

ISO 22762-6:2022-07 (E)

Elastomeric seismic-protection isolators - Part 6: High-durability and high-performance specifications and test methods

Contents	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols	4
5 Classification	4
6 Requirements	5
6.1 General	5
6.2 Type tests and routine tests	5
6.3 Functional requirements	5
6.4 Design compressive force and design shear displacement	5
6.5 Performance requirements	5
6.5.1 General	5
6.5.2 Compressive properties	14
6.5.3 Shear properties	14
6.5.4 Tensile properties	14
6.5.5 Dependencies of shear properties	14
6.5.6 Dependencies of compressive properties	14
6.5.7 Shear displacement capacity	15
6.5.8 Durability	15
6.6 Test pieces for type testing	15
6.6.1 General	15
6.6.2 Number of test pieces	16
6.6.3 Scale of test pieces	17
6.7 Rubber material requirements	17
6.8 Dimensional requirements	17
6.9 Requirements on steel used for flanges and reinforcing plates	17
6.10 Requirements on lead material for LRB	17
7 Marking and labelling	17
7.1 General	17
7.2 Information to be provided	18
7.3 Additional requirements	18
7.4 Marking and labelling examples	18
8 Test methods	19
8.1 General	19
8.2 Various dependence tests	19
8.2.1 Repeated deformation dependence of shear properties	19
8.2.2 Horizontal biaxial loading dependency	21
8.2.3 Dependence of compression properties on shear strain	23
8.3 Ultimate properties under horizontal biaxial loading test	23
8.3.1 Principle	23

8.3.2	Test machine	24
8.3.3	Test piece	24
8.3.4	Test conditions	24
8.3.5	Procedure	24
8.3.6	Expression of results	25
8.3.7	Test report	25
8.4	Tensile testing	26
8.4.1	Allowable tensile strain	26
8.4.2	Shear strain dependency of tensile yield strength	27
8.4.3	Shear strain dependency of allowable tensile strain	28
8.4.4	Tensile fracture strain	29
8.5	Durability	30
8.5.1	Cumulative shear strain	30
8.5.2	Horizontal shear creep test and residual shear strain test	32
9	Quality assurance	34
Annex A (informative) Shear displacement capacity of various elastomeric seismic- protection isolators		35
Annex B (informative) Example of the test method for ultimate properties under horizontal biaxial loading		41
Bibliography		45