

GAS BEHAVES LIKE SOLID UNDER PRESSURE

CONCRETE

prone to tension

rigid

heavy

opaque

more durable under tension

steel

less rigid

polymers

glass fibres

translucent

more durable under tension

mono-directional transmittance of load

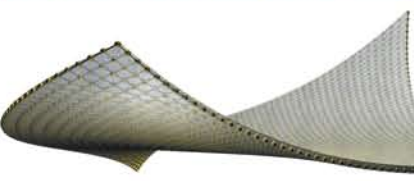
GAS MEETS CONCRETE

WHY USE MORE WHEN WE CAN'T TOUCH, SEE OR LIFT?

SOLIDITY WITHOUT EXCESS WEIGHT

CONCRETE

concrete [kən-kri:t]
adjective, noun, verb, -creted, -creted
adjective
 1. constituting an actual thing or instance; real: a concrete proof of his sincerity.
 2. made of concrete: a concrete pavement.
 3. formed by coalescence of separate particles into a mass; united in a conglutinated, condensed, or solid mass or state.
noun
 4. an artificial, stonelike material used for various structural purposes, made by mixing cement and various aggregates, as sand, pebbles, gravel, or shale, with water and allowing the mixture to harden.
 5. any of various other artificial building or paving materials, as those containing tar.
 6. a concrete idea or term; a word or notion having an actual or existing thing or instance as its referent.
 7. a mass formed by coalescence or concretion of particles of matter.
verb (used with object)
 8. to treat or lay with concrete: to concrete a sidewalk.
 9. to coalesce into a mass; become solid; harden.
 10. to use or apply concrete.
adjective
 11. set or cast in concrete, to put (something) in final form; finalize so as to prevent change or reversal. The basic agreement sets in concrete certain policies.
reinforce [ri:n-fo:rs]
verb (used with object)
 1. to strengthen with some added piece, support, or material to reinforce a wall.
 2. to strengthen; make more forcible or effective: to reinforce efforts.
noun
 3. something that reinforces.
solid [səl-əd]
adjective
 1. having three dimensions (length, breadth, and thickness), as a geometrical body or figure.
 2. having the interior completely filled up, free from cavities, or not hollow: a solid piece of chocolate.
 3. without openings or breaks: a solid wall.
 4. firm, hard, or compact in substance: solid ground.
 5. having relative firmness, coherence of particles, or persistence of form as not liquid or gaseous: solid particles suspended in a fluid.
 6. dense; thick; or heavy in nature or appearance: solid masses of cloud.
 7. not flimsy; slight, or light, as buildings, furniture, fabrics, or food; substantial.
 8. without separation or division; continuous: a solid row of buildings.
 9. thorough, vigorous, great, big, etc. (with emphatic force, often after another adverbial flow).
 10. firmly united or consolidated: a solid combination.



gas

gas [gæs]
noun
 1. Physics: a substance possessing perfect molecular mobility and the property of indefinite expansion, as opposed to a solid or liquid.
 2. any such fluid or mixture of fluids.
 3. Slang, a empty talk.
 b. a person or thing that is very entertaining, pleasing, or successful: The party was an absolute gas, and we loved it.
 c. a person or thing that affects one strongly.
verb (used with object)
 4. to supply with gas.
 5. to treat or impregnate with gas.

SOLIDS

behave:

$P = M / A$

mono-directional transmission

BUT

GASES

behave:

$P = M / V$

multi-directional transmission

CAVITY

a cavity.

resistant cavity

non-resistant cavity

PRESSURE > < PRESSURE

PRESSURE > < PRESSURE

GIVEN a particular FORM

non-plastic resistant cavity

plastic resistant cavity

non-plastic resistant cavity

plastic resistant cavity

PRESSURE > < PRESSURE

PRESSURE > < PRESSURE

cavity

[kæv-ə-ti]
noun, plural: cavities
 1. any hollow place; hollow.
 2. Anatomy: a hollow space within the body; an organ; a bone, etc.
 3. a hollow space or a pit in a tooth, most commonly produced by caries. A cavity may be artificially made to support dental restorations.
hole [ho:l]
noun, verb; holed, holed; holed
noun
 1. an opening through something; gap; aperture; a hole in the roof; a hole in my sock.
 2. a hollow place in a solid body or mass; a cavity; a hole in the ground.
 3. the excavated habitation of an animal; a burrow.
 4. a place of solitary confinement; a dungeon.
 5. a cove or small harbor.
 6. a fault or flaw: They found serious holes in his reasoning.
 7. a deep, still place in a stream: a swimming hole.
 8. informal: opening; slot: The radio program was scheduled for the p.m. hole.
 9. informal: a hole in our accounting department.
 10. Aeronautics: an air pocket that causes a plane or other aircraft to drop suddenly.
verb (used with object)
 11. to make a hole or holes in.
 12. to put or drive into a hole.
verb (used without object)
 20. to make a hole or holes.