

# DIN EN 17990:2025-12 (E)

Thermal insulation and energy economy in buildings - Method to determine the durability of bondings with adhesive tapes and adhesive masses for the establishment of airtight layers under climatic conditions representative for indoor environments

---

| <b>Contents</b>   |   | <b>Page</b> |
|---|---|-------------|
| European foreword .....   |   | 4           |
| <b>1</b>  | <b>Scope .....</b>  | <b>5</b>    |
| <b>2</b>  | <b>Normative references .....</b>   | <b>5</b>    |
| <b>3</b>  | <b>Terms and definitions .....</b>  | <b>6</b>    |
| <b>4</b>  | <b>Symbols and units .....</b>  | <b>7</b>    |
| <b>5</b>  | <b>Testing .....</b>  | <b>7</b>    |
| 5.1   | General .....   | 7           |
| 5.2   | Test substrate .....  | 8           |
| 5.2.1   | Reference substrate .....   | 8           |
| 5.2.2   | Product combinations .....  | 8           |
| 5.3   | Climatic boundary conditions .....  | 8           |
| 5.4   | Apparatus .....   | 8           |
| 5.4.1   | Pressure roller and support .....   | 8           |
| 5.4.2   | Device for cutting sample strips (test pieces) .....  | 9           |
| 5.4.3   | Tensile testing machine .....   | 9           |
| 5.4.4   | Climatic chamber for artificial ageing .....  | 9           |
| 5.4.5   | Conditioned room .....  | 9           |
| 5.4.6   | Heating cabinet .....   | 9           |
| 5.5   | Preparation for testing .....   | 9           |
| 5.5.1   | General .....   | 9           |
| 5.5.2   | Sample preparation for the test of single-sided and double-sided adhesive tapes .....   | 10          |
| 5.5.3   | Sample preparation for the test of adhesive masses .....  | 12          |
| 5.5.4   | Tables regarding sample preparation, conditioning and test procedures .....   | 13          |
| 5.6   | Procedure .....   | 15          |
| 5.6.1   | General .....   | 15          |
| 5.6.2   | Execution of T-peel tests (adhesive tapes) .....  | 15          |
| 5.6.3   | Execution of 180° peel test (adhesive masses) .....   | 17          |
| 5.6.4   | Static peel test .....  | 18          |
| 5.7   | Evaluation of tests .....   | 20          |
| 5.7.1   | Determination of maximum and mean peel strength for the T-peel test and the 180° peel test according to 5.6.2 and 5.6.3 ..... | 20          |
| 5.7.2   | Evaluation of static peel test .....  | 22          |
| <b>6</b>  | <b>Test report .....</b>  | <b>22</b>   |
| <b>Annex A (normative) Detailed description of the sample preparation for adhesive masses .....</b>               |   | <b>23</b>   |
| <b>Annex B (informative) Detailed description of the sample preparation for double sided adhesive tapes .....</b> |   | <b>25</b>   |
| <b>B.1</b>  | <b>General preparation for double sided adhesive tapes .....</b>  | <b>25</b>   |
| <b>B.2</b>  | <b>Subsequent procedure for membranes .....</b>   | <b>26</b>   |
| <b>B.3</b>  | <b>Subsequent procedure for beech wood substrates .....</b>   | <b>27</b>   |
| <b>Bibliography .....</b>   |   | <b>28</b>   |