

## EXAMPLE OF A TYPICAL STAIR DETAIL

This is not intended to indicate complete code compliance but is intended to provide information about a flight of stairs, handrail and guard requirements, etc.

For complete code information consult the NJ 2006 IRC, sections R311.5.3 and R312.

### Minimum Uniformly Distributed Live Loads

Guardrails and handrails <sup>d</sup>	200 lbs.
Guardrails in-fill components	50 lbs. per square foot
<sup>d</sup> A single concentrated load applied in any direction at any point along the top.	

### Stairs

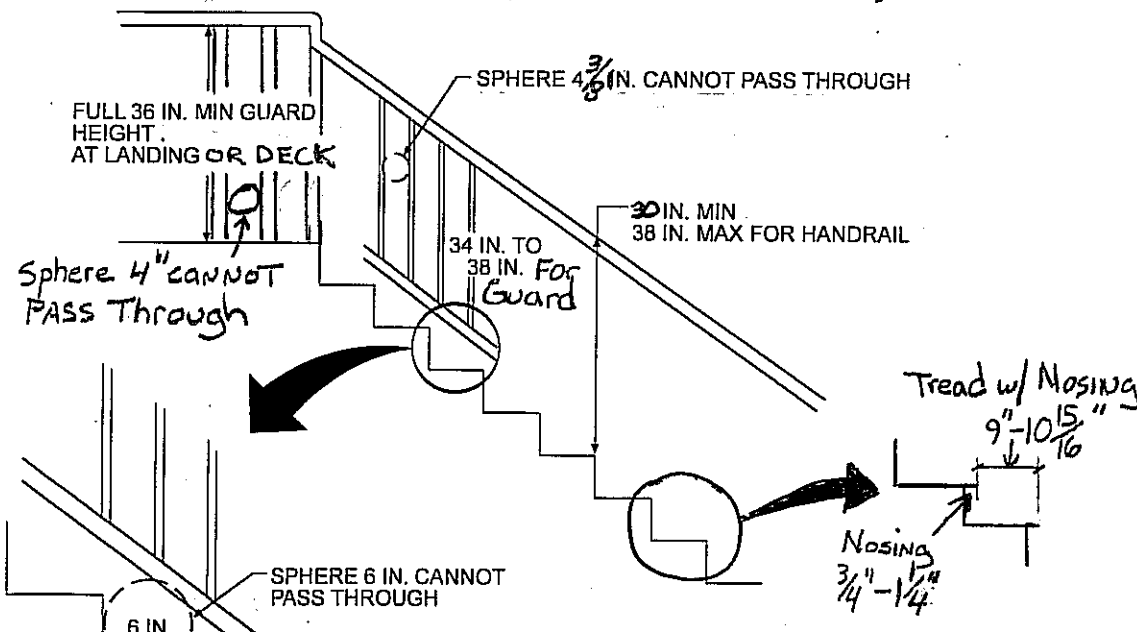
- Risers and treads are to be uniform - the variation between risers shall be a maximum of  $\frac{3}{8}$ " from the smallest to the largest.
- Minimum 3 feet in clear width.
- Landings at stairs are required at the top and bottom and must be a minimum of 3 ft. by 3 ft.
- Riser height maximum of  $8\frac{1}{4}$ ".
- Tread depth minimum of 9" measured from nosing to nosing, - minimum nosing projection of  $\frac{3}{4}$ ", maximum nosing of  $1\frac{1}{4}$ " if tread less than 11"
- Solid risers required except open risers allowed as long as a 4" sphere will not pass between the treads.

### Handrails

- Required on at least one (1) side of all continuous run of treads or flight with 4 or more risers.
- Minimum of 30" and maximum of 38" high measured vertically from top of nosing of tread.
- Equivalent graspability of all handrails is required. There are 2 types of handrails, (See NJ 2006 IRC, section R311.5.6.3 for complete graspability requirements)
- If mounted on a wall or a guardrail, minimum space between the wall or guard and the handrail is  $1\frac{1}{2}$ ".
- Ends of the handrails shall be returned to a post or wall or terminate into a post or safety terminal.

### Guards

- Required when a landing or deck is over 30" above grade.
- Must have less than 4" spacing between balusters @ landings or decks (so that a 4" sphere will not pass between the balusters).
- Required on an open side of stairs over 30" above grade.
- Must have less than  $4\frac{3}{8}$ " spacing between balusters @ stairs (so that a  $4\frac{3}{8}$ " sphere will not pass between the balusters - except at the tread to riser connection in which case sized so that a 6" sphere will not pass through this riser and tread connection opening).
- Minimum height of 36" for landings and decks, 34" when installed on stairs - both measured vertically from the nosing of the tread or the walking surface of the landing/deck.



NOT TO  
SCALE  
  
FOR  
REFERENCE  
ONLY