

Code Approval Information

What is the ICC?

The ICC (International Code Council) is an independent, nonprofit organization responsible for the development of national model construction codes. The ICC was formed by the Building Officials and Code Administrators International, Inc. (BOCA), the International Conference of Building Officials (ICBO) and the Southern Building Code Congress International, Inc. (SBCCI). The ICC combined the efforts of these three organizations to produce a single set of comprehensive and coordinated requirements for building safety. Among the codes developed by the ICC are the IRC (International Residential Code) and the IBC (International Building Code).

ICC Evaluation Service, Inc. (ICC-ES) is the leading source of technical information on building codes, products and technology in the United States. ICC-ES conducts technical evaluations of building products, components, methods, and materials. Building industry professionals look to ICC-ES evaluation reports for evidence that products and systems meet code requirements.

What is the International Residential Code?

The IRC (International Residential Code) is the culmination of the standards established by the three model building code groups (BOCA, ICBO and SBCCI). The IRC addresses the design and construction of one- and two-family dwellings and multiple single-family townhouses constructed in a group of three or more units, with at least two sides of the unit exposed from foundation to roof, not more than three stories in height.

What is the International Building Code?

The IBC (International Building Code) also combines the standards established by BOCA, ICBO and SBCCI. The IBC addresses the design and installation of building systems through requirements emphasizing performance. The provisions of this code apply to the design and construction of all buildings and structures, except for the buildings and structures that comply with the IRC.

What are the requirements of the IRC?

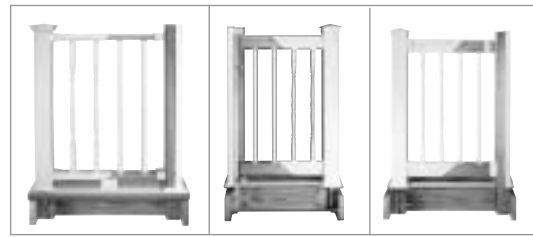
The IRC stipulates that railing products meet the following criteria:

- Porches, balconies or raised floor surfaces more than 30" above grade
- Flat rails not less than 36" in height
- Stair rails not less than 34" in height, measured vertically from the nose of the tread
- Floor spacing on flat applications of not more than 4"
- Baluster spacing on flat applications of not more than 4"
- Triangular openings on open sides of stairways not more than 6"

How does a product achieve IRC compliance?

In order to achieve IRC compliance, a product must go through a stringent evaluation process:

- An independent testing agency approved by the ICC must test the product for compliance, supplying certified test results upon completion



- Railing must comply to a single load of 200 lbs. applied at any point along the top rail

Note: Because vinyl railing systems are considered an alternative material, design, or method of construction, load requirements have an additional factor of safety of 2.5, exception for deflection requirement (test should show a 500 lb. sustained load capacity to any direction along the top rail).

What are the requirements of the IBC?

The IBC includes the following requirements:

- Open walking surfaces, mezzanines, industrial equipment platforms, stairways, ramps and landings which are located more than 30" above grade
- Flat rails not less than 42" in height
- Stair rails not less than 34" and not more than 38" in height measured vertically from the nose of the tread
- Floor spacing on flat applications of not more than 4"
- Baluster spacing on flat applications of not more than 4"
- Triangular openings on open sides of stairways not more than 6"

How does a product achieve IBC compliance?

To attain IBC compliance, a product must go through a stringent evaluation process, which includes:

- An independent testing agency approved by the ICC must test the railing product for compliance, supplying certified test results upon completion
- A concentrated load test of 50 lbs. per lineal foot applied at any point along the top rail
Note: Because vinyl railing systems are considered an alternative material, design, or method of construction, load requirements have an additional factor of safety of 2.5, exception for deflection requirement.
- Supporting data where necessary to assist in the approval of materials or assemblies not specifically provided for in the code, i.e., valid research reports from approved sources