

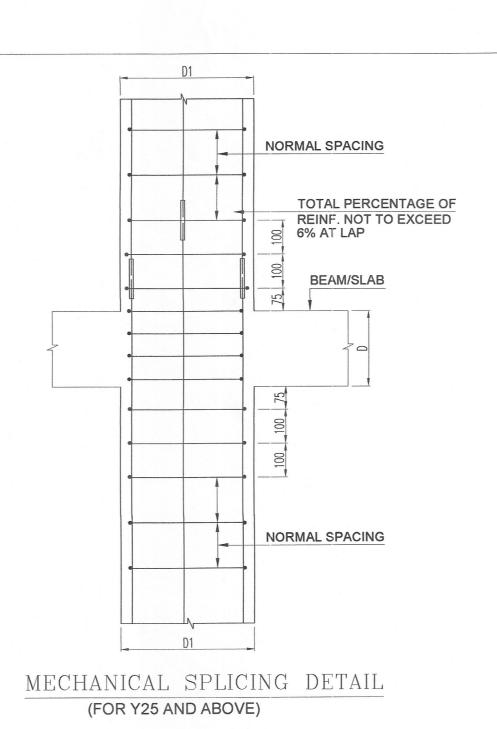
# BEAM/SLAB (TYP) NORMAL SPACING REDUCING COLUMN SIZE

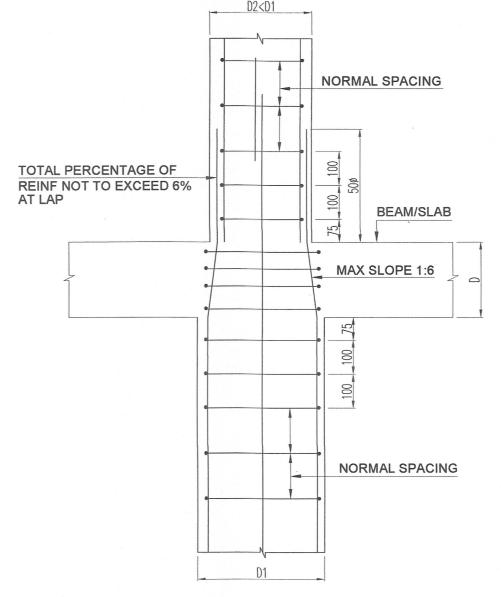
SPLICING AT THE FLOOR LEVEL WHEN THE

RELATIVE DISPLACEMENT OF COLUMN FACES

D2<D1

NORMAL SPACING





REDUCING COLUMN SIZE TYPICAL COLUMN SPLICING DETAIL AT FLOOR LEVEL

# L. GENERAL

- 1.1 ALL DIMENSIONS ARE IN S.I UNITS.
- 1.2 WORK TO FIGURED DIMENSIONS AND DO NOT SCALE THE DRAWING.
- 1.3 ALL STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND SERVICE DRAWINGS.
- 1.4 ANY DISCREPANCY IN THE DRAWING SHALL BE BROUGHT TO THE NOTICE
- OF CONSULTANTS BEFORE COMMENCING THE WORK. 1.5 THE 0.00 LEVEL OF THE PROJECT REFERS TO ARCHITECTURAL DRAWING.

## 2. DESIGN-CRITERIA

STANDARDS AND LOADS

2.1 THE CONCRETE DESIGN IS BASED ON IS: 456-2000.

- 2.2 LOADS ARE BASED ON IS: 875 1) <u>DEAD LOAD</u>
  - a) SELF WEIGHT: AS PER DRAWING.
  - b) FLOOR FINISH: 125Kg/Sqm
  - c) NO LANDSCAPE LOAD ON THE TERRACE d) EQUIPMENT LOADS: AS PER ARCHITECTURAL/SERVICES DRG.

II) LIVE LOAD — 200Kg/sqm or 300kg/sqm as per DBR

2.3 WIND LOADS ARE BASED ON IS: 875 PART III AND ARE AS FOLLOWS:

2.4 SEISMIC LOAD

ZONE ZONE FACTOR : 0.16

IMPORTANCE FACTOR : 1.20

BASIC WIND SPEED 50 M/SEC

# 3. CONCRETE

3.1 GRADE OF CONCRETE: -PILE,PILE CAP = M30COLUMN AS PER SCHEDULE

15 N/mm<sup>2</sup>AT 28 DAYS.

RAFT, RET. WALL = M30

- BEAM,SLAB = M253.2 MAXIMUM SIZE OF AGGREGATE SHALL PREFERABLY BE 20mm
- AND SHALL BE GRADED 3.3 PLAIN CEMENT CONCRETE SHALL HAVE CUBE STRENGTH OF
- 3.4 ALL CONCRETE SHALL BE OF DESIGN MIX AND ARE TO BE OBTAINED FROM REPUTED TESTING LABORATORIES AND APPROVED BY CONSULTANTS, THE MATERIALS THAT ARE PROPOSED TO BE USED IN THE PROJECT SHALL BE TESTED AND TEST CERTIFICATE FURNISHED BEFORE USE OF MATERIAL
- AT SITE. 3.5 PILE CONCRETE:
- a) SLUMP VALUE FOR PILE CONCRETE SHOULD BE 150-180MM AS PER IS 2911-(PART I / SEC I)-2010 AS PER CLAUSE 7.3.2 PAGE 7.
- b) MINIMUM GRADE OF CONCRETE M25 & MINIMUM CEMENT CONTENT 400 KG/CUM. AS PER CLAUSE 7.3.3 OF IS 2911-(PART I / SEC I)-2010 PAGE 7.

# 4. REINFORCING STEEL

4.1 ALL REINFORCING STEEL SHALL CONFIRM TO IS:1786-2008 HAVING MIN. YIELD STRENGTH OF 500 N/mm DENOTED AS --- ' T

# 5. SOIL DATA

1) CAPACITY OF PILE AS PER SOIL TEST REPORT.

#### 6. CONCRETE NOMINAL COVER FROM OUTMOST REINFORCEMENT

6.1 CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 75MM.

BEAM -COLUMNS -SLAB -

6.3 COVER BLOCKS (CONCRETE) OF APPROVED MAKE SHALL BE USED IN CONCRETE.

# 7. EXCAVATION

- 7.1 100THK BLINDING SHALL BE
- PROVIDED UNDER RAFT, INDEPENDENT AND COMBINED FOOTINGS.
- 7.2 EXCAVATION SHALL BE DONE BEYOND THE FOOTING/BASEMENT AS INDICATED IN THE DRAWINGS.
- 7.3 LOOSE POCKETS OF ENCOUNTERED SHALL BE REMOVED AND FILLED WITH PLUMB CONCRETE.
- 7.4 A LEVELING COURSE OF CONCRETE SHALL BE LAID USING P.C.C 1:3:6 PRIOR TO FOUNDATION S REQUIRED.
- 7.5 FOUNDATION SHALL BE LAID BELOW TOP WEAK ZONE IN WEATHERED ROCK STRATA.

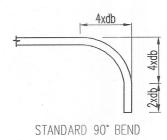
# 8. DEVELOPMENT AND ANCHORAGE LENGTHS

8.1 DEVELOPMENT LENGTH (Ld) FOR REINFORCEMENT STEEL BARS

i) M25 , Fe500-50D

i) M30 , Fe500-46D

(D IS DIA OF THE BAR) (GENERALLY 50D FOLLOWED FOR SITE CONVENIENCE)



- 8.2 LAPS FOR REINFORCEMENT IN COMPRESSION SHALL BE ACCOUNTED ONLY AS STRAIGHT LENGTHS AND NO HOOKS OR BENDS ARE ACCOUNTED FOR COMPRESSION LAPS OR ANCHORAGES.
- 8.3 STANDARD HOOKS OR BENDS SHALL BE PROVIDED WHERE NECESSARY IN TENSION REINFORCEMENTS IN BEAMS, COLUMNS, SLABS, ETC.
- 8.4 MECHANICAL ANCHORAGES OF APPROVED MANUFACTURERS SHALL BE USED FOR COLUMN SPLICES FOR 25mm DIA AND ABOVE AND ARE TO BE AS PER DESIGN DRAWINGS AND SHALL HAVE YEILD STRENGTH OF 125% MORE THAN GRADE OF
- 8.5 LAPS SHALL BE STAGGERED AS INDICATED IN DRAWINGS.

# 9. WATER PROOFING

9.1 WATER PROOFING SHALL BE DONE FOR: SUMP TANKS, OVERHEAD TANK, BASEMENT WALLS, TOILET SLABS, TERRACE, AS PER SPECIFICATIONS.

### 10. CURING

IS MORE THAN 75 MM.

- 10.1 CURING COMPOUNDS SHALL BE USED FOR ALL VERTICAL ELEMENTS PROVIDED IT IS PIGMENTED.
- 10.2 CURING BY WATER SHALL BE DONE FOR THE OTHER ELEMENTS FOR A MINIMUM PERIOD OF 7 DAYS

## 11. DESHUTTERING TIME

11.1 TYPE OF FORM WORK FOR :

MINIMUM PERIOD BEFORE STRIKING (EXCLUDING THE

DAY OF CASTING) 7 DAYS

a. SLABS UPTO 4.5M: 14 DAYS OVER 4.5M :

14 DAYS b. BEAMS UPTO 6.0M: 21 DAYS OVER 6.0M:

- c. WALL/BEAM/COLUMN VERTICAL FACES: 1 DAY
- 11.2 SHUTTERING CAN BE RELEASED EARLIER THAN SPECIFIED ABOVE PROVIDED THE PROPS ARE RETAINED AT REASONABLE SPACINGS AND CONCRETE ATTAINS THE FULL STRENGTH AT THE TIME OF DESHUTTERING AS PER IS 456 - 1978. ESHUTTERING SHALL BE DONE BY PROVIDING DAMPENING MATERIAL BELOW IN ORDER TO REDUCE THE IMPACT AT THE LOWER LEVEL.
- 11.3 SIMPLY SUPPORTED AND CONTINUOUS SPANS SHALL BE DESHUTTERED FROM MID SPAN TOWARDS SUPPORTS. CANTILEVERS SHALL BE DESHUTTERED FROM FREE END TOWARDS SUPPORTS
- 11.4 SLAB/BEAMS SHALL BE REPROPPED UNTIL THE NEXT LEVEL SLAB IS CAST AND DESHUTTERED.

# 12. CONSTRUCTION JOINTS

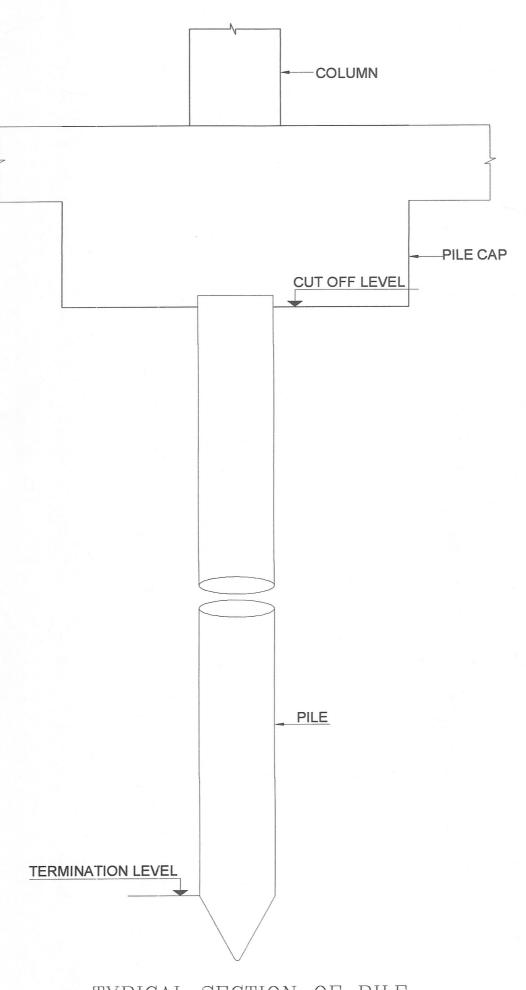
- 12.1 SLABS : AT MIDDLE ONE THIRD OF THE SPAN. 12.2 BEAMS : AT MIDDLE ONE THIRD OF THE SPAN. IF ANY CROSS
  - BEAMS ARE LOCATED IN THIS REGION THE JOINT SHALL BE LOCATED TWO TIMES THE WIDTH OF THE BEAM AWAY FROM THE BEAM.
- 12.3 RETAINING WALL : AT THE JUNCTION OF THE WALL AND FOOTING WITH A KEY JOINT AND AT MIDDLE OF VERTICAL SPAN, VERTICAL JOINTS TO BE AVOIDED.
- 12.4 RAFT SLAB : AT MIDDLE ONE THIRD OF THE SPAN.
- 12.5 CONSTRUCTION JOINTS SHALL BE STRAIGHT
- 12.6 CANTILEVERS: CONSTRUCTION JOINT SHALL NOT BE PROVIDED IN CANTILEVERS.

# 13. ADMIXTURE

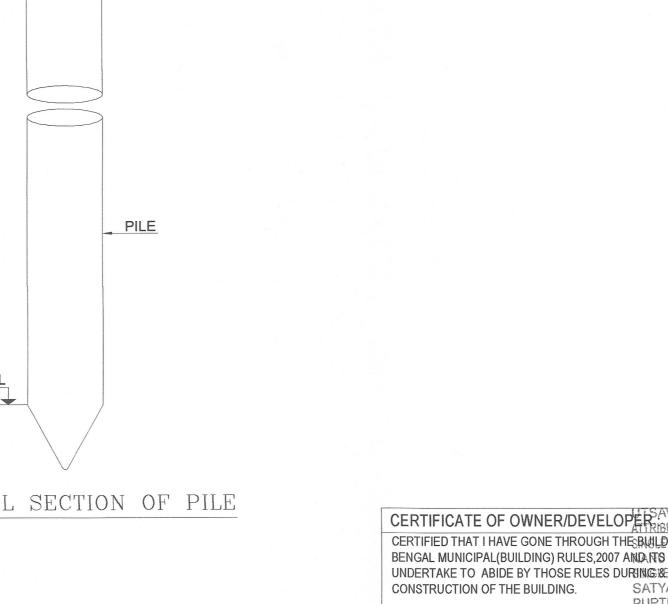
- 13.1 CONCRETE ADMIXTURES OF APPROVED MAKE SHALL BE USED TO IMPROVE WORKABILITY AND STRENGTH AS PER TENDER SPECIFICATIONS. 13.2 CONCRETE ADMIXTURES OF APPROVED MAKE SHALL BE USED FOR WATER PROOFING AS PER TENDER SPECIFICATIONS.
- 14. CONSULTANTS APPROVAL
- 14.1 CONSULTANTS SHALL APPROVE THE CONCRETING SURFACE AFTER INSPECTION AND REMEDIAL MEASURES IF ANY TO BE DONE BEFORE ANY PLASTERING WORK IS TAKEN UP ON CONCRETE SURFACE. HOWEVER THIS DOES NOT DEVOLVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR GETTING THE REQUIRED STRENGTH OF CONCRETE.

# 15. CAMBER FOR CANTILEVERS

FOR UP TO 1.5M CANTILEVERS --- 10MM FROM 1.5M TO 2.5M CANTILEVERS -- 15MM



TYPICAL SECTION OF PILE



CERTIFICATE OF OWNER/DEVELOPER BUILD WORTH PVT. LTD.P.S. RAJARHAT, DIST - 24 PGNS (N) CERTIFIED THAT I HAVE GONE THROUGH THE BUILDING RULES OF MEST. LT BENGAL MUNICIPAL (BUILDING) RULES, 2007 AND AND AMENDMENTS ALSO LTD. A RC HITECTS UNDERTAKE TO ABIDE BY THOSE RULES DURING & ARTER THENCIES PVT. LT SATYAM VANIJYA PVT. LTD PURTI BEVERAGES PVT. LTD. PURTI REALTY PVT. LTD. MAHESH KEDIA

PANSARI DEVELOPERS LIMITED Un un

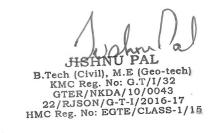
> PURTI NANU CREATORS LLP Authorised Signatory

ADITYA MURARKA

SIGNATURE OF OWNER / DEVELOPE

#### CERTIFICATE OF STRUCTURAL ENGINEER

I/WE HEREBY CERTIFY THAT THE FOUNDATION AND SUPERSTRUCTURE OF PROPOSED RESIDENTIAL COMPLEX OF 3 NOS. OF G+XII STORIED (BLOCK-1,2&3) RESIDENTIAL BUILDING & 1 NOS OF G+III CLUB HOUSE AT HOLDING NOS.211, RAJARHAT MAIN ROAD, JAGARDANGA, DAG NO. - 3344. 3366, KHATIAN NO. - 91, UNDER MOUZA-GOPALPUR, J.L. NO. - 2 P.O-NARAYANPUR, P.S-RAJARHAT, DIST- 24 PGS NORT HAVE BEEN PERSONALLY INSPECTED AND DO DESIGNED BY ME / WILL MAKE SUCH FOUNDATION AND SUPER STRUCTURE SAFE IN ALL RESPECT INCLUDING THE CONSIDERATION OF BEARING CAPACITY AND SETTLEMENT OF SOIL AND OTHER CONDITIONS, IF ANY, CONFORMING TO ALL STIPULATIONS OF ALL RELEVANT IS CODE OF PRACTICE AND NATIONAL BUILDING CODE.



SIGNATURE OF GEO-TECHNICAL ENGINEER



Mainak Maiumdar B.C.E., M.C.E. (Struct) ESE-152/I of KMC ESR-(I), 152/4 STRUC.Rev.-SMC/1

SIGNATURE OF STRUCTURAL ENGINEER

#### CERTIFICATE OF STRUCTURAL REVIEWER

I/WE HEREBY CERTIFY THAT THE FOUNDATION AND SUPERSTRUCTURE OF PROPOSED PROPOSED RESIDENTIAL COMPLEX OF 3 NOS. OF G+XII STORIED (BLOCK-1,2&3) RESIDENTIAL BUILDING & 1 NOS OF G+III CLUB HOUSE AT HOLDING NOS.211, RAJARHAT MAIN ROAD, JAGARDANGA, DAG NO. - 3344, 3366, KHATIAN NO. - 91, UNDER MOUZA-GOPALPUR, J.L. NO. - 2 P.O-NARAYANPUR, P.S-RAJARHAT, DIST- 24 PGS NORT, HAVE BEEN PERSONALLY VISITED BY ME/US AND ALL THE DESIGNS, DRAWINGS, SOIL TEST REPORT AND LOAD TEST RESULTS FOR FOUNDATION AND SUPERSTRUCTURE HAVE BEEN DULY REVIEWED CONFORMING TO STIPULATIONS OF ALL LATEST RELEVANT IS CODE OF PRACTICE AND NATIONAL BUILDING CODE AND IT IS FOUND THAT EVERYTHING IS COMPLETELY IN ORDER AND THE PROPOSED FOUNDATION AND SUPER STRUCTURE ARE SAFE IN ALL RESPECT.



SIGNATURE OF STRUCTURAL REVIEWER

# CERTIFICATE OF ARCHITECT:

I/WE DO HEREBY CERTIFY THAT PLANS, ELEVATIONS AND SECTIONS AND OTHER STRUCTURAL DETAILS OF PROPOSED RESIDENTIAL COMPLEX OF 3 NOS. OF G+XII STORIED (BLOCK-1,2&3) RESIDENTIAL BUILDING & 1 NOS OF GHII CLUB HOUSE AT HOLDING NOS.211, RAJARHAT MAIN ROAD, JAGARDANGA, DAG NO. - 3344, 3366, KHATIAN NO. - 91, UNDER MOUZA-GOPALPUR, J.L. NO. - 2 P.O-NARAYANPUR, P.S-RAJARHAT, DIST- 24 PGS NORT HAVE BEEN PREPARED IN CONFORMITY WITH ALL RELEVANT PROVISIONS UNDER WEST BENGAL MUNICIPAL (BUILDING) RULES 2007 & AMENDMENTS. THIS ALSO TO CERTIFY THAT RELEVANT "NO OBJECTION" CERTIFICATES FROM THE RESPECTIVE AUTHORITIES SUCH AS FIRE AND EMERGENCY SERVICES DEPARTMENT, AIRPORT AUTHORITY, POLLUTION CONTROL BOARD, TELECOMMUNICATION DEPARTMENT ETC AS APPLICABLE IN THIS REGARD ARE ALSO ENCLOSED WITH THE APPLICATION FOR SEEKING APPROVAL OF THE PLAN TO CONSTRUCTION /RECONSTRUCT/ ADDITION TO ALTERATION OF THE BUILDING ON THE



SIGNATURE OF ARCHITECT TYPE OF DRAWING :- SANCTION DRAWING

TITLE: GENERAL NOTE'S

# PROJECT:

PROPOSED PLAN FOR RESIDENTIAL COMPLEX OF 3 NOS. G+XII STORIED RESIDENTIAL BUILDINGS OVER A COMMON BASEMENT & 1 NOS OF G+III CLUB HOUSE BUILDING AT RS. & L.R DAG NO. 3344( PART), 3345 & 3366. LR. KHAITAN NO. 26380 TO 26385 & 26438-26447. IN MOUZA- GOPALPUR, J.L. NO-2, UNDER BIDHANNAGAR MUNICIPAL CORPORATION, BOROUGH -01, WARD NO - 04,



MAHESHWARI & ASSOCIATES 37A BAKER ROAD, 2ND FLOOR, ALIPORE, KOLKATA- 700027. Tel: 65334966,65228584.

SURESH KUMAR MURARKA DHANUKA MER: ANTS PVT. LTD. NEERAJ KUMAK OHANUKA SUSHIL KUMAR DHANUKA

STRUCTURAL CONSULTANT:-ADROIT CONSULTANT 10/3, PANCHANANTALA ROAD

**KOLKATA 700029** DRG. NO:-GOPALPUR/MS/ST-01 APPROVED BY:- MM | SCALE:- N:T:S DATE:- 06.01.25

