

# MEZZANINE PLATFORMS

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## 2. GENERAL

### 2.1 Scope

2.11 This section covers the installation of unit type mezzanine platforms.

### 2.2 Associated Information

- 2.21 Floor plan drawing.
- 2.22 Mezzanine platform assembly and detail drawings.
- 2.23 Drawing showing floor expansion bolt hole locations furnished to the job.
- 2.24 Section 10 covering high type auxiliary framing.
- 2.25 Section 70 covering painting, retouching, and cleaning of finishes.
- 2.26 Safety precautions and general requirements and information contained in the "General" section.

## 3. INSTALLING EQUIPMENT

3.1 In addition to tools supplied in the general kits, the material listed below will be required for the operations covered by this section.

### 3.11 Materials

Obtain Locally      Rope, 1/2" or Larger (For  
(See Fig. 2)      hoisting platform units)

## 4. FRAMING BARS

4.1 The platform should be located in accordance with measurements shown on drawings furnished to the job.

4.2 Locate secondary framing bars as shown in Figure 1.

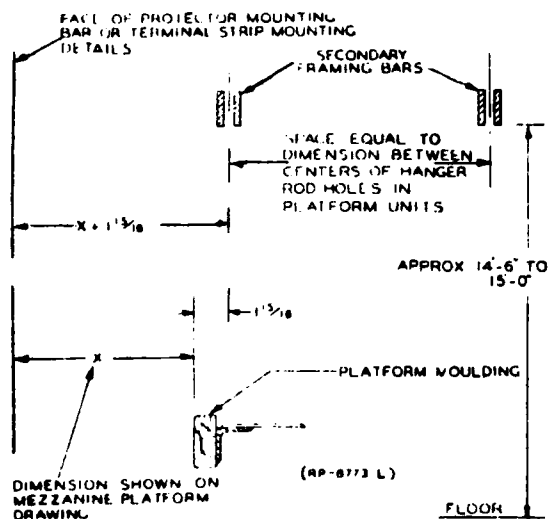


FIG. 1 LOCATING SECONDARY FRAMING BARS  
(PAR. 4.2)

4.3 Use a steel square for locating the bars nearest the frame. Place the long side of the square against the face of the frame and extend the short side to the center line for the bars (same as center line for the hanger rods).

4.4 Splices in framing bars should be avoided wherever possible. Where splices are necessary they shall be located within 1'-0" of a support.

4.5 To reduce interference between framing bar splices and hanger rods, place the first splice 2 feet ahead of a junction in the platform and use standard 20 foot lengths of bar from there on.

4.6 In no case shall cable rack stringers or cable rack hanger rods be used for the support of mezzanine platforms.

## 5. HANGER ROD ASSEMBLIES

5.1 Install hanger rods (see Paragraph 6.1 and 8.1) with the greater length of thread at the upper end.

5.2 Any cutting of the hanger rods to obtain the proper length should be done at the upper end of the rods.

5.3 In no case should the hanger rods used for the support of mezzanine platforms be spliced.

5.4 After assembling the railing upright, upright assembly, and fittings on the hanger rod, adjust the assembly to obtain the proper height of the platform from the floor, and the required length of rod below the platform level, as indicated on the mezzanine platform drawings.

## 6. ORIGINATING PLATFORM UNIT

6.1 The first unit to be installed should be at a stairway where the unit has four support assemblies. This will permit the removal of the hoist without the use of temporary supports.

6.2 Hoist the unit as shown in Figure 2.

6.3 Fasten, align and level the unit.

6.4 Tighten the nuts at the bottom of the hanger rods.

## 7. STAIRWAYS

7.1 Install stairway at the originating unit before placing the other units. This will steady the platform and facilitate its use as scaffolding.

7.2 Before locating the bottom of the stairway, recheck the accuracy of the platform unit location.

7.3 To locate the holes in the floor, assemble the second stair tread (from bottom) for spacing and put the stair channels in place, using the floor angles as templates.

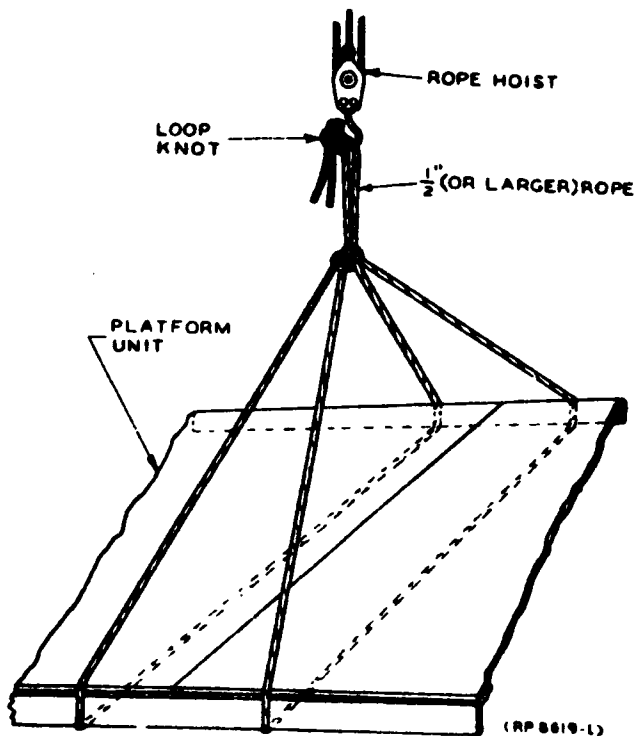


FIG. 2 HOISTING PLATFORM UNIT  
(PARS. 6.2, 8.2)

7.4 Drill stair channels for the railing flanges before assembling the treads (except as in Paragraph 7.3).

#### 8. SUCCEEDING PLATFORM UNITS

8.1 Place the hanger rods for one unit at a time.

8.2 Hoist the unit as shown in Figure 2.

8.3 Fasten, align and level the unit with respect to preceding unit.

8.31 Align the unit at junctions so that the top surfaces are flush, by tapping the angles on underside of the unit with a hammer.

#### 9. PLATFORM RAILINGS

9.1 Drill and countersink the 5/16" rivet hole in the reamed end of fittings before the associated rails are in place. See Figure 3.

**NOTE:** The purpose of the 5/16" hole which is drilled in one side of the fitting only, is to allow the rivet to upset a greater distance from the end and thus insure a tight fit of the rail in the fitting.

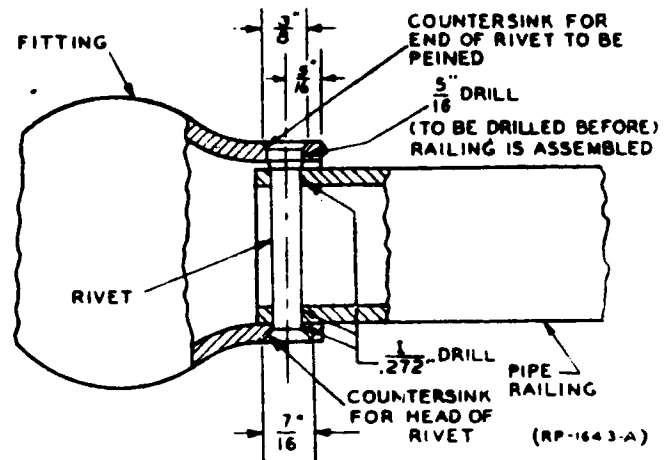


FIG. 3 SIZES OF RIVET HOLES IN RAILS AND FITTINGS (PARS. 9.1, 9.4)

9.2 Place the pipe rail in position by springing the hanger rods apart slightly.

9.3 Tighten the threaded end of the rail section moderately with a pipe wrench and remove any burrs caused by the wrench.

9.4 Drill and countersink the .272" rivet holes in the reamed ends of the fittings after all rails are in place, and rivet the unthreaded ends in the fittings. See Figure 3.

9.5 Where necessary to eliminate a loose fit where a hanger rod passes through a rail fitting, stake the fitting with a center punch at points equally spaced around the rod, and remove any resulting burrs.

#### 10. WOODEN MOULDINGS

10.1 Drill for brace rods before mounting the moulding.

10.2 When mounting the moulding, allow space for the mounting screws for cable designation board supporting bars, located approximately opposite every fifth frame vertical.

10.3 Junctions in moulding or floor covering shall not coincide with the junction of platform units.

10.4 Retouch mouldings where necessary in accordance with Section 70.

#### 11. METAL MOULDINGS

11.1 Place metal moulding at the head of the stairway landing as soon as practicable after the floor covering is laid so that the edge of the floor covering does not become scuffed up.

- [ 11.2 The metal moulding shall not be buckled or bent.

## 12. CABLE DESIGNATION BOARDS

12.1 Install the cable designation boards on the underside of the mezzanine platform in accordance with mezzanine platform drawing.

- [ 12.2 The space at joints in cable designation boards shall not exceed 1/8".

## 13. VERIFICATION ITEMS

13.1 The numbers in parentheses refer to the associated paragraphs in this section unless otherwise indicated.

- (a) Location correct per job specification and drawings (4.1).
- (b) Supports and braces rigidly fastened and correctly spaced (2.24).
- (c) Cable rack hanger rod or stringers not used for the support of the platform (4.6).
- (d) Splices in framing bars, where necessary, within 1'-0" of a support (4.4).
- (e) Hanger rods not spliced; lock-washers in place at auxiliary framing bars (2.22, 2.24, 5.3).
- (f) Hanger rod not loose in rail fitting (9.5).

[Vertical lines at side of paragraphs indicate requirements.

- (g) Platform level; top surfaces or units flush; sides parallel; and height correct (2.22, 6.3, 8.3).

- (h) Wooden moulding properly installed; finish retouched where necessary (2.22, 10.4).

- (i) Junctions in moulding or floor covering do not coincide with those of platform units (10.3).

- (j) Metal moulding fastened over edge of floor covering at stairway landings; not buckled nor bent (11.2).

- (k) Railings riveted to fitting at unthreaded end; railing tight at rivet; rivet ends flush (2.22, 9.4).

- (l) Stairways securely fastened and guarded with rails at proper height and slant (2.22, 2.23).

- (m) Ironwork finish as specified (2.22, 2.25).

- (n) Cable designation boards, installed where required; size and finish correct; junction space not over 1/8" (12.1, 12.2).

- (o) Bolts, nuts and screws within following requirements (2.26):

- (1) Kind and size as specified and installed in all places requiring them.
- (2) Free from stripped threads and defaced heads.
- (3) Not burred.
- (4) Sufficient thread engagement and properly tightened.

Superintendent, Installation Engineering

Reason for Reissue:  
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