



The above image shows the stresses on the wall due to the drive shaft and pedaling from the user. This is an extreme case of 100 lbf used by the user on the pedal. Maximum deflection on the right hand side of the wall was calculated to be $5.179e-5$ inches. The deflection is negligible along with the maximum of 8000 Pa stress along the bottom corner due to the 37.9 MPa Yield stress.