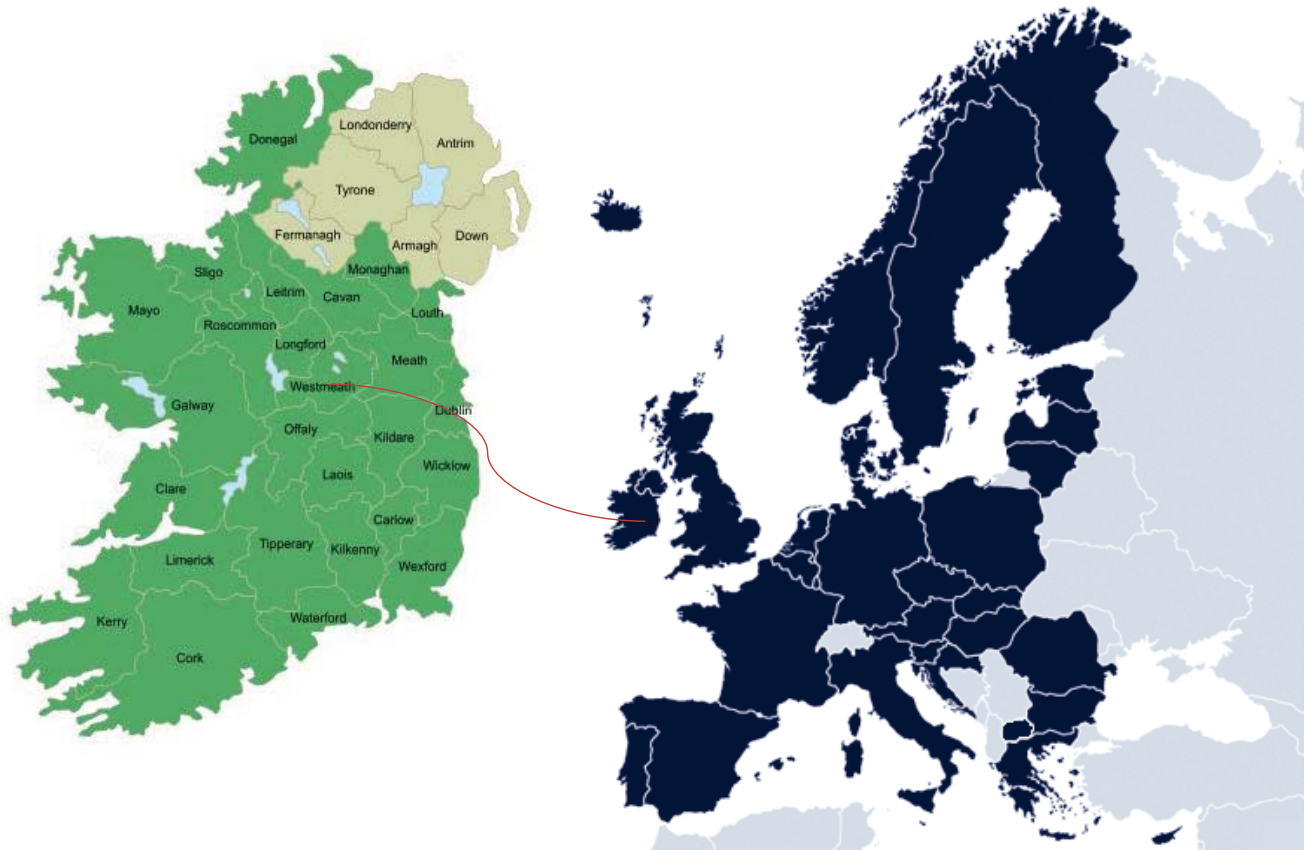


Webinar, 20th November 2014 – Airtightness testing Part 3: Status & trends in competent tester schemes in Denmark, Ireland and Sweden

Mark A. Shirley, 2eva.ie

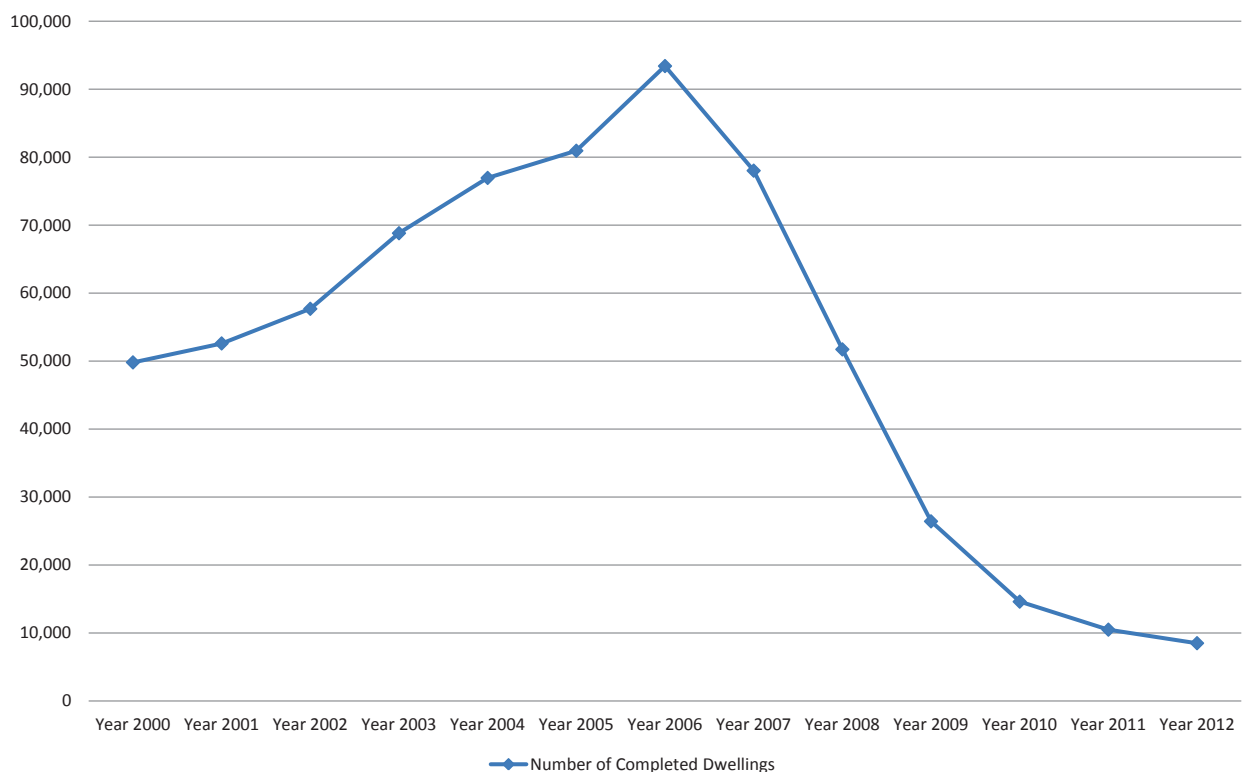


The National Building Regulations in Ireland are administered by the Department of Environment, Community and Development who through the Planning Standards section devise and implement the Building Regulations.

The Republic of Ireland is a relatively small island nation of 4.6 million persons and the Building Regulations are set at a National level with no ability for regional variations.

Along with the rest of our economy the Construction Industry collapsed in 2007/08 - but due the over-reliance at that time on Construction the industry was hit very badly.

Number of Completed Dwellings

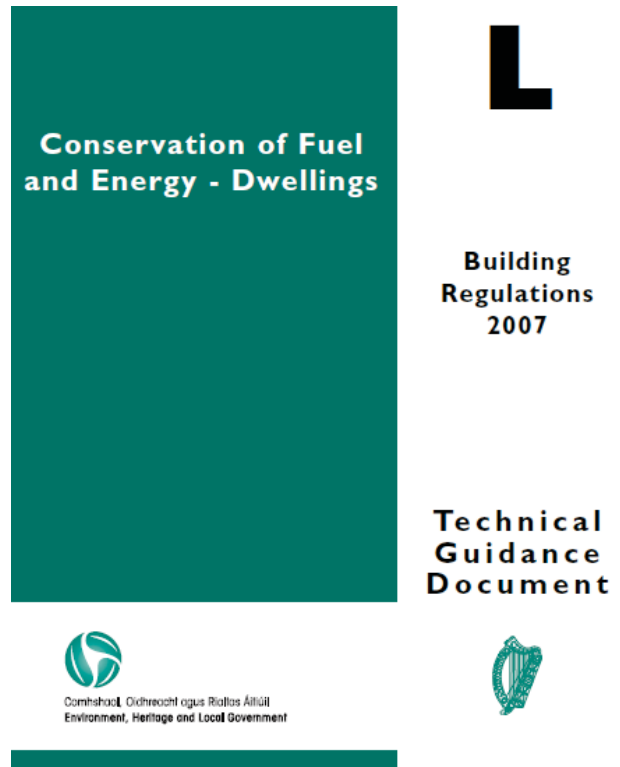


The authorities have since 2007 significantly improved the Building Regulations across all Parts which has coincided with the collapse of the Industry.

This has included recognition of Ireland's obligations under various EU laws including the EPBD and NZEBs.

It is part of a more than 10 year process towards 2020.

Air tightness up to 2008 was an aspiration but became mandatory with the 2008 Building Regulations and is covered under Part (L) Conservation of Fuel & Energy - Dwellings



The 2008 regulations set

'a performance level of $10\text{m}^3/(\text{h}\cdot\text{m}^2)$ represents a reasonable upper limit for air permeability'

Therefore the air permeability rate (q_{50}) is the National Standard.

Table 4 Number of pressure tests per dwelling type	
Number of units	Number of tests
4 or less	One test
Greater than 4, but equal or less than 40	Two tests
Greater than 40, but equal or less than 100	At least 5% of the dwelling type
More than 100	
(a) where the first five tests achieve the design air permeability	At least 2% (for dwellings in excess of first 100 units)
(b) where one or more of first five tests do not achieve the design air permeability	At least 5% of units, until 5 successful consecutive tests are achieved, 2% thereafter

All dwellings in Ireland now must
be built to the
2011 Building Regulations.

*‘a performance level of
7 m³/(h.m²) represents a reasonable
upper limit for air permeability’*

‘Where an air permeability value better than the backstop value of $7 \text{ m}^3/(\text{h.m}^2)$ at 50 Pascals is claimed for use in DEAP, a test should be performed on each dwelling claiming that value’

In other words for the EPBD calculation if the basis of the it is better than $7 \text{ m}^3/(\text{h.m}^2)$ then each and every dwelling must be tested.

There are 2 other important points relevant to air tightness in the Regulations:

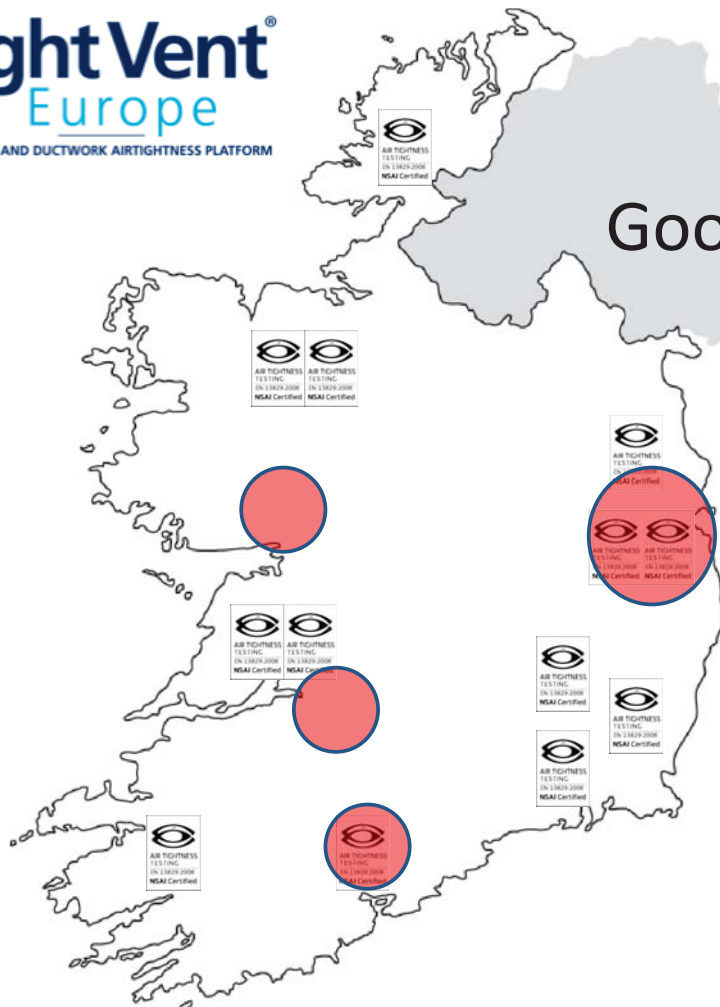
‘The tests should be carried out by a person certified by an independent third party to carry out this work, e.g. National Standards Authority of Ireland certified or equivalent.’

Register of Airtight Testers

I.S. EN 13829:2000 - Thermal Performance of Buildings - Determination of Air Permeability of Domestic Buildings - Fan Pressurization Method.

Company Name	County	File Number	Certified Air Tightness Tester Company Contact
Greenbuild Energy Rating & Building Information T/A Greenbuild	Co. Wexford	1.91.003	Gavin O'Sé contact@greenbuild.ie
2Eva.ie	Co. Carlow	1.91.006	Mark A. Shirley mas@2eva.ie
Bercerts.ie	Co. Meath	1.91.007	Joe Kearney joseph@bercerts.ie
Annaholty Energy and Engineering Service	Co. Clare	1.91.008	John Hickey annaholtyenergy@yahoo.ie
Navitus Ltd	Dublin 15	1.91.009	Oliver Walsh ow@navitus.ie
Irish Energy Assessors	Co. Sligo	1.91.010	Martin Cooney info@irishenergyassessors.com
Clean Energy Ireland Ltd	Co. Cork	1.91.011	Con Dempsey Con@cleanenergyireland.ie
Newtown Energy	Co. Wexford	1.91.012	Seamus McQuaid info@newtownenergy.ie
Gilroy Energy Services	Co. Sligo	1.91.013	Donal Gilroy donal@gilroyenergy.ie
Sheehan Energy Services	Co. Kerry	1.91.017	Bernard Sheehan bernard@airtightnesstesting.ie
Evolved Energy Solutions Ltd	Co. Dublin	1.91.019	Brian Sweeney brian@evolvedenergy.ie
ABUILD	Co. Donegal	1.91.022	John Curran info@abuild.ie
2EVA.IE	Co. Clare	1.91.023	Eoin McGann emg@2eva.ie

Competent Tester Scheme in Ireland – currently a total of 13 registered testers.



Good geographical distribution



Fees and further information

For further information or an application form for on this scheme please contact patricia.walsh@nsai.ie

Certified Air Tester Scheme - Registration Fees			
	Initial Application Fee ¹	Annual Registration Fee ²	Initial Audit / Annual Audit
Single Fan	Waived	€440	€1,100
Add additional Single Fan registered tester from the same company ³	Waived	-	€300 ⁴
Single & Multi Fan	Waived	€440	€1,650 ⁵ (€1,100+€550)
Adding Multi Fan to Single Fan Registration	Waived	-	€1,100 (or €550 ⁶)

Continued registration by new testers

Core group of long standing, professionals testers

Inclusion of the ability to tester commercial buildings using a single fan

Multifan testing

Competent Testers Association

QUESTIONS?