



TILTING/SHIFTING vs. STABILITY COMPARE SQUARE vs. ROUND

Loads are distributed from many various directions depending on the structure the column and footing are supporting.

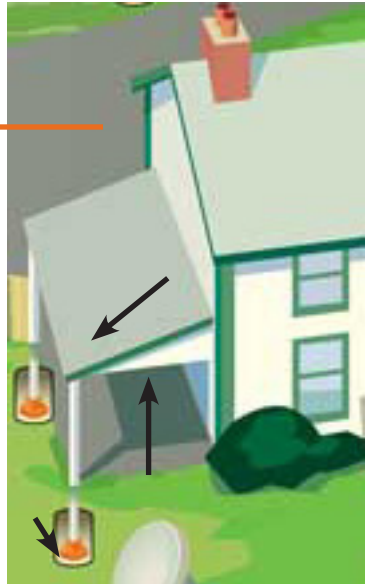
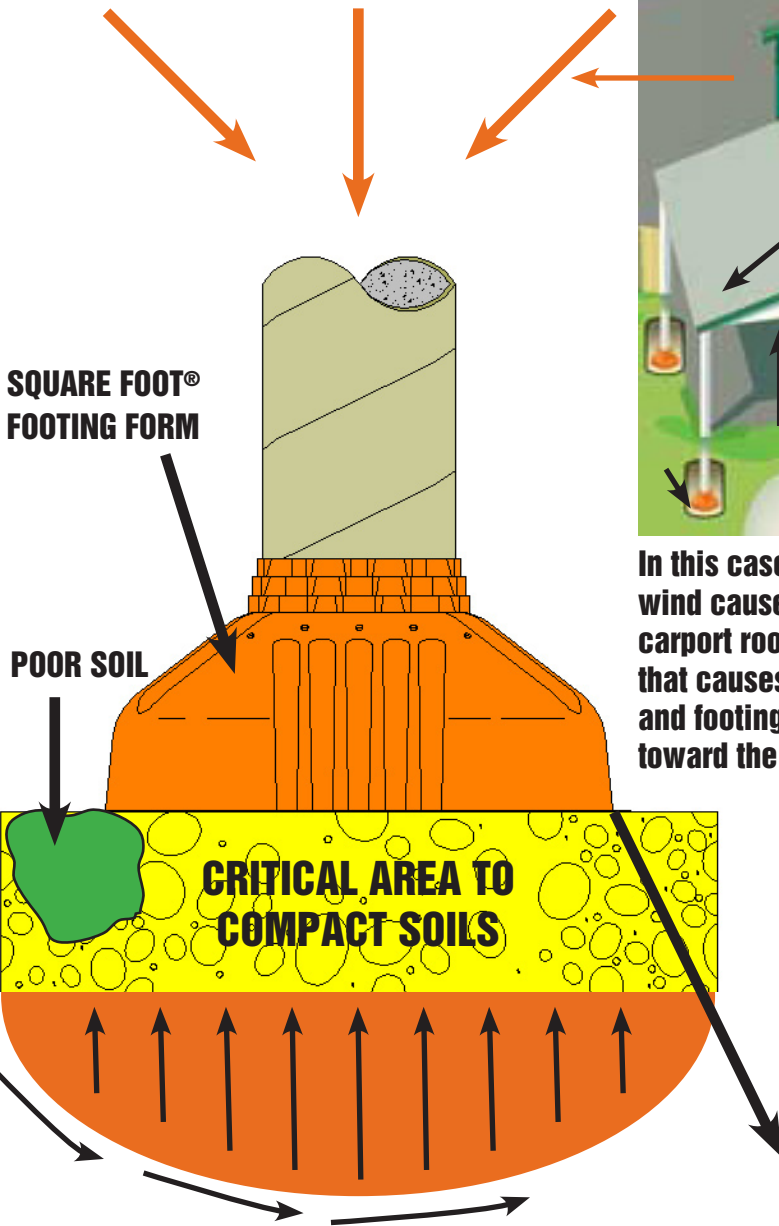
As the load under a footing spreads out the pressure/load on the soil reduces. Soil directly beneath the footing takes the GREATEST load, therefore compaction is required.

There are many different types of soil from rock or ledge (strongest), soils with high moisture content (the weakest). You need to make sure that the soil your building on can take the weight of the structure.

The larger the bottom or underside area is of a footing for a given load, the lower the pressure is on the soil.

A SQUARE footing the same width of a round/bell/cone shaped footing has more bearing surface area which reduces the load on the soil/earth proportionally.

FORCE/PRESSURE/LOADS



In this case, forces from wind cause uplift and the carport roof imposes a load that causes the column and footing to pivot inward toward the main stressor.

The imposed load spreads out from the base of the footing.



Pockets of POOR SOIL, moisture or mud can cause foundation failure. Forces from above can cause a footing to act like a lever, causing the footing to pivot. This shift can cause significant damage \$\$\$ to the structure it is supporting. Make sure your soil has the ability to support the weight of your structure and COMPACT the soil under the footing!