

June 29, 2019

Via Email: [rbergman@titanbuildingproducts.com](mailto:rbergman@titanbuildingproducts.com)

**Titan Building Products**

5390 Canotek Road, Unit 14  
Ottawa, ON.  
K1J 1H8

**ATTENTION:** Richard Bergman

**SUBJECT:** Titan Building Products – Snap’n Lock Baluster | Structural Review  
Project Number: S184-19

As requested, Vriend Engineering Inc. has reviewed the Snap’n Lock Balusters produced by Titan Building Products.

**Test Report:**

We are in receipt of the Intertek Testing Services NA Ltd. Test Report No. 102720794TOR-002 dated 04/12/18 for Titan Building Products. The load testing of the infill Snap’n Lock Baluster was completed on January 19, 2018. The testing was carried out in accordance with the loads specified in the 2012 Ontario Building Code, Section 9.8.8.2 – Loads on Guards.

**Loads on Guards:**

The 2012 Ontario Building Code, Section 9.8.8.2 Loads on Guards consists of guards within dwelling units and exterior guards serving not more than 2 dwelling units.

**Minimum Specified Loads:**

- **Horizontal Load Applied Inward or Outward on Elements Within the Guard, Including Solid Panels and Pickets:** Concentrated Load of 0.5 kN (112 lbf) load applied over an area with maximum width of 300 mm and maximum height of 300 mm.

**Tested Guardrail Assembly:**

The tested guardrail assembly consisted of the following: The infill balusters are composed of ¾ inch diameter T6066 aluminum tubes spaced at 4 inches on centre. The balusters are fitted to the top and bottom 2x4 cedar rails using polycarbonate Snap’n Lock Baluster Connectors. Each connector was fastened to the rails by a single #8 x 1-¼ inch long round head screw.

**Conclusion:**

Based on the test results, the infill Snap'n Lock balusters safely resisted the specified loading requirements as noted above. Based on our review, we confirm the Snap'n Lock balusters, when installed in strict accordance with Titan Building Products installation instructions, are found to be in conformance with the 2012 Ontario Building Code, Section 9.8.8.2 – Loads on Guards. Please note the Snap'n Lock balusters are only to be installed in residential guardrail applications in accordance with the 2012 Ontario Building Code. Other applications of the Snap'n Lock balusters 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.

