Supplementary Materials

Table S1. Database of compressive strength tests on concrete samples containing waste marble powder

Referance	Sample No	W/C	Cem. Grade (MPa)	Cement (kg/m^3)	Max. Agg. Size (mm)	Coarse A. (kg/m^3)	Fine A. (kg/m^3)	Marble Powder (kg/m^3)	R	M (%)	Sample	Curing Day	Con. Cu. Comp Str. (MPa)	Con. Exp. Inc. Str. (%)	Est. Inc. Str. (%)
Amani et al. [27]	C1	0.45	53	300	25	950	850	0	0.53	0	Cyl.	3	23.8	0.0	-1.4
	CM3	0.45	53	300	25	950	765	85	0.53	10	"	3	21.2	-10.8	-7.3
	CM2	0.45	53	300	25	950	680	170	0.53	20	"	3	19.8	-16.5	-14.4
	CM1	0.45	53	300	25	950	595	255	0.53	30	"	3	17.6	-25.8	-22.6
	C1	0.45	53	300	25	950	850	0	0.53	0	"	7	27.9	0.0	-1.4
	CM3	0.45	53	300	25	950	765	85	0.53	10	"	7	25.7	-7.9	-7.3
	CM2	0.45	53	300	25	950	680	170	0.53	20	"	7	24.0	-14.1	-14.4
	CM1	0.45	53	300	25	950	595	255	0.53	30	"	7	20.9	-25.0	-22.6
	C1	0.45	53	300	25	950	850	0	0.53	0	"	28	38.5	0.0	-1.4
	CM3	0.45	53	300	25	950	765	85	0.53	10	"	28	36.2	-6.1	-7.3
	CM2	0.45	53	300	25	950	680	170	0.53	20	"	28	34.1	-11.5	-14.4
	CM1	0.45	53	300	25	950	595	255	0.53	30	"	28	30.4	-21.1	-22.6
	C1	0.45	53	300	25	950	850	0	0.53	0	"	90	42.5	0.0	-1.4
	CM3	0.45	53	300	25	950	765	85	0.53	10	"	90	38.8	-8.7	-7.3
	CM2	0.45	53	300	25	950	680	170	0.53	20	"	90	36.8	-13.3	-14.4
	CM1	0.45	53	300	25	950	595	255	0.53	30	"	90	32.7	-22.9	-22.6
Zaid et al. [33]	W0-M0-S0	0.43	43	470	25	1050	615	0	0.63	0	Cyl.	7	31.2	0.0	1.6
	W0-M10-S0	0.43	43	470	25	1050	554	62	0.63	10	"	7	32.6	4.7	6.7
	W0-M20-S0	0.43	43	470	25	1050	492	123	0.63	20	"	7	34.3	10.0	10.6
	W0-M30-S0	0.43	43	470	25	1050	431	185	0.63	30	"	7	35.3	13.3	13.2
	W0-M0-S0	0.43	43	470	25	1050	615	0	0.63	0	"	28	54.3	0.0	1.6
	W0-M10-S0	0.43	43	470	25	1050	554	62	0.63	10	"	28	58.8	8.3	6.7
	W0-M20-S0	0.43	43	470	25	1050	492	123	0.63	20	"	28	60.0	10.7	10.6
	W0-M30-S0	0.43	43	470	25	1050	431	185	0.63	30	"	28	63.5	17.1	13.2

Vigneshpandian et al. [34]	0%	0.42	53	380	20	1290	710	0	0.65	0	Cu.	28	31.4	0.0	0.4
	25%	0.42	53	380	20	1290	533	178	0.65	25	“	28	33.0	5.1	9.1
	50%	0.42	53	380	20	1290	355	355	0.65	50	“	28	40.2	28.0	-
	100%	0.42	53	380	20	1290	0	710	0.65	100	“	28	29.3	-6.8	-9.3
Varadharajan [35]	M000	0.40	43	487	20	1295	540	0	0.71	0	“	7	17.6	0.0	-1.7
	M100	0.40	43	487	20	1295	486	54	0.71	10	“	7	18.5	5.6	9.7
	M200	0.40	43	487	20	1295	432	108	0.71	20	“	7	21.2	20.5	19.9
	M300	0.40	43	487	20	1295	378	162	0.71	30	“	7	22.4	27.8	28.9
	M000	0.40	43	487	20	1295	540	0	0.71	0	“	28	22.6	0.0	-1.7
	M100	0.40	43	487	20	1295	486	54	0.71	10	“	28	23.2	2.6	9.7
	M200	0.40	43	487	20	1295	432	108	0.71	20	“	28	27.5	21.7	19.9
	M300	0.40	43	487	20	1295	378	162	0.71	30	“	28	29.4	30.2	28.9
Sancheti et al. [36]	CO	0.45	43	351	20	1176	722	0	0.62	0	Cu.	7	21.7	0.0	5.6
	MP05	0.45	43	351	20	1176	686	36	0.62	5	“	7	23.9	9.8	7.9
	MP10	0.45	43	351	20	1176	650	72	0.62	10	“	7	25.1	15.6	10.0
	MP15	0.45	43	351	20	1176	614	108	0.62	15	“	7	24.4	12.2	11.7
	MP20	0.45	43	351	20	1176	578	144	0.62	20	“	7	20.4	-6.0	-
	MP25	0.45	43	351	20	1176	542	181	0.62	25	“	7	19.7	-9.1	-
	CO	0.45	43	351	20	1176	722	0	0.62	0	“	28	31.8	0.0	5.6
	MP05	0.45	43	351	20	1176	686	36	0.62	5	“	28	34.7	9.2	7.9
	MP10	0.45	43	351	20	1176	650	72	0.62	10	“	28	36.7	15.2	10.0
	MP15	0.45	43	351	20	1176	614	108	0.62	15	“	28	34.5	8.5	11.7
	MP20	0.45	43	351	20	1176	578	144	0.62	20	“	28	30.2	-5.1	-
	MP25	0.45	43	351	20	1176	542	181	0.62	25	“	28	28.3	-11.1	-
	CO	0.45	43	351	20	1176	722	0	0.62	0	“	56	42.2	0.0	5.6
	MP05	0.45	43	351	20	1176	686	36	0.62	5	“	56	46.0	9.1	7.9
	MP10	0.45	43	351	20	1176	650	72	0.62	10	“	56	48.8	15.7	10.0
	MP15	0.45	43	351	20	1176	614	108	0.62	15	“	56	46.1	9.2	11.7
	MP20	0.45	43	351	20	1176	578	144	0.62	20	“	56	40.1	-5.0	-

	MP25	0.45	43	351	20	1176	542	181	0.62	25	“	56	37.7	-10.7	-
	CO	0.45	43	351	20	1176	722	0	0.62	0	“	90	44.7	0.0	5.6
	MP05	0.45	43	351	20	1176	686	36	0.62	5	“	90	48.5	8.6	7.9
	MP10	0.45	43	351	20	1176	650	72	0.62	10	“	90	51.4	14.9	10.0
	MP15	0.45	43	351	20	1176	614	108	0.62	15	“	90	48.4	8.3	11.7
	MP20	0.45	43	351	20	1176	578	144	0.62	20	“	90	42.0	-6.1	-
	MP25	0.45	43	351	20	1176	542	181	0.62	25	“	90	39.5	-11.5	-
Vardhan et al. [22]	M0	0.50	43	372	20	1179	621	0	0.66	0	Cu.	7	24.8	0.0	0.3
	M10	0.50	43	372	20	1179	559	69	0.65	10	“	7	26.9	8.5	7.4
	M20	0.50	43	372	20	1179	497	138	0.65	20	“	7	27.8	12.1	13.2
	M30	0.50	43	372	20	1179	435	207	0.65	30	“	7	29.5	19.1	17.7
	M40	0.50	43	372	20	1179	373	275	0.65	40	“	7	30.5	23.0	20.8
	M50	0.50	43	372	20	1179	311	344	0.64	50	“	7	30.1	21.3	22.6
	M60	0.50	43	372	20	1179	249	413	0.64	60	“	7	29.5	19.1	23.1
	M0	0.50	43	372	20	1179	621	0	0.66	0	“	28	36.1	0.0	0.3
	M10	0.50	43	372	20	1179	559	69	0.65	10	“	28	39.6	9.5	7.4
	M20	0.50	43	372	20	1179	497	138	0.65	20	“	28	41.8	15.6	13.2
	M30	0.50	43	372	20	1179	435	207	0.65	30	“	28	43.7	20.9	17.7
	M40	0.50	43	372	20	1179	373	275	0.65	40	“	28	44.2	22.4	20.8
	M50	0.50	43	372	20	1179	311	344	0.64	50	“	28	43.8	21.2	22.6
	M60	0.50	43	372	20	1179	249	413	0.64	60	“	28	43.4	20.2	23.1
	M0	0.50	43	372	20	1179	621	0	0.66	0	“	90	44.5	0.0	0.3
	M10	0.50	43	372	20	1179	559	69	0.65	10	“	90	48.6	9.3	7.4
	M20	0.50	43	372	20	1179	497	138	0.65	20	“	90	50.4	13.2	13.2
	M30	0.50	43	372	20	1179	435	207	0.65	30	“	90	53.4	20.0	17.7
	M40	0.50	43	372	20	1179	373	275	0.65	40	“	90	54.7	22.9	20.8
	M50	0.50	43	372	20	1179	311	344	0.64	50	“	90	53.9	21.1	22.6
	M60	0.50	43	372	20	1179	249	413	0.64	60	“	90	53.1	19.4	23.1

Alyamaç and Aydın [19]	REF	0.60	43	320	16	771	1077	0	0.42	0	Cu.	7	24.8	0.0	-0.6
	MP10	0.60	43	320	16	771	969	108	0.42	10	“	7	26.3	6.0	2.3
	MP20	0.60	43	320	16	771	861	216	0.42	20	“	7	27.4	10.5	4.1
	MP30	0.60	43	320	16	771	753	324	0.42	30	“	7	26.8	8.1	4.7
	MP40	0.60	43	320	16	771	645	432	0.42	40	“	7	26.0	4.8	4.1
	MP50	0.60	43	320	16	771	537	540	0.42	50	“	7	25.4	2.4	2.3
	MP90	0.60	43	320	16	771	105	972	0.42	90	“	7	23.2	-6.5	-16.7
	REF	0.60	43	320	16	771	1077	0	0.42	0	“	28	34.1	0.0	-0.6
	MP10	0.60	43	320	16	771	969	108	0.42	10	“	28	35.3	3.5	2.3
	MP20	0.60	43	320	16	771	861	216	0.42	20	“	28	36.3	6.5	4.1
	MP30	0.60	43	320	16	771	753	324	0.42	30	“	28	35.5	4.1	4.7
	MP40	0.60	43	320	16	771	645	432	0.42	40	“	28	33.4	-2.1	4.1
	MP50	0.60	43	320	16	771	537	540	0.42	50	“	28	31.4	-7.9	2.3
	MP90	0.60	43	320	16	771	105	972	0.42	90	“	28	29.3	-14.1	-16.7
	REF	0.60	43	320	16	771	1077	0	0.42	0	“	28	36.2	0.0	-0.6
	MP10	0.60	43	320	16	771	969	108	0.42	10	“	28	37.1	2.5	2.3
	MP20	0.60	43	320	16	771	861	216	0.42	20	“	28	38.1	5.2	4.1
	MP30	0.60	43	320	16	771	753	324	0.42	30	“	28	37.4	3.3	4.7
	MP40	0.60	43	320	16	771	645	432	0.42	40	“	28	36.4	0.6	4.1
	MP50	0.60	43	320	16	771	537	540	0.42	50	“	28	34.9	-3.6	2.3
	MP90	0.60	43	320	16	771	105	972	0.42	90	“	28	31.5	-13.0	-16.7
	REF	0.60	43	320	16	771	1077	0	0.42	0	“	90	41.4	0.0	-0.6
	MP10	0.60	43	320	16	771	969	108	0.42	10	“	90	43.3	4.6	2.3
	MP20	0.60	43	320	16	771	861	216	0.42	20	“	90	44.2	6.8	4.1
	MP30	0.60	43	320	16	771	753	324	0.42	30	“	90	43.2	4.3	4.7
	MP40	0.60	43	320	16	771	645	432	0.42	40	“	90	41.2	-0.5	4.1
	MP50	0.60	43	320	16	771	537	540	0.42	50	“	90	38.5	-7.0	2.3
	MP90	0.60	43	320	16	771	105	972	0.42	90	“	90	35.2	-15.0	-16.7

	0-0.5	0.40	43	400	19	1089	726	0	0.60	0	Cu.	7	41.8	0.0	3.7
	5-0.5	0.40	43	400	19	1088	689	36	0.60	5	“	7	45.2	8.0	6.6
	7.5-0.5	0.40	43	400	19	1088	671	54	0.60	8	“	7	45.8	9.4	8.0
	10-0.5	0.40	43	400	19	1087	652	72	0.60	10	“	7	46.2	10.4	9.3
	15-0.5	0.40	43	400	19	1086	616	109	0.60	15	“	7	45.5	8.8	11.7
	0-0.5	0.40	43	400	19	1028	686	0	0.60	0	“	28	48.5	0.0	3.7
	5-0.5	0.40	43	400	19	1027	651	34	0.60	5	“	28	57.0	17.6	6.6
	7.5-0.5	0.40	43	400	19	1027	633	51	0.60	8	“	28	58.7	21.1	-
	10-0.5	0.40	43	400	19	1026	616	68	0.60	10	“	28	59.3	22.4	-
	15-0.5	0.40	43	400	19	1025	581	103	0.60	15	“	28	56.0	15.6	11.7
	0-0.5	0.40	43	400	19	1028	686	0	0.60	0	“	56	55.6	0.0	3.7
	5-0.5	0.40	43	400	19	1027	651	34	0.60	5	“	56	59.3	6.6	6.6
	7.5-0.5	0.40	43	400	19	1027	633	51	0.60	8	“	56	62.0	11.4	8.0
	10-0.5	0.40	43	400	19	1026	616	68	0.60	10	“	56	62.7	12.8	9.3
Aliabdo et al. [15]	15-0.5	0.40	43	400	19	1025	581	103	0.60	15	“	56	61.0	9.8	11.7
	0-0.5	0.50	43	400	19	1028	686	0	0.60	0	“	7	30.9	0.0	3.5
	5-0.5	0.50	43	400	19	1027	651	34	0.60	5	“	7	33.7	9.1	7.4
	7.5-0.5	0.50	43	400	19	1027	633	51	0.60	8	“	7	35.6	15.3	9.2
	10-0.5	0.50	43	400	19	1026	616	68	0.60	10	“	7	36.3	17.4	10.9
	15-0.5	0.50	43	400	19	1025	581	103	0.60	15	“	7	34.4	11.3	14.2
	0-0.5	0.50	43	400	19	1028	686	0	0.60	0	“	28	40.0	0.0	3.5
	5-0.5	0.50	43	400	19	1027	651	34	0.60	5	“	28	43.0	7.6	7.4
	7.5-0.5	0.50	43	400	19	1027	633	51	0.60	8	“	28	44.6	11.5	9.2
	10-0.5	0.50	43	400	19	1026	616	68	0.60	10	“	28	45.6	14.0	10.9
	15-0.5	0.50	43	400	19	1025	581	103	0.60	15	“	28	43.1	7.9	14.2
	0-0.5	0.50	43	400	19	1028	686	0	0.60	0	“	56	45.4	0.0	3.5
	5-0.5	0.50	43	400	19	1027	651	34	0.60	5	“	56	46.7	3.0	7.4
	7.5-0.5	0.50	43	400	19	1027	633	51	0.60	8	“	56	48.0	5.9	9.2
	10-0.5	0.50	43	400	19	1026	616	68	0.60	10	“	56	48.8	7.7	10.9
	15-0.5	0.50	43	400	19	1025	581	103	0.60	15	“	56	46.3	2.0	-

Ashish et al. [37]	MX0	0.42	43	432	20	1124	648	0	0.63	0	Cu.	7	21.2	0.0	4.6
	MX1	0.42	43	432	20	1124	584	65	0.63	10	“	7	23.5	10.8	12.0
	MX3	0.42	43	432	20	1124	551	97	0.63	15	“	7	26.7	26.1	15.3
	MX0	0.42	43	432	20	1124	648	0	0.63	0	“	28	32.8	0.0	4.6
	MX1	0.42	43	432	20	1124	584	65	0.63	10	“	28	36.5	11.2	12.0
	MX3	0.42	43	432	20	1124	551	97	0.63	15	“	28	40.5	23.2	15.3
	MX0	0.42	43	432	20	1124	648	0	0.63	0	“	90	50.5	0.0	4.6
	MX1	0.42	43	432	20	1124	584	65	0.63	10	“	90	58.4	15.6	12.0
	MX3	0.42	43	432	20	1124	551	97	0.63	15	“	90	58.7	16.2	15.3
Sadek et al. [18]	C1	0.45	43	400	14	900	900	0	0.50	0	Cu.	7	27.9	0.0	-5.8
	20%MP	0.45	43	400	14	862	862	80	0.48	20	“	7	28.1	0.9	5.4
	30%MP	0.45	43	400	14	843	843	120	0.47	30	“	7	29.2	5.0	8.2
	40%MP	0.45	43	400	14	824	824	160	0.46	40	“	7	31.0	11.2	9.0
	50%MP	0.45	43	400	14	806	806	200	0.44	50	“	7	32.6	17.2	7.9
	C1	0.45	43	400	14	900	900	0	0.50	0	“	28	36.0	0.0	-5.8
	20%MP	0.45	43	400	14	862	862	80	0.48	20	“	28	35.5	-1.3	5.4
	30%MP	0.45	43	400	14	843	843	120	0.47	30	“	28	36.7	1.9	8.2
	40%MP	0.45	43	400	14	824	824	160	0.46	40	“	28	37.5	4.2	9.0
	50%MP	0.45	43	400	14	806	806	200	0.44	50	“	28	39.4	9.3	7.9
Demirel [38]	MD0	0.51	43	500	16	725	836	0	0.46	0	Cu.	7	35.5	0.0	-3.4
	MD25	0.51	43	500	16	725	797	39	0.46	5	“	7	35.5	0.1	1.4
	MD50	0.51	43	500	16	725	758	78	0.46	9	“	7	36.4	2.6	5.8
	MD100	0.51	43	500	16	725	680	156	0.46	19	“	7	39.0	9.8	14.1
	MD0	0.51	43	500	16	725	836	0	0.46	0	“	28	46.7	0.0	-3.4
	MD25	0.51	43	500	16	725	797	39	0.46	5	“	28	50.3	7.6	1.4
	MD50	0.51	43	500	16	725	758	78	0.46	9	“	28	50.7	8.6	5.8
	MD100	0.51	43	500	16	725	680	156	0.46	19	“	28	53.4	14.4	14.1
	MD0	0.51	43	500	16	725	836	0	0.46	0	“	90	60.5	0.0	-3.4
	MD25	0.51	43	500	16	725	797	39	0.46	5	“	90	61.4	1.5	1.4
	MD50	0.51	43	500	16	725	758	78	0.46	9	“	90	61.5	1.6	5.8
	MD100	0.51	43	500	16	725	680	156	0.46	19	“	90	63.3	4.6	14.1

Yıldız et al. [39]	D300-K	0.60	43	300	8	598	1110	0	0.35	0	Cu.	28	36.9	0.0	-
	D300-CE0-MT25	0.60	43	300	8	598	1089	21	0.35	2	“	28	42.3	14.5	18.9
	D300-CE0-MT50	0.60	43	300	8	598	1068	43	0.35	4	“	28	44.2	19.8	20.3
	D300-CE0-MT75	0.60	43	300	8	598	1046	64	0.35	6	“	28	45.9	24.2	21.5
	D300-CE0-MT100	0.60	43	300	8	598	1025	85	0.35	8	“	28	44.6	20.7	22.8
	D350-K	0.60	43	350	8	556	1032	0	0.35	0	“	28	49.9	0.0	8.3
	D350-CE0-MT25	0.60	43	350	8	556	1013	20	0.35	2	“	28	54.8	9.9	10.0
	D350-CE0-MT50	0.60	43	350	8	556	993	40	0.35	4	“	28	57.9	16.1	11.7
	D350-CE0-MT75	0.60	43	350	8	556	973	60	0.35	6	“	28	59.6	19.4	13.3
	D350-CE0-MT100	0.60	43	350	8	556	953	79	0.35	8	“	28	58.5	17.2	15.0
Boobalan et al. [40]	M25-0% WMD	0.43	53	320	20	1356	751	0	0.64	0	“	7	21.3	0.0	2.7
	M25-25% WMD	0.43	53	320	20	1356	564	187	0.64	25	Cu.	7	22.2	4.2	5.8
	M25-50% WMD	0.43	53	320	20	1356	376	375	0.64	50	“	7	22.4	5.2	1.5
	M25-75% WMD	0.43	53	320	20	1356	188	563	0.64	75	“	7	21.2	-0.8	-10.2
	M25-100% WMD	0.43	53	320	20	1356	0	751	0.64	100	“	7	13.3	-37.5	-29.4
	M25-0% WMD	0.43	53	320	20	1356	751	0	0.64	0	“	14	21.8	0.0	2.7
	M25-25% WMD	0.43	53	320	20	1356	564	187	0.64	25	“	14	22.4	2.7	5.8
	M25-50% WMD	0.43	53	320	20	1356	376	375	0.64	50	“	14	23.1	6.1	1.5
	M25-75% WMD	0.43	53	320	20	1356	188	563	0.64	75	“	14	21.2	-2.7	-10.2
	M25-100% WMD	0.43	53	320	20	1356	0	751	0.64	100	“	14	14.2	-34.7	-29.4
	M25-0% WMD	0.43	53	320	20	1356	751	0	0.64	0	“	28	31.7	0.0	2.7
	M25-25% WMD	0.43	53	320	20	1356	564	187	0.64	25	“	28	33.1	4.3	5.8
	M25-50% WMD	0.43	53	320	20	1356	376	375	0.64	50	“	28	34.7	9.3	1.5
	M25-75% WMD	0.43	53	320	20	1356	188	563	0.64	75	“	28	26.3	-17.1	-10.2
	M25-100% WMD	0.43	53	320	20	1356	0	751	0.64	100	“	28	21.3	-32.8	-29.4
Ghani et al. [24]	SR-0	0.43	0.62	354	9	993	821	0	0.55	0	Cyl.	14	30.5	0.0	-
	SR-20	0.43	0.62	354	9	993	656	164	0.55	20	“	14	36.9	20.9	-
	SR-40	0.43	0.62	354	9	993	492	328	0.55	40	“	14	42.5	39.4	-
	SR-60	0.43	0.62	354	9	993	328	492	0.55	60	“	14	38.7	26.8	-

SR-80	0.43	0.62	354	9	993	164	656	0.55	80	“	14	18.5	-39.5	-
SR-0	0.43	0.62	354	9	993	821	0	0.55	0	“	28	33.6	0.0	-
SR-20	0.43	0.62	354	9	993	656	164	0.55	20	“	28	41.2	22.6	-
SR-40	0.43	0.62	354	9	993	492	328	0.55	40	“	28	46.4	38.1	-
SR-60	0.43	0.62	354	9	993	328	492	0.55	60	“	28	41.9	24.8	-
SR-80	0.43	0.62	354	9	993	164	656	0.55	80	“	28	19.7	-41.5	-
SR-0	0.43	0.62	354	9	993	821	0	0.55	0	“	70	33.9	0.0	-
SR-20	0.43	0.62	354	9	993	656	164	0.55	20	“	70	45.5	34.0	-
SR-40	0.43	0.62	354	9	993	492	328	0.55	40	“	70	49.2	44.9	-
SR-60	0.43	0.62	354	9	993	328	492	0.55	60	“	70	45.4	33.9	-
SR-80	0.43	0.62	354	9	993	164	656	0.55	80	“	70	22.4	-34.0	-

Table S2. Database of compressive strength tests of concretes containing fine marble aggregate

Referance	Sample No	W/C	Cem. Grade (MPa)	Cement (kg/m^3)	Max. Agg. Size (mm)	Coarse A. (kg/m^3)	Fine A. (kg/m^3)	Fine Marble (kg/m^3)	R	M (%)	Sample	Curing Day	Con. Cu. Comp Str. (MPa)	Con. Exp. Inc. Str. (%)	Est. Inc. Str. (%)
Binici and Aksogan [28]	Control	0.53	43	400	32	1200	500	0	0.71	0	Cu.	7	19.8	0.0	4.0
	MP10	0.53	43	400	32	1200	450	50	0.73	10	“	7	23.5	18.7	13.9
	MP20	0.54	43	400	32	1200	400	100	0.75	20	“	7	24.7	24.7	19.2
	MP30	0.55	43	400	32	1200	350	150	0.77	30	“	7	25.3	27.8	24.0
	MP40	0.56	43	400	32	1200	300	200	0.80	40	“	7	26.0	31.3	28.3
	MP50	0.58	43	400	32	1200	250	250	0.83	50	“	7	27.1	36.9	32.0
	MP100	0.59	43	400	32	1200	0	500	1.00	100	“	7	32.7	65.2	57.6
	Control	0.53	43	400	32	1200	500	0	0.71	0	“	28	28.5	0.0	4.0
	MP10	0.53	43	400	32	1200	450	50	0.73	10	“	28	33.6	17.9	13.9
	MP20	0.54	43	400	32	1200	400	100	0.75	20	“	28	34.8	22.1	19.2
	MP30	0.55	43	400	32	1200	350	150	0.77	30	“	28	35.6	24.9	24.0
	MP40	0.56	43	400	32	1200	300	200	0.80	40	“	28	36.4	27.7	28.3
	MP50	0.58	43	400	32	1200	250	250	0.83	50	“	28	37.8	32.6	32.0
	MP100	0.59	43	400	32	1200	0	500	1.00	100	“	28	42.0	47.4	57.6
	Control	0.53	43	400	32	1200	500	0	0.71	0	“	90	35.5	0.0	4.0
	MP10	0.53	43	400	32	1200	450	50	0.73	10	“	90	39.6	11.5	13.9
	MP20	0.54	43	400	32	1200	400	100	0.75	20	“	90	40.4	13.8	19.2
	MP30	0.55	43	400	32	1200	350	150	0.77	30	“	90	41.6	17.2	24.0
	MP40	0.56	43	400	32	1200	300	200	0.80	40	“	90	42.5	19.7	28.3
	MP50	0.58	43	400	32	1200	250	250	0.83	50	“	90	43.0	21.1	-
	MP100	0.59	43	400	32	1200	0	500	1.00	100	“	90	47.5	33.8	-
Ahmad et al. [23] [1]	Control	0.50	43	408	20	1225	613	0	0.67	0	Cyl.	7	18.9	0.0	1.0
	M20	0.50	43	408	20	1225	490	123	0.71	20	“	7	19.4	3.1	6.6
	M40	0.50	43	408	20	1225	368	245	0.77	40	“	7	20.1	6.5	10.5
	M60	0.50	43	408	20	1225	245	368	0.83	60	“	7	21.3	13.1	12.2

	M80	0.50	43	408	20	1225	123	490	0.91	80	“	7	20.8	10.5	11.1
	M100	0.50	43	408	20	1225	0	613	1.00	100	“	7	19.9	5.7	6.3
	Control	0.50	43	408	20	1225	613	0	0.67	0	“	28	27.3	0.0	1.0
	M20	0.50	43	408	20	1225	490	123	0.71	20	“	28	29.9	9.7	6.6
	M40	0.50	43	408	20	1225	368	245	0.77	40	“	28	31.4	15.2	10.5
	M60	0.50	43	408	20	1225	245	368	0.83	60	“	28	33.0	20.9	12.2
	M80	0.50	43	408	20	1225	123	490	0.91	80	“	28	30.3	10.9	11.1
	M100	0.50	43	408	20	1225	0	613	1.00	100	“	28	29.3	7.3	6.3
	Control	0.50	43	408	20	1225	613	0	0.67	0	“	56	30.8	0.0	1.0
	M20	0.50	43	408	20	1225	490	123	0.71	20	“	56	32.1	4.3	6.6
	M40	0.50	43	408	20	1225	368	245	0.77	40	“	56	32.5	5.7	10.5
	M60	0.50	43	408	20	1225	245	368	0.83	60	“	56	35.4	15.1	12.2
	M80	0.50	43	408	20	1225	123	490	0.91	80	“	56	32.7	6.5	11.1
	M100	0.50	43	408	20	1225	0	613	1.00	100	“	56	31.3	1.6	6.3
Singhal et al. [41] [2]	Control	0.37	43	422	20	1083	770	0	0.58	0	Cu.	7	39.7	0.0	3.1
	F30M10	0.38	43	422	20	1083	693	77	0.61	10	“	7	41.5	4.4	4.5
	F30M20	0.39	43	422	20	1083	616	154	0.64	20	“	7	43.6	9.7	5.5
	F30M30	0.40	43	422	20	1083	539	231	0.67	30	“	7	40.4	1.8	6.3
	Control	0.37	43	422	20	1083	770	0	0.58	0	“	28	47.2	0.0	3.1
	F30M10	0.38	43	422	20	1083	693	77	0.61	10	“	28	49.7	5.3	4.5
	F30M20	0.39	43	422	20	1083	616	154	0.64	20	“	28	52.3	10.9	5.5
	F30M30	0.40	43	422	20	1083	539	231	0.67	30	“	28	48.2	2.2	6.3
Hebhoub et al. [42] [3]	0	0.50	43	350	25	1155	770	0	0.60	0	Cyl.	14	30.3	0.0	-0.4
	25	0.50	43	350	25	1155	578	193	0.67	25	“	14	40.6	34.2	-
	50	0.50	43	350	25	1155	385	385	0.75	50	“	14	38.3	26.4	26.7
	75	0.50	43	350	25	1155	193	578	0.86	75	“	14	35.5	17.2	17.9
	100	0.50	43	350	25	1155	0	770	1.00	100	“	14	23.7	-21.5	-15.7
	0	0.50	43	350	25	1155	770	0	0.60	0	“	28	34.6	0.0	-0.4
	25	0.50	43	350	25	1155	578	193	0.67	25	“	28	40.6	17.4	18.9

	50	0.50	43	350	25	1155	385	385	0.75	50	“	28	42.9	24.2	26.7
	75	0.50	43	350	25	1155	193	578	0.86	75	“	28	40.3	16.5	17.9
	100	0.50	43	350	25	1155	0	770	1.00	100	“	28	26.8	-22.5	-15.7
	0	0.50	43	350	25	1155	770	0	0.60	0	“	90	34.9	0.0	-0.4
	25	0.50	43	350	25	1155	578	193	0.67	25	“	90	40.6	16.4	18.9
	50	0.50	43	350	25	1155	385	385	0.75	50	“	90	43.2	24.0	26.7
	75	0.5	43	350	25	1155	193	578	0.86	75	“	90	43.2	24.0	17.9
	100	0.5	43	350	25	1155	0	770	1.00	100	“	90	33.7	-3.4	-15.7
Silva et al. [21]	BRB	0.55	43	441	16	962	872	0	0.52	0	Cu.	7	38.1	0.0	-0.5
	BB/M20	0.55	43	441	16	962	698	174	0.58	20	“	7	35.8	-6.0	-2.9
	BB/M50	0.56	43	441	16	962	436	436	0.69	50	“	7	35.6	-6.6	-5.7
	BRM	0.54	43	441	16	962	0	872	1.00	100	“	7	36.8	-3.4	-10.0
	BRC	0.49	43	441	16	1219	554	0	0.69	0	“	7	45.6	0.0	-0.6
	BC/N20	0.5	43	441	16	1219	443	111	0.73	20	“	7	42.7	-6.4	-2.7
	BC/M50	0.5	43	441	16	1219	277	277	0.81	50	“	7	40.1	-12.1	-6.3
	BRG	0.54	43	441	16	1069	695	0	0.61	0	“	7	39.6	0.0	0.3
	BG/M20	0.55	43	441	16	1069	481	214	0.69	20	“	7	38.6	-2.5	-1.3
	BG/M50	0.56	43	441	16	1069	160	535	0.87	50	“	7	38.3	-3.3	-3.2
	BRB	0.55	43	441	16	962	872	0	0.52	0	“	28	50.4	0.0	-0.5
	BB/M20	0.55	43	441	16	962	698	174	0.58	20	“	28	49.2	-2.4	-2.9
	BB/M50	0.56	43	441	16	962	436	436	0.69	50	“	28	46.7	-7.3	-5.7
	BRM	0.54	43	441	16	962	0	872	1.00	100	“	28	45.3	-10.1	-10.0
	BRC	0.49	43	441	16	1219	554	0	0.69	0	“	28	56.9	1.6	-0.6
	BC/N20	0.5	43	441	16	1219	443	111	0.737	20	“	28	56.0	0.0	-2.7
	BC/M50	0.5	43	441	16	1219	277	277	0.81	50	“	28	51.2	-8.6	-6.3
	BRG	0.54	43	441	16	1069	695	0	0.61	0	“	28	49.2	0.0	0.3
	BG/M20	0.55	43	441	16	1069	481	214	0.69	20	“	28	47.6	-3.3	-1.3
	BG/M50	0.56	43	441	16	1069	160	535	0.87	50	“	28	46.2	-6.1	-3.2

[1]The weights were calculated according to the 2450 kg/m^3 concrete mass according to the ratios given in the article.
[2]Concrete compressive strengths were increased according to the concrete compressive strength ratio between the control sample and the concrete with fly ash mineral additives.
[3]Aggregate weights were calculated according to the ratio of Fine Aggregate/Aggregate=0.4.

Table S3. Database of compressive strength tests of concretes containing coarse marble aggregate

Referance	Sample No	W/C	Cem. Grade (MPa)	Cement (kg/m^3)	Max. Agg. Size (mm)	Coarse A. (kg/m^3)	Fine A. (kg/m^3)	Coarse Marble (kg/m^3)	R	M (%)	Sample	Curing Day	Con. Cu. Comp Str. (MPa)	Con. Exp. Inc. Str. (%)	Est. Inc. Str. (%)
Chawla et al. [43]	A1	0.87		240	10	1390	1044	0	0.57	0	Cu.	7	5.1	0.0	-2.8
	A2	0.87		240	10	0	1044	1421	0.58	100	“	7	5.4	4.9	8.3
	A1	0.87		240	10	1390	1044	0	0.57	0	“	28	9.1	0.0	-2.8
	A2	0.87		240	10	0	1044	1421	0.58	100	“	28	9.8	7.1	8.3
Kore and Vyas [44]	C0	0.62	33	310	20	1171	647	0	0.64	0	Cu.	28	15.8	0.0	0.2
	C1	0.62	33	310	20	964	647	234	0.65	20	“	28	16.0	1.3	9.8
	C2	0.62	33	310	20	703	647	468	0.64	40	“	28	17.6	11.6	13.4
	C3	0.62	33	310	20	468	647	703	0.64	60	“	28	18.7	18.3	17.6
	C4	0.62	33	310	20	234	647	937	0.64	80	“	28	21.3	35.0	20.1
	C5	0.62	33	310	20	0	647	1171	0.64	100	“	28	20.0	26.5	20.9
	C0	0.62	33	310	20	1171	647	0	0.64	0	“	90	21.0	0.0	0.2
	C1	0.62	33	310	20	964	647	234	0.65	20	“	90	22.5	7.1	9.8
	C2	0.62	33	310	20	703	647	468	0.64	40	“	90	24.4	16.1	13.4
	C3	0.62	33	310	20	468	647	703	0.64	60	“	90	25.1	19.4	17.6
	C4	0.62	33	310	20	234	647	937	0.64	80	“	90	24.5	16.7	20.1
	C5	0.62	33	310	20	0	647	1171	0.64	100	“	90	24.7	17.5	20.9
Martins et al. [45]	LRC	0.55	43	350	22	1003	834	0	0.55	0	Cyl.	7	42.2	0.0	1.1
	LC20	0.55	43	350	22	802	794	205	0.56	20	“	7	42.2	0.0	0.6
	LC50	0.55	43	350	22	501	794	512	0.56	50	“	7	42.2	0.0	1.3
	MRC	0.55	43	350	22	0	794	1023	0.56	100	“	7	41.0	-2.9	-5.5
	BRC	0.55	43	350	22	1131	834	0	0.58	0	“	7	42.2	0.0	-4.3
	BC20	0.55	43	350	22	905	794	205	0.58	20	“	7	41.0	-2.9	-1.3
	BC50	0.55	43	350	22	565	794	512	0.58	50	“	7	42.2	0.0	0.6
	GRC	0.55	43	350	22	1042	834	0	0.56	0	“	7	43.5	0.0	-1.3
	GC20	0.55	43	350	22	833	794	205	0.57	20	“	7	42.2	-2.8	-0.4

	GC50	0.55	43	350	22	517	794	512	0.56	50	“	7	42.2	-2.8	1.0
	LRC	0.55	43	350	22	1003	834	0	0.55	0	“	28	53.3	0.0	1.1
	LC20	0.55	43	350	22	802	794	205	0.56	20	“	28	53.3	0.0	0.6
	LC50	0.55	43	350	22	501	794	512	0.56	50	“	28	54.5	2.3	1.3
	MRC	0.55	43	350	22	0	794	1023	0.56	100	“	28	52.0	-2.3	-5.5
	BRC	0.55	43	350	22	1131	834	0	0.58	0	“	28	56.9	0.0	-4.3
	BC20	0.55	43	350	22	905	794	205	0.58	20	“	28	54.5	-4.3	-1.3
	BC50	0.55	43	350	22	565	794	512	0.58	50	“	28	54.5	-4.3	0.6
	GRC	0.55	43	350	22	1042	834	0	0.56	0	“	28	58.1	0.0	-1.3
	GC20	0.55	43	350	22	833	794	205	0.57	20	“	28	54.5	-6.3	-0.4
	GC50	0.55	43	350	22	517	794	512	0.56	50	“	28	50.8	-12.6	-
	LRC	0.55	43	350	22	1003	834	0	0.55	0	“	56	55.7	0.0	1.1
	LC20	0.55	43	350	22	802	794	205	0.56	20	“	56	61.7	10.9	0.6
	LC50	0.55	43	350	22	501	794	512	0.56	50	“	56	60.5	8.7	1.3
	MRC	0.55	43	350	22	0	794	1023	0.56	100	“	56	58.1	4.4	-5.5
	BRC	0.55	43	350	22	1131	834	0	0.58	0	“	56	62.9	0.0	-4.3
	BC20	0.55	43	350	22	905	794	205	0.58	20	“	56	60.5	-3.8	-1.3
	BC50	0.55	43	350	22	565	794	512	0.58	50	“	56	60.5	-3.8	0.6
	GRC	0.55	43	350	22	1042	834	0	0.56	0	“	56	61.7	0.0	-1.3
	GC20	0.55	43	350	22	833	794	205	0.57	20	“	56	58.1	-5.9	-0.4
	GC50	0.55	43	350	22	517	794	512	0.56	50	“	56	58.1	-5.9	1.0
Uygunoğlu et al. [46]	LS-1	0.31	43	450	22	986	720	0	0.58	0	Cu.	7	50.0	0.0	2.3
	LS-2	0.34	43	450	22	966	706	0	0.58	0	“	7	46.0	0.0	0.5
	LS-3	0.37	43	450	22	947	692	0	0.58	0	“	7	42.0	0.0	-1.6
	LS-4	0.40	43	450	22	927	678	0	0.58	0	“	7	39.4	0.0	-3.4
	MW-1	0.31	43	450	22	0	720	1109	0.61	100	“	7	44.0	-12.0	-8.3
	MW-2	0.34	43	450	22	0	706	1087	0.61	100	“	7	42.0	-8.7	-13.0
	MW-3	0.37	43	450	22	0	692	1065	0.61	100	“	7	37.0	-11.9	-18.2
	MW-4	0.40	43	450	22	0	678	1043	0.61	100	“	7	34.0	-13.7	-22.9

	LS-1	0.31	43	450	22	986	720	0	0.58	0	“	28	57.0	0.0	2.3
	LS-2	0.34	43	450	22	966	706	0	0.58	0	“	28	57.0	0.0	0.5
	LS-3	0.37	43	450	22	947	692	0	0.58	0	“	28	56.0	0.0	-1.6
	LS-4	0.40	43	450	22	927	678	0	0.58	0	“	28	55.6	0.0	-3.4
	MW-1	0.31	43	450	22	0	720	1109	0.61	100	“	28	53.6	-6.0	-8.3
	MW-2	0.34	43	450	22	0	706	1087	0.61	100	“	28	50.0	-12.3	-13.0
	MW-3	0.37	43	450	22	0	692	1065	0.61	100	“	28	42.0	-25.0	-18.2
	MW-4	0.40	43	450	22	0	678	1043	0.61	100	“	28	38.0	-31.7	-22.9
Hebhoub et al. [42][1]	0	0.50	43	350	25	1155	770	0	0.60	0	Cyl.	14	30.3	0.0	5.9
	25	0.50	43	350	25	866	770	289	0.60	25	“	14	33.4	10.5	12.0
	50	0.50	43	350	25	578	770	578	0.60	50	“	14	27.3	-9.8	-
	75	0.50	43	350	25	289	770	866	0.60	75	“	14	39.6	30.8	-
	100	0.50	43	350	25	0	770	1155	0.60	100	“	14	35.2	16.4	14.6
	0	0.50	43	350	25	1155	770	0	0.60	0	“	28	34.6	0.0	5.9
	25	0.50	43	350	25	866	770	289	0.60	25	“	28	42.1	21.7	12.0
	50	0.50	43	350	25	578	770	578	0.60	50	“	28	40.5	17.2	15.5
	75	0.50	43	350	25	289	770	866	0.60	75	“	28	43.3	25.2	16.3
	100	0.50	43	350	25	0	770	1155	0.60	100	“	28	36.6	5.7	14.6
	0	0.50	43	350	25	1155	770	0	0.60	0	“	90	34.8	0.0	5.9
	25	0.50	43	350	25	866	770	289	0.60	25	“	90	42.1	21.0	12.0
	50	0.50	43	350	25	578	770	578	0.60	50	“	90	42.1	21.0	15.5
	75	0.50	43	350	25	289	770	866	0.60	75	“	90	43.3	24.5	16.3
	100	0.50	43	350	25	0	770	1155	0.60	100	“	90	36.6	5.1	14.6
Binici et al. [20]	C1	0.40	-	300	19	1180	780	0	0.60	0	Cyl.	28	31.3	0.0	-
	MC1	0.40	-	300	19	0	765	1140	0.60	100	“	28	54.8	75.4	-
	C1	0.40	-	300	19	1180	780	0	0.60	0	“	90	40.1	0.0	-
	MC1	0.40	-	300	19	0	765	1140	0.60	100	“	90	60.8	51.4	-
	C2	0.40	-	300	19	1180	770	0	0.61	0	“	7	35.3	0.0	-2.2
	MC2	0.40	-	300	19	0	765	1150	0.60	100	“	7	49.7	40.7	36.0

	C2	0.40	-	300	19	1180	770	0	0.61	0	“	28	43.7	0.0	-2.2
	MC2	0.40	-	300	19	0	765	1150	0.60	100	“	28	58.4	33.5	36.0
	C2	0.40	-	300	19	1180	770	0	0.61	0	“	90	51.1	0.0	-2.2
	MC2	0.40	-	300	19	0	765	1150	0.60	100	“	90	66.6	30.5	36.0
Kore and Vyas [47]	C1	0.45	-	426	20	1180	663	0	0.64	0	Cu.	7	25.9	0.0	-2.8
	C2	0.45	-	426	20	295	663	885	0.64	75	“	7	21.1	-18.5	-5.9
	C1	0.45	-	426	20	1180	663	0	0.64	0	“	28	31.5	0.0	-2.8
	C2	0.45	-	426	20	295	663	885	0.64	75	“	28	31.1	-1.4	-5.9
	C1	0.45	-	426	20	1180	663	0	0.64	0	“	90	38.8	0.0	-2.8
	C2	0.45	-	426	20	295	663	885	0.64	75	“	90	36.7	-5.6	-5.9

[1]Aggregate weights were calculated according to the ratio of Fine Aggregate/Aggregate=0.4.

Table S4. Database of compressive strength tests of concretes containing fine and coarse marble aggregates

Referance	Sample No	W/C	Cem. Grade (MPa)	Cement (kg/m^3)	Max. Agg. Size (mm)	Coarse Marble Rep. (%)	Fine Marble Rep. (%)	Sample	Curing Day	Con. Cu. Comp Str. (MPa)	Con. Exp. Inc. Str. (%)	Est. Inc. Str. (%)
AL-Baghdadi et al. [48]	0%-0%sf	0.35	-	480	20	0	0	Cu.	28	41.4	0.0	-
	10%-0%sf	0.35	-	480	20	10	10	"	28	44.7	7.8	-
	50%-0%sf	0.35	-	480	20	50	50	"	28	46.9	13.1	-
	100%-0%sf	0.35	-	480	20	100	100	"	28	51.5	24.3	-
Hebhoub et al. [42]	0	0.50	43	366	25	0	0	Cyl.	14	30.5	0.0	-
	25	0.50	43	367	25	25	25	"	14	39.1	28.1	-
	50	0.50	43	368	25	50	50	"	14	35.1	15.1	-
	75	0.50	43	369	25	75	75	"	14	28.9	-5.2	-
	100	0.50	43	370	25	100	100	"	14	26.2	-14.3	-
	0	0.50	43	371	25	0	0	"	28	34.7	0.0	-
	25	0.50	43	372	25	25	25	"	28	42.5	22.4	-
	50	0.50	43	373	25	50	50	"	28	40.5	16.7	-
	75	0.50	43	374	25	75	75	"	28	40.5	16.7	-
	100	0.50	43	375	25	100	100	"	28	35.2	1.2	-
	0	0.50	43	376	25	0	0	"	90	35.2	0.0	-
	25	0.50	43	377	25	25	25	"	90	42.8	21.5	-
	50	0.50	43	378	25	50	50	"	90	41.0	16.5	-
	75	0.50	43	379	25	75	75	"	90	40.6	15.4	-
	100	0.50	43	380	25	100	100	"	90	38.4	9.2	-
Belachia and Hebhoub [49]	B2.1.1	0.45	-	350	25	0	0	-	28	40.9	0.0	-
	B2.2.1	0.45	-	350	25	25	25	-	28	45.0	10.3	-
	B2.3.1	0.45	-	350	25	50	50	-	28	37.4	-8.5	-
	B2.4.1	0.45	-	350	25	75	75	-	28	37.1	-9.2	-

	B2.5.1	0.45	-	350	25	100	100	-	28	37.0	-9.3	-
	B2.1.2	0.55	-	350	25	0	0	-	28	28.5	0.0	-
	B2.2.2	0.55	-	350	25	25	25	-	28	31.2	9.2	-
	B2.3.2	0.55	-	350	25	50	50	-	28	30.9	8.2	-
	B2.4.2	0.55	-	350	25	75	75	-	28	29.7	4.1	-
	B2.5.2	0.55	-	350	25	100	100	-	28	29.4	3.1	-
	B2.1.3	0.65	-	350	25	0	0	-	28	16.7	0.0	-
	B2.2.3	0.65	-	350	25	25	25	-	28	26.5	58.2	-
	B2.3.3	0.65	-	350	25	50	50	-	28	24.4	45.9	-
	B2.4.3	0.65	-	350	25	75	75	-	28	23.9	42.9	-
	B2.5.3	0.65	-	350	25	100	100	-	28	23.6	41.2	-
Gencel et al. [50]	B0	0.40	43	400	12.5	0	0	Cyl.	7	58.4	0.0	-
	B1	0.46	43	400	12.5	10	10	"	7	56.0	-4.1	-
	B2	0.49	43	400	12.5	20	20	"	7	52.8	-9.6	-
	B3	0.52	43	400	12.5	30	30	"	7	49.5	-15.3	-
	B4	0.55	43	400	12.5	40	40	"	7	45.7	-21.8	-
	B0	0.40	43	400	12.5	0	0	"	28	64.0	0.0	-
	B1	0.46	43	400	12.5	10	10	"	28	60.7	-5.2	-
	B2	0.49	43	400	12.5	20	20	"	28	59.2	-7.5	-
	B3	0.52	43	400	12.5	30	30	"	28	55.5	-13.3	-
	B4	0.55	43	400	12.5	40	40	"	28	50.4	-21.2	-