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March 16, 2012

Letter Report No. 100604363TOR-002L
Project No. G100604363

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Subject: R&D Testing of Railing Post Anchor Samples

Dear Mr. Bergman,

This letter represents the results of the evaluation of six (6) Titan Primus 6 X 6 anchor samples. Three (3) samples were evaluated in tension. Four samples were evaluated in compression.

The samples evaluated in tension were fastened to SPF posts using 4 equally spaced 3/8" X 5" lags about the centre. The base of the post anchor was then fastened to a concrete slab through the pre made holes in the post anchor using 8, 1/4" X 2 3/4" Tapcon concrete lag screws. At the time of the test, the concrete strength was 37MPa. The results of the testing are found below.

Vertical Tension Test of 6 X 6 Primus Post Anchor		
Specimen	Achieved Load (lbf)	Failure Method
1	7100	Max cylinder travel reached.
2	6800	Fasteners pulled out from wood post.
3	6600	Fasteners pulled out from wood post.

The samples evaluated in compression were fastened to SPF posts using 4 equally spaced 3/8" X 5" lags about the centre. The assembly was then placed onto the Table of a Universal Testing machine and compressed to the loads found below.

Vertical Compression Test of 6 X 6 Primus Post Anchor					
Specimen	Load at initial steel deformation (lbf)	Load at which steel tube contacted table max (lbf)	Load at which bolt heads contacted table(lbf)	Max load achieved (lbf)	Failure Method
1	N/A	N/A	N/A	118765*	N/A
2	34000	50000	74600	112745*	N/A
3	30000	34000	76000	112228*	N/A
4	23000	27000	50000	61513*	Wood column failed

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- ***NOTE: Application of Load was terminated prior to attaining the maximum load capacity of testing machine which was 120000 lb.**

This investigation was authorized by signed proposal number 500351089, dated December 20, 2011.

Samples were evaluated from March 14, 2012 to March 16, 2012. Sample preparation and testing was conducted at the Intertek facility located at 6225 Kenway Drive, Mississauga, Ontario.

If there are any questions regarding the results contained in this report, or any of the other services offered by Intertek, please do not hesitate to contact the undersigned.

Reported by: Gabriel Fernandes
Title: Technician

Reviewed by: Vern Jones
Title: Technologist

Signature:



Signature


