

## Updates on Building Airtightness in Germany

Fachverband Luftdichtheit im Bauwesen e.V.  
(Airtightness in buildings association)

Oliver Solcher  
Storkower Strasse 158, 10407 Berlin  
solcher@flib.de  
www.flib.de, www.luftdicht.info



1

### Building Energy Act

#### § 13 tightness

A building is to be erected in such a way that the heat-transferring surface including the joints **is permanently sealed airtight in accordance with the recognized rules of technology.**

#### § 26 Testing the tightness of a building

If the airtightness of a building to be constructed **is tested** before its completion **in accordance with DIN EN ISO 9972: 2018-12 Annex NA, the measured net air exchange rate may be used when determining the annual primary energy demand** in accordance with Section 20 (1) or (2) and in accordance with Section 21 Paragraphs 1 and 2 in accordance with Paragraphs 2 to 5 as the air exchange rate.

**No requirements regarding airtightness for refurbishments**

internal volume  
 $\leq 1.500 \text{ m}^3$

without  
mechanical  
ventilation

$$n_{L50} \leq 3.0 \text{ 1/h}$$

with  
mechanical  
ventilation

$$n_{L50} \leq 1.5 \text{ 1/h}$$

internal volume  
 $> 1.500 \text{ m}^3$

without  
mechanical  
ventilation

$$q_{E50} \leq 4.5 \text{ m}^3/(\text{h m}^2)$$

with  
mechanical  
ventilation

$$q_{E50} \leq 2.5 \text{ m}^3/(\text{h m}^2)$$

2

### Federal funding for efficient buildings

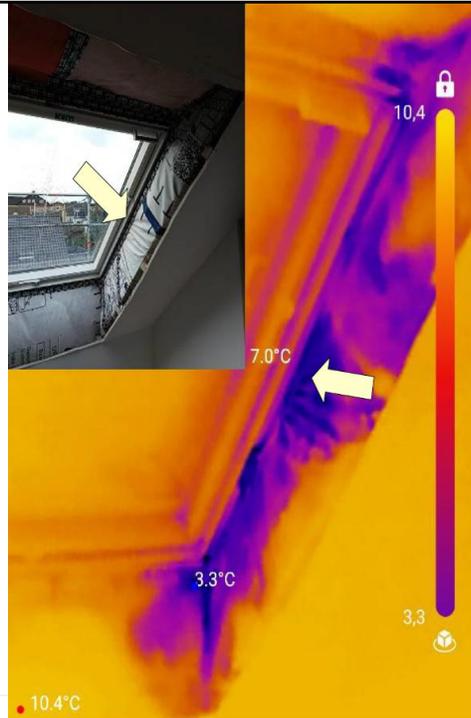
#### no mandatory air tightness test

**mandatory only** if test is used for reduction of airing heat loss in **EP-calculation** and with **EE-Class funding** (renewal energy)

At residential and non-residential buildings, attention must be paid to an **airtight design with reduced thermal bridges for all measures.**

Energy consultant must give an **air tightness concept**

**Evidence** for the thermal bridge-reduced and **airtight execution**



### Coalition agreement of government 2025

#### Energy-efficient construction and refurbishment

**We will continue to promote energy-efficient construction and refurbishment as a key contribution to the energy transition** and want to ensure that high-quality, energy-saving housing remains affordable for everyone. The economic efficiency requirement, openness to technology and the renunciation of forced refurbishment remain fixed cornerstones of the energy concept.

**We will not tighten the current regulatory requirements and will evaluate their effects.**

**We will continue to support new technologies for even greater energy efficiency in buildings** and for increasing the generation and use of renewable energies in the building sector. **We will continue and bundle state funding for energy counselling in the building sector.**



Ergebnis Vor Ab Prüfung (1 Punkt Messung)  
nL<sub>50 1Punkt</sub> ≈ 13 1/h

Ergebnis Abschlussmessung  
nL<sub>50</sub> = 2,2 1/h  
Verbesserung um 83 %

## DIN 4108-7:2026-04 Airtightness of buildings

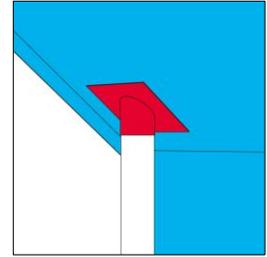
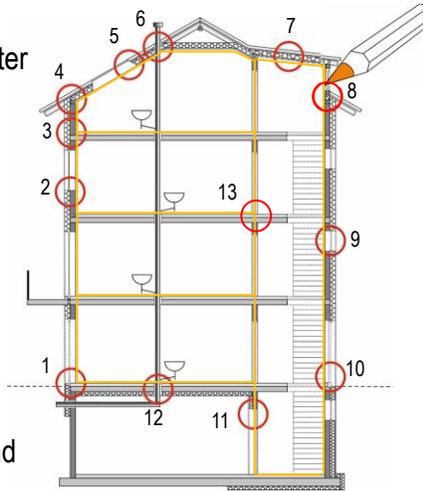
Publication April 2026

**Airtightness concept** as new chapter

- Location of **air tightness layer**
- Rough description of the **connections**
- **materials** of air tightness layer
- planned **quality assurance measures**

**Quotable air tightness concept**

Standard gives **further information** on airtight materials, connections and examples for airtight design and execution



The plumbing pipe is connected to the airtight layer (membrane, sheet material, etc.).

A gap of about one hand's width is left between the pipe and adjacent walls or structural elements.

A smooth-walled pipe is used in the penetration area.

Figure 4 — Example of a rough description of the airtight design of connection detail 6 from Figure 2

5

## WTA Guidelines have been published 2026-01

**Airtightness of (existing) buildings –**

6-9: General principles of planning

6-10: Detailed planning and execution

6-11: Measuring procedure

- Measuring time 1: **Before the refurbishment** - as-built analysis
- Measuring time 2: **During the refurbishment** - execution check
- Measuring time 3: **After the refurbishment** - final measurement



6

### Goals of the FLiB

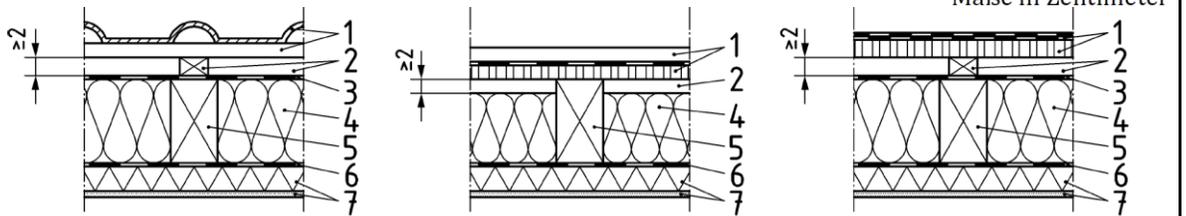
Support of **air tightness testers, planners and craftsmen**

Main focus is currently the **roof refurbishment**

- good example for **trades interface**
- airtightness is **obligatory**
- Airtightness test during construction as **quality measure**



### Workshop to roof refurbishment



## Workshop to roof refurbishment

Energy consultants  
are responsible for the air  
tightness concept

Craftsmen  
are responsible for the  
building connection

**Who plans the building  
connection?**



## What must happen?

**Air tightness measurement during construction must get mandatory**

### Goals

Identify and easily seal existing  
leaks

Has the airtight connection to  
neighbouring trades been made?

Leaks can be detected and  
visualised using the test pressure.

Leaks can be repaired  
immediately

<p><b>Fensteranschluss</b> „Am oberen und unteren Abschluss von der Blende des Fensters im Bereich der Emporen in Kind 1 und 2 kam es zu Einströmungen.“</p>		<p><b>Durchdringungen</b> „Anschluss mit dem Klebeband im Bereich der Kabeldurchführung ist undicht.“</p>	
<p><b>Fensteranschluss</b> „In den unteren Fenster-Eckbereichen konnten Einströmungen nachgewiesen werden: am Abschluss vom Kompriband bzw. an der Proflluft.“</p>		<p><b>Durchdringungen</b> „Luftdurchgang über Wanddurchbruch zum angrenzenden Technikkur (Luftverbund vorhanden) Schließen der Wandöffnung erforderlich (z.B. Kabelschott)“</p>	
<p><b>Fensteranschluss</b> „Anschlüsse Rahmen Wand mittels Kompriband An zahlreichen Stellen gab es direkte Fehlstellen an der Abdichtung mittels des eingesetzten Kompribandes, wie hier im Eckanschluss.“</p>		<p><b>Dachflächenfenster</b> „Anschluss umlaufend – gelöste Abklebung“</p>	

**Research report on leaks:** [https://www.flib.de/publikationen/12\\_forschungsbericht/FLiB\\_Forschungsbericht\\_2016.pdf](https://www.flib.de/publikationen/12_forschungsbericht/FLiB_Forschungsbericht_2016.pdf)



**Dicht + Gut**

**Thank you for the attention**

Oliver Solcher  
Fachverband Luftdichtheit im  
Bauwesen e.V.  
Storkower Strasse 158, 10407 Berlin  
solcher@flib.de  
www.flib.de, www.luftdicht.info

Folie 11

Information under  
[www.flib.de](http://www.flib.de)  
[www.luftdicht.info](http://www.luftdicht.info)



Der Workshop ist eine Kooperation von:



passivehouse.com



www.gih.de/nrw



**FLiB-Workshop:**  
**„Wie die Dach-  
modernisierung gelingt“**

**Qualitätssicherung als Bindeglied zwischen  
Planung, Beratung und Ausführung**

**45127 Essen**  
**Donnerstag, 23. April 2026**  
Haus der Technik

