

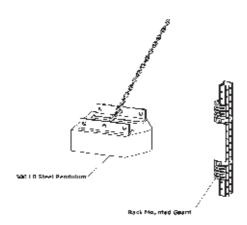


## Rack Mounted Guard

## Objective

McCue products are tested for compliance and product failure analysis to determine safe working conditions.

## Scope



The Rack Mounted Guard was installed on industrial metal racking and impacted with a 500-lb [227 kg] pendulum raised 0.6 ft [0.18 m] from point of impact per EN 15512 resulting in an impact energy of 300 ft-lbs [400 Nm].

## **Calculations**

$$E = mgh$$

$$\begin{array}{lll} m_{\rm pendulum} = 500 \; {\rm lb/32.2} \; ^{\rm tl}/{\rm s}^2 = 15.5 \; {\rm lb_m} & m_{\rm pend} = 226.8 \; {\rm kg} \\ g = 32.2 \; ^{\rm tl}/{\rm s}^2 & g = 9.8 \; {\rm m/s}^2 \\ h = 0.6 \; {\rm ft} & h = 0.183 \; {\rm m} \\ E = 15.5 \; {\rm lb_m} \, {\rm x} \; 32.2 \; ^{\rm tl}/{\rm s}^2 \, {\rm x} \; 0.6 \; {\rm ft} & E = 226.8 \; {\rm kg} \, {\rm x} \; 9.8 \; {\rm m/s}^2 \, {\rm x} \; 0.183 \; {\rm m} \\ E = 300 \; {\rm ft-lb} & E = 407 \; {\rm Nm} \end{array}$$

The Rack Mounted Guard exceeded impact requirements of EN 15512.

