The flow velocity is 29.3 ft/s

The Reynolds Number for flow past the pole is 1.74e+05

The frontal area of pole is 30 sq.ft

The Drag force exerted on only the pole is 32.4 lbf

The Reynolds Number for square part of pole is 2.9e+04

The frontal area of square part of pole is 0.667 sq.ft

The Drag force exerted on cross piece of the pole is 1.31 lbf

The total drag force on the pole is 33.7 lbf