

DIN EN 459-1:2010-12 (E)

Building lime - Part 1: Definitions, specifications and conformity criteria

Contents		Page
Foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Air lime	8
4.1	General	8
4.2	Sub-families of air lime	8
4.2.1	Calcium lime (CL)	8
4.2.2	Dolomitic lime (DL)	8
4.3	Forms of air lime	8
4.3.1	Quicklime (Q)	8
4.3.2	Hydrated lime (S, S PL or S ML)	8
4.4	Calcium lime	9
4.4.1	Classification of calcium lime	9
4.4.2	Chemical requirements for calcium lime	9
4.4.3	Physical requirements and other physical properties for quicklime	10
4.4.4	Physical requirements and other physical properties for hydrated lime and lime putty	10
4.4.5	Additional properties	11
4.4.6	Durability requirements	11
4.4.7	Conformity criteria of calcium lime	11
4.4.8	Standard designation of calcium lime	14
4.5	Dolomitic lime	14
4.5.1	Classification of dolomitic lime	14
4.5.2	Chemical requirements for dolomitic lime	14
4.5.3	Physical requirements and other physical properties for dolomitic quicklime	15
4.5.4	Physical requirements and other physical properties for dolomitic hydrated lime	16
4.5.5	Additional properties	16
4.5.6	Durability requirements	16
4.5.7	Conformity criteria of dolomitic lime	17
4.5.8	Standard designation of dolomitic lime	18
5	Lime with hydraulic properties	19
5.1	General	19
5.2	Sub-families of lime with hydraulic properties	19
5.2.1	Natural hydraulic lime (NHL)	19
5.2.2	Formulated lime (FL)	19
5.2.3	Hydraulic lime (HL)	19
5.3	Natural hydraulic lime	20
5.3.1	Classification of natural hydraulic lime	20
5.3.2	Chemical requirements for natural hydraulic lime	20
5.3.3	Physical requirements and other physical properties for natural hydraulic lime	20
5.3.4	Additional properties	21
5.3.5	Durability requirements	21
5.4	Formulated lime	21
5.4.1	Classification of formulated lime	21
5.4.2	Composition of formulated lime	22

5.4.4	Physical requirements and other physical properties for formulated lime	23
5.4.5	Additional properties	24
5.4.6	Durability requirements	24
5.5	Hydraulic lime	24
5.5.1	Classification of hydraulic lime	24
5.5.2	Chemical requirements for hydraulic lime	24
5.5.3	Physical requirements and other physical properties for hydraulic lime	25
5.5.4	Additional properties	26
5.5.5	Durability requirements	26
5.6	Conformity criteria of natural hydraulic lime, formulated lime and hydraulic lime	26
5.6.1	General requirements	26
5.6.2	Conformity requirements	26
5.7	Standard designation of lime with hydraulic properties	28
5.7.1	Standard designation of natural hydraulic lime	28
5.7.2	Standard designation of formulated lime	28
5.7.3	Standard designation of hydraulic lime	28
Annex A (normative) Statistical evaluation methods for strength, physical and chemical properties		29
Annex B (informative) Additional properties for building lime		35
Annex C (informative) Schematic diagram for the types of lime and fields of application		37
Annex D (normative) Declaration of composition for formulated lime		38
Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Product Directive		40
Bibliography		48