
**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 1618.4.6).

Balustrade & Plastic Railing

- Perpendicular to railing load test, with loading per conditions specified in section 1618.4.6 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.

