

# Schedule of Accreditation



Organisation Name	Building Envelope Technologies Ltd
Trading As	
INAB Reg No	193T
Contact Name	Tommy Morris
Address	Ballylacey Crossroads, Inch, Gorey, Wexford, Y25 XW93
Contact Phone No	0402 21873
Email	quality@bettechnologies.ie
Website	<a href="http://www.bettechnologies.ie">http://www.bettechnologies.ie</a>
Accreditation Standard	EN ISO/IEC 17025 T
Standard Version	2017
Date of award of accreditation	22/04/2008
Scope Classification	Mechanical testing
Scope Classification	Notified bodies - Labs
Services available to the public <sup>1</sup>	Yes

<sup>1</sup> Refer to document on interpreting INAB Scopes of Accreditation

Sites from which accredited services are delivered		
(the detail of the accredited services delivered at each site are on the Scope of Accreditation)		
	Name	Address
1	BET Test Lab	IDA Business Park, Ballynattin Road, Arklow, Wicklow
2	Head Office	Ballylacey Crossroads, Gorey, Inch, Wexford, Y25 XW93

# Scope of Accreditation

## BET Test Lab

### Mechanical Testing

Category: A

Product categories - Tests	Test detail	Product detail	Range of Measurement	Equipment/Technique	Std. Ref & SOP
1144 Mechanical tests on assemblies - .99 Other assemblies	AIR PERMEABILITY LABORATORY TESTING Air Permeability: Windows & Doors Air Permeability: Curtain Walling & Cladding Components	AIR PERMEABILITY LABORATORY TESTING Air Permeability: Windows & Doors Air Permeability: Curtain Walling & Cladding Components		EN 1026:1999 Windows and Doors - Air Permeability -Test Method. EN 12207:1999 Windows and Doors - Air Permeability - Classification CWCT Section 5.0 & CWCT Part 3 section 3.3 EN 12153-2000 Curtain Walling - Air Permeability-Test Method. EN 12152-1999 Curtain Walling - Air Permeability-Performance Requirements and Classification.	Documented in house Test Method LAB_TM-01
	Dynamic Aero Engine Test Façade Elements including: Curtain Walling Windows & Doors Roof Lights Auto & Manual Opening Vents External Wall Systems Cladding Systems Rainscreen Systems Roof Cladding Systems	Dynamic Aero Engine Test Façade Elements including: Curtain Walling Windows & Doors Roof Lights Auto & Manual Opening Vents External Wall Systems Cladding Systems Rainscreen Systems Roof Cladding Systems	N/A	AAMA 501.1-83 Dynamic Aero Engine – TEST METHOD CWCT Section 7 Standard Test Method for Water Penetration – Dynamic AERO ENGINE TEST	Documented in house Test Method LAB_TM-06

	Impact Testing	IMPACT TESTING		<p>CWCT Part 8: Section 8.10 Page 15  CWCT Section 15.0 (Method of Test for Impact Test)  CWCT Section 16.0 (Method of Test for Fragility) Section 16.0 Fragility  ACR[M]001:2014 Test For Non-Fragility of Large Element Roofing Assemblies [Fifth Edition] Technical Note No 67 Supersedes TN 42 Safety and Fragility of Glazed Roofing: Testing and Assessment Technical Note No 66 Safety and Fragility of Glazed Roofing: Guidance on Specification  BS EN 356:1999 Glass in Building-Security Glazing-Testing and Classification of resistance against manual attack  Technical Note No 92 Simplified Method for Assessing Glazing in Class 2 Roofs Section 15.0 Impact  BS EN 12600:2002 Glass in building-Pendulum test-Impact Test method and classification for flat glass  BS EN 8200:1985 Code of practice for-Design of non-loading external vertical enclosures of buildings  Technical Note No 65 Thermal Fracture of Glass Technical Note No 75 Supersedes TN52 Impact Performance of Building Envelopes: Guidance on Specification  Technical Note No 76 Supersedes TN52 Impact Performance of Building Envelopes: Method for Impact Testing of Cladding Panels</p>	Documented in house Test Method LAB_TM-05
--	----------------	----------------	--	--	---

Performance of Windows and Doors for Weathertightness	Performance Testing of Windows and Doors	AIRTIGHTNESS Class 0 to Class 4 WATERTIGHTNESS Class 0 to Class 9A RESISTANCE TO WIND LOAD Class A2 to Class A5.	High Pressure Low Flow Centrifugal Fan kit, High Pressure Pump & Deflection Transducers. BS6375-1:2015 Part 1	Documented in house Test Method LAB_TM-03
Performance Testing and Installation Checks of Residential Ventilation Systems	Residential Ventilation Systems	Air flow range (supply and exhaust): 10 to 550 m <sup>3</sup> /h and 551 to 850m <sup>3</sup> /h with calculated compensation	Calibrated flowmeter.	Documented in house Test Method SUS_TM-01  EN 14134:2019 Ventilation for buildings - Performance testing and installation checks of residential ventilation buildings.  Building Regulations Technical Guidance Document F: Ventilation
RESISTANCE TO WIND LOAD LABORATORY TESTING Resistance Due to Wind Loading: WINDOWS & DOORS Resistance Due to Wind Loading: CURTAIN WALLING & CLADDING SYSTEMS	RESISTANCE TO WIND LOAD LABORATORY TESTING Resistance Due to Wind Loading: WINDOWS & DOORS Resistance Due to Wind Loading: CURTAIN WALLING & CLADDING SYSTEMS		EN 12211:2000 Windows and Doors - Resistance to Wind Load Test-Test Method. EN 12210:2000 Windows and Doors - Resistance to Wind Load Test-Classification. CWCT Section 11.0 & CWCT Section 12 EN 12179:2000 Curtain Walling – Resistance to Wind Load Test -Test Method. EN 13116- 2001 Curtain Walling – Resistance to Wind Load -	Documented in house Test Method LAB_TM-02

			Performance Requirements.	
SEISMIC/DIFFERENTIAL MOVEMENT TESTING Vertical & Lateral Seismic/Differential Movement: VERTICAL & LATERAL	SEISMIC/DIFFERENTIAL MOVEMENT TESTING Vertical & Lateral Seismic/Differential Movement: Movement: VERTICAL & LATERAL		AAMA 501.4-09 Seismic - LATERAL WIND SWAY-Test Method AAMA 501.7-11 Seismic - VERTICAL WIND SWAY- Test Method CWCT Section 17 Structural Movement Regime.	Documented in house Test Method LAB_TM-04
Slip Resistance Testing	Slip Resistance Testing		EN16165:2021 Determination of slip resistance of pedestrian surfaces - Methods of evaluation  BS EN 13036-4:2011 Road and airfield surface characteristics - Test Methods Part 4: Method for Measurement of slip/skid resistance of a surface: The Pendulum Test. UK Slip Resistance Guidelines - Test Procedure fully compliant	Documented in house Test Method LAB_TM-07
Thermal bridge analysis of building junctions and openings: calculation of linear thermal transmittance and surface temperature factor	Building junctions and openings	2D & 3D Building junctions	Thermal analysis software program for steady state heat transfer in three-dimensional objects validated to I.S. EN ISO 10211	BRE Report BR 497 Conventions for calculating linear thermal transmittance and temperature factors.  BRE IP 1/06: Assessing the effects of thermal bridging at junctions and around openings  I.S. EN ISO 10211  Building Regulations Technical

				Guidance Document L - Appendix D Thermal bridging at junctions and around openings SUS_TM_02
Water penetration – Spray Bar Test	Weather Testing Water Penetration-Hose Test Water Penetration -Spray Bar Test		CWCT Standard Test Method for Water Penetration - HOSE TEST Section 9.0 - AAMA Test Method for Field Hose Test AAMA 501.2-03 - CWCT Standard SITE Test for Water Penetration - SPRAY BAR TEST Section 10.0 - CWCT TN:41 Technical Note No 41 "Site testing for water tightness" - BS EN 13051: 2001 Curtain walling - Water tightness - Site test.	Documented in house Test Method CWCT_TM-01 and CWCT_TM-02
WATERTIGHTNESS LABORATORY TESTING Watertightness: Windows & Doors Watertightness: Curtain Walling & Cladding Components	WATERTIGHTNESS LABORATORY TESTING Watertightness: Windows & Doors Watertightness: Curtain Walling & Cladding Components		EN 1027:2000 Windows and Doors – Water Tightness - Test Method. EN 12208:2000 Windows and Doors – Water Tightness - Classification CWCT Section 6.0 & CWCT Part 3 section 3.4 EN 12155:2000 Curtain Walling – Water Tightness - Test Method. EN 12154- 1999 Curtain Walling – Watertightness– Performance Requirements and Classification.	Documented in house Test Method LAB_TM-03

Mechanical Testing

Category: B

Product categories - Tests	Test detail	Product detail	Range of Measurement	Equipment/Technique	Std. Ref & SOP
1144 Mechanical tests on assemblies - .99 Other assemblies	Anchor Pull Testing - Test Fixings to confirm the holding power of anchors in construction materials.	Anchor Pull Testing - Test Fixings to confirm the holding power of anchors in construction materials by applying a force to fixings to validate the correct installation.	N/A	Hydra Jaws 2000 Pull Tester for testing mechanical anchor fixings	Documented in house Test Method LAB_TM-06
	Procedure for assessing the thermal performance (U-Value) of windows, doors, shutters and curtain wall systems.	Windows, doors, shutters and curtain wall systems	Finite-element thermal analysis software program for steady state heat transfer in two-dimensional objects validated to I.S. EN ISO 10077-2	<p>ISO 10077-1:2017 Thermal performance of windows, doors and shutters - Calculation of thermal transmittance - Part 1: General</p> <p>ISO 10077-2:2017 Thermal performance of windows, doors and shutters - Calculation of thermal transmittance - Part 2: Numerical method for frames</p> <p>BS EN 673:2011 Glass in building. Determination of thermal transmittance (U value). Calculation method</p> <p>ISO 12631:2017 Thermal performance of curtain walling - Calculation of thermal transmittance</p> <p>Irish Building Regulations Technical Guidance Document Part L 2017 (Buildings other than Dwellings) Appendix A – Calculations of U-values &amp; Technical Guidance Document Part L 2019 (Dwellings) Appendix A - Calculations</p>	Documented in house Test Method SUS_TM-03

				of U-values Documented in house Test Method SUS_TM-03	
--	--	--	--	---	--



## BET Test Lab

### Notified Bodies - Labs

EU Directive no. & name -	Irish legislation	Conformity Assessment Procedures (Directive Annex, Modules, System, Decision)	Product & Harmonised Standard	Procedures
Regulation EU/305/2011 Construction products	Decision 99/93/EC	Annex V - Laboratory AVCP System 3	EN14351-1: 2006+A2:2016 Windows And Doors - Product Standard, Performance Characteristics - Part 1: Windows And External Pedestrian Doorsets: Air Permeability Testing, Water Tightness Testing, Resistance to Wind Load Testing & Calculation of Thermal Transmittance	LAB-TM-01B LAB-TM02B Lab-TM03B & SUS-TM03

Mechanical Testing

Category: B

Product categories - Tests	Test detail	Product detail	Range of Measurement	Equipment/Technique	Std. Ref & SOP
1144 Mechanical tests on assemblies - .99 Other assemblies	AIR PERMEABILITY LABORATORY TESTING Air Permeability: Windows & Doors Air Permeability: Curtain Walling & Cladding Components	AIR PERMEABILITY LABORATORY TESTING Air Permeability: Windows & Doors Air Permeability: Curtain Walling & Cladding Components		EN 1026:1999 Windows and Doors - Air Permeability -Test Method. EN 12207:1999 Windows and Doors - Air Permeability - Classification CWCT Section 5.0 & CWCT Part 3 section 3.3 EN 12153-2000 Curtain Walling - Air Permeability-Test Method. EN 12152-1999 Curtain Walling - Air Permeability-Performance Requirements and Classification.	Documented in house Test Method LAB_TM-01
	Building Air Leakage Permeability Test	Building Air Leakage Permeability test Airtightness Testing of:- - Commercial Buildings (TestM-02) T.G.D Part L (Buildings other than Dwellings) fully Compliant Airtightness Testing of:- - Commercial Buildings (TestM-02) T.G.D Part L (Buildings other than Dwellings) fully Compliant - Residential Buildings (TestM-03) T.G.D Part L (Dwellings) fully Compliant	Range of Pressurised Air Flow 0.05m <sup>3</sup> /S to 63.3m <sup>3</sup> /S	based on - BS EN 13829:2000, Part 1, "Determination of air permeability of buildings, fan pressurised methods"  - BS EN ISO:9972 2015, "Thermal performance of buildings — Determination of air permeability of buildings—Fan pressurization method" (Residential & Commercial Buildings)  - ATTMA (Air-tightness Testing and measurement Association) Technical Standard TS 1: July 2007.  - ATTMA Technical Standard L2 (Non-Dwellings) October 2010	Documented in house Test Method 02, 03 and 16 TESTM_02 Airtightness Testing Commercial Buildings  TESTM_03 Airtightness Testing Residential Buildings

			<ul style="list-style-type: none"> <li>- TM 23 of 2002 Testing Buildings for Air Leakage CIBSE (Chartered Institution of Building Services Engineers).</li> <li>- ATTMA Technical Standard L1 (Dwellings) October 2010</li> <li>- ATTMA Technical Standard L1 (Dwellings) September 2016</li> <li>-H.B.N Supplement 1: Hospital Isolation Facilities in Acute Settings Appendix II Acceptance testing of Isolation Suite fully compliant.</li> </ul>	
Dynamic Aero Engine Test Façade Elements including: Curtain Walling Windows & Doors Roof Lights Auto & Manual Opening Vents External Wall Systems Cladding Systems Rainscreen Systems Roof Cladding Systems	Dynamic Aero Engine Test Façade Elements including: Curtain Walling Windows & Doors Roof Lights Auto & Manual Opening Vents External Wall Systems Cladding Systems Rainscreen Systems Roof Cladding Systems	N/A	AAMA 501.1-83 Dynamic Aero Engine – TEST METHOD CWCT Section 7 Standard Test Method for Water Penetration – Dynamic AERO ENGINE TEST	Documented in house Test Method LAB_TM-06
Impact Testing	IMPACT TESTING		<p>CWCT Part 8: Section 8.10 Page 15  CWCT Section 15.0 (Method of Test for Impact Test)  CWCT Section 16.0 (Method of Test for Fragility) Section 16.0 Fragility  ACR[M]001:2014 Test For Non-Fragility of Large Element Roofing Assemblies [Fifth Edition] Technical Note No 67 Supersedes TN 42  Safety and Fragility of Glazed Roofing: Testing and Assessment  Technical Note No 66 Safety and Fragility of Glazed Roofing: Guidance on Specification BS  EN 356:1999 Glass in Building-</p>	Documented in house Test Method LAB_TM-05

				<p>Security Glazing-Testing and Classification of resistance against manual attack</p> <p>Technical Note No 92 Simplified Method for Assessing Glazing in Class 2 Roofs Section 15.0 Impact</p> <p>BS EN 12600:2002 Glass in building- Pendulum test-Impact Test method and classification for flat glass BS EN 8200:1985 Code of practice for- Design of non-loading external vertical enclosures of buildings</p> <p>Technical Note No 65 Thermal Fracture of Glass</p> <p>Technical Note No 75 Supersedes TN52 Impact Performance of Building Envelopes: Guidance on Specification</p> <p>Technical Note No 76 Supersedes TN52 Impact Performance of Building Envelopes: Method for Impact Testing of Cladding Panels</p>	
Performance of Windows and Doors for Weathertightness	Performance Testing of Windows and Doors	<p>AIR TIGHTNESS Class 0 to Class 4</p> <p>WATER TIGHTNESS Class 0 to Class 9A</p> <p>RESISTANCE TO WINDLOAD Class A2 to Class A5</p>	High Pressure Low Flow Centrifugal Fan kit, High Pressure Pump & Deflection Transducers. BS6375-1:2015 Part 1	Documented in house Test Method LAB_TM-03	
Performance Testing and Installation Checks of Residential Ventilation Systems	Residential Ventilation Systems	Air flow range (supply and exhaust): 10 to 550 m3/h and 551 to 850m3/h with calculated compensation	ACIN Flowfinder Mk2 or similar calibrated flowmeter	<p>Documented in house Test Method SUS_TM_01</p> <p>EN 14134:2019 Ventilation for buildings - Performance testing and</p>	

				installation checks of residential ventilation buildings.  Building Regulations Technical Guidance Document F: Ventilation
RESISTANCE TO WIND LOAD LABORATORY TESTING Resistance Due to Wind Loading: WINDOWS & DOORS Resistance Due to Wind Loading: CURTAIN WALLING & CLADDING SYSTEMS	RESISTANCE TO WIND LOAD LABORATORY TESTING Resistance Due to Wind Loading: WINDOWS & DOORS Resistance Due to Wind Loading: CURTAIN WALLING & CLADDING SYSTEMS		EN 12211:2000 Windows and Doors - Resistance to Wind Load Test- Test Method. EN 12210:2000 Windows and Doors - Resistance to Wind Load Test- Classification. CWCT Section 11.0 & CWCT Section 12 EN 12179:2000 Curtain Walling – Resistance to Wind Load Test -Test Method. EN 13116- 2001 Curtain Walling – Resistance to Wind Load - Performance Requirements.	Documented in house Test Method LAB_TM-02
SEISMIC/DIFFERENTIAL MOVEMENT TESTING Vertical & Lateral Seismic/Differential Movement: VERTICAL & LATERAL	SEISMIC/DIFFERENTIAL MOVEMENT TESTING Vertical & Lateral Seismic/Differential Movement: VERTICAL & LATERAL		AAMA 501.4-09 Seismic - LATERAL WIND SWAY-Test Method AAMA 501.7-11 Seismic - VERTICAL WIND SWAY- Test Method CWCT Section 17 Structural Movement Regime.	Documented in house Test Method LAB_TM-04
Slip Resistance Testing	Slip Resistance Testing		EN16165:2021 Determination of slip resistance of pedestrian surfaces - Methods of evaluation BS EN 13036-4:2011 Road and airfield surface characteristics - Test Methods Part 4: Method for Measurement of slip/skid resistance	Documented in house Test Method LAB_TM-07

			of a surface: The Pendulum Test. UK Slip Resistance Guidelines - Test Procedure fully compliant	
Sound Insulation Testing (Acoustic Testing)	Sound Insulation Testing (Acoustic Testing) Technical Guidance Document Part E 2014 Appendix A Test Procedure fully Compliant. Building Regulations (Northern Ireland) 2012. Technical Booklet G Technical Guidance Document TGD-021-5 Acoustic Performance in New Primary & Post Primary School Buidings (1st Edition, February 2013) Revision 1, November 2015		EN 16283-1:2014 Acoustics - Field measurement of sound insulation in buildings and of building elements - Airborne. EN 16283-2:2015 Acoustics - Field measurement of sound insulation in buildings and of building elements - Impact EN140-7:1998 Acoustics - Measurement of sound insulation in buildings and of building elements - Impact En 140-4:1998 Acoustics - Field measurement of sound insulation in buildings and of building elements - Airborne. En 717-1:2013 Acoustics Rating of sound insulation in buildings and of building elements - Airborne En 717-2:2013 Acoustics Rating of sound insulation in building and of building elements - Impact En 3382-2-2008 Acoustics - Measurement of room acoustic parameters - reverberation in ordinary rooms. EN ISO 354:2003 Acoustics - measurement of sound absorption in a reverberation room	Documented in house Test Method AC_TM_01
Water penetration – Hose Test	Weather Testing Water Penetration-Hose Test Water Penetration -Spray Bar Test		CWCT Standard Test Method for Water Penetration - HOSE TEST Section 9.0 - AAMA Test Method for Field Hose Test AAMA 501.2-03 - CWCT Standard SITE Test for Water Penetration - SPRAY BAR TEST Section 10.0 - CWCT TN:41 Technical Note No 41 "Site testing for water tightness"	Documented in house Test Method CWCT_TM-01 and CWCT_TM-02

				- BS En 13051: 2001 Curtain walling - Water tightness - Site test.	
	<p>WATERTIGHTNESS LABORATORY TESTING</p> <p>Watertightness: Windows &amp; Doors</p> <p>Watertightness: Curtain Walling &amp; Cladding Components</p>	<p>WATERTIGHTNESS LABORATORY TESTING</p> <p>Watertightness: Windows &amp; Doors</p> <p>Watertightness: Curtain Walling &amp; Cladding Components</p>		<p>EN 1027:2000 Windows and Doors – Water Tightness - Test Method.</p> <p>EN 12208:2000 Windows and Doors – Water Tightness - Classification</p> <p>CWCT Section 6.0 &amp; CWCT Part 3 section 3.4 EN</p> <p>12155:2000 Curtain Walling – Water Tightness - Test Method.</p> <p>EN 12154- 1999 Curtain Walling – Watertightness– Performance Requirements and Classification.</p>	<p>Documented in house Test Method</p> <p>LAB_TM-03</p>