DIN EN 12604:2021-05 (E)

Industrial, commercial and garage doors and gates - Mechanical aspects - Requirements and test methods (includes Amendment :2020)

Contents

Page

European foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 7

4 Safety requirements and/or protective measures 7
4.1 General 7
4.2 Design and construction 7
4.2.1 Operability 7
4.2.2 Glazing 7
4.3 Protection against unintentional and uncontrolled movements 7
4.3.1 Guides and end stops 7
4.3.2 Unintentional movements due to wind 8
4.3.3 Uncontrolled movements of vertically operating doors 8
4.3.4 Safeguarding against dropping of vertically operating door leaves 8
4.3.5 Safeguarding against dropping of hinged doors 9
4.4 Forces for manual operation 9
4.5 Devices for manual operation 9
4.6 Finger protection 9
4.7 Specific requirements for parts used in suspension and balancing systems 9
4.7.1 General 9
4.7.2 Springs 10
4.7.3 Counterweights 10
4.7.4 Steel wire ropes, chains, straps 10
4.8 Pass doors 11
4.9 Additional requirements for doors operating by gravity or other self-closing mechanism 11

5 Verification of the safety requirements and/or protective measures 11
5.1 General 11
5.2 Design and construction 12
5.2.1 Operability 12
5.2.2 Glazing 12
5.3 Protection against unintentional and uncontrolled movements 12
5.3.1 Guides and end stops 12
5.3.2 Unintentional movements due to wind 12
5.3.3 Uncontrolled movements of vertically operating doors 12
5.3.4 Safeguarding against dropping of vertically operating door leaves 13
5.3.5 Safeguarding against dropping of hinged doors 13
5.4 Forces for manual operation 13
5.5 Devices for manual operation 13
5.6 Finger protection 13
5.7 Specific requirements for parts used in suspension and balancing systems 14
5.7.1 Springs 14
5.7.2 Counterweights 14
5.7.3 Steel wire ropes, chains, straps 14
5.8 Pass doors 14

5.9 Warning signs and/or devices 14

6 !Information for Use 14

7 !Marking 16

Annex A(informative) Guidelines for a safe construction 17

Annex B(informative) Examples of mechanical protection and safety distances 18

Annex C(informative) Logbook 19