

DESIGN OF SLABS

Difference between One Way Slab and Two Way Slab

Sr No.	One Way Slab	Two Way Slab
1	The one way slab is supported by a beam on two opposite side only.	The two way slab is supported by the beam on all four sides.
2	In one way slab, the load is carried in one direction perpendicular to the supporting beam.	In two way slab, the load is carried in both directions.
3	One way slab two opposite side support beam /wall	Two Way Slab four side mins all side supported beam /wall
4	One way slab is bend only in one spanning side direction while load transfer	Two way slab is bend both spanning side direction while load transfer
5	One way slab is bend only in one spanning side direction while load transfer	In two-way slab, the crank is provided in four directions.
6	If L/b the ratio is greater than or equal 2 or then it is considered a one-way slab.	If L/b the ratio is less than 2 then it is considered a two-way slab.
7	In one-way slab, the load is carried in one direction perpendicular to the supporting beam.	In two-way slab, the load is carried in both directions.
8	The deflected shape of the one-way slab is cylindrical.	Whereas the deflected shape of the two-way slab is a dish or saucer-like shape.
9	Chajja and Varandha are practical examples of one-way slab.	Whereas two-way slabs are used in constructive floors of the Multistorey building.
10	In one-way slab quantity of steel is less.	In two-way slab quantity of steel is more as

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		compared to the one-way slab.
11	Main Reinforcement is in provide short span due to banding.	Main Reinforcement is in provide short span due to banding
12	$L_y/L_x \geq 2$ one way slab spanning.	$L_y/L_x < 2$ two way slab spanning
13	One way slab near about 100mm to 150mm based on the deflection.	two way slabs is in the range of 100mm to 200mm depending upon
14	one way slab economical near about 3.5 m.	Two way slab may economical for the panel sizes near about 6m x 6m.

