The Stainless steel (SS-304 Material) hood should be fabricated and installed at CSIR–CBRI site as per the dimension shown in Figure-1. The hood should be installed at a height of 2 m from the floor and the SS-304 supports needed are also are in bidder scope. The hood should be placed centrally above the opening of the test room with edge aligned to the roof of the room. The bottom dimensions of the hood are 3 m×3 m and the height 1.0m as shown in figure 2. On four sides, steel sheets are extended 1.0 m downwards. The effective height of the hood will thus be 2 m as shown in figure 2. The hood feeds into a plenum having a 0.9 m × 0.9 m cross sectional area. The plenum has a minimum height of 0.9 m. In the plenum chambers, two baffle plates approximately 0.5 m × 0.9 m are located to increase mixing of gases. The exhaust duct pipe of 400 mm is already installed at the site, Hence the fabricated hood has to be connected with existing exhaust duct pipe as shown in figure 1 is in bidder scope. The sheet should be of minimum thickness 2 mm.

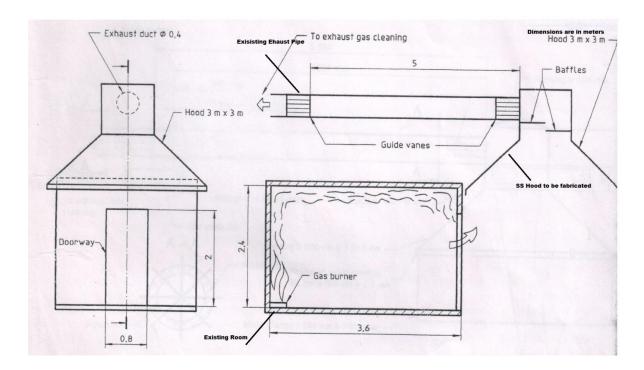


Figure 1: SS-304 Hood for smoke and hot gases collection and extraction (Side and front view).

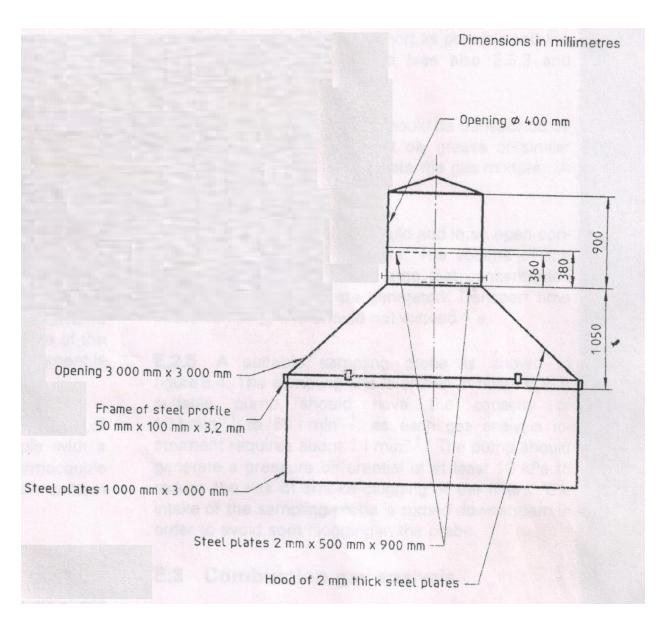


Figure 2: SS-304 Hood for smoke and hot gases collection and extraction (Side view without exhaust pipe).