

ISO/TR 4553:2022-01 (E)

Deformations and displacements of buildings and building elements at serviceability limit states

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Limit state design	1
5 Serviceability limit state guidelines for buildings and building elements	2
6 Design procedure for serviceability limit states	2
7 Probability of exceedance and reliability index for serviceability	3
8 Verification methods for serviceability	4
8.1 General.....	4
8.2 Actions.....	4
8.3 Design values of the effects of actions.....	5
8.4 Combination of actions.....	6
8.4.1 General.....	6
8.4.2 Characteristic combination of actions.....	6
8.4.3 Frequent combination of actions.....	6
8.4.4 Quasi-permanent combination of actions.....	6
8.4.5 Combination of actions in seismic design situations.....	7
8.5 Design values of geometrical parameters.....	7
8.6 Design values of material properties.....	7
9 Criteria for serviceability limit state	8
9.1 General.....	8
9.2 Vertical and horizontal deformations.....	8
9.2.1 General.....	8
9.2.2 Vertical deformations.....	9
9.2.3 Horizontal deformations.....	10
9.2.4 Concrete buildings — Stress limitation and checking of cracks.....	11
9.3 Vibration.....	11
Bibliography	12