



Client: Post-Tensioned Products, Inc.
9140 N CR 229
Sanderson, FL 32087

Date of Service: 12/23/24

Report No.: 16283

Project: Barrier Cable Anchors / Components

Project No.: 24-1509

Scope of Work

Construction Testing Sciences (CTS) was retained by Post-Tensioned Products, Inc. to perform ultimate tensile testing on barrier cable anchors and components for compliance with the Post Tension Institute (PTI) specifications. The samples shall obtain a minimum of 95% of the Minimum Ultimate Tensile Strength (MUTS) of 0.5" \varnothing seven-wire strand, which has a minimum ultimate tensile strength of 41,300 lbs. Note: 95% of MUTS = 39,235 lbs. tension load.

Test Sample Components

- NAA1 - Non-adjustable Anchor - Zinc plated, 0.5" cable
- NAA2 - Non-adjustable Anchor - Zinc plated, for 3/4" all thread
- ADA1 - Adjustable Anchor - Zinc plated, 0.5" cable
- SC2 - Splice Coupler - Zinc plated, 0.5" cable
- 0.5" seven-wire cable

Test Equipment

- Tinius-Olsen Super L 120 universal test machine, calibrated 06/14/24
- Reusable 0.5" chucks (anchors)

Test Setup

The barrier cable anchors were tested with a 48" long piece of cable inserted into the anchor.

NAA1 - The threaded stem extended through a steel plate on the top platen of the test machine and secured with a nut.

NAA2 - A piece of 3/4" high-strength all thread was threaded into the anchor and inserted through a steel plate on the top platen of the test machine and secured with a nut.

ADA1 - A piece of 3/4" high-strength all thread was threaded into the anchor and inserted through a steel plate on the top platen of the test machine and secured with a nut.

The other end of the cable on these samples extended through the bottom platen of the test machine, through a steel plate, and secured with a reusable chuck.



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Test Setup Cont'd.

SC2 - Two pieces of cable, approximately 24" long were inserted into each end of the coupler. The other end of the cables extended thru the top and bottom platens, through a steel plate, and were secured with reusable chucks.

Tension load was applied to each sample with a crosshead separation speed of 0.85"/min. Loading was continued to failure, at which time the ultimate load was recorded and the failure mode was observed. The ultimate load was calculated to determine the percent of MUTS. Results of these tests are given in the table below.

Results of Tests			
Sample ID	Ultimate Load (lbs.)	Percent of MUTS	Failure Mode
NAA1	41,000	99.3	1 wire broke at anchor
NAA2	39,500	95.6	1 wire broke at anchor
ADA1	39,300	95.2	1 wire broke at anchor
SC2	39,600	95.9	1 wire broke at anchor

We appreciate the opportunity to provide Post-Tensioned Products, Inc. these services. If you have any questions or require additional information do not hesitate to contact us.

Respectfully submitted,

Jack Gary
General Manager