

November 21, 2025

Titan Building Products

5390 Canotek Road, Unit 14
Ottawa, ON.
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ATTENTION: Richard Bergman

SUBJECT: Titan Building Products – Titan Guardrail Assemblies | Structural Review
Project Number: S697-25

As requested, Vriend Engineering Inc. has reviewed the Titan Guardrail Assemblies produced by Titan Building Products.

The purpose of this report is to provide a structural review of the Titan Guardrail Assembly in accordance with the new 2024 Ontario Building Code requirements.

The 2024 Ontario Building Code change includes the following:

- **Section 4.1.5.14 – Sentence 4:** The size of the opening between two adjacent vertical elements within the guard shall not exceed the limits required by Part 3 when each of these elements is subjected to a horizontal specified live load of 0.1 kN applied in opposite directions in the in-plane direction of the guard so as to produce the most critical effect.

Please note that there was only one change to the 2024 Ontario Building Code as noted above. The remainder of the loading requirements for guardrails remains the same in the 2024 Ontario Building Code.

Test Reports:

We are in receipt of the original test reports for the Titan Guardrail Assembly produced by Intertek Testing Services as follows:

- 100390597TOR-003A 18' Section 4x4x42" SPF
- 100390597TOR-003B 18' Section 4x4x42" SPF
- 1003645361TOR-003 18' Section 6x6 4x4x42" SPF
- 103914490TOR-003 12' Section 6x6 4x4x42" SPF W. Cedar
- 100604363TOR-004B 7' Section 6x6x42" SPF
- 100604363TOR-004C 6' Section 6x6x42" SPF

The original test loading requirements were not changed and the original test reports for the Titan Guardrail Assembly, as noted above, remain valid for the 2020 National Building Code of Canada and the 2024 Ontario Building Code.

We are in receipt of the report produced by Intertek Testing Services, Report No. 106270124TOR-001, Issued 10/30/25, for Titan Building Products to address the 2024 Ontario Building Code revision to Section 4.1.5.14 – Sentence 4.

The new tests were carried out in accordance with the loads specified in the 2020 National Building Code of Canada and the 2024 Ontario Building Code, Section 4.1.5.14 – “Loads on Guards and Handrails”, sentence 4.

Conclusion:

Based on the test results, the Titan Building Products Snap’n Lock balusters met the requirements of Section 4.1.5.14 – “Loads on Guards and Handrails”, Sentence 4 of the 2020 National Building Code of Canada and the 2024 Ontario Building Code.

Since the remainder of the loading requirements for the 2020 National Building Code of Canada and the 2024 Ontario Building Code have not changed, the original test results for the Titan Guardrail Assembly remains valid.

Based on our review, we confirm the Titan Guardrail Assembly, when installed in strict accordance with Titan Building Products installation instructions, are found to be in conformance with the 2020 National Building Code of Canada and the 2024 Ontario Building Code, Section 4.1.5.14 – Loads on Guards and Handrails. Please note the Titan Guardrail Assemblies are only to be installed in residential guardrail applications in accordance with the 2020 National Building Code of Canada and the 2024 Ontario Building Code. Other applications of the Titan Guardrail Assembly are not permitted.

We trust the preceding is sufficiently clear and acceptable. If you have any questions, please contact the undersigned.

Yours truly,

VRIEND ENGINEERING INC.



Jason Vriend, P. Eng.

