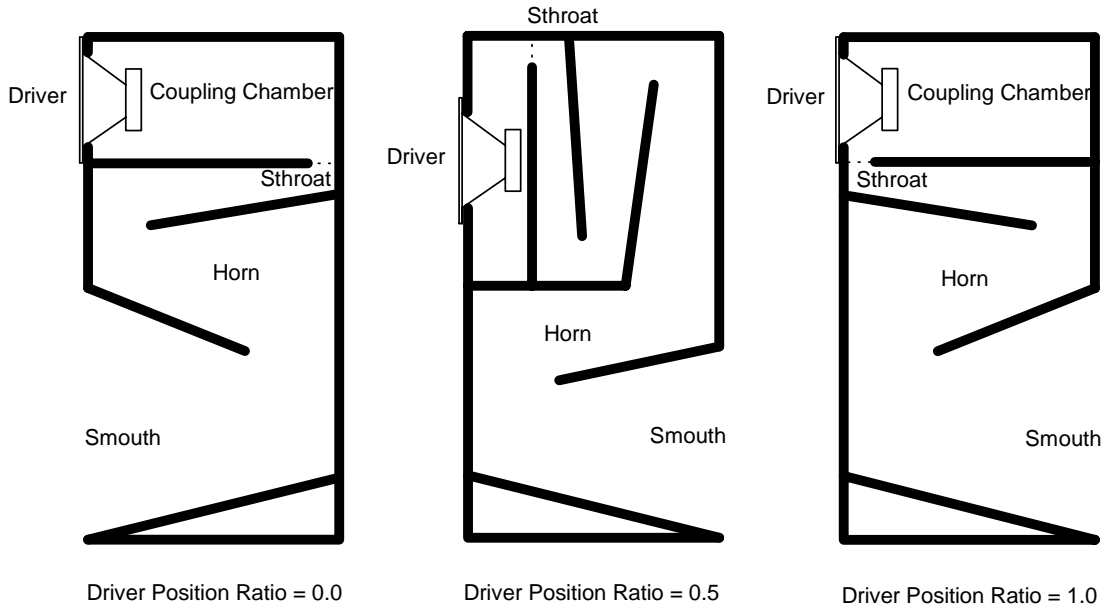


Figure 7.1 : Back Loaded Horn Geometry



where :

Horn Geometry is defined by :

$$S_0 = S_{\text{throat}} = \text{throat area}$$

$$S_L = S_{\text{mouth}} = \text{mouth area}$$

$$L_{\text{horn}} = \text{horn length}$$

Coupling Chamber Geometry is defined by :

$$S_{DF} = \text{coupling chamber area at the closed end}$$

$$S_{LF} = \text{coupling chamber area at the throat end}$$

$$\xi = \text{driver position ratio } (0 < \xi < 1)$$

$$L_F = \text{coupling chamber length}$$