DIN EN 17468-2:2022-09 (E)

Fibre-cement products - Determination of pull through and shear resistance and bending strength calculations - Part 2: Profiled sheets

Contents

Page

European foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 6

4 Symbols and abbreviations 7

5 Product requirements 9
5.1 Composition 9
5.2 Appearance and finish 9

6 Sampling procedure 9
6.1 Sampling method 9
6.2 Type testing 9
6.3 Preparation of test specimens 9
6.3.1 Preparation of the test specimens for the pull through test 9
6.3.2 Preparation of test specimens for the shear resistance test 10

7 Test method for the determination of pull through resistance of fibre-cement profiled sheets 10
7.1 Principle 10
7.2 Test equipment 10
7.2.1 Tensile testing machine 10
7.3 Fasteners 13
7.4 Test procedure 13
7.5 Expression of results and test report 14
7.5.1 Pull through resistance 14
7.5.2 Test report 15
7.6 Field of application 15

8 Test method for the determination of shear resistance of fibre-cement profiled sheets 16
8.1 Principle 16
8.2 Test equipment 16
8.2.1 Testing of shear resistance 16
8.2.2 Shear resistance parallel to the corrugations 16
8.2.3 Shear resistance perpendicular to the corrugations 17
8.3 Fasteners 18
8.4 Test procedure 18
8.5 Expression of results and test report 19
8.5.1 Shear resistance 19
8.5.2 Test report 20
8.6 Field of application 20

9 Mechanical characteristics 20
9.1 Bending strength 20
9.1.1 General 20

9.1.2 Characteristic bending strength 21
9.1.3 Bending modulus of elasticity 22
9.1.4 Longitudinal direction 23
9.1.5 Transverse direction 24
9.1.6 Design bending strength 24
9.2 Pull through resistance / shear resistance 25
9.2.1 Characteristic pull through resistance / shear resistance 25
9.2.2 Design pull through resistance / shear resistance 25

Bibliography 26