
CHECKLIST #0460 FOR THE APPROVAL OF: RAILINGS (STAIRS & BALCONY)

- Basic Requirements Checklist.
- One set of the manufacturer's 'approval document' including:
 - a) Section of all components including structural properties,
 - b) Dimension and spacing of all components, and
 - c) All connection details between components.
- Calculations for the structural integrity of the railing to sustain the loading conditions showing:
 - a) Bending, reaction and deflection of all members: post, picket, top-rail and bottom-rail for all loading conditions,
 - b) Details of all connections between railing components, including fasteners types, frequency and sizes, and
 - c) Anchoring method of posts considering the largest reaction.
- One set of manufacturer's design drawings marked and verified by the testing laboratory.

The following current laboratory tests and test reports in compliance with protocol TAS 301.

Glazed Railing (If glass, only laminated glass is allowed.)

- Impact test according to ANSI Z 97.1 with a load of 400 ft.lb. Three specimens are required. Glazing infill must remain in the frame after the test, and any resultant cracks shall not allow a 3" metal sphere to pass through.
- Static wind load test on complete assembly per TAS202. Assembly consists of a minimum of 3 glass lites. Test shall be in both positive and negative directions. The test load shall be 2 times the design load with a recovery of 80%. One assembly is required.
- TAS201 if posts that support the top rail are substituted with glass. One assembly is required, and must consist of minimum 3 lites, where all lites are to be impacted from the exterior side. After impacts, the glass panels are required to continue supporting the top rail and all applicable loads; concentrated, distributed and wind (see FBC 1607.9.1, 1607.9.1.1, and 1607.9.1.2).

Balustrade & Plastic Railing

- Perpendicular to railing load test, with loading per conditions specified in section 1607.9.1, 1607.9.1.1, and 1607.9.1.2 of the Florida Building Code, on a minimum 8-ft section and 3 posts. Test load shall be 2 times the design load, with minimum 80% recovery.
- Plastic Railing shall be tested and comply with all the requirements of the plastic checklist.

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Railings

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