

### <u>Subject:</u> Building Material and Construction-IV <u>Topic:</u> Centering <u>Presented by</u>: Nilofar Saifi

CENTERING

## CENTERING

- Centering is a type of falsework the temporary structure upon which, the RCC for slab is laid during construction.
- A part of formwork which supports the horizontal surface is called centering.
- E.g. Bottom of beam and slab, also used for bottom of sunshade.

• Centering work for casting slab and beam.



## COMPONENTS

- It consists of :-
- Sole plates
- Wedges
- Props Head
- Tree Planks
- Batten
- Ledgers
- Beam formwork rests on head tree Slab form work rests on battens and joists, If prop height are more than 8' provide horizontal braces.

#### CENTRING FORMWORK FOR SLAB AND BEAM



#### SHEETING:-

There are two types of sheeting used: -

• Steel sheeting and wooden sheeting



Advantages of steel form-work over timber form:

- Steel shuttering is strong, durable & has longer life.
- It gives very smooth finish to surface of member.
- It is waterproof and minimizes the honeycombing effect.
- Steel formwork can be installed & dismantled with greater ease.



Advantages of using timber forms:

- Timber Shuttering is easy to construct for any shape, size and height.
- It is economical for Small projects.
- It can easily be made into any shape or size.
- It can be constructed using locally available timber.
- It is light weight as compared to steel or aluminum Shuttering.

# ARCH CENTRING

• Temporary framework or formwork, usually timber that masonry or concrete arches are built on top of.

• In centering, The thin battens nailed to the ribs of the center that the masonry sits on are known as lagging.

Formwork materials use din the construction of the arches are :-

- Laggings
- Braces
- Ties
- Ribs
- Folding wedges
- props



## REQUIREMENTS OF GOOD CENTERING

- Material should be cheap and re usable.
- It should be practically water proof, so that it should not absorb water from concrete, Swelling and shrinkage should be minimum.
- Strong enough to with stand all external loads, Deflection should be minimum.
- Surface should be smooth, and afford easy striping, Light in weight, so that easy to transfer, Joints should be stiff, so that lateral deformation and leak is minimum.

