# Wall Footing

## is a footing which supports a wall by extending along the entire length of the wall. Isolated Footing is one which supports a single column, post, pier or other concentrated load. Combined Footing is one which supports two column loads or sometimes three column loads not in a row

# STAKE

# This shows grade level based on the word's complexity. a stick or post pointed at one end for driving into the ground as a boundary mark, part of a fence, support for a plant, etc.

## A footing which supports a number of columns in a line has to be a combined footing known as strip footing. It is used when the row of a column is closely spaced and their spread footings overlap with each other. A strip footing is also known as a continuous footing.

## Combined Footing

## is one which supports two column loads or sometimes three column loads not in a row. Continuous Footing is one which supports a row of three or more columns. Raft or mat footing is one which extends under the entire building area and supports all the wall and column loads from the building.

## Ceiling

## insulation provides a thermal barrier to prevent the transfer of heat energy which will improve indoor comfort and also save on heating and cooling energy costs.

#### Girder

#### (/ˈɡɜːrdər/) is a support beam used in construction. It is the main horizontal support of a structure which supports smaller beams. Girders often have an I-beam cross section composed of two load-bearing

# Purlins

## are beams that can be used to create a building framework to support the weight of roofing sheets or wall cladding sheets attached. Some roof purlins are made of wood, however, galvanised steel purlins offer additional benefits including durability, cost and structural length.

#### Header

#### in the construction and engineering world is a beam over an opening that disperses the structural load to the outside of the opening to keep

## Trimmer

## Angle is a steel fabrication used to 'trim' around openings in floors. The angle provides a bearing surface for building elements (e.g. beams) and transmits the load to supports at either end of the trimmer.

#### String,

#### a tension member, is not only. able to make structures by itself but also in combination with such rigid members as beams and. arches.

### Dead" loads

### comprise the weight of the structure itself as well as things like mechanical equipment, ceiling and floor finishes, cladding, façades, and parapets. The dead load is essentially the amount of consistent weight that a building must support at all times.

## Live" loads

## account for things that are more transient in nature, like the weight of people moving around in the building, snow atop the structure or interior furnishings. The floor decking and roof sheathing distribute the load to uniformly spaced beams.

## Load bearing

## structures are designed to carry a bifurcated, constant, and climatic load on the foundation. It is the main load bearing frame of the structure. Roof construction and longitudinal walls are generally supported by fasteners. Gable walls receive support from gable columns.

# Wind load

# is the load, in pounds per square foot, placed on the exterior of a structure by wind. This will depend on: The angle at which the wind strikes the structure. The shape of the structure (height, width, etc.)

butterplu roof

## Two downward sloping surfaces meet to form a middle roofline, creating a shape that resembles a butterfly in flight.

# hip roof,

## also called hipped roof, roof that slopes upward from all sides of a structure, having no vertical ends. The hip is the external angle at which adjacent sloping sides of a roof meet. The degree of such an angle is referred to as the hip bevel.

### A gable roof

### is a common roof type used for many building designs. It will have two sloping sides that meet to form a ridge, and is most easily identified by the triangular shape formed at either end.

# mansard roof,

## type of roof having two slopes on every side, the lower slope being considerably steeper than the upper. In cross section the straight-sided mansard can appear like a gambrel roof, but it differs from the gambrel by displaying the same profile on all sides.

Common rafter

### In modern house construction, the most common form of rafter is known as the fink or 'w' trussed rafter. This consists of a rafter incorporating tension and compression members in the shape of a W. This is capable of spans u

1. A rafter

that follows the same line as the common rafters, but it meets a hip instead of the ridge board. As a result it is shorter than the common rafters and has an inclined top or cheek cut where it meets the hip rafter.

he valley

## rafter is the rafter in the valley line that joins the ridge to the wall plate along the meeting line of two sloped sides of a roof that are perpendicular to each other in a roof framing system

hip rafter

## Unlike common roof rafters, which run perpendicular to the peak of the roof, a hip rafter connects to the ridge at a 45-degree angle. These rafters can be created out of lumber using traditional stick-framing techniques, or may be included in a pre-engineered steel o

rise

# HalleysBlue High Rise Steel Structures are made of Built-Up beams & Rolled Steel sections forming columns, joists, floor beams & roof Structure in the shape of the letter, Square & Star column sections.

tread

# COMPONENTS. Tread: The tread is the piece of steel that makes up the steps of the stair.