

Concept 1 Glossary

anti-funicular form

the inverse of a funicular form; the form taken by a structure with applied downward loads such that the entire structure is in compression

arch

a (usually) curved structure used to span a distance

beam

a structural element that is capable of withstanding loads applied perpendicular to the element

bending (see image below) the curved shape taken by a slender element when loads are applied perpendicular to the element



column

a vertical member that supports downward loads applied parallel to the length

compression

force “pushing” (force that is directed toward) the member

design

to conceive, plan, or invent something

funicular form

form taken by a cable or rope under any given load

prototype

a preliminary model of a new product or process



shear (see image to the left)
a set of parallel, non-collinear forces
acting across an element

structure

elements or a collection of elements that form a system capable of supporting loads

tension

force “pulling” on a member