

DIN EN 13108-1:2006-08 (E)

Bituminous mixtures - Material specifications - Part 1: Asphalt Concrete

Contents		Page
Foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms, definitions, symbols and abbreviations	7
3.1	Terms and definitions	7
3.2	Symbols and abbreviations	8
4	Requirements for constituent materials	8
4.1	General	8
4.2	Binder	9
4.2.1	General	9
4.2.2	Binder in empirically specified mixtures	9
4.3	Aggregates	10
4.3.1	Coarse aggregate	10
4.3.2	Fine aggregate	10
4.3.3	All-in aggregates	10
4.3.4	Added filler	10
4.4	Reclaimed asphalt	10
4.5	Additives	10
5	Requirements for the mixture	11
5.1	Empirical or fundamental requirements	11
5.1.1	Declaration of the target composition	11
5.1.2	Empirical requirements	11
5.1.3	Fundamental requirements	11
5.2	General requirements	11
5.2.1	Composition and grading	11
5.2.2	Void content	12
5.2.3	Coating and homogeneity	14
5.2.4	Water sensitivity	14
5.2.5	Resistance to abrasion by studded tyres	15
5.2.6	Resistance to permanent deformation	15
5.2.7	Reaction to fire	17
5.2.8	Resistance to fuel for application on airfields	17
5.2.9	Resistance to de-icing fluid for application on airfields	17
5.2.10	Temperature of the mixture	18
5.2.11	Durability	18
5.3	Empirical requirements	18
5.3.1	Composition, grading, binder content and additives	18
5.3.2	Marshall values for application on airfields	20
5.3.3	Voids filled with bitumen	22
5.3.4	Voids in mineral aggregate	24
5.3.5	Void content at 10 gyrations	24
5.3.6	Over-specification	24
5.4	Fundamental requirements	25
5.4.1	Composition - grading and binder content	25
5.4.2	Stiffness	25

5.4.3	Resistance to permanent deformation in triaxial compression test	26
5.4.4	Resistance to fatigue	27
5.4.5	Over-specification	28
6	Evaluation of conformity	28
7	Identification	29
Annex A (normative) Calculations of the penetration or the softening point of the binder of a mixture when reclaimed asphalt is used		30
A.1	General	30
A.2	Calculation of the penetration of the binder of a mixture	30
A.3	Calculation of the softening point of the binder of a mixture	30
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Construction Products Directive		32