

6.4 Guardrail Components

The scope of testing performed and reported herein was intended to evaluate the *LandMarke*[®] guardrail system consisting of the following components (see Appendix A for drawings):

Top Rail - 1-3/4 in high by 3 in wide by 0.06 in wall, T profile, PVC mono-extrusion

Bottom Rail - 2-1/4 in high by 1-3/4 in wide by 0.06 in wall, rectangular profile, PVC mono-extrusion

Reinforcing Inserts

10 ft Top rail - 1.54 in high by 2.84 in wide by 0.05 to 0.10 in wall, open T profile, 6063-T6 aluminum extrusion

6 ft and 8 ft Top rails - 1.55 in high by 2.78 in wide by 0.06 in wall, flanged inverted U profile, 6063-T6 aluminum extrusion

Bottom rails - 2.05 in high by 1.55 in wide by 0.05 in wall, H profile, 6063-T6 aluminum extrusion

Balusters - 1-3/8 in square by 0.07 in wall, co-extruded (capped) PVC baluster

- 1-3/8 in square-ended, hollow, post-extrusion thermoformed PVC baluster by Tuscan Manufacturing, LLC (Tuscan “Turned” balusters were included in one guardrail structural test assembly but were not qualified)

Support Block - Baluster cut to length and located at mid-span of bottom rail

Rail Bracket - 1.87 in high by 2.05 in wide by 0.11 / 0.17 in thick saddle and 0.35 in thick back wall, aluminum die casting

Post Sleeve - 4 in square by 0.12 wall, PVC co-extrusion (capped)

Post - Conventional preservative-treated southern pine (SP) wood 4x4

6.5 Fastening Schedule

Connection	Fastener
Rail Bracket to Post	Three #8 - 8 x 1-5/8 in, flat-head, #2 square-drive, T-17 point, stainless steel screws
Rail Bracket to Rail	Two #10 - 16 x 3/4 in, pan-head, #2 square-drive, plated steel, Tek screws