DIN EN 1504-10:2017-12 (E)

Products and systems for the protection and repair of concrete structures - Definitions, requirements, quality control and evaluation of conformity - Part 10: Site application of products and systems and quality control of the works

Contents

Page

European foreword 4

Introduction 8

1 Scope 9

2 Normative references 9

3 Terms and definitions 12

4 Structural stability during preparation, protection and repair 15

5 General requirements during preparation, protection and repair 15

6 Methods of protection and repair 16
6.1 Preparation, application and quality control 16
6.2 Methods specified in another EN or European Technical Approval 23

7 Preparation of substrate 23
7.1 General 23
7.2 Preparation of concrete 25
7.3 Preparation of reinforcement 26

8 Application of products and systems 27
8.1 General 27
8.2 Defects in concrete and structural strengthening 30
8.3 Defects caused by reinforcement corrosion 32

9 Quality control 33
9.1 General 33
9.2 Execution classes 33
9.3 Quality control tests and observations 34

10 Maintenance 44

Annex A (informative) Guidance and background information on the normative text 45

A.1 Structural stability during preparation, protection and repair (Clause 4) 45
A.2 Methods of protection and repair (Clause 6) 45
A.3 Preparation of substrate (Clause 7) 48
A.4 Application of products and systems (Clause 8) 51
A.5 Quality control (Clause 9) 54

Annex B (informative) Testing cleanliness of concrete surface 66

B.1 Principle 66
B.2 Procedure 66
B.3 Materials 67
B.4 Expression of results 67

B.5 Test report 67
B.6 Testing frequency 67

Annex C (informative) Testing surface roughness through the saw-teeth profile method 68
C.1 Principle 68
C.2 Definitions 68
C.3 Procedure 68
C.4 Apparatus 70
C.5 Expression of result 70
C.6 Test report 70
C.7 Testing frequency 71

Annex D (informative) Testing degree of microcracking of concrete surfaces 72

D.1 Principle 72
D.2 Procedure 72
D.3 Apparatus 73
D.4 Expression of result 73
D.5 Test report 73
D.6 Testing frequency 74

Bibliography 75