



Test Report No: TR2020-010
Date: 24/09/2020

Collated Ribbed vs Loose Barbed

QSI Safety
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Delfast representative Pomare Hapeta-King conducted series of static pull tests with the Delfast 4.00mm by 50mm Ribbed Post Staple against the Delfast Loose 4.00mm by 50mm Post Staple.

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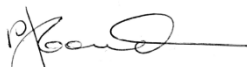
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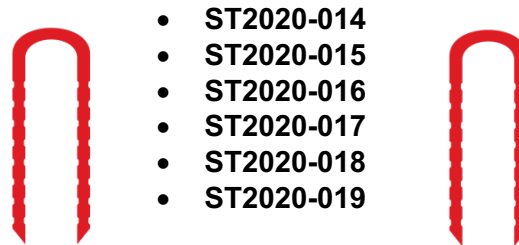
EXECUTIVE SUMMARY

- **Objectives**

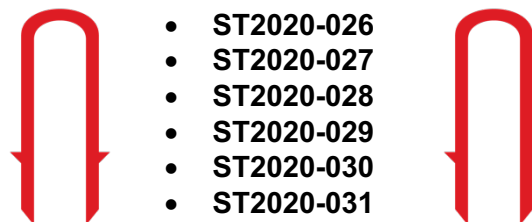
A static test is performed in the static pull test rig to determine the static holding strength of staples. The test specimen is a staple that is stapled in a suitable wooden post. The force in which the staple releases is recorded. A series of six tests is conducted, pull testing one staple at a time and then with the data the average over all six tests is calculated.

Specimens

Delfast 4.00mm by 50mm Collated Ribbed Post Staples



Delfast 4.00mm by 50mm Loose Barbed Staples



Equipment

The test was done on the QSI Pull Test Rig used in conjunction with the Load Cell B

TEST PROGRAM TABLE 1;

Designation / Attachment Points	Test	Description
Staples into post and left for two weeks for them to set using fencing No8 wire as an attachment point	Static pull ST2020-014 to ST2020-019 & ST2020-26 to ST2020-31	Loaded until staple pulls out of the post

Assessment

Test numbers:- ST2020-014 to ST2020-019 (Static Pull Test)

- Staple the Delfast 4.00mm by 50mm Collated Ribbed Post Staples into two fencing post with three staples in each post using a **NAC-CP400 Delfast Cordless Post stapler** then leave to set for two weeks. Conduct a series of six tests, pull test one staple at a time. Calculate the average over all six tests.

Test numbers:- ST2020-026 to ST2020-031 (Static Pull Test)

- Hammer the Delfast 4.00m by 50mm Loose Barbed Staples into two fencing post with three staples then leave to set for two weeks. Conduct a series of six tests, pull test one staple at a time. Calculate the average over all six tests.

Conclusion:

Test	Delfast 4.00mm by 50mm Collated Ribbed Post Staples	Delfast 4.00m by 50mm Loose Barbed Staples
1	207kg	204kg
2	198kg	188kg
3	342kg	287kg
4	243kg	207kg
5	217kg	231kg
6	222kg	218kg
AVERAGE	238.17kg	222.5kg

- The Delfast 4.00mm by 50mm Collated Ribbed Post Staples were pull tested one staple at a time and then with the data we have calculated the average over all six tests.

Delfast 4.00mm Ribbed Staple average over six tests = 238.17kg of force achieved before the staple was pulled from the fence post with a range from **198-342kg** of force

- The Delfast 4.00m by 50mm Loose Barbed Staples were pull tested one staple at a time and then with the data we have calculated the average over all six tests.

Loose 4.00mm by 50mm Barbed Staples average over six tests = 222.5kg of force achieved before the staple was pulled from the fence post with a range from **188-287kg** of force

Conditions of report

The test specimen(s) identified in this report has been chosen and supplied by Delfast. The results contained in this report are only applicable to the test specimen(s) supplied and tested.

The tests were conducted as instructed by Delfast representative Pomare Hapeta-King.

The author of this report may not necessarily be the testing officer.

The checking officer is independent of the author and has only performed checks for the transfer, correctness and completeness of data and the comprehension of this report.