

Scaffolding meaning | Types of Scaffolding | Scaffolding material

Scaffolding meaning

The Scaffolding meaning will be very simple for you if you read all the articles below. Scaffolding is a temporary framework of timber or steel elements, having platforms at different levels, to enable the masons to work at different heights of a building.

A mason standing on the ground can work up to a height of about 1.5m. When work gains height more than this, mason and labors need a temporary platform to work at heights. The temporary framework is erected close to the work to provide a working platform for the workers and provide limited space for the storage of building materials, tools, and plants, etc.

Parts of a Scaffolding

An ordinary scaffolding consists of following parts:

1. Standards: Vertical bullies erected at a distance of about 1m to 2m from the structure are known as standards. All the loads are ultimately borne by standards; they should strong enough to bear them. They should be strong and adequately, buried into the ground.

2. Ledgers: These are the members laid horizontally, parallel to the walls. They are rigidly connected to the standards either by ropes or other connectors, at heights where temporary working platforms have to be built.
3. Putlogs: These are lateral pieces, one end of which remains supported on ledgers and another end on the wall. In the case of double scaffolding, two sets of standards and ledgers are erected and putlog pieces remain supported on both the ledgers.
4. Braces: These are diagonal or cross-pieces fixed on the standard to provide the stiffness to the scaffolding.
5. Guard Rail: It is an additional horizontal rail, like a ledger, provided at the working level as a safeguard for the workers and masons.
6. Toe Board: It is a wooden plank placed parallel to the ledgers and supported between the putlogs.
7. Raker: It is inclined to support given to the scaffolding or structures etc.

Types of Scaffolding

We have studied scaffolding meaning now let us study scaffolding types. There are various types of scaffoldings, each one being useful for some specific purposes. Following are the usual types of scaffoldings:

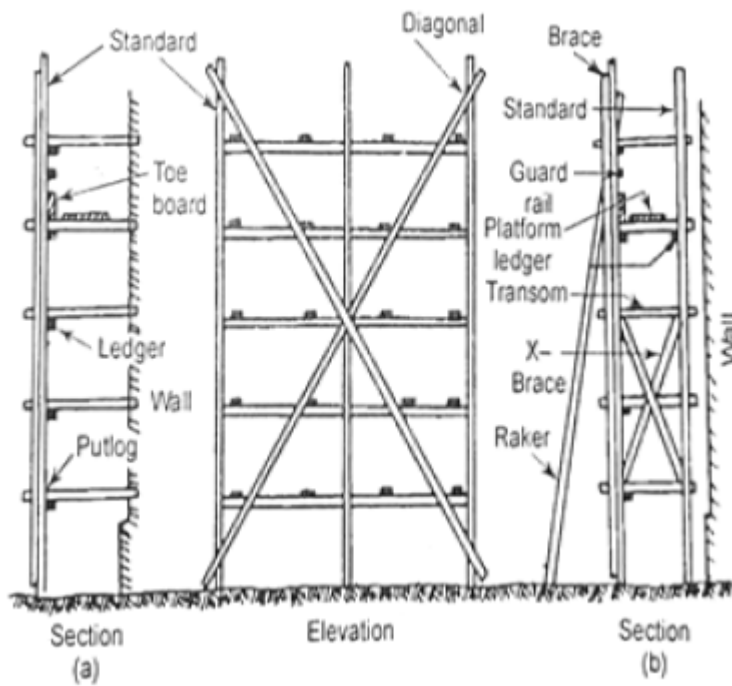
1. Brick-layers scaffolding or single scaffolding
2. Mason's scaffolding or double scaffolding
3. Steel scaffolding
4. Needle or cantilever scaffolding
5. Trestle scaffolding
6. Suspended scaffolding

7. Gantries

8. Patented scaffolding

1) Brick-layers Scaffolding or single scaffolding: Figure shows the diagram of a brick-layers scaffolding. It consists of a row of standards at a distance below about 1.20m from the wall. The distance between adjacent standards is about 2 to 2.5 m. The standards are connected to each other with the help of ledgers at a vertical interval of 1.2m to 1.8m. Ledgers are connected to the standards on the side of the wall. Traverse pieces i.e. putlogs, with one end on the ledger and the other end on the wall are then put at a horizontal interval of about 1.2m to 1.8m.

2) Mason's scaffolding or double scaffolding: This scaffolding is more or less similar to singles scaffolding except that where single scaffolding has only one row of standards and ledgers, this scaffolding has two sets of standards and ledgers. The distance between the face of the wall and the inner row standards kept about 20cm to 30cm and the distance between the two-row standards is kept about one meter. Putlogs are supported directly on ledgers of the two rows and in this case, no holes are required to be left in the wall to support one end of the putlogs.



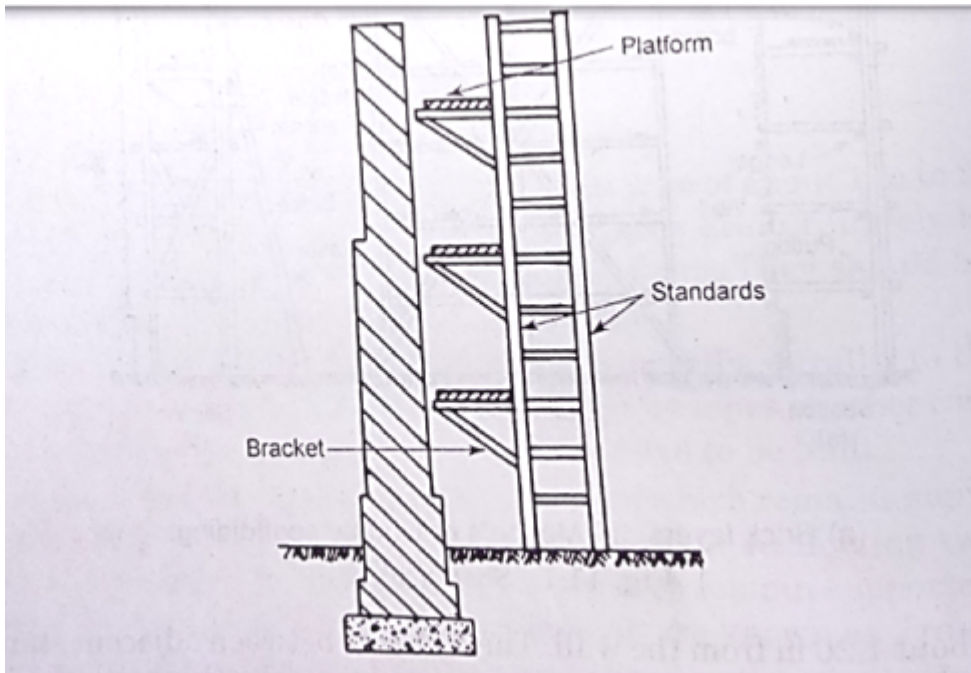
Mason's scaffolding or double scaffolding

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3) Steel scaffolding: Steel scaffolding is similar in construction to the masons scaffolding except that steel tubes are used in place of wooden bullies. Various members in it are not connected with the help of rope lashing but by standard couplets. Steel tubes are available in 38 mm to 64 mm diameter and in standard lengths. Tubes are used as uprights or standards are connected to a square or circular steel base plate by welding.



Steel scaffolding

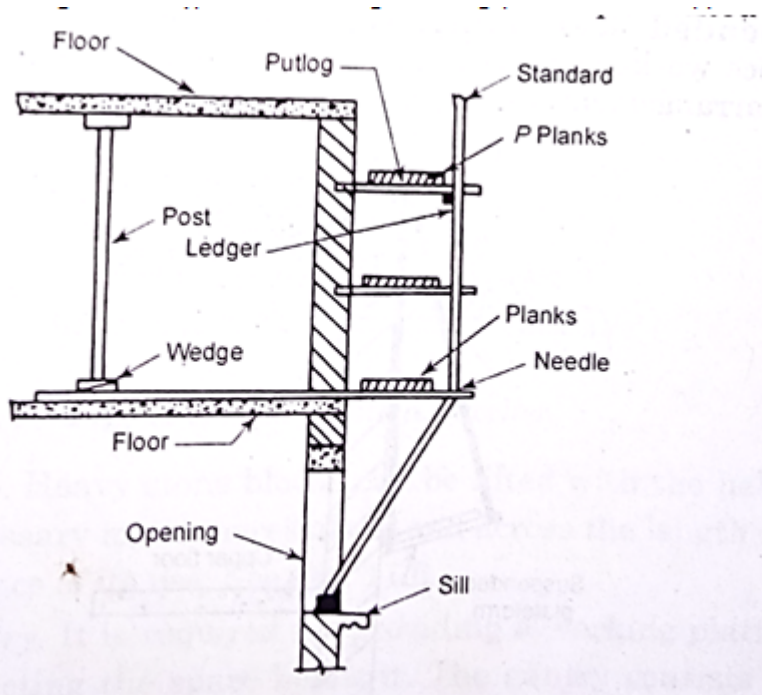
4) Needle or cantilever scaffolding: This type of scaffolding is used under the following situations;

1. Hard firm ground is not available for standards to rest.
2. When construction is to be carried on the side or a very busy road where construction of single or double scaffolding is not possible.
3. When construction is to be carried out at a very large height of a multi-storied building.

In this scaffolding, general frame-work is just like single or double scaffolding. But the standards are supported by a series of ties or needle projecting out through window opening or opening development for this purpose. The needle may also be taken out at floor levels.

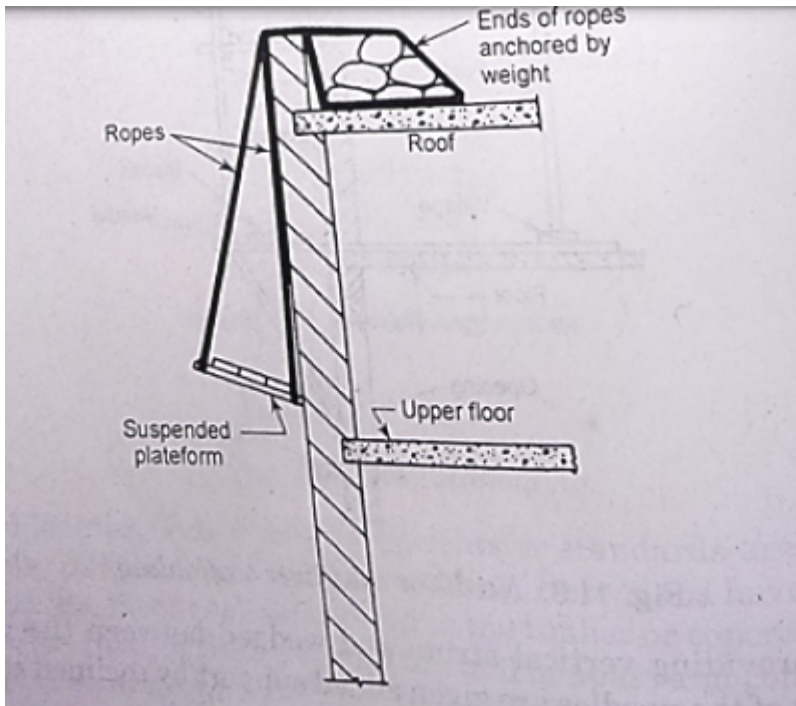
5) Trestle scaffolding: In this type of scaffolding, working platforms are supported in ladders, tripods, etc. They do not need any standards, ledgers, putlogs, etc. This scaffolding

can be easily shifted from one place to another. It is mostly used for minor repairs or painting works, inside the rooms.



Trestle scaffolding

6) Suspended scaffolding: This type of scaffolding mostly used for maintenance works such as painting, pointing, distempering, whitewashing, etc. In this arrangement, the working platform is suspended from the roofs or parapet walls by means of ropes, chains or wires.



Suspended scaffolding

7) Gantries: Gantries are used when very heavy stone blocks are required to be lifted to put them in the position of their use.

8) Patented scaffolding: These days various types of scaffolding, useful for certain specific purposes are available. In all these scaffoldings, the working platform is specific purposes are available In all these scaffolding, the working platform is supported on brackets which can be adjusted at any height.

So, friends, i hope this article on “scaffolding meaning |Types of Scaffolding| scaffolding material” remains helpful for you.