

Square root method results for Fehmarn (Submerged exposure)

Field exposure site			Fehmarn													
Concrete ID			F-A	F-B	F-C	F-D	F-E	F-F	F-G	F-H	F-I	F-J	F-K	F-L	F-M	F-N
Powder composition [wt%]	CEM I	100	85	75	75	96	84	84	84	84	84					
	FA ¹⁾		15	25	25		12	12	12	12	12					
	SF ²⁾					4	4	4	4	4	4					
	CEM III ³⁾											100	100	100	100	
Exposure		C _r														
Submerged	a _{Cr}	0.25	na	7.8	na	6.1	15.0	6.4	6.3	na	7.1	7.6	5.5	4.7	5.9	3.7
		0.50	na	8.2	na	6.0	14.0	6.1	5.6	7.1	7.0	7.8	5.8	3.9	5.3	3.1
		0.75	na	8.3	na	5.9	13.0	5.9	5.6	6.9	6.6	7.6	5.0	3.6	4.7	na
		1.00	na	8.3	na	6.0	12.3	5.8	5.6	7.2	6.3	9.1	4.7	4.6	5.1	na
		1.25	na	8.5	na	6.3	12.6	6.0	5.5	7.4	6.3	9.0	4.4	4.3	na	na
	b _{Cr}	0.25	na	12	na	8	1	11	9	na	6	8	2	3	0	3
		0.50	na	8	na	7	0	9	8	10	5	5	0	3	1	3
		0.75	na	7	na	6	-1	8	7	8	4	4	0	2	0	na
		1.00	na	5	na	4	-2	7	5	6	3	-1	0	-1	-1	na
		1.25	na	3	na	2	-5	5	4	4	2	-2	0	-1	na	na
	R ²	0.25	na	0.95	na	1.00	1.00	0.95	1.00	na	1.00	1.00	1.00	0.97	0.94	0.92
		0.50	na	0.95	na	1.00	0.99	0.96	0.98	0.92	0.99	1.00	1.00	0.96	0.94	0.92
		0.75	na	0.95	na	1.00	0.99	0.94	0.98	0.95	0.99	1.00	1.00	0.96	0.94	na
		1.00	na	0.94	na	1.00	0.99	0.93	0.97	0.94	0.99	0.98	1.00	0.92	0.92	na
		1.25	na	0.94	na	1.00	0.98	0.93	0.97	0.94	1.00	0.99	0.99	0.91	na	na

1) FA = Fly ash; 2) SF = Silica fume; 3) CEM III = Blast furnace slag cement or blast furnace slag combination according to BS 8500.

Square root method results for Fehmarn and Østmarkneset (Tidal exposure)

Field exposure site			Fehmarn														Østmarkneset		
Concrete ID			F-A	F-B	F-C	F-D	F-E	F-F	F-G	F-H	F-I	F-J	F-K	F-L	F-M	F-N	Ø-EF	Ø-GH	Ø-IJ
Powder composition [wt%]	CEM I	100	85	75	75	96	84	84	84	84	84						80	90	80
	FA ¹⁾		15	25	25		12	12	12	12	12								
	SF ²⁾					4	4	4	4	4	4						20	10	20
	CEM III ³⁾												100	100	100	100			
Exposure		C _r																	
Tidal	a _{Cr}	0.25	na	9.2	na	6.7	16.2	na	8.2	na	7.0	8.9	na	5.3	6.4	5.3	na	7.8	6.2
		0.50	na	9.0	na	6.1	15.4	na	7.7	na	6.9	8.9	4.6	4.8	na	5.1	9.2	6.8	6.1
		0.75	15.3	8.9	6.5	6.0	15.1	na	8.2	9.4	7.0	9.1	4.2	4.8	na	4.9	8.3	6.2	5.7
		1.00	13.8	9.2	6.6	6.1	14.0	na	8.3	9.0	7.0	10.3	4.0	4.6	na	4.8	7.9	5.7	5.3
		1.25	12.4	9.5	6.6	6.4	12.5	na	9.6	9.0	7.7	9.6	3.9	4.4	na	4.5	7.6	5.3	5.1
	b _{Cr}	0.25	na	10	na	11	3	na	8	na	8	6	na	2	0	3	na	7	12
		0.50	na	8	na	9	1	na	6	na	5	4	2	2	na	2	16	6	7
		0.75	4	7	8	8	-1	na	3	6	4	2	2	1	na	1	14	3	5
		1.00	2	5	7	7	-1	na	2	5	3	-2	1	0	na	1	10	2	2
		1.25	2	2	5	5	-1	na	-2	4	0	-2	0	0	na	1	6	0	0
	R ²	0.25	na	0.99	na	1.00	1.00	na	1.00	na	0.99	0.98	na	1.00	0.99	0.94	na	0.97	0.85
		0.50	na	0.98	na	0.98	1.00	na	0.98	na	1.00	1.00	0.96	1.00	na	0.95	0.96	0.96	0.90
		0.75	0.99	0.98	0.99	0.99	1.00	na	0.90	0.99	1.00	1.00	0.97	1.00	na	0.93	0.98	0.96	0.94
		1.00	1.00	0.98	1.00	0.99	0.99	na	0.91	0.99	0.99	0.98	0.97	1.00	na	0.94	0.96	0.96	0.98
		1.25	1.00	0.98	1.00	0.99	0.99	na	0.98	0.99	0.99	0.99	0.98	0.99	na	0.95	0.92	0.95	0.98

1) FA = Fly ash; 2) SF = Silica fume; 3) CEM III = Blast furnace slag cement or blast furnace slag combination according to BS 8500.

Square root method results for Träslövsläge

Field exposure site			Träslövsläge										
Concrete ID			T-1	T-OE	T-2	T-3	T-10	T-12	T-H1	T-H2	T-H4	T-H5	T-H8
Powder composition [wt%]	CEM I	100	100	100	95	78.5	85	95	90	95	95	80	
	FA ¹⁾					17	10					20	
	SF ²⁾				5	4.5	5	5	10	5	5		
Exposure		C _r											
Submerged	a _{Cr}	0.25	na	23.3	19.3	na	6.1	6.5	4.3	5.5	8.0	5.5	4.9
		0.50	na	20.4	16.3	na	5.6	6.5	4.1	5.3	6.2	5.0	4.6
		0.75	na	18.6	15.0	na	5.7	6.2	3.7	5.1	6.3	5.3	4.7
		1.00	na	15.7	13.7	na	5.9	6.1	3.5	5.1	6.6	4.0	4.8
		1.25	na	13.3	12.3	na	6.1	5.9	3.0	4.7	6.4	3.9	4.8
	b _{Cr}	0.25	na	3	0	na	9	9	9	2	9	4	10
		0.50	na	1	0	na	6	6	7	0	8	2	9
		0.75	na	0	-1	na	4	4	6	-1	6	0	7
		1.00	na	0	-2	na	2	2	5	-2	4	3	5
		1.25	na	0	-2	na	0	1	5	-2	3	2	4
	R ²	0.25	na	1.00	0.99	na	1.00	0.95	0.83	0.91	0.99	0.99	1.00
		0.50	na	0.99	1.00	na	1.00	0.95	0.86	0.95	0.97	0.99	0.99
		0.75	na	0.99	1.00	na	1.00	0.96	0.87	0.96	0.98	1.00	0.99
		1.00	na	0.99	1.00	na	1.00	0.94	0.86	0.97	0.98	0.94	1.00
		1.25	na	1.00	0.98	na	1.00	0.92	0.81	0.97	0.98	0.96	0.99
Atmospheric	a _{Cr}	0.1	4.9	na	14.0	na	2.2	5.0	2.1	na	4.7	na	na
		0.2	5.2	na	13.4	6.1	3.6	5.4	2.9	na	5.2	na	na
		0.3	5.1	na	11.8	6.0	4.2	5.4	3.2	na	5.0	na	na
		0.4	4.8	na	11.4	5.7	4.2	5.6	3.3	na	4.6	na	na
		0.5	4.6	na	11.2	5.5	4.2	7.3	3.3	na	4.3	na	na
	b _{Cr}	0.1	11	na	-4	na	12	5	7	na	9	na	na
		0.2	6	na	-5	0	6	1	3	na	6	na	na
		0.3	5	na	-5	-1	3	-1	2	na	4	na	na
		0.4	4	na	-5	-2	2	-2	1	na	4	na	na
		0.5	3	na	-6	-2	1	-8	0	na	3	na	na
	R ²	0.1	0.99	na	0.99	na	0.55	0.90	0.93	na	0.99	na	na
		0.2	1.00	na	0.97	0.82	0.76	0.97	1.00	na	0.95	na	na
		0.3	0.99	na	0.96	0.81	0.92	0.95	1.00	na	0.93	na	na
		0.4	0.98	na	0.95	0.78	0.95	0.95	1.00	na	0.92	na	na
		0.5	0.97	na	0.94	0.79	0.96	1.00	1.00	na	0.93	na	na

1) FA = Fly ash; 2) SF = Silica fume

Square root method results for Dornoch

Field exposure site				Dornoch											
Concrete ID		Dor				Dor			Dor			Dor			Dor
Powder composition [wt%]	CEM I	100			CEM I	100			CEM I	100			CEM I		100
Exposure		C_r		Exposure		C_r		Exposure		C_r		Exposure		C_r	
Below mid-tidal zone (XS2)	a_{Cr}	0.25	21.3	High-tidal zone (XS3)	a_{Cr}	0.25	14.5	Low-splash zone (XS3)	a_{Cr}	0.25	13.6	High-splash zone (XS3)	a_{Cr}	0.1	14.1
		0.50	21.0			0.50	12.3			0.50	12.0			0.2	10.2
		0.75	20.3			0.75	11.4			0.75	11.1			0.3	10.9
		1.00	19.4			1.00	10.9			1.00	8.7			0.4	11.2
		1.25	18.3			1.25	9.8			1.25	5.5			0.5	7.4
	b_{Cr}	0.25	4		b_{Cr}	0.25	6		b_{Cr}	0.25	-6		b_{Cr}	0.1	-4
		0.50	-1			0.50	4			0.50	-7			0.2	-3
		0.75	-3			0.75	2			0.75	-9			0.3	-8
		1.00	-4			1.00	-1			1.00	-8			0.4	-11
		1.25	-4			1.25	-2			1.25	-5			0.5	-5
	R^2	0.25	0.94		R^2	0.25	0.93		R^2	0.25	0.95		R^2	0.1	0.71
		0.50	0.98			0.50	0.91			0.50	0.95			0.2	0.89
		0.75	0.97			0.75	0.87			0.75	0.95			0.3	0.91
		1.00	0.97			1.00	0.85			1.00	0.9			0.4	0.82
		1.25	0.97			1.25	0.83			1.25	0.7			0.5	0.88

Square root method results for Deicing

Field exposure site				
Concrete ID			RV206	RV206 Summe
Powder composition [wt%]	CEM I			95
	SF ¹⁾			5
Exposure		C_r		
Deicing	a_{Cr}	0.1	7.2	7.8
		0.2	7.1	7.6
		0.3	7.0	7.2
		0.4	6.3	6.7
		0.5	5.5	6.2
	b_{Cr}	0.1	13	12
		0.2	9	8
		0.3	6	6
		0.4	4	4
		0.5	3	3
	R^2	0.1	0.97	1.0
		0.2	0.97	1.0
		0.3	0.97	0.99
		0.4	0.93	0.99
		0.5	0.83	0.98

1) SF = Silica fume