## 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@betechnologies.ie
Website http://www.betechnologies.ie

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>&</sup>lt;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
tests on	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		- Air Permeability -Test Method. EN 12207:1999 Windows and Doors	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	Engine – TEST METHOD CWCT Section 7 Standard Test	Documented in house Test Method LAB_TM-06

Impact Testing	IMPACT TESTING	CWCT Part 8: Section 8.10 Page 15	Documented in
impact resulty	IIIII AOT ILOTING	CWCT Fall 6. Section 6.10 Fage 13 CWCT Section 15.0 (Method of Test	
			Method
		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	
		impact resting of Clauding Panels	
	l l		

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 m3/h and 551 to 850m3/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
Performance testing of Windows and Doors	Doors - Hard Body Impact	Security Testing of Doors	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 950:1999 BS EN 1192:2000
	Doors - Load bearing capacity of safety devices	Security Testing of Doors	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 948:1999
	Doors - Operating Forces	Security Testing of Doors	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 12046- 2:2000 BS EN 12217:2003

	Doors - Soft and Heavy Body Impact		Security Testing of Doors	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 13049:2003 BS EN 949:1999 BS EN 1192:2000
	Doors - Static Torsion	Do	Security Testing of Doors	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 948:1999 BS EN 1192:2000
	Doors - Vertical Load	Do	Security Testing of Doors	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 947:1999 BS EN 1192:2000
	Windows - Load bearing capa of safety devices		Security Testing of Doors and Windows	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 14609:2004
	Windows - Operating Forces	Wir	Security Testing of Doors and Windows	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 12046- 1:2003
	Windows - Racking	Wir	Security Testing of Doors and Windows	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 14608:2004
	Windows - Static Torsion	Wir	Security Testing of Doors and Windows	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 14609:2004
and Doors DOORSETS - single and double lead - single and double swarphinged - sliding (single and many pivot	Infill medium removal - manual test Infill medium removal - mechanical test Manual cutting test Mechanical loading test Manual check test And multi- and multi- Soft body impact test Hard body impact test Security hardware and cylinder	Infi TS and double leaf and double swing aningle and multi-track) Infi - m Ma Ma Idding (single and multi- Hai Securithout integral side	Security Testing of Doors and Windows	PAS24 -Security Testing of Windows and Doors	PAS24: 2022

	- Part 1 & Part 2			
Performance testing of Windows and Doors EXTERNAL DOORSETS - single and double leaf - single swing - hinged - sliding - folding sliding - inward and outward opening - with or without integral side panels and fanlights	Manipulation test Infill medium removal - manual test Infill medium removal - mechanical test Manual cutting test Mechanical loading test Manual check test Soft body impact test Hard body impact test Security hardware and cylinder test - Part 1 - Part 2 Letter plate fixings	Security Testing of Doors and Windows	PAS24 -Security Testing of Windows and Doors	PAS24: 2022
Performance testing of Windows and Doors WINDOWS: SINGULAR and MULTILIGHT - top hung, side hung, bottom hung, butt hinged - top and side hung projected - top hung and side hung fully reversible - tilt and turn and turn and tilt - vertical and horizontal sliding - fixed and fixed casements (dummy vents) - parallel opening - double opening (French windows) - vertical and horizontal pivot	Manipulation test Infill medium removal - manual test Infill medium removal - mechanical test Mechanical loading test Manual check test	Security Testing of Doors and Windows	PAS24 -Security Testing of Windows and Doors	PAS24:2022
RESISTANCE TO WIND LOAD LABORATORY TESTING Resistance Due to Wind Loading: WINDOWS & DOORS	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 –	house Test Method

Name of the second seco				
			Resistance to Wind Load Test -Test Method. EN 13116- 2001 Curtain Walling – Resistance to Wind Load - Performance Requirements.	
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 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 brid at junctions around oper SUS_TM_02	dging and nings
Water penetration – Test	Spray Bar 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.	-01
WATERTIGHTNES LABORATORY TES Watertightness: Windows & Doors Watertightness: Curtain Walling & C Components	LABORATORY TESTING Watertightness: Windows & Doors Watertightness:	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.	

## **BET Test Lab**

## **Mechanical Testing**

Category: B

Product categories - Tests	Test detail	Product detail	Range of Measurement	Equipment/Technique	Std. Ref & SOP
tests on assemblies99 Other	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
	Performance testing of Windows and Doors	Doors - Hard Body Impact	Security Testing of Doors	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 950:1999 BS EN 1192:2000
		Doors - Load bearing capacity of safety devices	Security Testing of Doors	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 948:1999
		Doors - Operating Forces	Security Testing of Doors	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 12046- 2:2000 BS EN 12217:2003
		Doors - Soft and Heavy Body Impact	Security Testing of Doors	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 13049:2003 BS EN 949:1999 BS EN 1192:2000
		Doors - Static Torsion	Security Testing of Doors	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 948:1999 BS EN 1192:2000

	Doors - Vertical Load	Security Testing of Doors	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 947:1999 BS EN 1192:2000
	Windows - Load bearing capacity of safety devices	Security Testing of Windows	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 14609:2004
	Windows - Operating Forces	Security Testing of Windows	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 12046- 1:2003
	Windows - Racking	Security Testing of Windows	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 14608:2004
	Windows - Static Torsion	Security Testing of Windows	BS6375 - Security Testing of Windows and Doors	BS 6375-2:2009 BS EN 14609:2004
Performance testing of Windows and Doors DOORSETS - single and double leaf - single and double swing - hinged - sliding (single and multi-track) - pivot - folding sliding (single and multi-track) - stable - with or without integral side panels and fanlights	Manipulation test Infill medium removal - manual test Infill medium removal - mechanical test Manual cutting test Mechanical loading test Manual check test Soft body impact test Hard body impact test Security hardware and cylinder test - Part 1 & Part 2	Security Testing of Doors and Windows	PAS24 -Security Testing of Windows and Doors	PAS24: 2022
Performance testing of Windows and Doors EXTERNAL DOORSETS - single and double leaf - single swing - hinged - sliding - folding sliding - inward and outward opening - with or without integral side panels and fanlights	Infill medium removal - mechanical test Manual cutting test Mechanical loading test Manual check test Soft body impact test Hard body impact test Security hardware and	Security Testing of Doors and Windows	PAS24 -Security Testing of Windows and Doors	PAS24: 2022

	- Part 1 - Part 2 Letter plate fixings			
Performance testing of Windows and Doors WINDOWS: SINGULAR and MULTILIGHT - top hung, side hung, bottom hung, butt hinged - top and side hung projected - top hung and side hung fully reversible - tilt and turn and turn and tilt - vertical and horizontal sliding - fixed and fixed casements (dummy vents) - parallel opening - double opening (French windows) - vertical and horizontal pivot	Manual check test	Security Testing of Doors and Windows	PAS24 -Security Testing of Windows and Doors	PAS24:2022
Procedure for assessing the thermal performance (U-Value) of windows, doors, shutters and curtain wall systems.	Windows, doors, shutters and curtain wall systems	, ,		Documented in house Test Method SUS_TM- 03

	Calculation of thermal transmittance
	Irish Building Regulations Technical Guidance Document Part L 2017 (Buildings other than Dwellings) Appendix A – Calculations of U-values & Technical Guidance Document Part L 2019 (Dwellings) Appendix A - Calculations 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
- U	Decision 99/93/EC		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

## **Head Office**

## **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 0.05m3/S to 63.3m3/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

			- TM 23 of 2002 Testing Buildings for Air Leakage CIBSE (Chartered Institution of Building Services Engineers).  - ATTMA Technical Standard L1 (Dwellings) October 2010 - ATTMA Technical Standard L1 (Dwellings) September 2016 -H.B.N Supplement 1: Hospital Isolation Facilities in Acute Settings Appendix II Acceptance testing of Isolation Suite fully compliant.	
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	CWCT Section 7 Standard Test	Documented in house Test Method LAB_TM-06
Impact Testing	IMPACT TESTING			

	Performance of Windows and Doors for Weathertightness	Performance Testing of Windows and Doors		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 GlassTechnical 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  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
Ir	Performance Testing and nstallation Checks of Residential Pentilation Systsems	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	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 - Performance Requirements.	house Test Method
SEISMIC/DIFFERENTIAL MOVEMENT TESTING Vertical & Lateral Seismic/Differential Movement: VERTICAL & LATERAL	SEISMIC/DIFFERENTIAL MOVEMENT TESTING Vertical & Lateral Seismic/Differential Movement: VERTICAL & LATERAL	WIND SWAY-Test Method AAMA 501.7-11 Seismic - VERTICAL	Documented in house Test Method LAB_TM-04
Slip Resistance Testing	Slip Resistance Testing	·	Documented in house Test Method LAB_TM-07

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		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	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.
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.