

DIN EN 12839:2012-03 (E)

Precast concrete products - Elements for fences

Contents

Page

The numbering of clauses is strictly related to EN 13369:2004: Common rules for precast concrete products, at least for the first three digits. When a clause of EN 13369:2004 is not relevant or included in a more general reference of this standard, its number is omitted and this may result in a gap on numbering. Foreword4

1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Requirements	8
4.1	Material requirements	8
4.2	Production requirements	9
4.2.1	Concrete production	9
4.2.2	Hardened concrete	9
Structural	9
4.2.3	reinforcement	9
4.3	Finished product requirement	9
4.3.1	Geometrical properties	9
4.3.2	Surface characteristics	11
4.3.3	Mechanical resistance	11
4.3.4	Resistance and reaction to fire	15
4.3.5	Acoustic properties	15
4.3.6	Thermal properties	15
4.3.7	Durability	15
4.3.8	Safety in handling	16
5	Test methods	16
5.1	Dimensions	16
5.1.1	Measuring equipment	16
5.1.2	Posts and rails	17
5.1.3	Panels	19
5.2	Concrete cover	20
5.3	Surface characteristic	20
5.3.1	Surface finish as cast	20
5.3.2	Surface finish treated	20
5.4	Water absorption	20
5.5	Concrete strength	20
5.6	Load testing	20
5.7	Density	21
6	Evaluation of conformity	21
6.1	General	21
6.2	Initial type testing	21
6.2.1	General	21
6.2.2	Load bearing capacity and durability	21
6.2.3	Other characteristics	21
6.3	Factory production control	22
6.3.1	General	22
6.3.2	Finished elements	22

6.4	Independent acceptance testing and compliance criteria	22
7	Marking and labelling	22
7.1	Information	22
7.2	Complementary information	22
8	Technical documentation	23
Annex A (informative) Basic types of fences		24
A.1	General	24
A.2	Solid fence	24
A.3	Open-work fence	25
A.4	Mesh or wire fence	25
A.5	Mixed fence	26
A.6	Rail fence	28
A.7	Anti-intruder fence	29
Annex B (normative) Test method for the determination of the load bearing capacity and the complementary load bearing capacity		32
B.1	Load testing	32
Annex C (normative) Factory production control procedures		38
Annex D (informative) Acceptance testing of a consignment at delivery		39
D.1	General	39
D.2	Sampling	39
D.3	Places and dates of inspection and acceptance testing	39
D.4	Compliance	39
Annex ZA (informative) Relationship between this European Standard and the essential requirements of EU Directive 89/106/EEC, EU Construction Products Directive		41
ZA.1	Scope and relevant characteristics	41
ZA.2	Procedure for attestation of conformity of precast concrete elements for boundary fences	42
ZA.3	CE marking and labelling	44
Bibliography		52