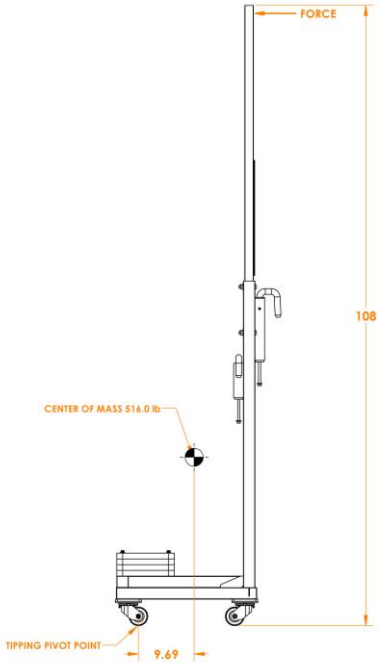
BARRICADE & SAFETY PLATFORM TIPPING CALCULATION

1. BARRICADE TIPPING CALCULATION:



Center of mass (m) = 516 lb

Distance (d)= 9.69”

Force acting height (h) = 108”

Force required to tip (F) = $\frac{m * d}{h}$

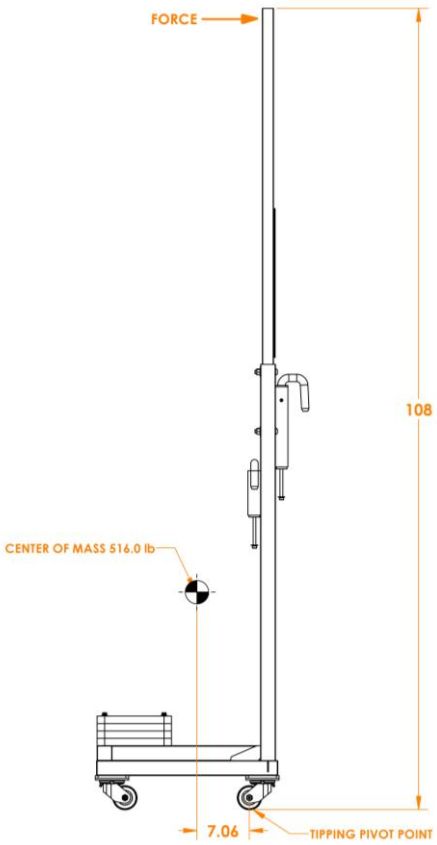
Where,

- Distance (d) means the shortest possible horizontal distance to the tipping point from the center of mass.
- Force acting height (h) refers to the vertical distance between the pivot point to the top most point where the force required to tip a structure is the lowest.
- Force required to tip (F) is the minimum force required to tip the structure.

Force required to tip (F) = $\frac{516 * 9.69}{108}$

F = 46.3 lbf

2. BARRICADE TIPPING CALCULATION:



Center of mass (m) = 516 lb

Distance (d)= 7.06”

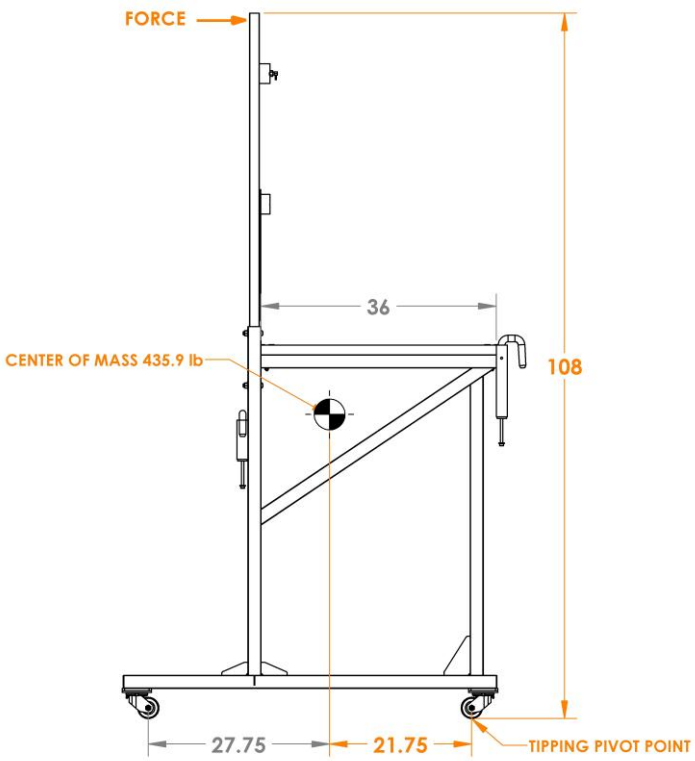
Force acting height (h) = 108”

Force required to tip (F) = $\frac{m * d}{h}$

Force required to tip (F) = $\frac{516 * 7.06}{108}$

F = 33.7 lbf

3. 36” SAFETY PLATFORM TIPPING CALCULATION:



Center of mass (m) = 435.9 lb

Distance (d) = 21.75”

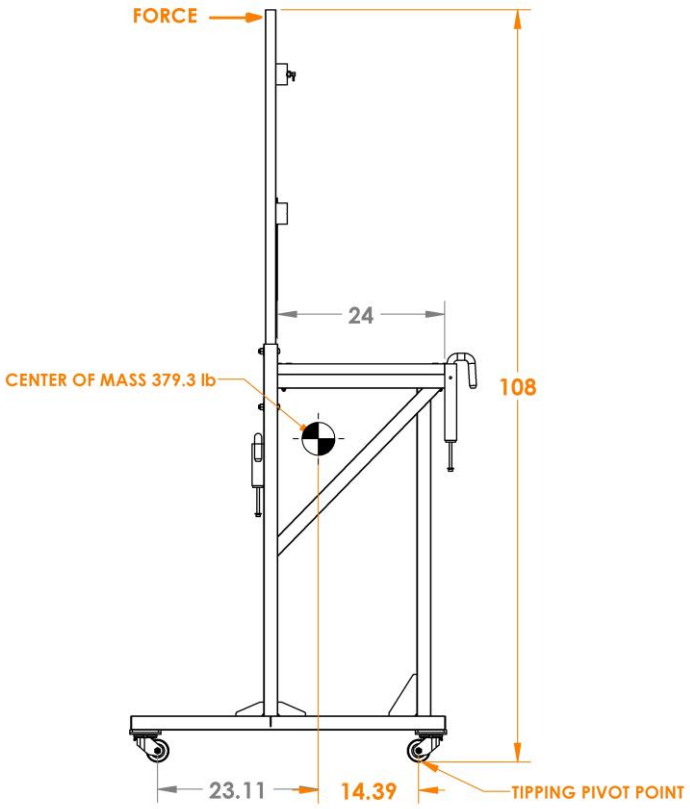
Force acting height (h) = 108”

Force required to tip (F) = $\frac{m * d}{h}$

Force required to tip (F) = $\frac{435.9 * 21.75}{108}$

F = 87.8 lbf

4. 24” SAFETY PLATFORM TIPPING CALCULATION:



Center of mass (m) = 379.3 lb

Distance (d) = 14.39”

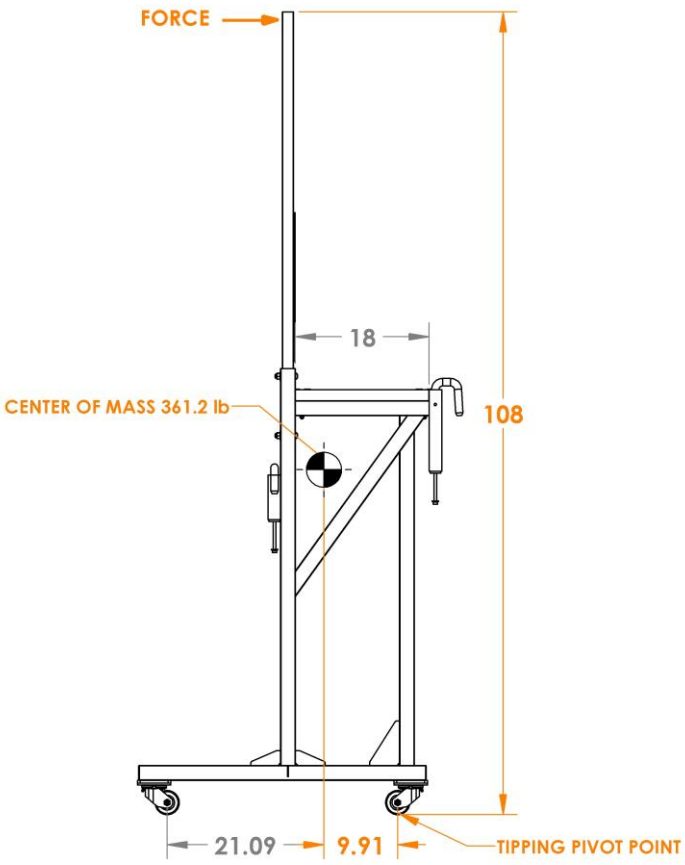
Force acting height (h) = 108”

Force required to tip (F) = $\frac{m * d}{h}$

Force required to tip (F) = $\frac{379.3 * 14.39}{108}$

F = 50.5 lbf

5. 18” SAFETY PLATFORM TIPPING CALCULATION:



Center of mass (m) = 361.2 lb

Distance (d) = 9.91”

Force acting height (h) = 108”

Force required to tip (F) = $\frac{m * d}{h}$

Force required to tip (F) = $\frac{361.2 * 9.91}{108}$

F = 33.1 lbf