

3.5 MASKING PLATE FOR 13A TWIN SOCKET

3.5.1 Problem Statement

During the training period, I was assigned to make a prototype of a masking plate 13A twin 2 gang sockets. Generally a masking plate is used to mount in between the wall and the grid of the socket with the purpose of fixing the grid of the socket tightly to the wall neglecting the roughness of the wall.

3.5.2 Design Methodology

The solid works model(See Figure 3.22) was designed considering the scale of the existing solid works model of the socket as shown in Figure 3.23. When molding the thin components, the molded part may wobble when detaching from the cavity. As a solution, drafts were added to the thinner walls(See Figure 3.21). Then the prototype was printed using a 3D printer as shown in Figure 3.24.



Figure 3.21 Undercuts and Drafts in order

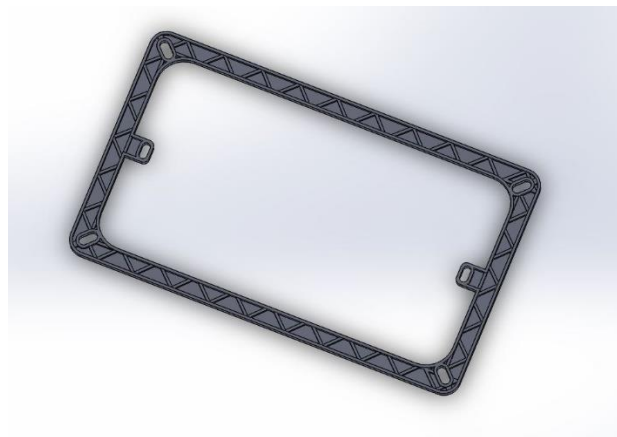


Figure 3.22 Solid works model of masking plate

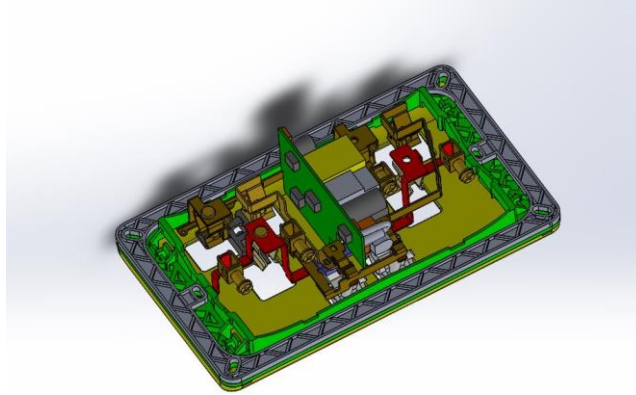


Figure 3.23 Masking plate has assembled with socket



Figure 3.24 Prototype of the masking plate