

STRUCTURAL TIMBER

1. THE BASE SPECIFICATION FOR STRUCTURAL TIMBER ROOFS SHALL BE BS5268 'STRUCTURAL USE OF TIMBER'.
2. ALL TIMBER SHALL BE FACTORY TREATED IN ACCORDANCE WITH BS5268 'CODE OF PRACTICE FOR THE PRESERVATION TREATMENT OF STRUCTURAL TIMBER'. SUCH TREATMENT SHALL NOT BE DETRIMENTAL TO ANY FIXINGS IN CONTACT WITH TIMBER MEMBERS.
3. ALL TIMBER SHALL BE GRADE C24 U.N.O.

STRUCTURAL MASONRY NOTES

- THE BASE SPECIFICATION FOR STRUCTURAL MASONRY SHALL BE BS5628; "CODE OF PRACTICE FOR USE OF MASONRY". IN ADDITION, REFERENCE SHALL BE MADE TO THE ARCHITECT'S MASONRY SPECIFICATION AND ASSOCIATED DRAWINGS.
2. ALL CAVITY WALL TIES OR TIES USED FOR MULTI SKIN WALL CONSTRUCTION SHALL BE STAINLESS STEEL IN ACCORDANCE WITH BS1243 AND DD140.
3. LEDGER ANGLES SUPPORTING EXTERNAL MASONRY MUST BE STAINLESS STEEL. WHEN FIXED TO STRUCTURAL STEELWORK, INSULATED FIXINGS MUST BE USED TO PREVENT BI-METALLIC ACTION.
4. ALL PROPRIETARY STEEL LINTELS MUST BE GALVANISED.
5. ALL LINTELS MUST BEAR ONTO SUPPORTING MASONRY 150MM MINIMUM.
6. THE FIRE RATING FOR LINTELS SHALL BE DETERMINED BY THE ARCHITECT.
7. THE SPACING, LOCATION AND TYPE OF CAVITY WALL TIES SHALL BE IN ACCORDANCE WITH BS5628 AND AS DETAILED BY THE ARCHITECT.
- 8) ALL MOVEMENT JOINTS SHALL BE REFLECTED IN THE APPLIED FINISHES (E.G. PLASTERWORK, RENDERING AND CERAMIC TILING). FOR DETAILS REFER TO ARCHITECTS DETAILS.
- 9) MORTAR CUBES SHALL BE PREPARED AND CRUSHED AT INTERVALS AS OUTLINED IN THE SPECIFICATION. THE DAY TEST RESULTS SHALL BE DEEMED TO COMPLY IF THEY ACHIEVE 2/3 OF THE 28 DAY STRENGTHS AS OUTLINED IN TABLE 1 OF BS5628.
- 10) THE FOLLOWING BRICK/BLOCK STRENGTHS SHALL APPLY UNLESS NOTED OTHERWISE :-
- | | SEE ARCHITECTS SPECIFICATION (MIN. CLASS) |
|-----------|---|
| BRICKWORK | CLASS B (100 N/mm ²) |
| BLOCKWORK | CLASS B (100 N/mm ²) |
- UNLESS OTHERWISE NOTED, THE MINIMUM CRUSHING STRENGTHS OF LOADBEARING BLOCKWORK UNITS SHALL BE CLASS B (100 N/mm²)
- 11) MORTAR CLASSIFICATION AS DEFINED IN TABLE 1 OF BS 5628: PART 1 TO BE USED IN THE CONSTRUCTION ARE AS FOLLOWS:-
- BELOW DPC - MORTAR DESIGNATION CLASS (i)
- ABOVE DPC - MORTAR DESIGNATION CLASS (ii)
- 12) CHASES TO BE IN ACCORDANCE WITH BS 5628 PT 3 UNLESS NOTED OTHERWISE.
- 13) THE WEIGHT OF ANY INDIVIDUAL MASONRY UNITS SHALL NOT EXCEED 20kg IN ACCORDANCE WITH THE RECOMMENDATIONS OF CDM.


STRUCTURAL MASONRY NOTES

- IN THE ABSENCE OF A PROJECT SPECIFIC SPECIFICATION THE BASE SPECIFICATION FOR STRUCTURAL STEELWORK SHALL BE BS5950 ("STRUCTURAL USE OF STEELWORK IN BUILDING") AND THE "NATIONAL STEELWORK SPECIFICATION" PRODUCED BY THE B.C.S.A 5TH EDITION.
- 2) STRUCTURAL STEELWORK TO BE GRADE S355 UNLESS NOTED OTHERWISE.
- 3) LOADING SCHEDULE :-
DEAD LOAD ** KN/M2
LIVE LOAD ** KN/M2
WIND LOADING AS BS6399 PART 2/CP3 CH V
SNOW LOADING AS BS6399 PART 3
- 4) ALL REACTIONS (ULTIMATE) SHOWN THUS ** ARE IN KN. ALL MOMENTS (ULTIMATE) SHOWN THUS (**) ARE IN KN-m. ALL BEAM/COLUMN OFFSETS SHOWN THUS ** ARE IN MM.
- 5) ALL CONNECTIONS SHALL HAVE A MINIMUM OF 2 NO. BOLTS AND SHALL BE DESIGNED FOR A MINIMUM 50KN (ULTIMATE) REACTION UNLESS NOTED OTHERWISE.
- 6) ALL CONNECTIONS (BOLTED OR WELDED) ARE TO BE DESIGNED BY THE STEELWORK CONTRACTOR IN ACCORDANCE WITH BS5950. THEY SHALL BE BASED ON THE INDICATED REACTIONS OR WHERE RELEVANT ON GENERAL STRUCTURAL CALCULATIONS AS PREPARED BY THE ENGINEER.
- 7) BASEPLATE AND HOLDING DOWN BOLTS TO BE DESIGNED AND DETAILED BY THE STEELWORK SUB CONTRACTOR UNLESS NOTED OTHERWISE. THE MINIMUM SPECIFICATION FOR BOLTS SHALL BE 8.8 AND ZINC PLATED.
- 8) HOLDING DOWN BOLTS AND WASHER PLATES ARE TO BE SUPPLIED BY THE STEELWORK SUB CONTRACTOR UNLESS NOTED OTHERWISE.
- 9) ALL BEAMS/STANCHIONS SHALL BE LOCATED SYMMETRICALLY ON GRID LINES UNLESS NOTED OTHERWISE.
- 10) ALL PLAN DIMENSIONS ARE SHOWN TO CENTRE LINES OF BEAMS OR STANCHIONS UNLESS NOTED OTHERWISE.
- 11) ALL LEVELS SHOWN THUS TOS (***) ARE TO TOPS OF BEAMS OR STANCHIONS UNLESS NOTED OTHERWISE.
- 12) FOR DETAILS OF FIRE PROTECTION TO STEELWORK REFER TO ARCHITECT'S DETAILS
- 13) ALL STEELWORK BELOW GROUND LEVEL TO BE ENCASED WITH 100MM CONCRETE (MIX AS FOR FOUNDATIONS) AND WITH D49 WRAPPING FABRIC AS DIRECTED BY THE ENGINEER.
- 14) DESIGN OF ALL TEMPORARY WORKS, PROPPING AND BRACING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 15) THE STEELWORK SUB CONTRACTOR SHALL NOT FORM ANY HOLES THROUGH STEEL MEMBERS OTHER THAN THOSE FOR CONNECTIONS WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.
- 16) WHERE DISSIMILAR STEELS ARE TO BE CONNECTED A SUITABLE ISOLATING MATERIAL SHALL BE INCORPORATED.
- 17) ALL STEELWORK RECEIVING TIMBER WALLPLATES, BEARERS ETC. ARE TO BE PREDRILLED WITH 12MM DIA HOLES AT 450MM CENTRES STAGGERED (900MM PITCH ON LINE) AS INDICATED ON THE ENGINEERS DRAWING.
- 18) UNLESS OTHERWISE NOTED IN THE PROJECT SPECIFIC SPECIFICATION, PROTECTION TREATMENT OF STEELWORK SHALL BE IN ACCORDANCE WITH BRITISH STEELS' PREVENTION OF CORROSION OF STRUCTURAL STEELWORK' APPROPRIATE SYSTEM. A MINIMUM STRUCTURAL LIFE OF 50 YEARS AND A FIRST MAJOR MAINTENANCE OF 15 YEARS IS TO BE ASSUMED.
- 19) ALL STEELWORK TO BE ENCASED (EITHER BURIED, ENCASED IN CONCRETE BELOW SLAB LEVEL OR WHOLLY OR PARTIALLY EMBEDDED WITHIN EXTERNAL CAVITY WALLS). TO BE GIVEN 2 COATS OF R.I.W. LIQUID ASPHALTIC COMPOUND ON ALL SIDES THAT ARE TO BE ENCASED OR EMBEDDED BY THE PRINCIPAL CONTRACTOR. REFER TO THE ARCHITECTS DRAWINGS FOR THE EXTENT OF RIW COATINGS.
- 20) THE STEELWORK SUB CONTRACTOR IS TO ENSURE THAT ANY SHOP OR SITE APPLIED PRIMERS ARE COMPATIBLE WITH ANY FINISHING, INTUMESCENT OR R.I.W. COATINGS WHICH MAY BE APPLIED BY THE PRINCIPAL CONTRACTOR.
- 21) THE STEELWORK SUB-CONTRACTOR SHALL SUBMIT COPIES OF HIS DRAWINGS TO BOTH THE ARCHITECT AND THE ENGINEER FOR COMMENTS A MINIMUM OF 7 DAYS PRIOR TO MANUFACTURE.
- 22) AT ALL COLUMN SPICE LOCATIONS THE BOLT HEAD MUST BE ON THE VISIBLE EXTERNAL SURFACE OF THE STEEL MEMBER.
- 23) THE FOLLOWING MEMBERS SHALL BE PRE-CAMBERED:-

PILING NOTES

- 3) THE PILING SHALL BE IN ACCORDANCE WITH THE SPECIFICATION FOR PILING AND EMBEDDED RETAINING WALLS PUBLISHED BY THE ICE AND BS8004 'BRITISH STANDARD CODE OF PRACTICE FOR FOUNDATIONS'.
- 2) FOR DETAILS OF GROUND CONDITIONS, REFER TO THE GROUND INVESTIGATION REPORT (IF APPLICABLE). THE PILING CONTRACTOR SHOULD VISIT SITE AND INSPECT THE GROUND CONDITIONS TO SATISFY THEMSELVES OF THE DESIGN PARAMETERS.
- 3) THE SPECIALIST PILING SUB CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE PILING SYSTEM AND SHALL BE DEEMED TO HAVE TAKEN DUE ACCOUNT OF THE PROPOSED LOADS AND ANY EFFECTS ON ADJACENT STRUCTURES OR FEATURES.
- 4) DUE REGARD SHALL BE TAKEN OF ALL RELEVANT INFORMATION NOTED WITHIN THE GROUND INVESTIGATION REPORT FOR THE DESIGN OF THE PILING SYSTEM. SHOULD THE PILING SUB CONTRACTOR CONSIDER THE INFORMATION CONTAINED WITHIN THE REPORT TO BE INCONCLUSIVE OR DEFICIENT IN ANY WAY, THEN THE TENDER MUST INCLUDE FOR ANY ADDITIONAL GROUND INVESTIGATION CONSIDERED NECESSARY.
- 5) THE NATURE, EXTENT AND LEVEL OF THE PILING PLATFORM SHALL BE DESIGNED BY THE PRINCIPLE CONTRACTOR.
- 6) SETTING OUT DIMENSIONS, AS INDICATED ON THIS DRAWING, RELATE TO CENTRE OF PILES UNLESS NOTED OTHERWISE.
- 7) REFER TO DRAWING FOR PILE CUT-OFF LEVELS. - THE METHOD OF BREAKING DOWN PILES SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- 8) FOLLOWING 'BREAKING DOWN' PILE, REINFORCEMENT SHALL BE TIED INTO THE SUPPORTED STRUCTURE A MINIMUM OF 400mm.
- 9) PILE LOADS (WORKING/CHARACTERISTIC LOADS) ARE AS NOTED ON THE SCHEDULE
- 10) ALL PILES SHALL BE CAPABLE OF SUPPORTING ADDITIONAL FORCES DUE TO THE EFFECTS OF SETTING OUT AND RAKE TOLERANCES ETC.
- 11) THE PILING SUB CONTRACTOR SHALL ALLOW, WITHIN THEIR DESIGN, FOR THE EFFECT OF ANY NEGATIVE SKIN FRICTION DUE TO GROUND CONDITIONS IF THEY CONSIDER THEM APPLICABLE.
- 12) THE PRINCIPLE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY KNOWN OBSTRUCTIONS PRIOR TO PILING AND BACKFILLING RESULTANT EXCAVATIONS AS DIRECTED BY THE ENGINEER.
- 13) SHOULD UNKNOWN OBSTRUCTIONS BE ENCOUNTERED, THEN THE ENGINEER SHALL BE INFORMED IMMEDIATELY SO THAT HE/SHE MAY CONSIDER ANY NECESSARY REMEDIAL WORK.
- 14) THE ENGINEER SHALL ALSO BE NOTIFIED IMMEDIATELY OF ANY BROKEN PILES.
- 15) THE ENGINEER AND PRINCIPLE CONTRACTOR TO SELECT PILES TO BE TESTED.
- 16) PRECAST WHOLLY PILES WITH JOINTS RELYING WHOLLY OR PARTLY UPON ADHESIVES ARE NOT ACCEPTABLE.
- 17) WHERE TREES ARE LOCATED IN CLOSE PROXIMITY TO BUILDINGS ETC, DESIGN PRECAUTIONS ARE TO BE TAKEN IN ACCORDANCE WITH THE 'N.H.B.C' STANDARDS. (REFER TO ENGINEER FOR FURTHER ADVICE).

BEAM AND BLOCK FLOOR

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN
OF THE PRECAST BEAM & BLOCK FLOOR.
2. FLOOR LOADINGS:
- DEAD LOAD:
- | | |
|---------------------|------------|
| SCREENED | MFE 4 B 10 |
| INSULATION/FINISHES | MFE 4 B 10 |
- LIVE LOAD:
- | | | |
|------------|------------|----------|
| GENERALLY | MFE 4 B 10 | AY 10 UD |
| PARTITIONS | MFE 4 B 10 | AY 10 UD |
- INTERNAL BLOCKWORK WALLS = 4.0 K/N/M RUN LINE
LOAD
- LOADS GIVEN ARE UNFACTORED AND ARE IN ADDITION
TO UNIT SELF-WT
- | | |
|---|--|
|  | DENOTES SPAN OF 150DP BEAMS AND
BLOCK FLOOR |
|---|--|
3. FOR LOCATION AND SIZE OF SERVICE HOLES
REQUIRED THROUGH THE FLOOR REFER TO
ARCHITECTS DRAWINGS
4. PROVIDE TWO FLOOR BEAMS BELOW ALL INTERNAL
BLOCKWORK WALLS WHICH RUN PARALLEL TO SPAN OF
FLOOR BEAMS.
5. PRIOR TO THE MANUFACTURE OF THE BEAM & BLOCK
FLOOR THE CONTRACTOR IS TO SUBMIT FOR
APPROVAL TO THE ENGINEER TWO COPIES OF ALL
CALCULATIONS & DRAWINGS

PADSTONES

1. WHERE INDICATED ON PLAN, STEEL BEAMS ARE TO BEAR ON PADSTONES.
2. PADSTONES ARE TO BE IN MASS CONCRETE GRADE RC35.
3. ALL BEAMS ARE TO BE FIXED TO PADSTONES USING MINIMUM OF TWO M10 EXCALIBUR ANCHORS HSB SCREW BOLTS.
4. PADSTONES AT ROOF LEVEL ARE TO BE STRAPPED TO A MINIMUM OF 900MM OF MASONRY, USING TWO 30X5 THICK GALVANISED MILD STEEL RESTRAINT STRAPS. STRAPS ARE TO BE PLUGGED AND SCREWED TO MASONRY/ PADSTONE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

REINFORCED CONCRETE

1. ALL REINFORCEMENT IS TO BE CUT AND BENT IN ACCORDANCE WITH B.S. 8666
2. REINFORCEMENT IS TO BE PLACED IN ACCORDANCE WITH B.S. 8110
3. ALL REINFORCEMENT TO BE CAST ON 50MM THICK BLINDING CONCRETE.
4. REINFORCED CONCRETE IS TO BE CAST AGAINST TRADITIONAL FORMWORK AND NOT EARTH FACES. ANY VOIDS BETWEEN EARTH FACE AND CONCRETE TO BE FILLED WITH LEAN MIX CONCRETE.
5. CONCRETE COVER TO BE (UNLESS NOTED OTHERWISE):

40MM ALL FACES
6. MINIMUM REINFORCEMENT BAR LAPS LENGTHS ARE TO BE AS FOLLOWS:

H8	- 400MM
H10	- 500MM
H12	- 600MM
H16	- 800MM
H20	- 1000MM
H25	- 1250MM
H32	- 1600MM
7. WHERE ONE BAR LAPS ANOTHER OF A DIFFERENT SIZE, THE LAP LENGTH OF THE SMALLER DIAMETER BAR IS TO BE USED
8. CONCRETE SURFACE FINISHES ARE TO BE AS FOLLOWS:

FORMED FACES - TYPE 'A' B.S. 8110 PT.1 1997
UNFORMED FACES - TYPE 'U2' N.S.C.S. 2000
9. LAYER ABBREVIATIONS (WHERE USED)

9. LAYER ABBREVIATIONS (WHERE USED)

- BTM - BOTTOM FACE
TOP - TOP FACE
B1 - OUTERMOST LAYER IN BOTTOM
B2 - SUBSEQUENT LAYER IN BOTTOM
T1 - OUTERMOST LAYER IN TOP
T2 - SUBSEQUENT LAYER IN TOP
NF - NEAR FACE
FF - FAR FACE
EF - EACH FACE
EW - EACH WAY
STG - STAGGERED
ABR - ALTERNATE BARS REVERSED