Channabasaveshwara Institute of Technology

(Affiliated to VTU, Belgaum & Approved by AICTE, New Delhi)
(NAAC Accredited & ISO 9001:2015 Certified Institution)
NH 206 (B.H. Road), Gubbi, Tumkur – 572 216. Karnataka.

"INTERNSHIP PRESENTATION"

Under the guidance of

MR .VINAYAK RAO S R
Assistant Professor,
Department Of Civil Engineering
CIT. Gubbi -572216

Presented by

RANJINI B S
[1CG17CV032]

CONTENTS

OBJECTIVES

- The objective of the internship course is to facilitate reflection on experiences obtained in the internship and to enhance understanding of academic material by application in the internship setting.
- Internships will provide students the opportunity to test their interest in a particular career before permanent commitments are made..
- Internship allows us to gain a better perspective of post graduation employment by applying the principles and theories developed in classroom
- Knowing the practical work and the real situation besides the theoretical knowledge in time of studying makes one experienced in practical and theoretical knowledge at the time of graduation.

ABOUT THE COMPANY

habitatventures.com

- Habitat Ventures Pvt Ltd. is an architect developer company, established in the year of 2004.
- The company has delivered 2.5 million square feet across 15 projects in past 14 years and 1+ million square feet under construction.

Vision

"To emerge as the real estate developer of choice in southern India by building quality relationships through a work culture and promotes integrity respect and loyalty".

Mission

"To provide our client and costumers exemplary service in a professional and transparent environment and make the entire experience of dealing with habitat ventures pleasant & personal".

COMPANY PROJECTS

The company has already completed 15+projects across the Bengaluru .Completed projects distributed all over city with prominent access and has attained the distinction of delivering top quality living spaces to extremely satisfied clients.

Completed Residential Projects

- Habitat crest -Whitefield
- Habitat aster -Whitefield
- Habitat Mayflower - Koramangala
- Habitat cedar - Thindlu
- Habitat Carnation - Chandra layout
- Habitat orchid - Basavanagudi
- Habitat Maple - Raja Rajeshwari nagara
- Habitat ochre - Uttrahalli

COMPANY ONGOING PROJECTS

Company Has 3 Major Ongoing Projects

- Habitat Iluminar -Off Mysore Road.
- Habitat Eden heights- Whitefield.
- Habitat Aura – Bannergatta

Commercial Projects

- HVP Cypress I &II -VV Puram
- HVP Arcade - RR Nagar
- HVP Aster - Whitefield

ABOUT SITE

- The internship is done at ongoing project named **“HABITAT ILUMINAR”.**
- The proposed residential project “Habitat Iluminar” at Mysore Road, Bengaluru, is coming up with 7no’s High rise Towers with Basement+GF+11 upper floors & 3 no’s High-rise Tower with Basement+GF+10 upper floors with a Total 412 Deluxe Apartment.

PROJECT DETAILS

1. Project name - HABITAT ILUMINAR.
2. Type - Residential apartment.
3. Categories as per NBC - Group A - Sub -division- A-4
4. Max. Height of Tower - 37.1 m
5. Total no of towers - 10.
6. Total site area - 212276.07sqft.
7. Total built-up area - 652534.6sqft.
8. Total no of flats - 412.
9. Tower no - 1,2,3,7,8,9,10 - G+11.
10. Tower no - 4,5,6 - G+10.
11. Tower 1 to 6 - 2 BHK.
12. Tower 7 - 2.5 BHK.
13. Tower 8 to10 - 3 BHK.
14. 1 floor - 4 flats.
15. 5&6 tower up to 4 floor - 2 flats.
16. 2 BHK - 1031sqft - 148 flats.
17. 2.5 BHK - 1252sqf - 44flats.
18. 3 BHK - 12985sqft - 220flats.

- CLIENT: HVPL - Habitat ventures private ltd.
- PMC: ANPC - AN Prakash consultancy.
- CONTRACTOR: TCIPL - Technicon information limited.

MASTER PLAN


BLOCK 06
BLOCK 05
BLOCK 04
BLOCK 03
BLOCK 02
BLOCK 01
T10
T9
T8
T7
T6
T5
T4
T3
T2
T1
01
KEY PLAN
HABITAT ILUMINAR - AMENITIES
CLUB HOUSE - AMENITIES
W
S
N
E

TASK PERFORMED

- MASONARY WORK
- PLASTERING
- FLOORING
- WATER PROOFING
- PLUMBING
- PAINTING
- CURING
- EXPANSION JOINT
- QUALITY INSPECTION
- SAFETY MEASURES

MASONRY WORK

- Masonry is generally a highly durable form of construction.
- Masonry is the structure, from individual units, which are often laid in and bound together by mortar.
- In this project combination of concrete solid blocks and porotherm blocks are used. Solid blocks are being used at the opening edges so that it will give stiffs support to the fixtures, such as doors and windows. Remaining porting of masonry is done with porotherm blocks, which are thermal and sound resistant and also has effective light weight.

Porotherm block

- **Size of blocks used in construction site**
  -

  - 400x200x200
  - 400x150x200
  - 400x100x200
  - **Advantage :**
    - Light weight (60% less weight than conventional walling material
    - Low water absorption of ~15 % thus minimal risk of dampness ,cracks or shrinkage of walls.
    - Non -susceptible to carbonation thus providing greater durability.

Solid blocks

Sizes used in site

- 400x150x200 mm
- 400x100x200 mm

Advantages

- More durable and strength
- Increase in stability and capable of carrying more loads

PLASTERING

- Plastering work is a thin layer of mortar, applied over the masonry and it acts as a damp-proof coat over the brick masonry work.
- Plastering work also provides a finished surface over the masonry that is firm and smooth hence it enhances the appearance of the building
- Minimum of 7 days Curing is must for mortar plastering.
- GYPSUM PLASTER is done in areas, where there is no regular water usage, like bedrooms and living rooms.

GYPSUM PLASTERING

Gypsum plastering is most commonly used in internal wall plastering and has been widely replacing the traditional cement mortar plastering.

SPECIFICATION OF GYPSUM PLASTER USED AT SITE:

Setting time: 25-30 min.
Color: White
Coverage area(Considering 12mm thickness):21sq ft per 25 kgs bag
Compressive strength: 60-70 kg/cm2
Plaster/Water Ratio: 10 kg to 6-6.5 litres of water
Storage Life: 12 Months from manufacture in dry & sheltered conditions

Advantages:

Light Weight
Resistant to corrosion
More economical than steel mesh
Smooth finishing

FLOORING

- Flooring is the general term for a permanent covering of a floor or the work of installing such a floor covering ,finished material applied over the floor structure to provide a walking surface.
- Wall tiling of dimension 300x300 mm , 6mm thickness is used in this project.
- Flooring tile - vitrified tiles of 600x600mm , 9mm thickness is used.

WATER PROOFING

Waterproofing is the process of making a structure water resistant so that it remains relatively unaffected by water or resisting the ingress of water under specified conditions. Such items may be used in wet environments. Waterproofing of toilets is required to prevent seepage of water from floor slab and walls as toilet involves use of water and has plumbing works.

Procedure

•Surface preparation.
•Priming of surface.
•Application of 2 coats.

Waterproof chemical- PROTECTA 500 coating is done**.**

PLUMBING

- A fitting is used in pipe systems to connect straight pipe or tubular sections, adapt to different sizes or shapes and for other purposes, such as regulating fluid flow.

- PVC- Polyvinyl chloride-which is light weight plastic used in construction it is softer and more flexible. It is used as acid resistant waste piping .
- UPVC- Unplasticized polyvinyl chloride -It is more hard than PVC. It is used for cold water and transmit drinking water.
- CPVC- Chlorinated polyvinyl chloride – It is a thermoplastic produced by chlorination of polyvinyl chloride resin, which is significantly more flexible and can withstand higher temp. It include hot and cold water pipes.

PAINTING

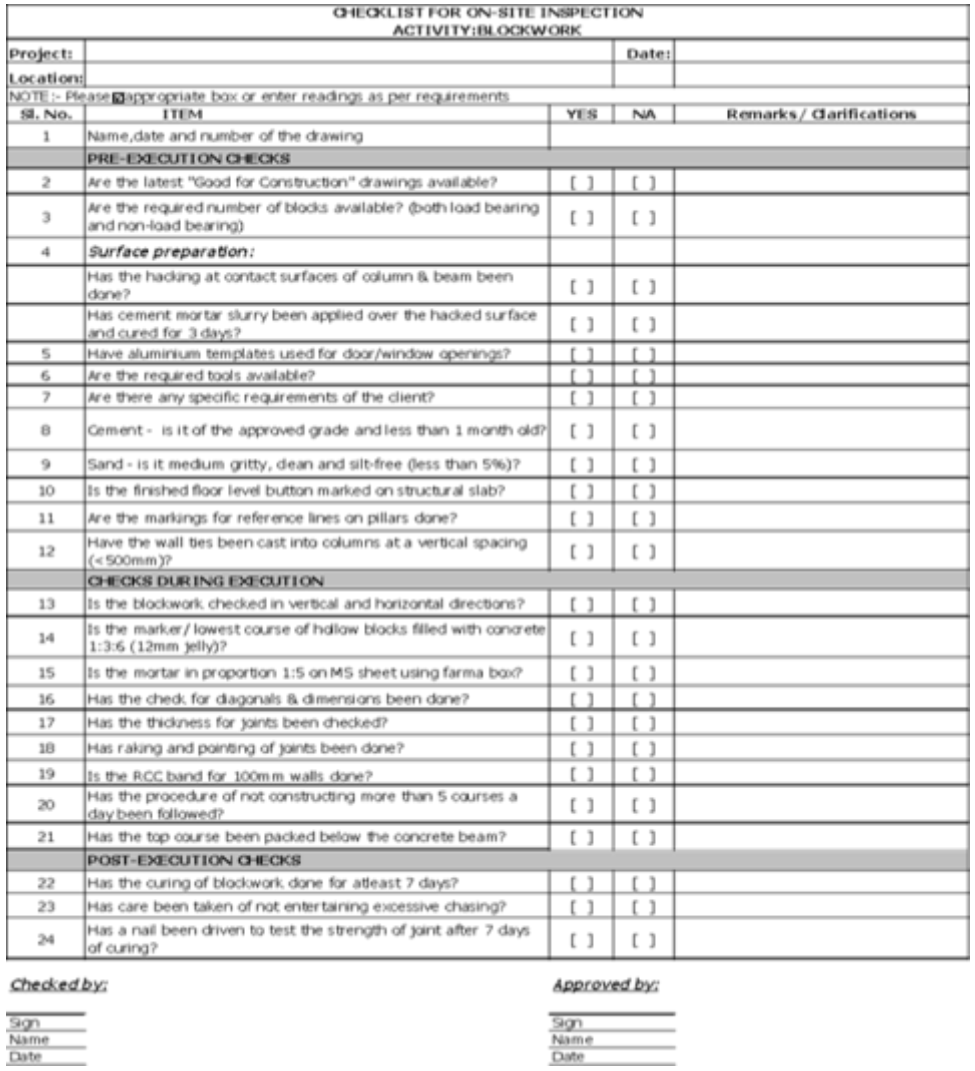
- The painting technology is growing more rapidly day-by-day and it has attained a higher position in almost all areas where nothing is said to be complete without painting as far as material world is concerned.
- Residential painting may include
    1. Surface Dryness
    2. Cleaning & Treatment
    3. First Primer Coat
    4. Application of Putty
    5. Second Primer Coat
    6. Finish Coat

EXPANSION JOINT

- Normally structures exceed 45m in length are designed with one or more expansion joint. Structures adjacent to the joint should preferably be supported on separate columns or walls but not necessarily on separate foundations. Joints provided to accommodate the expansion of adjacent building. 100mm width of expansion joints are considered between the two blocks.
- In building construction, an expansion joint is a mid structure separation designed to relieve stress of building movement included by:
- Thermal expansion and construction caused by temperature changes
- Sway caused by wind
- Seismic events
- Static load deflection
- Live load deflection

QUALITY INSPECTION

- Tolls to be used for quality inspection.
- Measuring tape.
- Spirit levels - 3m.
- Right angle template.
- Related “Good for Construction” drawings.



CHECKLIST FOR ON-SITE INSPECTION
ACTIVITY:BLOCKWORK

Project:			Date:	
Location:				
NOTE :- Please ☒ appropriate box or enter readings as per requirements				
Sl. No.	ITEM	YES	NA	Remarks / Clarifications
1	Name,date and number of the drawing			
	PRE-EXECUTION CHECKS			
2	Are the latest "Good for Construction" drawings available?	[ ]	[ ]	
3	Are the required number of blocks available? (both load bearing and non-load bearing)	[ ]	[ ]	
4	*Surface preparation:*			
	Has the hacking at contact surfaces of column & beam been done?	[ ]	[ ]	
	Has cement mortar slurry been applied over the hacked surface and cured for 3 days?	[ ]	[ ]	
5	Have aluminium templates used for door/window openings?	[ ]	[ ]	
6	Are the required tools available?	[ ]	[ ]	
7	Are there any specific requirements of the client?	[ ]	[ ]	
8	Cement - is it of the approved grade and less than 1 month old?	[ ]	[ ]	
9	Sand - is it medium gritty, clean and silt-free (less than 5%)?	[ ]	[ ]	
10	Is the finished floor level button marked on structural slab?	[ ]	[ ]	
11	Are the markings for reference lines on pillars done?	[ ]	[ ]	
12	Have the wall ties been cast into columns at a vertical spacing (<500mm)?	[ ]	[ ]	
	CHECKS DURING EXECUTION			
13	Is the blockwork checked in vertical and horizontal directions?	[ ]	[ ]	
14	Is the marker / lowest course of hollow blocks filled with concrete 1:3:6 (12mm jelly)?	[ ]	[ ]	
15	Is the mortar in proportion 1:5 on MS sheet using farma box?	[ ]	[ ]	
16	Has the check for diagonals & dimensions been done?	[ ]	[ ]	
17	Has the thickness for joints been checked?	[ ]	[ ]	
18	Has raking and pointing of joints been done?	[ ]	[ ]	
19	Is the RCC band for 100mm walls done?	[ ]	[ ]	
20	Has the procedure of not constructing more than 5 courses a day been followed?	[ ]	[ ]	
21	Has the top course been packed below the concrete beam?	[ ]	[ ]	
	POST-EXECUTION CHECKS			
22	Has the curing of blockwork done for atleast 7 days?	[ ]	[ ]	
23	Has care been taken of not entertaining excessive chasing?	[ ]	[ ]	
24	Has a nail been driven to test the strength of joint after 7 days of curing?	[ ]	[ ]	

Checked by:

Sign
Name
Date

Approved by:

Sign
Name
Date

CURING

As per the IS 9013(1978) Standards the curing time of concrete is 28 days until it achieves its nominal strength.

- Minimum of 7 days and 14 days of curing should be done for columns, slabs.
- Most of concrete reaches approximately 80% of its compressive strength within 7 days.
- If concrete does not contain fly ash , GGBS , micro silica , the slab needs to be cured for a minimum period of 7 days. If they contain this compounds it should be cured for 14 days.

In our site, the types of curing done are as follows,

- For Columns- Gunny bag curing is done for 28 days.
- For Slabs- pond curing is done for 28 days.
- For Block work- 7 days of curing is done with the help of pipes.
- For Plastered surface- 7 days of curing is done with the help of pipes.

SAFTEY AT SITE

Safety us very important part of any work. Most accidents can be prevented by taking simple measures or adopting proper working procedures. It is very important to discuss issues on safety and health that should be paid attention to on construction sites.

Precautions at site for safety:

- Wear protective equipment.
- Do not drink or drugs while working.
- Pay attention to personal hygiene.
- Do not play in workplace.
- Report to your supervisor immediately if you notice any unsafe condition.
- Areas of responsibility are defined and lines of communication are clear.
- Educate the workers on safe work practices on a regular basis.
- Good housekeeping of materials through proper method of stacking avoids accidents.

SITE PHOTOS


Habitat

CONCLUSION

- Internship provide us a nice learning curve with little experience of professional world
- This helps me and my friends not only to get experience on technical practices but also to observe management practices and interact with field work .
- The site engineers make us more familiar with site work starting from communication skills ,handling of different site works ,equipment utilization ,manpower control to finishing of work .


THANK YOU