



Report of Discrete Ultra L Extruded Rail Load / Deflection Testing

Client: Precision Wall Systems, Inc., dba Gridworx **Report No.:** 14617-581
Project: Discrete Ultra L 581 Anchor **Date of Service:** 06/04/21
Project No.: 20-00157-900-02

Construction Testing Sciences (CTS) was retained by Precision Wall Systems, Inc., dba Gridworx, to perform compression load / deflection testing on a discrete "L" anchor, identified as Discrete Ultra L Anchor, Part Number 581. This test program consisted of a steel frame with three vertical members at 16" o.c., simulating typical metal stud construction. The 580-A anchor, which measured 34" long, was secured to the frame with 1/4" Ø Grade 8 bolts. The discrete dead load rail, Part Number 581, which measured 4" long, was interlocked into the "L" anchor. One pitch adjustment bolt was utilized with 1/4" engagement. A rigid steel loading bar, simulating stone, was secured to the dead load rail with 1/4" Grade 8 bolts, through which to apply a compression load. One dial gauge was installed underneath the anchor to measure deflection under load. Initially, load was applied in 25 lbs. increments up to 300 lbf., followed by loading in 50 lbs. increments up to a minimum of 800 lbf. Deflection was recorded at each increment throughout the test. A total of five anchors were tested in this manner. Results of these tests are given on the following pages.

We trust the information provided is acceptable for your use. If you have any questions or require additional information please contact us.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Jack Gary".

Jack Gary
General Manager



Gridworx Extruded Rail Compression Loading

Date of Service: 06/04/21

Sample ID: Discrete Ultra L 581 Anchor

Report Number: 14617-581

Sample #: 1

Load (lbs)	Deflection (inches)
25	0.000
50	0.008
75	0.030
100	0.036
125	0.044
150	0.049
175	0.054
200	0.058
225	0.061
250	0.063
275	0.065
300	0.068
350	0.074
400	0.083
450	0.093
500	0.105
550	0.119
600	0.136
650	0.156
700	0.184
750	0.222
800	0.286



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Sample #: 2

Load (lbs)	Deflection (inches)
25	0.000
50	0.007
75	0.020
100	0.030
125	0.038
150	0.043
175	0.048
200	0.053
225	0.058
250	0.063
275	0.067
300	0.072
350	0.080
400	0.090
450	0.101
500	0.112
550	0.123
600	0.136
650	0.150
700	0.164
750	0.187
800	0.228
850	0.278
900	0.309



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Sample #: 3

Load (lbs)	Deflection (inches)
25	0.000
50	0.000
75	0.000
100	0.000
125	0.000
150	0.004
175	0.010
200	0.033
225	0.041
250	0.050
275	0.059
300	0.068
350	0.084
400	0.099
450	0.113
500	0.127
550	0.141
600	0.157
650	0.176
700	0.201
750	0.241
800	0.312
850	0.330
900	0.337



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Sample #: 4

Load (lbs)	Deflection (inches)
25	0.000
50	0.009
75	0.021
100	0.056
125	0.060
150	0.064
175	0.068
200	0.072
225	0.076
250	0.082
275	0.088
300	0.095
350	0.111
400	0.125
450	0.141
500	0.160
550	0.175
600	0.195
650	0.220
700	0.245
750	0.285
800	0.347
850	0.389
900	0.414



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Sample #: 5

Load (lbs)	Deflection (inches)
25	0.000
50	0.003
75	0.011
100	0.030
125	0.046
150	0.054
175	0.059
200	0.065
225	0.072
250	0.078
275	0.084
300	0.091
350	0.105
400	0.120
450	0.136
500	0.149
550	0.165
600	0.181
650	0.199
700	0.220
750	0.242
800	0.257
850	0.269
900	0.280