

Information Mix Design Q1 BAG® Bauartikel GmbH

Test certificates on hardened concrete		Results	
Compressive strength (cube 150x150x150) 28 days		> 50 MPA	
Test certificate No. 220011095-15-01-01, Material Testing Institute MPA NRW	F	XF1, XF2, XF3 and XF4	
Spacers according to DBV leaflet Eurocode 2 copy January 2011	T	XS1, XS2, XS3	
	A	XD1-XD3, XS1-XS3, XF2 and XF4, XA1-XA2	

Raw material	Declaration	Certificates
Sand 0-2	Sarah II	CE marked JD Spolka ul. Piastowska 3, 45081 Opole PN-EN 12620 + A1:2010, PN-EN 13043 : 2004/Ap1:2010 Petrographic analysis by laboratory BARG L.M.B. Dolny Slaska Sp. Z o.o.
Cement	Gorazdze Cement SA CEM I 52,5 R	Statement of performance for Streets and Bridges INSTYTUT BADAWCZY DROG I MOSTOW PN-EN 196-1, PN-EN 196-2, PN-EN 196-3
Fly Ash	Betoment OP	CE marked, 1488-CPR-0040/W Material research and testing department University of Weimar Report 11.11.006.10 according to DIN EN 450-1
Plasticizer	BASF Master Glenium 432	Plasticizer for concrete according to DIN EN 934 2:T 3.1/3.2, contains substances according to EN 934-1:2008

Further restrictions regarding exposure class XC4

DIN EN 206-1/DIN 1045-2					
Class Designation	Environment description	Examples where exposure classes may occur	max w/c	min. strength	min. cement content
					kg/m ³
XC1	Dry or permanently wet	Inside building with low air humidity	0,65	20/25	260
XC2	Wet, rarely dry	Water retaining structures, Foundations	0,6	25/30	280
XC3	Moderate humidity	Inside building with moderate/high air humidity	0,55	30/37	280
		External structures sheltered from rain			
XC4	Cyclic wet and dry	External structures exposed to rain water	0,50	30/37	300

- Water cement ration mix design Q1 < 0,38
- Total paste or cement content > 300 kg/m³