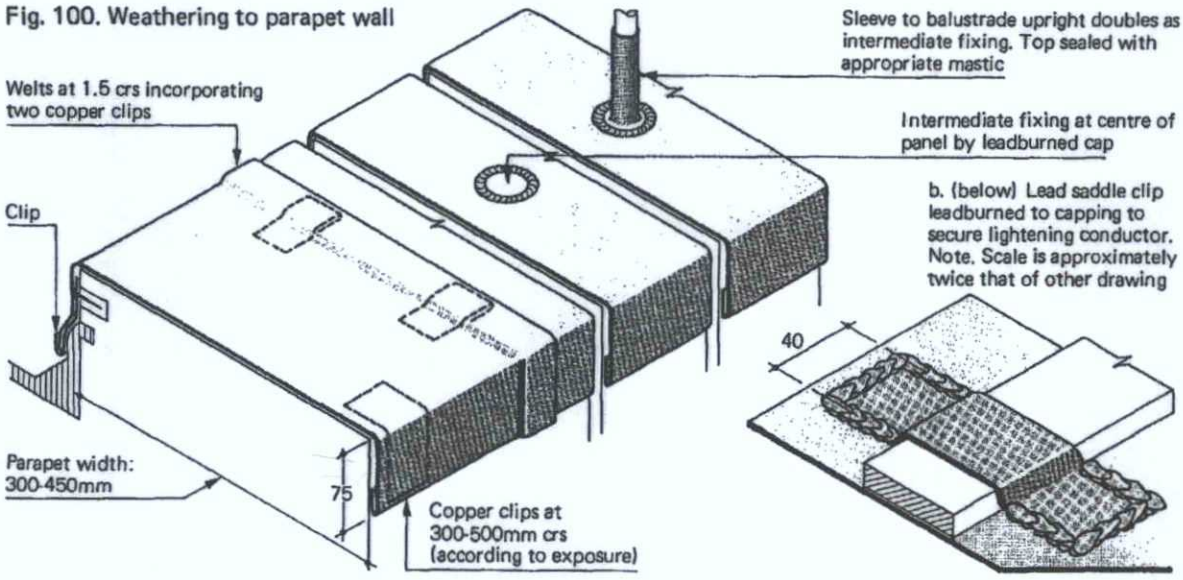
Fig. 100. Weathering to parapet wall



preferred for appearance. A typical small curved door hood is shown in Fig. 99c. The dressing in situ to form the upstand round the curve can be facilitated by preforming the lead as shown in Fig. 99d. It will usually be more practical to fit a separate cover flashing even if the projection is narrow and this will be cut from two or more strips of lead sheet as appropriate. (In designing coverings for large door hoods and porticos the information in this book on roof coverings will apply).

Parapet wall cappings

Information on cappings to parapet walls has previously been given under 'Head Finishes to Wall Cladding' on page 50, and Fig. 58 on page 51 shows a form of lead capping that is typical of that used for the tops of ordinary parapet walls up to about 300mm wide. The length of each piece of lead sheet can be from 1.5m to 2m according to the thickness of lead sheet being used, from No. 4 upwards. Cappings to parapets about 300mm wide will be adequately fixed by one copper clip incorporated in the welts joining each piece end to end and individual or continuous lead or copper clips to secure the edges according to the severity of the exposure, as described above for projections. Often, the inner edge of such cappings is carried down to serve as a cover flashing to the upstand of a roof covering or of the lining of a parapet gutter, see Fig. 100. For parapets wider than 300mm, dot fixings may be necessary at the centre of each piece of capping, as described above for weatherings to wide projections.

Where a railing is mounted on a lead-capped parapet wall, the railing uprights should be spaced to penetrate the capping at the centre of each panel only. The penetration is made weathertight by fitting a lead sleeve – about 100mm high with a small flange – at the base of the upright, the sleeve being dressed closely to the upright and the flange leadburned to the capping in situ.

Fixing of lightning conductors to cappings

Lightning conductors in the form of copper or aluminium extrusions are often fixed to lead cappings (and also to lead roof coverings) with screwed or nailed clips and thereby penetrating the lead. This can be avoided by using lead saddle clips leadburned to the capping or covering, as shown in Fig. 100b and spaced about 500mm apart whether the surface is flat or pitched. These clips will not only secure the lightning conductor firmly but will allow it freedom for thermal movement.

Weatherings to structural expansion joints

Where lead sheet is used to make weathertight structural expansion joints in flat roofs and adjoining walls, it must be fixed in such a way that the lead is not subject to flexing as the expansion joint opens and closes. Even with fairly slight flexing there must be a risk of the lead failing by fatigue cracking in the long term. The practical way to use lead sheet effectively for this purpose is to provide a raised curb to the roof on both sides of the opening so that the expansion joint can be capped to make it weathertight. Code No. 4 lead sheet is usually specified for this work.

Capping to accommodate small movement

If the expansion joint is designed for a structural movement not greater than plus or minus 5mm and the width of the capping is not more than about 300mm, then it can be capped with the lead fixed as shown in Fig. 101a. By simply securing the capping with the edges loosely welted over the fixing clips, there will be sufficient tolerance for the lead to move freely without any risk of flexing. The length of each piece of lead sheet for the capping should be about 1.5m, the pieces being joined end to end with welts.

Capping to accommodate greater movement

If the expansion joint is designed for a structural movement greater than plus or minus 5mm, then the capping is best formed of two strips of lead loosely welted together with sufficient tolerance for the structural movement to be accommodated without risk of flexing the lead, Fig. 101b. The lead should be supported across the gap with a strip of thin stiff material, say galvanized steel strip, fixed to one side of the curb only. The pieces of lead sheet should be about 1.5m long and be joined end to end with welts, but these welts should be staggered to avoid a four-way intersection with the welt at the centre of the capping so that the welt-to-welt intersection