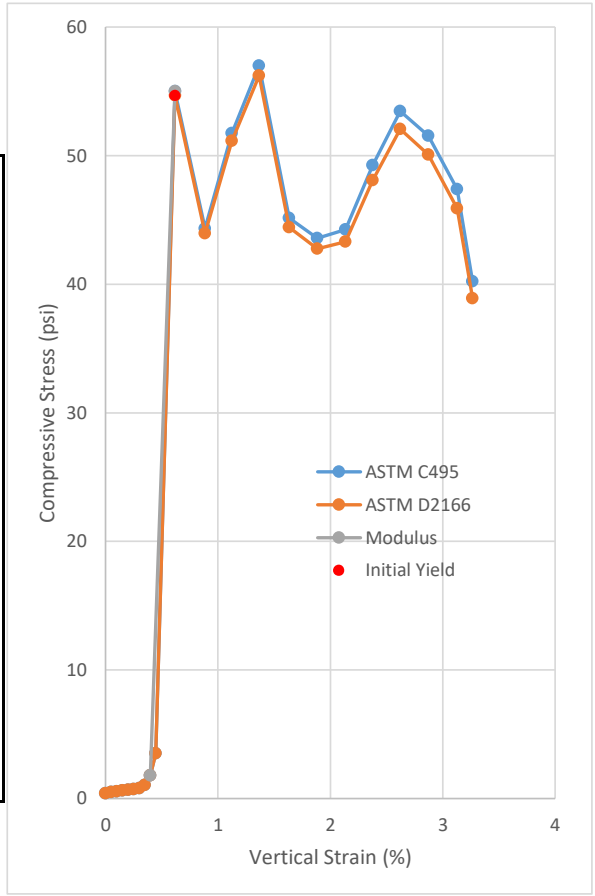
Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-01**
Height (in):	5.737
Height (mm):	145.7
Diameter (in):	2.984
Diameter (mm)	75.79
Area (in^2):	6.992
Area (mm^2):	4511
Mass (g):	238.89
Weight (lb):	0.5267
Weight (kN):	0.00234271
Volume (in^3):	40.11
Volume (mm^3):	657358
Density (g/mm^3):	0.0003634
Density (kg/m^3):	363.4
Unit Weight (pcf):	**22.69**
Unit Weight (kN/m^3):	3.564
Wet mass + tare (g):	547.58
Dry mass + tare (g):	500.90
Tare (g):	309.44
Water Content (%)	**24.38**
H:D ratio:	1.923
H:D correction:	0.9933

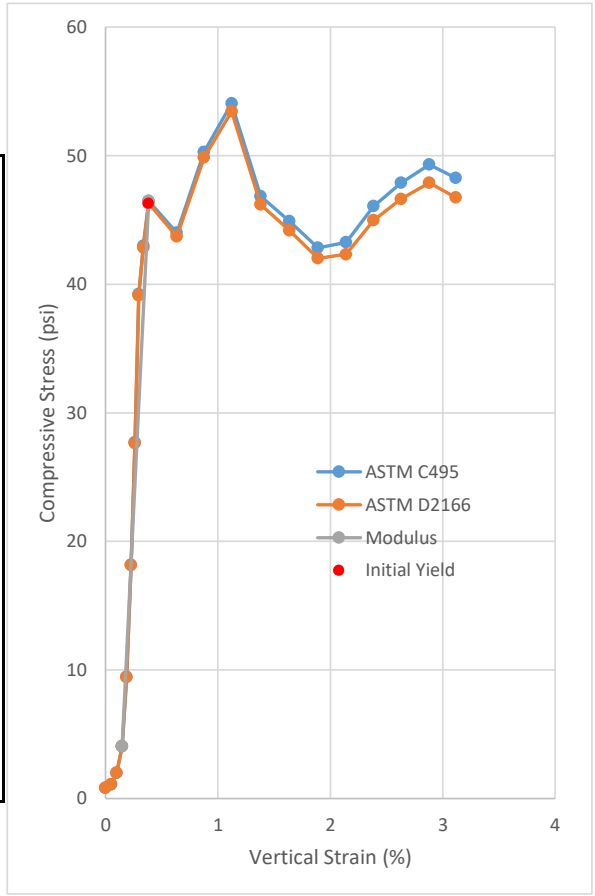
Age (days):	7
Cap:	None, surface ground
Maximum load (lb):	398.5
Maximum load (kN):	1.773
Strain Rate (%/min):	0.5
Time to Failure (min):	3.06
Strain at Failure (%):	1.452
Initial yield (psi):	54.68
Modulus (psi):	24250
ASTM C495	
Comp. Strength (MPa):	0.3930
Comp. Strength (psi):	57.00
Corr. Comp. Strength (psi):	**56.61**
ASTM D2166	
Comp. Strength (kPa):	387.6
Comp. Strength (psi):	56.22
Corr. Comp. Strength (psi):	**55.84**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-02**
Height (in):	5.840
Height (mm):	148.3
Diameter (in):	2.981
Diameter (mm)	75.72
Area (in^2):	6.979
Area (mm^2):	4503
Mass (g):	241.58
Weight (lb):	0.5326
Weight (kN):	0.00236909
Volume (in^3):	40.76
Volume (mm^3):	667925
Density (g/mm^3):	0.0003617
Density (kg/m^3):	361.7
Unit Weight (pcf):	**22.58**
Unit Weight (kN/m^3):	3.547
Wet mass + tare (g):	551.36
Dry mass + tare (g):	504.02
Tare (g):	310.45
Water Content (%)	**24.46**
H:D ratio:	1.959
H:D correction:	0.9962

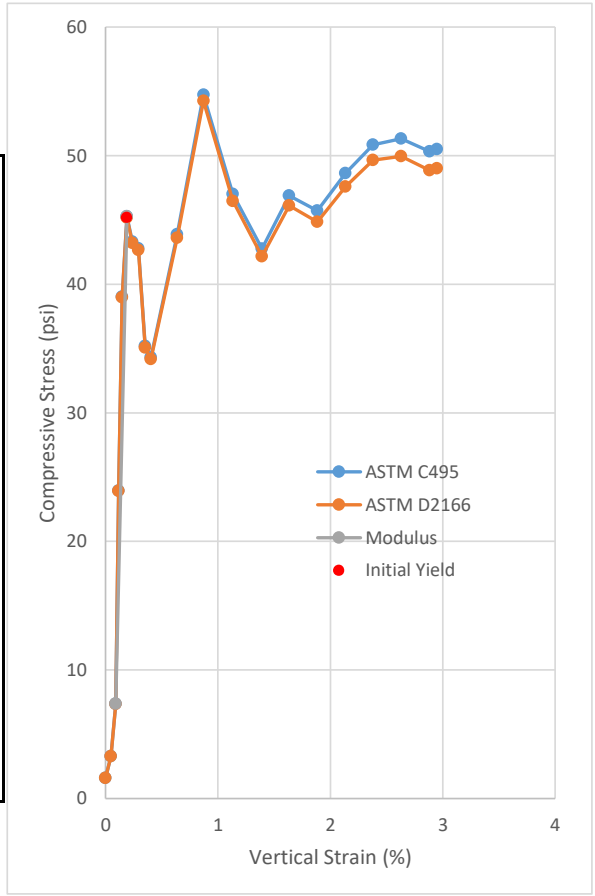
Age (days):	7
Cap:	None, surface ground
Maximum load (lb):	377.26
Maximum load (kN):	1.678
Strain Rate (%/min):	0.6
Time to Failure (min):	2.08
Strain at Failure (%):	1.201
Initial yield (psi):	46.29
Modulus (psi):	18010
ASTM C495	
Comp. Strength (MPa):	0.3727
Comp. Strength (psi):	54.05
Corr. Comp. Strength (psi):	**53.85**
ASTM D2166	
Comp. Strength (kPa):	368.5
Comp. Strength (psi):	53.45
Corr. Comp. Strength (psi):	**53.25**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-03**
Height (in):	5.825
Height (mm):	148.0
Diameter (in):	2.989
Diameter (mm)	75.93
Area (in^2):	7.018
Area (mm^2):	4528
Mass (g):	240.45
Weight (lb):	0.5301
Weight (kN):	0.00235801
Volume (in^3):	40.88
Volume (mm^3):	669940
Density (g/mm^3):	0.0003589
Density (kg/m^3):	358.9
Unit Weight (pcf):	**22.41**
Unit Weight (kN/m^3):	3.520
Wet mass + tare (g):	647.95
Dry mass + tare (g):	601.18
Tare (g):	408.21
Water Content (%)	**24.24**
H:D ratio:	1.949
H:D correction:	0.9954

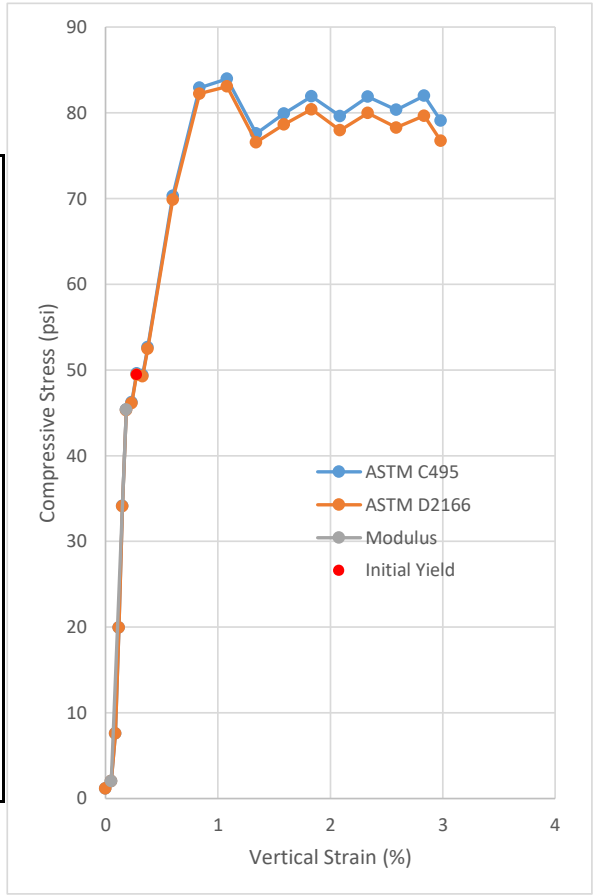
Age (days):	7
Cap:	None, surface ground
Maximum load (lb):	384.18
Maximum load (kN):	1.709
Strain Rate (%/min):	0.65
Time to Failure (min):	1.59
Strain at Failure (%):	0.951
Initial yield (psi):	45.18
Modulus (psi):	38764
ASTM C495	
Comp. Strength (MPa):	0.3774
Comp. Strength (psi):	54.74
Corr. Comp. Strength (psi):	**54.49**
ASTM D2166	
Comp. Strength (kPa):	374.1
Comp. Strength (psi):	54.26
Corr. Comp. Strength (psi):	**54.01**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-01**
Height (in):	5.862
Height (mm):	148.9
Diameter (in):	2.981
Diameter (mm)	75.73
Area (in^2):	6.981
Area (mm^2):	4504
Mass (g):	246.01
Weight (lb):	0.5424
Weight (kN):	0.00241253
Volume (in^3):	40.92
Volume (mm^3):	670629
Density (g/mm^3):	0.0003668
Density (kg/m^3):	366.8
Unit Weight (pcf):	**22.90**
Unit Weight (kN/m^3):	3.597
Wet mass + tare (g):	709.72
Dry mass + tare (g):	660.96
Tare (g):	464.54
Water Content (%)	**24.82**
H:D ratio:	1.966
H:D correction:	0.9968

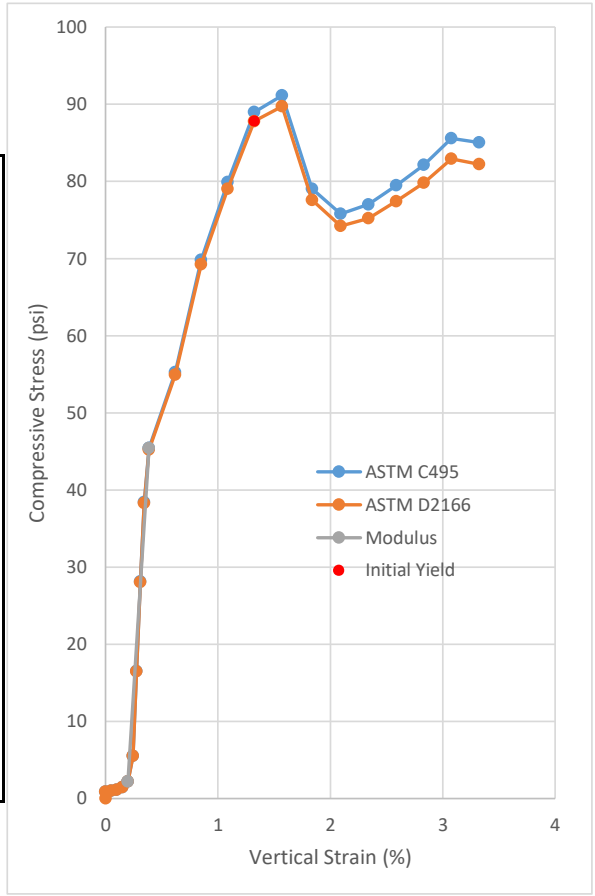
Age (days):	7
Cap:	None, surface ground
Maximum load (lb):	586.22
Maximum load (kN):	2.608
Strain Rate (%/min):	0.7
Time to Failure (min):	1.79
Strain at Failure (%):	1.202
Initial yield (psi):	49.43
Modulus (psi):	32132
ASTM C495	
Comp. Strength (MPa):	0.5790
Comp. Strength (psi):	83.97
Corr. Comp. Strength (psi):	**83.71**
ASTM D2166	
Comp. Strength (kPa):	572.7
Comp. Strength (psi):	83.07
Corr. Comp. Strength (psi):	**82.80**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-02**
Height (in):	5.885
Height (mm):	149.5
Diameter (in):	2.977
Diameter (mm)	75.62
Area (in^2):	6.961
Area (mm^2):	4491
Mass (g):	248.91
Weight (lb):	0.5488
Weight (kN):	0.00244097
Volume (in^3):	40.97
Volume (mm^3):	671305
Density (g/mm^3):	0.0003708
Density (kg/m^3):	370.8
Unit Weight (pcf):	**23.15**
Unit Weight (kN/m^3):	3.636
Wet mass + tare (g):	713.05
Dry mass + tare (g):	662.20
Tare (g):	465.09
Water Content (%)	**25.80**
H:D ratio:	1.977
H:D correction:	0.9977

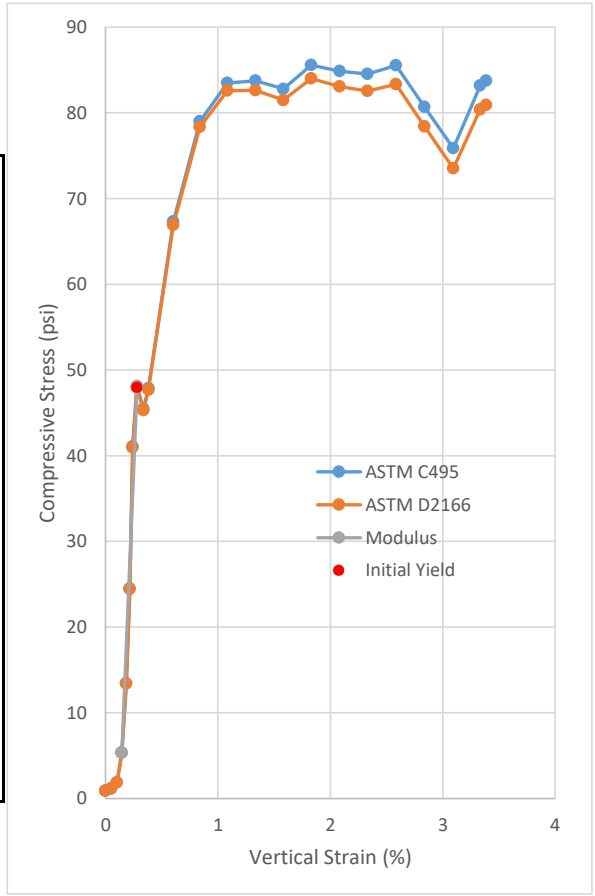
Age (days):	7
Cap:	None, surface ground
Maximum load (lb):	634.48
Maximum load (kN):	2.822
Strain Rate (%/min):	0.7
Time to Failure (min):	2.54
Strain at Failure (%):	1.700
Initial yield (psi):	87.80
Modulus (psi):	22953
ASTM C495	
Comp. Strength (MPa):	0.6285
Comp. Strength (psi):	91.15
Corr. Comp. Strength (psi):	**90.94**
ASTM D2166	
Comp. Strength (kPa):	618.6
Comp. Strength (psi):	89.72
Corr. Comp. Strength (psi):	**89.51**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-03**
Height (in):	5.868
Height (mm):	149.0
Diameter (in):	2.973
Diameter (mm)	75.51
Area (in^2):	6.940
Area (mm^2):	4478
Mass (g):	249.62
Weight (lb):	0.5503
Weight (kN):	0.00244794
Volume (in^3):	40.73
Volume (mm^3):	667381
Density (g/mm^3):	0.0003740
Density (kg/m^3):	374.0
Unit Weight (pcf):	**23.35**
Unit Weight (kN/m^3):	3.668
Wet mass + tare (g):	658.40
Dry mass + tare (g):	607.63
Tare (g):	409.76
Water Content (%)	**25.66**
H:D ratio:	1.974
H:D correction:	0.9975

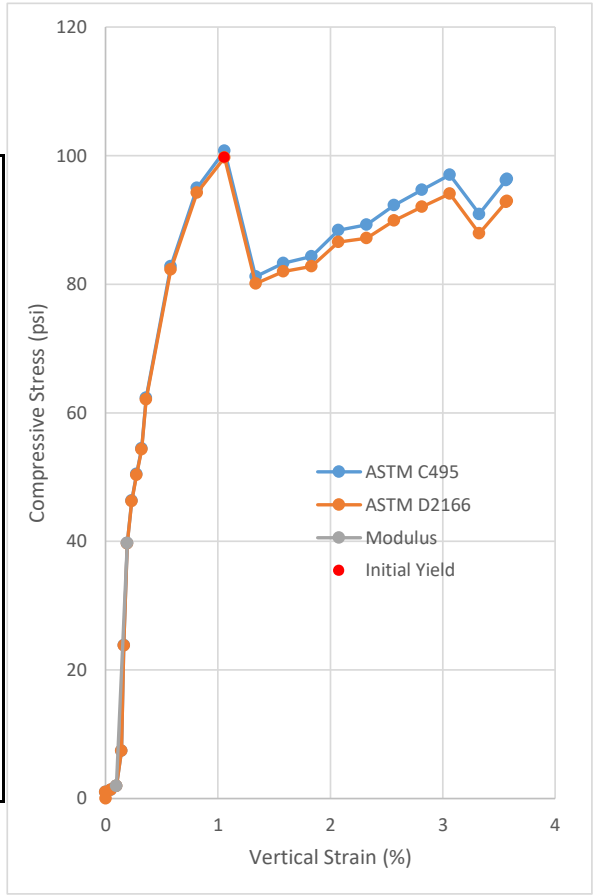
Age (days):	7
Cap:	None, surface ground
Maximum load (lb):	593.95
Maximum load (kN):	2.642
Strain Rate (%/min):	0.7
Time to Failure (min):	2.92
Strain at Failure (%):	1.949
Initial yield (psi):	47.95
Modulus (psi):	31377
ASTM C495	
Comp. Strength (MPa):	0.5900
Comp. Strength (psi):	85.58
Corr. Comp. Strength (psi):	**85.36**
ASTM D2166	
Comp. Strength (kPa):	579.3
Comp. Strength (psi):	84.01
Corr. Comp. Strength (psi):	**83.80**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-01**
Height (in):	5.876
Height (mm):	149.3
Diameter (in):	2.975
Diameter (mm)	75.57
Area (in^2):	6.953
Area (mm^2):	4486
Mass (g):	255.91
Weight (lb):	0.5642
Weight (kN):	0.00250962
Volume (in^3):	40.86
Volume (mm^3):	669528
Density (g/mm^3):	0.0003822
Density (kg/m^3):	382.2
Unit Weight (pcf):	**23.86**
Unit Weight (kN/m^3):	3.748
Wet mass + tare (g):	565.37
Dry mass + tare (g):	514.72
Tare (g):	310.50
Water Content (%)	**24.80**
H:D ratio:	1.975
H:D correction:	0.9975

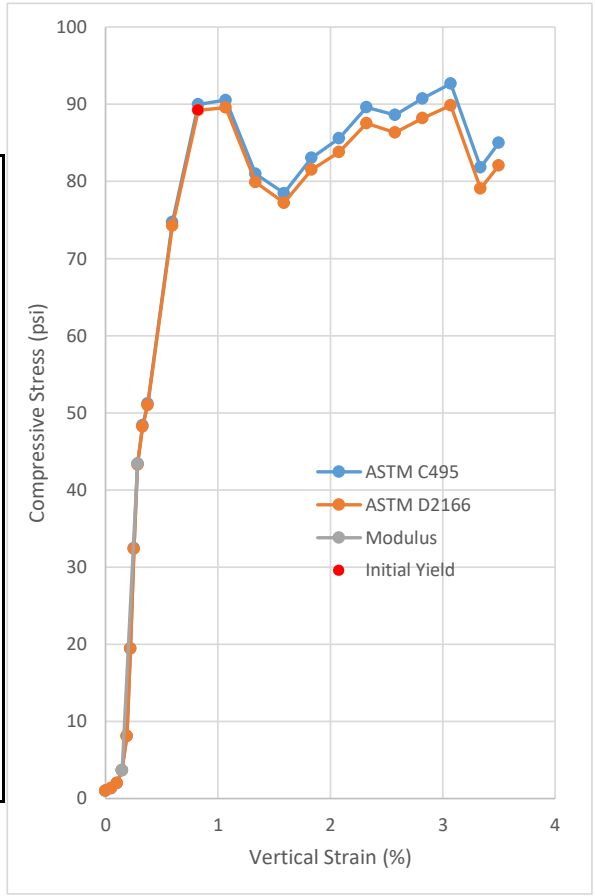
Age (days):	7
Cap:	None, surface ground
Maximum load (lb):	700.69
Maximum load (kN):	3.117
Strain Rate (%/min):	0.75
Time to Failure (min):	1.71
Strain at Failure (%):	1.199
Initial yield (psi):	99.71
Modulus (psi):	38912
ASTM C495	
Comp. Strength (MPa):	0.6948
Comp. Strength (psi):	100.78
Corr. Comp. Strength (psi):	**100.53**
ASTM D2166	
Comp. Strength (kPa):	687.5
Comp. Strength (psi):	99.71
Corr. Comp. Strength (psi):	**99.47**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-02**
Height (in):	5.888
Height (mm):	149.6
Diameter (in):	2.988
Diameter (mm)	75.90
Area (in^2):	7.012
Area (mm^2):	4524
Mass (g):	256.24
Weight (lb):	0.5649
Weight (kN):	0.00251286
Volume (in^3):	41.29
Volume (mm^3):	676581
Density (g/mm^3):	0.0003787
Density (kg/m^3):	378.7
Unit Weight (pcf):	**23.64**
Unit Weight (kN/m^3):	3.714
Wet mass + tare (g):	565.47
Dry mass + tare (g):	513.23
Tare (g):	310.34
Water Content (%)	**25.75**
H:D ratio:	1.971
H:D correction:	0.9972

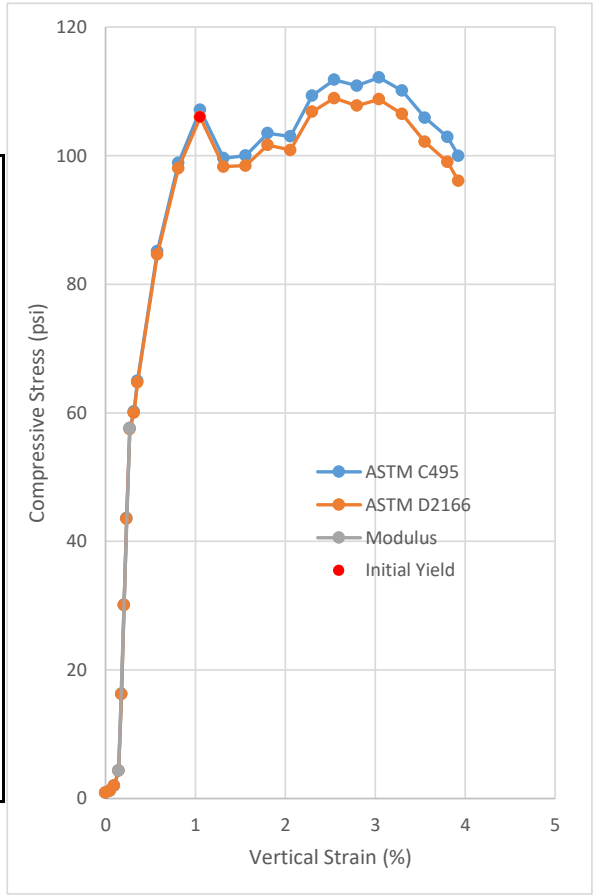
Age (days):	7
Cap:	None, surface ground
Maximum load (lb):	649.94
Maximum load (kN):	2.891
Strain Rate (%/min):	0.75
Time to Failure (min):	4.36
Strain at Failure (%):	3.200
Initial yield (psi):	89.22
Modulus (psi):	28495
ASTM C495	
Comp. Strength (MPa):	0.6391
Comp. Strength (psi):	92.69
Corr. Comp. Strength (psi):	**92.43**
ASTM D2166	
Comp. Strength (kPa):	619.4
Comp. Strength (psi):	89.84
Corr. Comp. Strength (psi):	**89.59**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-03**
Height (in):	5.868
Height (mm):	149.1
Diameter (in):	2.982
Diameter (mm)	75.75
Area (in^2):	6.986
Area (mm^2):	4507
Mass (g):	258.84
Weight (lb):	0.5706
Weight (kN):	0.00253835
Volume (in^3):	40.99
Volume (mm^3):	671766
Density (g/mm^3):	0.0003853
Density (kg/m^3):	385.3
Unit Weight (pcf):	**24.05**
Unit Weight (kN/m^3):	3.779
Wet mass + tare (g):	570.37
Dry mass + tare (g):	515.84
Tare (g):	312.84
Water Content (%)	**26.86**
H:D ratio:	1.968
H:D correction:	0.9969

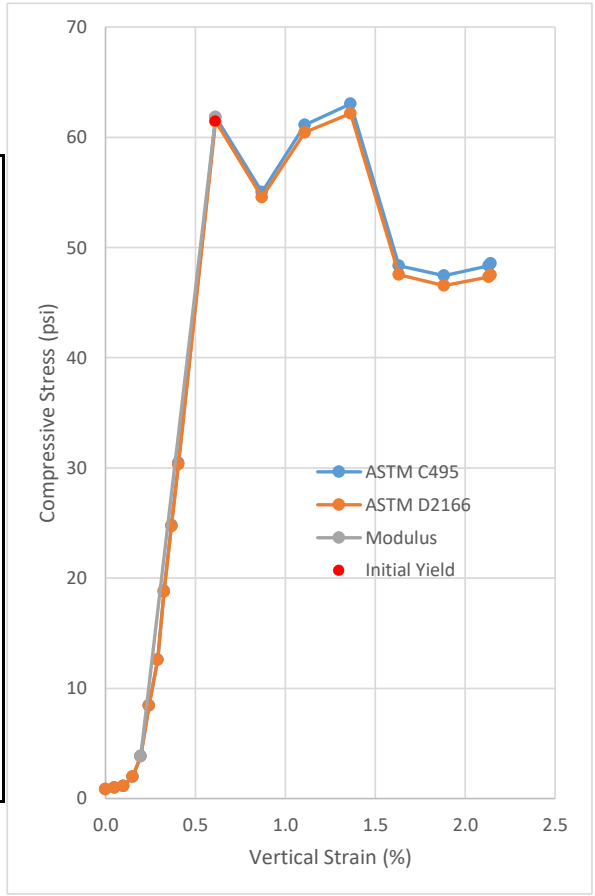
Age (days):	7
Cap:	None, surface ground
Maximum load (lb):	783.61
Maximum load (kN):	3.486
Strain Rate (%/min):	0.75
Time to Failure (min):	4.36
Strain at Failure (%):	3.198
Initial yield (psi):	105.98
Modulus (psi):	42653
ASTM C495	
Comp. Strength (MPa):	0.7734
Comp. Strength (psi):	112.18
Corr. Comp. Strength (psi):	**111.83**
ASTM D2166	
Comp. Strength (kPa):	751.2
Comp. Strength (psi):	108.95
Corr. Comp. Strength (psi):	**108.61**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-04**
Height (in):	5.653
Height (mm):	143.6
Diameter (in):	2.983
Diameter (mm)	75.76
Area (in^2):	6.987
Area (mm^2):	4508
Mass (g):	237.58
Weight (lb):	0.5238
Weight (kN):	0.00232986
Volume (in^3):	39.50
Volume (mm^3):	647299
Density (g/mm^3):	0.0003670
Density (kg/m^3):	367.0
Unit Weight (pcf):	**22.91**
Unit Weight (kN/m^3):	3.599
Wet mass + tare (g):	547.86
Dry mass + tare (g):	501.89
Tare (g):	310.55
Water Content (%)	**24.03**
H:D ratio:	1.895
H:D correction:	0.9911

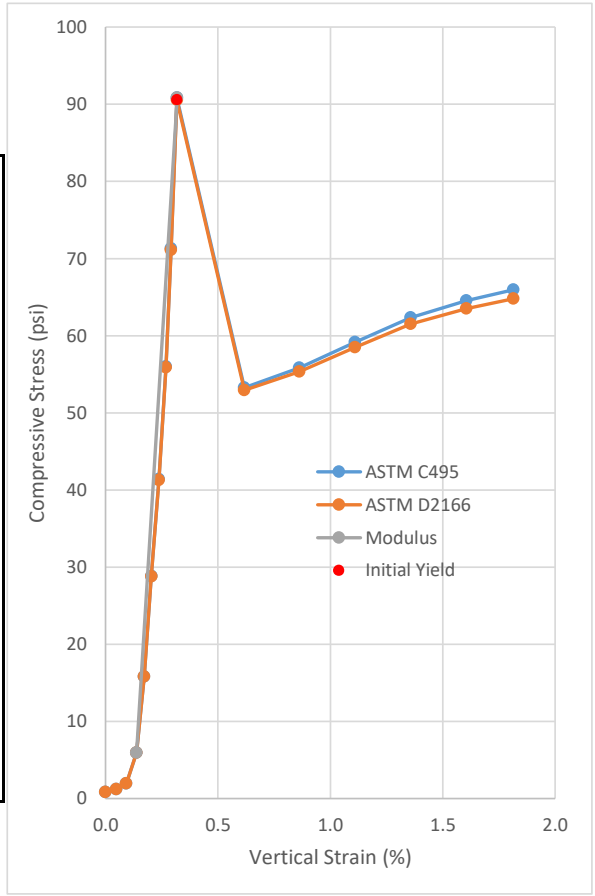
Age (days):	14
Cap:	None, surface ground
Maximum load (lb):	440.48
Maximum load (kN):	1.959
Strain Rate (%/min):	1
Time to Failure (min):	1.52
Strain at Failure (%):	1.456
Initial yield (psi):	61.46
Modulus (psi):	13964
ASTM C495	
Comp. Strength (MPa):	0.4347
Comp. Strength (psi):	63.04
Corr. Comp. Strength (psi):	**62.48**
ASTM D2166	
Comp. Strength (kPa):	428.7
Comp. Strength (psi):	62.18
Corr. Comp. Strength (psi):	**61.63**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-05**
Height (in):	5.754
Height (mm):	146.1
Diameter (in):	2.979
Diameter (mm)	75.68
Area (in^2):	6.972
Area (mm^2):	4498
Mass (g):	248.61
Weight (lb):	0.5481
Weight (kN):	0.00243803
Volume (in^3):	40.11
Volume (mm^3):	657316
Density (g/mm^3):	0.0003782
Density (kg/m^3):	378.2
Unit Weight (pcf):	**23.61**
Unit Weight (kN/m^3):	3.709
Wet mass + tare (g):	641.28
Dry mass + tare (g):	588.55
Tare (g):	393.01
Water Content (%)	**26.97**
H:D ratio:	1.931
H:D correction:	0.9940

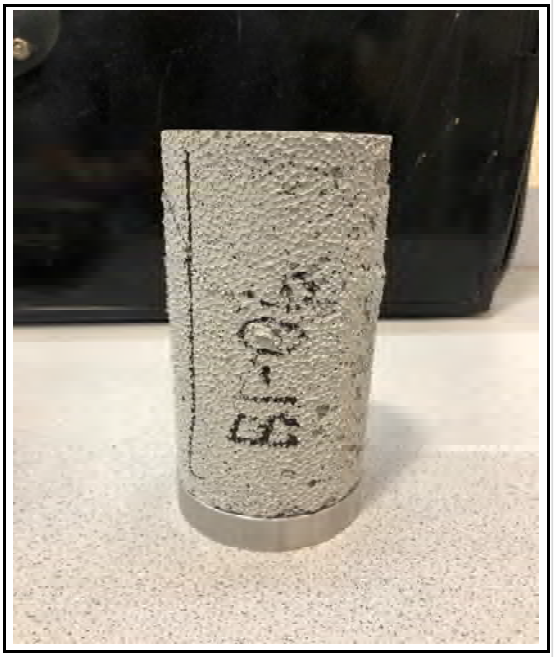
Age (days):	14
Cap:	None, surface ground
Maximum load (lb):	633.35
Maximum load (kN):	2.817
Strain Rate (%/min):	1
Time to Failure (min):	0.53
Strain at Failure (%):	0.449
Initial yield (psi):	90.56
Modulus (psi):	47026
ASTM C495	
Comp. Strength (MPa):	0.6264
Comp. Strength (psi):	90.85
Corr. Comp. Strength (psi):	**90.30**
ASTM D2166	
Comp. Strength (kPa):	624.4
Comp. Strength (psi):	90.56
Corr. Comp. Strength (psi):	**90.01**
Treatment:	AD

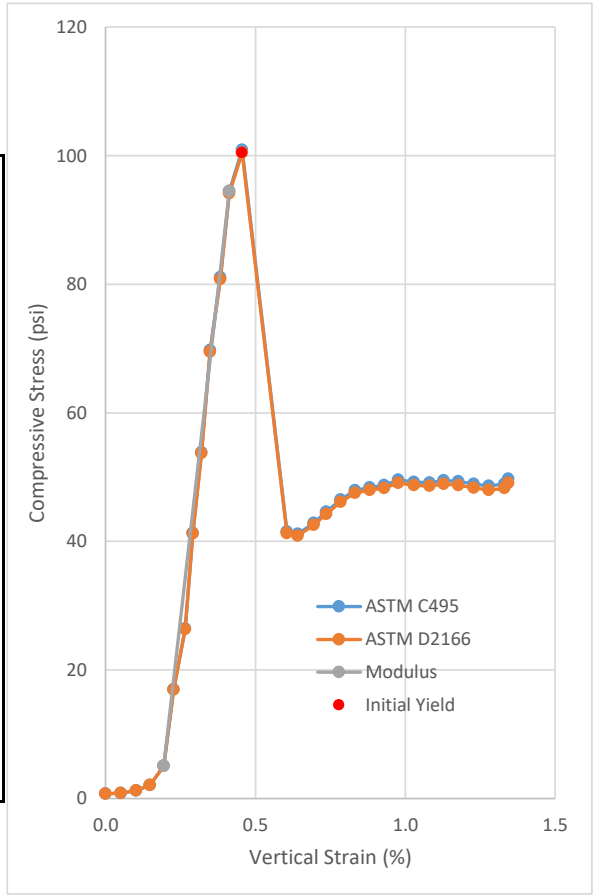


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-06**
Height (in):	5.650
Height (mm):	143.5
Diameter (in):	2.963
Diameter (mm)	75.27
Area (in^2):	6.897
Area (mm^2):	4450
Mass (g):	238.47
Weight (lb):	0.5257
Weight (kN):	0.00233859
Volume (in^3):	38.97
Volume (mm^3):	638596
Density (g/mm^3):	0.0003734
Density (kg/m^3):	373.4
Unit Weight (pcf):	**23.31**
Unit Weight (kN/m^3):	3.662
Wet mass + tare (g):	629.13
Dry mass + tare (g):	580.69
Tare (g):	391.05
Water Content (%)	**25.54**
H:D ratio:	1.907
H:D correction:	0.9920

Age (days):	14
Cap:	None, surface ground
Maximum load (lb):	696.11
Maximum load (kN):	3.096
Strain Rate (%/min):	1
Time to Failure (min):	0.68
Strain at Failure (%):	0.602
Initial yield (psi):	100.47
Modulus (psi):	40821
ASTM C495	
Comp. Strength (MPa):	0.6959
Comp. Strength (psi):	100.93
Corr. Comp. Strength (psi):	**100.12**
ASTM D2166	
Comp. Strength (kPa):	692.7
Comp. Strength (psi):	100.47
Corr. Comp. Strength (psi):	**99.67**
Treatment:	AD

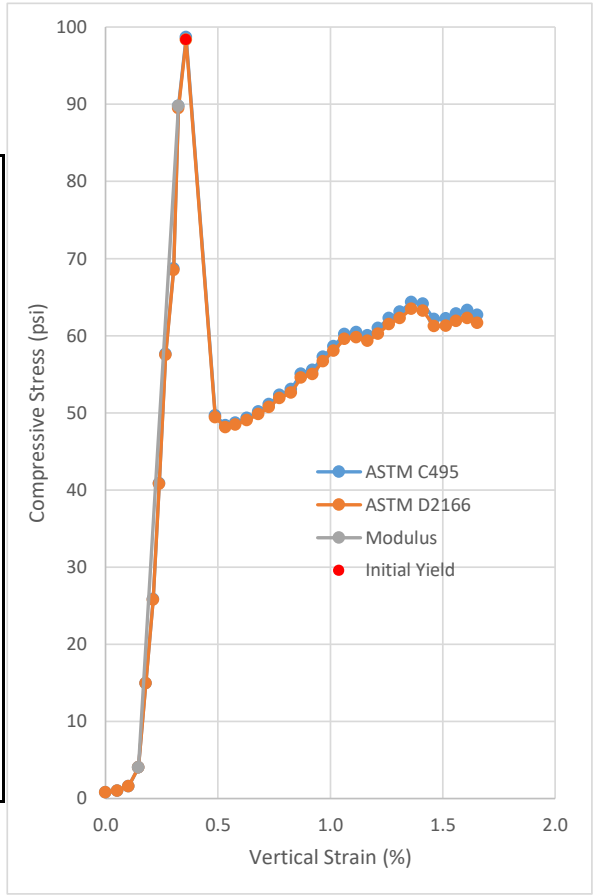




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-04**
Height (in):	5.739
Height (mm):	145.8
Diameter (in):	2.967
Diameter (mm)	75.36
Area (in^2):	6.914
Area (mm^2):	4461
Mass (g):	253.45
Weight (lb):	0.5588
Weight (kN):	0.0024855
Volume (in^3):	39.68
Volume (mm^3):	650185
Density (g/mm^3):	0.0003898
Density (kg/m^3):	389.8
Unit Weight (pcf):	**24.34**
Unit Weight (kN/m^3):	3.823
Wet mass + tare (g):	563.42
Dry mass + tare (g):	510.08
Tare (g):	310.44
Water Content (%)	**26.72**
H:D ratio:	1.934
H:D correction:	0.9942

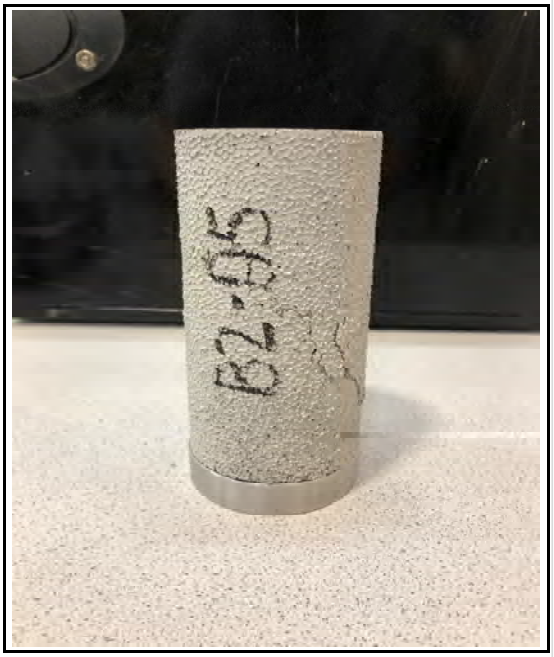
Age (days):	14
Cap:	None, surface ground
Maximum load (lb):	682.42
Maximum load (kN):	3.036
Strain Rate (%/min):	1
Time to Failure (min):	0.57
Strain at Failure (%):	0.500
Initial yield (psi):	98.35
Modulus (psi):	48236
ASTM C495	
Comp. Strength (MPa):	0.6805
Comp. Strength (psi):	98.70
Corr. Comp. Strength (psi):	**98.13**
ASTM D2166	
Comp. Strength (kPa):	678.1
Comp. Strength (psi):	98.35
Corr. Comp. Strength (psi):	**97.78**
Treatment:	AD

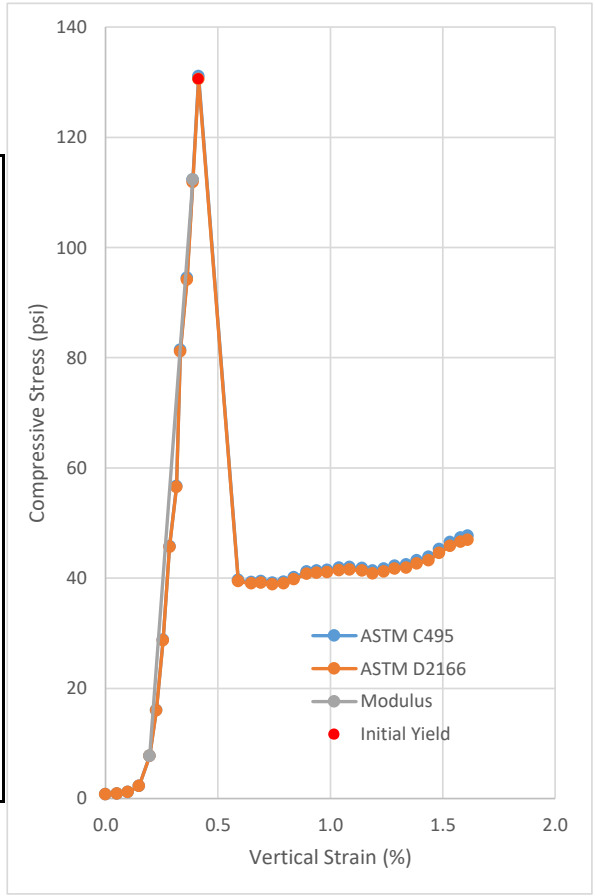


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-05**
Height (in):	5.736
Height (mm):	145.7
Diameter (in):	2.983
Diameter (mm)	75.76
Area (in^2):	6.987
Area (mm^2):	4508
Mass (g):	247.3
Weight (lb):	0.5452
Weight (kN):	0.00242518
Volume (in^3):	40.08
Volume (mm^3):	656803
Density (g/mm^3):	0.0003765
Density (kg/m^3):	376.5
Unit Weight (pcf):	**23.51**
Unit Weight (kN/m^3):	3.692
Wet mass + tare (g):	571.98
Dry mass + tare (g):	519.85
Tare (g):	324.17
Water Content (%)	**26.64**
H:D ratio:	1.923
H:D correction:	0.9933

Age (days):	14
Cap:	None, surface ground
Maximum load (lb):	915.95
Maximum load (kN):	4.074
Strain Rate (%/min):	1
Time to Failure (min):	0.69
Strain at Failure (%):	0.600
Initial yield (psi):	130.55
Modulus (psi):	54629
ASTM C495	
Comp. Strength (MPa):	0.9038
Comp. Strength (psi):	131.09
Corr. Comp. Strength (psi):	**130.22**
ASTM D2166	
Comp. Strength (kPa):	900.1
Comp. Strength (psi):	130.55
Corr. Comp. Strength (psi):	**129.68**
Treatment:	AD

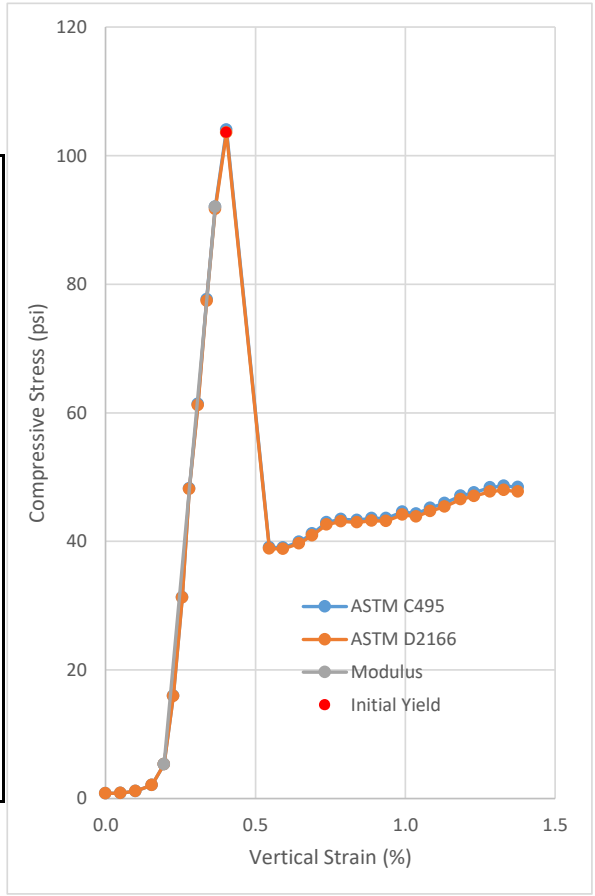




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-06**
Height (in):	5.721
Height (mm):	145.3
Diameter (in):	2.983
Diameter (mm)	75.77
Area (in^2):	6.989
Area (mm^2):	4509
Mass (g):	246.47
Weight (lb):	0.5434
Weight (kN):	0.00241705
Volume (in^3):	39.98
Volume (mm^3):	655155
Density (g/mm^3):	0.0003762
Density (kg/m^3):	376.2
Unit Weight (pcf):	**23.49**
Unit Weight (kN/m^3):	3.689
Wet mass + tare (g):	556.38
Dry mass + tare (g):	506.58
Tare (g):	310.48
Water Content (%)	**25.40**
H:D ratio:	1.918
H:D correction:	0.9929

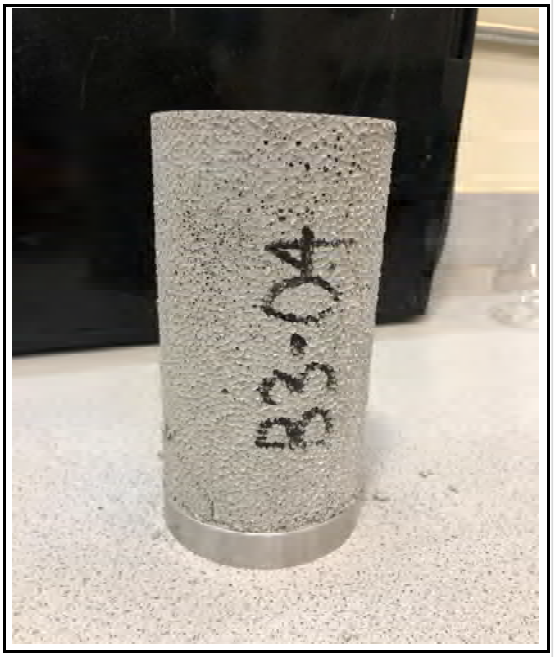
Age (days):	14
Cap:	None, surface ground
Maximum load (lb):	727.03
Maximum load (kN):	3.234
Strain Rate (%/min):	1
Time to Failure (min):	0.64
Strain at Failure (%):	0.554
Initial yield (psi):	103.61
Modulus (psi):	50896
ASTM C495	
Comp. Strength (MPa):	0.7173
Comp. Strength (psi):	104.03
Corr. Comp. Strength (psi):	**103.29**
ASTM D2166	
Comp. Strength (kPa):	714.4
Comp. Strength (psi):	103.61
Corr. Comp. Strength (psi):	**102.87**
Treatment:	AD

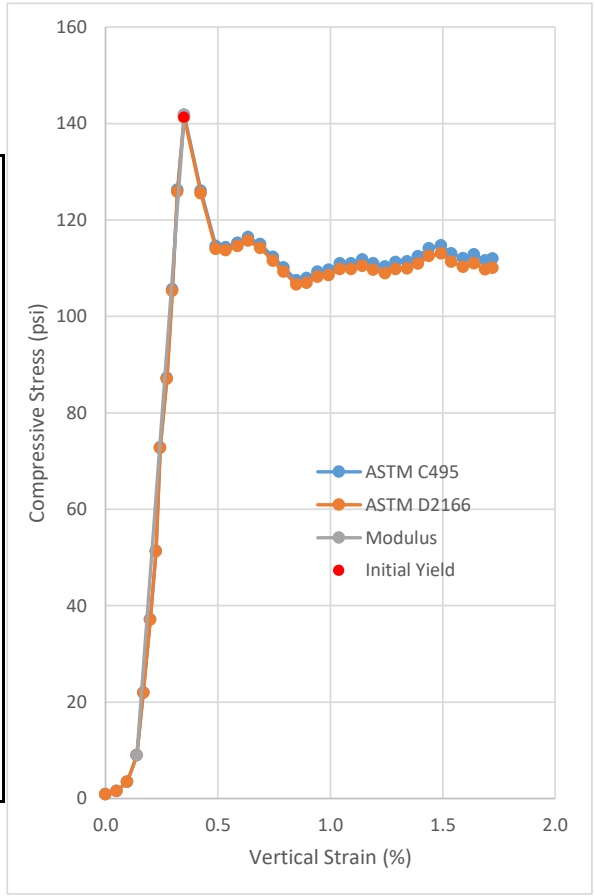


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-04**
Height (in):	5.733
Height (mm):	145.6
Diameter (in):	2.985
Diameter (mm)	75.82
Area (in^2):	6.998
Area (mm^2):	4515
Mass (g):	255.87
Weight (lb):	0.5641
Weight (kN):	0.00250923
Volume (in^3):	40.12
Volume (mm^3):	657410
Density (g/mm^3):	0.0003892
Density (kg/m^3):	389.2
Unit Weight (pcf):	**24.30**
Unit Weight (kN/m^3):	3.817
Wet mass + tare (g):	583.06
Dry mass + tare (g):	528.46
Tare (g):	327.85
Water Content (%)	**27.22**
H:D ratio:	1.920
H:D correction:	0.9931

Age (days):	14
Cap:	None, surface ground
Maximum load (lb):	992
Maximum load (kN):	4.413
Strain Rate (%/min):	1
Time to Failure (min):	0.66
Strain at Failure (%):	0.550
Initial yield (psi):	141.26
Modulus (psi):	62923
ASTM C495	
Comp. Strength (MPa):	0.9774
Comp. Strength (psi):	141.75
Corr. Comp. Strength (psi):	**140.78**
ASTM D2166	
Comp. Strength (kPa):	973.9
Comp. Strength (psi):	141.26
Corr. Comp. Strength (psi):	**140.28**
Treatment:	AD

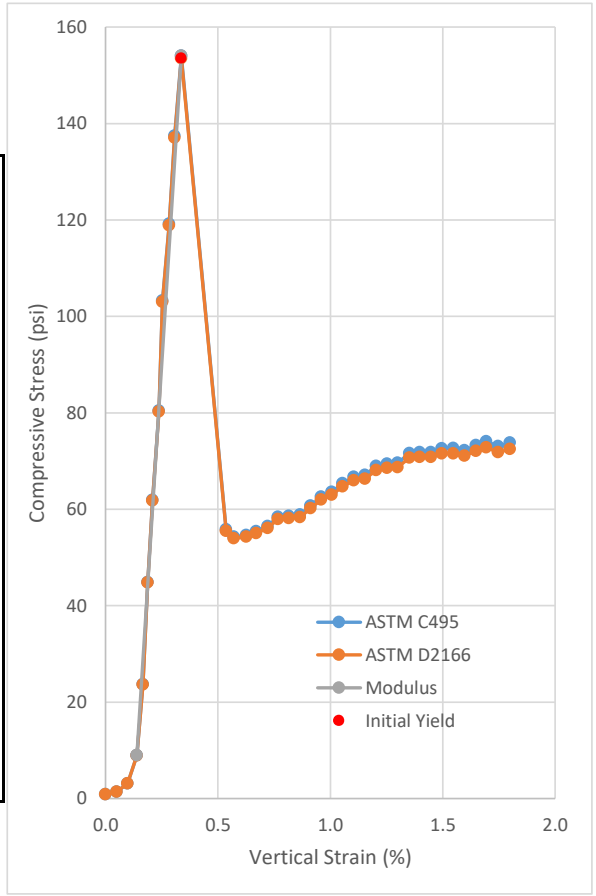




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-05**
Height (in):	5.754
Height (mm):	146.2
Diameter (in):	2.974
Diameter (mm)	75.55
Area (in^2):	6.948
Area (mm^2):	4483
Mass (g):	254.97
Weight (lb):	0.5621
Weight (kN):	0.0025004
Volume (in^3):	39.98
Volume (mm^3):	655187
Density (g/mm^3):	0.0003892
Density (kg/m^3):	389.2
Unit Weight (pcf):	**24.29**
Unit Weight (kN/m^3):	3.816
Wet mass + tare (g):	720.11
Dry mass + tare (g):	666.01
Tare (g):	465.83
Water Content (%)	**27.03**
H:D ratio:	1.935
H:D correction:	0.9943

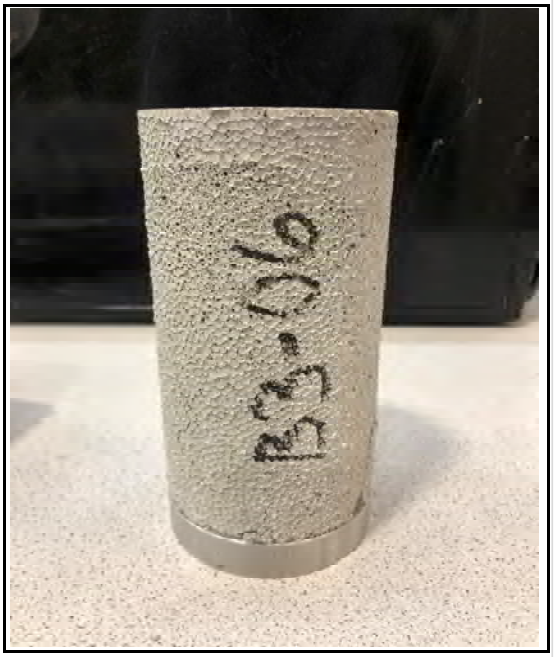
Age (days):	14
Cap:	None, surface ground
Maximum load (lb):	1070.4
Maximum load (kN):	4.761
Strain Rate (%/min):	1
Time to Failure (min):	0.66
Strain at Failure (%):	0.550
Initial yield (psi):	153.54
Modulus (psi):	73586
ASTM C495	
Comp. Strength (MPa):	1.0622
Comp. Strength (psi):	154.06
Corr. Comp. Strength (psi):	**153.17**
ASTM D2166	
Comp. Strength (kPa):	1058.6
Comp. Strength (psi):	153.54
Corr. Comp. Strength (psi):	**152.65**
Treatment:	AD

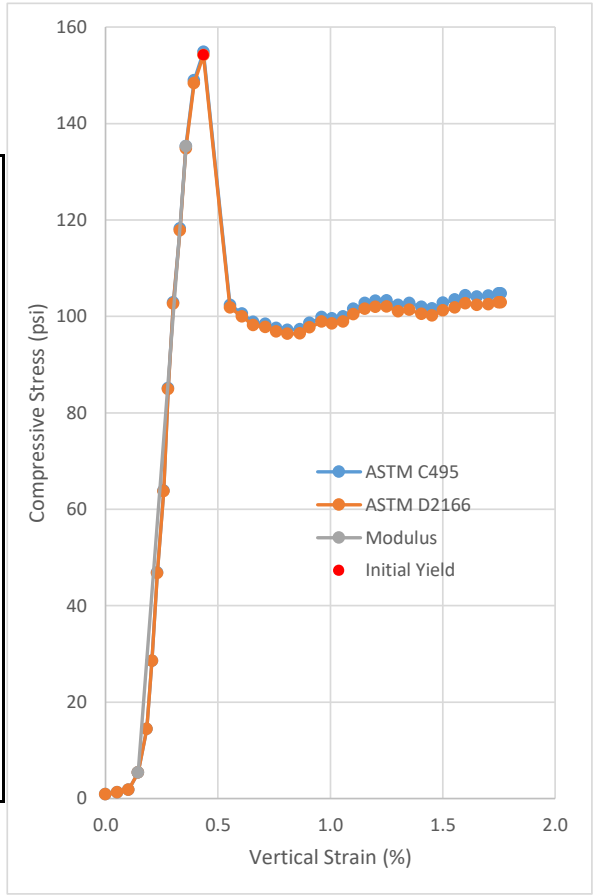


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-06**
Height (in):	5.724
Height (mm):	145.4
Diameter (in):	2.981
Diameter (mm)	75.72
Area (in^2):	6.979
Area (mm^2):	4503
Mass (g):	252.18
Weight (lb):	0.5560
Weight (kN):	0.00247304
Volume (in^3):	39.95
Volume (mm^3):	654696
Density (g/mm^3):	0.0003852
Density (kg/m^3):	385.2
Unit Weight (pcf):	**24.05**
Unit Weight (kN/m^3):	3.777
Wet mass + tare (g):	567.30
Dry mass + tare (g):	516.78
Tare (g):	315.79
Water Content (%)	**25.14**
H:D ratio:	1.920
H:D correction:	0.9931

Age (days):	14
Cap:	None, surface ground
Maximum load (lb):	1080.9
Maximum load (kN):	4.808
Strain Rate (%/min):	1
Time to Failure (min):	0.76
Strain at Failure (%):	0.652
Initial yield (psi):	154.20
Modulus (psi):	60941
ASTM C495	
Comp. Strength (MPa):	1.0678
Comp. Strength (psi):	154.87
Corr. Comp. Strength (psi):	**153.80**
ASTM D2166	
Comp. Strength (kPa):	1063.1
Comp. Strength (psi):	154.20
Corr. Comp. Strength (psi):	**153.13**
Treatment:	AD

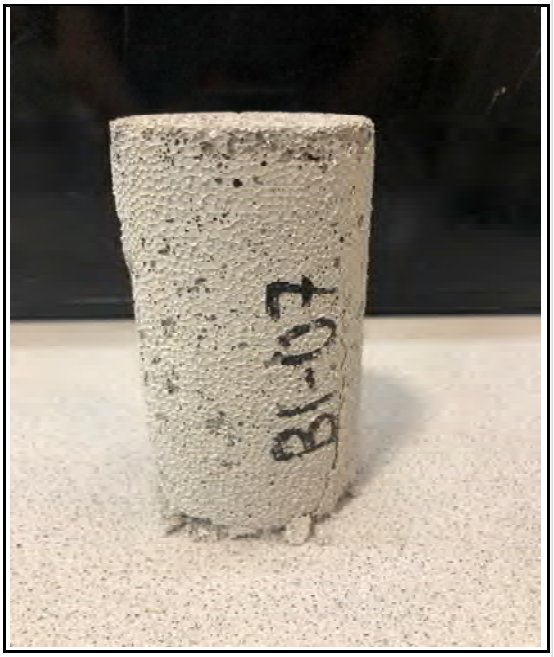


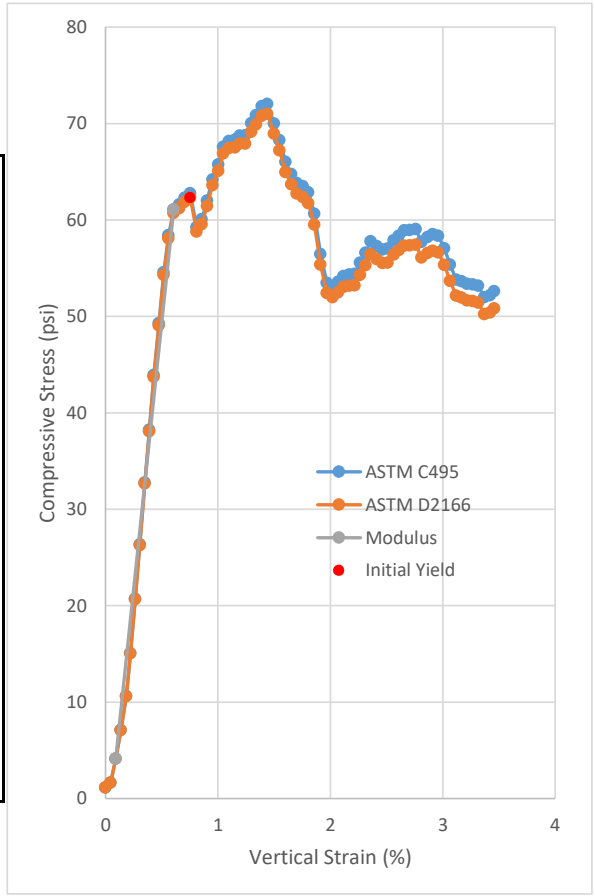


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-07**
Height (in):	5.687
Height (mm):	144.4
Diameter (in):	2.958
Diameter (mm)	75.14
Area (in^2):	6.874
Area (mm^2):	4435
Mass (g):	227.92
Weight (lb):	0.5025
Weight (kN):	0.00223513
Volume (in^3):	39.09
Volume (mm^3):	640573
Density (g/mm^3):	0.0003558
Density (kg/m^3):	355.8
Unit Weight (pcf):	**22.21**
Unit Weight (kN/m^3):	3.489
Wet mass + tare (g):	692.39
Dry mass + tare (g):	656.32
Tare (g):	465.83
Water Content (%)	**18.94**
H:D ratio:	1.922
H:D correction:	0.9933

Age (days):	28
Cap:	None, surface ground
Maximum load (lb):	495.08
Maximum load (kN):	2.202
Strain Rate (%/min):	1
Time to Failure (min):	1.63
Strain at Failure (%):	1.545
Initial yield (psi):	62.29
Modulus (psi):	11044
ASTM C495	
Comp. Strength (MPa):	0.4966
Comp. Strength (psi):	72.03
Corr. Comp. Strength (psi):	**71.54**
ASTM D2166	
Comp. Strength (kPa):	489.5
Comp. Strength (psi):	70.99
Corr. Comp. Strength (psi):	**70.51**
Treatment:	AD

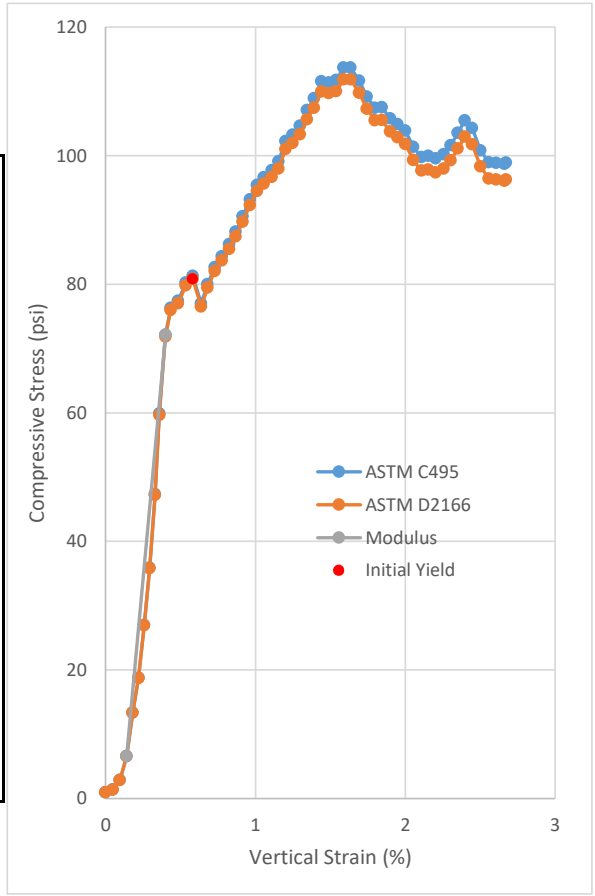




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-08**
Height (in):	5.685
Height (mm):	144.4
Diameter (in):	2.977
Diameter (mm)	75.61
Area (in^2):	6.959
Area (mm^2):	4490
Mass (g):	231.3
Weight (lb):	0.5099
Weight (kN):	0.00226828
Volume (in^3):	39.56
Volume (mm^3):	648309
Density (g/mm^3):	0.0003568
Density (kg/m^3):	356.8
Unit Weight (pcf):	**22.27**
Unit Weight (kN/m^3):	3.499
Wet mass + tare (g):	560.91
Dry mass + tare (g):	524.97
Tare (g):	330.79
Water Content (%)	**18.51**
H:D ratio:	1.910
H:D correction:	0.9923

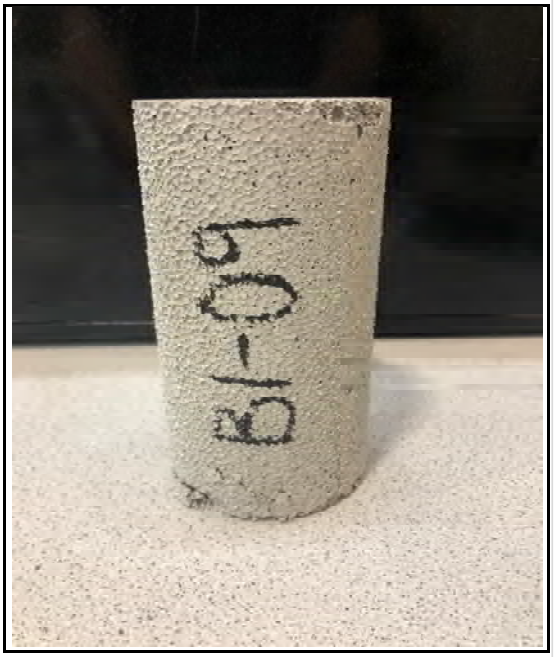
Age (days):	28
Cap:	None, surface ground
Maximum load (lb):	791.23
Maximum load (kN):	3.520
Strain Rate (%/min):	1
Time to Failure (min):	1.88
Strain at Failure (%):	1.798
Initial yield (psi):	80.80
Modulus (psi):	25192
ASTM C495	
Comp. Strength (MPa):	0.7839
Comp. Strength (psi):	113.70
Corr. Comp. Strength (psi):	**112.82**
ASTM D2166	
Comp. Strength (kPa):	771.4
Comp. Strength (psi):	111.88
Corr. Comp. Strength (psi):	**111.01**
Treatment:	AD

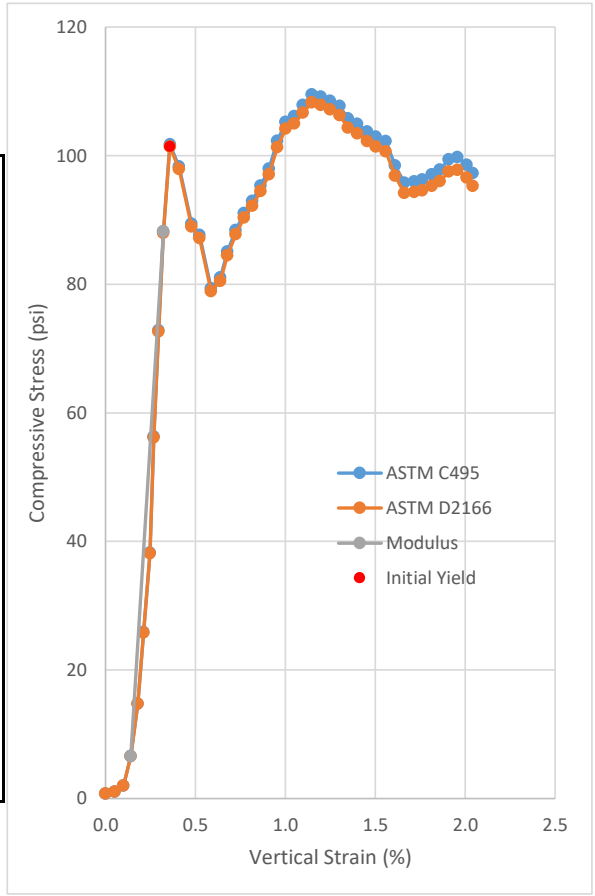


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-09**
Height (in):	5.750
Height (mm):	146.1
Diameter (in):	2.979
Diameter (mm)	75.67
Area (in^2):	6.970
Area (mm^2):	4497
Mass (g):	234.15
Weight (lb):	0.5162
Weight (kN):	0.00229623
Volume (in^3):	40.08
Volume (mm^3):	656788
Density (g/mm^3):	0.0003565
Density (kg/m^3):	356.5
Unit Weight (pcf):	**22.26**
Unit Weight (kN/m^3):	3.496
Wet mass + tare (g):	558.92
Dry mass + tare (g):	521.35
Tare (g):	326.33
Water Content (%)	**19.26**
H:D ratio:	1.930
H:D correction:	0.9939

Age (days):	28
Cap:	None, surface ground
Maximum load (lb):	763.34
Maximum load (kN):	3.396
Strain Rate (%/min):	1
Time to Failure (min):	1.38
Strain at Failure (%):	1.305
Initial yield (psi):	101.40
Modulus (psi):	45046
ASTM C495	
Comp. Strength (MPa):	0.7551
Comp. Strength (psi):	109.52
Corr. Comp. Strength (psi):	**108.85**
ASTM D2166	
Comp. Strength (kPa):	746.4
Comp. Strength (psi):	108.26
Corr. Comp. Strength (psi):	**107.60**
Treatment:	AD

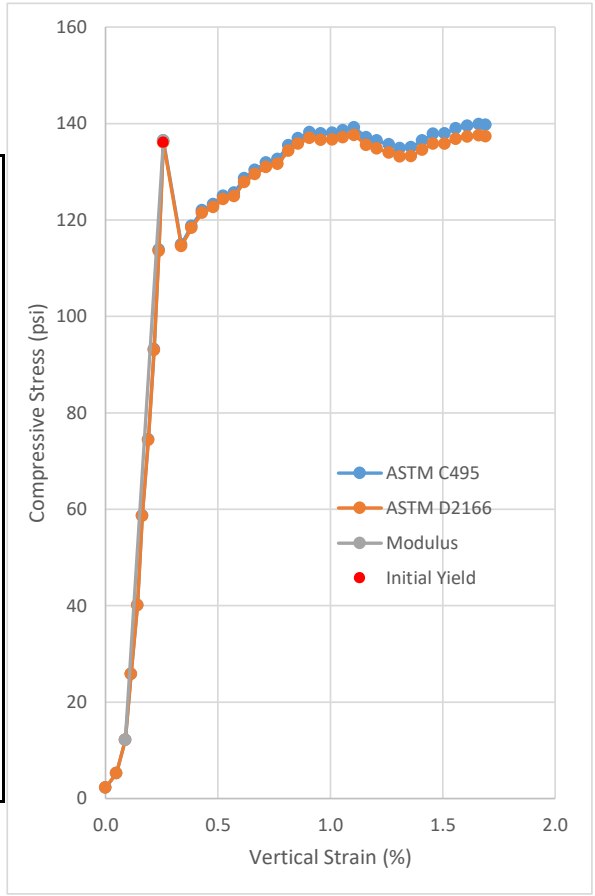




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-07**
Height (in):	5.732
Height (mm):	145.6
Diameter (in):	2.974
Diameter (mm)	75.54
Area (in^2):	6.947
Area (mm^2):	4482
Mass (g):	243.06
Weight (lb):	0.5359
Weight (kN):	0.0023836
Volume (in^3):	39.82
Volume (mm^3):	652536
Density (g/mm^3):	0.0003725
Density (kg/m^3):	372.5
Unit Weight (pcf):	**23.25**
Unit Weight (kN/m^3):	3.653
Wet mass + tare (g):	688.13
Dry mass + tare (g):	648.46
Tare (g):	446.50
Water Content (%)	**19.64**
H:D ratio:	1.927
H:D correction:	0.9937

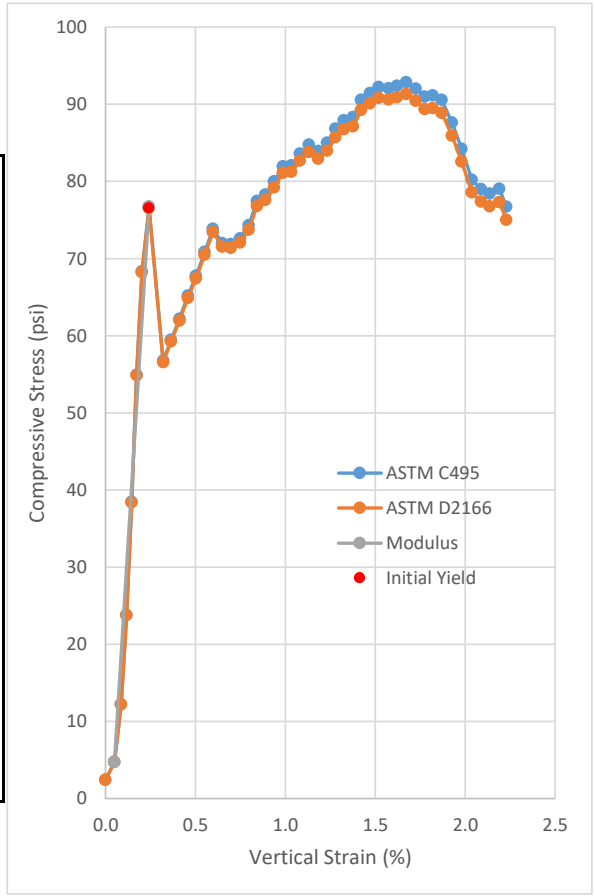
Age (days):	28
Cap:	None, surface ground
Maximum load (lb):	971.34
Maximum load (kN):	4.321
Strain Rate (%/min):	1
Time to Failure (min):	1.97
Strain at Failure (%):	1.855
Initial yield (psi):	136.09
Modulus (psi):	73536
ASTM C495	
Comp. Strength (MPa):	0.9641
Comp. Strength (psi):	139.83
Corr. Comp. Strength (psi):	**138.95**
ASTM D2166	
Comp. Strength (kPa):	948.9
Comp. Strength (psi):	137.63
Corr. Comp. Strength (psi):	**136.76**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-08**
Height (in):	5.769
Height (mm):	146.5
Diameter (in):	2.981
Diameter (mm)	75.71
Area (in^2):	6.978
Area (mm^2):	4502
Mass (g):	236.04
Weight (lb):	0.5204
Weight (kN):	0.00231476
Volume (in^3):	40.25
Volume (mm^3):	659619
Density (g/mm^3):	0.0003578
Density (kg/m^3):	357.8
Unit Weight (pcf):	**22.34**
Unit Weight (kN/m^3):	3.509
Wet mass + tare (g):	643.46
Dry mass + tare (g):	606.18
Tare (g):	408.70
Water Content (%)	**18.88**
H:D ratio:	1.935
H:D correction:	0.9943

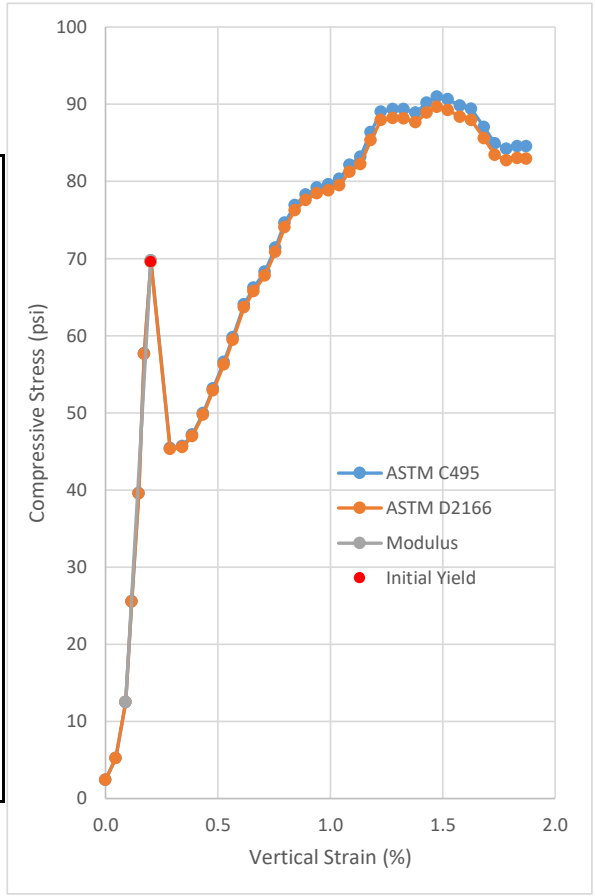
Age (days):	28
Cap:	None, surface ground
Maximum load (lb):	647.95
Maximum load (kN):	2.882
Strain Rate (%/min):	1
Time to Failure (min):	1.88
Strain at Failure (%):	1.803
Initial yield (psi):	76.54
Modulus (psi):	37443
ASTM C495	
Comp. Strength (MPa):	0.6402
Comp. Strength (psi):	92.86
Corr. Comp. Strength (psi):	**92.33**
ASTM D2166	
Comp. Strength (kPa):	629.5
Comp. Strength (psi):	91.31
Corr. Comp. Strength (psi):	**90.79**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-09**
Height (in):	5.834
Height (mm):	148.2
Diameter (in):	2.973
Diameter (mm)	75.51
Area (in^2):	6.940
Area (mm^2):	4478
Mass (g):	235.99
Weight (lb):	0.5203
Weight (kN):	0.00231427
Volume (in^3):	40.49
Volume (mm^3):	663476
Density (g/mm^3):	0.0003557
Density (kg/m^3):	355.7
Unit Weight (pcf):	**22.20**
Unit Weight (kN/m^3):	3.488
Wet mass + tare (g):	563.63
Dry mass + tare (g):	527.08
Tare (g):	328.90
Water Content (%)	**18.44**
H:D ratio:	1.962
H:D correction:	0.9965

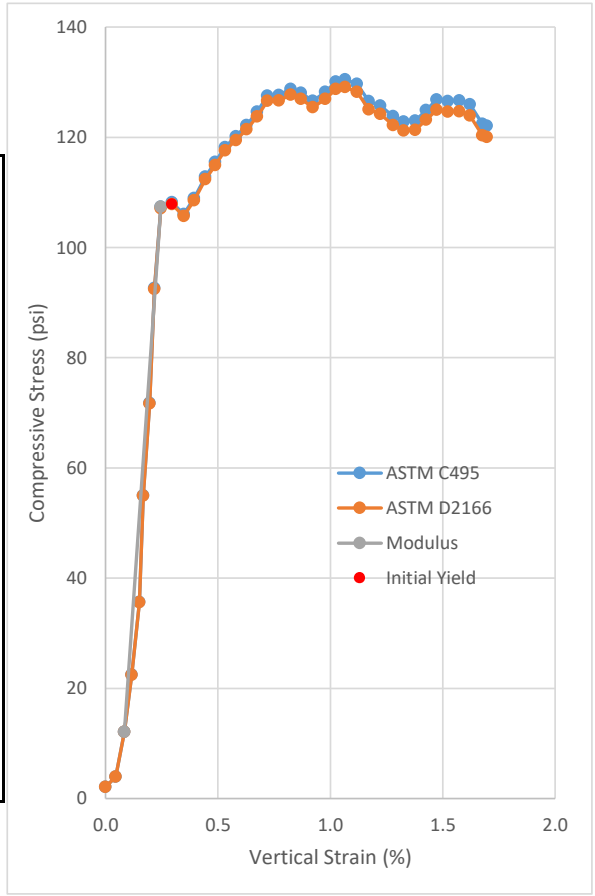
Age (days):	28
Cap:	None, surface ground
Maximum load (lb):	631.51
Maximum load (kN):	2.809
Strain Rate (%/min):	1
Time to Failure (min):	1.71
Strain at Failure (%):	1.601
Initial yield (psi):	69.58
Modulus (psi):	50510
ASTM C495	
Comp. Strength (MPa):	0.6274
Comp. Strength (psi):	90.99
Corr. Comp. Strength (psi):	**90.67**
ASTM D2166	
Comp. Strength (kPa):	618.1
Comp. Strength (psi):	89.65
Corr. Comp. Strength (psi):	**89.34**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-07**
Height (in):	5.724
Height (mm):	145.4
Diameter (in):	2.963
Diameter (mm)	75.25
Area (in^2):	6.894
Area (mm^2):	4448
Mass (g):	243.17
Weight (lb):	0.5361
Weight (kN):	0.00238468
Volume (in^3):	39.46
Volume (mm^3):	646631
Density (g/mm^3):	0.0003761
Density (kg/m^3):	376.1
Unit Weight (pcf):	**23.48**
Unit Weight (kN/m^3):	3.688
Wet mass + tare (g):	573.97
Dry mass + tare (g):	534.54
Tare (g):	332.26
Water Content (%)	**19.49**
H:D ratio:	1.932
H:D correction:	0.9940

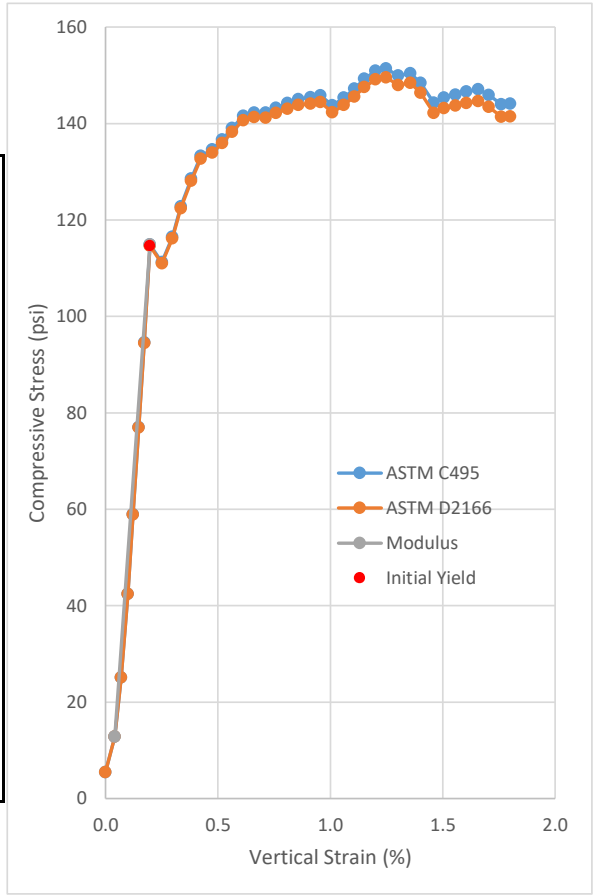
Age (days):	28
Cap:	None, surface ground
Maximum load (lb):	899.64
Maximum load (kN):	4.002
Strain Rate (%/min):	1
Time to Failure (min):	1.33
Strain at Failure (%):	1.247
Initial yield (psi):	107.87
Modulus (psi):	58942
ASTM C495	
Comp. Strength (MPa):	0.8998
Comp. Strength (psi):	130.50
Corr. Comp. Strength (psi):	**129.72**
ASTM D2166	
Comp. Strength (kPa):	890.2
Comp. Strength (psi):	129.11
Corr. Comp. Strength (psi):	**128.34**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-08**
Height (in):	5.804
Height (mm):	147.4
Diameter (in):	2.972
Diameter (mm)	75.48
Area (in^2):	6.936
Area (mm^2):	4475
Mass (g):	246.54
Weight (lb):	0.5435
Weight (kN):	0.00241773
Volume (in^3):	40.25
Volume (mm^3):	659620
Density (g/mm^3):	0.0003738
Density (kg/m^3):	373.8
Unit Weight (pcf):	**23.33**
Unit Weight (kN/m^3):	3.665
Wet mass + tare (g):	709.98
Dry mass + tare (g):	668.68
Tare (g):	465.05
Water Content (%)	**20.28**
H:D ratio:	1.953
H:D correction:	0.9957

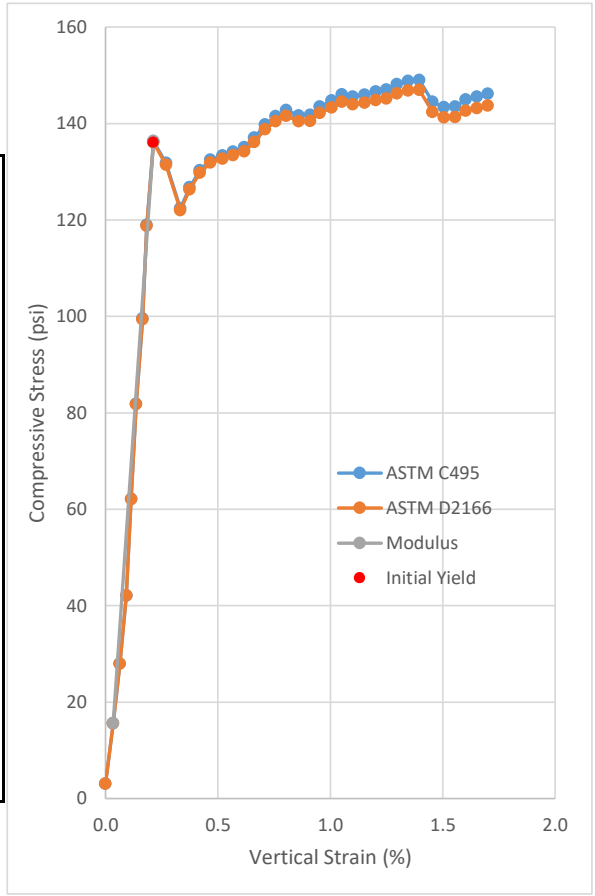
Age (days):	28
Cap:	None, surface ground
Maximum load (lb):	1050.1
Maximum load (kN):	4.671
Strain Rate (%/min):	1
Time to Failure (min):	1.57
Strain at Failure (%):	1.449
Initial yield (psi):	114.65
Modulus (psi):	65144
ASTM C495	
Comp. Strength (MPa):	1.0439
Comp. Strength (psi):	151.41
Corr. Comp. Strength (psi):	**150.76**
ASTM D2166	
Comp. Strength (kPa):	1030.9
Comp. Strength (psi):	149.52
Corr. Comp. Strength (psi):	**148.88**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-09**
Height (in):	5.770
Height (mm):	146.6
Diameter (in):	2.984
Diameter (mm)	75.79
Area (in^2):	6.993
Area (mm^2):	4512
Mass (g):	245.59
Weight (lb):	0.5414
Weight (kN):	0.00240842
Volume (in^3):	40.35
Volume (mm^3):	661286
Density (g/mm^3):	0.0003714
Density (kg/m^3):	371.4
Unit Weight (pcf):	**23.18**
Unit Weight (kN/m^3):	3.642
Wet mass + tare (g):	553.49
Dry mass + tare (g):	512.99
Tare (g):	309.43
Water Content (%)	**19.90**
H:D ratio:	1.934
H:D correction:	0.9942

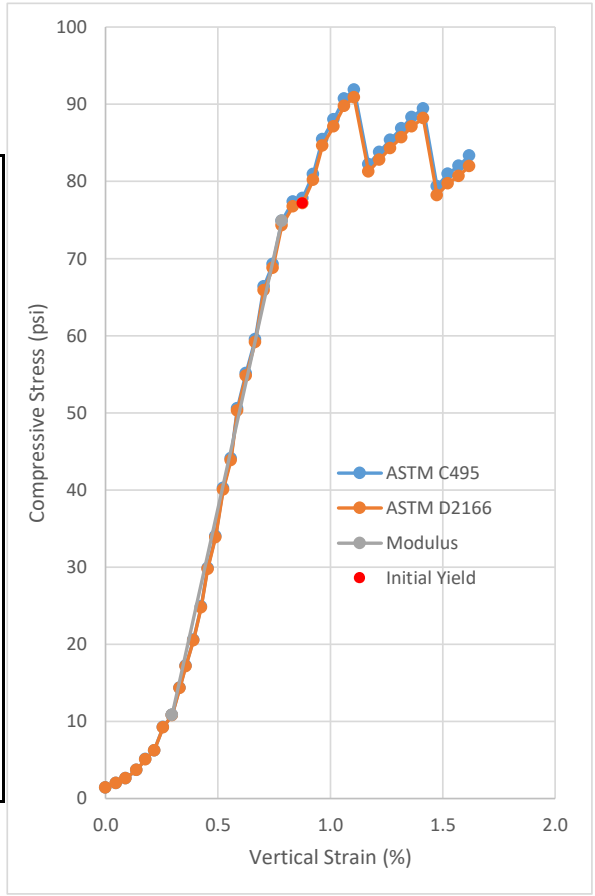
Age (days):	28
Cap:	None, surface ground
Maximum load (lb):	1042.3
Maximum load (kN):	4.636
Strain Rate (%/min):	1
Time to Failure (min):	1.70
Strain at Failure (%):	1.601
Initial yield (psi):	136.05
Modulus (psi):	67460
ASTM C495	
Comp. Strength (MPa):	1.0276
Comp. Strength (psi):	149.04
Corr. Comp. Strength (psi):	**148.17**
ASTM D2166	
Comp. Strength (kPa):	1013.3
Comp. Strength (psi):	146.96
Corr. Comp. Strength (psi):	**146.11**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-10**
Height (in):	5.483
Height (mm):	139.3
Diameter (in):	2.978
Diameter (mm)	75.65
Area (in^2):	6.967
Area (mm^2):	4495
Mass (g):	226.53
Weight (lb):	0.4994
Weight (kN):	0.0022215
Volume (in^3):	38.20
Volume (mm^3):	625935
Density (g/mm^3):	0.0003619
Density (kg/m^3):	361.9
Unit Weight (pcf):	**22.59**
Unit Weight (kN/m^3):	3.549
Wet mass + tare (g):	550.79
Dry mass + tare (g):	509.53
Tare (g):	327.87
Water Content (%)	**22.71**
H:D ratio:	1.841
H:D correction:	0.9868

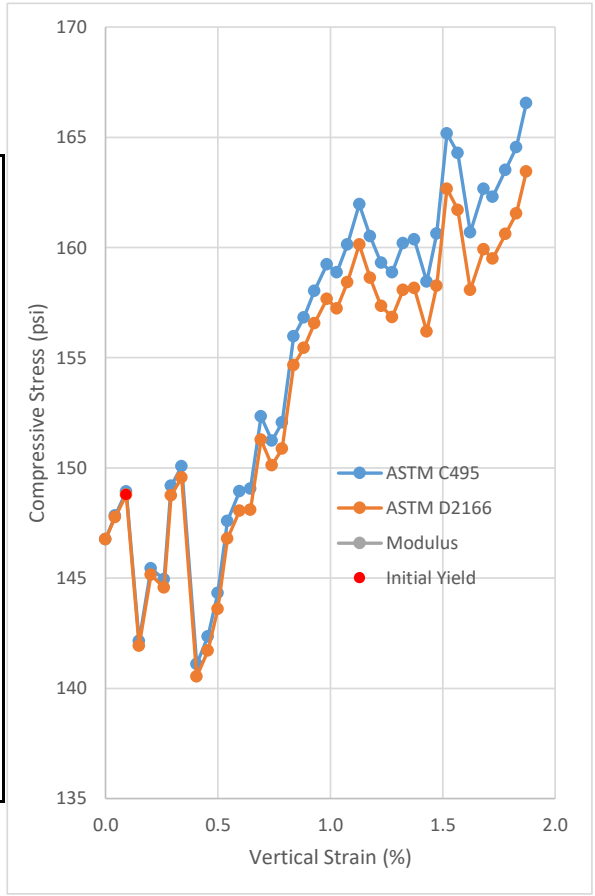
Age (days):	52
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	640.19
Maximum load (kN):	2.848
Strain Rate (%/min):	1
Time to Failure (min):	1.00
Strain at Failure (%):	1.400
Initial yield (psi):	77.14
Modulus (psi):	13121
ASTM C495	
Comp. Strength (MPa):	0.6336
Comp. Strength (psi):	91.89
Corr. Comp. Strength (psi):	**90.68**
ASTM D2166	
Comp. Strength (kPa):	626.6
Comp. Strength (psi):	90.88
Corr. Comp. Strength (psi):	**89.67**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-10**
Height (in):	5.693
Height (mm):	144.6
Diameter (in):	2.974
Diameter (mm)	75.54
Area (in^2):	6.947
Area (mm^2):	4482
Mass (g):	246.87
Weight (lb):	0.5443
Weight (kN):	0.00242097
Volume (in^3):	39.54
Volume (mm^3):	648020
Density (g/mm^3):	0.0003810
Density (kg/m^3):	381.0
Unit Weight (pcf):	**23.78**
Unit Weight (kN/m^3):	3.736
Wet mass + tare (g):	579.99
Dry mass + tare (g):	533.56
Tare (g):	333.13
Water Content (%)	**23.17**
H:D ratio:	1.914
H:D correction:	0.9926

Age (days):	52
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1206.7
Maximum load (kN):	5.368
Strain Rate (%/min):	1
Time to Failure (min):	1.16
Strain at Failure (%):	2.896
Initial yield (psi):	148.78
Modulus (psi):	#N/A
ASTM C495	
Comp. Strength (MPa):	1.1977
Comp. Strength (psi):	173.71
Corr. Comp. Strength (psi):	**172.43**
ASTM D2166	
Comp. Strength (kPa):	1126.9
Comp. Strength (psi):	163.44
Corr. Comp. Strength (psi):	**162.23**
Treatment:	AD

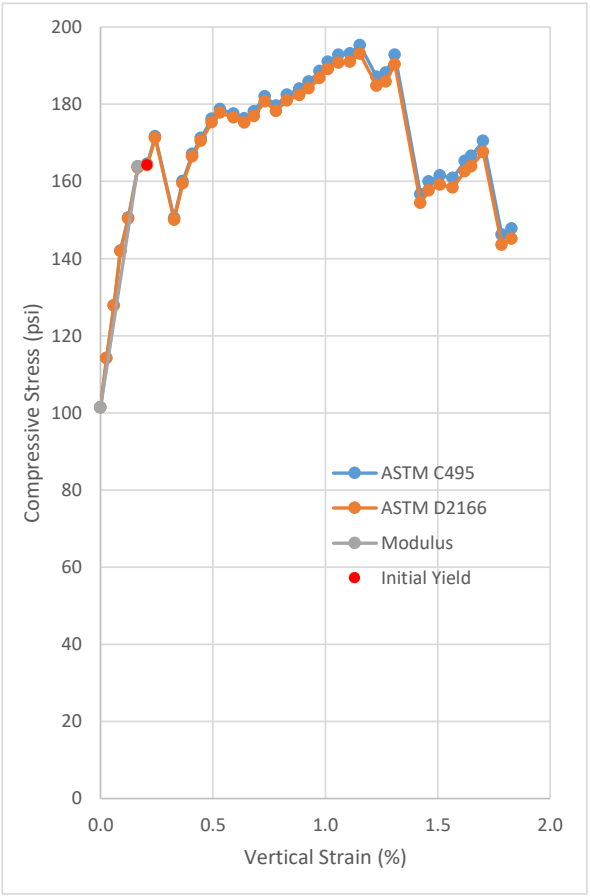


Note: Data acquisition error occurred during the initial portion of the test.

Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-10**
Height (in):	5.637
Height (mm):	143.2
Diameter (in):	2.972
Diameter (mm)	75.49
Area (in^2):	6.937
Area (mm^2):	4476
Mass (g):	240.87
Weight (lb):	0.5310
Weight (kN):	0.00236213
Volume (in^3):	39.10
Volume (mm^3):	640783
Density (g/mm^3):	0.0003759
Density (kg/m^3):	375.9
Unit Weight (pcf):	**23.47**
Unit Weight (kN/m^3):	3.686
Wet mass + tare (g):	648.53
Dry mass + tare (g):	606.41
Tare (g):	408.55
Water Content (%)	**21.29**
H:D ratio:	1.897
H:D correction:	0.9912

Age (days):	52
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1355
Maximum load (kN):	6.027
Strain Rate (%/min):	1
Time to Failure (min):	0.68
Strain at Failure (%):	1.294
Initial yield (psi):	164.21
Modulus (psi):	37570
ASTM C495	
Comp. Strength (MPa):	1.3467
Comp. Strength (psi):	195.32
Corr. Comp. Strength (psi):	**193.60**
ASTM D2166	
Comp. Strength (kPa):	1331.2
Comp. Strength (psi):	193.07
Corr. Comp. Strength (psi):	**191.37**
Treatment:	AD

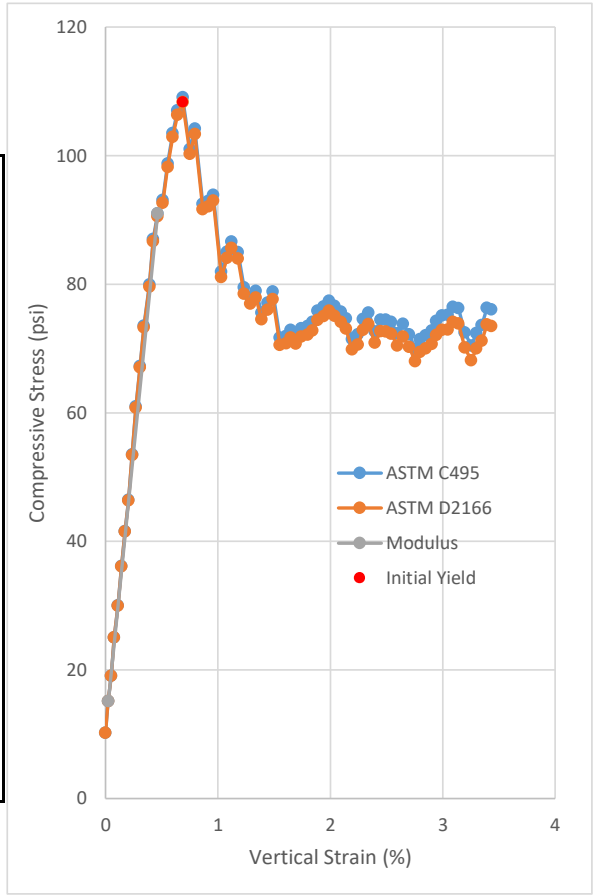


Note: Data acquisition error occurred during the initial portion of the test.

Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-11**
Height (in):	5.611
Height (mm):	142.5
Diameter (in):	2.976
Diameter (mm)	75.60
Area (in^2):	6.957
Area (mm^2):	4489
Mass (g):	237.89
Weight (lb):	0.5245
Weight (kN):	0.0023329
Volume (in^3):	39.04
Volume (mm^3):	639765
Density (g/mm^3):	0.0003718
Density (kg/m^3):	371.8
Unit Weight (pcf):	**23.21**
Unit Weight (kN/m^3):	3.647
Wet mass + tare (g):	553.83
Dry mass + tare (g):	507.29
Tare (g):	316.46
Water Content (%)	**24.39**
H:D ratio:	1.885
H:D correction:	0.9903

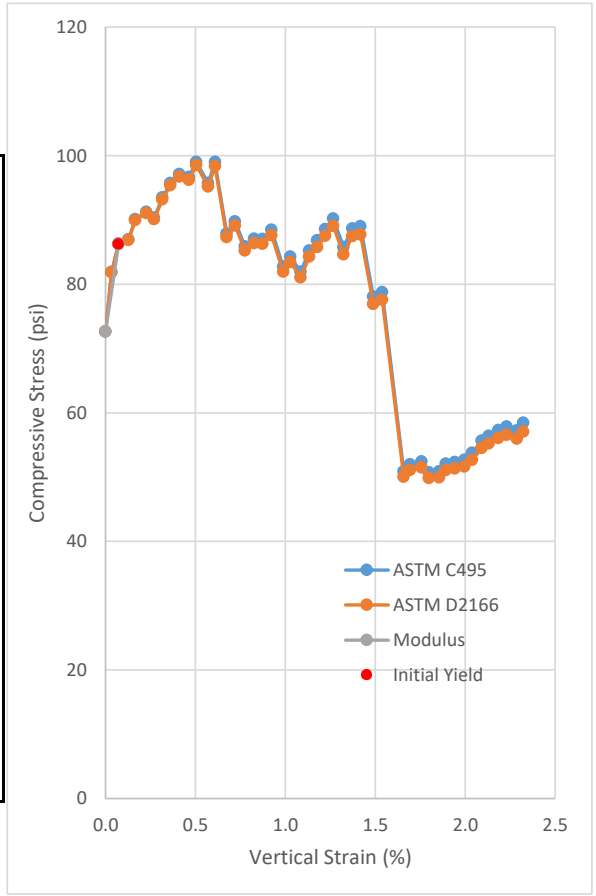
Age (days):	56
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	758.73
Maximum load (kN):	3.375
Strain Rate (%/min):	2
Time to Failure (min):	0.53
Strain at Failure (%):	0.948
Initial yield (psi):	108.30
Modulus (psi):	17237
ASTM C495	
Comp. Strength (MPa):	0.7519
Comp. Strength (psi):	109.05
Corr. Comp. Strength (psi):	**107.99**
ASTM D2166	
Comp. Strength (kPa):	746.7
Comp. Strength (psi):	108.30
Corr. Comp. Strength (psi):	**107.25**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-12**
Height (in):	5.641
Height (mm):	143.3
Diameter (in):	2.980
Diameter (mm)	75.69
Area (in^2):	6.975
Area (mm^2):	4500
Mass (g):	235.58
Weight (lb):	0.5194
Weight (kN):	0.00231025
Volume (in^3):	39.35
Volume (mm^3):	644771
Density (g/mm^3):	0.0003654
Density (kg/m^3):	365.4
Unit Weight (pcf):	**22.81**
Unit Weight (kN/m^3):	3.583
Wet mass + tare (g):	565.75
Dry mass + tare (g):	521.37
Tare (g):	330.66
Water Content (%)	**23.27**
H:D ratio:	1.893
H:D correction:	0.9909

Age (days):	56
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	690.71
Maximum load (kN):	3.072
Strain Rate (%/min):	2
Time to Failure (min):	0.29
Strain at Failure (%):	0.548
Initial yield (psi):	86.24
Modulus (psi):	18812
ASTM C495	
Comp. Strength (MPa):	0.6828
Comp. Strength (psi):	99.03
Corr. Comp. Strength (psi):	**98.13**
ASTM D2166	
Comp. Strength (kPa):	679.4
Comp. Strength (psi):	98.53
Corr. Comp. Strength (psi):	**97.64**
Treatment:	AD

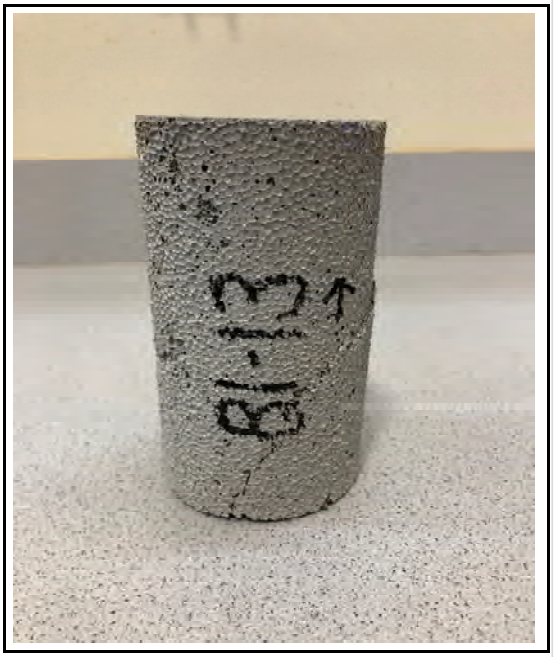


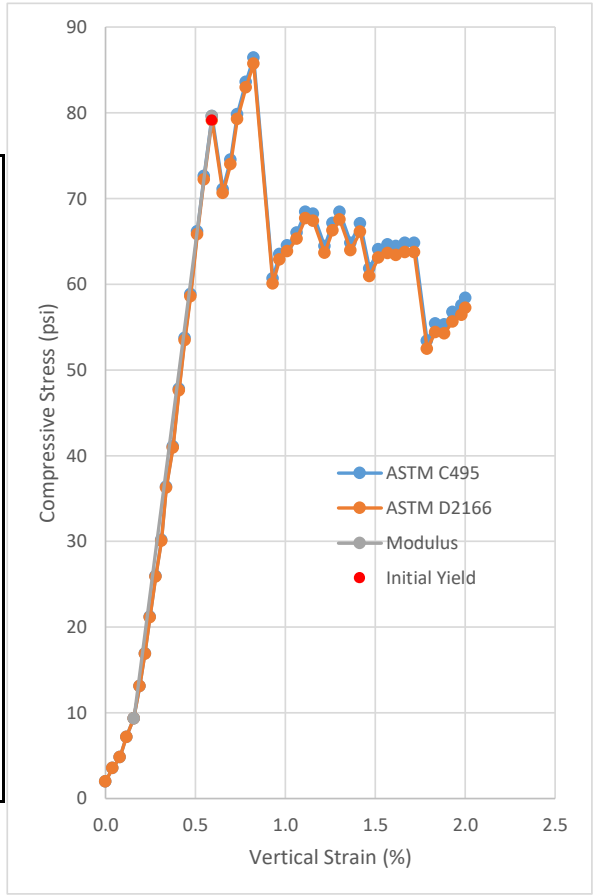
Note: Data acquisition error occurred during the initial portion of the test.

Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-13**
Height (in):	5.608
Height (mm):	142.4
Diameter (in):	2.977
Diameter (mm)	75.62
Area (in^2):	6.961
Area (mm^2):	4491
Mass (g):	234.18
Weight (lb):	0.5163
Weight (kN):	0.00229652
Volume (in^3):	39.03
Volume (mm^3):	639633
Density (g/mm^3):	0.0003661
Density (kg/m^3):	366.1
Unit Weight (pcf):	**22.86**
Unit Weight (kN/m^3):	3.590
Wet mass + tare (g):	697.77
Dry mass + tare (g):	653.55
Tare (g):	464.05
Water Content (%)	**23.34**
H:D ratio:	1.884
H:D correction:	0.9902

Age (days):	56
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	601.64
Maximum load (kN):	2.676
Strain Rate (%/min):	2
Time to Failure (min):	0.57
Strain at Failure (%):	1.099
Initial yield (psi):	79.12
Modulus (psi):	16172
ASTM C495	
Comp. Strength (MPa):	0.5959
Comp. Strength (psi):	86.43
Corr. Comp. Strength (psi):	**85.58**
ASTM D2166	
Comp. Strength (kPa):	591.0
Comp. Strength (psi):	85.72
Corr. Comp. Strength (psi):	**84.88**
Treatment:	AD

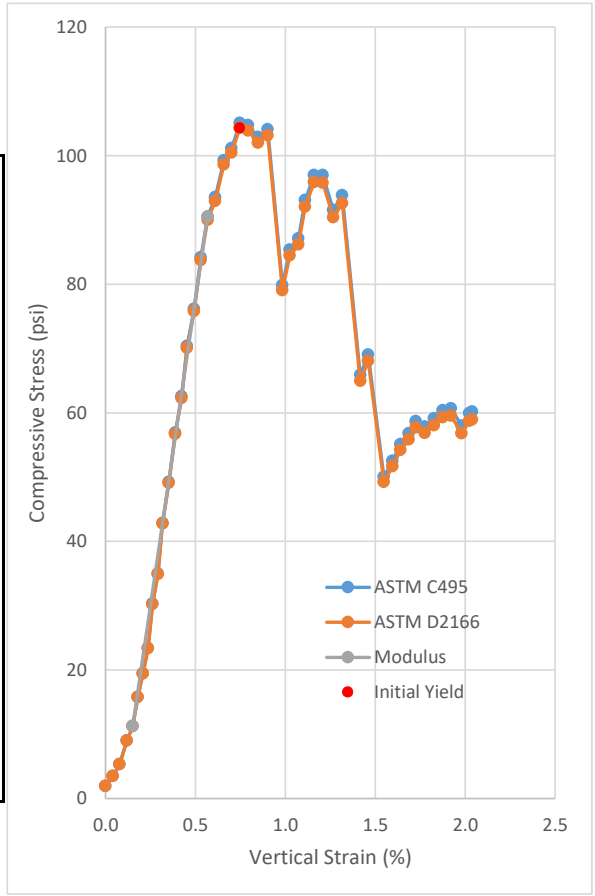




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-11**
Height (in):	5.581
Height (mm):	141.8
Diameter (in):	2.973
Diameter (mm)	75.51
Area (in^2):	6.940
Area (mm^2):	4478
Mass (g):	234.81
Weight (lb):	0.5177
Weight (kN):	0.0023027
Volume (in^3):	38.74
Volume (mm^3):	634777
Density (g/mm^3):	0.0003699
Density (kg/m^3):	369.9
Unit Weight (pcf):	**23.09**
Unit Weight (kN/m^3):	3.628
Wet mass + tare (g):	680.77
Dry mass + tare (g):	638.23
Tare (g):	446.68
Water Content (%)	**22.21**
H:D ratio:	1.878
H:D correction:	0.9897

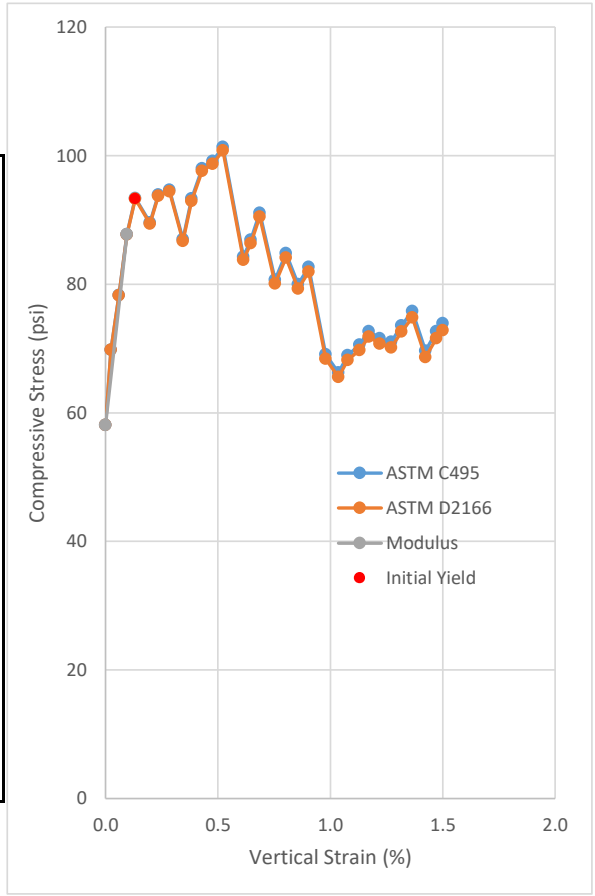
Age (days):	56
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	729.26
Maximum load (kN):	3.244
Strain Rate (%/min):	2
Time to Failure (min):	0.56
Strain at Failure (%):	1.052
Initial yield (psi):	104.29
Modulus (psi):	19041
ASTM C495	
Comp. Strength (MPa):	0.7245
Comp. Strength (psi):	105.08
Corr. Comp. Strength (psi):	**103.99**
ASTM D2166	
Comp. Strength (kPa):	719.1
Comp. Strength (psi):	104.29
Corr. Comp. Strength (psi):	**103.21**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-12**
Height (in):	5.643
Height (mm):	143.3
Diameter (in):	2.973
Diameter (mm)	75.52
Area (in^2):	6.943
Area (mm^2):	4480
Mass (g):	234.81
Weight (lb):	0.5177
Weight (kN):	0.0023027
Volume (in^3):	39.18
Volume (mm^3):	642041
Density (g/mm^3):	0.0003657
Density (kg/m^3):	365.7
Unit Weight (pcf):	**22.83**
Unit Weight (kN/m^3):	3.587
Wet mass + tare (g):	543.93
Dry mass + tare (g):	500.78
Tare (g):	310.46
Water Content (%)	**22.67**
H:D ratio:	1.898
H:D correction:	0.9913

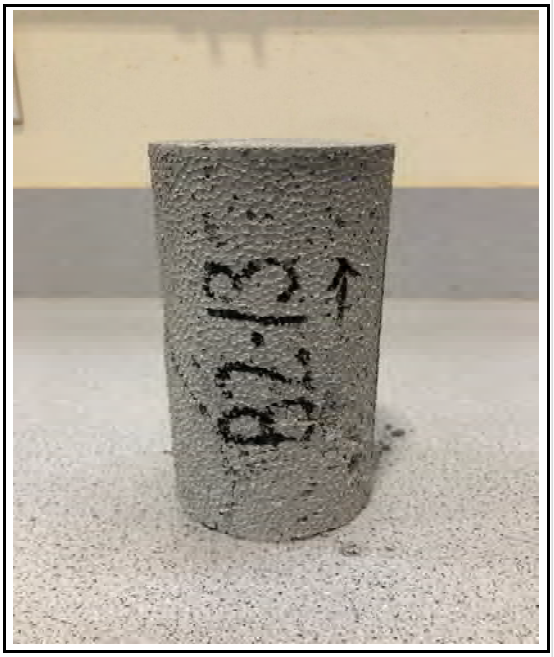
Age (days):	56
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	703.74
Maximum load (kN):	3.130
Strain Rate (%/min):	2
Time to Failure (min):	0.32
Strain at Failure (%):	0.599
Initial yield (psi):	93.29
Modulus (psi):	31337
ASTM C495	
Comp. Strength (MPa):	0.6988
Comp. Strength (psi):	101.35
Corr. Comp. Strength (psi):	**100.47**
ASTM D2166	
Comp. Strength (kPa):	695.2
Comp. Strength (psi):	100.82
Corr. Comp. Strength (psi):	**99.94**
Treatment:	AD

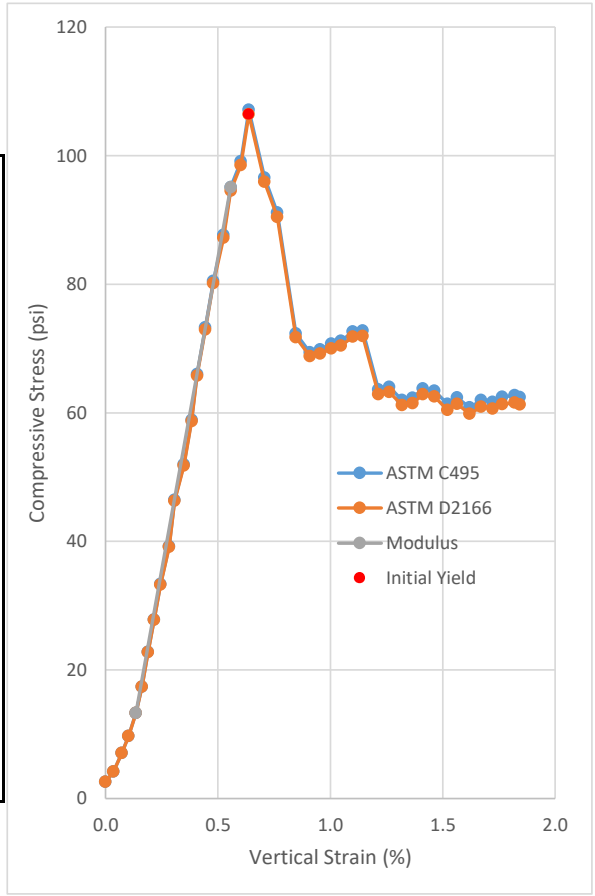


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-13**
Height (in):	5.591
Height (mm):	142.0
Diameter (in):	2.976
Diameter (mm)	75.58
Area (in^2):	6.954
Area (mm^2):	4487
Mass (g):	236.11
Weight (lb):	0.5205
Weight (kN):	0.00231545
Volume (in^3):	38.88
Volume (mm^3):	637199
Density (g/mm^3):	0.0003705
Density (kg/m^3):	370.5
Unit Weight (pcf):	**23.13**
Unit Weight (kN/m^3):	3.634
Wet mass + tare (g):	550.64
Dry mass + tare (g):	506.43
Tare (g):	315.00
Water Content (%)	**23.09**
H:D ratio:	1.879
H:D correction:	0.9898

Age (days):	56
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	745.05
Maximum load (kN):	3.314
Strain Rate (%/min):	2
Time to Failure (min):	0.50
Strain at Failure (%):	0.941
Initial yield (psi):	106.45
Modulus (psi):	19385
ASTM C495	
Comp. Strength (MPa):	0.7387
Comp. Strength (psi):	107.13
Corr. Comp. Strength (psi):	**106.04**
ASTM D2166	
Comp. Strength (kPa):	734.0
Comp. Strength (psi):	106.45
Corr. Comp. Strength (psi):	**105.36**
Treatment:	AD



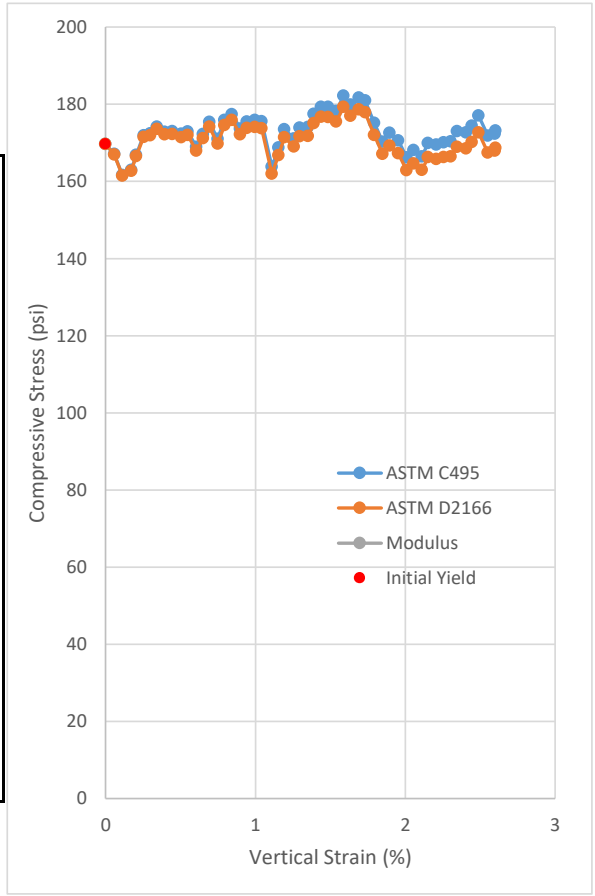


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-11**
Height (in):	5.675
Height (mm):	144.1
Diameter (in):	2.965
Diameter (mm)	75.32
Area (in^2):	6.906
Area (mm^2):	4456
Mass (g):	245.72
Weight (lb):	0.5417
Weight (kN):	0.00240969
Volume (in^3):	39.19
Volume (mm^3):	642250
Density (g/mm^3):	0.0003826
Density (kg/m^3):	382.6
Unit Weight (pcf):	**23.88**
Unit Weight (kN/m^3):	3.752
Wet mass + tare (g):	555.52
Dry mass + tare (g):	511.09
Tare (g):	310.35
Water Content (%)	**22.13**
H:D ratio:	1.914
H:D correction:	0.9926

Age (days):	56
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1258.3
Maximum load (kN):	5.597
Strain Rate (%/min):	2
Time to Failure (min):	0.81
Strain at Failure (%):	1.607
Initial yield (psi):	169.66
Modulus (psi):	#N/A
ASTM C495	
Comp. Strength (MPa):	1.2562
Comp. Strength (psi):	182.20
Corr. Comp. Strength (psi):	**180.85**
ASTM D2166	
Comp. Strength (kPa):	1236.3
Comp. Strength (psi):	179.31
Corr. Comp. Strength (psi):	**177.98**
Treatment:	AD

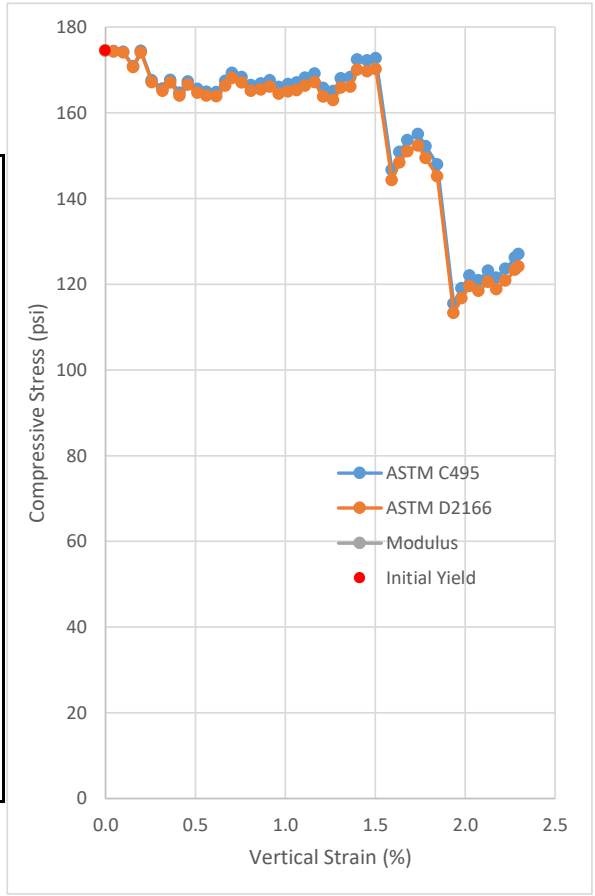
Note: Data acquisition error occurred during the initial portion of the test.



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-12**
Height (in):	5.682
Height (mm):	144.3
Diameter (in):	2.962
Diameter (mm)	75.23
Area (in^2):	6.891
Area (mm^2):	4446
Mass (g):	246.97
Weight (lb):	0.5445
Weight (kN):	0.00242195
Volume (in^3):	39.15
Volume (mm^3):	641597
Density (g/mm^3):	0.0003849
Density (kg/m^3):	384.9
Unit Weight (pcf):	**24.03**
Unit Weight (kN/m^3):	3.775
Wet mass + tare (g):	710.98
Dry mass + tare (g):	666.42
Tare (g):	464.54
Water Content (%)	**22.07**
H:D ratio:	1.918
H:D correction:	0.9929

Age (days):	56
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1202.4
Maximum load (kN):	5.349
Strain Rate (%/min):	2
Time to Failure (min):	0.00
Strain at Failure (%):	0.000
Initial yield (psi):	174.50
Modulus (psi):	#N/A
ASTM C495	
Comp. Strength (MPa):	1.2031
Comp. Strength (psi):	174.50
Corr. Comp. Strength (psi):	**173.26**
ASTM D2166	
Comp. Strength (kPa):	1203.1
Comp. Strength (psi):	174.50
Corr. Comp. Strength (psi):	**173.26**
Treatment:	AD



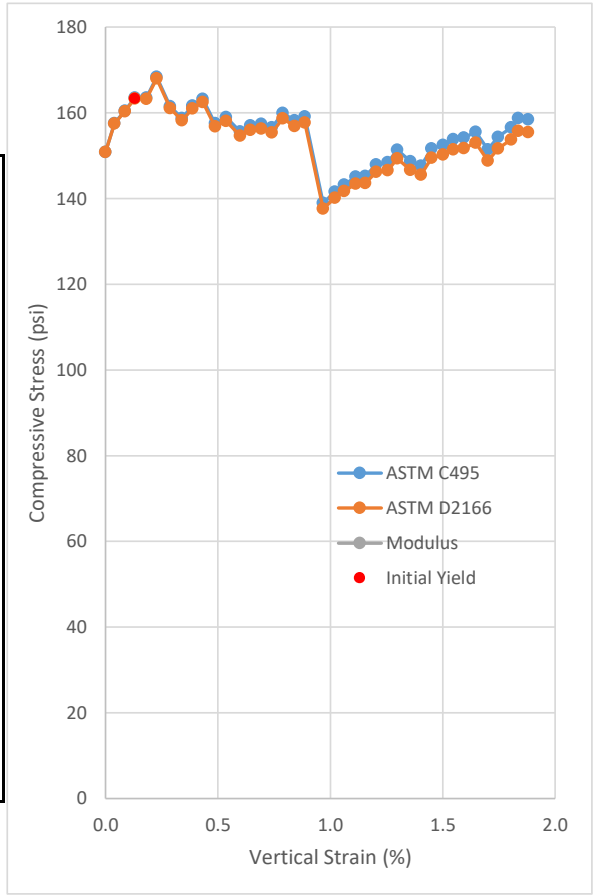
Note: Data acquisition error occurred during the initial portion of the test.

Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-13**
Height (in):	5.658
Height (mm):	143.7
Diameter (in):	2.972
Diameter (mm)	75.50
Area (in^2):	6.939
Area (mm^2):	4477
Mass (g):	246.39
Weight (lb):	0.5432
Weight (kN):	0.00241626
Volume (in^3):	39.26
Volume (mm^3):	643353
Density (g/mm^3):	0.0003830
Density (kg/m^3):	383.0
Unit Weight (pcf):	**23.91**
Unit Weight (kN/m^3):	3.756
Wet mass + tare (g):	654.06
Dry mass + tare (g):	607.86
Tare (g):	408.19
Water Content (%)	**23.14**
H:D ratio:	1.904
H:D correction:	0.9917

Age (days):	56
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1168.3
Maximum load (kN):	5.197
Strain Rate (%/min):	2
Time to Failure (min):	0.15
Strain at Failure (%):	0.253
Initial yield (psi):	163.34
Modulus (psi):	#N/A
ASTM C495	
Comp. Strength (MPa):	1.1609
Comp. Strength (psi):	168.37
Corr. Comp. Strength (psi):	**166.98**
ASTM D2166	
Comp. Strength (kPa):	1158.3
Comp. Strength (psi):	167.99
Corr. Comp. Strength (psi):	**166.60**
Treatment:	AD

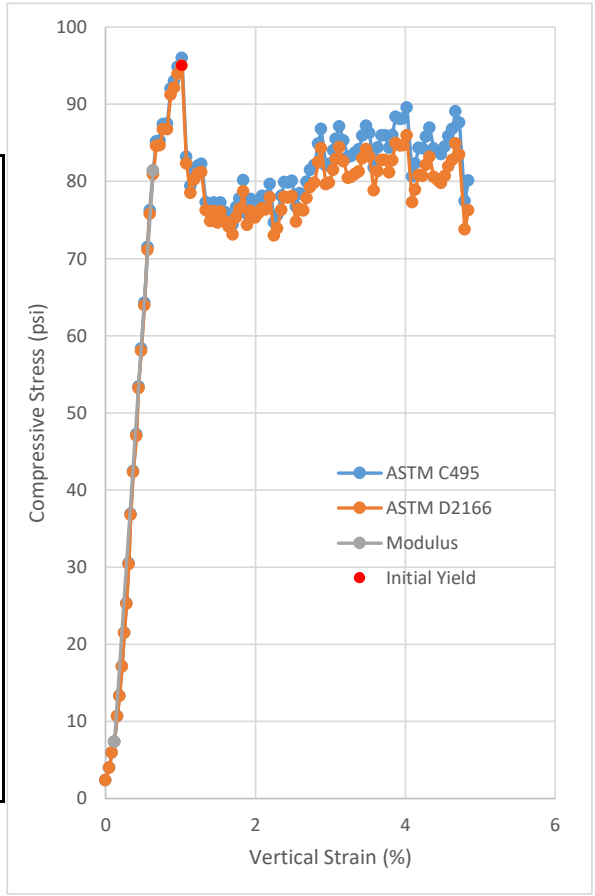
Note: Data acquisition error occurred during the initial portion of the test.



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-14**
Height (in):	5.530
Height (mm):	140.5
Diameter (in):	2.973
Diameter (mm)	75.51
Area (in^2):	6.942
Area (mm^2):	4479
Mass (g):	229.41
Weight (lb):	0.5058
Weight (kN):	0.00224974
Volume (in^3):	38.39
Volume (mm^3):	629042
Density (g/mm^3):	0.0003647
Density (kg/m^3):	364.7
Unit Weight (pcf):	**22.77**
Unit Weight (kN/m^3):	3.576
Wet mass + tare (g):	620.11
Dry mass + tare (g):	579.22
Tare (g):	391.03
Water Content (%)	**21.73**
H:D ratio:	1.860
H:D correction:	0.9883

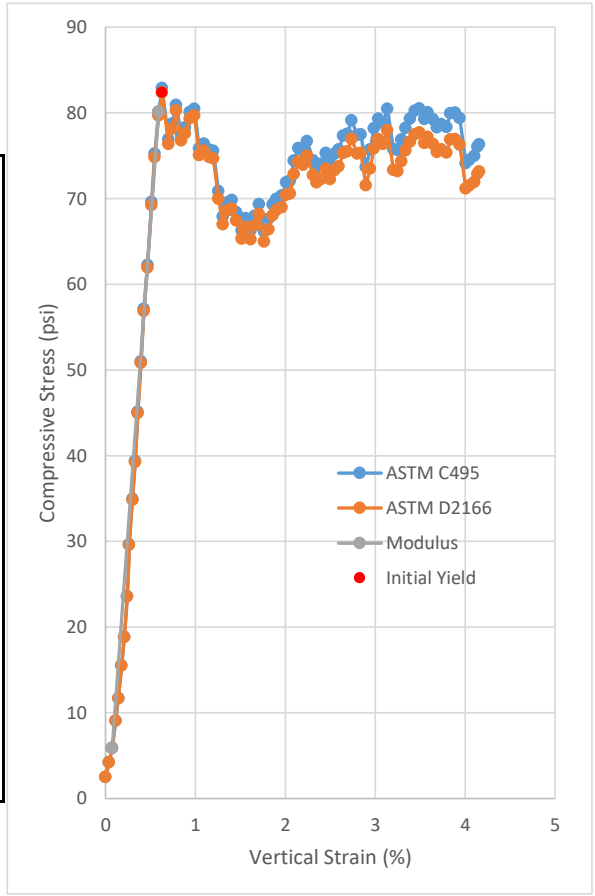
Age (days):	70
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	666.37
Maximum load (kN):	2.964
Strain Rate (%/min):	2.5
Time to Failure (min):	0.56
Strain at Failure (%):	1.310
Initial yield (psi):	95.02
Modulus (psi):	14275
ASTM C495	
Comp. Strength (MPa):	0.6618
Comp. Strength (psi):	95.99
Corr. Comp. Strength (psi):	**94.87**
ASTM D2166	
Comp. Strength (kPa):	655.1
Comp. Strength (psi):	95.02
Corr. Comp. Strength (psi):	**93.90**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-15**
Height (in):	5.565
Height (mm):	141.3
Diameter (in):	2.968
Diameter (mm)	75.38
Area (in^2):	6.917
Area (mm^2):	4463
Mass (g):	225.17
Weight (lb):	0.4964
Weight (kN):	0.00220816
Volume (in^3):	38.49
Volume (mm^3):	630755
Density (g/mm^3):	0.0003570
Density (kg/m^3):	357.0
Unit Weight (pcf):	**22.29**
Unit Weight (kN/m^3):	3.501
Wet mass + tare (g):	633.26
Dry mass + tare (g):	594.76
Tare (g):	408.41
Water Content (%)	**20.66**
H:D ratio:	1.875
H:D correction:	0.9895

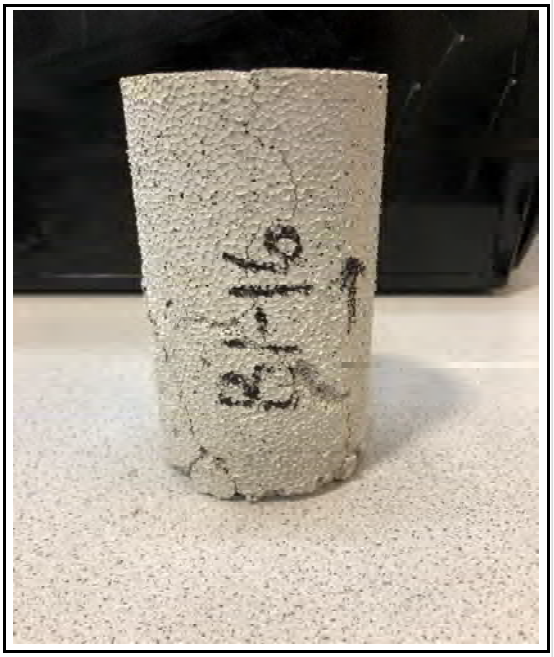
Age (days):	70
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	573.36
Maximum load (kN):	2.550
Strain Rate (%/min):	2.5
Time to Failure (min):	0.38
Strain at Failure (%):	0.898
Initial yield (psi):	82.37
Modulus (psi):	14372
ASTM C495	
Comp. Strength (MPa):	0.5715
Comp. Strength (psi):	82.89
Corr. Comp. Strength (psi):	**82.02**
ASTM D2166	
Comp. Strength (kPa):	567.9
Comp. Strength (psi):	82.37
Corr. Comp. Strength (psi):	**81.50**
Treatment:	AD

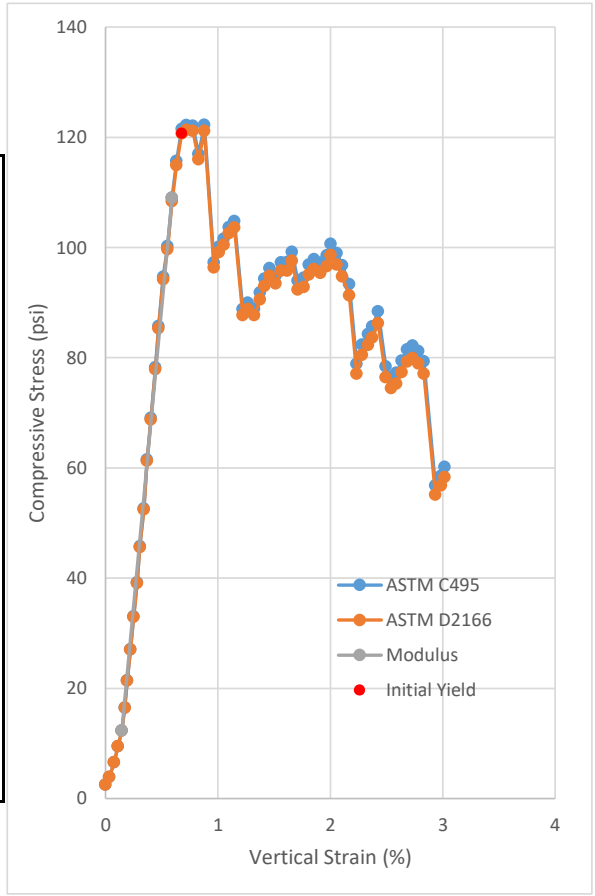


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-16**
Height (in):	5.642
Height (mm):	143.3
Diameter (in):	2.984
Diameter (mm)	75.79
Area (in^2):	6.993
Area (mm^2):	4512
Mass (g):	235.89
Weight (lb):	0.5200
Weight (kN):	0.00231329
Volume (in^3):	39.46
Volume (mm^3):	646579
Density (g/mm^3):	0.0003648
Density (kg/m^3):	364.8
Unit Weight (pcf):	**22.78**
Unit Weight (kN/m^3):	3.578
Wet mass + tare (g):	643.22
Dry mass + tare (g):	601.80
Tare (g):	407.89
Water Content (%)	**21.36**
H:D ratio:	1.891
H:D correction:	0.9907

Age (days):	70
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	854.91
Maximum load (kN):	3.803
Strain Rate (%/min):	2.5
Time to Failure (min):	0.53
Strain at Failure (%):	1.203
Initial yield (psi):	120.67
Modulus (psi):	21655
ASTM C495	
Comp. Strength (MPa):	0.8429
Comp. Strength (psi):	122.25
Corr. Comp. Strength (psi):	**121.11**
ASTM D2166	
Comp. Strength (kPa):	836.5
Comp. Strength (psi):	121.33
Corr. Comp. Strength (psi):	**120.20**
Treatment:	AD

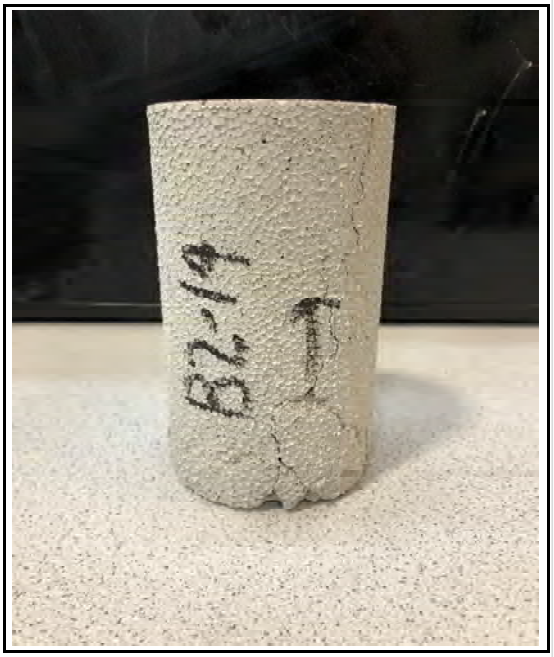


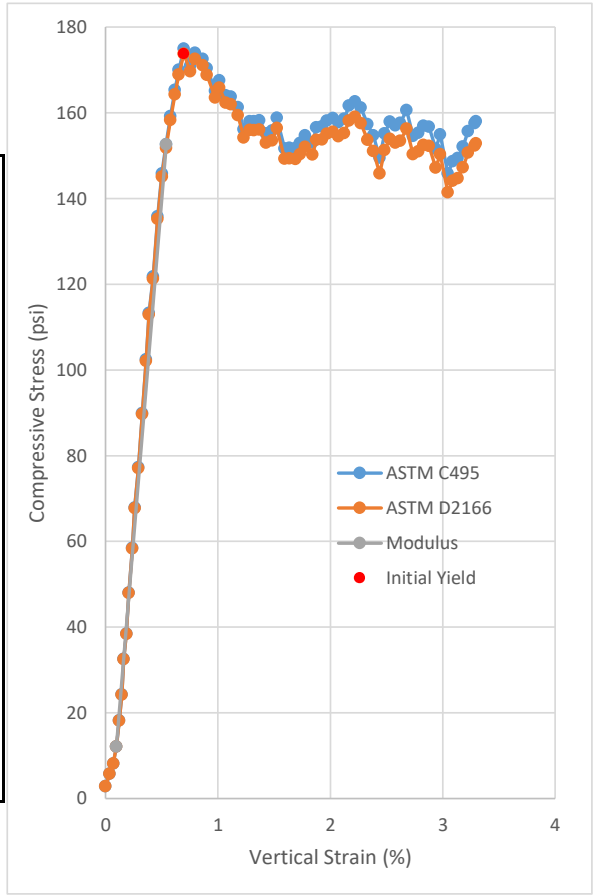


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-14**
Height (in):	5.642
Height (mm):	143.3
Diameter (in):	2.981
Diameter (mm)	75.72
Area (in^2):	6.979
Area (mm^2):	4503
Mass (g):	245.02
Weight (lb):	0.5402
Weight (kN):	0.00240283
Volume (in^3):	39.38
Volume (mm^3):	645318
Density (g/mm^3):	0.0003797
Density (kg/m^3):	379.7
Unit Weight (pcf):	**23.70**
Unit Weight (kN/m^3):	3.723
Wet mass + tare (g):	654.32
Dry mass + tare (g):	611.76
Tare (g):	409.70
Water Content (%)	**21.06**
H:D ratio:	1.893
H:D correction:	0.9909

Age (days):	70
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1221.3
Maximum load (kN):	5.433
Strain Rate (%/min):	2.5
Time to Failure (min):	0.50
Strain at Failure (%):	1.098
Initial yield (psi):	173.77
Modulus (psi):	31666
ASTM C495	
Comp. Strength (MPa):	1.2065
Comp. Strength (psi):	174.99
Corr. Comp. Strength (psi):	**173.39**
ASTM D2166	
Comp. Strength (kPa):	1198.1
Comp. Strength (psi):	173.77
Corr. Comp. Strength (psi):	**172.18**
Treatment:	AD

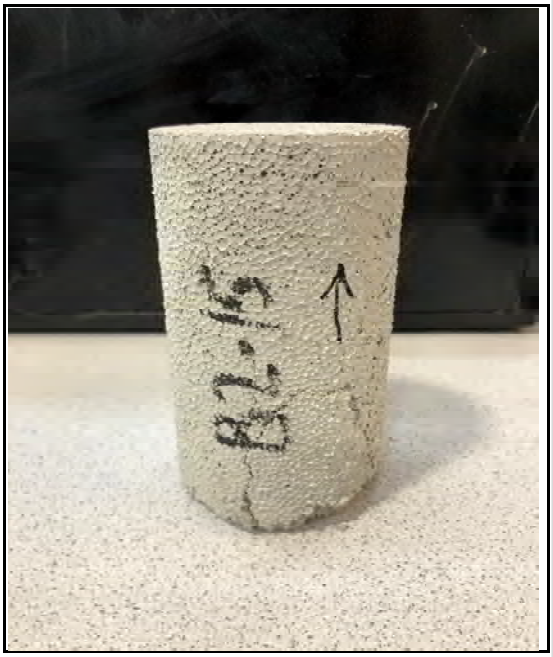


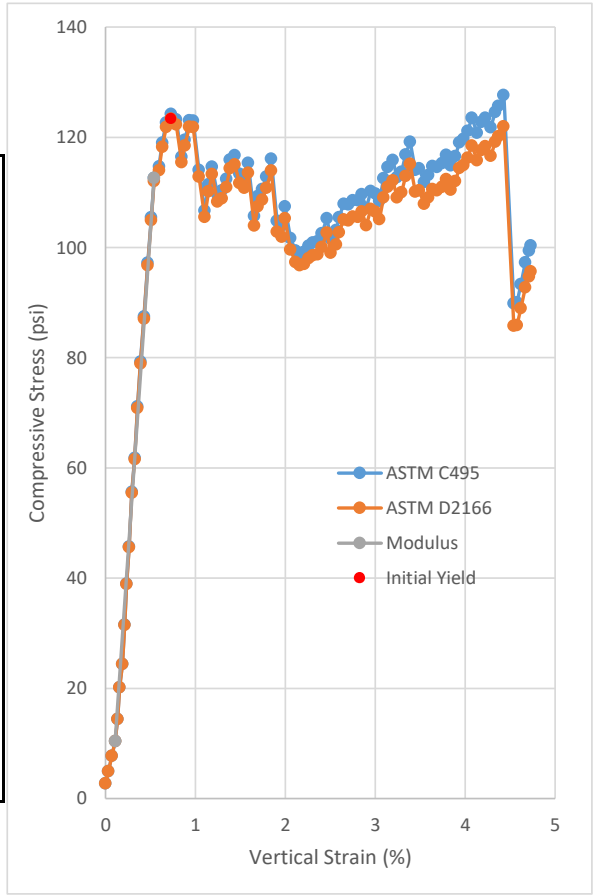


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-15**
Height (in):	5.657
Height (mm):	143.7
Diameter (in):	2.976
Diameter (mm)	75.58
Area (in^2):	6.954
Area (mm^2):	4487
Mass (g):	234.25
Weight (lb):	0.5164
Weight (kN):	0.00229721
Volume (in^3):	39.34
Volume (mm^3):	644644
Density (g/mm^3):	0.0003634
Density (kg/m^3):	363.4
Unit Weight (pcf):	**22.68**
Unit Weight (kN/m^3):	3.564
Wet mass + tare (g):	642.57
Dry mass + tare (g):	604.22
Tare (g):	408.75
Water Content (%)	**19.62**
H:D ratio:	1.901
H:D correction:	0.9915

Age (days):	70
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	887.67
Maximum load (kN):	3.949
Strain Rate (%/min):	2.5
Time to Failure (min):	1.96
Strain at Failure (%):	4.755
Initial yield (psi):	123.35
Modulus (psi):	23655
ASTM C495	
Comp. Strength (MPa):	0.8801
Comp. Strength (psi):	127.64
Corr. Comp. Strength (psi):	**126.56**
ASTM D2166	
Comp. Strength (kPa):	850.5
Comp. Strength (psi):	123.35
Corr. Comp. Strength (psi):	**122.31**
Treatment:	AD

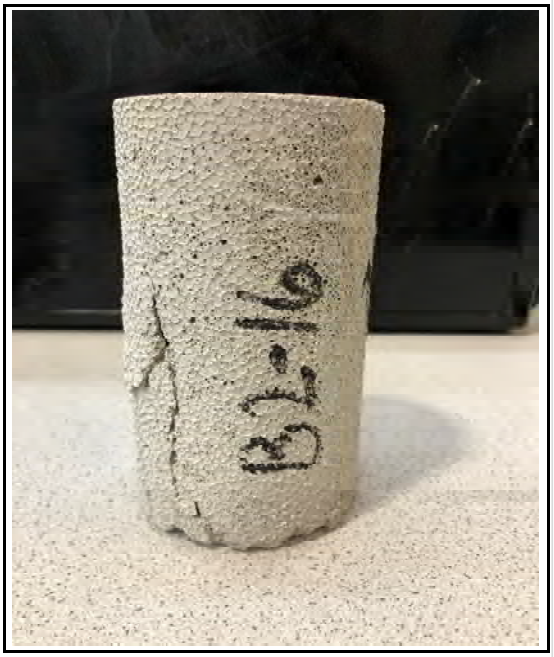


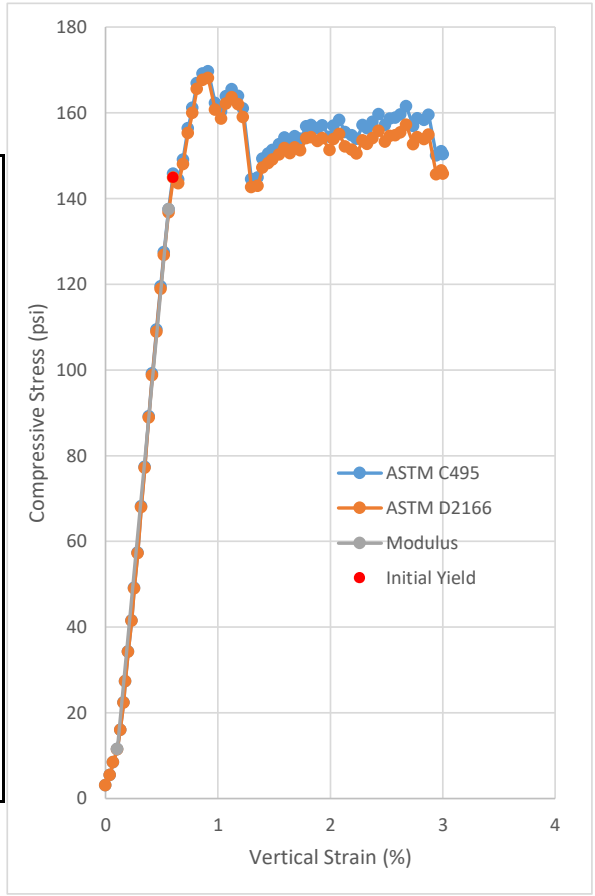


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-16**
Height (in):	5.639
Height (mm):	143.2
Diameter (in):	2.970
Diameter (mm)	75.43
Area (in^2):	6.926
Area (mm^2):	4469
Mass (g):	242.87
Weight (lb):	0.5354
Weight (kN):	0.00238174
Volume (in^3):	39.06
Volume (mm^3):	640042
Density (g/mm^3):	0.0003795
Density (kg/m^3):	379.5
Unit Weight (pcf):	**23.69**
Unit Weight (kN/m^3):	3.721
Wet mass + tare (g):	570.36
Dry mass + tare (g):	527.23
Tare (g):	328.06
Water Content (%)	**21.65**
H:D ratio:	1.899
H:D correction:	0.9914

Age (days):	70
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1174.9
Maximum load (kN):	5.226
Strain Rate (%/min):	2.5
Time to Failure (min):	0.56
Strain at Failure (%):	1.302
Initial yield (psi):	144.88
Modulus (psi):	27565
ASTM C495	
Comp. Strength (MPa):	1.1695
Comp. Strength (psi):	169.63
Corr. Comp. Strength (psi):	**168.16**
ASTM D2166	
Comp. Strength (kPa):	1158.9
Comp. Strength (psi):	168.08
Corr. Comp. Strength (psi):	**166.63**
Treatment:	AD

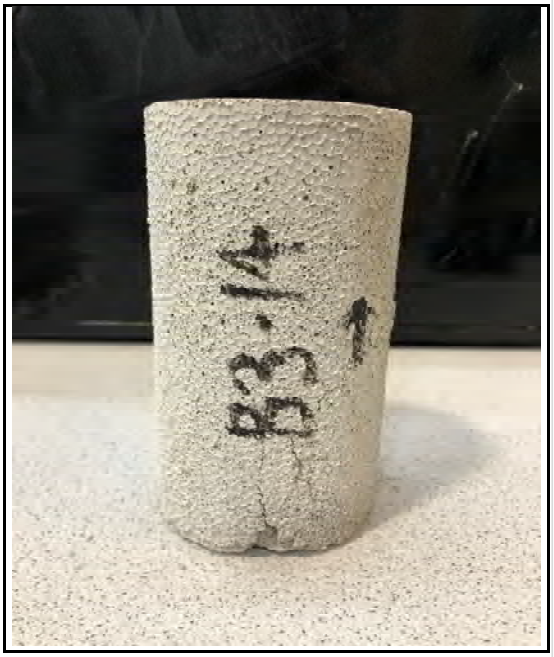


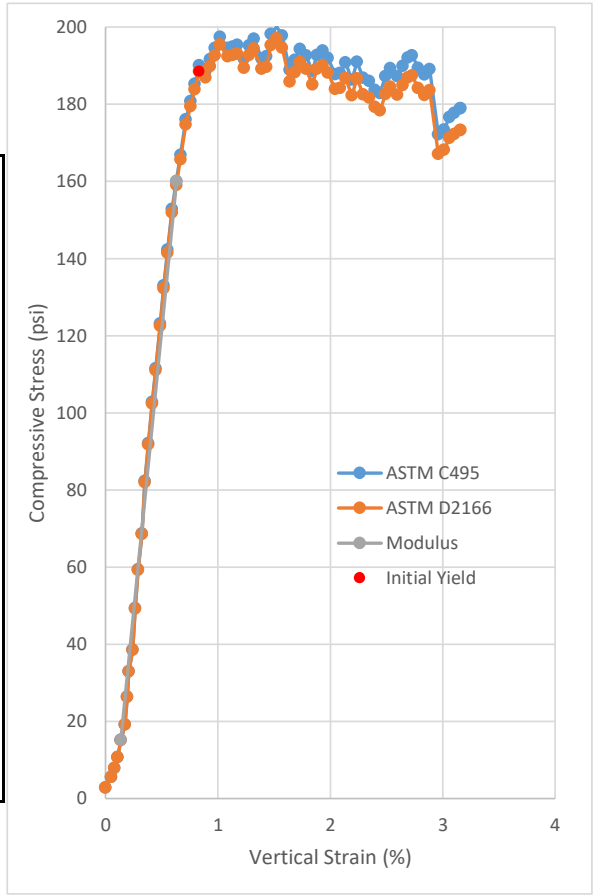


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-14**
Height (in):	5.687
Height (mm):	144.4
Diameter (in):	2.970
Diameter (mm)	75.44
Area (in^2):	6.928
Area (mm^2):	4470
Mass (g):	241.48
Weight (lb):	0.5324
Weight (kN):	0.00236811
Volume (in^3):	39.40
Volume (mm^3):	645635
Density (g/mm^3):	0.0003740
Density (kg/m^3):	374.0
Unit Weight (pcf):	**23.35**
Unit Weight (kN/m^3):	3.668
Wet mass + tare (g):	551.17
Dry mass + tare (g):	510.37
Tare (g):	310.19
Water Content (%)	**20.38**
H:D ratio:	1.915
H:D correction:	0.9927

Age (days):	70
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1386.4
Maximum load (kN):	6.167
Strain Rate (%/min):	2.5
Time to Failure (min):	0.84
Strain at Failure (%):	1.958
Initial yield (psi):	188.53
Modulus (psi):	29322
ASTM C495	
Comp. Strength (MPa):	1.3798
Comp. Strength (psi):	200.12
Corr. Comp. Strength (psi):	**198.65**
ASTM D2166	
Comp. Strength (kPa):	1358.8
Comp. Strength (psi):	197.07
Corr. Comp. Strength (psi):	**195.62**
Treatment:	AD

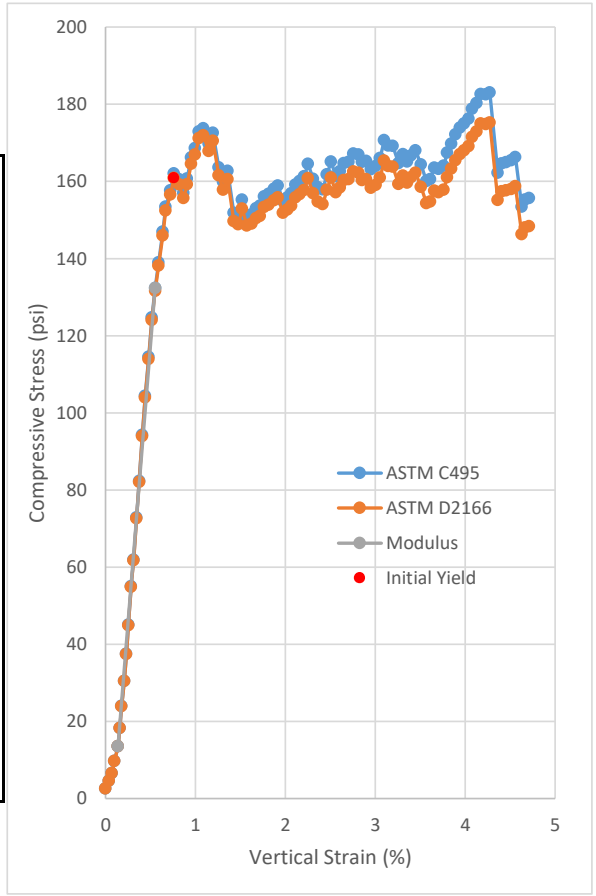




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-15**
Height (in):	5.556
Height (mm):	141.1
Diameter (in):	2.966
Diameter (mm)	75.34
Area (in^2):	6.911
Area (mm^2):	4459
Mass (g):	234.15
Weight (lb):	0.5162
Weight (kN):	0.00229623
Volume (in^3):	38.39
Volume (mm^3):	629169
Density (g/mm^3):	0.0003722
Density (kg/m^3):	372.2
Unit Weight (pcf):	**23.23**
Unit Weight (kN/m^3):	3.650
Wet mass + tare (g):	545.19
Dry mass + tare (g):	505.94
Tare (g):	310.45
Water Content (%)	**20.08**
H:D ratio:	1.873
H:D correction:	0.9893

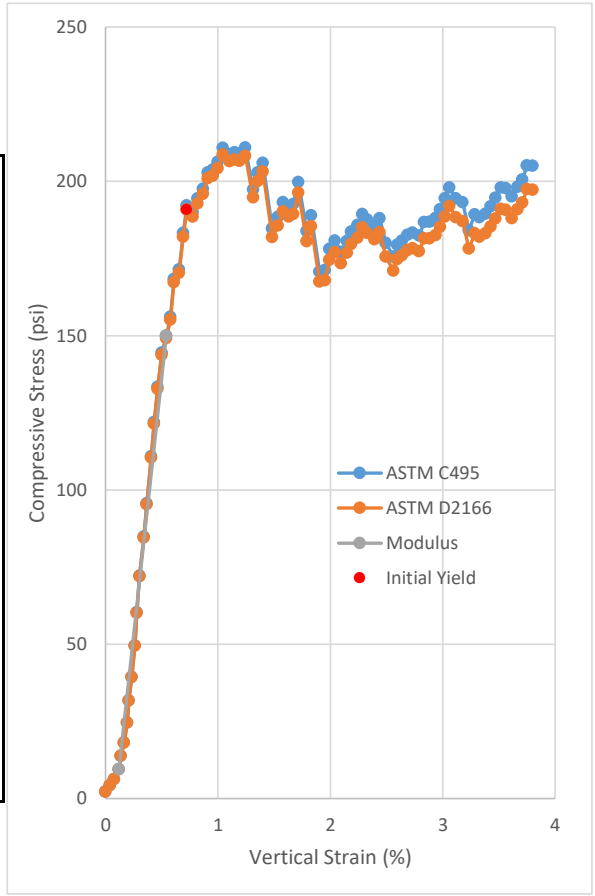
Age (days):	70
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1265.1
Maximum load (kN):	5.627
Strain Rate (%/min):	2.5
Time to Failure (min):	1.94
Strain at Failure (%):	4.690
Initial yield (psi):	160.85
Modulus (psi):	28667
ASTM C495	
Comp. Strength (MPa):	1.2622
Comp. Strength (psi):	183.06
Corr. Comp. Strength (psi):	**181.10**
ASTM D2166	
Comp. Strength (kPa):	1208.2
Comp. Strength (psi):	175.24
Corr. Comp. Strength (psi):	**173.37**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-16**
Height (in):	5.663
Height (mm):	143.8
Diameter (in):	2.976
Diameter (mm)	75.58
Area (in^2):	6.954
Area (mm^2):	4487
Mass (g):	241.29
Weight (lb):	0.5320
Weight (kN):	0.00236625
Volume (in^3):	39.38
Volume (mm^3):	645404
Density (g/mm^3):	0.0003739
Density (kg/m^3):	373.9
Unit Weight (pcf):	**23.34**
Unit Weight (kN/m^3):	3.666
Wet mass + tare (g):	551.20
Dry mass + tare (g):	512.46
Tare (g):	310.46
Water Content (%)	**19.18**
H:D ratio:	1.903
H:D correction:	0.9917

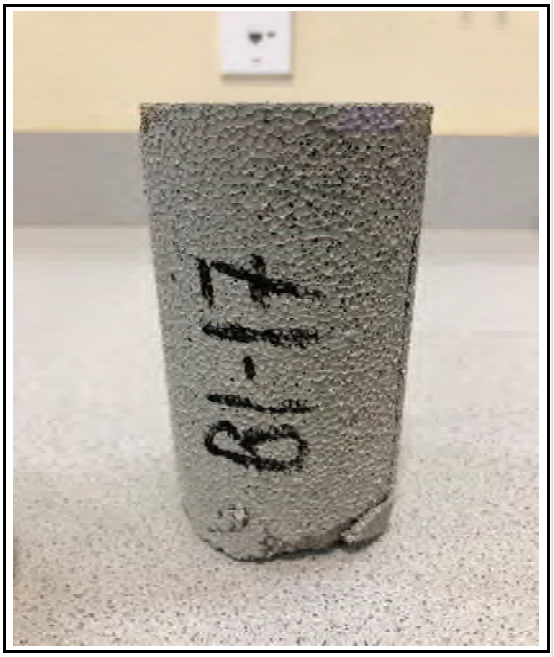
Age (days):	70
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1466.8
Maximum load (kN):	6.525
Strain Rate (%/min):	2.5
Time to Failure (min):	0.75
Strain at Failure (%):	1.703
Initial yield (psi):	190.82
Modulus (psi):	33382
ASTM C495	
Comp. Strength (MPa):	1.4542
Comp. Strength (psi):	210.92
Corr. Comp. Strength (psi):	**209.17**
ASTM D2166	
Comp. Strength (kPa):	1438.5
Comp. Strength (psi):	208.64
Corr. Comp. Strength (psi):	**206.91**
Treatment:	AD

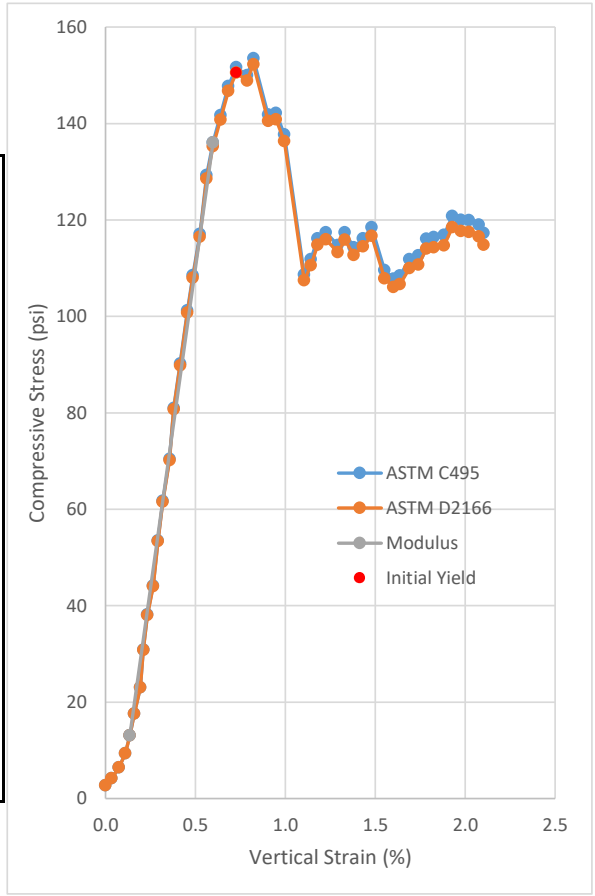


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-17**
Height (in):	5.616
Height (mm):	142.6
Diameter (in):	2.963
Diameter (mm)	75.26
Area (in^2):	6.895
Area (mm^2):	4449
Mass (g):	234.02
Weight (lb):	0.5159
Weight (kN):	0.00229495
Volume (in^3):	38.72
Volume (mm^3):	634573
Density (g/mm^3):	0.0003688
Density (kg/m^3):	368.8
Unit Weight (pcf):	**23.02**
Unit Weight (kN/m^3):	3.617
Wet mass + tare (g):	544.22
Dry mass + tare (g):	504.83
Tare (g):	310.49
Water Content (%)	**20.27**
H:D ratio:	1.895
H:D correction:	0.9911

Age (days):	99
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1058.4
Maximum load (kN):	4.708
Strain Rate (%/min):	2.5
Time to Failure (min):	0.53
Strain at Failure (%):	1.190
Initial yield (psi):	150.55
Modulus (psi):	26647
ASTM C495	
Comp. Strength (MPa):	1.0583
Comp. Strength (psi):	153.50
Corr. Comp. Strength (psi):	**152.13**
ASTM D2166	
Comp. Strength (kPa):	1049.6
Comp. Strength (psi):	152.23
Corr. Comp. Strength (psi):	**150.88**
Treatment:	AD

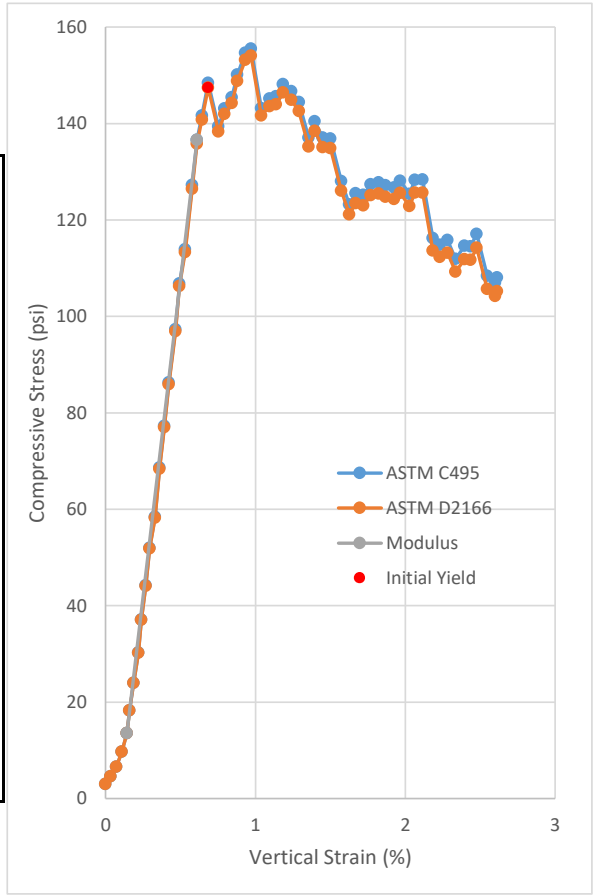




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-18**
Height (in):	5.556
Height (mm):	141.1
Diameter (in):	2.958
Diameter (mm)	75.12
Area (in^2):	6.870
Area (mm^2):	4433
Mass (g):	229.71
Weight (lb):	0.5064
Weight (kN):	0.00225269
Volume (in^3):	38.17
Volume (mm^3):	625498
Density (g/mm^3):	0.0003672
Density (kg/m^3):	367.2
Unit Weight (pcf):	**22.93**
Unit Weight (kN/m^3):	3.601
Wet mass + tare (g):	539.81
Dry mass + tare (g):	500.33
Tare (g):	310.36
Water Content (%)	**20.78**
H:D ratio:	1.878
H:D correction:	0.9897

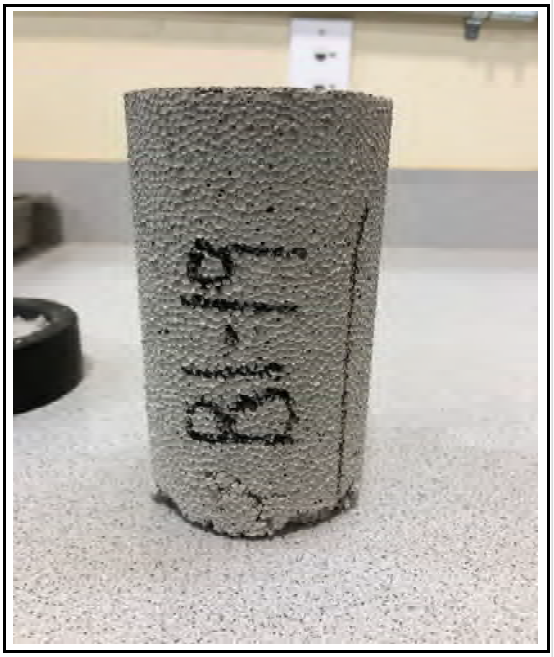
Age (days):	99
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1068.7
Maximum load (kN):	4.754
Strain Rate (%/min):	2.5
Time to Failure (min):	0.57
Strain at Failure (%):	1.343
Initial yield (psi):	147.43
Modulus (psi):	26251
ASTM C495	
Comp. Strength (MPa):	1.0725
Comp. Strength (psi):	155.55
Corr. Comp. Strength (psi):	**153.95**
ASTM D2166	
Comp. Strength (kPa):	1062.1
Comp. Strength (psi):	154.04
Corr. Comp. Strength (psi):	**152.46**
Treatment:	AD

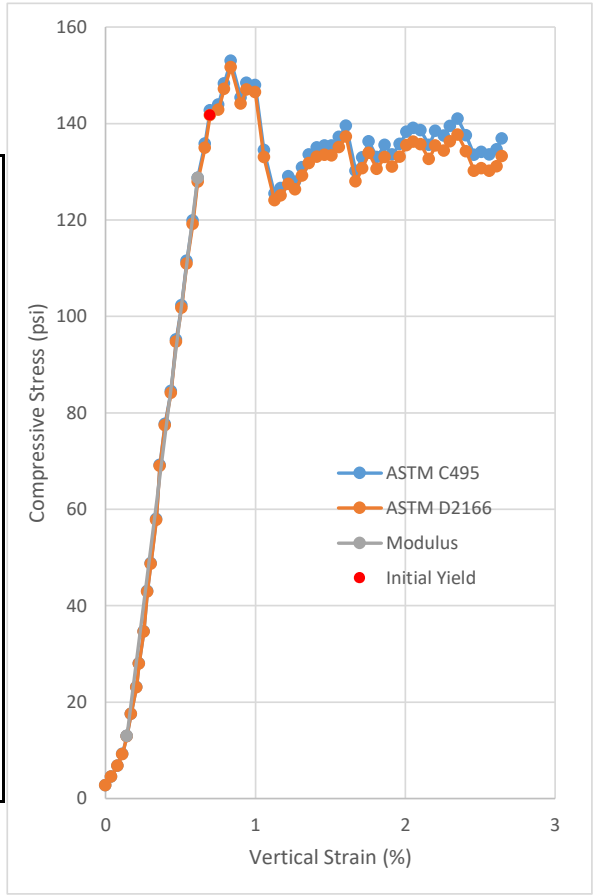


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B1-19**
Height (in):	5.601
Height (mm):	142.3
Diameter (in):	2.968
Diameter (mm)	75.39
Area (in^2):	6.919
Area (mm^2):	4464
Mass (g):	231.59
Weight (lb):	0.5106
Weight (kN):	0.00227112
Volume (in^3):	38.75
Volume (mm^3):	635053
Density (g/mm^3):	0.0003647
Density (kg/m^3):	364.7
Unit Weight (pcf):	**22.77**
Unit Weight (kN/m^3):	3.576
Wet mass + tare (g):	563.52
Dry mass + tare (g):	523.57
Tare (g):	332.26
Water Content (%)	**20.88**
H:D ratio:	1.887
H:D correction:	0.9904

Age (days):	99
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1058.3
Maximum load (kN):	4.708
Strain Rate (%/min):	2.5
Time to Failure (min):	0.52
Strain at Failure (%):	1.206
Initial yield (psi):	141.68
Modulus (psi):	24512
ASTM C495	
Comp. Strength (MPa):	1.0547
Comp. Strength (psi):	152.96
Corr. Comp. Strength (psi):	**151.50**
ASTM D2166	
Comp. Strength (kPa):	1045.8
Comp. Strength (psi):	151.68
Corr. Comp. Strength (psi):	**150.23**
Treatment:	AD

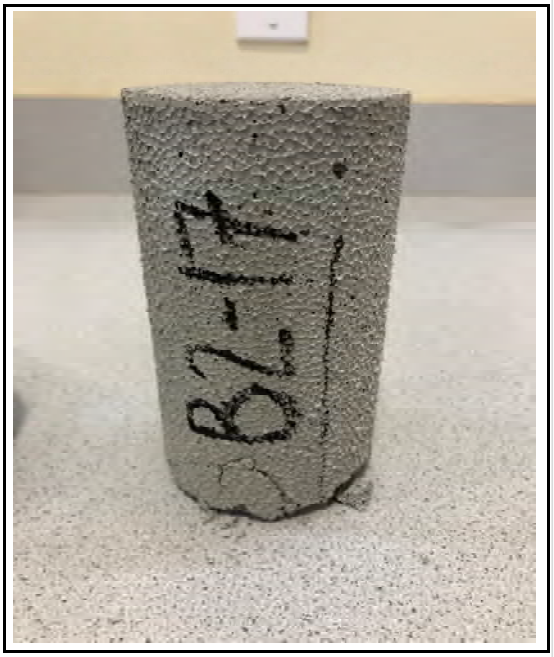


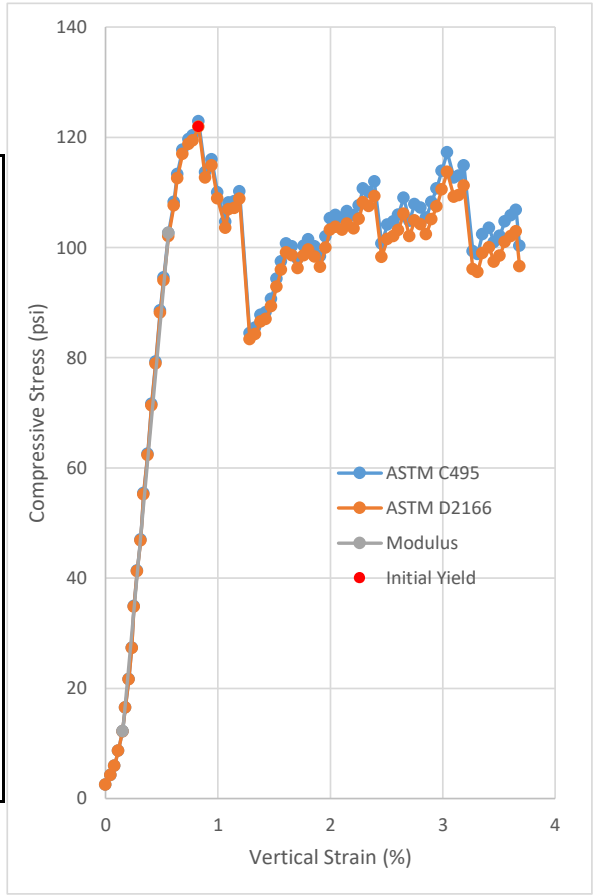


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-17**
Height (in):	5.588
Height (mm):	141.9
Diameter (in):	2.974
Diameter (mm)	75.54
Area (in^2):	6.947
Area (mm^2):	4482
Mass (g):	226.79
Weight (lb):	0.5000
Weight (kN):	0.00222405
Volume (in^3):	38.82
Volume (mm^3):	636106
Density (g/mm^3):	0.0003565
Density (kg/m^3):	356.5
Unit Weight (pcf):	**22.26**
Unit Weight (kN/m^3):	3.496
Wet mass + tare (g):	634.43
Dry mass + tare (g):	598.77
Tare (g):	407.89
Water Content (%)	**18.68**
H:D ratio:	1.879
H:D correction:	0.9898

Age (days):	99
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	853.85
Maximum load (kN):	3.798
Strain Rate (%/min):	2.5
Time to Failure (min):	0.50
Strain at Failure (%):	1.155
Initial yield (psi):	121.90
Modulus (psi):	22106
ASTM C495	
Comp. Strength (MPa):	0.8475
Comp. Strength (psi):	122.92
Corr. Comp. Strength (psi):	**121.66**
ASTM D2166	
Comp. Strength (kPa):	840.5
Comp. Strength (psi):	121.90
Corr. Comp. Strength (psi):	**120.65**
Treatment:	AD

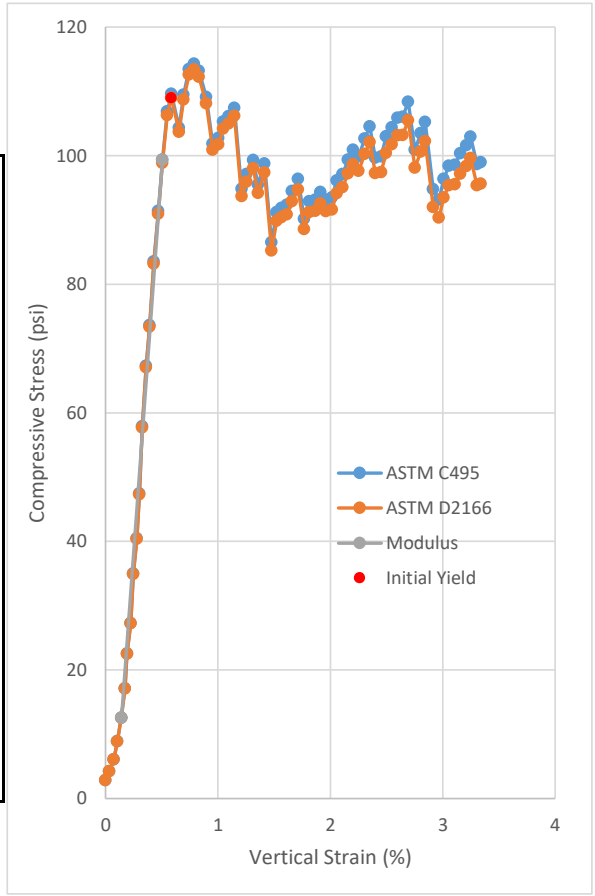




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-18**
Height (in):	5.598
Height (mm):	142.2
Diameter (in):	2.968
Diameter (mm)	75.38
Area (in^2):	6.917
Area (mm^2):	4463
Mass (g):	229.05
Weight (lb):	0.5050
Weight (kN):	0.00224621
Volume (in^3):	38.72
Volume (mm^3):	634495
Density (g/mm^3):	0.0003610
Density (kg/m^3):	361.0
Unit Weight (pcf):	**22.54**
Unit Weight (kN/m^3):	3.540
Wet mass + tare (g):	638.53
Dry mass + tare (g):	601.83
Tare (g):	409.77
Water Content (%)	**19.11**
H:D ratio:	1.886
H:D correction:	0.9904

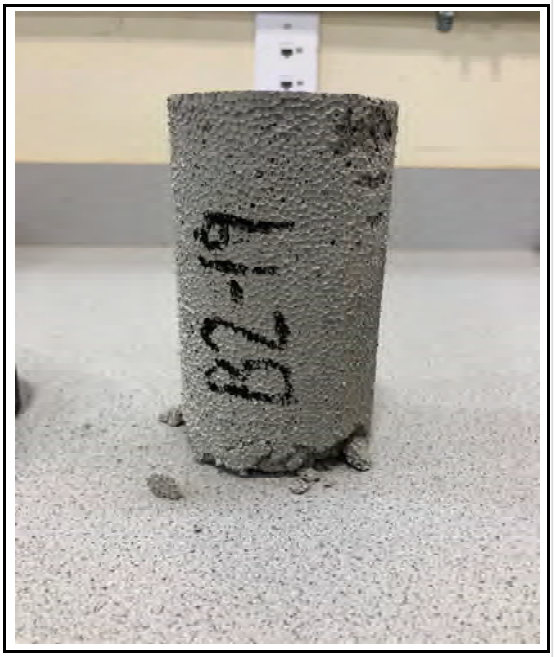
Age (days):	99
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	790.57
Maximum load (kN):	3.517
Strain Rate (%/min):	2.5
Time to Failure (min):	0.47
Strain at Failure (%):	1.098
Initial yield (psi):	108.99
Modulus (psi):	23681
ASTM C495	
Comp. Strength (MPa):	0.7880
Comp. Strength (psi):	114.29
Corr. Comp. Strength (psi):	**113.19**
ASTM D2166	
Comp. Strength (kPa):	781.8
Comp. Strength (psi):	113.39
Corr. Comp. Strength (psi):	**112.30**
Treatment:	AD

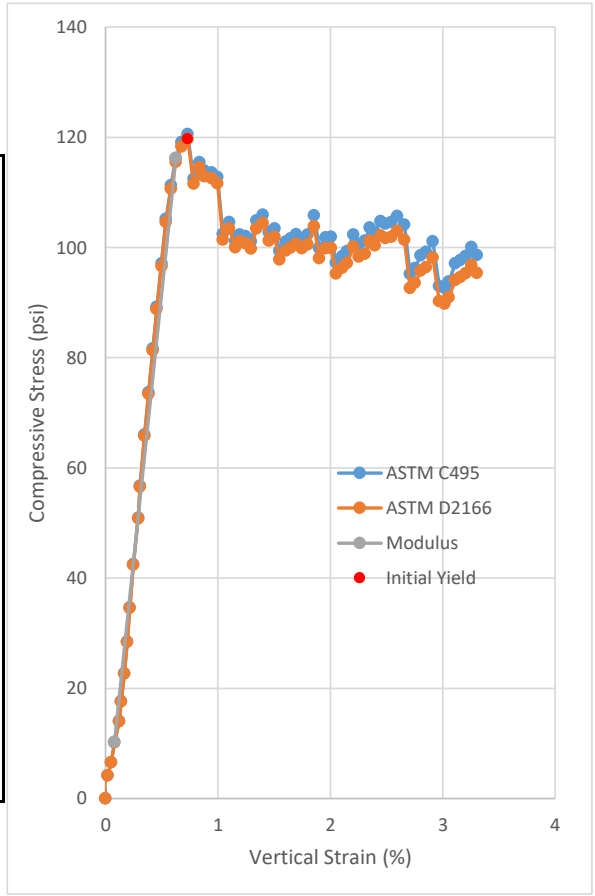


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-19**
Height (in):	5.576
Height (mm):	141.6
Diameter (in):	2.975
Diameter (mm)	75.56
Area (in^2):	6.950
Area (mm^2):	4484
Mass (g):	228.72
Weight (lb):	0.5042
Weight (kN):	0.00224298
Volume (in^3):	38.75
Volume (mm^3):	634986
Density (g/mm^3):	0.0003602
Density (kg/m^3):	360.2
Unit Weight (pcf):	**22.49**
Unit Weight (kN/m^3):	3.532
Wet mass + tare (g):	636.86
Dry mass + tare (g):	599.68
Tare (g):	408.44
Water Content (%)	**19.44**
H:D ratio:	1.874
H:D correction:	0.9894

Age (days):	99
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	838.07
Maximum load (kN):	3.728
Strain Rate (%/min):	2.5
Time to Failure (min):	0.46
Strain at Failure (%):	1.042
Initial yield (psi):	119.71
Modulus (psi):	19479
ASTM C495	
Comp. Strength (MPa):	0.8314
Comp. Strength (psi):	120.59
Corr. Comp. Strength (psi):	**119.32**
ASTM D2166	
Comp. Strength (kPa):	825.4
Comp. Strength (psi):	119.71
Corr. Comp. Strength (psi):	**118.44**
Treatment:	AD

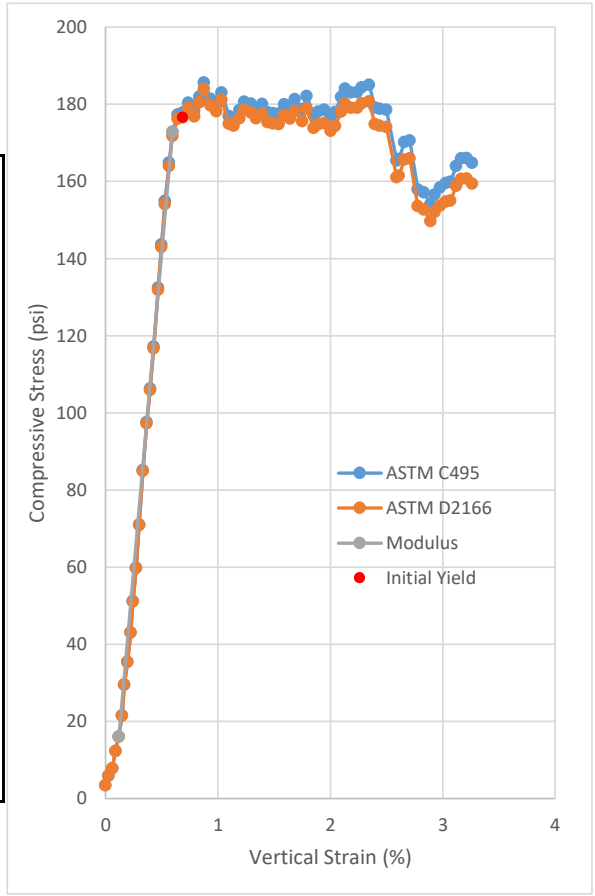




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-17**
Height (in):	5.671
Height (mm):	144.0
Diameter (in):	2.977
Diameter (mm)	75.61
Area (in^2):	6.959
Area (mm^2):	4490
Mass (g):	241.35
Weight (lb):	0.5321
Weight (kN):	0.00236683
Volume (in^3):	39.46
Volume (mm^3):	646712
Density (g/mm^3):	0.0003732
Density (kg/m^3):	373.2
Unit Weight (pcf):	**23.30**
Unit Weight (kN/m^3):	3.660
Wet mass + tare (g):	551.21
Dry mass + tare (g):	509.99
Tare (g):	310.18
Water Content (%)	**20.63**
H:D ratio:	1.905
H:D correction:	0.9919

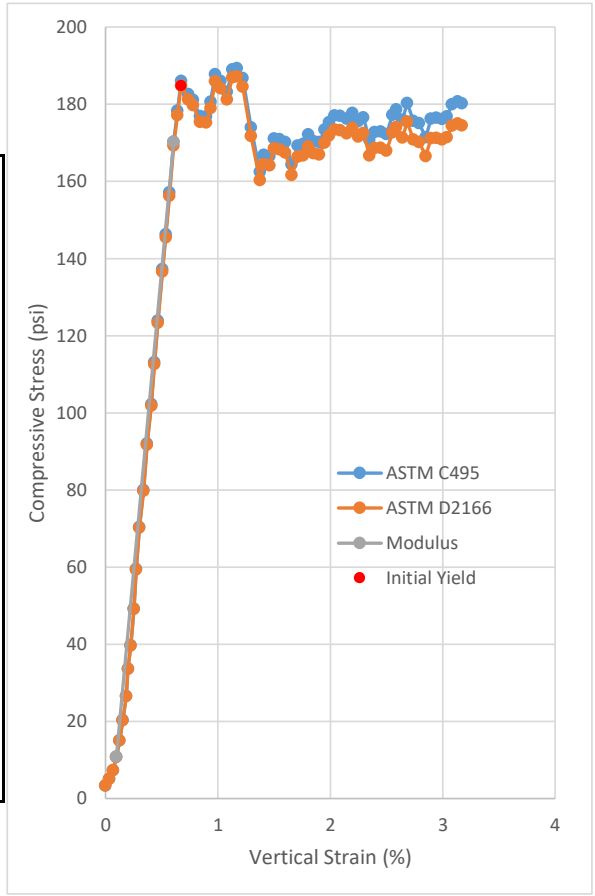
Age (days):	99
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1291.6
Maximum load (kN):	5.745
Strain Rate (%/min):	2.5
Time to Failure (min):	0.57
Strain at Failure (%):	1.287
Initial yield (psi):	176.56
Modulus (psi):	32817
ASTM C495	
Comp. Strength (MPa):	1.2797
Comp. Strength (psi):	185.60
Corr. Comp. Strength (psi):	**184.09**
ASTM D2166	
Comp. Strength (kPa):	1268.5
Comp. Strength (psi):	183.98
Corr. Comp. Strength (psi):	**182.48**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-18**
Height (in):	5.598
Height (mm):	142.2
Diameter (in):	2.971
Diameter (mm)	75.47
Area (in^2):	6.934
Area (mm^2):	4474
Mass (g):	237.6
Weight (lb):	0.5238
Weight (kN):	0.00233006
Volume (in^3):	38.82
Volume (mm^3):	636064
Density (g/mm^3):	0.0003735
Density (kg/m^3):	373.5
Unit Weight (pcf):	**23.32**
Unit Weight (kN/m^3):	3.663
Wet mass + tare (g):	646.01
Dry mass + tare (g):	604.43
Tare (g):	408.81
Water Content (%)	**21.26**
H:D ratio:	1.884
H:D correction:	0.9902

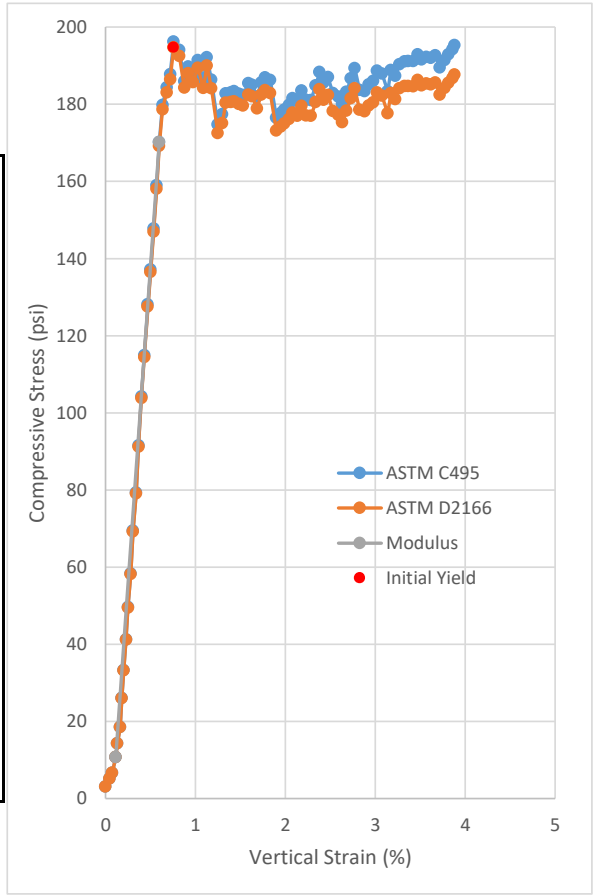
Age (days):	99
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1313
Maximum load (kN):	5.841
Strain Rate (%/min):	2.5
Time to Failure (min):	0.68
Strain at Failure (%):	1.591
Initial yield (psi):	184.74
Modulus (psi):	31302
ASTM C495	
Comp. Strength (MPa):	1.3055
Comp. Strength (psi):	189.35
Corr. Comp. Strength (psi):	**187.49**
ASTM D2166	
Comp. Strength (kPa):	1290.3
Comp. Strength (psi):	187.14
Corr. Comp. Strength (psi):	**185.30**
Treatment:	AD



Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-19**
Height (in):	5.597
Height (mm):	142.2
Diameter (in):	2.974
Diameter (mm)	75.53
Area (in^2):	6.945
Area (mm^2):	4481
Mass (g):	238.72
Weight (lb):	0.5263
Weight (kN):	0.00234104
Volume (in^3):	38.87
Volume (mm^3):	637025
Density (g/mm^3):	0.0003747
Density (kg/m^3):	374.7
Unit Weight (pcf):	**23.39**
Unit Weight (kN/m^3):	3.675
Wet mass + tare (g):	702.93
Dry mass + tare (g):	662.35
Tare (g):	464.55
Water Content (%)	**20.52**
H:D ratio:	1.882
H:D correction:	0.9901

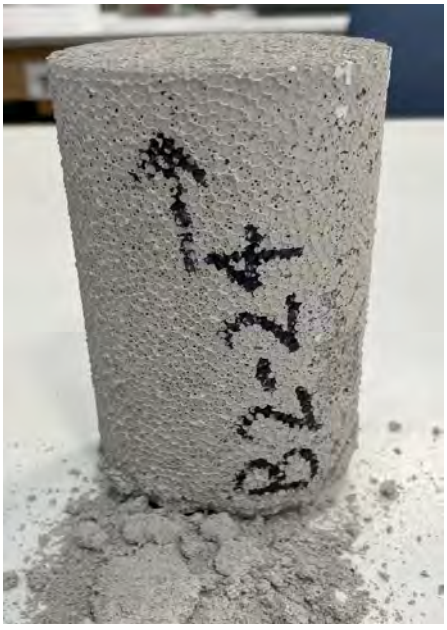
Age (days):	99
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1362.7
Maximum load (kN):	6.062
Strain Rate (%/min):	2.5
Time to Failure (min):	0.53
Strain at Failure (%):	1.194
Initial yield (psi):	194.72
Modulus (psi):	32857
ASTM C495	
Comp. Strength (MPa):	1.3528
Comp. Strength (psi):	196.21
Corr. Comp. Strength (psi):	**194.26**
ASTM D2166	
Comp. Strength (kPa):	1342.6
Comp. Strength (psi):	194.72
Corr. Comp. Strength (psi):	**192.79**
Treatment:	AD

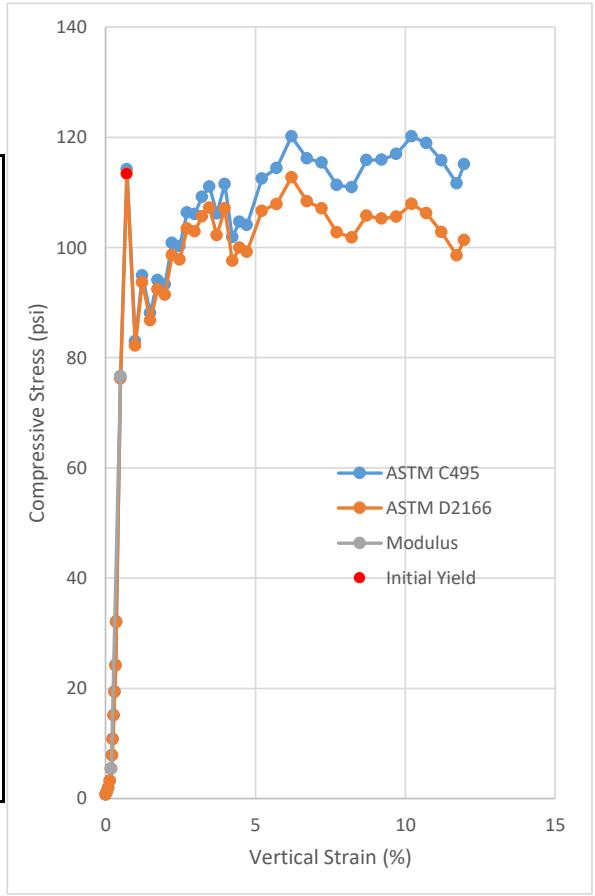


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-24**
Height (in):	5.617
Height (mm):	142.7
Diameter (in):	2.962
Diameter (mm)	75.24
Area (in^2):	6.891
Area (mm^2):	4446
Mass (g):	214.07
Weight (lb):	0.4719
Weight (kN):	0.00209931
Volume (in^3):	38.71
Volume (mm^3):	634305
Density (g/mm^3):	0.0003375
Density (kg/m^3):	337.5
Unit Weight (pcf):	**21.07**
Unit Weight (kN/m^3):	3.310
Wet mass + tare (g):	341.30
Dry mass + tare (g):	324.17
Tare (g):	128.06
Water Content (%)	**8.73**
H:D ratio:	1.896
H:D correction:	0.9912
Saturation (%):	3.07

Age (days):	1051
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	828.22
Maximum load (kN):	3.684
Strain Rate (%/min):	2.5
Time to Failure (min):	2.70
Strain at Failure (%):	6.891
Initial yield (psi):	113.35
Modulus (psi):	22413
ASTM C495	
Comp. Strength (MPa):	0.8287
Comp. Strength (psi):	120.19
Corr. Comp. Strength (psi):	**119.12**
ASTM D2166	
Comp. Strength (kPa):	781.5
Comp. Strength (psi):	113.35
Corr. Comp. Strength (psi):	**112.35**
Treatment:	AD

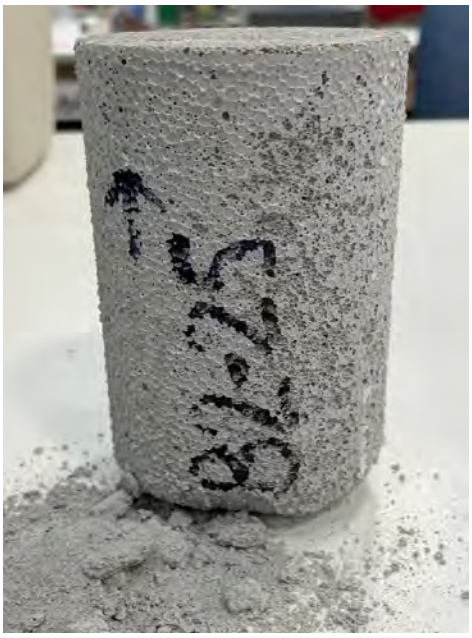


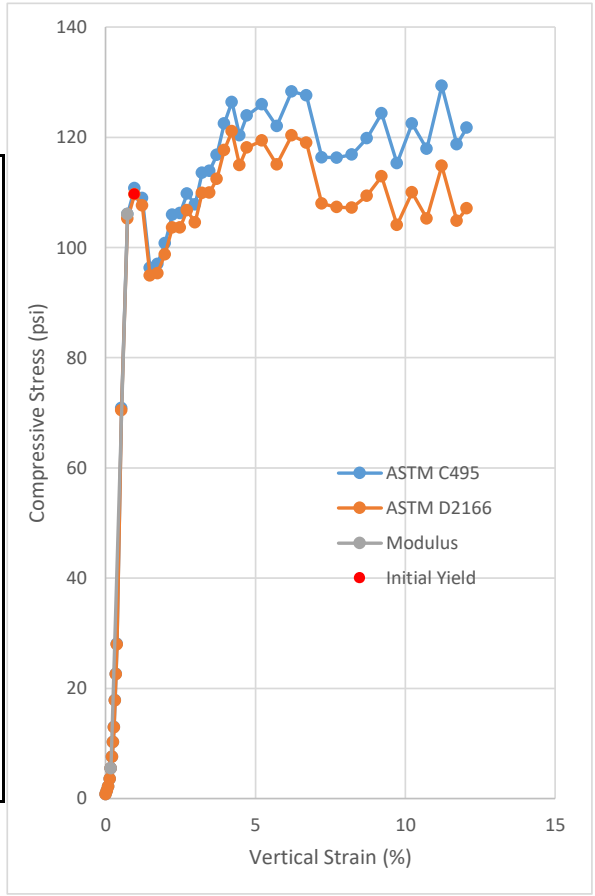


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-25**
Height (in):	5.692
Height (mm):	144.6
Diameter (in):	2.933
Diameter (mm)	74.49
Area (in^2):	6.755
Area (mm^2):	4358
Mass (g):	217.57
Weight (lb):	0.4797
Weight (kN):	0.00213363
Volume (in^3):	38.45
Volume (mm^3):	630096
Density (g/mm^3):	0.0003453
Density (kg/m^3):	345.3
Unit Weight (pcf):	**21.56**
Unit Weight (kN/m^3):	3.386
Wet mass + tare (g):	345.76
Dry mass + tare (g):	328.44
Tare (g):	128.37
Water Content (%)	**8.66**
H:D ratio:	1.941
H:D correction:	0.9948
Saturation (%):	3.12

Age (days):	1052
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	873.57
Maximum load (kN):	3.886
Strain Rate (%/min):	2.5
Time to Failure (min):	4.68
Strain at Failure (%):	6.756
Initial yield (psi):	109.66
Modulus (psi):	18127
ASTM C495	
Comp. Strength (MPa):	0.8917
Comp. Strength (psi):	129.32
Corr. Comp. Strength (psi):	**128.65**
ASTM D2166	
Comp. Strength (kPa):	834.8
Comp. Strength (psi):	121.08
Corr. Comp. Strength (psi):	**120.44**
Treatment:	AD

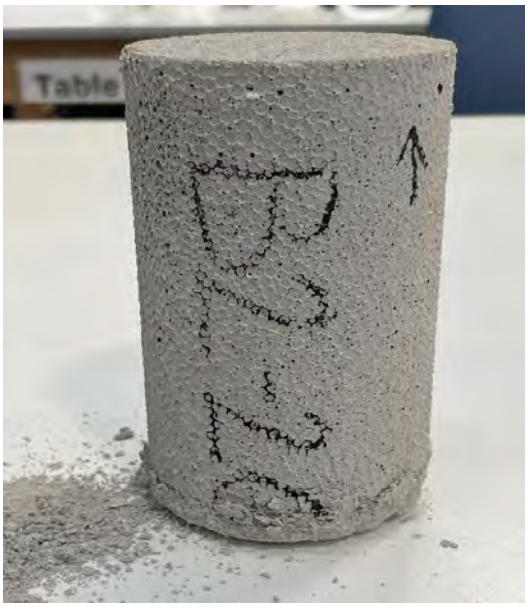


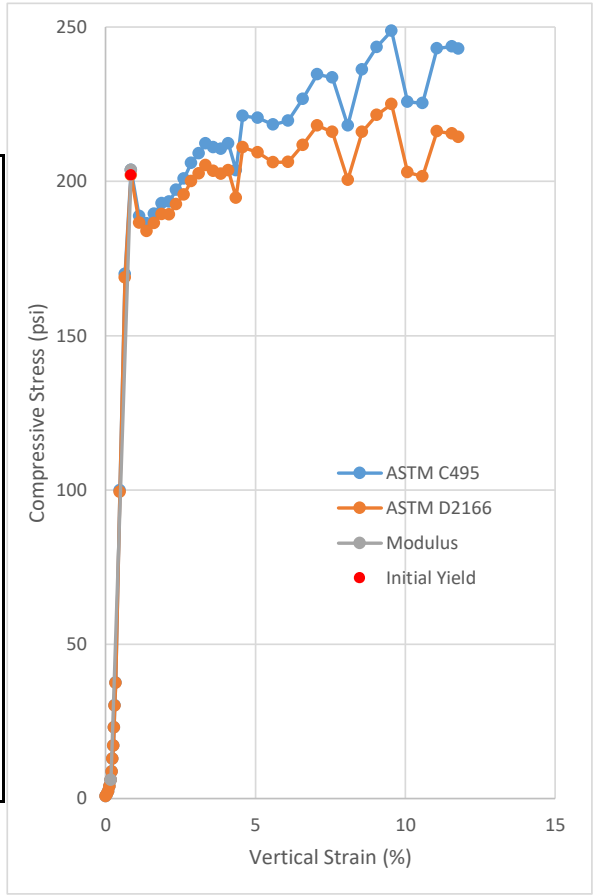


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-26**
Height (in):	5.613
Height (mm):	142.6
Diameter (in):	2.966
Diameter (mm)	75.35
Area (in^2):	6.911
Area (mm^2):	4459
Mass (g):	222.43
Weight (lb):	0.4904
Weight (kN):	0.00218129
Volume (in^3):	38.79
Volume (mm^3):	635709
Density (g/mm^3):	0.0003499
Density (kg/m^3):	349.9
Unit Weight (pcf):	**21.84**
Unit Weight (kN/m^3):	3.431
Wet mass + tare (g):	344.71
Dry mass + tare (g):	324.63
Tare (g):	124.39
Water Content (%)	**10.03**
H:D ratio:	1.892
H:D correction:	0.9908
Saturation (%):	3.62

Age (days):	1052
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1719.5
Maximum load (kN):	7.649
Strain Rate (%/min):	2.5
Time to Failure (min):	4.12
Strain at Failure (%):	6.909
Initial yield (psi):	201.98
Modulus (psi):	29097
ASTM C495	
Comp. Strength (MPa):	1.7154
Comp. Strength (psi):	248.79
Corr. Comp. Strength (psi):	**246.51**
ASTM D2166	
Comp. Strength (kPa):	1551.7
Comp. Strength (psi):	225.06
Corr. Comp. Strength (psi):	**222.99**
Treatment:	AD

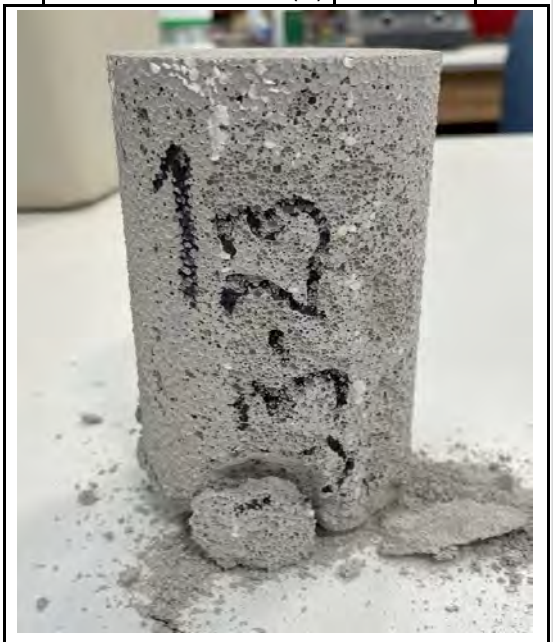


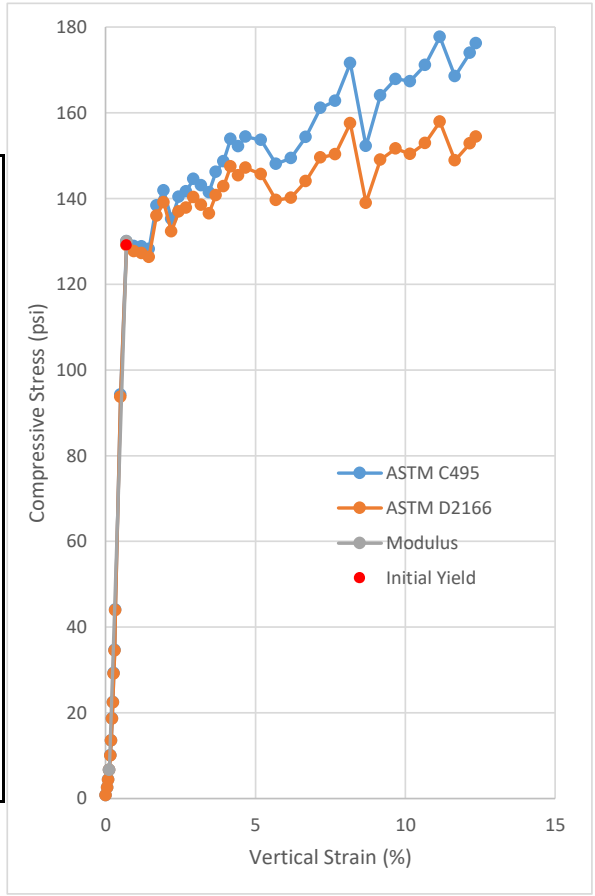


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-23**
Height (in):	5.628
Height (mm):	142.9
Diameter (in):	2.948
Diameter (mm)	74.88
Area (in^2):	6.826
Area (mm^2):	4404
Mass (g):	221.35
Weight (lb):	0.4880
Weight (kN):	0.0021707
Volume (in^3):	38.41
Volume (mm^3):	629469
Density (g/mm^3):	0.0003516
Density (kg/m^3):	351.6
Unit Weight (pcf):	**21.95**
Unit Weight (kN/m^3):	3.448
Wet mass + tare (g):	344.47
Dry mass + tare (g):	328.17
Tare (g):	123.56
Water Content (%)	**7.97**
H:D ratio:	1.909
H:D correction:	0.9922
Saturation (%):	2.95

Age (days):	1051
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1213.1
Maximum load (kN):	5.396
Strain Rate (%/min):	2.5
Time to Failure (min):	4.73
Strain at Failure (%):	6.826
Initial yield (psi):	129.07
Modulus (psi):	21403
ASTM C495	
Comp. Strength (MPa):	1.2254
Comp. Strength (psi):	177.73
Corr. Comp. Strength (psi):	**176.34**
ASTM D2166	
Comp. Strength (kPa):	1088.7
Comp. Strength (psi):	157.91
Corr. Comp. Strength (psi):	**156.67**
Treatment:	AD

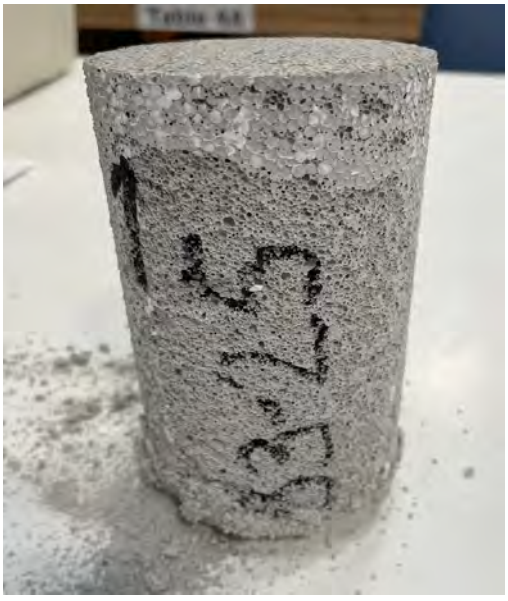


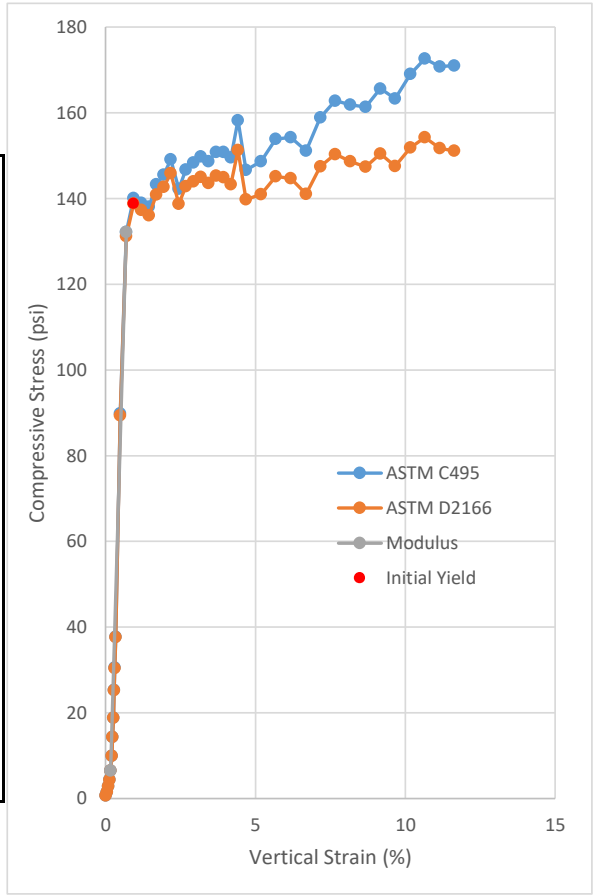


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B3-25**
Height (in):	5.669
Height (mm):	144.0
Diameter (in):	2.947
Diameter (mm)	74.86
Area (in^2):	6.822
Area (mm^2):	4401
Mass (g):	219.14
Weight (lb):	0.4831
Weight (kN):	0.00214903
Volume (in^3):	38.67
Volume (mm^3):	633747
Density (g/mm^3):	0.0003458
Density (kg/m^3):	345.8
Unit Weight (pcf):	**21.59**
Unit Weight (kN/m^3):	3.391
Wet mass + tare (g):	358.87
Dry mass + tare (g):	341.66
Tare (g):	140.32
Water Content (%)	**8.55**
H:D ratio:	1.924
H:D correction:	0.9934
Saturation (%):	3.09

Age (days):	1051
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1177.8
Maximum load (kN):	5.239
Strain Rate (%/min):	2.5
Time to Failure (min):	4.50
Strain at Failure (%):	6.821
Initial yield (psi):	138.80
Modulus (psi):	23981
ASTM C495	
Comp. Strength (MPa):	1.1904
Comp. Strength (psi):	172.66
Corr. Comp. Strength (psi):	**171.51**
ASTM D2166	
Comp. Strength (kPa):	1063.6
Comp. Strength (psi):	154.27
Corr. Comp. Strength (psi):	**153.24**
Treatment:	AD

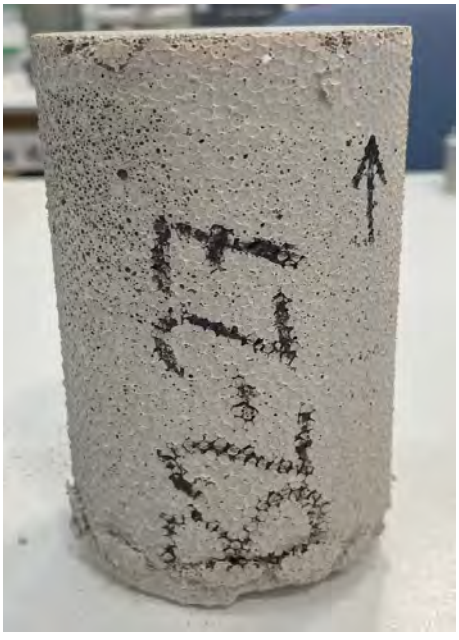


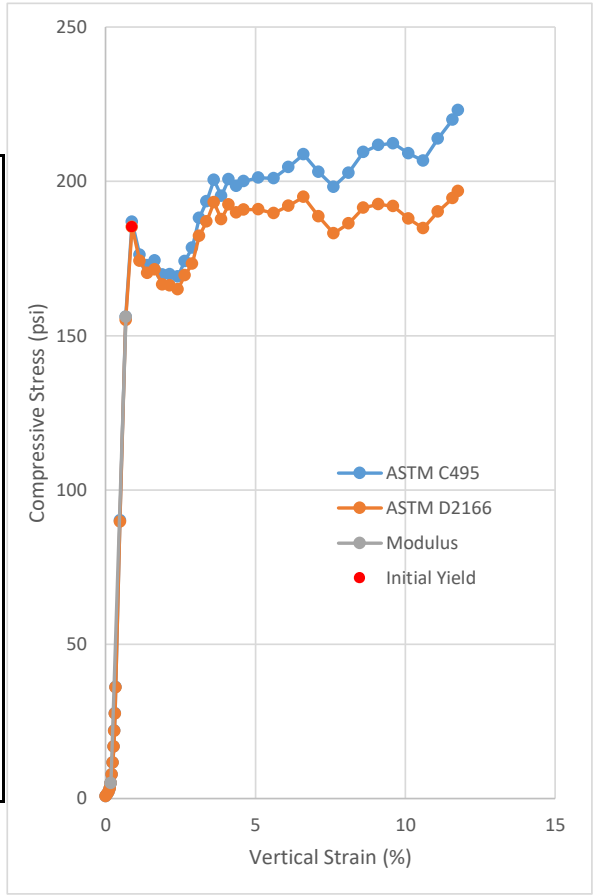


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-27**
Height (in):	5.618
Height (mm):	142.7
Diameter (in):	2.971
Diameter (mm)	75.46
Area (in^2):	6.932
Area (mm^2):	4472
Mass (g):	226.02
Weight (lb):	0.4983
Weight (kN):	0.0022165
Volume (in^3):	38.94
Volume (mm^3):	638174
Density (g/mm^3):	0.0003542
Density (kg/m^3):	354.2
Unit Weight (pcf):	**22.11**
Unit Weight (kN/m^3):	3.473
Wet mass + tare (g):	438.77
Dry mass + tare (g):	414.36
Tare (g):	218.51
Water Content (%)	**12.46**
H:D ratio:	1.891
H:D correction:	0.9908
Saturation (%):	4.45

Age (days):	1058
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1546.5
Maximum load (kN):	6.879
Strain Rate (%/min):	2.5
Time to Failure (min):	5.01
Strain at Failure (%):	6.933
Initial yield (psi):	185.20
Modulus (psi):	30654
ASTM C495	
Comp. Strength (MPa):	1.5383
Comp. Strength (psi):	223.11
Corr. Comp. Strength (psi):	**221.05**
ASTM D2166	
Comp. Strength (kPa):	1357.4
Comp. Strength (psi):	196.87
Corr. Comp. Strength (psi):	**195.05**
Treatment:	H100

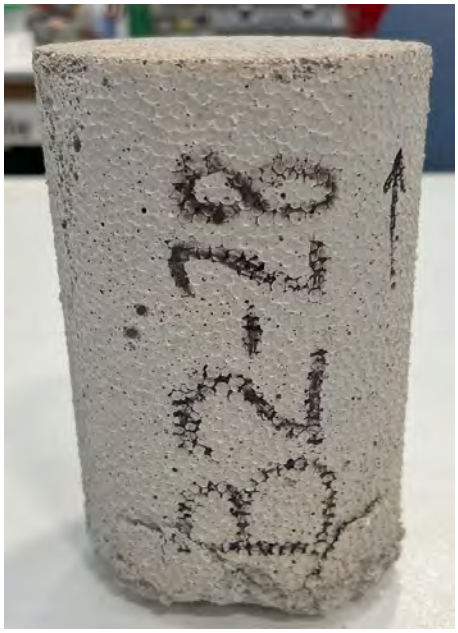


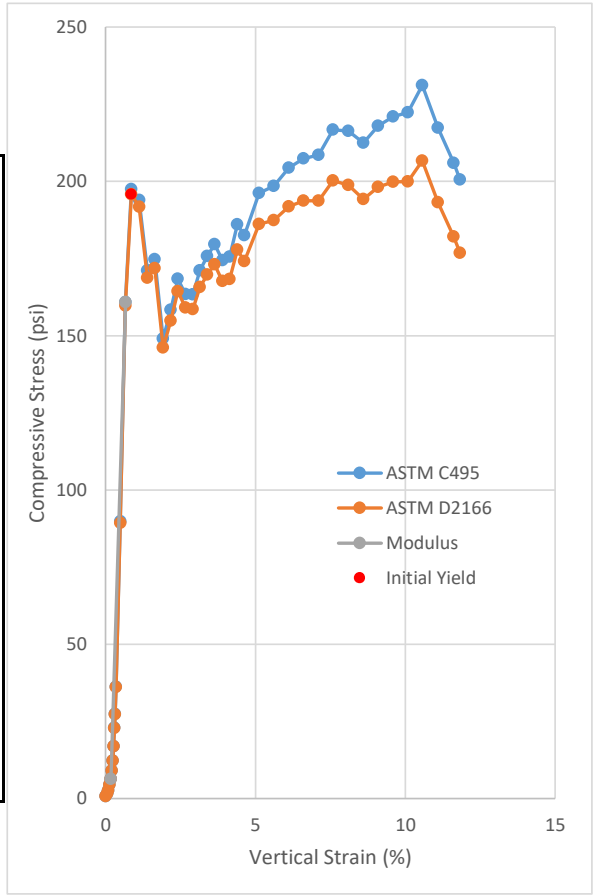


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-28**
Height (in):	5.605
Height (mm):	142.4
Diameter (in):	2.961
Diameter (mm)	75.22
Area (in^2):	6.887
Area (mm^2):	4443
Mass (g):	228.57
Weight (lb):	0.5039
Weight (kN):	0.00224151
Volume (in^3):	38.60
Volume (mm^3):	632608
Density (g/mm^3):	0.0003613
Density (kg/m^3):	361.3
Unit Weight (pcf):	**22.56**
Unit Weight (kN/m^3):	3.543
Wet mass + tare (g):	348.75
Dry mass + tare (g):	324.92
Tare (g):	128.28
Water Content (%)	**12.12**
H:D ratio:	1.893
H:D correction:	0.9909
Saturation (%):	4.44

Age (days):	1058
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1592
Maximum load (kN):	7.082
Strain Rate (%/min):	2.5
Time to Failure (min):	4.51
Strain at Failure (%):	6.886
Initial yield (psi):	195.77
Modulus (psi):	31519
ASTM C495	
Comp. Strength (MPa):	1.5938
Comp. Strength (psi):	231.16
Corr. Comp. Strength (psi):	**229.05**
ASTM D2166	
Comp. Strength (kPa):	1425.4
Comp. Strength (psi):	206.74
Corr. Comp. Strength (psi):	**204.85**
Treatment:	H100

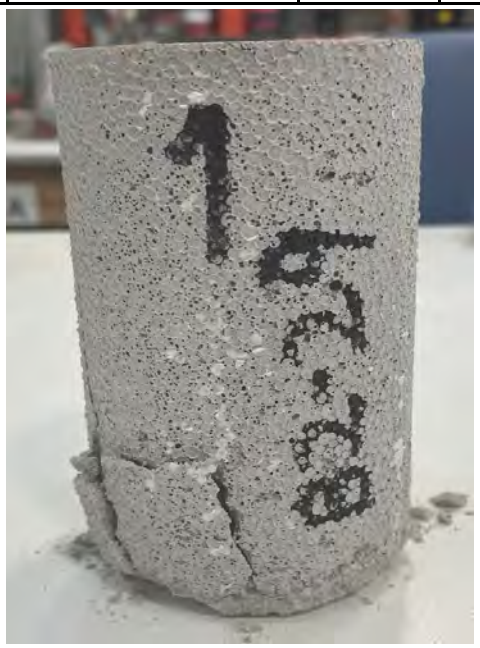


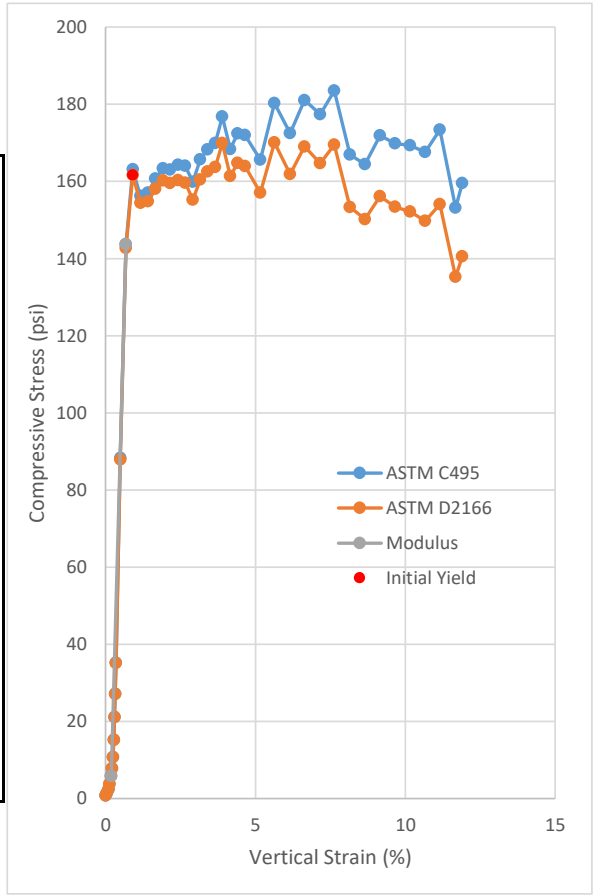


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-29**
Height (in):	5.638
Height (mm):	143.2
Diameter (in):	2.962
Diameter (mm)	75.23
Area (in^2):	6.889
Area (mm^2):	4445
Mass (g):	226.3
Weight (lb):	0.4989
Weight (kN):	0.00221924
Volume (in^3):	38.84
Volume (mm^3):	636448
Density (g/mm^3):	0.0003556
Density (kg/m^3):	355.6
Unit Weight (pcf):	**22.20**
Unit Weight (kN/m^3):	3.487
Wet mass + tare (g):	348.28
Dry mass + tare (g):	325.00
Tare (g):	128.49
Water Content (%)	**11.85**
H:D ratio:	1.904
H:D correction:	0.9917
Saturation (%):	4.27

Age (days):	1058
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	1264.1
Maximum load (kN):	5.623
Strain Rate (%/min):	2.5
Time to Failure (min):	3.30
Strain at Failure (%):	6.891
Initial yield (psi):	161.63
Modulus (psi):	28078
ASTM C495	
Comp. Strength (MPa):	1.2651
Comp. Strength (psi):	183.49
Corr. Comp. Strength (psi):	**181.98**
ASTM D2166	
Comp. Strength (kPa):	1172.8
Comp. Strength (psi):	170.10
Corr. Comp. Strength (psi):	**168.69**
Treatment:	H100

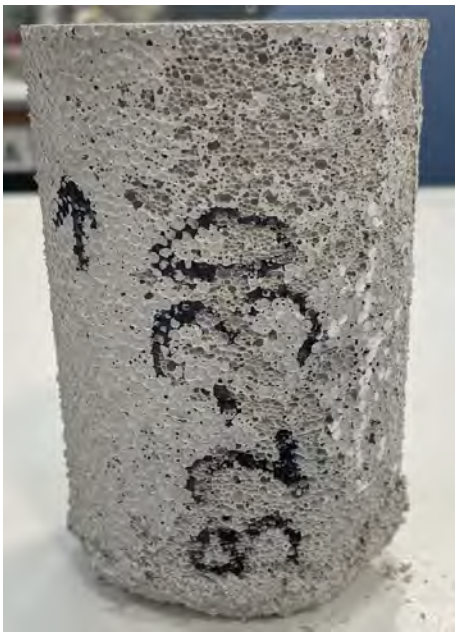


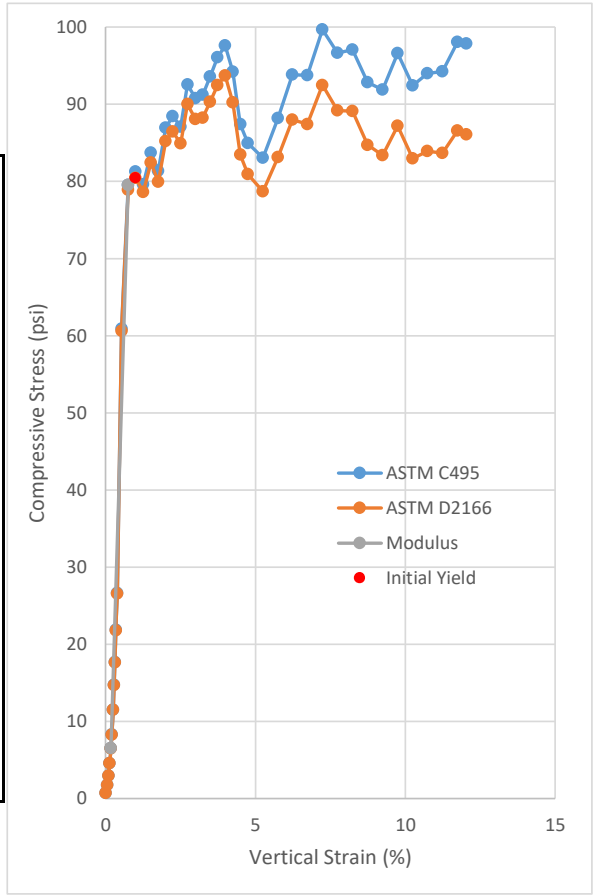


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-30**
Height (in):	5.656
Height (mm):	143.7
Diameter (in):	2.962
Diameter (mm)	75.23
Area (in^2):	6.891
Area (mm^2):	4446
Mass (g):	224.33
Weight (lb):	0.4946
Weight (kN):	0.00219993
Volume (in^3):	38.97
Volume (mm^3):	638661
Density (g/mm^3):	0.0003513
Density (kg/m^3):	351.3
Unit Weight (pcf):	**21.93**
Unit Weight (kN/m^3):	3.445
Wet mass + tare (g):	329.44
Dry mass + tare (g):	307.19
Tare (g):	119.91
Water Content (%)	**11.88**
H:D ratio:	1.910
H:D correction:	0.9922
Saturation (%):	4.23

Age (days):	1058
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	686.97
Maximum load (kN):	3.056
Strain Rate (%/min):	2.5
Time to Failure (min):	3.09
Strain at Failure (%):	6.891
Initial yield (psi):	80.46
Modulus (psi):	12657
ASTM C495	
Comp. Strength (MPa):	0.6874
Comp. Strength (psi):	99.70
Corr. Comp. Strength (psi):	**98.92**
ASTM D2166	
Comp. Strength (kPa):	646.2
Comp. Strength (psi):	93.73
Corr. Comp. Strength (psi):	**93.00**
Treatment:	H100

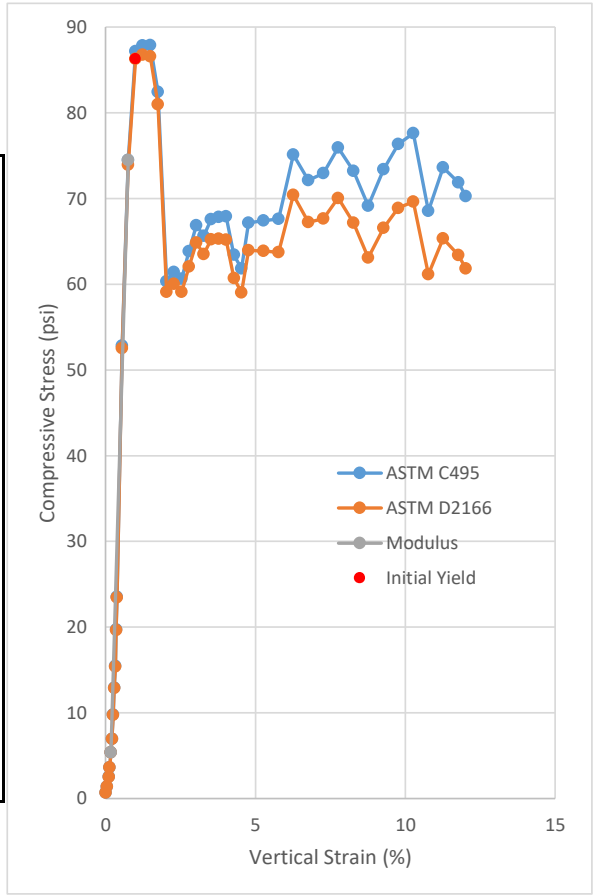




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-31**
Height (in):	5.687
Height (mm):	144.5
Diameter (in):	2.978
Diameter (mm)	75.64
Area (in^2):	6.965
Area (mm^2):	4494
Mass (g):	228.96
Weight (lb):	0.5048
Weight (kN):	0.00224533
Volume (in^3):	39.61
Volume (mm^3):	649156
Density (g/mm^3):	0.0003527
Density (kg/m^3):	352.7
Unit Weight (pcf):	**22.02**
Unit Weight (kN/m^3):	3.459
Wet mass + tare (g):	311.70
Dry mass + tare (g):	288.06
Tare (g):	122.44
Water Content (%)	**14.27**
H:D ratio:	1.910
H:D correction:	0.9922
Saturation (%):	4.98

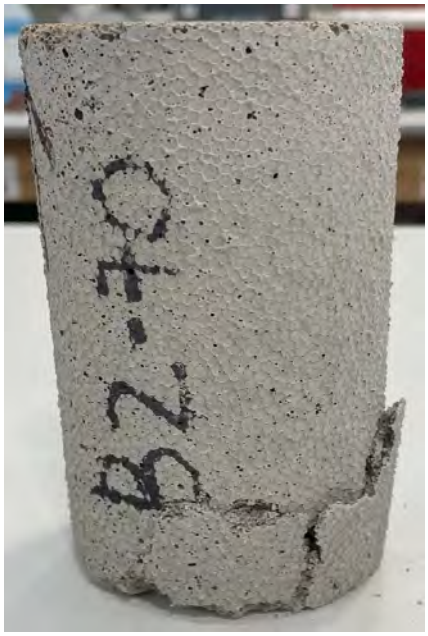
Age (days):	1059
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	612.12
Maximum load (kN):	2.723
Strain Rate (%/min):	2.5
Time to Failure (min):	0.78
Strain at Failure (%):	6.965
Initial yield (psi):	86.29
Modulus (psi):	11942
ASTM C495	
Comp. Strength (MPa):	0.6059
Comp. Strength (psi):	87.88
Corr. Comp. Strength (psi):	**87.20**
ASTM D2166	
Comp. Strength (kPa):	598.3
Comp. Strength (psi):	86.77
Corr. Comp. Strength (psi):	**86.10**
Treatment:	H100

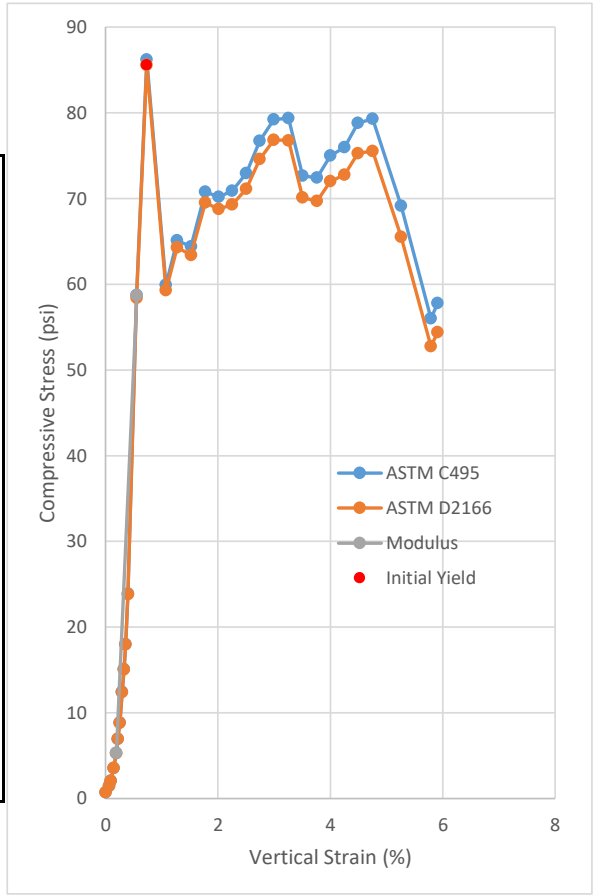


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-70**
Height (in):	5.452
Height (mm):	138.5
Diameter (in):	2.964
Diameter (mm)	75.28
Area (in^2):	6.899
Area (mm^2):	4451
Mass (g):	257.96
Weight (lb):	0.5687
Weight (kN):	0.00252972
Volume (in^3):	37.62
Volume (mm^3):	616411
Density (g/mm^3):	0.0004185
Density (kg/m^3):	418.5
Unit Weight (pcf):	**26.13**
Unit Weight (kN/m^3):	4.104
Wet mass + tare (g):	377.21
Dry mass + tare (g):	313.47
Tare (g):	123.43
Water Content (%)	**33.54**
H:D ratio:	1.839
H:D correction:	0.9867
Saturation (%):	11.91

Age (days):	1075
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	594.75
Maximum load (kN):	2.646
Strain Rate (%/min):	2.5
Time to Failure (min):	0.47
Strain at Failure (%):	6.900
Initial yield (psi):	85.57
Modulus (psi):	14713
ASTM C495	
Comp. Strength (MPa):	0.5943
Comp. Strength (psi):	86.20
Corr. Comp. Strength (psi):	**85.05**
ASTM D2166	
Comp. Strength (kPa):	590.0
Comp. Strength (psi):	85.57
Corr. Comp. Strength (psi):	**84.43**
Treatment:	M5

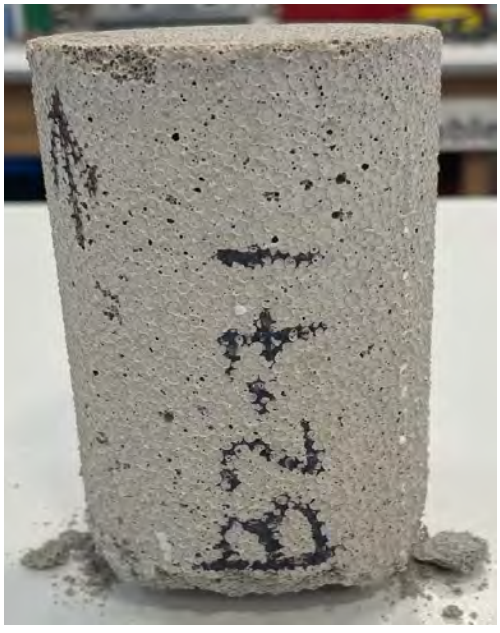


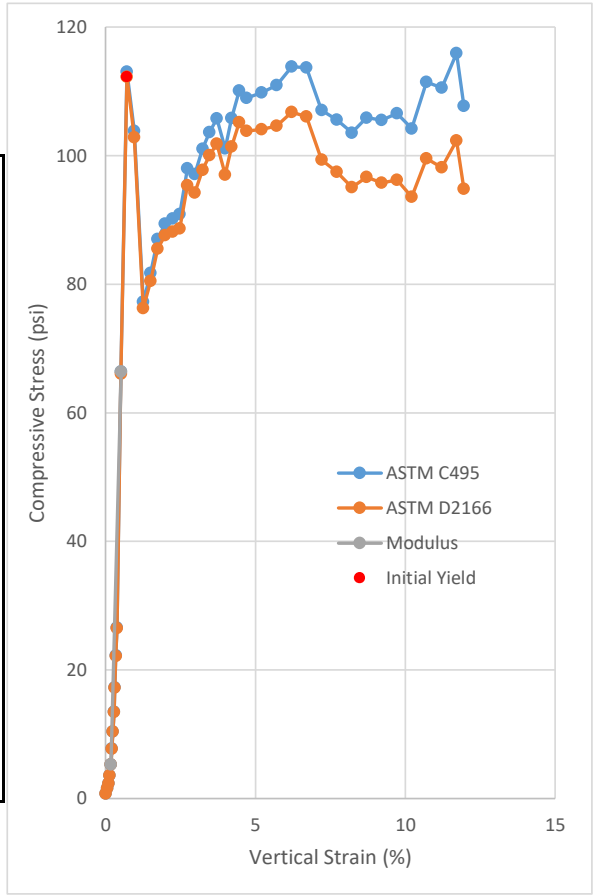


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-71**
Height (in):	5.414
Height (mm):	137.5
Diameter (in):	2.965
Diameter (mm)	75.30
Area (in^2):	6.903
Area (mm^2):	4453
Mass (g):	244.65
Weight (lb):	0.5394
Weight (kN):	0.0023992
Volume (in^3):	37.37
Volume (mm^3):	612391
Density (g/mm^3):	0.0003995
Density (kg/m^3):	399.5
Unit Weight (pcf):	**24.94**
Unit Weight (kN/m^3):	3.918
Wet mass + tare (g):	352.14
Dry mass + tare (g):	302.93
Tare (g):	124.52
Water Content (%)	**27.58**
H:D ratio:	1.826
H:D correction:	0.9856
Saturation (%):	9.78

Age (days):	1075
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	800.17
Maximum load (kN):	3.559
Strain Rate (%/min):	2.5
Time to Failure (min):	4.91
Strain at Failure (%):	6.905
Initial yield (psi):	112.26
Modulus (psi):	18352
ASTM C495	
Comp. Strength (MPa):	0.7993
Comp. Strength (psi):	115.92
Corr. Comp. Strength (psi):	**114.26**
ASTM D2166	
Comp. Strength (kPa):	774.0
Comp. Strength (psi):	112.26
Corr. Comp. Strength (psi):	**110.65**
Treatment:	M5

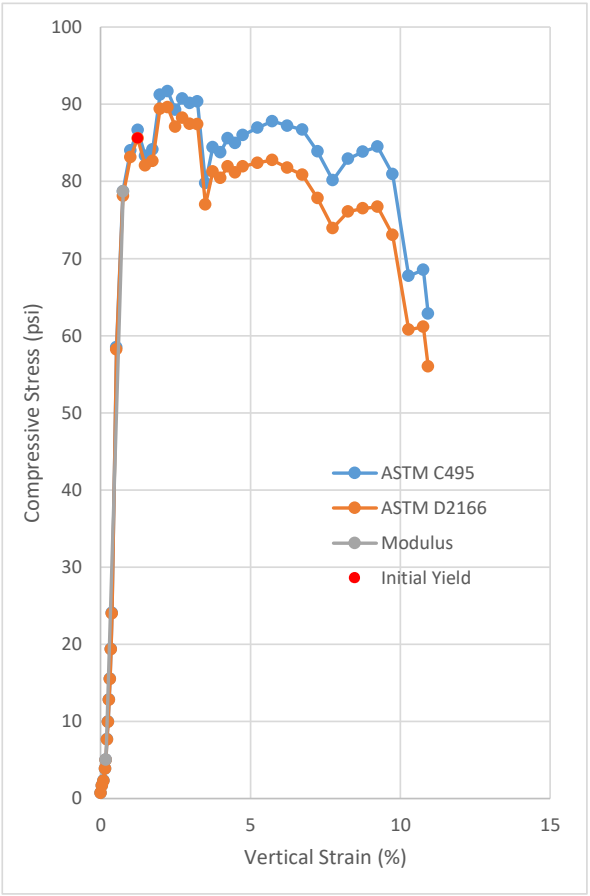




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-72**
Height (in):	5.472
Height (mm):	139.0
Diameter (in):	2.955
Diameter (mm)	75.07
Area (in^2):	6.860
Area (mm^2):	4426
Mass (g):	249.69
Weight (lb):	0.5505
Weight (kN):	0.00244862
Volume (in^3):	37.54
Volume (mm^3):	615144
Density (g/mm^3):	0.0004059
Density (kg/m^3):	405.9
Unit Weight (pcf):	**25.34**
Unit Weight (kN/m^3):	3.981
Wet mass + tare (g):	355.32
Dry mass + tare (g):	304.28
Tare (g):	126.86
Water Content (%)	**28.77**
H:D ratio:	1.852
H:D correction:	0.9876
Saturation (%):	10.28

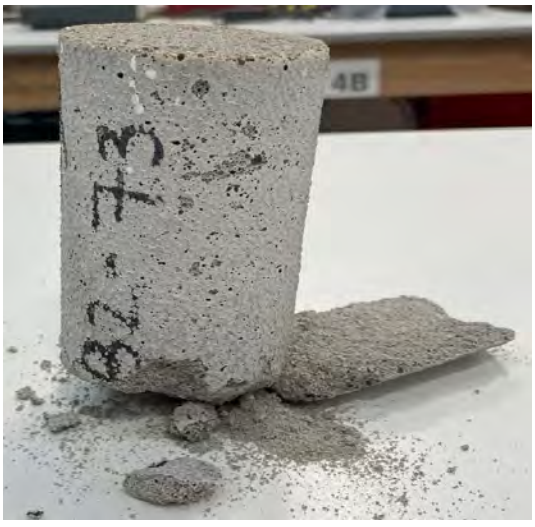
Age (days):	1075
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	628.79
Maximum load (kN):	2.797
Strain Rate (%/min):	2.5
Time to Failure (min):	1.08
Strain at Failure (%):	6.858
Initial yield (psi):	85.57
Modulus (psi):	12906
ASTM C495	
Comp. Strength (MPa):	0.6320
Comp. Strength (psi):	91.66
Corr. Comp. Strength (psi):	**90.53**
ASTM D2166	
Comp. Strength (kPa):	617.9
Comp. Strength (psi):	89.61
Corr. Comp. Strength (psi):	**88.51**
Treatment:	M5

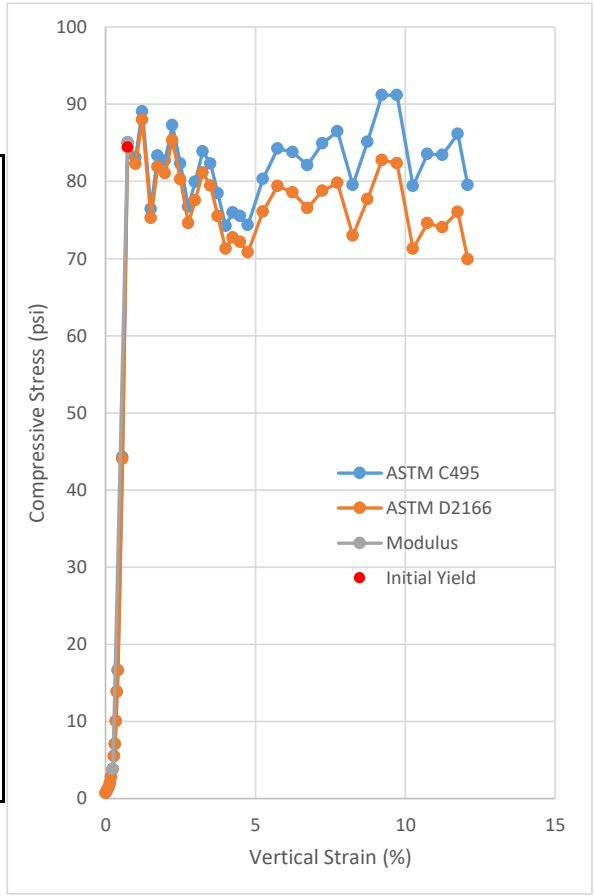


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-73**
Height (in):	5.457
Height (mm):	138.6
Diameter (in):	2.964
Diameter (mm)	75.27
Area (in^2):	6.898
Area (mm^2):	4450
Mass (g):	245.47
Weight (lb):	0.5412
Weight (kN):	0.00240724
Volume (in^3):	37.64
Volume (mm^3):	616876
Density (g/mm^3):	0.0003979
Density (kg/m^3):	397.9
Unit Weight (pcf):	**24.84**
Unit Weight (kN/m^3):	3.902
Wet mass + tare (g):	345.72
Dry mass + tare (g):	298.89
Tare (g):	127.70
Water Content (%)	**27.36**
H:D ratio:	1.841
H:D correction:	0.9868
Saturation (%):	9.68

Age (days):	1075
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	629.1
Maximum load (kN):	2.798
Strain Rate (%/min):	2.5
Time to Failure (min):	4.07
Strain at Failure (%):	6.900
Initial yield (psi):	84.41
Modulus (psi):	16264
ASTM C495	
Comp. Strength (MPa):	0.6288
Comp. Strength (psi):	91.20
Corr. Comp. Strength (psi):	**90.00**
ASTM D2166	
Comp. Strength (kPa):	606.7
Comp. Strength (psi):	87.99
Corr. Comp. Strength (psi):	**86.84**
Treatment:	M5

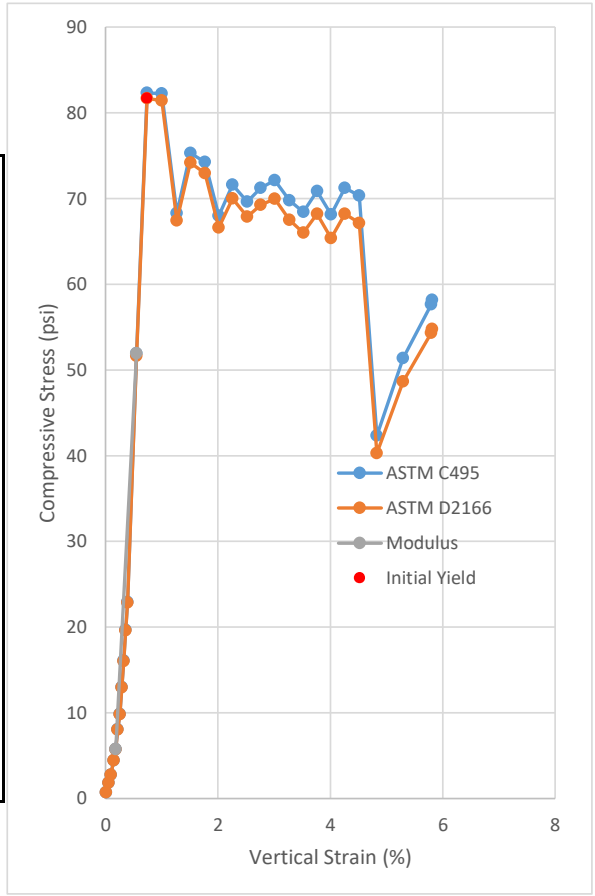




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-74**
Height (in):	5.491
Height (mm):	139.5
Diameter (in):	2.961
Diameter (mm)	75.21
Area (in^2):	6.886
Area (mm^2):	4443
Mass (g):	249.6
Weight (lb):	0.5503
Weight (kN):	0.00244774
Volume (in^3):	37.81
Volume (mm^3):	619649
Density (g/mm^3):	0.0004028
Density (kg/m^3):	402.8
Unit Weight (pcf):	**25.15**
Unit Weight (kN/m^3):	3.950
Wet mass + tare (g):	367.52
Dry mass + tare (g):	312.57
Tare (g):	127.72
Water Content (%)	**29.73**
H:D ratio:	1.855
H:D correction:	0.9879
Saturation (%):	10.44

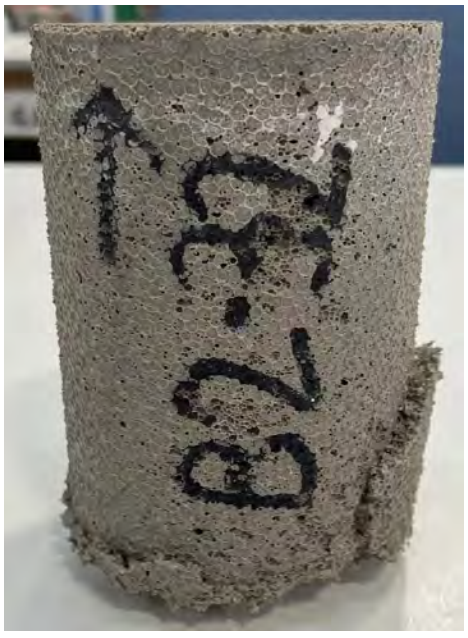
Age (days):	1075
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	566.78
Maximum load (kN):	2.521
Strain Rate (%/min):	2.5
Time to Failure (min):	0.45
Strain at Failure (%):	6.886
Initial yield (psi):	81.70
Modulus (psi):	12445
ASTM C495	
Comp. Strength (MPa):	0.5675
Comp. Strength (psi):	82.31
Corr. Comp. Strength (psi):	**81.31**
ASTM D2166	
Comp. Strength (kPa):	563.3
Comp. Strength (psi):	81.70
Corr. Comp. Strength (psi):	**80.71**
Treatment:	M5

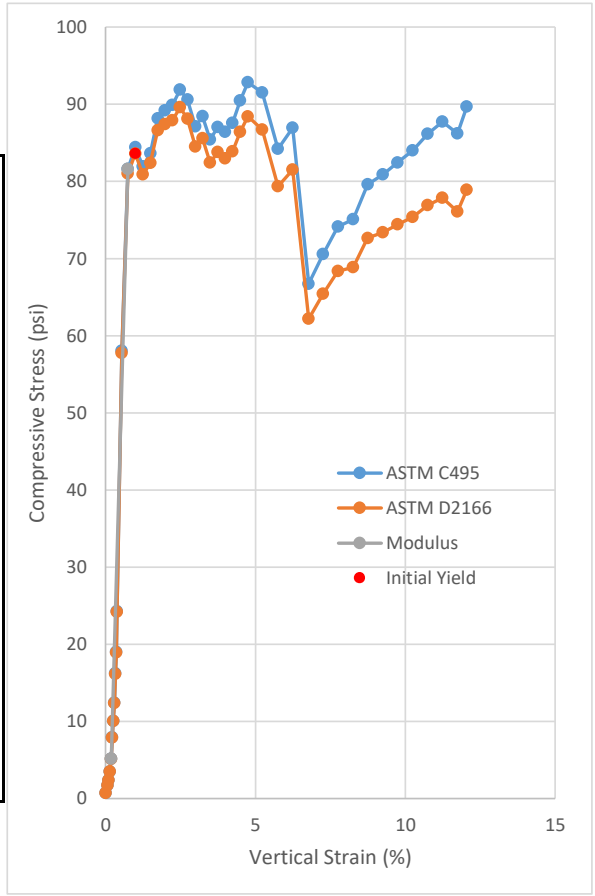


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-32**
Height (in):	5.505
Height (mm):	139.8
Diameter (in):	2.959
Diameter (mm)	75.16
Area (in^2):	6.877
Area (mm^2):	4437
Mass (g):	284.74
Weight (lb):	0.6277
Weight (kN):	0.00279235
Volume (in^3):	37.86
Volume (mm^3):	620436
Density (g/mm^3):	0.0004589
Density (kg/m^3):	458.9
Unit Weight (pcf):	**28.65**
Unit Weight (kN/m^3):	4.501
Wet mass + tare (g):	381.49
Dry mass + tare (g):	302.33
Tare (g):	123.52
Water Content (%)	**44.27**
H:D ratio:	1.860
H:D correction:	0.9883
Saturation (%):	15.99

Age (days):	1063
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	638.4
Maximum load (kN):	2.840
Strain Rate (%/min):	2.5
Time to Failure (min):	2.07
Strain at Failure (%):	6.877
Initial yield (psi):	83.57
Modulus (psi):	13770
ASTM C495	
Comp. Strength (MPa):	0.6400
Comp. Strength (psi):	92.83
Corr. Comp. Strength (psi):	**91.74**
ASTM D2166	
Comp. Strength (kPa):	617.8
Comp. Strength (psi):	89.60
Corr. Comp. Strength (psi):	**88.56**
Treatment:	D1

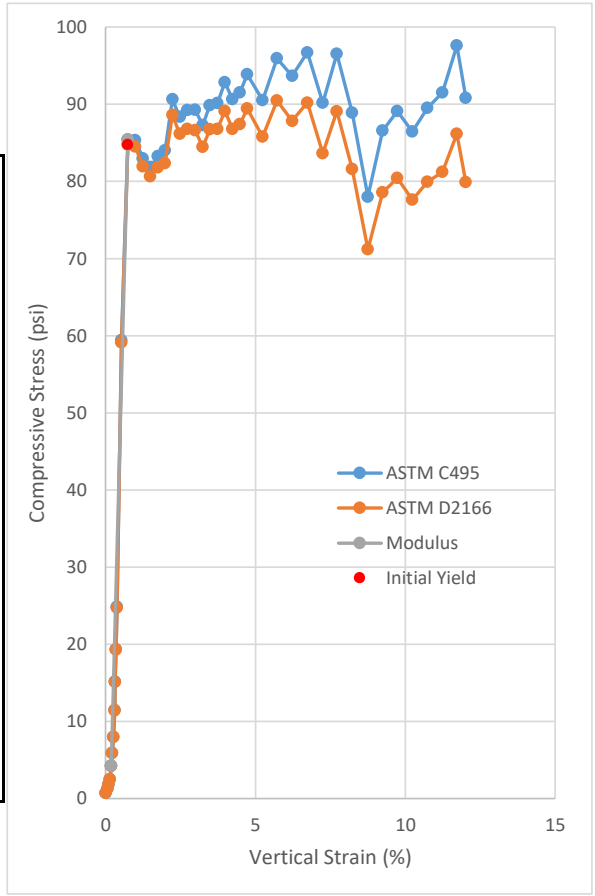




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-33**
Height (in):	5.468
Height (mm):	138.9
Diameter (in):	2.954
Diameter (mm)	75.02
Area (in^2):	6.852
Area (mm^2):	4421
Mass (g):	276.1
Weight (lb):	0.6087
Weight (kN):	0.00270762
Volume (in^3):	37.47
Volume (mm^3):	614001
Density (g/mm^3):	0.0004497
Density (kg/m^3):	449.7
Unit Weight (pcf):	**28.07**
Unit Weight (kN/m^3):	4.410
Wet mass + tare (g):	345.11
Dry mass + tare (g):	275.29
Tare (g):	115.76
Water Content (%)	**43.77**
H:D ratio:	1.851
H:D correction:	0.9876
Saturation (%):	15.50

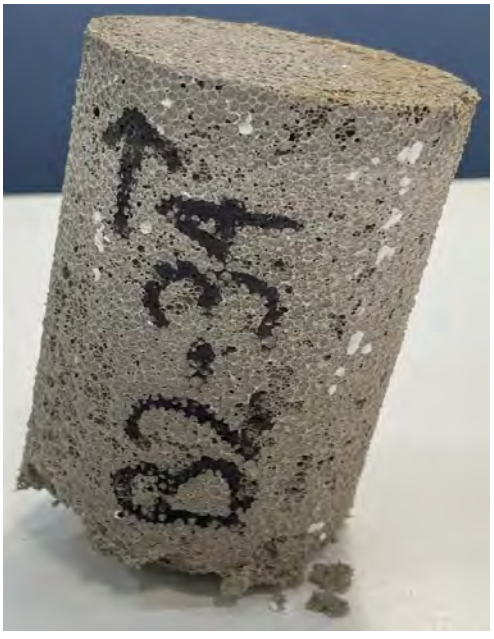
Age (days):	1063
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	668.83
Maximum load (kN):	2.975
Strain Rate (%/min):	2.5
Time to Failure (min):	4.89
Strain at Failure (%):	6.854
Initial yield (psi):	84.77
Modulus (psi):	14675
ASTM C495	
Comp. Strength (MPa):	0.6730
Comp. Strength (psi):	97.61
Corr. Comp. Strength (psi):	**96.40**
ASTM D2166	
Comp. Strength (kPa):	623.7
Comp. Strength (psi):	90.46
Corr. Comp. Strength (psi):	**89.34**
Treatment:	D1

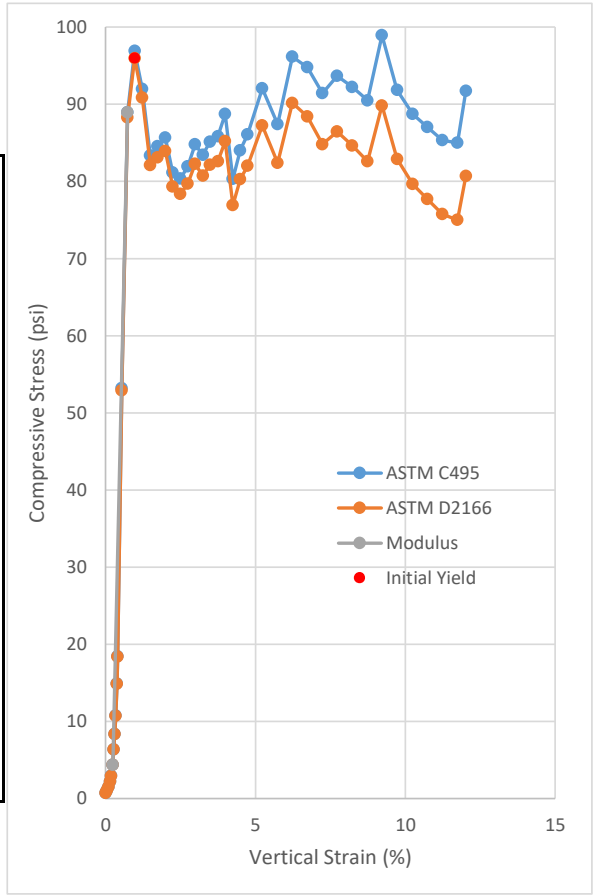


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-34**
Height (in):	5.499
Height (mm):	139.7
Diameter (in):	2.957
Diameter (mm)	75.10
Area (in^2):	6.867
Area (mm^2):	4430
Mass (g):	276.35
Weight (lb):	0.6092
Weight (kN):	0.00271007
Volume (in^3):	37.76
Volume (mm^3):	618830
Density (g/mm^3):	0.0004466
Density (kg/m^3):	446.6
Unit Weight (pcf):	**27.88**
Unit Weight (kN/m^3):	4.379
Wet mass + tare (g):	355.27
Dry mass + tare (g):	283.84
Tare (g):	122.20
Water Content (%)	**44.19**
H:D ratio:	1.860
H:D correction:	0.9883
Saturation (%):	15.48

Age (days):	1063
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	679.52
Maximum load (kN):	3.023
Strain Rate (%/min):	2.5
Time to Failure (min):	3.88
Strain at Failure (%):	6.867
Initial yield (psi):	95.95
Modulus (psi):	17277
ASTM C495	
Comp. Strength (MPa):	0.6823
Comp. Strength (psi):	98.96
Corr. Comp. Strength (psi):	**97.80**
ASTM D2166	
Comp. Strength (kPa):	661.6
Comp. Strength (psi):	95.95
Corr. Comp. Strength (psi):	**94.83**
Treatment:	D1

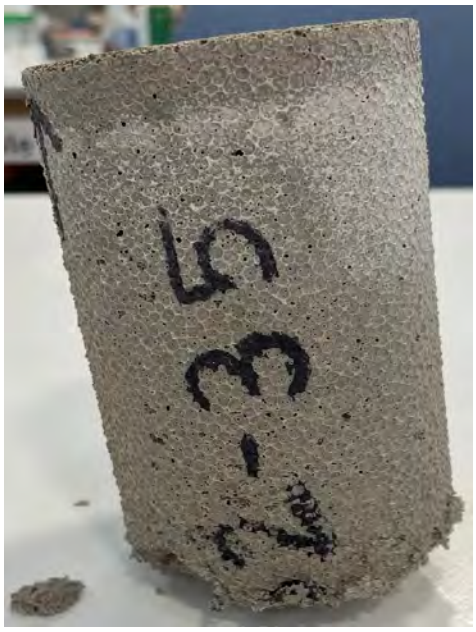


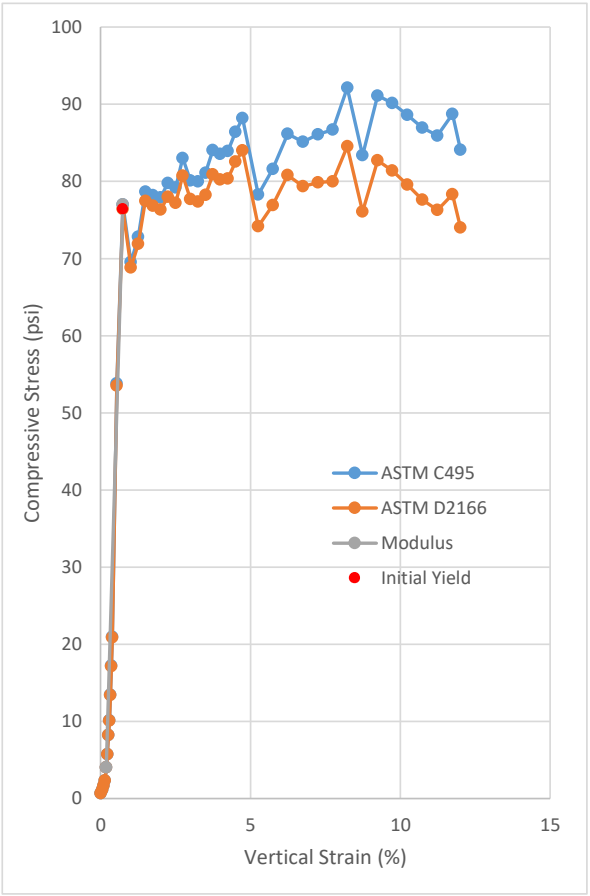


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-35**
Height (in):	5.570
Height (mm):	141.5
Diameter (in):	2.959
Diameter (mm)	75.17
Area (in^2):	6.878
Area (mm^2):	4438
Mass (g):	287.82
Weight (lb):	0.6345
Weight (kN):	0.00282255
Volume (in^3):	38.31
Volume (mm^3):	627856
Density (g/mm^3):	0.0004584
Density (kg/m^3):	458.4
Unit Weight (pcf):	**28.62**
Unit Weight (kN/m^3):	4.496
Wet mass + tare (g):	376.64
Dry mass + tare (g):	301.11
Tare (g):	127.79
Water Content (%)	**43.58**
H:D ratio:	1.882
H:D correction:	0.9900
Saturation (%):	15.80

Age (days):	1063
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	633.71
Maximum load (kN):	2.819
Strain Rate (%/min):	2.5
Time to Failure (min):	3.50
Strain at Failure (%):	6.877
Initial yield (psi):	76.41
Modulus (psi):	13047
ASTM C495	
Comp. Strength (MPa):	0.6352
Comp. Strength (psi):	92.13
Corr. Comp. Strength (psi):	**91.22**
ASTM D2166	
Comp. Strength (kPa):	582.9
Comp. Strength (psi):	84.55
Corr. Comp. Strength (psi):	**83.71**
Treatment:	D1

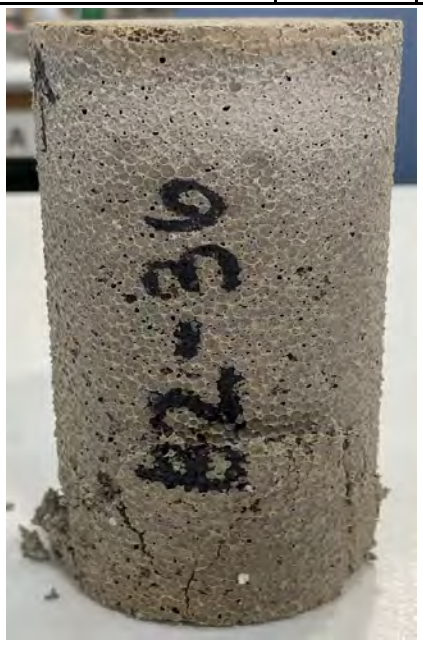


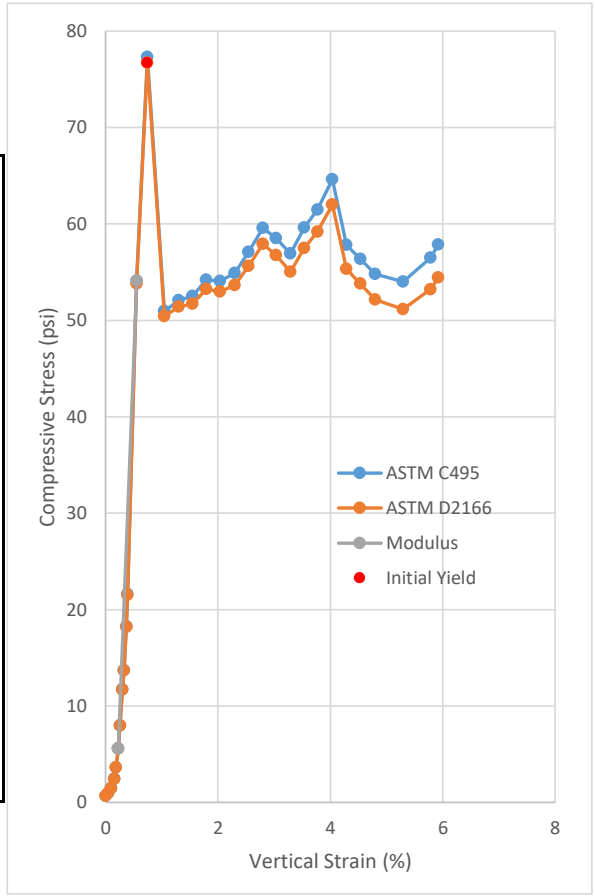


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-36**
Height (in):	5.540
Height (mm):	140.7
Diameter (in):	2.963
Diameter (mm)	75.25
Area (in^2):	6.894
Area (mm^2):	4448
Mass (g):	289.86
Weight (lb):	0.6390
Weight (kN):	0.00284256
Volume (in^3):	38.19
Volume (mm^3):	625882
Density (g/mm^3):	0.0004631
Density (kg/m^3):	463.1
Unit Weight (pcf):	**28.91**
Unit Weight (kN/m^3):	4.542
Wet mass + tare (g):	396.81
Dry mass + tare (g):	309.22
Tare (g):	128.60
Water Content (%)	**48.49**
H:D ratio:	1.870
H:D correction:	0.9891
Saturation (%):	17.12

Age (days):	1064
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	532.81
Maximum load (kN):	2.370
Strain Rate (%/min):	2.5
Time to Failure (min):	0.47
Strain at Failure (%):	6.895
Initial yield (psi):	76.71
Modulus (psi):	14885
ASTM C495	
Comp. Strength (MPa):	0.5329
Comp. Strength (psi):	77.29
Corr. Comp. Strength (psi):	**76.44**
ASTM D2166	
Comp. Strength (kPa):	528.9
Comp. Strength (psi):	76.71
Corr. Comp. Strength (psi):	**75.87**
Treatment:	D1

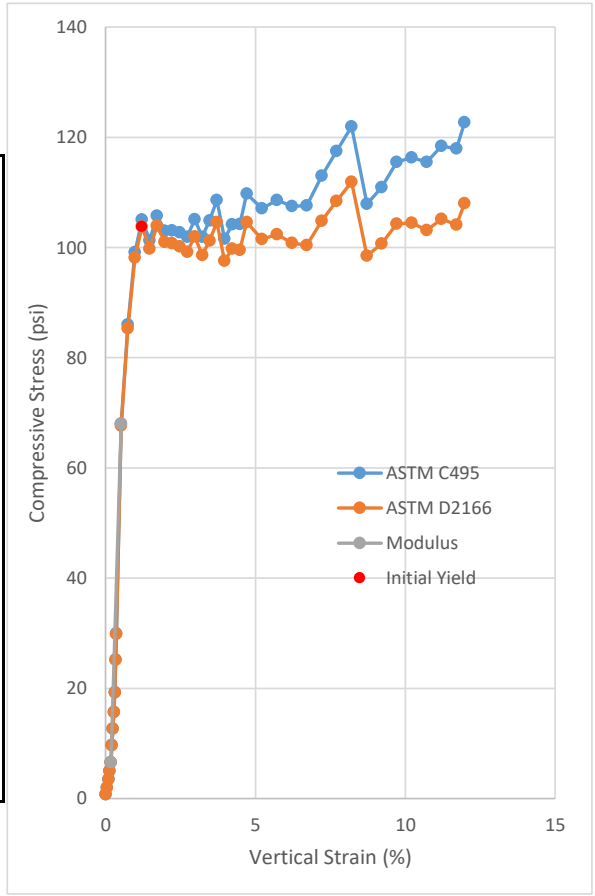




Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-37**
Height (in):	5.469
Height (mm):	138.9
Diameter (in):	2.957
Diameter (mm)	75.12
Area (in^2):	6.869
Area (mm^2):	4432
Mass (g):	289.1
Weight (lb):	0.6374
Weight (kN):	0.0028351
Volume (in^3):	37.57
Volume (mm^3):	615648
Density (g/mm^3):	0.0004696
Density (kg/m^3):	469.6
Unit Weight (pcf):	**29.32**
Unit Weight (kN/m^3):	4.605
Wet mass + tare (g):	420.91
Dry mass + tare (g):	335.27
Tare (g):	160.86
Water Content (%)	**49.10**
H:D ratio:	1.849
H:D correction:	0.9874
Saturation (%):	17.53

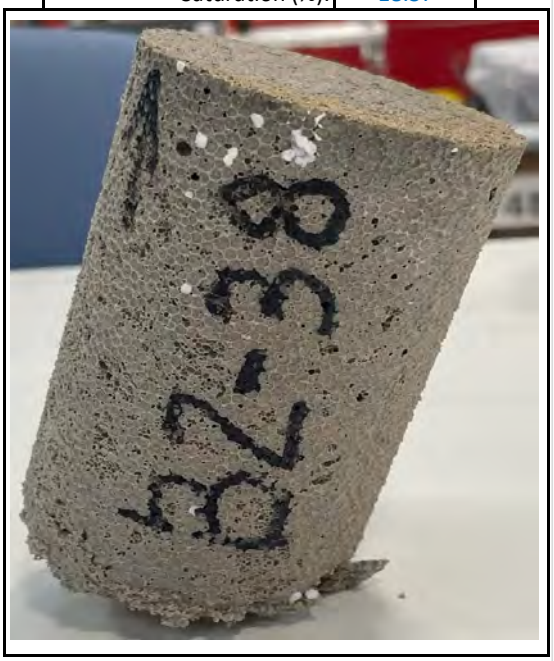
Age (days):	1066
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	843.13
Maximum load (kN):	3.750
Strain Rate (%/min):	2.5
Time to Failure (min):	5.01
Strain at Failure (%):	6.867
Initial yield (psi):	103.79
Modulus (psi):	17924
ASTM C495	
Comp. Strength (MPa):	0.8462
Comp. Strength (psi):	122.74
Corr. Comp. Strength (psi):	**121.19**
ASTM D2166	
Comp. Strength (kPa):	771.8
Comp. Strength (psi):	111.94
Corr. Comp. Strength (psi):	**110.54**
Treatment:	W1

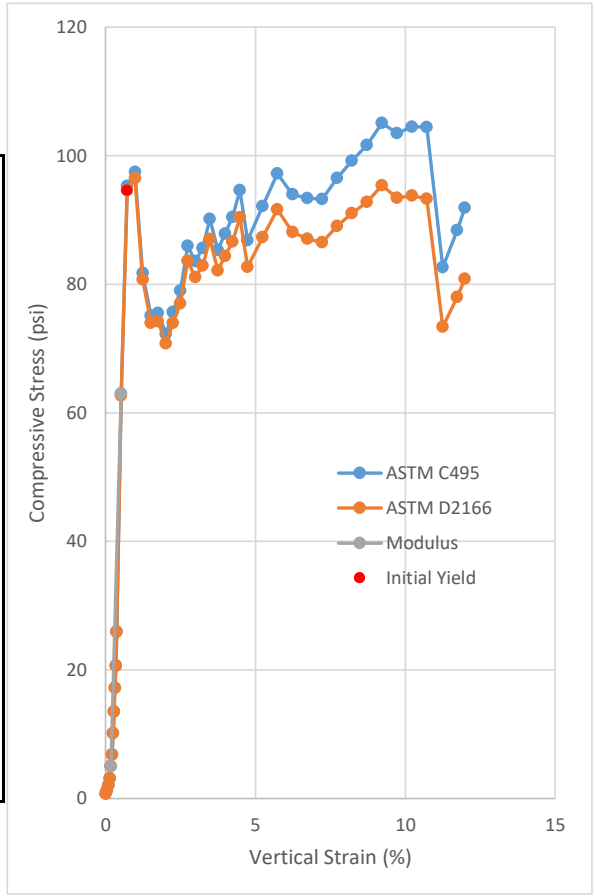


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-38**
Height (in):	5.508
Height (mm):	139.9
Diameter (in):	2.954
Diameter (mm)	75.03
Area (in^2):	6.853
Area (mm^2):	4421
Mass (g):	293.58
Weight (lb):	0.6472
Weight (kN):	0.00287904
Volume (in^3):	37.74
Volume (mm^3):	618510
Density (g/mm^3):	0.0004747
Density (kg/m^3):	474.7
Unit Weight (pcf):	**29.63**
Unit Weight (kN/m^3):	4.655
Wet mass + tare (g):	384.15
Dry mass + tare (g):	296.64
Tare (g):	128.16
Water Content (%)	**51.94**
H:D ratio:	1.865
H:D correction:	0.9886
Saturation (%):	18.37

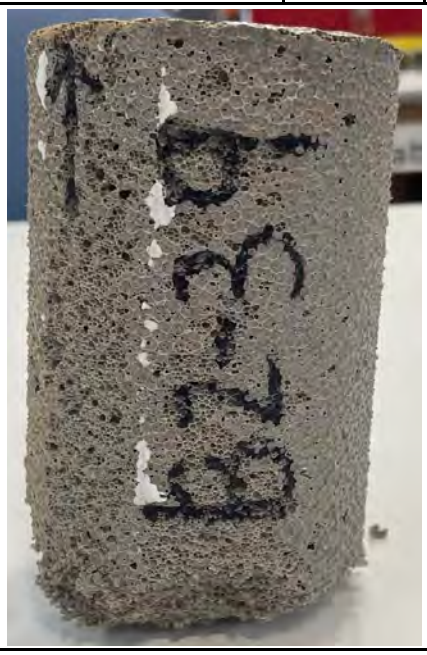
Age (days):	1066
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	720.09
Maximum load (kN):	3.203
Strain Rate (%/min):	2.5
Time to Failure (min):	3.90
Strain at Failure (%):	6.854
Initial yield (psi):	94.61
Modulus (psi):	17057
ASTM C495	
Comp. Strength (MPa):	0.7245
Comp. Strength (psi):	105.08
Corr. Comp. Strength (psi):	**103.88**
ASTM D2166	
Comp. Strength (kPa):	665.3
Comp. Strength (psi):	96.49
Corr. Comp. Strength (psi):	**95.40**
Treatment:	W1



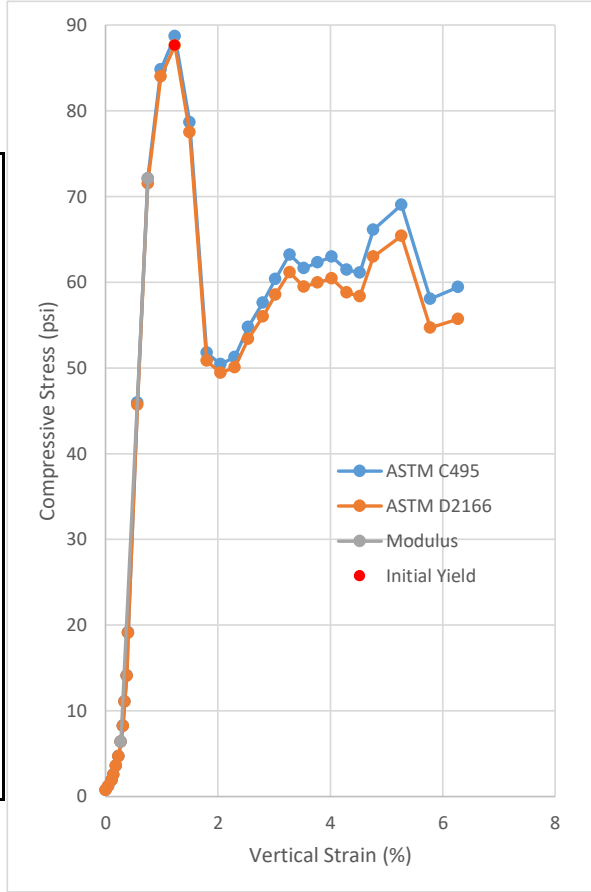


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-39**
Height (in):	5.491
Height (mm):	139.5
Diameter (in):	2.964
Diameter (mm)	75.29
Area (in^2):	6.902
Area (mm^2):	4453
Mass (g):	306.17
Weight (lb):	0.6750
Weight (kN):	0.0030025
Volume (in^3):	37.89
Volume (mm^3):	620969
Density (g/mm^3):	0.0004931
Density (kg/m^3):	493.1
Unit Weight (pcf):	**30.78**
Unit Weight (kN/m^3):	4.835
Wet mass + tare (g):	395.65
Dry mass + tare (g):	297.55
Tare (g):	126.64
Water Content (%)	**57.40**
H:D ratio:	1.852
H:D correction:	0.9877
Saturation (%):	20.37



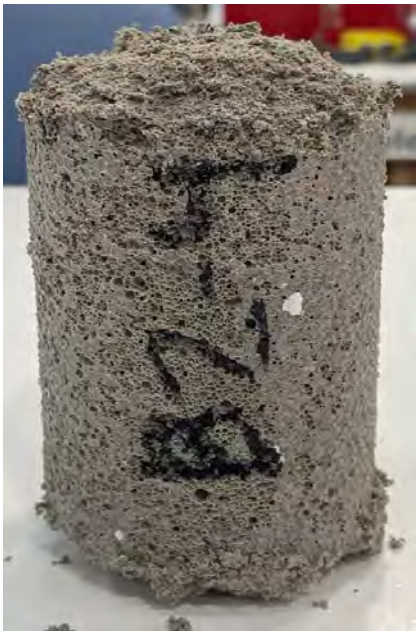
Age (days):	1066
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	612.35
Maximum load (kN):	2.724
Strain Rate (%/min):	2.5
Time to Failure (min):	0.65
Strain at Failure (%):	6.900
Initial yield (psi):	87.63
Modulus (psi):	13667
ASTM C495	
Comp. Strength (MPa):	0.6118
Comp. Strength (psi):	88.73
Corr. Comp. Strength (psi):	**87.63**
ASTM D2166	
Comp. Strength (kPa):	604.2
Comp. Strength (psi):	87.63
Corr. Comp. Strength (psi):	**86.55**
Treatment:	W1

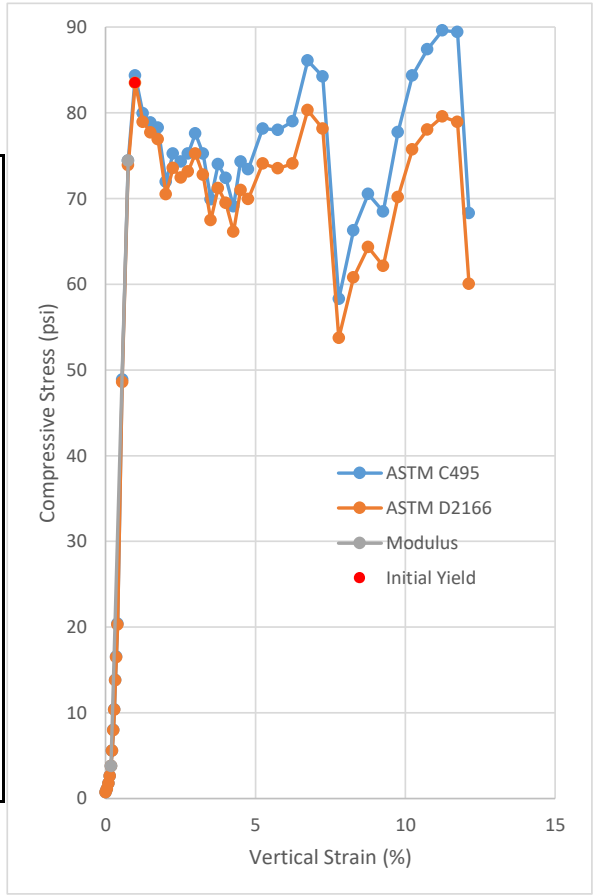


Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-40**
Height (in):	5.512
Height (mm):	140.0
Diameter (in):	2.950
Diameter (mm)	74.94
Area (in^2):	6.836
Area (mm^2):	4411
Mass (g):	299.55
Weight (lb):	0.6604
Weight (kN):	0.00293758
Volume (in^3):	37.68
Volume (mm^3):	617470
Density (g/mm^3):	0.0004851
Density (kg/m^3):	485.1
Unit Weight (pcf):	**30.29**
Unit Weight (kN/m^3):	4.757
Wet mass + tare (g):	382.46
Dry mass + tare (g):	292.20
Tare (g):	127.25
Water Content (%)	**54.72**
H:D ratio:	1.868
H:D correction:	0.9889
Saturation (%):	19.44

Age (days):	1066
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	612.66
Maximum load (kN):	2.725
Strain Rate (%/min):	2.5
Time to Failure (min):	4.68
Strain at Failure (%):	6.835
Initial yield (psi):	83.50
Modulus (psi):	12444
ASTM C495	
Comp. Strength (MPa):	0.6179
Comp. Strength (psi):	89.62
Corr. Comp. Strength (psi):	**88.62**
ASTM D2166	
Comp. Strength (kPa):	575.7
Comp. Strength (psi):	83.50
Corr. Comp. Strength (psi):	**82.57**
Treatment:	W1





Uniaxial Compressive Strength of Lightweight Cellular Concrete

Sample ID:	**B2-41**
Height (in):	5.537
Height (mm):	140.6
Diameter (in):	2.967
Diameter (mm)	75.35
Area (in^2):	6.912
Area (mm^2):	4459
Mass (g):	302.32
Weight (lb):	0.6665
Weight (kN):	0.00296475
Volume (in^3):	38.27
Volume (mm^3):	627111
Density (g/mm^3):	0.0004821
Density (kg/m^3):	482.1
Unit Weight (pcf):	**30.10**
Unit Weight (kN/m^3):	4.728
Wet mass + tare (g):	370.67
Dry mass + tare (g):	287.79
Tare (g):	127.55
Water Content (%)	**51.72**
H:D ratio:	1.866
H:D correction:	0.9888
Saturation (%):	18.65

Age (days):	1070
Cap:	Surface ground, 50 durometer end cap
Maximum load (lb):	590.98
Maximum load (kN):	2.629
Strain Rate (%/min):	2.5
Time to Failure (min):	2.68
Strain at Failure (%):	6.914
Initial yield (psi):	83.34
Modulus (psi):	12981
ASTM C495	
Comp. Strength (MPa):	0.5895
Comp. Strength (psi):	85.50
Corr. Comp. Strength (psi):	**84.54**
ASTM D2166	
Comp. Strength (kPa):	574.6
Comp. Strength (psi):	83.34
Corr. Comp. Strength (psi):	**82.41**
Treatment:	W1