

# ISO 23930:2023-01 (E)

## Fibre-reinforced plastic composites - Full-section compressive test for pultruded profiles

---

| <b>Contents</b>       |   | <b>Page</b> |
|-----------------------|---|-------------|
| Foreword .....        |   | iv          |
| Introduction .....    |   | v           |
| 1                     | Scope .....   | 1           |
| 2                     | Normative references .....  | 1           |
| 3                     | Terms and definitions .....   | 1           |
| 4                     | Principle .....   | 2           |
| 5                     | Apparatus .....   | 3           |
| 5.1                   | Test machine .....  | 3           |
| 5.2                   | Compression platens .....   | 3           |
| 5.3                   | Strain indicator .....  | 3           |
| 6                     | Specimens .....   | 4           |
| 6.1                   | Geometry .....  | 4           |
| 6.2                   | Preparation of specimens .....  | 4           |
| 6.3                   | Number of test specimens .....  | 4           |
| 6.4                   | Sampling of test specimens .....  | 4           |
| 6.5                   | Conditioning atmosphere .....   | 4           |
| 7                     | Test procedure .....  | 5           |
| 7.1                   | Test atmosphere .....   | 5           |
| 7.2                   | Measurement of initial dimensions of test specimen .....                | 5           |
| 7.3                   | Test speed .....  | 5           |
| 8                     | Calculation and expression results .....                                | 5           |
| 8.1                   | General .....   | 5           |
| 8.2                   | Full-section compressive strength .....                                 | 6           |
| 8.3                   | Strain .....  | 6           |
| 8.4                   | Full-section compressive modulus .....                                  | 6           |
| 8.4.1                 | General .....   | 6           |
| 8.4.2                 | Chord slope .....   | 6           |
| 8.4.3                 | Regression slope .....  | 6           |
| 8.5                   | Failure mode .....  | 7           |
| 9                     | Test report .....   | 7           |
| Annex A (informative) | Calculation method of slenderness ratio and width-thickness ratio ..... | 9           |