

SCAFFOLDING

When the height of wall or column or other structural member of a building exceeds 1.5 m temporary structures needed to support the platforms over which the workman sits and carries out the work

These temporary structures constructed very close to the wall is in the form of timber or steel frame work commonly called as scaffoldings

Components of scaffoldings

- Ledgers
- Braces
- Put logs

- Transoms
- Boarding
- Guard rail
- Toe board

- Single scaffolding or brick layer scaffolding
- Double scaffoldings or masons scaffoldings
- Cantilever or needle scaffoldings
- Suspended scaffoldings
- Trestle scaffolding
- Steel scaffolding
- Patented scaffoldings

Single scaffoldings

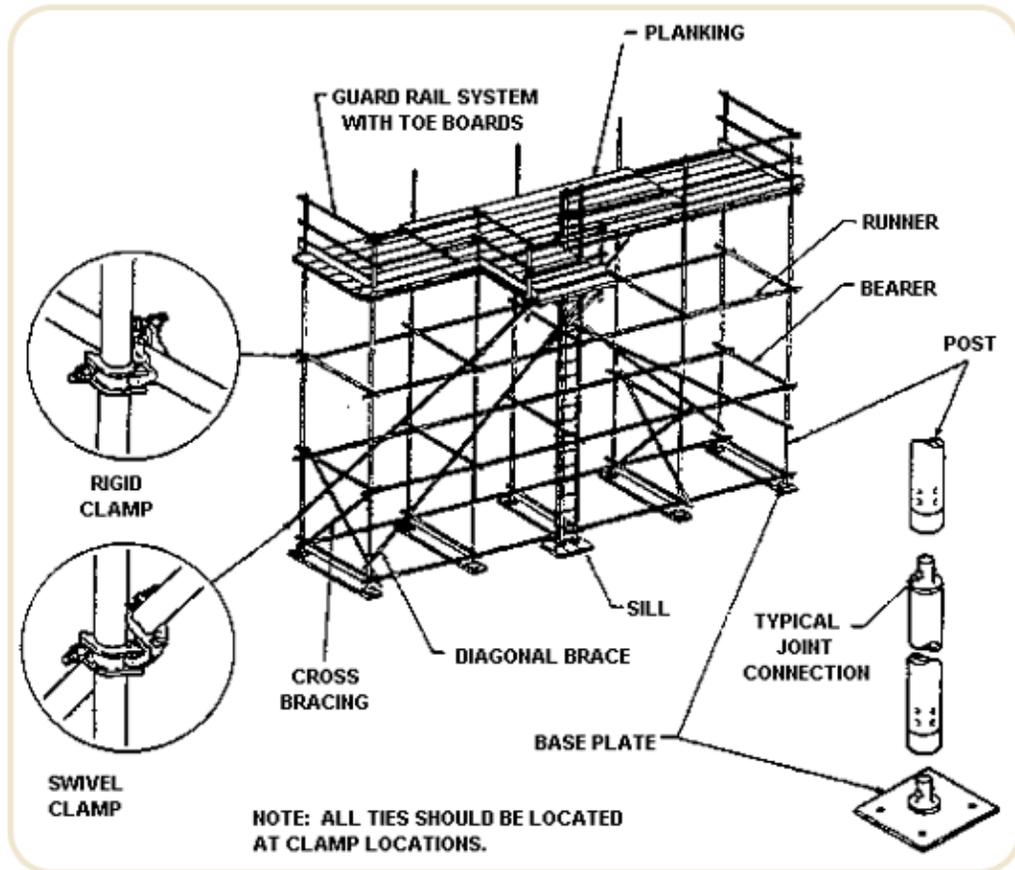
This consists of a single frame work of standards, ledgers, put logs etc
Constructed parallel to the wall at a distance of about 1.2 meters

The standards are placed at a distance of 2 to 2.5 m interval

Ledger connected with the standards, and are provided at a vertical distance of 1.2 to 1.5 m

Put logs or connected with one end on the ledgers and other end at the holes of the wall at an interval of 1.2 to 1.5 m interval

Double are masons



scaffoldings

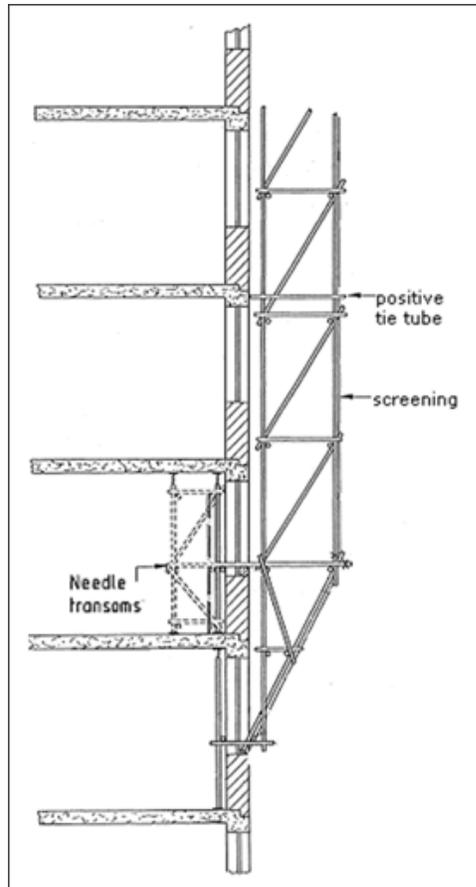
It is very difficult to put holes in walls to support putlogs in stone masonry

In the case a strong scaffolding is used consisting of two rows of scaffolding

The first row placed 20 to 30 cm away from the wall the other frame will 1m distance from the first one

Put logs are supported on both the supports, rakers and cross braces are provided to make the scaffolding more strong

It also called as independent scaffoldings



Cantilever or needle scaffolding

Cantilever supports can be used under following circumstances

Ground is weak to support standards

Construction of the upper part of the wall is to be carried out

It is required to keep the ground near wall free for traffic etc i

It has two types

Single Frame

The standards are supported on series of needle taken out through opening or through holes

Double frame

The needles are projecting beams are strutted inside the floors

Suspended scaffolding

It is the light weight scaffolding used for repair works such as pointing, painting etc

The working platforms are suspended from roofs by means of wire ropes or chains etc

Trestle scaffolding

Such type of scaffoldings are used for painting and repairing work inside the room up to a height of 5m

The working platform is supported over the top of movable contrivances such as tripods ladders etc

Steel scaffolding

Steel scaffolding is practically similar to the timber scaffolding, here wooden members are replaced by steel couplets are fittings

Such scaffolding can be erected and dismantled rapidly

It has a greater strength and greater durability

Patented scaffolding

Many patented scaffolding made of steel are available in the market
Thos scaffoldings are equipped with special couplings frames etc

Source : <http://www.nprcet.org/e%20content/Misc/e-Learning/CIVIL/VI%20SEMESTER/10111CE601%20-%20CONSTRUCTION%20TECHNIQUES%20EQUIPMENTS%20AND%20PRACTICE.pdf>