

1. Construct or reconstruct the manhole chimney, the outside diameter of which is within 4 inches of that of the frame base flange, to grade as required, allowing for the 3/4 inch thick joint under the frame. The sealing surface for the bottom of the sleeve and extension must be approximately 2 inches wide, reasonably smooth, vertical and circular, clean and free of any loose material or excessive voids. Non-shrink mortar must be used as needed, to prepare this surface.
2. Place a thick mortar course on top of the chimney with the three 3/4 inch thick spacers embedded in it at equal spacing. This 3/4 inch thickness is not required if the flange is 1-1/2 inches or more larger in diameter than the chimney. Do not use any butyl gasket material such as EZ Stik or Kent Seal in this joint.
3. Set the manhole frame on top of these spacers, center it on the chimney, and embed it in the mortar course. Rake the mortar free for a minimum depth of 1 inch from the outer surface and trowel smooth the joint on the inner surface.
4. Grind off or fill in any imperfections in the edge of the manhole frame base flange and remove any loose rust or scale to provide a reasonably smooth, clean sealing surface. Cut back any strengthening ribs so that they are flush with the top of and back 1/2 inch from the edge of the base flange.
5. If an extension is to be used, place it around the manhole frame and pull it over the chimney until the sealing fins bear against the vertical surface of the manhole cone.
6. Place the sleeve around the manhole frame and chimney and fit the top section of the sleeve over and under the edge of the frame base flange and lubricate the top band area of the sleeve with gasket lube.
7. Place the top compression band around the sleeve and position it with the long leg of the band extending over the top of the sleeve and the short leg extending into the slot provided in the sleeve. Install 2 studs in the appropriate set of holes, position them in the adjustment slot and draw the band tight with the special tool. Check to insure that the sleeve is sealed around its entire perimeters, check band tightness and tighten the 2 locknuts.
8. Some surfaces may have irregularities that require the use of butyl rubber caulk as a filler material to obtain a watertight seal. In such cases, lift up the bottom of the sleeve or extension, apply a bead of caulk to it's center portion of the area of the irregularity and return it to it's normal position.
9. If an extension is not being used, lubricate the bottom band recess area, place the bottom band around the sleeve in the recess and adjust the sleeve's position so that the bands are approximately parallel. Install the studs and tighten the band as before. Check to insure that the sleeve is tight against the surface around its entire perimeter. Check band tightness and tighten the 2 locknuts.
10. Position the extension around the sleeve so that the top of the extension fits into the sleeve's bottom band recess and the bands are approximately parallel.
11. Repeat step 9 to seal the top of the extension/bottom of sleeve and the bottom of the extension.
12. Backfill the area immediately around the manhole with selected material using care so as not to damage the installed seal and extension.

NOTE: ALWAYS WEAR GLOVES WHEN HANDLING BANDS.

