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Certificate of Authorization Stratum Engineering Inc. Certificate # 100692879

August 24, 2026

File No.: V-01-26

Vista Railing Systems Inc.

23282 River Road

Maple Ridge, B.C. Canada V2W 1B6

Attention: Mr. Chizoba Nwobodo and Mr. Cameron MacArthur

Re: Lag Screw Alternative Fasteners

According to Vista Recommended Mounting and Fastening Guide for Residential Single Dwelling Unit Deck Guardrail Systems sealed March 25, 2025, there are installation configurations for 2" and 2 1/2" posts that specify the use of 5/16" diameter standard lag screws with up to 5 1/2" of minimum thread length embedment into solid No. 1/No. 2 or better D.Fir-L or SPF.

SPAX or GRK RSS structural screws of minimum 5/16" diameter, self-drilling, exterior rated, ACQ rated (if required), washer head, and heat treated, may be used as approved alternative screws as follows:

S - SPAX 5/16"x 4" total length screw with Hex Washer Head and 2.993" thread length

in lieu of standard 5/16" lag screw with up to 5" threaded length embedment

G1 - GRK RSS 5/16"x 4" total length screw in lieu of standard 5/16" lag screw with up to 4" threaded length embedment

G2 - GRK RSS 5/16"x 5-1/8" total length screw in lieu of standard 5/16" lag screw with up to 5" threaded length embedment

Standard lag screws require two specific diameter holes to be pre-drilled – one for the root diameter of the thread and one for the shank diameter. The shank hole should be drilled to precisely the depth required to accommodate the length of the full diameter shank. This procedure is challenging in the field and consequently, achieving the full design withdrawal resistance of standard lag screws is equally challenging. The alternate SPAX and GRK RSS screws are much more likely to be installed correctly as they do not require any pre-drilling in typical North American Softwoods, thereby significantly increasing the likelihood of achieving full design withdrawal resistance compared to that of standard lag screws.

Therefore, the use of the aforementioned 5/16" diameter SPAX and GRK RSS lag screws are acceptable alternatives to use, as specified above, and as such are in conformance with the applicable structural requirements of the 2024 Ontario Building Code and the National Building Code of Canada 2025 for this particular application for relevant Vista residential guard installations.

Note that particular care must be taken to not over-tighten these fasteners, as this could reduce the withdrawal resistance as in the case for standard lag screws. Should screws be required to penetrate additional layers of non-structural material, fastener length must be increased accordingly.

Sincerely,

Jay K. Pierson, P.Eng.

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