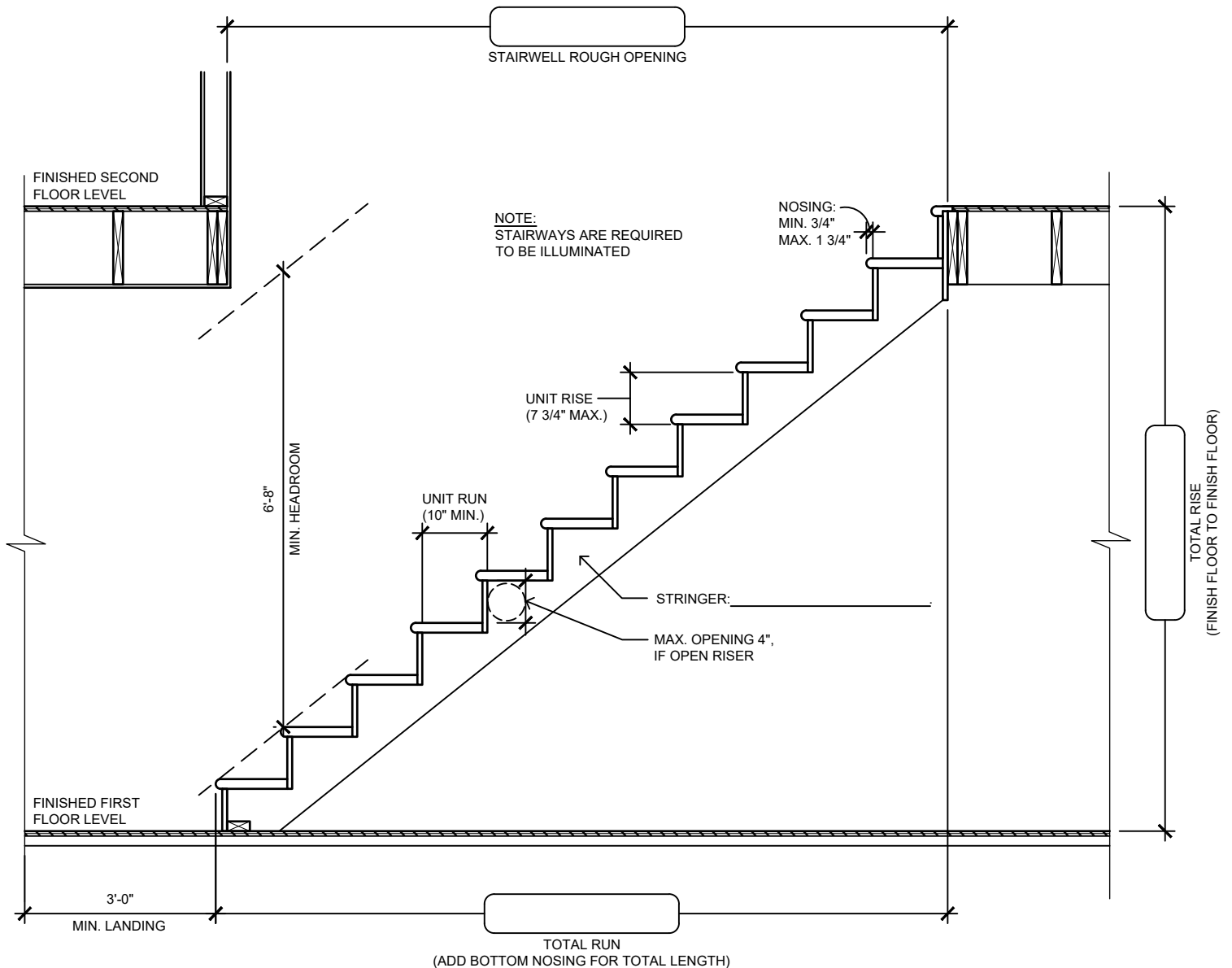


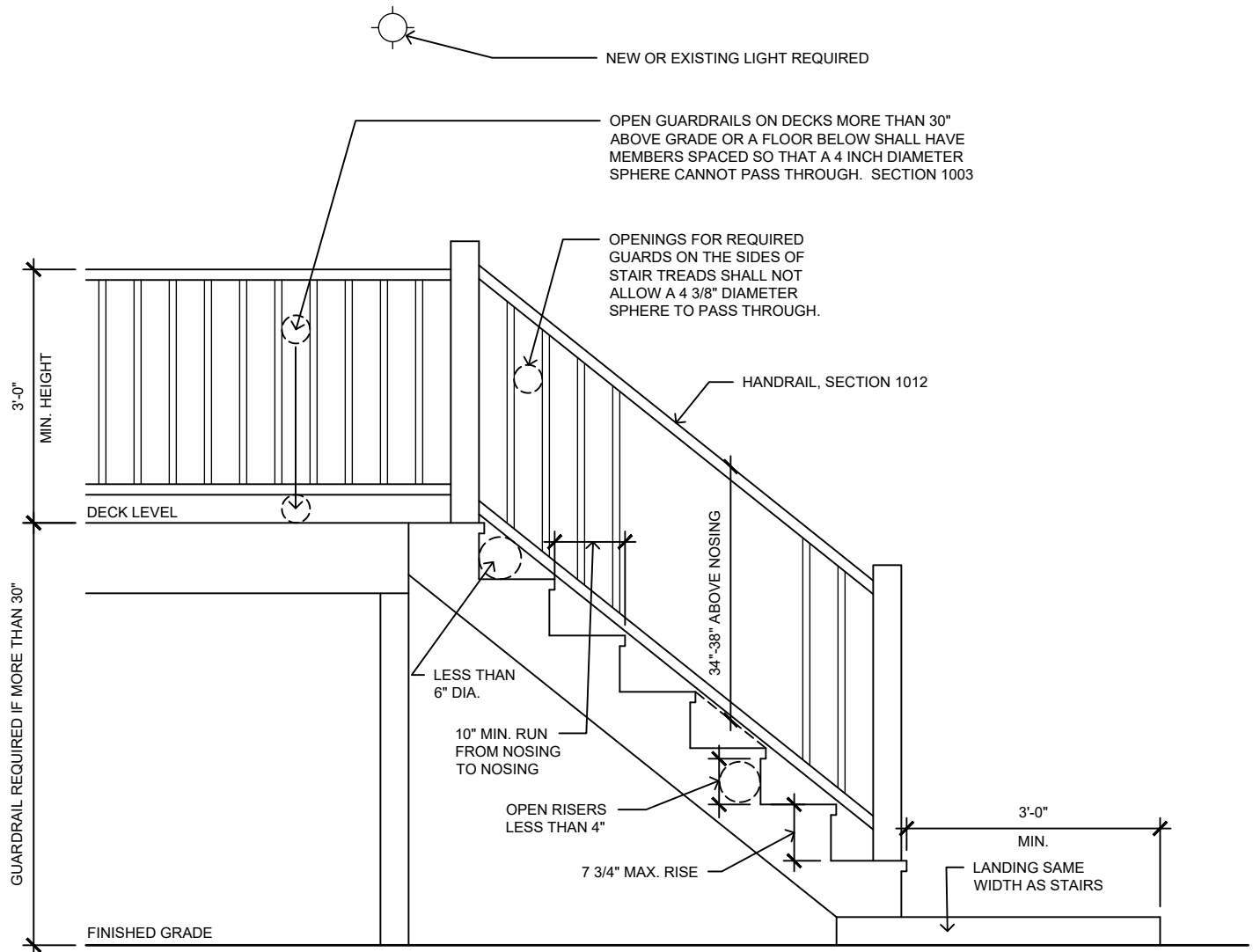
## STAIR SECTION



$$\text{UNIT RISE} = \text{TOTAL RISE} / \text{NUMBER OF RISERS}$$

$$\text{UNIT RUN} = \text{TOTAL RUN} / \text{NUMBER OF TREADS}$$

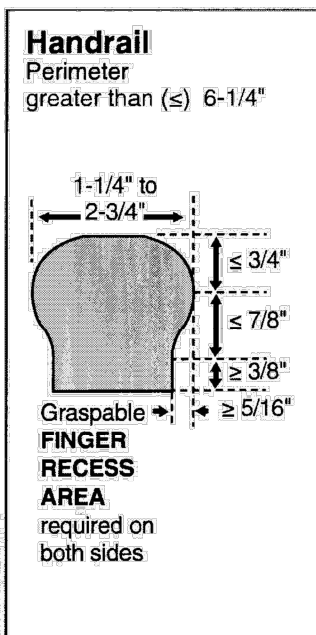
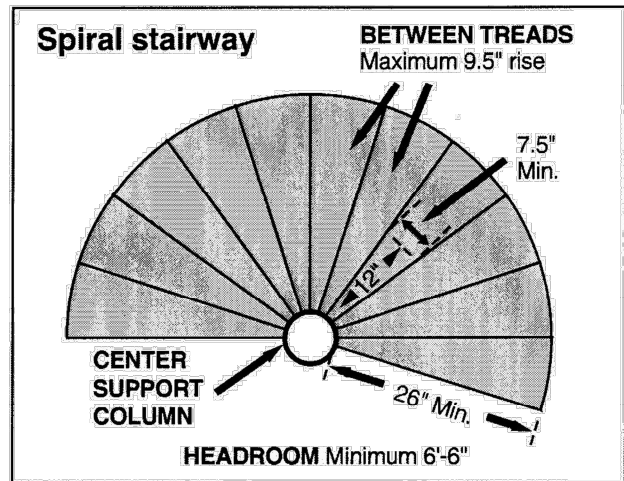
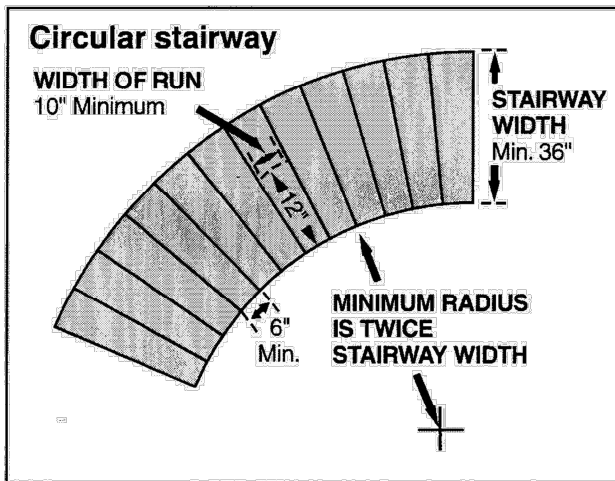
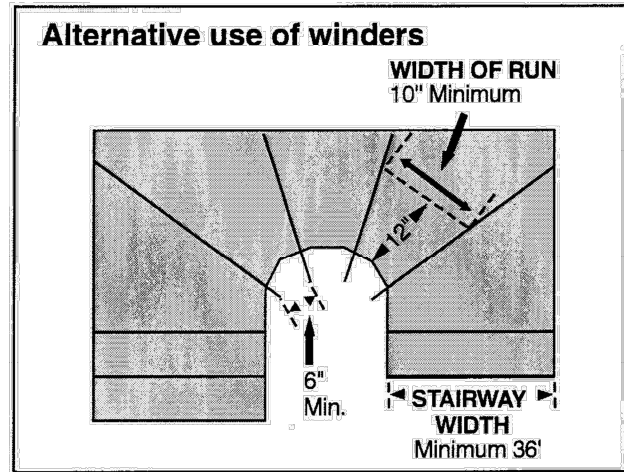
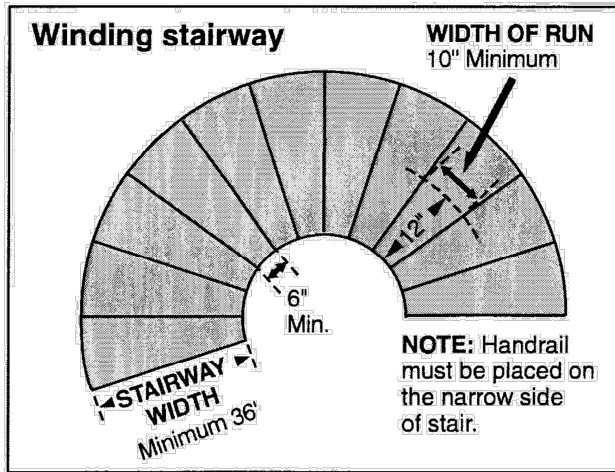
## DECK/STAIR RAILING



### STAIRWAY NOTES:

1. STAIRWAYS SHALL BE NOT LESS THAN 36" IN WIDTH.
2. STAIRWAY RISES SHALL BE NOT GREATER THAN 7 3/4".
3. STAIRWAY TREADS SHALL HAVE A MINIMUM RUN OF 10".
4. THE LENGTH OF RUN AND THE HEIGHT OF RISER SHALL NOT VARY MORE THAN 3/8" IN THE ENTIRE RUN OF THE STAIR.
5. STAIRS ARE REQUIRED TO BE ILLUMINATED.
6. OPEN RISERS PERMITTED IF OPENING IS LESS THAN 4".
7. A NOSING NOT LESS THAN 3/4" BUT NOT MORE THAN 1 1/4" SHALL BE PROVIDED ON STAIRWAYS WITH SOLID RISERS, AND LESS THAN 11".

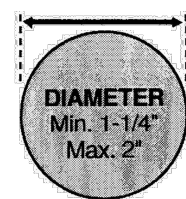
**NOTE: REQUIRED HANDRAILS ARE NOT SHOWN**



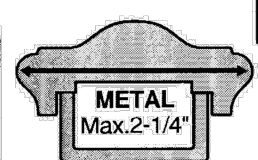
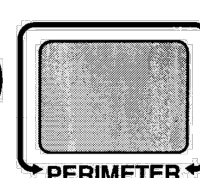
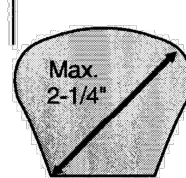
**Handrail details**

Other shapes may be acceptable if they provide equivalent gripping service. Contact Building and Inspection.

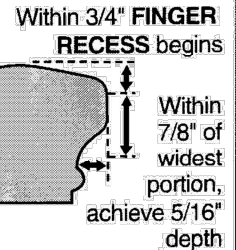
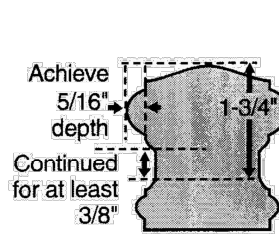
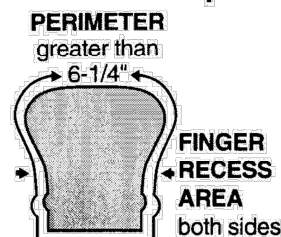
**CIRCULAR**



**NON-CIRCULAR**



**Handrail samples**





## Width

Stairways shall not be less than 36 inches wide. The handrail may enter a maximum of 4-1/2 inches into this dimension. If placing two handrails on a stairway, maintain a minimum of 27 inches.

## Dimensional tolerances

The largest tread depth or riser height within any stairway shall not exceed the smallest by more than 3/8 inch.

## Risers

Open risers are permitted, provided that the opening between treads does not exceed 4 inches. This does not apply if less than 30 inches above floor or grade.

## Headroom

Every stairway shall have a headroom clearance of not less than 6 feet 8 inches. The minimum headroom in all parts of the stairway may not be less than 6 feet 8 inches. This is measured vertically from the sloped plane adjoining the tread nosings or from the floor surface of the landings.

## Handrails

### Required at four or more risers.

The top shall be placed not less than 34 inches, nor more than 38 inches, above the nosing of the treads. Ends shall be returned or terminated in newel posts or safety terminals.

All required handrails shall be continuous for the full length of the stairs from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight.

### Exceptions:

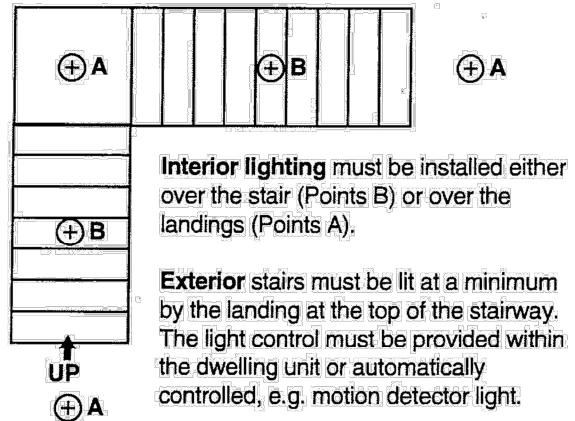
1. Handrails may be interrupted by a newel post at a turn.
2. A volute, turnout or newel post is allowed over the lowest tread.

The outside diameter of a circular handrail may be no less than 1-1/4 inches and no greater than 2 inches. A non-circular must have a perimeter dimension of at least 4 inches and no greater than 6-1/4 inches. The maximum cross section is 2-1/4 inches. See page 2.

## Illumination

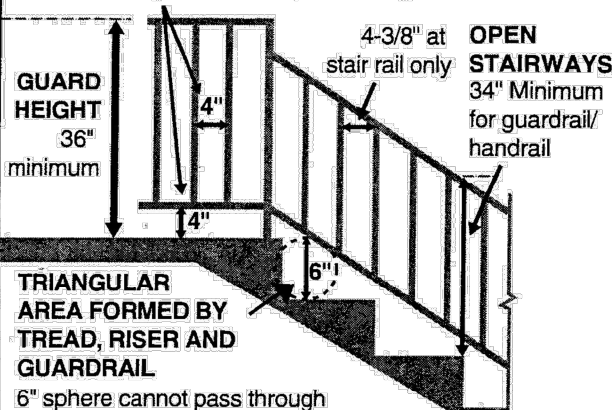
All interior and exterior stairways must be illuminated.

### Stairway lighting



### Guard opening limitations

**INTERMEDIATE RAIL SPACING OR PATTERN**  
4" sphere cannot pass through



### Occupant load less than 10

(Private stairway)

If stairway has closed risers and stair tread is less than 11 inches, a nosing of 3/4 inch depth by no greater than 1-1/4 inch is required.

