shallow foundations and their types
in today's video we shall focus on the concept of shallow foundation and their types
a shallow foundation is a type of foundation
in which the depth of the foundation is equal to or less than the width of the foundation
probably these foundations are constructed to a shallow depth up to 1.5 meters
the shallow foundations are classified into strip footing
spread or isolated footing combined footing strap or cantilever footing
and mata raft foundation
let us start with strip footing
a strip footing is a continuous strip of concrete that serves to spread the weight of a load-bearing wall across an area of soil
sometimes when a row of columns to be closely spaced in such a case
it is more economical to provide a strip footing than to provide a number of spread footings in one line
spread or isolated footing
a spread footing is also called isolated

footing or pad footing or individual
footing constructed to support an
individual column
a spread footing is constructed in a
circular
square or rectangular slab of uniform
thickness
based on requirements spread footing is
constructed either stepped or sloped to
spread the load over a large area
combined footing a combined footing is
constructed to support two columns
it is generally constructed either in a
rectangular or trapezoidal shape
these types of footings are adopted when
the two columns are so close to each
other where their individual footing
would overlap
or when the property line is so close
that spread footing would be subjected
to eccentric load
strap or cantilever footing in this case
two isolated footings are connected with
a structural strap or a lever
making the footings behave as one unit
a strap is a rigid beam that helps to
transfers the load acting on it safely
this type of footing is more economical
than a combined footing when the

allowable soil pressure is relatively
high and the distance between the
columns is large
mat or raft foundation
a matter raft foundation is a large slab
supporting a number of columns and walls
under the entire structure or a large
part of the structure
a mat is required when the allowable
soil pressure is low
and are useful in reducing the
differential settlements on
non-homogeneous
soils we will see more on foundations in
upcoming topics
thank you for watching stay tuned
the best is yet to come kindly do like
share comment your views and finally
don't forget to subscribe our channel