The text and illustrations included in this guide represent tables and illustrations from the 2009 International Residential Code and the opinions of the Township of Derry Community Development Department. This guide is for information purposes and should not be misconstrued as a full and complete interpretation of the Building Code.
Table 301.5, Guardrails and handrails shall be capable of supporting a concentrated load of 200 pounds per square foot, applied in any direction at any point along the top.

Section 311.7.7 of the 2009 IRC, Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers.

Section 311.7.7.1 of the 2009 IRC, Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34” and not more than 38”.

- Noncircular
  - [R311.7.7.3 Type I]
  - Perimeter: 4” – 6-1/4”

- Circular
  - [R311.7.7.3 Type II]
  - Perimeter: > 6-1/4”

- Recessed
  - [R311.7.7.3 Type III]
  - 1-1/4” – 2-3/4”

- Plan View of Handrail Termination

- Mounted to Wall
  - 1-1/2” min.
  - 1-3/4” min.
  - 34”-38”
  - to nosing of stairs

- Mounted to Guard
  - 1-1/2” min.
  - 1-3/4” min.
Exceptions:
#1. The use of a volute, turnout or starting easing shall be allowed over the lowest tread.
#2. When handrail fittings or bendings are used to provide continuous transition between flights, the transition from handrail to guardrail, or used at the start of a flight, the handrail height at the fittings or beddings shall be permitted to exceed the maximum height.

- Section 311.7.7.2 of the 2009 IRC, Handrails for stairways shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less then 1 ½” between the wall and the handrails.

Exceptions:
#1. Handrails shall be permitted to be interrupted by a newel post at the turn.
#2. The use of a volute, turnout, starting easing or starting newel shall be allowed over the lowest tread.