

TYPE 1 CL803 SHW SUB-BASE AGGREGATE

Mixture and grading requirement categories for unbound mixtures

Unbound Mixture	Type 1
Clause	803
Standard	BS EN 13285 Categories for unbound mixture properties
Mixture Requirement Category 1) Designation 2) Maximum fines 3) Oversize	0/31,5 or 0/20 $UF_{1,2}$ or $UF_{1,3}$ OC_{15}
Grading requirement Category 1) Overall grading	G_2

Requirements for Aggregates used in unbound mixtures

Unbound Mixture	Type 1
Clause	803
Standard	BS EN 13285 Categories for unbound mixture properties
Crushed, or broken and totally rounded particles – crushed rock, crushed manufactured and crushed recycled aggregates (see NOTE 1)	C_{600}
Crushed, or broken and totally rounded particles – crushed gravel	C_{600} See NOTE 2
Resistance to fragmentation – Los Angeles test	LA_{60}
Resistance to wear – micro-Deval test	$M_{10}NR$ (no requirement) The supplier shall state the value for the aggregate used
Resistance to freezing and thawing – magnesium sulfate soundness	MS_{10}
Water absorption	$WA_{10}NR$ (no requirement) The supplier shall state the value for the aggregates used
Volume stability of blast furnace slag	Free from dicalcium silicate and iron dintegration
Volume stability of steel (BOF and EAF) slags	V_1
All Other BS EN 13242 aggregate requirements	Category $_{10}$ (no requirement)
NOTES:	
1. BS EN 13242 assumes that crushed rock aggregates comply with category C_{600} without further testing.	
2. Where permitted by contract specific Appendix 7/1.	

Requirements for Recycled Coarse Aggregates and Recycled Concrete Aggregates

Unbound Mixture	Type 1
Clause	803
Component identified by Clause 710	Maximum Permitted Content (% by mass)
Asphalt (Class Ra)	50
Glass (Class Rg)	25
Other materials (Class X), including wood, plastic and metal	1
Floating Materials	< 5cm ³ /kg

Summary grading requirements

Sieve Size, mm	Percentage by mass passing		
	Overall grading range	Supplier declared value grading range	Tolerance on the supplier declared value
63	100	-	-
31.5	75 – 99	-	-
16	43 – 81	54 – 72	± 15
18	23 – 66	33 – 52	± 15
4	12 – 53	21 – 38	± 15
2	6 – 42	14 – 27	± 13
1	3 – 32	9 – 20	± 10
0.063	0 – 9	-	-
Grading of individual batches – differences in values passing selected sieves			
Retained sieve size, mm	Passing sieve size, mm	Percentage by mass passing	
		Not less than	Not more than
8	16	7	30
4	8	7	30