

Tensegrity Tower

winds or by violent disturbances caused at the anchored ends. Being one of the most commonly found designs in nature, the radial threads connected to fixed objects are criss-crossed by the spiral threads to form an optimal design. It is strong enough to hold a large prey and at the same time flexible enough to sustain strong wind blows. Recent studies show that if few local threads are broken, the overall loading capacity of the web is in fact increased, proving the robustness of the structure. When a prey is trapped, the spider gets the message through the vibrations of threads. The patterns of interwoven threads enables the spider to spot the prey in an efficient manner.

This exhibit is an extension of the tensegrity structure concept that brings out a further advantage or effectiveness, namely robustness and structural stability. For the structure to weather a storm or a tremor, it needs to absorb sudden shocks and regain the original form.

Where do these occur? Spider web example again relates this aspect to the fact that the web is not easily destroyed by strong

