

DECLARATION OF PERFORMANCE

DDP LERMA I5

1. UNIQUE IDENTIFICATION CODE OF PRODUCT TYPE:

SAND, GRAVEL, ARMOURSTONE

2. EXPECTED USE:

EN 13139:2002 y EN 13139:2002/AC:2004. Aggregates for mortar.

EN 12620:2003 + A1:2008. Aggregates for concrete.

EN 13043:2002 y EN 13043:2002/AC:2004. Aggregates for bituminous mixtures.

EN 13242:2003 +A1:2008, Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction

EN 13383-2:2002. Armourstone

3. MANUFACTURER:

NAME: CANTERAS Y HORMIGONES SANTANDER S.L.

SOCIAL ADDRESS: Bº LA VENTA S/N. 39608 IGOLLO DE CAMARGO. CANTABRIA.

PRODUCTION ADDRESS: Arce – Piélagos (Cantabria)

4. ASSESMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE (AVCP)

2+

5. HARMONIZED STANDARD: EN 13139:2002, EN 13139:2002/AC:2004, EN 12620:2003 + A1:2008, EN 13043:2002, EN 13043:2002/AC:2004, EN 13242:2003 +A1:2008, EN 13383-2:2002

NOTIFIED BODY BUREAU VERITAS QUALITY INTERNATIONAL Nº 1035 /CPR-ES037756-1

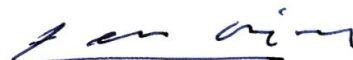
6. PERFORMANCE FEATURES:

PRODUCT	PRODUCT CODE	PRODUCT DESCRIPTION	INTENDED USES OF PRODUCTS	PERFORMANCES
SAND 0/1,25	A0125-5 MOR	AF-T-0/2-C	AGGREGATES FOR MORTAR - EN 13139	SEE DECLARED PERFORMANCE TABLE TDDP LERMA I5-A AND TYPICAL GRADING TABLE TDDP LERMA I5-B
SAND 0/1,5	A015-5 MOR	AF-T-0/4-C		
SAND 0/2	A02-5 MOR	AF-T-0/2-C		
SAND 0/2	A02-5 HOR	AF-T-0/2-C	AGGREGATES FOR CONCRETE - EN 12620	
SAND 0/5	A05-5 HOR	AC-T-0/5-C		
GRAVEL 6/12	G612-5 HOR	AG-T-6/12-C		
GRAVEL 12/20	G1220-5 HOR	AG-T-12/20-C		
GRAVEL 20/32	G2032-5 HOR	AG-T-20/32-C	AGGREGATES FOR BITUMINOUS MIXURES - EN 13043	
SAND 0/5	A05-5 MBC	AC-T-0/5-C		
GRAVEL 6/12	G612-5 MBC	AG-T-6/12-C		
GRAVEL 12/20	G1220-5 MBC	AG-T-12/20-C	AGGREGATES FOR UNBOUND AND HIDRAULICALLY BOUND MATERIALS - EN 13242	
GRAVEL 20/32	G2032-5 MBC	AG-T-20/32-C		
ALL IN 0/32	Z032-5 ACG	AC-T-0/32-C		
ALL IN 0/40	S040-5 ACG	AC-T-0/40-C	ARMOURSTONES - EN 13383	
ARMOURSTONE	E1000-3000-5	1000/3000		

BENEFITS OF THE PRODUCT IDENTIFIED ABOVE ARE CONSISTENT WITH THE SET OF PERFORMANCE FEATURES. THIS BENEFITS STATEMENT IS ISSUED, IN ACCORDANCE WITH THE RULES OF PROCEDURE (UE) Nº 305/2011, UNDER THE SINGLE RESPONSIBILITY OF THE MANUFACTURER UP MARKING.

SIGNED FOR AND ON BEHALF OF THE MANUFACTURER

Carlos Díaz Díaz. General manager commercial and corporate development



SIGN:

Igollo de Camargo, July 1, 2016

AGGREGATES FOR MORTAR - EN 13139

MORTAR	PRODUCT	PRODUCT CODE	PARTICLE SHAPE				CLEANLINESS					
			Particle Size	Granulometry			Particle Shape Flakiness index	Particle Density	Sand Equivalent	Methylene Blue	Shell Content	Fines Content
				4 mm- 100%	3 mm- 95-100%	2 mm- 85-99%						
	SAND 0/1,25	A0125-5 MOR	0/1,25	4 mm- 100%	3 mm- 95-100%	2 mm- 85-99%	NPD	2,62 Mg/m ³	S.E. >65	<0,40	NPD	Category 4
	SAND 0/1,5	A015-5 MOR	0/1,5	4 mm- 100%	3 mm- 95-100%	2 mm- 85-99%	NPD	2,62 Mg/m ³	S.E. >65	<0,40	NPD	Category 4
	SAND 0/2	A02-5 MOR	0/2	4 mm- 100%	3 mm- 95-100%	2 mm- 85-99%	NPD	2,62 Mg/m ³	S.E. >75	NPD	NPD	Category 4
		COMPOSITION / CONTENT					OTHER PROPERTIES					
PRODUCT	PRODUCT CODE	Chlorides	Acid Soluble Sulphates	Total Sulphur	Constituents which Alter the Rate of Setting and Hardening of Mortar		Volume Stability	Water Absorption	Dangerous Substances	Durability Against Freeze / Thaw	Durability Against Alkali / Silica Reactivity	
SAND 0/1,25	A0125-5 MOR	< 0,01% Cl ⁻	AS _{0,2}	<1% S	pass		NPD	1,56%	NPD	SM ₁₈	NPD	
SAND 0/1,5	A015-5 MOR	< 0,01% Cl ⁻	AS _{0,2}	<1% S	pass		NPD	1,56%	NPD	SM ₁₈	NPD	
SAND 0/2	A02-5 MOR	< 0,01% Cl ⁻	AS _{0,2}	<1% S	pass		NPD	1,56%	NPD	SM ₁₈	NPD	

AGGREGATES FOR CONCRETE - EN 12620

CONCRETE	PRODUCT	PRODUCT CODE	PARTICLE SHAPE				CLEANLINESS			OTHER PROPERTIES						
			Particle Size	Granulometry	Particle Shape Flakiness index	Particle Density	Sand Equivalent	Methylene Blue	Fines Content	Resistance to Fragmentation / Crushing	Resistance to polishing / Abrasion / Wear	Volume Stability	Water Absorption	Dangerous Substances	Durability Against Freeze / Thaw	Durability Against Alkali / Silica Reactivity
	SAND 0/2	A02-5 HOR	0/2	G ₈₅	NPD	2,62 Mg/m ³	S.E. >65	<0,40	f ₂₈	NPD	NPD	NPD	1,56%	NPD	SM ₁₈	NPD
	SAND 0/5	A05-5 HOR	0/5	G ₈₅	NPD	2,62 Mg/m ³	S.E. >65	<0,50	f _{1,6}	NPD	NPD	NPD	1,56%	NPD	SM ₁₈	NPD
	GRAVEL 6/12	A612-5 HOR	6/12	G _c 90/15	F ₁₅	2,71 Mg/m ³	NPD	NPD	f _{1,5}	LA ₃₀	NPD	NPD	2,29%	NPD	SM ₁₈	NPD
	GRAVEL 12/20	A1220-5 HOR	12/20	G _c 85/20	F ₁₅	2,71 Mg/m ³	NPD	NPD	f _{1,5}	LA ₃₀	NPD	NPD	2,29%	NPD	SM ₁₈	NPD
	GRAVEL 20/32	A2032-5 HOR	20/32	G _c 85/20	F ₁₅	2,71 Mg/m ³	NPD	NPD	f _{1,5}	LA ₃₀	NPD	NPD	2,29%	NPD	SM ₁₈	NPD
		COMPOSITION / CONTENT														
PRODUCT	PRODUCT CODE	Composition of Coarse Recycled Aggregate	Chlorides	Acid Soluble Sulphates	Total Sulphur	Water Soluble Sulphate Content or Recycled Aggregate	Constituents which Alter the Rate of Setting and Hardening of Concrete		Influence or recycled aggregates on initial setting time of cement		Carbonate Content					
SAND 0/2	A02-5 HOR	NPD	< 0,01% Cl ⁻	AS _{0,2}	<1% S	NPD	pass		NPD		NPD					
SAND 0/5	A05-5 HOR	NPD	< 0,01% Cl ⁻	AS _{0,2}	<1% S	NPD	pass		NPD		NPD					
GRAVEL 6/12	A612-5 HOR	NPD	< 0,01% Cl ⁻	AS _{0,2}	<1% S	NPD	pass		NPD		NPD					
GRAVEL 12/20	A1220-5 HOR	NPD	< 0,01% Cl ⁻	AS _{0,2}	<1% S	NPD	pass		NPD		NPD					
GRAVEL 20/32	A2032-5 HOR	NPD	< 0,01% Cl ⁻	AS _{0,2}	<1% S	NPD	pass		NPD		NPD					



ASPHALT															
AGGREGATES FOR BITUMINOUS MIXTURES - EN 13043															
PRODUCT	PRODUCT CODE	PARTICLE SHAPE						CLEANLINESS							
		Particle Size	Granulometry	Grading Coarse	Particle Shape Flakiness index	Shape index	Particle Density	Sand Equivalent	Methylene Blue	Fines Content					
SAND 0/5	A05-5 MBC	0/5	G ₈₅	G ₇₅ NR	NPD	NPD	2,62 Mg/m ³	S.E. > 65	MB _f 10	f ₁₆					
GRAVEL 6/12	A612-5 MBC	6/12	G _c 90/15	G _{20/15}	Fl ₂₀	NPD	2,71 Mg/m ³	--	--	f _{1,5}					
GRAVEL 12/20	A1220-5 MBC	10/20	G _c 85/20	G _{20/15}	Fl ₁₅	NPD	2,71 Mg/m ³	--	--	f _{1,5}					
GRAVEL 20/32	A2032-5 MBC	20/32	G _c 85/20	G _{20/15}	Fl ₁₅	NPD	2,71 Mg/m ³	--	--	f _{1,5}					
OTHER PROPERTIES															
PRODUCT	PRODUCT CODE	Percentage of Crushed Particles / Broken Surfaces	Affinity to Bituminous Binders	Angularity of fines aggregate	Resistance to Fragmentation / Crushing	Resistance to polishing / Abrasion / Wear	Resistance to Thermal Shock	Volume Stability	Chemical composition	Dangerous Substances	Durability Against Freeze / Thaw	Durability Against Weathering	Abrasion of Studded Tyres	SONNENBRAND OF BASALT	
SAND 0/5	A05-5 MBC	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	SM ₁₈	NPD	NPD	NPD	
GRAVEL 6/12	A612-5 MBC	C _{100/0}	NPD	NPD	LA ₃₀	NPD	NPD	NPD	NPD	NPD	SM ₁₈	NPD	NPD	NPD	
GRAVEL 12/20	A1220-5 MBC	C _{100/0}	NPD	NPD	LA ₃₀	NPD	NPD	NPD	NPD	NPD	SM ₁₈	NPD	NPD	NPD	
GRAVEL 20/32	A2032-5 MBC	C _{100/0}	NPD	NPD	LA ₃₀	NPD	NPD	NPD	NPD	NPD	SM ₁₈	NPD	NPD	NPD	

ROADS												
AGGREGATES FOR UNBOUND AND HIDRAULICALLY BOUND MATERIALS - EN 13242												
PRODUCT	PRODUCT CODE	PARTICLE SHAPE				CLEANLINESS			Percentage of Crushed Particles / Broken Surfaces	Resistance to Fragmentation / Crushing	Volume Stability	
		Particle Size	Granulometry	Particle Shape Flakiness index	Particle Density	Sand Equivalent	Methylene Blue	Fines Content				
ALL IN 0/32	Z032-5 ACG	0/32	G _A 80	Fl ₂₀	2,71 Mg/m ³	S.E. >65	MB < 10	f ₉	C _{90/3}	LA ₃₀	NPD	
ALL IN 0/40	Z040-5 ACG	0/40	G _A 80	Fl ₂₀	2,71 Mg/m ³	S.E. >65	MB < 10	f ₉	C _{90/3}	LA ₃₀	NPD	
COMPOSITION / CONTENT												
PRODUCT	PRODUCT CODE	Classification of Coarse Recycled Aggregate	Water Soluble Sulphate Content or Recycled Aggregate	Acid Soluble Sulphates	Total Sulphur	Constituents Which alter the rate of setting and hardening of hydraulically bound mixture	Water Absortion	Resistance to Breakage	RELEASE OF HEAVY METALS LEACHING	RELEASE OF OTHER HAZARDOUS SUBSTANCES	Durability Against Freeze / Thaw	
ALL IN 0/32	Z032-5 ACG	NPD	NPD	AS _{0,2}	<1%	NPD	WA < 5%	NPD	NPD	NPD	SM ₁₈	
ALL IN 0/40	Z040-5 ACG	NPD	NPD	AS _{0,2}	<1%	NPD	WA < 5%	NPD	NPD	NPD	SM ₁₈	



ARMOURSTONES	ARMOURSTONE - EN 13383							
	PRODUCT	PRODUCT CODE	Particle Size	Granulometry	Resistance to Breakage	Resistance to Attrition	Release of Dangerous substances	Durability Against Freeze / Thaw
	ESCOLLERA	E1000-3000-5	LTA	HMA ₁₀₀₀₋₃₀₀₀	CS ₆₀	M _{De} 30	NPD	NPD
	DURABILITY AGAINST WEATHERING							
	PRODUCT	PRODUCT CODE	Dicalcium silicate disintegration of air cooled blast furnace slag	Iron disintegration of air cooled blast furnace slag	Disintegration of steel slag	Durability against salt crystallisation	Durability against Weathering	
	ESCOLLERA	E1000-3000-5	NPD	NPD	NPD	MS ₂₅	NPD	

