this condition an elongation at break value of 11% or greater is required.

Result: 37% PASS

“This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories”

Report number	Issue Date	Expiry Date
216-1 AS 4654.1-2012	19/05/2023	19/05/2026

TEST REPORT



Accredited for compliance with ISO/IEC 17025 – Testing
20678

DURABILITY OF MEMBRANE

HEAT AGING

Date of test: 23/12/2022

Testing:

Test carried out in accordance with AS 4654.1 Appendix A.

Additions, deviations and/or exclusions from AS 4654.1 Appendix A:

Nil

Test Parameters:

PARAMETER	VALUE
Ambient temperature (conditioning)	22.3°C
Ambient humidity (conditioning)	51.2% RH
Ambient temperature (testing)	23°C
Ambient humidity (testing)	49% RH
Accuracy grading of test machine	A
Specimen type	Type 2
Elongation measurement type:	Electronic internal measurement
Method of preparation of specimens	Cast
Orientation of specimens to direction of cast	Parallel to direction of casting blade
Clamping device:	Pneumatic jaws
Testing speed:	50mm/min

Test Results:

Number of replicates	Sample thickness (mm)	Maximum Extension (mm)	Tensile strength (MPa)	Elongation at break (%)
1	4.58	50.0	2.31	43
2	4.63	47.2	2.31	40
3	4.51	53.2	2.18	42
Mean	4.57	50.1	2.27	42
Std Deviation	0.06	3.0	0.07	2

Passing Requirement: "Elongation at break shall be not less than 50% of the result recorded for the controls".

To pass this condition an elongation at break value of 21% or greater is required.

Result: 42% PASS

"This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories"

Report number	Issue Date	Expiry Date
216-1 AS 4654.1-2012	19/05/2023	19/05/2026

TEST REPORT



Accredited for compliance with ISO/IEC 17025 – Testing
20678

FIELD SEAM STRENGTH

Date of test: 19/05/23

Testing:

Test carried out in accordance with AMTM005.

Additions, deviations and/or exclusions from AMTM005:

Nil

Test Parameters:

PARAMETER	VALUE
Ambient temperature (conditioning)	20.8-24.3°C
Ambient humidity (conditioning)	50.7-52.3% RH
Ambient temperature (testing)	24.3°C
Ambient humidity (testing)	49.2% RH
Accuracy grading of test machine	A
Elongation measurement type:	Electronic internal measurement
Orientation of specimens to direction of cast	Parallel to direction of casting blade
Clamping device:	Pneumatic jaws
Testing speed:	100mm/min

Test Results:

Replicate	Peak Force (N/25mm)	Mode of Failure	
		Lap joint	Sheet
1	254.46	☒	☐
2	264.61	☒	☐
3	249.90	☒	☐
4	261.31	☒	☐
5	262.25	☒	☐
Mean	258.51		
Std Deviation	6.11		
Number of Failures		5	0
% Failure		100	0

"This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories"

Report number
216-1 AS 4654.1-2012

Issue Date
19/05/2023

Expiry Date
19/05/2026

TEST REPORT



WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 – Testing
20678

TEMPERATURE RESISTANCE

Date of test: 13-28/02/2023

Testing:

Test carried out in accordance with AMTM004.

Additions, deviations and/or exclusions from AMTM004:

Nil

Test Parameters:

PARAMETER	VALUE
Cold exposure: Immersion date	06/02/2023
Cold exposure: Removal date	08/02/2023
Cold exposure: Temperature range	-17.9—15.1°C
Heat exposure: Immersion date	08/02/2023
Heat exposure: Removal date	10/02/2023
Heat exposure: temperature range	85°C
WVT: Date of test	13-28/02/2023
WVT: Test temperature	21.2-25.7°C
WVT: Test humidity	50% RH
WVT: Cup design	Round cup with sealing flange
WVT: Cup sealant	Paraffin wax
WVT: Desiccant	Anhydrous Calcium Chloride

Test Results- Temperature Resistance

SAMPLE	THICKNESS (mm)	SIDE OF SPECIMEN HIGHER VAPOUR PRESSURE WAS APPLIED TO	REGRESSION		WATER VAPOUR TRANSMISSION RATE (g/m ² /24 hours)
			EQUATION	r ² VALUE	
1	4.504	Side A, top of cast film	Mass _(g) =5E-05x(Time _{hr})+166.75	0.9945	0.3613
2	4.502	Side A, top of cast film	Mass _(g) = 7E-05x(Time _{hr})+165.62	0.9922	0.5063
3	4.506	Side B, bottom of cast film	Mass _(g) = 6E-05x(Time _{hr})+167.26	0.9942	0.4337

*"This report shall not be reproduced except in full without prior approval of XTec Gen
Laboratories"*

Report number
216-1 AS 4654.1-2012

Issue Date
19/05/2023

Expiry Date
19/05/2026

TEST REPORT



WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 – Testing
20678

4	4.501	Side B, bottom of cast film	$\text{Mass}_{(g)} = 5\text{E-}05 \times (\text{Time}_{\text{hr}}) + 167.26$	0.9935	0.3613
Mean	4.50				0.42
Std Deviation	0.00				0.07

Result: 0.42 g/m²/24 hour

*"This report shall not be reproduced except in full without prior approval of XTec Gen
Laboratories"*

Report number
216-1 AS 4654.1-2012

Issue Date
19/05/2023

Expiry Date
19/05/2026

TEST REPORT



WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 – Testing
20678

WATER VAPOUR TRANSMISSION RATE

Date of test: 13-28/02/2023

Testing: Test carried out in accordance with ASTM E96 Desiccant Method.

Additions, deviations and/or exclusions from ASTM E96 Desiccant Method: Nil

Test Parameters:

PARAMETER	VALUE
Test temperature:	21.2-25.7°C
Test humidity:	50% RH
Cup design:	Round cup with sealing flange
Sealant:	Paraffin wax
Desiccant:	Anhydrous Calcium Chloride

Test Results

SAMPLE	THICKNESS (mm)	SIDE OF SPECIMEN HIGHER VAPOUR PRESSURE WAS APPLIED TO	REGRESSION		WATER VAPOUR TRANSMISS ON RATE (g/m ² /24 hours)
			EQUATION	r ² VALUE	
1	4.509	Side A, top of cast film	Mass _(g) = 6E-05x(Time _{hr})+179.25	0.9976	0.4323
2	4.514	Side A, top of cast film	Mass _(g) =5E-05x(Time _{hr})+180.01	0.9974	0.3602
3	4.512	Side B, bottom of cast film	Mass _(g) = 6E-05x(Time _{hr})+180.88	0.9866	0.4347
4	4.506	Side B, bottom of cast film	Mass _(g) =6E-05x(Time _{hr})+179.59	0.9966	0.4331
Mean	4.51				0.42
Std Deviation	0.00				0.04

Result: 0.42 g/m²/24 hour

*"This report shall not be reproduced except in full without prior approval of XTec Gen
Laboratories"*

Report number
216-1 AS 4654.1-2012

Issue Date
19/05/2023

Expiry Date
19/05/2026

TEST REPORT



WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 – Testing
20678

Puncture Resistance

Date Of Testing: 23/03/2023

Testing:

Testing carried out in accordance with BS EN 12691:2018

Additions, deviations and/or exclusions from AS 4654.1 Appendix A:

Nil

Test Parameters:

PARAMETER	VALUE
Ambient temperature (conditioning)	24.2°C -27.2°C
Ambient humidity (conditioning)	32.1-46.9%
Ambient temperature (testing)	27.2°C
Ambient humidity (testing)	36.9% RH
Test Method of support	Method A: Hard support

Test Results:

Drop height (mm)	Pass (✓) Fail (✗)					Drop Height (mm)	Pass (✓) Fail (✗)				
	Replicate						Replicate				
	1	2	3	4	5		1	2	3	4	5
30	✓	✓	✓	✓	✓	600	✓	✓	✓	✓	✓
50	✓	✓	✓	✓	✓	700	✓	✓	✓	✓	✓
75	✓	✓	✓	✓	✓	800	✓	✓	✓	✓	✓
100	✓	✓	✓	✓	✓	900	✓	✓	✓	✓	✓
200	✓	✓	✓	✓	✓	1000	✓	✓	✓	✓	✓
250	✓	✓	✓	✓	✓	1200	✓	✓	✓	✓	✓
300	✓	✓	✓	✓	✓	1400	✓	✓	✓	✓	✓
350	✓	✓	✓	✓	✓	1600	✓	✓	✓	✓	✓
400	✓	✓	✓	✓	✓	1800	✓	✓	✓	✓	✓
450	✓	✓	✓	✓	✓	2000	✓	✓	✓	✓	✓
500	✓	✓	✓	✓	✓						

† XTecGen Laboratory was not NATA accredited for at time of testing.

"This report shall not be reproduced except in full without prior approval of XTec Gen Laboratories"

Report number
216-1 AS 4654.1-2012

Issue Date
19/05/2023

Expiry Date
19/05/2026

TEST REPORT



Accredited for compliance with ISO/IEC 17025 – Testing
20678

END OF REPORT

*"This report shall not be reproduced except in full without prior approval of XTec Gen
Laboratories"*

Report number	Issue Date	Expiry Date
216-1 AS 4654.1-2012	19/05/2023	19/05/2026