

# DIN EN 1013:2015-03 (E)

Light transmitting single skin profiled plastics sheets for internal and external roofs, walls and ceilings - Requirements and test methods (includes Amendment A1:2014)

| Contents   | Page |
|--|------|
| Foreword .....   | 4    |
| Introduction .....   | 5    |
| 1 Scope .....  | 6    |
| 2 Normative references .....   | 6    |
| 3 Terms and definitions .....  | 7    |
| 4 Symbols and abbreviations .....  | 8    |
| 4.1 Symbols .....  | 8    |
| 4.2 Abbreviations .....  | 8    |
| 5 Requirements .....   | 8    |
| 5.1 Visual appearance .....  | 8    |
| 5.2 Dimensional tolerances and mass per square metre .....                             | 8    |
| 5.3 Light transmission .....   | 9    |
| 5.4 Flexural/tensile strength .....  | 9    |
| 5.5 Durability .....   | 10   |
| 5.6 Thermal ageing resistance (only for thermoplastic sheets) .....                    | 12   |
| 5.7 Longitudinal reversion and profile retention (only for thermoplastic sheets) ..... | 12   |
| 5.8 Impact resistance .....  | 12   |
| 5.9 Resistance to deflection (mechanical resistance) .....                             | 12   |
| 5.10 Water vapour permeability .....   | 13   |
| 5.11 Water/air permeability .....  | 13   |
| 5.12 Linear thermal expansion .....  | 13   |
| 5.13 Reaction to fire .....  | 14   |
| 5.14 External fire performance .....   | 14   |
| 5.15 Glass-fibre content (only for glass-fibre reinforced sheets) .....                | 15   |
| 5.16 Barcol hardness (only for glass-fibre reinforced sheets) .....                    | 15   |
| 5.17 Presence of protective coating .....  | 15   |
| 5.18 Adhesion of surface coating (only for glass-fibre reinforced sheets) .....        | 16   |
| 5.19 Resistance to fixings .....   | 16   |
| 5.20 Dangerous substances .....  | 16   |
| 6 Test methods .....   | 16   |
| 6.1 Dimensional tolerances .....   | 16   |
| 6.2 Light transmission .....   | 20   |
| 6.3 yellowness index .....   | 20   |
| 6.4 Flexural/tensile strength .....  | 21   |
| 6.5 Thermal ageing resistance .....  | 21   |
| 6.6 Longitudinal reversion and profile retention .....                                 | 22   |
| 6.7 Small hard body impact resistance .....  | 24   |
| 6.8 Resistance to deflection .....   | 26   |
| 6.9 Reaction to fire .....   | 29   |
| 6.10 External fire performance .....   | 31   |
| 6.11 Glass-fibre content .....   | 32   |
| 6.12 Barcol hardness .....   | 32   |
| 6.13 Presence of protective coating .....  | 32   |
| 6.14 Adhesion of surface coating .....   | 35   |

|     |  |    |
|-----|--|----|
| 7   | <b>Assessment and verification of constancy of performance - AVCP .....</b>  | 36 |
| 7.1 | <b>General .....</b>   | 36 |
| 7.2 | <b>Product type determination .....</b>  | 36 |
| 7.3 | <b>Factory production control (FPC) .....</b>  | 38 |
| 7.4 | <b>Initial inspection of factory and of FPC .....</b>  | 40 |
| 7.5 | <b>Continuous surveillance of FPC .....</b>  | 40 |
| 8   | <b>Marking and labelling .....</b>   | 41 |
|     | <b>Annex A (normative) Profile terminology .....</b>   | 42 |
|     | <b>Annex B (normative) Glass content by density of laminate .....</b>  | 45 |
|     | <b>Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation .....</b> | 47 |
|     | <b>Bibliography .....</b>  | 58 |