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N° 1273310

TEST REPORT

CL0326C170

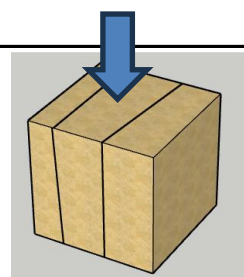
ASTM C170- STANDARD TEST METHOD FOR COMPRESSIVE STRENGTH OF DIMENSION STONE

CLIENT

PETROGRAPHIC NAME [ASTM C119]

TRADE NAME

LOAD PARALLEL TO RIFT



SPECIMENS LOT

TTC001 - block #718 from lot September 2025

SPECIMEN QUANTITIES

**5 DRY
5 WET**

TEST RESULTS

**COMPRESSIVE
STRENGTH**

DRY: 65 MPa [9428 psi]

WET: 53 MPa [7753 psi]

**MINIMUM VALUE REQUIRED (ASTM
C1527 Standard Specification for
Travertine Dimension Stone)**

EXTERIOR

52 MPa [7500 psi]

INTERIOR

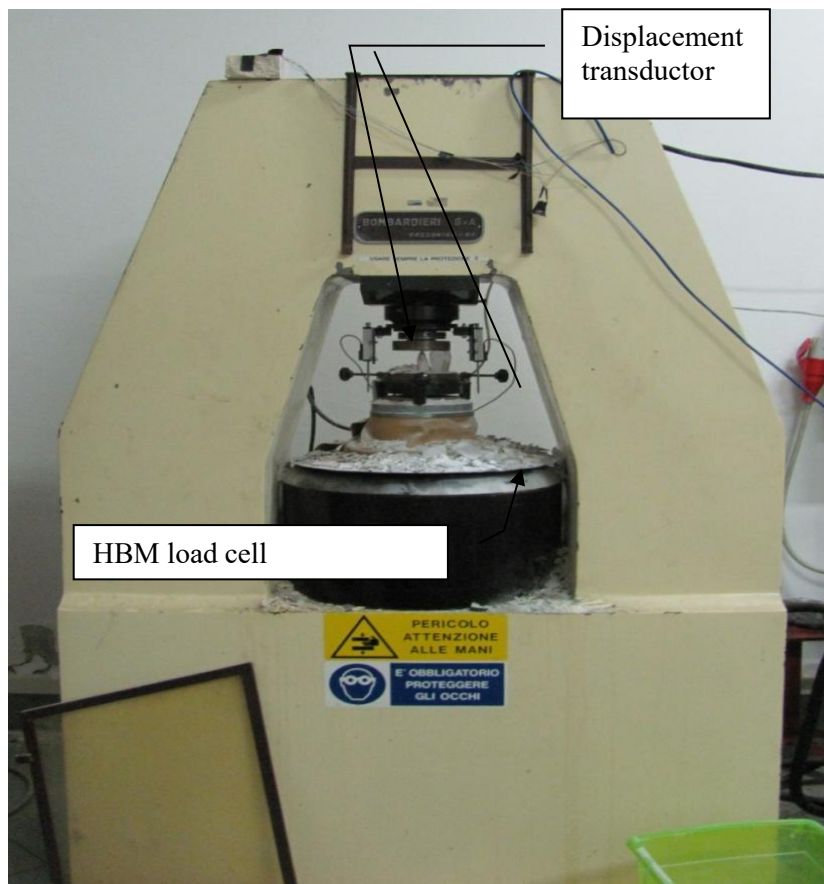
34 MPa [5000 psi]

Carrara - March 17, 2026

Apparatus

The testing machine is a special rigid machine "Bombardieri", with a MOOG servovalve, controlled by a real time digital platform C-Rio with FPGA technology.

The load is measured twice, the feedback signal is from an HBM load cell model C4 (2204600 lbf of nominal load) while the calibration cell is an Metior Load Cell model CVP (2204600 lbf of nominal load). Load cell data acquisition (A/D) and displacement is performed by National Instruments NI 9237 24-Bit module. Sample frequency is 2 milliseconds. The displacement is measured by 2 linear potentiometer.



Support blocks

The support for the specimens is installed on 2 special ball bearing.

Measuring instruments

Specimen size has been measured by a digital caliber "Mitutoyo Absolute" model CD-15PKX (serial no. 13185236) with a precision of 0.01 mm (0.39 mil). Measurements have been made using the international System of units (SI).

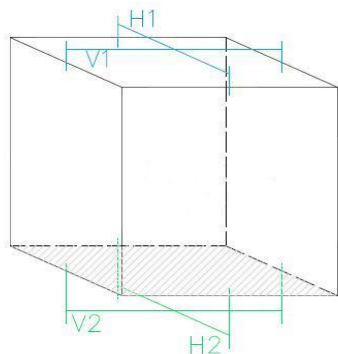
Conditioning

Dry conditions - The specimens are dried in a ventilated oven at $140^{\circ}\text{F} \pm 4^{\circ}\text{F}$ ($60 \pm 2^{\circ}\text{C}$) for 48 h.

Wet conditions - before testing the specimens have been conditioned for 48 h in water at $72^{\circ}\text{F} \pm 4^{\circ}\text{F}$ [$22 \pm 2^{\circ}\text{C}$]

Load gradient

Strain gradient is kept under 100 psi/s [690 kPa/s] until specimen failure.



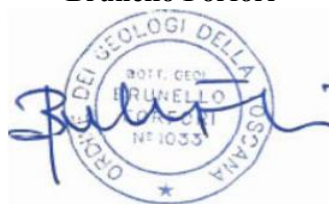
Compressive Strength Co - DRY condition

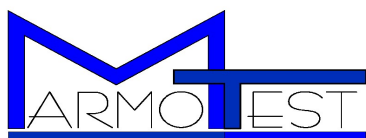
	H1	V1	H2	V2	LOAD KG	LOAD N	Co MPa
CL0326C170D_163	62,00	59,45	61,98	59,26	23596	231477	63
CL0326C170D_164	59,89	61,22	60,01	61,93	26948	264360	72
CL0326C170D_165	62,11	59,68	62,10	59,74	22479	220519	59
CL0326C170D_166	59,75	59,54	59,95	59,86	20685	202920	57
CL0326C170D_167	62,16	60,03	62,15	59,87	28227	276907	74
Average MPa							65
Standard deviation MPa							8

Compressive Strength Co - WET condition

	H1	V1	H2	V2	LOAD KG	LOAD N	Co MPa
EM8023C170W_01	59,99	61,48	51,85	61,67	21400	209934	61
EM8023C170W_02	59,86	57,84	60,01	59,83	16483	161697	46
EM8023C170W_03	59,87	59,85	59,83	59,86	23825	233718	65
EM8023C170W_04	59,90	59,86	60,12	59,82	18327	179785	50
EM8023C170W_05	59,88	59,86	59,68	59,74	16483	161697	45
Average MPa							53
Standard deviation MPa							9

**Laboratory supervisor
Brunello Forfori**





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membership number
1273310

C 170

DRY

LOAD PARALLEL

Number of specimens 5

Date of conditioning 07/03/2026

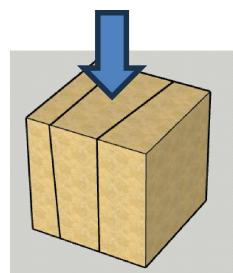
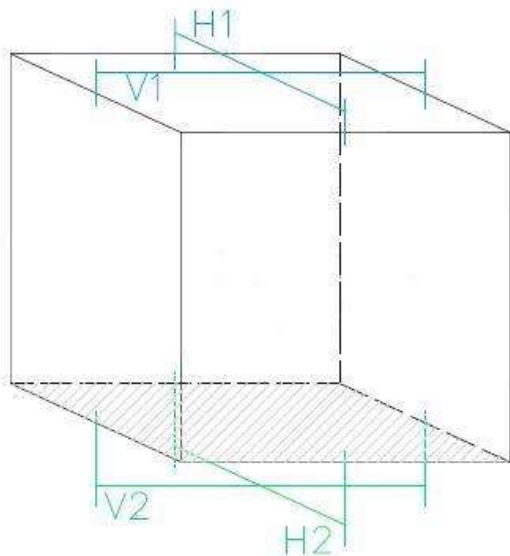
Date of measurement 09/03/2026

Date of test 09/03/2026

Conditioning operator 8

Measurement operator 8

Test operator 8



Name	H1 [in]	V1 [in]	SURF1 [in ²]	H2 [in]	V2 [in]	SURF2 [in ²]	AVG SURF [in ²]	BRK LOAD [lbf]	C [psi]
CL0326C170D_01	2,44	2,34	5,71	2,44	2,33	5,69	5,70	52.020	9.125
CL0326C170D_02	2,36	2,41	5,68	2,36	2,44	5,76	5,72	59.410	10.387
CL0326C170D_03	2,45	2,35	5,75	2,44	2,35	5,75	5,75	49.557	8.625
CL0326C170D_04	2,35	2,34	5,51	2,36	2,36	5,56	5,54	45.602	8.237
CL0326C170D_05	2,45	2,36	5,78	2,45	2,36	5,77	5,78	62.229	10.778

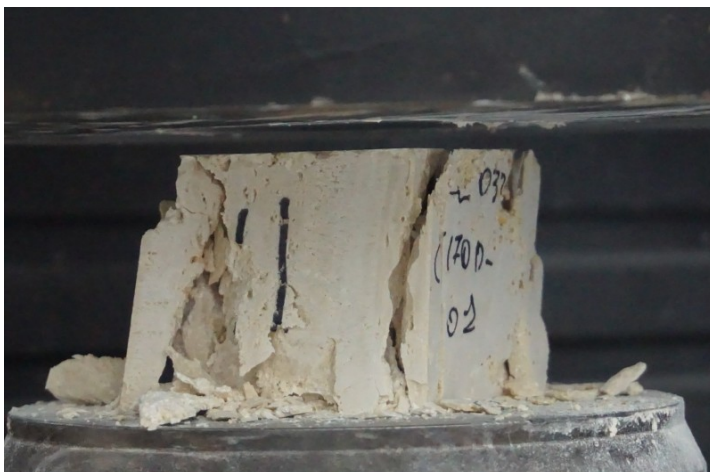
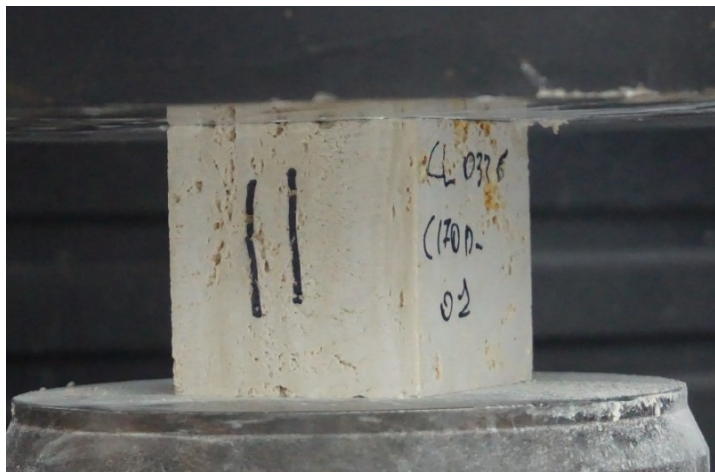
C average 9.430 psi C std. dev. 1.107 psi

Name	H1 [mm]	V1 [mm]	SURF1 [mm ²]	H2 [mm]	V2 [mm]	SURF2 [mm ²]	AVG SURF [mm ²]	LOAD [Kg]	LOAD [N]	C [MPa]
CL0326C170D_01	62,00	59,45	3.685,90	61,98	59,26	3.672,93	3.679,42	23.596	231.477	62,9
CL0326C170D_02	59,89	61,22	3.666,47	60,01	61,93	3.716,42	3.691,44	26.948	264.360	71,6
CL0326C170D_03	62,11	59,68	3.706,72	62,10	59,74	3.709,85	3.708,29	22.479	220.519	59,5
CL0326C170D_04	59,75	59,54	3.557,52	59,95	59,86	3.588,61	3.573,06	20.685	202.920	56,8
CL0326C170D_05	62,16	60,03	3.731,46	62,15	59,87	3.720,92	3.726,19	28.227	276.907	74,3

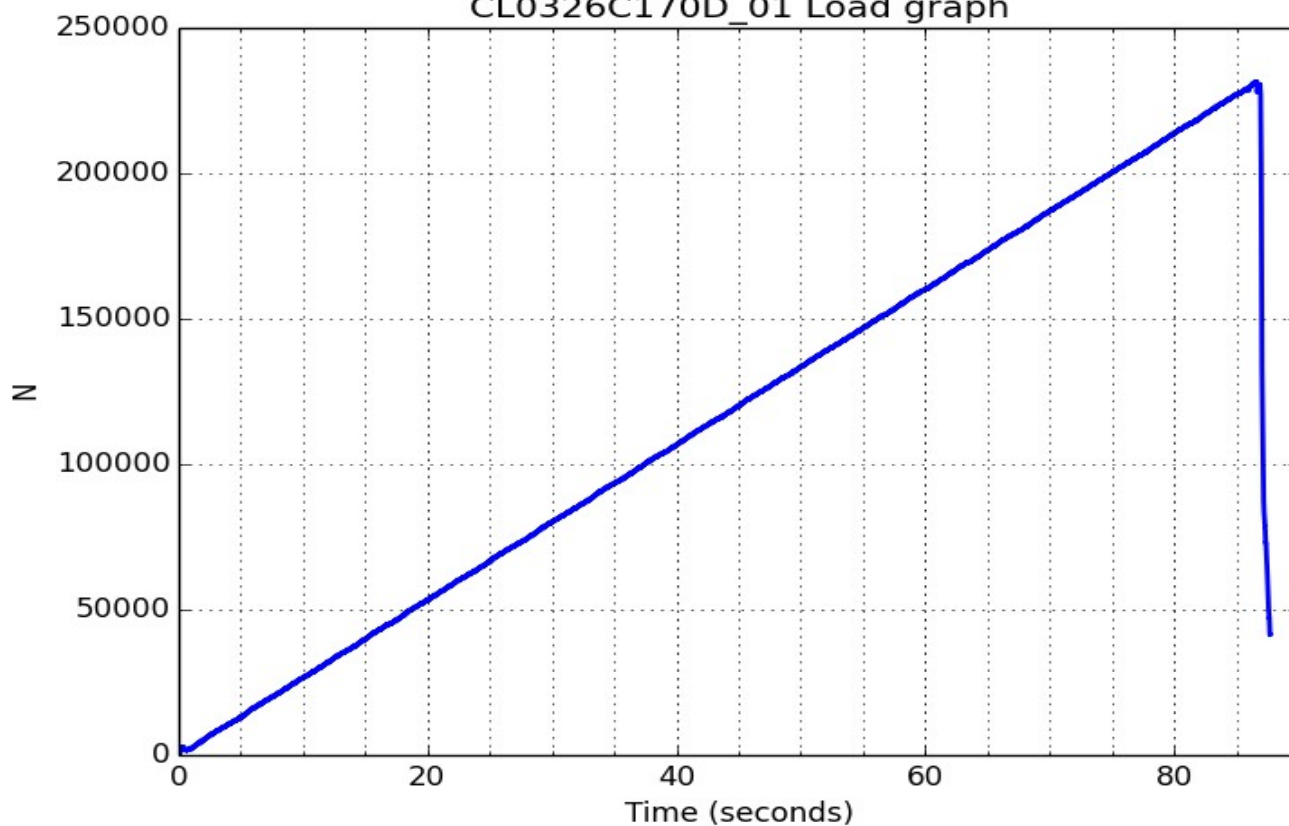
C average 65,0MPa C std. dev. 7,6MPa

NOTES

Specimen CL0326C170D_01 test result



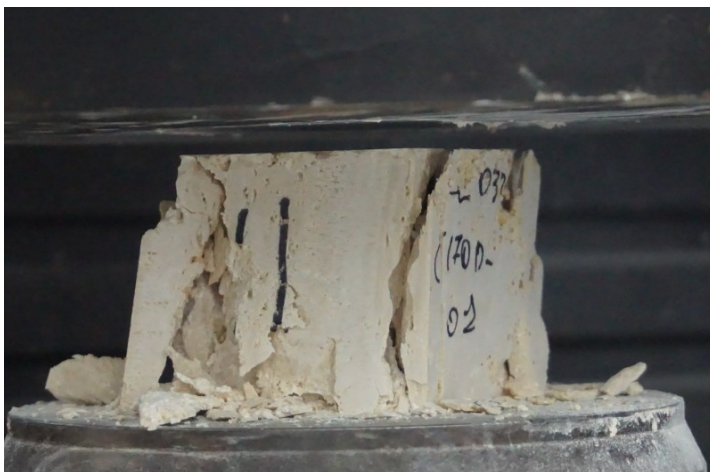
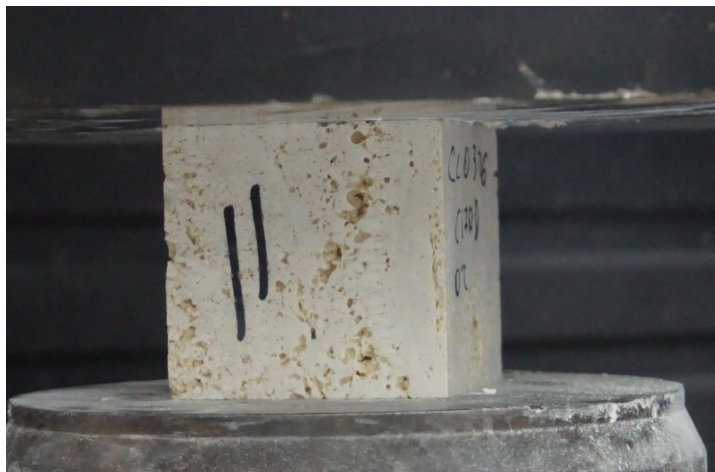
CL0326C170D_01 Load graph



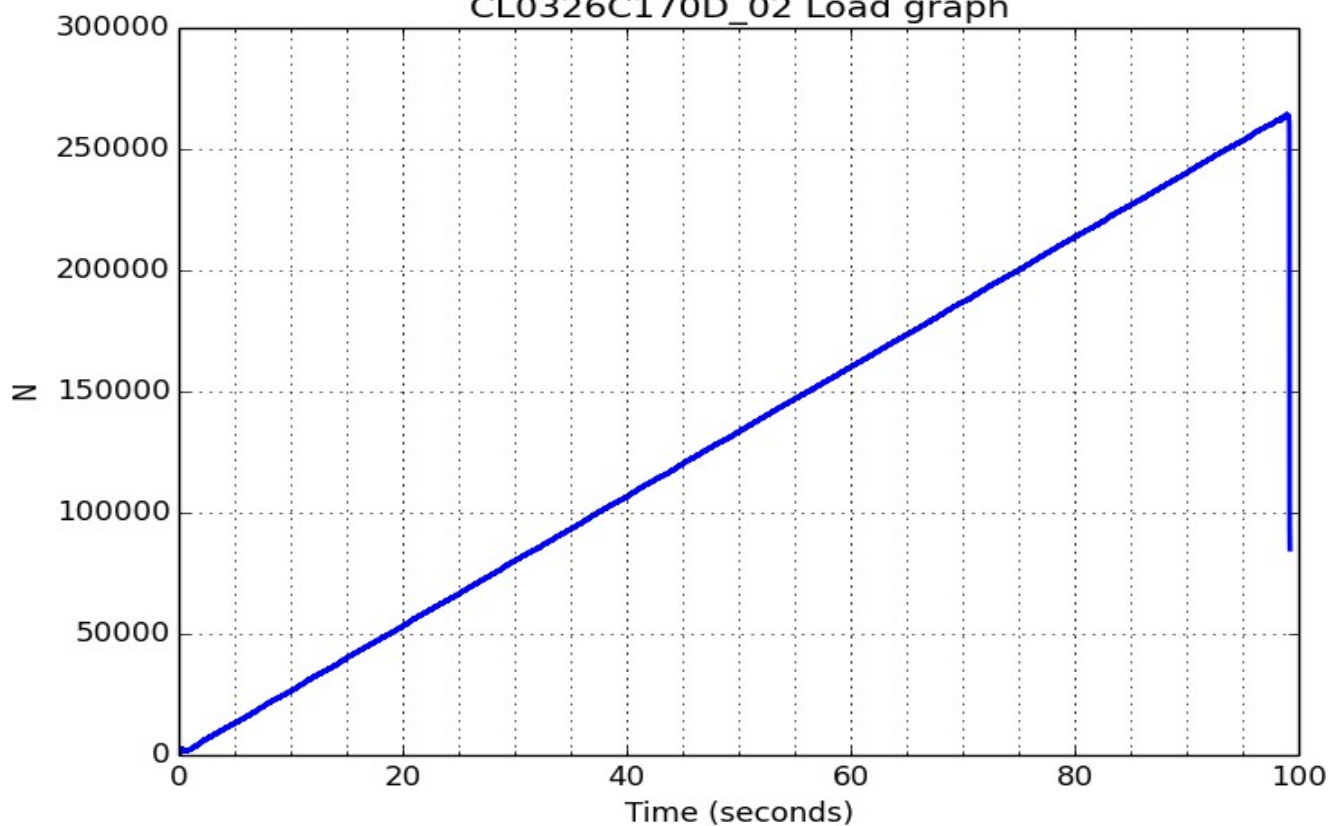
Name	H1 [in]	V1 [in]	SURF1 [in ²]	H2 [in]	V2 [in]	SURF2 [in ²]	AVG SURF [in ²]	BRK LOAD [lbf]	C [psi]
CL0326C170D_01	2,44	2,34	5,71	2,44	2,33	5,69	5,70	52.020	9.125

Name	H1 [mm]	V1 [mm]	SURF1 [mm ²]	H2 [mm]	V2 [mm]	SURF2 [mm ²]	AVG SURF [mm ²]	LOAD [Kg]	LOAD [N]	C [MPa]
CL0326C170D_01	62,00	59,45	3.685,90	61,98	59,26	3.672,93	3.679,42	23.596	231.477	62,9

Specimen CL0326C170D_02 test result



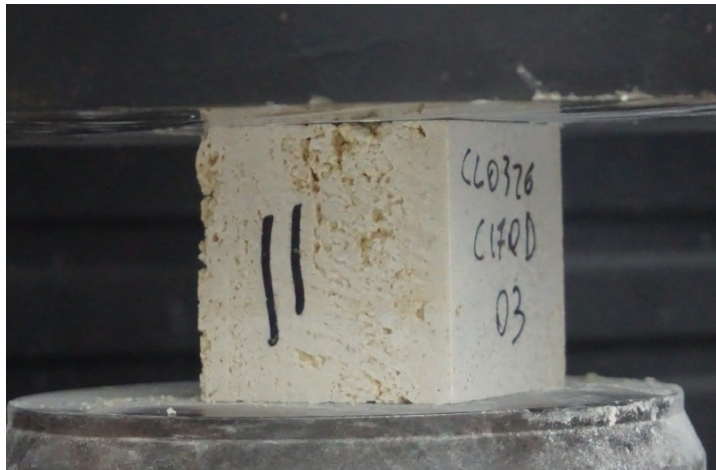
CL0326C170D_02 Load graph



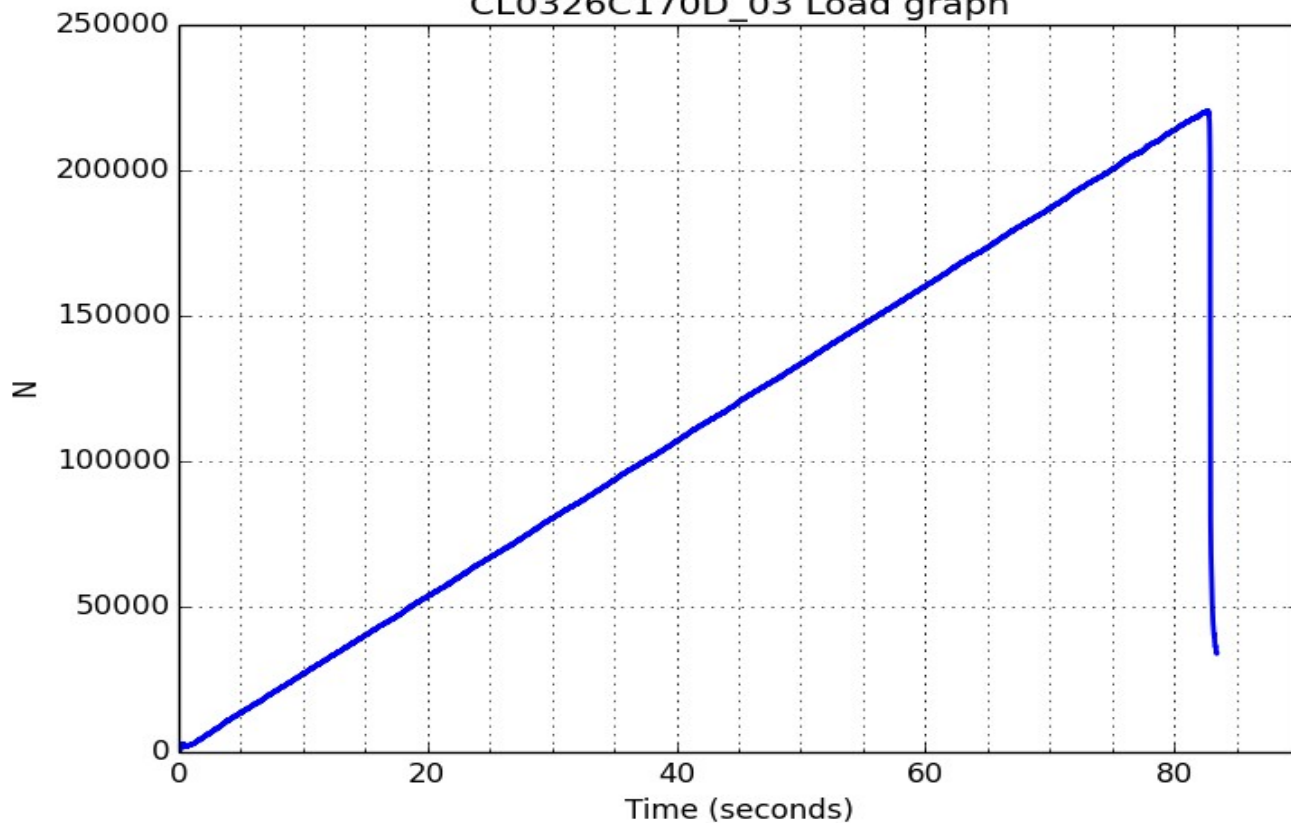
Name	H1 [in]	V1 [in]	SURF1 [in ²]	H2 [in]	V2 [in]	SURF2 [in ²]	AVG SURF [in ²]	BRK LOAD [lbf]	C [psi]
CL0326C170D_02	2,36	2,41	5,68	2,36	2,44	5,76	5,72	59.410	10.387

Name	H1 [mm]	V1 [mm]	SURF1 [mm ²]	H2 [mm]	V2 [mm]	SURF2 [mm ²]	AVG SURF [mm ²]	LOAD [Kg]	LOAD [N]	C [MPa]
CL0326C170D_02	59,89	61,22	3.666,47	60,01	61,93	3.716,42	3.691,44	26.948	264.360	71,6

Specimen CL0326C170D_03 test result



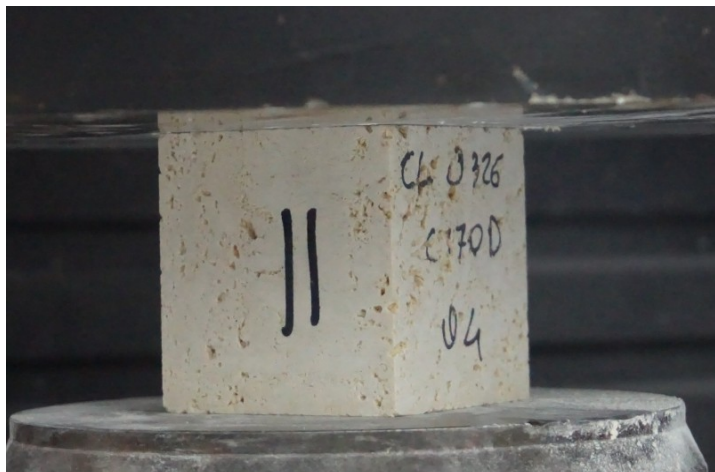
CL0326C170D_03 Load graph



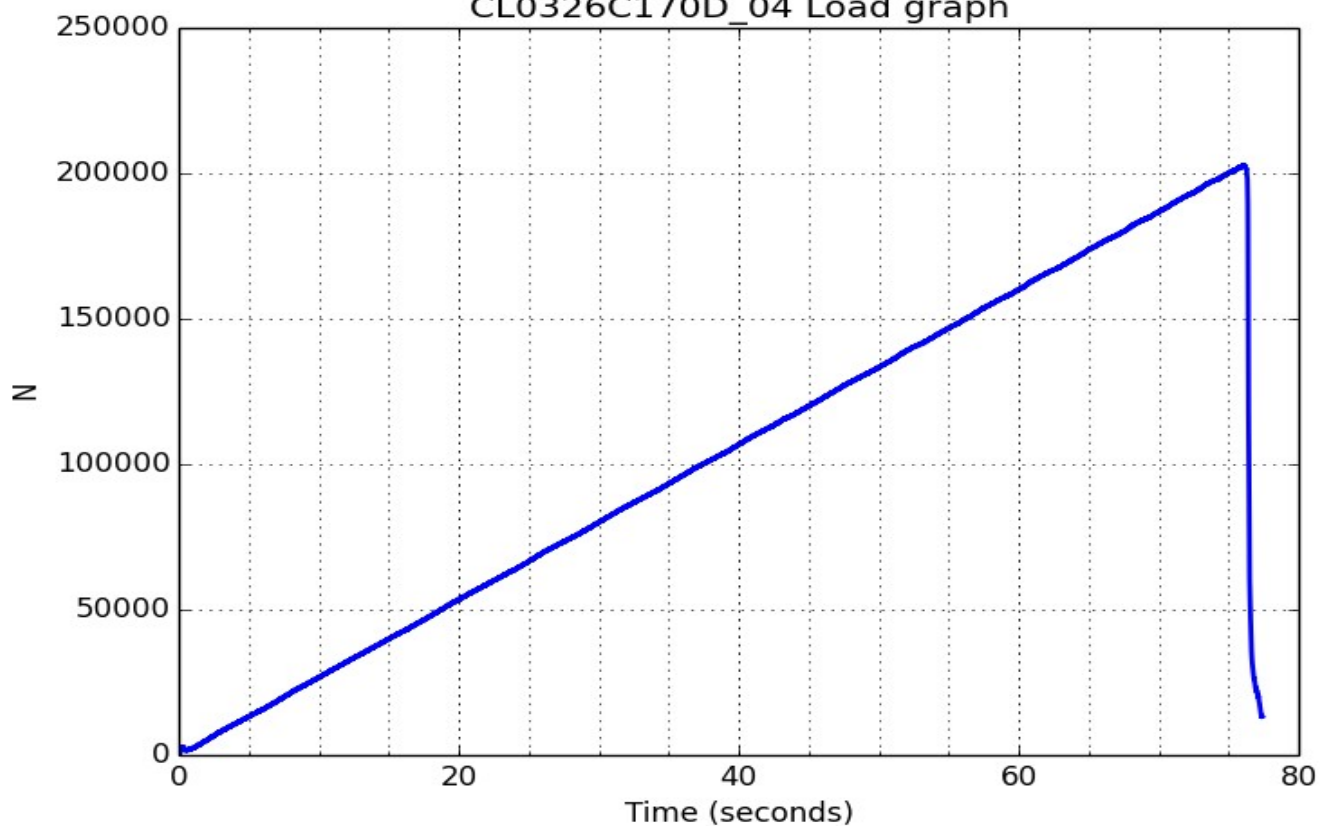
Name	H1 [in]	V1 [in]	SURF1 [in ²]	H2 [in]	V2 [in]	SURF2 [in ²]	AVG SURF [in ²]	BRK LOAD [lbf]	C [psi]
CL0326C170D_03	2,45	2,35	5,75	2,44	2,35	5,75	5,75	49.557	8.625

Name	H1 [mm]	V1 [mm]	SURF1 [mm ²]	H2 [mm]	V2 [mm]	SURF2 [mm ²]	AVG SURF [mm ²]	LOAD [Kg]	LOAD [N]	C [MPa]
CL0326C170D_03	62,11	59,68	3.706,72	62,10	59,74	3.709,85	3.708,29	22.479	220.519	59,5

Specimen CL0326C170D_04 test result



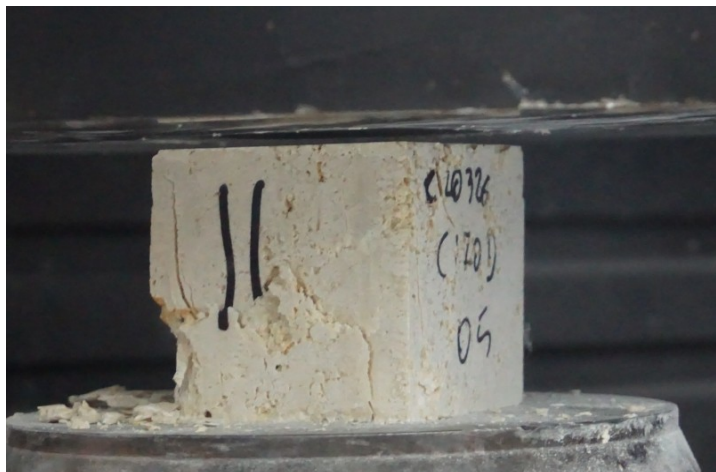
CL0326C170D_04 Load graph



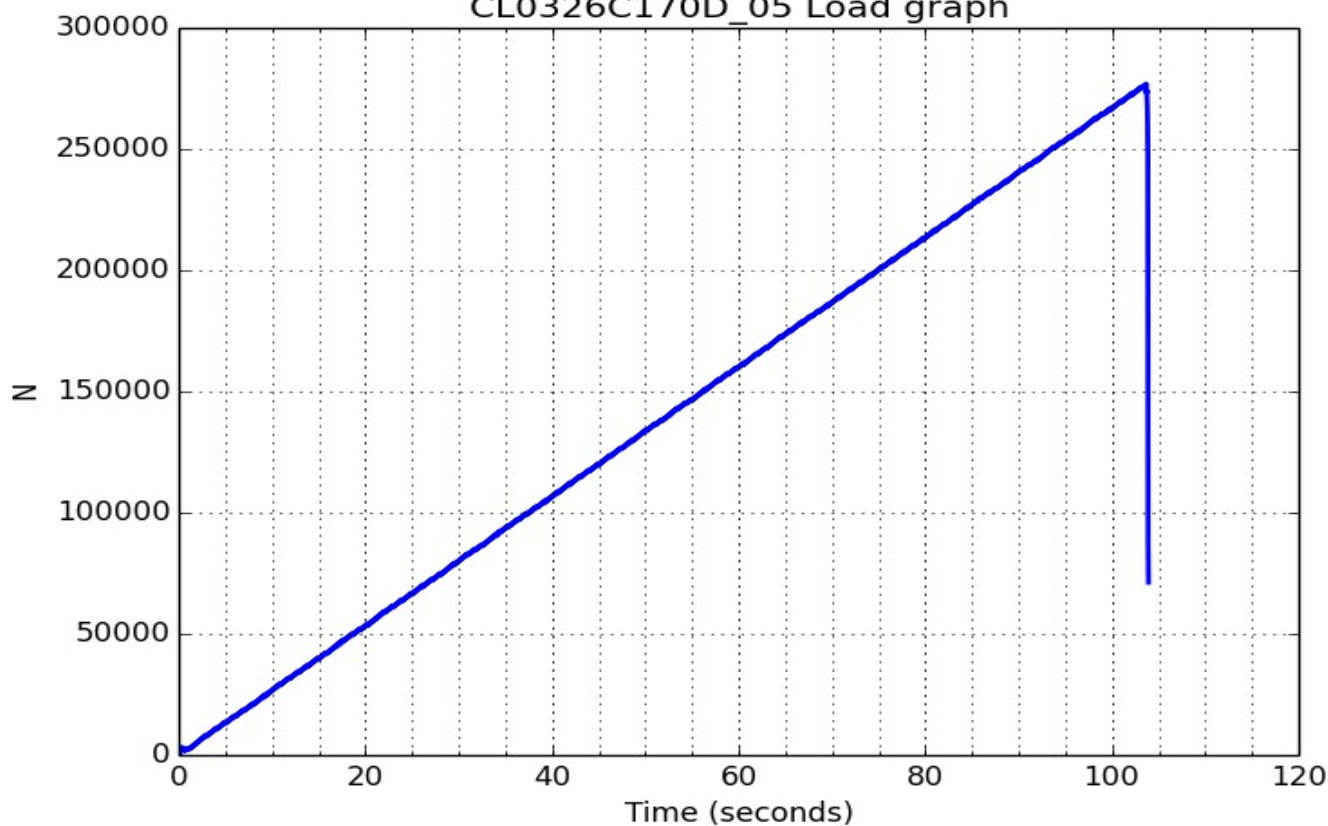
Name	H1 [in]	V1 [in]	SURF1 [in ²]	H2 [in]	V2 [in]	SURF2 [in ²]	AVG SURF [in ²]	BRK LOAD [lbf]	C [psi]
CL0326C170D_04	2,35	2,34	5,51	2,36	2,36	5,56	5,54	45.602	8.237

Name	H1 [mm]	V1 [mm]	SURF1 [mm ²]	H2 [mm]	V2 [mm]	SURF2 [mm ²]	AVG SURF [mm ²]	LOAD [Kg]	LOAD [N]	C [MPa]
CL0326C170D_04	59,75	59,54	3.557,52	59,95	59,86	3.588,61	3.573,06	20.685	202.920	56,8

Specimen CL0326C170D_05 test result

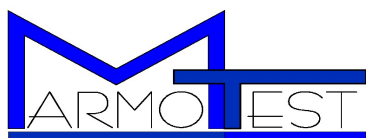


CL0326C170D_05 Load graph



Name	H1 [in]	V1 [in]	SURF1 [in ²]	H2 [in]	V2 [in]	SURF2 [in ²]	AVG SURF [in ²]	BRK LOAD [lbf]	C [psi]
CL0326C170D_05	2,45	2,36	5,78	2,45	2,36	5,77	5,78	62.229	10.778

Name	H1 [mm]	V1 [mm]	SURF1 [mm ²]	H2 [mm]	V2 [mm]	SURF2 [mm ²]	AVG SURF [mm ²]	LOAD [Kg]	LOAD [N]	C [MPa]
CL0326C170D_05	62,16	60,03	3.731,46	62,15	59,87	3.720,92	3.726,19	28.227	276.907	74,3



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membership number
1273310

C 170

WET

LOAD PARALLEL

Number of specimens 5

Date of conditioning 07/03/2026

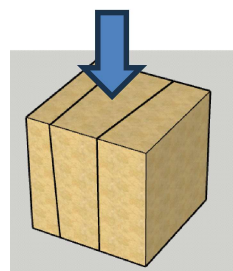
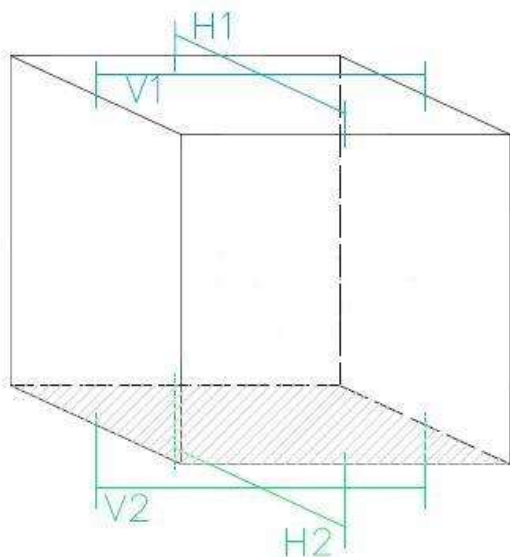
Date of measurement 09/03/2026

Date of test 09/03/2026

Conditioning operator 8

Measurement operator 8

Test operator 8



Name	H1 [in]	V1 [in]	SURF1 [in ²]	H2 [in]	V2 [in]	SURF2 [in ²]	AVG SURF [in ²]	BRK LOAD [lbf]	C [psi]
CL0326C170W_01	2,36	2,42	5,72	2,04	2,43	4,96	5,34	47.179	8.844
CL0326C170W_02	2,36	2,28	5,37	2,36	2,36	5,57	5,47	36.338	6.651
CL0326C170W_03	2,36	2,36	5,55	2,36	2,36	5,55	5,55	52.523	9.463
CL0326C170W_04	2,36	2,36	5,56	2,37	2,36	5,57	5,57	40.403	7.261
CL0326C170W_05	2,36	2,36	5,56	2,35	2,35	5,53	5,54	36.338	6.560

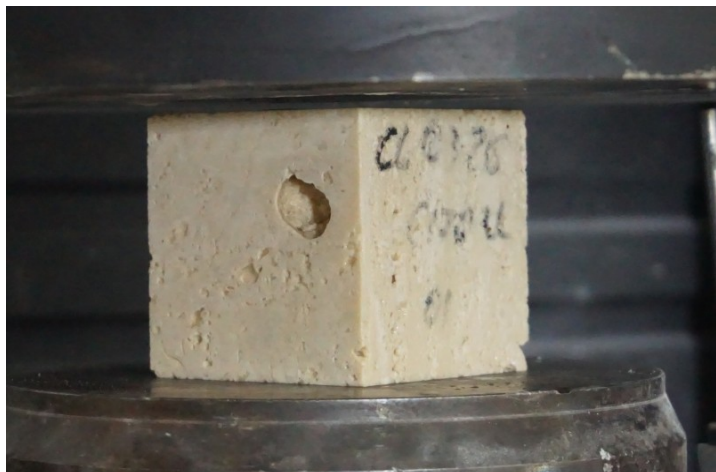
C average 7.756 psi C std. dev. 1.322 psi

Name	H1 [mm]	V1 [mm]	SURF1 [mm ²]	H2 [mm]	V2 [mm]	SURF2 [mm ²]	AVG SURF [mm ²]	LOAD [Kg]	LOAD [N]	C [MPa]
CL0326C170W_01	59,99	61,48	3.688,19	51,85	61,67	3.197,59	3.442,89	21.400	209.934	61,0
CL0326C170W_02	59,86	57,84	3.462,30	60,01	59,83	3.590,40	3.526,35	16.483	161.697	45,9
CL0326C170W_03	59,87	59,85	3.583,22	59,83	59,86	3.581,42	3.582,32	23.825	233.718	65,2
CL0326C170W_04	59,90	59,86	3.585,61	60,12	59,82	3.596,38	3.591,00	18.327	179.785	50,1
CL0326C170W_05	59,88	59,86	3.584,42	59,68	59,74	3.565,28	3.574,85	16.483	161.697	45,2

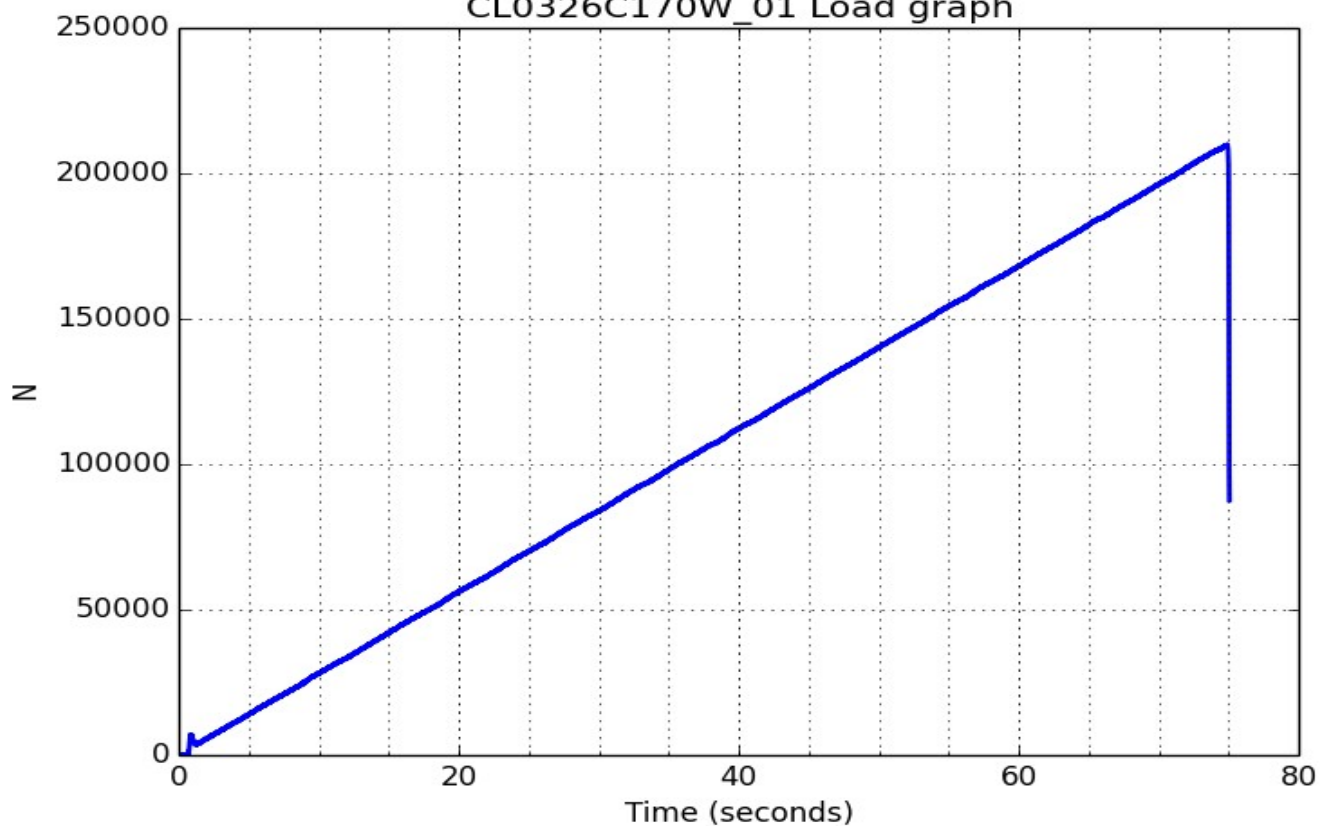
C average 53,5MPa C std. dev. 9,1MPa

NOTES

Specimen CL0326C170W_01 test result



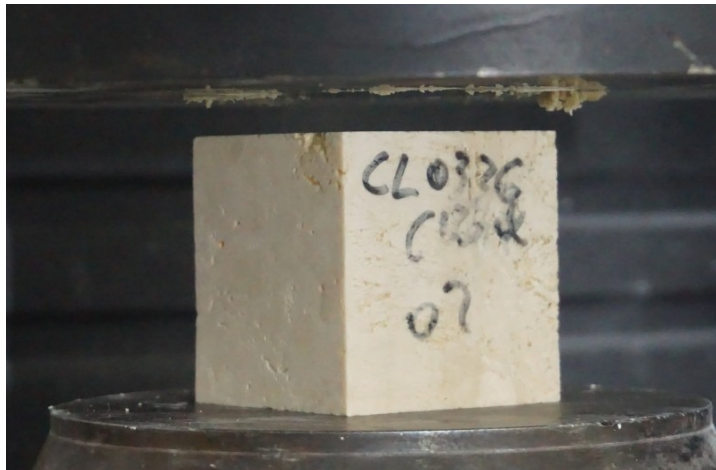
CL0326C170W_01 Load graph



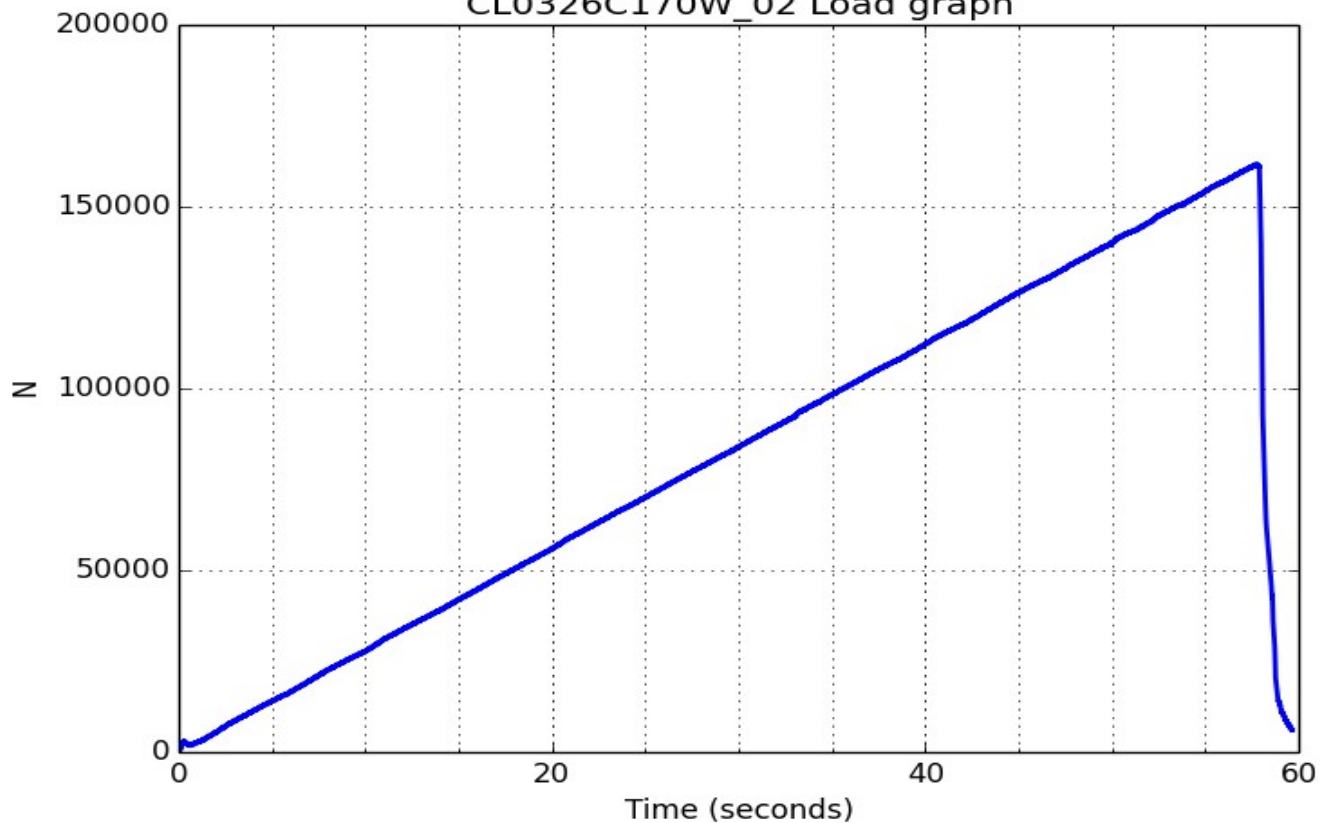
Name	H1 [in]	V1 [in]	SURF1 [in ²]	H2 [in]	V2 [in]	SURF2 [in ²]	AVG SURF [in ²]	BRK LOAD [lbf]	C [psi]
CL0326C170W_01	2,36	2,42	5,72	2,04	2,43	4,96	5,34	47.179	8.844

Name	H1 [mm]	V1 [mm]	SURF1 [mm ²]	H2 [mm]	V2 [mm]	SURF2 [mm ²]	AVG SURF [mm ²]	LOAD [Kg]	LOAD [N]	C [MPa]
CL0326C170W_01	59,99	61,48	3.688,19	51,85	61,67	3.197,59	3.442,89	21.400	209.934	61,0

Specimen CL0326C170W_02 test result



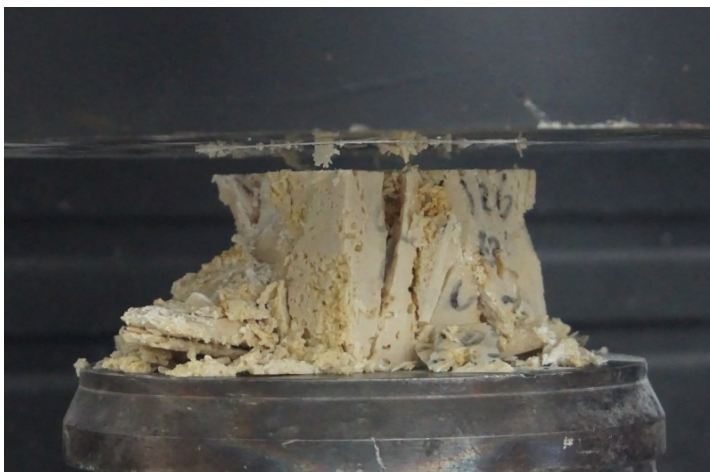
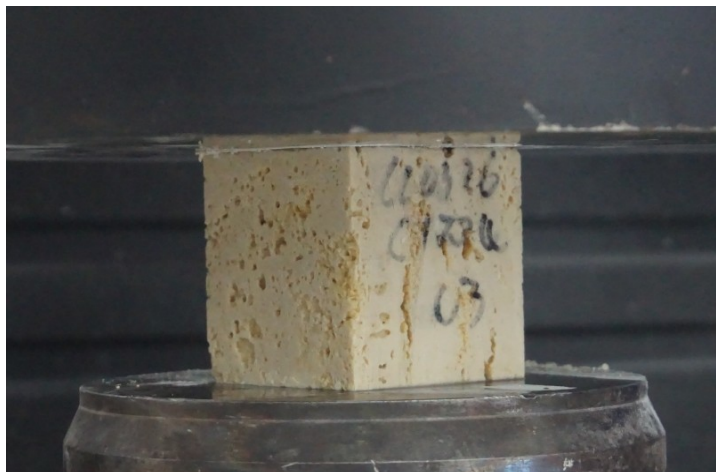
CL0326C170W_02 Load graph



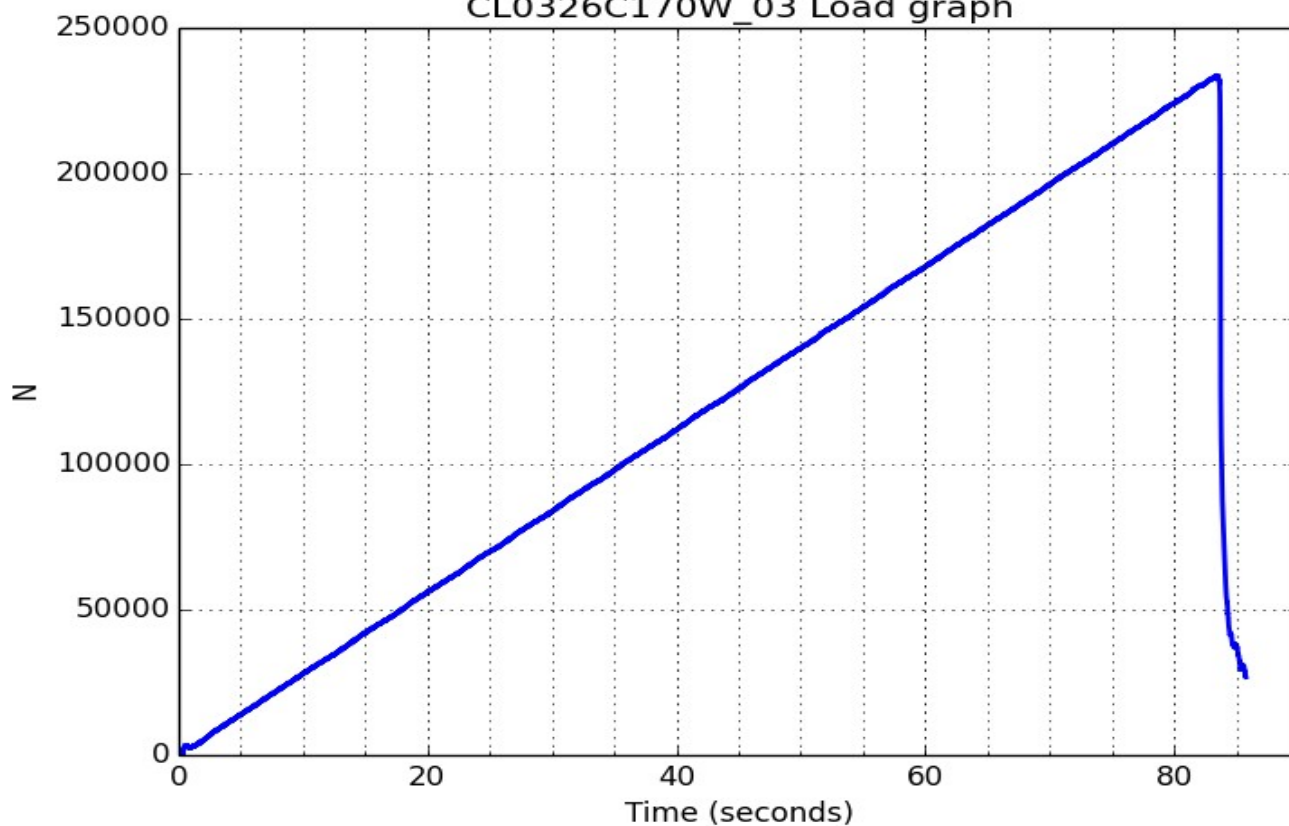
Name	H1 [in]	V1 [in]	SURF1 [in²]	H2 [in]	V2 [in]	SURF2 [in²]	AVG SURF [in²]	BRK LOAD [lbf]	C [psi]
CL0326C170W_02	2,36	2,28	5,37	2,36	2,36	5,57	5,47	36.338	6.651

Name	H1 [mm]	V1 [mm]	SURF1 [mm²]	H2 [mm]	V2 [mm]	SURF2 [mm²]	AVG SURF [mm²]	LOAD [Kg]	LOAD [N]	C [MPa]
CL0326C170W_02	59,86	57,84	3.462,30	60,01	59,83	3.590,40	3.526,35	16.483	161.697	45,9

Specimen CL0326C170W_03 test result



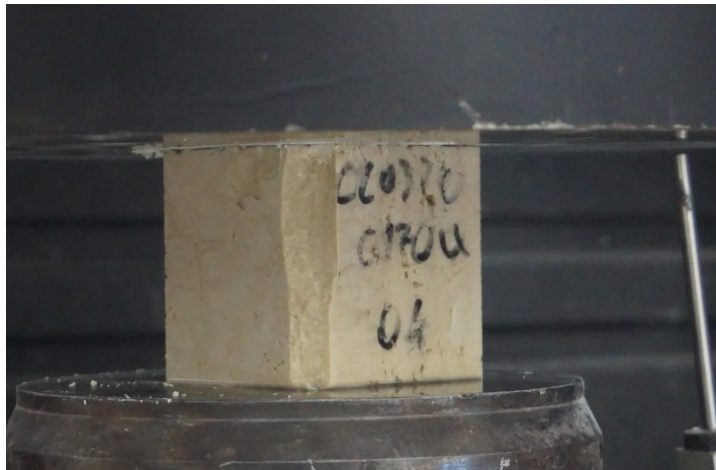
CL0326C170W_03 Load graph



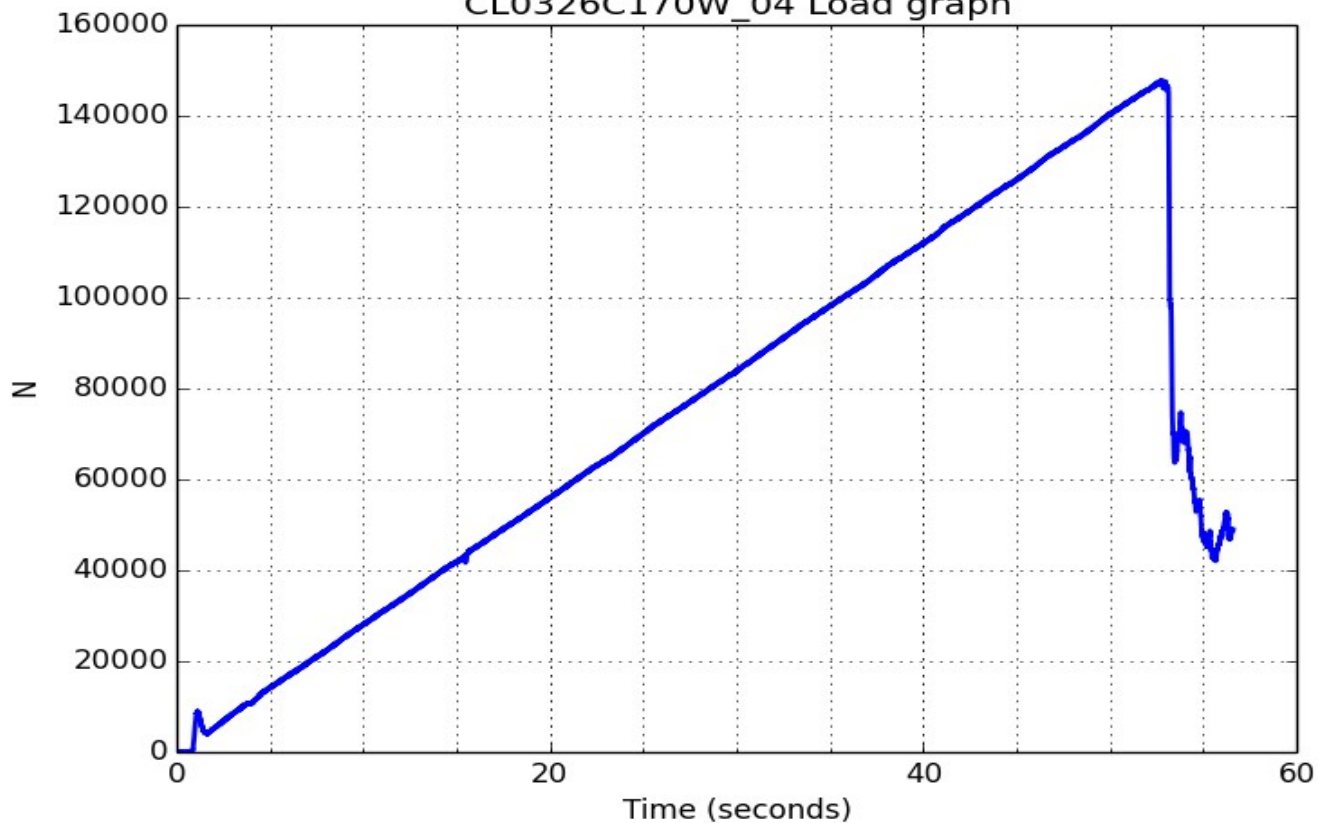
Name	H1 [in]	V1 [in]	SURF1 [in ²]	H2 [in]	V2 [in]	SURF2 [in ²]	AVG SURF [in ²]	BRK LOAD [lbf]	C [psi]
CL0326C170W_03	2,36	2,36	5,55	2,36	2,36	5,55	5,55	52.523	9.463

Name	H1 [mm]	V1 [mm]	SURF1 [mm ²]	H2 [mm]	V2 [mm]	SURF2 [mm ²]	AVG SURF [mm ²]	LOAD [Kg]	LOAD [N]	C [MPa]
CL0326C170W_03	59,87	59,85	3.583,22	59,83	59,86	3.581,42	3.582,32	23.825	233.718	65,2

Specimen CL0326C170W_04 test result



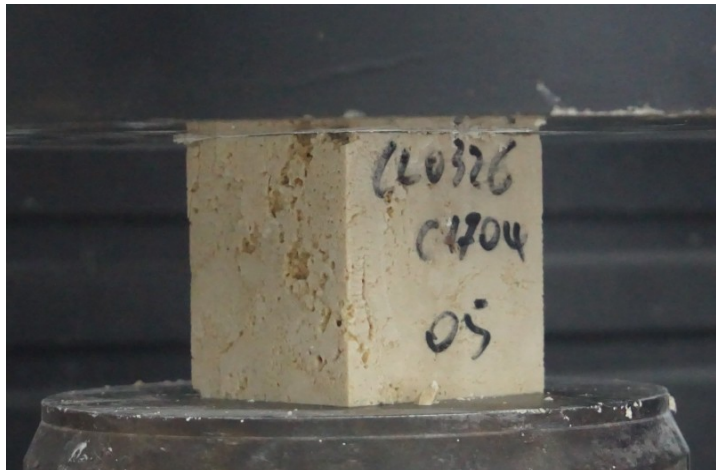
CL0326C170W_04 Load graph



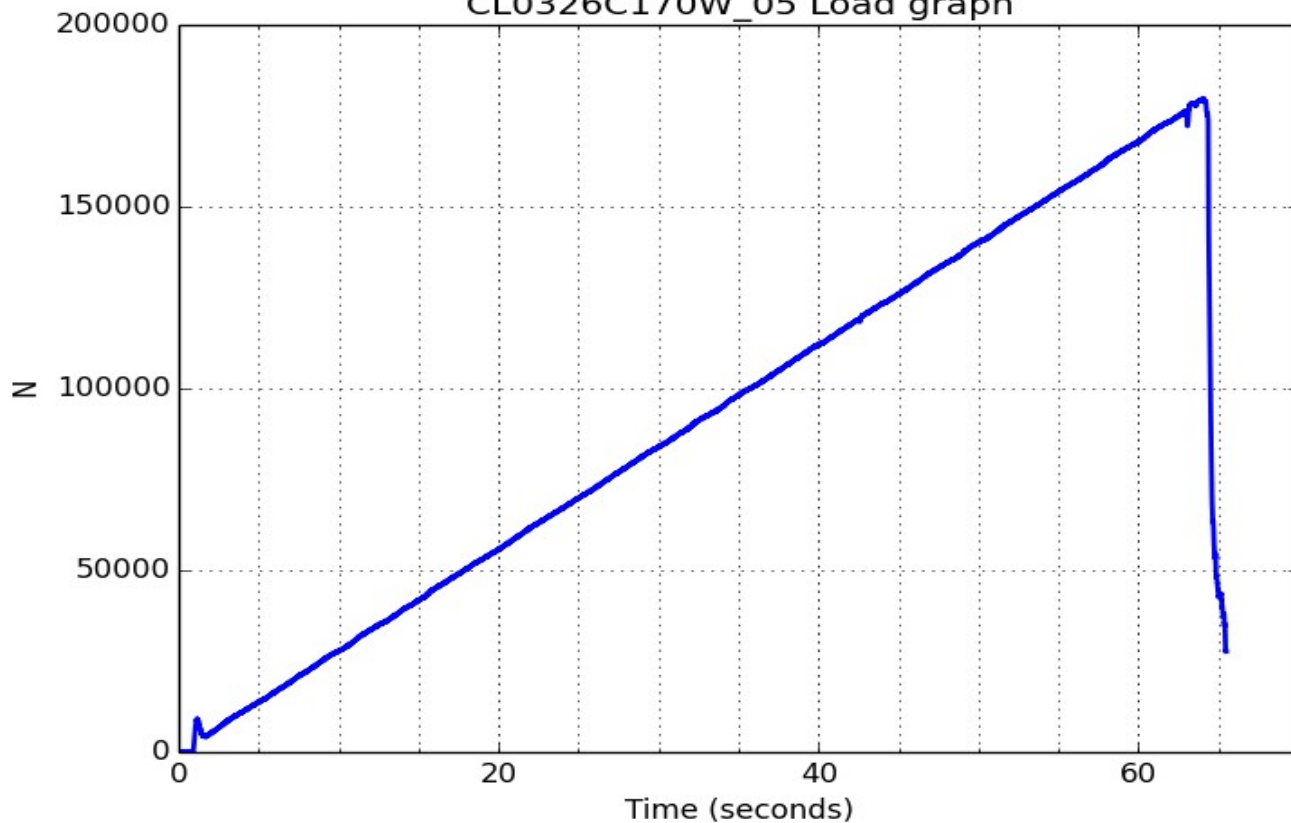
Name	H1 [in]	V1 [in]	SURF1 [in ²]	H2 [in]	V2 [in]	SURF2 [in ²]	AVG SURF [in ²]	BRK LOAD [lbf]	C [psi]
CL0326C170W_04	2,36	2,36	5,56	2,37	2,36	5,57	5,57	40.403	7.261

Name	H1 [mm]	V1 [mm]	SURF1 [mm ²]	H2 [mm]	V2 [mm]	SURF2 [mm ²]	AVG SURF [mm ²]	LOAD [Kg]	LOAD [N]	C [MPa]
CL0326C170W_04	59,90	59,86	3.585,61	60,12	59,82	3.596,38	3.591,00	18.327	179.785	50,1

Specimen CL0326C170W_05 test result



CL0326C170W_05 Load graph



Name	H1 [in]	V1 [in]	SURF1 [in ²]	H2 [in]	V2 [in]	SURF2 [in ²]	AVG SURF [in ²]	BRK LOAD [lbf]	C [psi]
CL0326C170W_05	2,36	2,36	5,56	2,35	2,35	5,53	5,54	36.338	6.560

Name	H1 [mm]	V1 [mm]	SURF1 [mm ²]	H2 [mm]	V2 [mm]	SURF2 [mm ²]	AVG SURF [mm ²]	LOAD [Kg]	LOAD [N]	C [MPa]
CL0326C170W_05	59,88	59,86	3.584,42	59,68	59,74	3.565,28	3.574,85	16.483	161.697	45,2