

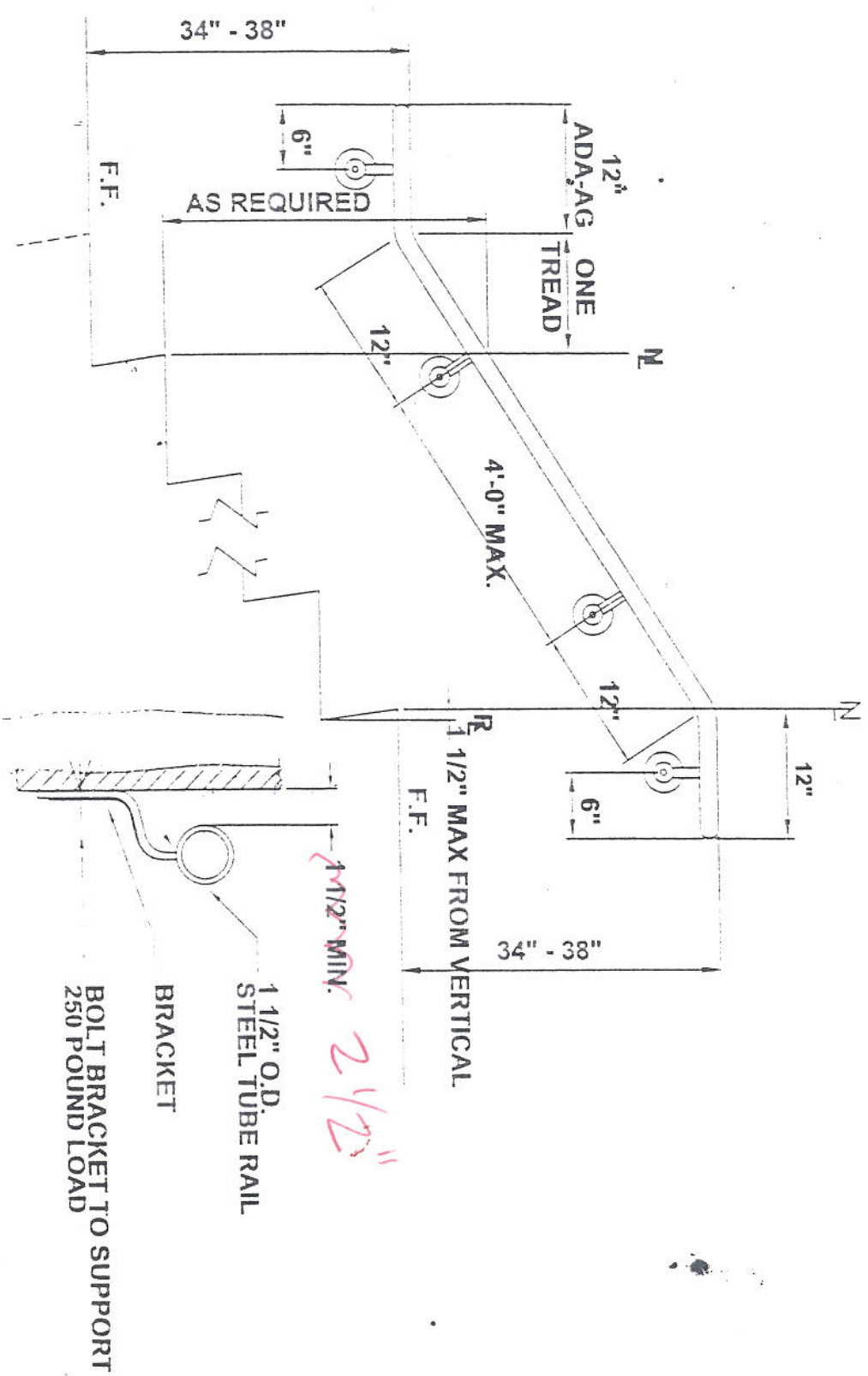
HANDRAIL:
 1 1/4" MIN - 2" MAX O.D. DIAMETER (MIN 4" MAX 6 1/4" CIRCUMFERENCE)
POST:
 1 1/2" O.D. X 3/16" WALL. TUBE

7.2.2.6.2
 42" HIGH GUARDRAIL (48" VISUAL BARRIER IF 4 STORY OUTSIDE OPEN STAIR)
 250# LOAD - INTERMEDIATES TO 34" ABOVE NOSING LINE



PLAN LAYOUT
RETURN TO WALL

000023



WALL RAIL - 1 1/2" O.D. TUBE

BRACKET
BOLT BRACKET TO SUPPORT
250 POUND LOAD

1 1/2" O.D.
STEEL TUBE RAIL

1 1/2" MIN. 2 1/2"

1 1/2" MAX FROM VERTICAL

4'-0" MAX.

12" ADA-AG ONE TREAD

N

N

34" - 38"

34" - 38"

6"

AS REQUIRED

F.F.

12"

12"

6"

12"

F.F.

34" - 38"

spaces on the floor in accordance with 7.1.3.2. Unenclosed interior stairs normally serve as exit access rather than as exits. Where an interior stair connects two or more stories, it creates a vertical opening and must meet the requirements applicable to such, regardless of whether it is an exit. See the vertical opening protection provisions of Section 8.6.

It is sometimes more difficult to determine whether outside stairs are part of the exit access, the exit, or the exit discharge. To be considered an exit, outside stairs need to be separated from the interior of the building by fire-rated construction in accordance with 7.2.2.6.3. Outside stairs adjacent to the building that are unprotected would normally be considered part of the exit access where serving occupants of upper stories, with the user reaching the exit and exit discharge simultaneously at the base of the last stair flight. Where stairs occur in a sidewalk that connects an exit door to a public way, the stairs are part of the exit discharge.

7.2.2.2 Dimensional Criteria.

7.2.2.2.1 Standard Stairs. Stairs shall meet the following criteria:

- (1) New stairs shall be in accordance with Table 7.2.2.2.1(a).
- (2)* Existing stairs shall be permitted to remain in use, provided that they meet the requirements for existing stairs shown in Table 7.2.2.2.1(b).

A.7.2.2.2.1(2) It is the intent of 7.2.2.2.1(2) to permit the use of Table 7.2.2.2.1(b) in existing buildings, even where there is a change in occupancy per 4.6.12. Safety improvements should be made that are reasonable and feasible at minimal cost. Improvements include removal, repair, or replacement of step coverings as described in A.7.2.2.3.5, particularly Figure A.7.2.2.3.5(e), and addition of functional handrails and guardrails in place of or in conjunction with other rails as described in 7.2.2.4.

(3) Approved existing stairs shall be permitted to be rebuilt in accordance with the following:

- (a) Dimensional criteria of Table 7.2.2.2.1(b)
- (b) Other stair requirements of 7.2.2

(4) The requirements for new and existing stairs shall not apply to stairs located in industrial equipment access areas where otherwise provided in 40.2.5.2.

Tables 7.2.2.2.1(a) and (b) present the required stair geometry for both new and existing stairs.

Editions of the Code prior to 1981 required that the height of every riser and the width of every tread

Table 7.2.2.2.1(a) New Stairs

Feature	Dimensional Criteria
Minimum width clear of all obstructions, except projections not more than 114 mm (4½ in.) at or below handrail height on each side	1120 mm (44 in.); 915 mm (36 in.) where total occupant load of all stories served by stairways is fewer than 50
Maximum height of risers	180 mm (7 in.)
Minimum height of risers	100 mm (4 in.)
Minimum tread depth	280 mm (11 in.)
Minimum headroom	2030 mm (80 in.)
Maximum height between landings	3660 mm (144 in.)
Landing	See 7.2.1.3 and 7.2.1.4.4

Table 7.2.2.2.1(b) Existing Stairs

Feature	Dimensional Criteria	
	Class A	Class B
Minimum width clear of all obstructions, except projections not more than 114 mm (4½ in.) at or below handrail height on each side	915 mm (36 in.)	915 mm (36 in.)
Maximum height of risers	190 mm (7½ in.)	205 mm (8 in.)
Minimum tread depth	255 mm (10 in.)	280 mm (9 in.)
Minimum headroom	2030 mm (80 in.)	2030 mm (80 in.)
Maximum height between landings	3660 mm (144 in.)	3660 mm (144 in.)
Landing	See 7.2.1.3 and 7.2.1.4.4	

be so proportioned that the sum of two risers and a tread, exclusive of its nosing or projection, was not less than 610 mm (24 in.) nor more than 635 mm (25 in.). This requirement was deleted because it was based on a 300-year-old French formula in which the inch was a slightly larger unit of measure than it is today. Moreover, people's feet and stride length—the basis for the formula—were somewhat smaller at that time. Also, the requirement was originally intended only for stairs of moderate steepness or pitch. These

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