

# FIELD TESTING ACCREDITATION PROGRAMME

**OVERVIEW** 



~	
Over	view
0101	1011

Version 1.0

Date: 18.06.21 Page:

ge: 2 of 12

## FIELD TESTING ACCREDITATION PROGRAMME

# Contents

1	SCO	SCOPE		
2	REQ	JIREME	3	
	2.1	Gene	ral	3
	2.2	Exper	rience	3
	2.3 Documentation			3
3	APPL	PPLICATION		
	3.1	Appli	5	
	3.2	Docu	5	
	3.3	Fees		6
		3.3.1	Application Fee	6
		3.3.2	Assessment Fee	6
		3.3.3	Annual Accreditation Fee	7
4	ASSESSMENT		8	
	4.1	4.1 General		8
	4.2	On-site Assessment		8
		4.2.1	Purpose	8
		4.2.2	Setup	8
5 EQUIPMENT REQUIREMENTS		REQUIREMENTS	10	
	5.1	General		10
	5.2	3 WGANZ 502, 503, 1105 Equipment		10
	5.3			10
	5.4			11
		5.4.1	General	11
		5.4.2	External Calibrations	11
		5.4.3	Internal Calibrations	12
6	AWARDING OF ACCREDITATION		13	
7	ANNUAL ACCREDITATION		14	



## FIELD TESTING ACCREDITATION PROGRAMME

Version 1.0

#### 1. Scope

This document provides information on the process and requirements for becoming a Window & Glass Accredited Field Tester.

Field Testing operators who hold a current IANZ accreditation for test method classification 4.41 Windows, Doors and Building Envelopes are automatically deemed to meet the requirements for a Window & Glass Association Accredited Field Tester.

#### 2. Requirements

#### 2.1 General

Prior to formally applying for Accreditation, applicants should read this document in its entirety to ensure that they able to meet the minimum requirements to become a Window & Glass Association accredited field tester Applicants should also familiarise themselves with the Window & Glass Association Field Testing Procedures which can be downloaded for free from the Association website.

#### 2.2 Experience

Although there are no minimum requirements with regards education or qualification, it is expected that personnel named in the application to be assessed as Window & Glass Association accredited test operators will have a basic knowledge of differential pressure measurement and fluid dynamics and will have the skills and experience required to undertake and report on the various classes of test for which they are seeking accreditation.

Personnel approved to conduct or supervise testing must also be able to carry out a subjective analysis of the test outcomes and must also be able to recognise when the test outcomes may indicate an issue with the test equipment or test sample.

#### 2.3 Documentation

Applicants will need to have documented systems in place that record the processes and procedures the organisation follows to ensure the competence, impartiality and consistency of operations for the testing activities the organisation undertakes. This documentation may be in the form of a Quality Management or Quality Assurance system based on the requirements of ISO/IEC 17025.



Page: 4 of 12

## FIELD TESTING ACCREDITATION PROGRAMME

Version 1.0

While it is not required that organisations comply with the full requirements of ISO/IEC 17025, it is expected that they will have documented processes and procedures that, as a minimum, specify how the organization operates in respect of,

- a. Impartiality
- b. Confidentiality
- c. Equipment
- d. Calibration
- e. Risk
- f. Record Keeping
- g. Reporting



## FIELD TESTING ACCREDITATION PROGRAMME

#### 3. Application

#### 3.1 Application Process

Applicants seeking to become a Window &. Glass Association Accredited Field Tester must complete and submit the application form which can be downloaded from the Association website.

Applications should be in the name of the company, organisation or entity seeking Accreditation as a Window & Glass Association approved testing facility and must include the name of the individual(s) to be assessed. For smaller organisations or Sole Traders this may be one and the same.

Once an application has been assessed and approved applicants will be required to undertake an on-site assessment.

Applications and supporting documentation must be submitted to:

The Technical Manager PO Box 44 237, Point Chevalier, Auckland 1246

Alternatively, applications may be submitted electronically to: <a href="mailto:robert.campion@wganz.org.nz">robert.campion@wganz.org.nz</a>

#### 3.2 Document Review

Formal application to become a Window & Glass Association accredited Field Tester must be made on the application forms available on the Window & Glass Association website. Applications must be completed in full and must include all required supporting documentation.

When your complete application has been received, the assessor will conduct a formal review of the documentation, prior to organising the on-site assessment. The review will consist of a non-technical assessment of documentation submitted with emphasis on management policies and procedures and technical procedures. If significant deficiencies are identified during the document review, you will be notified and asked to submit revised documentation for further review.

Documentation required will include but not be limited to,

- management system/QA documentation
- health & safety
- test procedures
- equipment records
- calibrations



## FIELD TESTING ACCREDITATION PROGRAMME

- test reports

Following acceptance of a properly completed application by WGANZ the applicant will be contacted to arrange a suitable date for the onsite assessment and to discuss the onsite assessment process.

Applicants should allow up to 14 days for checking of application and review of supporting documentation. If an applicant has been contacted within 21 days after submitting their application, they should contact the Window & Glass Association on 09 815 3550 to check on the status of their application.

Progress to the next stage cannot take place until the lead assessor is satisfied that your documented intentions substantially meet accreditation requirements (but this is not a guarantee that no further issues will be identified with documentation at a later stage). When this is done, the lead assessor will contact you to arrange a suitable date for the assessment and to discuss the proposed technical experts.

#### 3.3 Fees

The following are the current fee's applicable at the date of publication and may be subject to change without notice. Application fees are non-refundable, and all prices are exclusive of GST.

#### 3.3.1 Application Fee

There is no application fee.

#### 3.3.2 Assessment Fee

The assessment fee covers the initial documentation review and all on-site and post assessment procedures and must be paid within 7 days following date of invoice. Successful applicants will not be awarded as an accredited Field Tester until all outstanding fees have been paid.

Fee - Time @ \$200.00 per hour Travel time @ \$115.00 per hour. Meals, accommodation and travel (when charged) at cost.

#### 3.3.3 Annual Accreditation Fee

All Accredited field testers must pay an annual accreditation fee and Accredited testing technicians will be required to attend an annual workshop.

- Annual Accreditation Fee \$1000
- Annual Workshop Fee To be advised annually on confirmation of date and venue.



## FIELD TESTING ACCREDITATION PROGRAMME

#### 4 ASSESSMENT

#### 4.3 General

Assessment will be carried out by suitably qualified technical expert appointed by the Window & Glass Association. All appointed assessors will hold current IANZ accreditation or Window & Glass Association Accrediation for the class of test(s) to be assessed.

Once appointed, the assessor will be required to sign a confidentiality agreement to ensure the confidentiality of any documentation or information they may have access to as part of the assessment process.

#### 4.4 On-site Assessment

#### 4.2.1 Purpose

The purpose of the on-site assessment is to ensure,

- a. Applicants have a suitable understanding of the test procedures they are seeking Accrediation for and to demonstrate that their equipment and processes are able to produce consistently valid and reliable results.
- b. The processes and procedures described in the quality management and/or quality assurance documentation are followed without variation.

#### 4.2.2 Setup

Applicants must have available for assessment a minimum of one test sample for each class of test for which they are seeking Window & Glass accreditation as outlined at 4.2.2.1 and 4.2.2.2 below.

#### 4.2.2.1 WGANZ 501 Test Procedure

For assessment against the WGANZ 501 test procedure, applicants must be able to provide internal and external access to a glazed curtainwall or shopfront system with a minimum dimension of 2.0m high x 2.0m wide and incorporation a minimum of,

- a. 1 off mullion, or
- b. 1 off transom, or
- c. 1 off spandrel panel.



Version 1.0 Date: 18.06.21

Page: 8 of 12

## FIELD TESTING ACCREDITATION PROGRAMME

#### 4.2.2.2 WGANZ 502 and WGANZ 1105 Test Procedures

For assessment against the WGANZ 502 and WGANZ 1105 test procedures, applicants must be able to provide internal and external access to an external door or operable window with a minimum dimension of 1.0m high x 1.2m wide.

Operators able to successfully demonstrate the technical expertise required for the WGANZ 1105 test procedure shall also be deemed competent for undertake testing in accordance with the WGANZ 503 test procedures for field testing of Newly Installed Storefronts, Curtain Walls and Sloped Glazing Systems.

### 5 EQUIPMENT REQUIREMENTS

#### 5.3 General

Window & Glass Association Accredited field testers shall provide and maintain all necessary items of measurement and test equipment required for the correct performance of the Window & Glass Association Field Testing Procedures for testing of windows, doors, and other external building Façade elements.

#### 5.4 WGANZ 501 Equipment Requirements

The minimum equipment requirements for operators seeking Accrediation for testing in accordance with the WGANZ 501 test procedure are as follows,

- a. A Spray Wand comprising of an accurate adjustment valve, a calibrated pressure gauge and a Monarch B-25 brass nozzle to provide a solid cone spray at an angle of 80 degrees. The calibrated pressure gauge must be fitted between the spray nozzle and the adjustment valve and should allow for adjustment of the water pressure within a range of 205 to 240 kPa (30-35 psi).
- b. A water reservoir and booster pump to augment mains water pressure where necessary to achieve the specified pressure at the nozzle inlet of 205 to 240 kPa (30 to 35psi).
- **Note.** A centrifugal multistage pump with the ability to pump a minimum of 60 litres per minute to a minimum head of 15 meters or greater is recommended and will suffice for all WGANZ test procedures.
- c. Sufficient 19mm hose to connect from the booster pump to spray wand.

**Note.** To ensure the most cost effective use of the assessor's time it is recommended that any preliminary works and any equipment setup are carried out at the location of the on-site assessment, prior to commencement of the assessment.



## FIELD TESTING ACCREDITATION PROGRAMME

#### 5.5 WGANZ 502, 503, and 1105 Equipment Requirements

The minimum equipment requirements for operators seeking Accrediation for testing in accordance with the WGANZ 501, WGANZ 502 or WGANZ 1105 test procedures are as follows,

- a. A portable Spray Rack comprising of an accurate adjustment valve, a calibrated pressure gauge and a Monarch B-25 brass nozzle to provide a solid cone spray at an angle of 80 degrees. The calibrated pressure gauge must be fitted between the spray nozzle and the adjustment valve and should allow for adjustment of the water pressure within a range of 205 to 240 kPa (30-35 psi).
- **Note.** A Spraying Systems Co. (USA) 1/4HH-14WSQ nozzle is an example of a square patterns solid cone nozzle that provides a suitable droplet size and coverage of  $1.5 2.0 m^2$ .
- b. A calibrated water flow meter to be installed between the booster pump and the spray rack or alternatively, a calibrated pressure gauge may be incorporated into the spray rack design (see also 5.4.1).
- c. A calibrated differential pressure manometer with an accuracy of  $\pm 2\%$ .
- d. A fan with a variable speed controller capable of moving the volume of air required to achieve and maintain a vacuum/pressure that exceeds the specified test pressure.
- **Note.** Typically, the internal vacuum chamber will be sealed to internal timber framing members surrounding the window opening or façade area under test. When applying a vacuum to the pressure chamber, air may also be drawn from adjacent wall, ceiling and/or sub-floor spaces through defects and construction joints in timber framing, laps in flexible wall underlays etc. To ensure specified test pressures can be achieved and maintained for the required test duration, a commercial fan should be used that has enough capacity to accommodate extraneous air loss.

Residential or commercial vacuum cleaners fitted with or, combined with pressure dump valves or pressure release dampers do not constitute WGANZ approved test equipment.

- e. A water reservoir and booster pump to augment mains water pressure where necessary to achieve the specified pressure at the nozzle inlet of 205 to 240 kPa (30 to 35psi).
- Note. A centrifugal multistage pump with the ability to pump a minimum of 60 litres per minute to a minimum head of 15 meters or greater is recommended and will suffice for all WGANZ test procedures. The water reservoir should be readily portable and hold a sufficient volume of water to complete testing in the event of inadequate or interrupted town supply.



## FIELD TESTING ACCREDITATION PROGRAMME

f. Sufficient 19mm hose to connect from the booster pump to spray rack.

#### 5.6 Calibration

#### 5.4.1 General

Items of the organisations equipment that can influence the test results must be calibrated either in house or by an IANZ accredited at regular intervals or by an IANZ accredited Metrology and Calibration Laboratory as outlined below to ensure that that the equipment meets the required level of accuracy for the testing work being undertaken.

#### 5.4.2 External Calibrations

Pressure gauges, digital manometers and mechanical manometers used for testing to the Window &. Glass Association Field Testing Procedures must calibrated by an IANZ accredited Metrology and Calibration Laboratory at not more than six-monthly intervals or as required provided that no item of calibrated equipment is used where the calibration certificate is more than six months old.

#### 5.4.3 Internal Calibrations

Typically, calibration of the water spray rack used for the WGANZ 501, 502 and 1105 test methods are carried in-house using either the gravimetric or catch-box calibration methods described in the Window & Glass Association Field Testing Procedures. Spray racks should be calibrated at six-monthly intervals or as required provided that no spray rack shall be used for a Window & Glass Association accredited test where the calibration certificate is more than six months old.

Applicants will be required to submit copies of their documented in-house calibration procedures and worksheets for review as part of the application assessment process.



Version 1.0

Page: 11 of 12

## FIELD TESTING ACCREDITATION PROGRAMME

## 6 AWARDING OF ACCREDITATION

Following completion of the on-site assessment process you will be verbally advised of the outcome of the assessment and any corrective actions which might be required before awarding of Window & Glass Association Accreditation.

Where corrective actions are required or recommendations are made, these will be discussed with you on conclusion of the assessment so that any non-conformance and the action required to address them are fully understood. Your assessor will discuss with you an appropriate timeframe and the type of evidence required to show that any non-conformance has been addressed.

Corrective actions and agreed timeframes and verification methods for corrective actions will also be advised in the on-site assessment report which will be issued following completion of the assessment. Typically, the on-site assessment report will be issued with 7 days of the assessment with copies provided to both the applicant and the Window & Glass Association.

Where there are extensive corrective actions required or, where there are multiple nonconformances or the nonconformance is of a significant nature, you may be required to undertake a follow up assessment before Window & Glass Association Accreditation can be awarded.

Where an applicant has successfully completed the documentation review and onsite assessment process, they can expect to be awarded Window & Glass Association Accreditation within 21 days following issue of the assessor's report. Accreditation will be valid for a period of 1 year from the date of awarding of Accreditation and will be renewed following attendance at the annual workshop and payment of the Annual Accreditation fee.



#### FIELD TESTING ACCREDITATION PROGRAMME

#### 7 ANNUAL ACCREDITATION

Once your organisation has been awarded Window & Glass Association Accreditation you will be required to complete an annual accreditation process and pay an annual accreditation fee.

The accreditation processes will require attendance at an annual workshop where test operators will be provided with ongoing training and the opportunity to collaborate and discuss any testing issues with their peers.

Typically, workshops will be held over the course of a day and will be structured to provide a morning session dedicated to providing refresher courses in one or more aspects of the various testing operations and a review and discussion period in the afternoon.

Prior to commencement of an annual workshop, attendees will be required to submit a copy of a recently issued test report for each of the classes of test for which they hold Accreditation. These will be reviewed by the Window & Glass Association and any deficiencies will be discussed with you at the workshop.

Attendance at the annual accreditation workshops shall not be compulsory for organisations (or individuals) that have been awarded Window & Glass Association Accreditation within six months of a pending accreditation workshop, although the workshops provide the opportunity for ongoing professional development and are therefore recommended.

**Note.** Organisations that hold current IANZ accreditation for the WGANZ Field Testing Procedures shall not be required to complete the Window & Glass Association annual Accreditation process.