

**uzge**Ulusal Zemin Güvenliği Enstitüsü
National Floor Safety Institute

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5.4 TS EN 12372:2013 / Determination Of Flexural Strength Under Concentrated Moment**Sample Name** Old Brick**Test Starting Date** : 18.02.2020**Test Finishing Date** : 19.02.2020

Old Brick	Value Of Measurements									
	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8	Test 9	Test 10
Sample Width (mm)	48,66	45,39	44,90	44,35	45,30	47,31	47,37	50,32	46,69	49,27
Sample Thickness (mm)	51,19	51,59	52,19	51,50	52,22	52,13	52,16	54,02	52,01	54,19
Sample Length (mm)	300	300	300	300	300	300	300	300	300	300
Distance Between Lateral Supports (mm)	250	250	250	250	250	250	250	250	250	250
Deviation from Perpendicularity (°)	0,02	0,01	0,01	0,02	0,02	0,01	0,01	0,02	0,02	0,01
Breaking Load (kN)	1,50	1,49	1,54	1,35	1,39	1,63	1,46	1,84	1,63	1,61
Flexural Strength Under Concentrated Load (MPa)	5,57	6,31	6,59	6,00	5,84	6,29	5,61	6,05	6,47	5,51
Average Flexural Strength Under Concentrated Load (MPa)	6,0									
Standard Deviation (MPa) (±)	0,4									

*This test was done by the Accredited Subcontractor Laboratory.

Laboratory Conditions

Temperature: 21,6 °C

Moisture: 29

The results belong to the tested sample only.

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06.03.2020

Bu rapor, laboratuvarın işi almaktan itibaren veya tamamen kopyalanıp çoğaltılmaz. İmza ve mühür raporla geçerlidir. Aksi hâlinde raporun yalıtımları 6 ay saklanmaktadır.

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5.5 TS EN 13755:2014/ Determination of Water Absorption at Atmospheric Pressure**Sample Name** Old Brick**Test Starting Date** : 18.02.2020**Test Finishing Date** : 21.02.2020

Old Brick	Value Of Measurements					
	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
Sample Dimensions (mm)	50 x 50 x 50	50 x 50 x 50	50 x 50 x 50	50 x 50 x 50	50 x 50 x 50	50 x 50 x 50
Water Absorption At Atmospheric Pressure (%)	5,81	5,53	5,62	5,73	5,49	5,80
Average Water Absorption At Atmospheric Pressure (%)	5,66					
Standard Deviation (%) ($\pm$)	0,14					

*This test was done by the Accredited Subcontractor Laboratory.

Laboratory Conditions

Temperature: 22,3°C

Moisture: 40

The results belong to the tested sample only.

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Bu rapor, laboratuvarın izni alınmaksızın kısmen veya tamamen kopyalanıp çoğaltılamaz.
İmzasız ve mühürsüz raporlar geçersizdir. Akıllı telefonla çekilen fotoğraflar 6 ay
saldırmaktadır.

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Test / Analysis Report

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5. Result Of Measurements

5.1 TS EN 1936:2010 / Determination Of Real Density, Apparent Density, Total and Open Porosity

Sample Name : Old Brick

Test Starting Date : 18.02.2020

Test Finishing Date : 19.02.2020

Old Brick	Value Of Measurements					
	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
Sample Dimensions (mm)	50 x 50 x 50	50 x 50 x 50	50 x 50 x 50	50 x 50 x 50	50 x 50 x 50	50 x 50 x 50
Real Density (kg/m ³)	2501	2497	2491	2493	2492	2482
Apparent Density (kg/m ³)	2152	2097	2115	2121	2087	2099
Total Porosity (%)	13,97	16,15	15,44	15,20	16,57	16,07
Open Porosity (%)	11,48	11,92	12,11	12,18	11,76	11,08

	Real Density (kg/m ³)	Apparent Density (kg/m ³)	Total Porosity (%)	Open Porosity (%)
Average Values	2501	2112	15,6	11,8
Standard Deviation (±)	12	23	0,9	0,4

*This test was done by the Accredited Subcontractor Laboratory.

Laboratory Conditions

Temperature: 21,6 °C

Moisture: 29

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5.2 TS EN 1926:2013 / Determination of Compressive Strength

Sample Name Old Brick

Test Starting Date : 21.02.2020

Test Finishing Date : 24.02.2020

Old Brick	Value Of Measurements									
	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8	Test 9	Test 10
Sample Width (mm)	45,38	50,10	51,45	53,37	51,29	49,30	53,66	50,60	51,50	52,17
Sample Lenth (mm)	54,61	46,64	45,02	45,08	47,18	52,18	46,74	45,90	44,81	46,23
Sample Height (mm)	50,26	50,81	51,75	51,68	51,13	50,23	51,30	50,34	51,41	51,07
Breaking Load (kN)	86,35	62,33	66,10	86,89	68,61	83,84	80,08	74,16	86,00	87,25
Compressive Strength (MPa)	35	27	29	36	28	33	32	32	37	36
Average Compressive Strength (MPa)	32									
Standard Deviation (MPa) (±)	4									

*This test was done by the Accredited Subcontractor Laboratory

Laboratory Conditions

Temperature: 21,8 °C

Moisture: 32

The results belong to the tested sample only.

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Bu rapor, laboratuvarın izni alınmaksızın kâğıt veya elektronik ortamda çoğaltılamaz. İmza ve mühürsüz raporlar geçersizdir. Aksi belirtilmedikçe yabıt numuneler 6 ay saklanmaktadır.

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5.6 TS EN 14157:2017 / Determination Of Abrasion Resistance

Sample Name Old Brick

Test Starting Date : 26.02.2020

Test Finishing Date : 27.02.2020

Old Brick	Value Of Measurements					
	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
Sample Dimensions (mm)	100 x 70 x 20	100 x 70 x 20	100 x 70 x 20	100 x 70 x 20	100 x 70 x 20	100 x 70 x 20
Measured Abrasion Length (mm)	15,92	15,99	16,02	16,14	16,22	16,27
Calculated Abrasion Value (mm)	15,88	15,95	15,98	16,10	16,18	16,23
Average Abrasion Value (mm)	16,05					
Standard Deviation (mm) (±)	0,14					

*This test was done by the Accredited Subcontractor Laboratory

Laboratory Conditions

Temperature: 22,3°C

Moisture: 29

The results belong to the tested sample only.

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Bu rapor, laboratuvarın test ettikten sonra verilen ve/veya herhangi bir şekilde değiştirilmez.
İmza ve mühürle raporla geçerlidir. Aksi belirtilmedikçe yalın numuneler 6 ay saklanmaktadır.

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5.3 TS EN 13161:2014 / Determination Of Flexural Strength Under Constant Moment**Sample Name** Old Brick**Test Starting Date** : 19.02.2020**Test Finishing Date** : 20.02.2020

Old Brick	Value Of Measurements									
	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8	Test 9	Test 10
Sample Width (mm)	50,31	50,51	50,34	46,60	48,40	46,61	45,41	41,98	46,38	49,75
Sample Thickness (mm)	50,34	51,04	51,47	51,42	52,36	54,11	51,10	50,78	51,61	55,80
Sample Length (mm)	300	300	300	300	300	300	300	300	300	300
Distance Between Lateral Supports (mm)	250	250	250	250	250	250	250	250	250	250
Deviation from Perpendicularity (°)	0,02	0,02	0,01	0,01	0,02	0,01	0,01	0,01	0,02	0,01
Breaking Load (kN)	2,08	2,32	1,79	2,55	2,41	1,82	1,98	1,81	2,04	2,25
Flexural Strength (MPa)	4,90	5,34	4,12	6,85	5,89	4,64	5,64	6,07	5,51	4,89
Average Flexural Strength (MPa)	5,4									
Standard Deviation (MPa) (±)	0,8									

*This test was done by the Accredited Subcontractor Laboratory.

Laboratory Conditions

Temperature: 21,6 °C

Moisture: 30

The results belong to the tested sample only.

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