

# DIN EN 13859-1:2014-07 (E)

## Flexible sheets for waterproofing - Definitions and characteristics of underlays - Part 1: Underlays for discontinuous roofing

---

| <b>Contents</b>  |  | <b>Page</b> |
|--|--|-------------|
| Foreword .....   |  | 4           |
| 1  | Scope .....  | 5           |
| 2  | Normative references .....   | 5           |
| 3  | Terms and definitions .....  | 6           |
| 4  | Product characteristics .....  | 7           |
| 4.1  | General .....  | 7           |
| 4.2  | Dimensions, straightness and mass per unit area .....                    | 7           |
| 4.3  | Application related characteristics .....                                | 7           |
| 4.4  | Dangerous substances .....   | 8           |
| 5  | Testing .....  | 9           |
| 5.1  | Sampling .....   | 9           |
| 5.2  | Test methods .....   | 9           |
| 6  | Assessment and verification of the constancy of performance - AVCP ..... | 11          |
| 6.1  | General .....  | 11          |
| 6.2  | Type testing .....   | 11          |
| 6.3  | Factory production control (FPC) .....                                   | 12          |
| 7  | Product data sheet .....   | 16          |
| 8  | Marking, labelling and packaging .....                                   | 16          |
| Annex A (normative) Determination of tensile properties .....          |  | 18          |
| A.1  | General .....  | 18          |
| A.2  | Apparatus .....  | 18          |
| A.3  | Sampling .....   | 18          |
| A.4  | Preparation of test specimens .....                                      | 18          |
| A.5  | Procedure .....  | 18          |
| A.6  | Expression and evaluation of results .....                               | 19          |
| A.7  | Test report .....  | 20          |
| Annex B (normative) Determination of resistance to tearing .....       |  | 21          |
| B.1  | General .....  | 21          |
| B.2  | Apparatus .....  | 21          |
| B.3  | Sampling .....   | 21          |
| B.4  | Preparation of test specimens .....                                      | 21          |
| B.5  | Procedure .....  | 21          |
| B.6  | Expression and evaluation of results .....                               | 22          |
| B.7  | Test report .....  | 22          |
| Annex C (normative) Artificial ageing by exposure to UV and heat ..... |  | 23          |
| C.1  | General .....  | 23          |
| C.2  | Principle .....  | 23          |

|  |   |           |
|--|---|-----------|
| C.3  | Apparatus .....                         | 23        |
| C.4  | Preparation of test specimens .....     | 23        |
| C.5  | Procedure .....                         | 24        |
| C.6  | Expression of results .....             | 24        |
| C.7  | Test report .....                       | 24        |
| <b>Annex D (normative) Product type determination and frequencies of testing for factory production control .....</b>                        |   | <b>26</b> |
| <b>Annex E (informative) Example of a product data sheet .....</b>   |   | <b>28</b> |
| <b>Annex F (normative) Determination of the watertightness of seams .....</b>  |   | <b>30</b> |
| F.1  | General .....                           | 30        |
| F.2  | Terms and definitions .....             | 30        |
| F.3  | Procedure .....                         | 30        |
| F.4  | Apparatus .....                         | 30        |
| F.5  | Preparation of the test specimens ..... | 30        |
| F.6  | Procedure .....                         | 31        |
| F.7  | Evaluation .....                        | 31        |
| F.8  | Test report .....                       | 31        |
| <b>Annex ZA (informative) Clauses of this European Standard addressing provisions of the EU Construction Products Regulation (CPR) .....</b> |   | <b>32</b> |
| <b>ZA.1 Scope and relevant characteristics .....</b>   |   | <b>32</b> |
| <b>ZA.2 Procedures for AVPC of the flexible sheets for underlays .....</b>   |   | <b>33</b> |
| <b>ZA.2.1 Systems of AVPC .....</b>  |   | <b>33</b> |
| <b>ZA.2.2 Declaration of performance (DoP) .....</b>   |   | <b>35</b> |
| <b>ZA.2.2.1 General .....</b>  |   | <b>35</b> |
| <b>ZA.2.2.2 Content .....</b>  |   | <b>36</b> |
| <b>ZA.2.2.3 Example of DoP .....</b>   |   | <b>37</b> |
| <b>ZA.3 CE marking and labelling .....</b>   |   | <b>39</b> |
| <b>Bibliography .....</b>  |   | <b>42</b> |