SWITCHBOARDS AND DESKS
INSTALLATION
GENERAL EQUIPMENT REQUIREMENTS

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1. GENERAL

1.01 This section covers the general equipment requirements for installing switchboards and desks. The requirements covered herein are supplemented by requirements in BSP Section 800-614-154, Location, Erection, and Assembly of Equipment.

1.02 Changes in requirements which have been made with this issue are explained under "Reasons for Reissue" at the end of the section. Arrows have been used to indicate changes throughout the text.

2. REQUIREMENTS

A. Alignment

2.01 Switchboards and desks should be leveled and aligned as specified in BSP Section 800-614-154, Location, Erection, and Assembly of Equipment.

(a) When placed in a line-up, the level should be maintained throughout the line-up. Where the variation in floor level is 3/4" or more, the section framework should be set directly on the floor at the high points to insure that the space at the low points will not exceed 3/4". If an excessive space would be required to maintain a level, the line-up as a whole may be set with the minimum slope practicable.

2.02 After being fastened in place, the following conditions should be met:

(a) Upright parts should be approximately vertical.

(b) Horizontal parts should be approximately level.

(c) Other than horizontal or vertical parts should be at the angle specified as far as practicable.

(d) No pronounced irregularity should exist throughout a line-up.

(e) Front faces and keyshelves should be in proper alignment.

(1) The front surfaces of the piling rail and of the stile strips or wood fillets on which the stile castings mount, in any two adjacent panels should be in alignment, any variation being kept as small as practicable.

(2) The top surfaces of the piling rails in any two adjacent panels should be as nearly in alignment as practicable and in no case should the variation in level between them exceed 1/32".

(3) Where spacers are furnished between adjacent keyshelves and plugshelves, the alignment of the top surfaces of the adjacent keyshelves and plugshelves should not vary more than one-half the distance that the spacer projects above the surface of the keyshelf and plugshelf to which it is attached. The front contiguous surfaces may be out of alignment not to exceed 1/16", provided neither of the surfaces projects beyond the outermost surface of the spacer. Where spacers are not furnished, the surfaces should be as nearly flush as practicable.

(4) The front of crown moldings of adjoining sections should be as nearly flush and in alignment as practicable, except where junction moldings are provided. Where junction moldings are provided, the crown molding should be in apparent alignment. In either case, the space at the joints should be as small as practicable.

(5) The space between the adjoining edges of adjacent keyshelves (older types without spaces between adjacent keyshelves) should be as small as practicable. Keyshelves should not bind with adjoining keyshelves to such an extent that any keyshelf cannot be readily opened without causing an adjacent keyshelf to rise.

(6) The space between the bottom of the stile casing and the top of the plugshelf shall not exceed 1/32".

B. Clearance for Removable Parts

2.03 Doors, drawers, removable panels, and similar parts of switchboard, desk, or cabinet woodwork, should have sufficient clearnace between the fitted surfaces to make them readily removable.

C. Rolling Curtains

2.04 Adjust rolling curtains to meet the following requirements:

(a) Should not rise, unaided, from closed position.

(b) Should not drop, unaided, from any open position.

(c) Should not buckle or jam when raised or lowered with reasonable care.

(d) Arrange rollers so that the pawls will not operate.

2.05 Provide and locate stops to prevent curtain from rising enough to strike the hand when raising the curtain by the handle.

D. Cable Holes in Roofs of Cable Turning Sections, Switchboards, and Desks

2.06 For high-type sections, cut to the size required for the ultimate cabling and fit the cable hole closing details as closely as practicable around the equipped cabling.

2.07 For low-type sections having finished roofs, cut to fit the actual cabling as closely as practicable.

E. Framework Ground

2.08 Ground the framework of all switchboards and desks.

(a) Where arranged in a line-up, each section framework should be connected to a common "line-up" ground wire.

(b) In general, PBX's such as the 507 and the 555 which do not have a power supply of their own, but which are fed from a central office power supply over a cable pair, do not require a framework ground.

2.09 In wooden frame switchboards, desks, or cabinets, ground each group of apparatus mounting plates fastened to a common metal support by means of a 20 gauge "AM" lead equipped with a suitable terminal fastened under the head of a mounting screw of one of the mounting plates. A separate ground should be provided for each group of plates on separate metal supports in all wooden switchboards, desks or cabinets, and to all isolated mounting plates on separate metal supports not otherwise grounded, such as the roof of switchboard sections or at other locations in desks and wooden cabinets having steel frameworks. The several leads may be attached to a common lead if convenient.

2.10 Metal foot rails and brackets attached to the switchboard framework shall be insulated from ground.

2.11 Exposed metal parts on keyshelves or on the face of switchboards and desks should not be grounded through contact with grounded framework except parts that are arranged for ground contact with the framework, such as the exposed portion of key levers or exposed key screwheads.

(a) Stile casings on the older switchboard sections such as 49-type jack boards, all No. 1 manual boards, and certain PBX sections were also grounded.

(1) When it is specified that the stile casings on these older switchboard sections be insulated, a strip of cellulose acetate should be inserted between the stile strip and the stile casing and secured in place with fibre screws. The strip of cellulose acetate, as furnished, is long enough to fit the maximum jack opening in the high-type sections and should be cut off as desired to fit the lower sections. The following are the piece parts for these items:

P-369807 - Special 138-32 Vulcanized Fibre FHM Screw

P-415910 - Cellulose Acetate Insulator, 3' 6" long for 49-type jack switchboards

P-415911 - Cellulose Acetate Insulator, 3' 6" long for 92-type jack switchboards

(b) The stile casings on the new 92 jack universal-type switchboards, having separate upper and lower units, are insulated from the framework ground by wooden strips (stile casing fillets) placed between the style casing and the stile strip.

REASONS FOR REISSUE

1. Paragraph 2.02(3) was revised to clarify the wording of the first sentence.

2. Paragraph 2.08(b) was added to state that 507 and 555 PBX's do not require a framework ground.