

Technical Data

Soffits in Suspended Ceilings

Concealed Systems

(Fig. 1 – Isometric Top View)

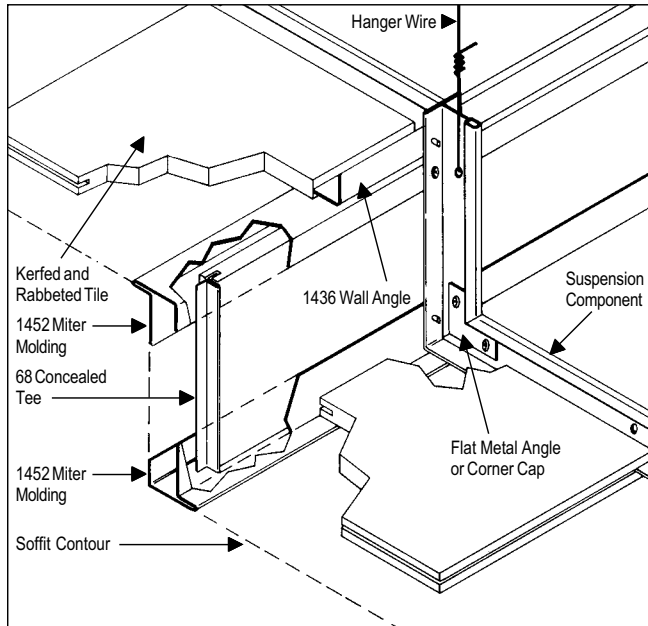
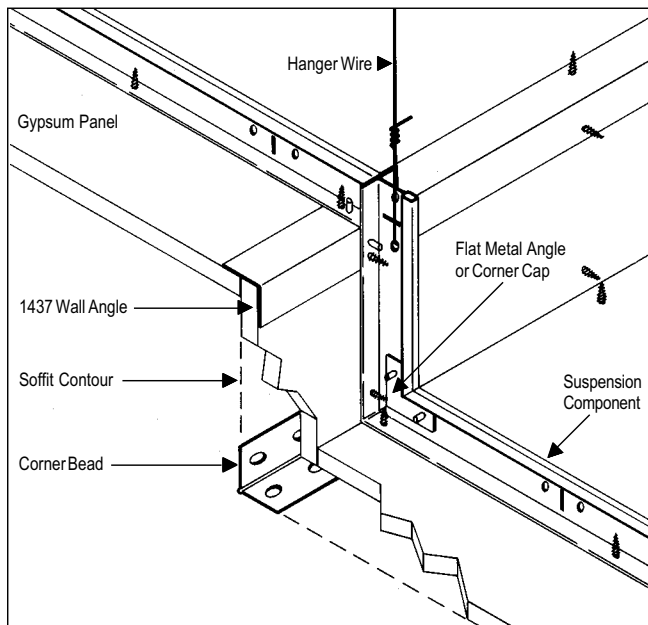


Fig. 1 shows a concealed system soffit that centers both upper and lower ceiling levels. The lower corner is formed by cutting only the bulbs and webs of suspension components as in Figure 4, inset (on back), and bending the flange faces 90°. The top corner is formed by pop riveting a 1436 wall angle to the vertical component section and upper level components. The lower bend is reinforced with a corner cap or flat metal angle. Rigid members at 45° for extra support may also be used for large drops in ceiling height. The vertical soffit section is made up of kerfed and rabbeted tiles with 68 concealed tees cut to length, if necessary, between all vertical kerfs. 1452 miter moldings, pop riveted to the vertical section flange faces as shown, support the tiles and 68 tees at top and bottom. The tiles and 68 tees are cut down 1/2" less than the vertical soffit size to allow the top 1452 molding to be installed and pop riveted from behind. The 68 concealed tees firmly hold 3/4" ceiling tiles into the 1452 moldings without shimming. Thinner tiles may require shimming from behind. Tiles for upper and lower ceiling levels are conventionally installed over the component flanges with the 1452 moldings supporting their edges as shown. It is recommended that a hanger wire be attached to each vertical component section, as shown. Note: To form mechanical concealed soffits, delete the 1436 angle, for the top corner of the soffit as in Figure 4, and pop rivet the 1452 miter moldings directly to the vertical component flange faces.

Drywall Furring Systems

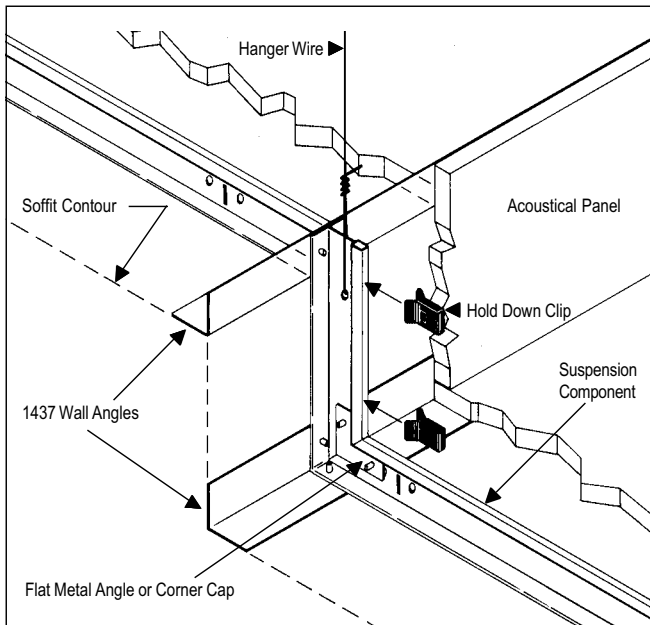
(Fig. 2 – Isometric Top View)



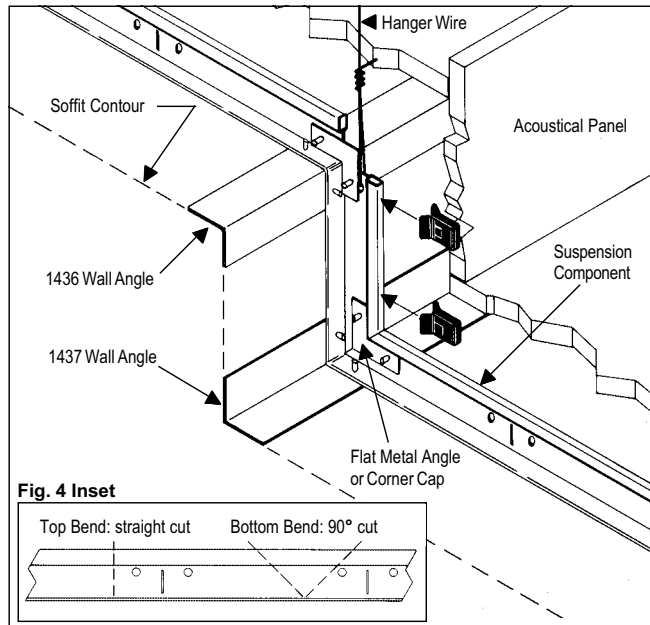
A drywall furring soffit that allows centering of upper and lower ceiling levels is shown in Fig. 2. The lower soffit corner is formed by cutting the suspension component bulbs and webs only as in Fig. 4, inset (on back), and bending the flange faces 90°. The top corner is formed by pop riveting a 1437 wall angle (galvanized side down) as shown, to the vertical and upper component section flanges. The lower bend is reinforced with a flat metal angle or corner cap. A rigid member at 45° for extra support may also be used for large ceiling drops. Gypsum panels are attached with drywall screws, and the panels overlap one another where they meet, as shown. Screw attachment into the 1437 angle prevents buckling at the upper corner of the soffit. A corner bead is attached to the lower soffit corner, and the soffit is now ready for taping and mudding. It is recommended that a hanger wire be attached to each vertical component section, as shown. Note: To form a mechanical drywall furring soffit, form the top corner as in Fig. 4.

Exposed Systems

(Fig. 3 – Isometric Top View)



(Fig. 4 – Isometric Top View)



Soffits for exposed systems can be made in two ways. Where upper and lower ceiling levels must be centered independently or where the module must change from level to level, the method shown in (Fig. 3) is used. Where these considerations are unimportant, a mechanical soffit is made (Fig. 4) Both soffits have lower corners formed by cutting only the bulbs and webs of suspension components (Fig. 4, inset) and bending the flange faces 90°. These bends are reinforced with flat metal angles or corner caps. For large drops in ceiling height, use 45° bracing via

rigid members. A 1437 wall angle is pop riveted to the lower corner to hold and cover the lay-in panel edges. The top corner is made by pop riveting a 1437 angle to the vertical component section and the upper level suspension components as shown in Fig. 3. The top corner may also be made by straight cutting the web and bulb only, bending 90° and covering with a 1436 wall angle as in Fig. 4. Acoustical panels in the vertical soffit section are held on with hold down clips. It is recommended that a hanger wire be attached to each vertical component section, as shown.



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