

ISO 10471:2025-08 (E)

Glass-reinforced thermosetting plastics (GRP) pipes - Determination of the long-term ultimate bending strain and the long-term ultimate relative ring deflection under wet conditions

| Contents | | Page |
|------------------------------|---|-------------|
| Foreword | | iv |
| 1 | Scope | 1 |
| 2 | Normative references | 1 |
| 3 | Terms and definitions | 1 |
| 4 | Principle | 3 |
| 5 | Apparatus | 4 |
| 5.1 | Compressive loading machine | 4 |
| 5.2 | Force application surfaces | 5 |
| 5.2.1 | General arrangement | 5 |
| 5.2.2 | Plates | 5 |
| 5.2.3 | Beam bars | 5 |
| 5.3 | Water container | 5 |
| 5.4 | Measuring devices | 5 |
| 6 | Test piece | 6 |
| 7 | Number of test pieces | 6 |
| 8 | Determination of the dimensions of the test pieces | 7 |
| 8.1 | Length | 7 |
| 8.2 | Wall thickness | 7 |
| 8.3 | Mean diameter | 7 |
| 9 | Conditioning | 7 |
| 10 | Procedure | 7 |
| 11 | Calculation | 8 |
| 11.1 | Extrapolation of the strain data to obtain the x-year value, x_{wet} | 8 |
| 11.2 | Calculation of the long-term ultimate relative ring deflection under wet conditions, $y_{u,wet,x/dm}$ | 8 |
| 12 | Test report | 8 |
| Annex A (informative) | Equal increments of lg (time in h) | 10 |