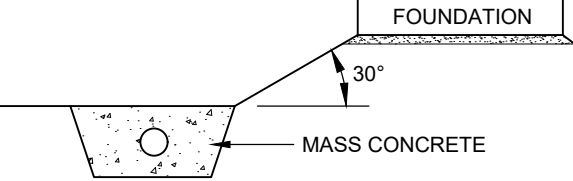


FIGURED DIMENSIONS ONLY TO BE USED

FOUNDATIONS:-

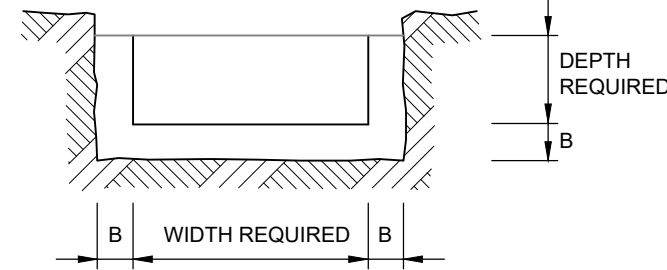
1. ALL CONCRETE TO BE IN ACCORDANCE WITH C+R'S CONCRETE SPECIFICATION.
2. ALL UN-REINFORCED FOUNDATION CONCRETE TO BE GRADE GEN 3 (C16/C20) MASS CONCRETE / (FND2 - FND4M) (C16/C20) MASS CONCRETE FOUNDATIONS.
3. ALL REINFORCED FOUNDATION CONCRETE TO BE GRADE XC2/AC-1 (RC28/35) / XC2/AC-(2-5) (RC28/35).
4. 50mm MASS BLINDING CONCRETE, GEN 1 (C8/10), TO BE PLACED UNDER ALL FOUNDATIONS UNLESS FOUNDATION CONCRETE IS PLACED IMMEDIATELY AFTER EXCAVATIONS.
5. FOUNDATIONS HAVE BEEN DESIGNED TO IMPOSE A MAXIMUM BEARING PRESSURE OF 75kN/m² ON THE BEARING STRATA OF FIRM BROWN SANDY CLAY. THIS STRATA WAS ENCOUNTERED IN THE SOIL INVESTIGATION AT A DEPTH OF 400mm BELOW EXISTING GROUND LEVEL. WHERE IT IS FOUND NECESSARY TO EXCAVATE FURTHER TO REACH THE BEARING STRATA OR A SOFT SPOT IS ENCOUNTERED, THE FOUNDATIONS ARE TO BE STEPPED DOWN TO THE BEARING STRATA. ALTERNATIVELY THE DIFFERENCE IN LEVELS IS TO BE MADE UP WITH MASS CONCRETE GRADE GEN 1 (C8/10) (ON NO ACCOUNT IS GRANULAR FILL MATERIAL TO BE INTRODUCED TO MAKE UP THE LEVEL DIFFERENCE OR TO REDUCE UNDER BUILDING DEPTHS).
6. IT SHOULD FURTHER BE ENSURED THAT THE LEVELS TO THE UNDERSIDE OF THE FOUNDATIONS ARE FORMED AT A MINIMUM DEPTH OF 750mm BELOW PROPOSED FINISHED GROUND LEVEL TO ENSURE ADEQUATE FROST COVER IS ACHIEVED. ADDITIONAL CARE SHOULD BE TAKEN WHERE IT IS INTENDED TO REDUCE THE ORIGINAL GROUND LEVEL TO ENSURE THIS DEPTH IS ACHIEVED.
7. THE SER DESIGN CERTIFICATE IS ISSUED ON THE BASIS THAT THE FOUNDATIONS ARE FORMED ON THE STRATA DESCRIBED ABOVE. WHERE GROUND CONDITIONS ENCOUNTERED VARY FROM THOSE DESCRIBED ABOVE THE CERTIFYING ENGINEER IS TO BE CONTACTED FOR FURTHER INSTRUCTIONS.
8. MASS CONCRETE BACKFILL: IT IS ESSENTIAL TO CHECK THAT ALL GROUND WITHIN A 30' LINE EXTENDING DOWN AND AWAY FROM ALL FOUNDATIONS IS UNDISTURBED OR WHEN DISTURBED IS REMOVED ENTIRELY AND BACKFILLED WITH MASS CONCRETE. DETAIL A SHOWS A TYPICAL METHOD OF COMPLYING WITH THIS REQUIREMENT WHICH SHOULD BE CHECKED FOR ALL FUTURE WORKS IN ADDITION TO EXISTING WORKS. ALTERNATIVELY, A LOWER FORMATION LEVEL TO THE FOUNDATION MAY BE ACHIEVED BY UPFILLING WITH GEN 1 (C8/10) MASS CONCRETE. IN EITHER CASE THE LOWER FORMATION SHOULD BE EXCAVATED AND BACKFILLED BEFORE THE HIGHER.



DETAIL A

9. BOTTOMS OF ALL FOUNDATIONS ARE SUBJECT TO THE APPROVAL OF THE LOCAL AUTHORITY WHO SHOULD BE CONTACTED TO ENABLE THEM TO CARRY OUT AN INSPECTION PRIOR TO CONCRETE BEING PLACED.
10. DUE COGNISANCE SHOULD BE TAKEN OF THE PROXIMITY OF TREE'S ADJACENT TO FOUNDATIONS AND FOUNDATIONS DEPTHS DEEPENED WHERE REQUIRED IN ACCORDANCE WITH NHBC STANDARDS, CHAPTER 4.2 APPENDIX A.
11. WHERE THE WIDTH OF FOOTING, WAS EXCAVATED, EXCEEDS THE DIMENSION SHOWN ON THE DRAWING, THE CONTRACTOR SHALL EITHER:-

- A. USE FORMWORK TO LIMIT THE WIDTH TO THE VALUE SHOWN.
- B. INCREASE THE FOOTING DEPTH BY AN AMOUNT EQUAL TO THE INCREASE IN WIDTH, SEE DETAIL B BELOW.
- C. PROVIDE ADDITIONAL REINFORCEMENT IN THE LOWER FACE TO THE SATISFACTION OF THE ENGINEER.



DETAIL B

12. FOUNDATIONS TO BE REINFORCED WITH REINFORCING MESH AS SHOWN ON FOUNDATION SECTION DETAILS.
13. MINIMUM OVERLAP OF MESH REINFORCEMENT TO BE 450mm.
14. CONCRETE COVER TO ALL REINFORCEMENT TO BE IN ACCORDANCE WITH TABLE A.9 OF BS 8500-1. THE LOWEST NOMINAL COVER TO REINFORCEMENT TO BE AS FOLLOWS.
- 75mm BOTTOM COVER IF CONCRETE IS CAST DIRECTLY AGAINST THE SOIL.
- 50mm BOTTOM COVER IF CONCRETE IS CAST DIRECTLY AGAINST BLINDING.
- 75mm SIDE COVER IF CONCRETE IS CAST DIRECTLY AGAINST THE SOIL.
- 50mm SIDE COVER IF CONCRETE IS CAST AGAINST FORMWORK.
- 50mm TOP COVER.

CONCRETE SPECIFICATION:-

1. ALL CONCRETE CONSTRUCTION TO BE IN ACCORDANCE WITH BS 8110, BS 8500 AND BS EN 206.
2. DESIGNATED CONCRETE MIX SPECIFICATION IN ACCORDANCE WITH BS EN 206: PART 1: 2004, TABLES A.13 & A.14.
3. NO CONCRETE POUR SHOULD OCCUR UNLESS THE TEMPERATURE IS 3°C AND RISING, SHOULD LOW TEMPERATURES BE EXPECTED FOLLOWING A POUR, THE CONTRACTOR MUST TAKE ALL NECESSARY MEASURES TO PROTECT THE CONCRETE.
4. CONCRETE CUBE TESTS SHOULD BE TAKEN TO CHECK COMPLIANCE OF THE MIX WITH THE DESIGN SPECIFICATION. AT LEAST ONE "SAMPLE", SHOULD BE TAKEN FOR EACH TYPE OF CONCRETE MIX ON THE DAY IT IS PLACED, PREPARED TO THE REQUIREMENTS OF BS1881, OR AS AGREED WITH C+R.
5. REINFORCING BARS TO CONCRETE TO BE IN ACCORDANCE WITH BS 4449. AND REINFORCING MESH TO BE IN ACCORDANCE WITH BS 4483.
6. UNLESS NOTED OTHERWISE, ALL REINFORCEMENT SHOULD BE "H" HIGH YIELD DEFORMED BARS WITH A MINIMUM TENSILE STRENGTH OF 500N/mm².
7. NO ADMIXTURES ARE PERMITTED WITHOUT THE PRIOR AGREEMENT OF C+R.

UNDERBUILDING:-

1. UNDERBUILDING TO BE 7N BLOCKWORK WITH A MINIMUM DENSITY OF 1500kg/m³ AND BUILT IN 1-3 TO 4 (M6) CEMENT-SAND MORTAR ALL IN ACCORDANCE WITH C+R'S MASONRY SPECIFICATION.
2. CAVITIES IN EXTERNAL WALLS TO BE FILLED WITH FINE CONCRETE TO A LEVEL 75mm BELOW FINISHED EXTERNAL GROUND LEVEL WITH WEEP HOLES FORMED AT A MAXIMUM ONE METER CRS IN THE OUTER LEAF.
3. ALL WALLS AND COLUMNS TO BE POSITIONED CENTRALLY ON FOUNDATION, EXCEPT WHERE SHOWN OTHERWISE.

RADON GAS MEASURES:-

1. BASED ON THE 'INDICATIVE ATLAS OF RADON IN SCOTLAND' THE SITE IS LOCATED IN RADON AFFECTED AREA < 1% AND HENCE NO RADON PROTECTION IS REQUIRED.

TIMBER FRAME:-

1. ALL TIMBER TO BE IN ACCORDANCE WITH C+R'S TIMBER SPECIFICATION.
2. TIMBERS TO BE CLASS C16 WITH MAXIMUM MOISTURE CONTENT OF 18% UNLESS SHOWN OTHERWISE.
3. EXTERNAL TIMBER FRAME WALL PANELS TO BE CONSTRUCTED FROM 38 x 140mm C16 STUDS AT A MAXIMUM OF 600mm CRS.
4. INTERNAL TIMBER FRAME WALL PANELS TO BE CONSTRUCTED FROM 38 x 90mm C16 STUDS AT A MAXIMUM OF 600mm CRS.
5. LINTELS TO TIMBER FRAME OPENINGS AS PER THE ASSOCIATED DRAWINGS; (ALL WITH 1NO. CRIPPLE STUD UNLESS NOTED OTHERWISE ON PLAN, THUS: (X))
6. ANY BEAMS, MULTIPLE TRUSSES OR TRIMMER JOISTS SHOWN ON THE PLAN SHOULD HAVE CRIPPLE STUDS PROVIDED BELOW THEM. THE NUMBER OF CRIPPLE STUDS SHOULD ENSURE THE MEMBER ABOVE HAS A FULL BEARING.
7. ANY CRIPPLE STUDS SHOWN ON UPPER LEVELS SHOULD ALSO BE CARRIED DOWN THROUGH ALL LOWER LEVELS.
8. TIMBER TO TIMBER HANGERS TO BE KH - KWIKI HANGERS BY CULLEN, UNLESS SHOWN OTHERWISE.
9. WALL TIES TO BE CULLEN FT-50 OR EQUAL APPROVED AT A MINIMUM AVERAGE DENSITY OF 3.70 PER SQUARE METRE.
10. FIRE PROTECTION TO BE PROVIDED IN THE FORM OF BOARDING. PLEASE REFER TO THE ARCHITECTS DETAILS AND SPECIFICATION.
11. REFER TO NAILING SCHEDULE AND RACKING PANEL SUMMARY SCHEDULE FOR FIXING DETAILS OF PANELS.
12. OSB/3 OR OSB/4 FIXED TO OUTSIDE OF STUDS IN ACCORDANCE WITH NAILING SCHEDULE AND RACKING PANEL SUMMARY SCHEDULE.

TIMBER SPECIFICATION:-

1. ALL TIMBER TO BE IN ACCORDANCE WITH BS 5628, AND A MINIMUM GRADE OF C16, UNLESS NOTED OTHERWISE.
2. MOISTURE CONTENT OF ALL TIMBER SHOULD BE 18% OR LESS.
3. ALL STRUCTURAL TIMBER SHOULD BE PRESSURE IMPREGNATED WITH PRESERVATIVE IN ACCORDANCE WITH BS 5628-5, TABLE 4.
4. SPECIAL ATTENTION SHOULD BE PAID TO ENSURE THAT THE CUT SURFACES OF ALL TIMBER ARE SUITABLY PROTECTED WITH PRESERVATIVE AS REQUIRED.

TEMPORARY STABILITY:-

1. ENSURE ALL WALLS ARE ACCURATELY ALIGNED, TEMPORARILY BRACED AND STABLE.
2. TEMPORARY BRACING ON THE WALLS SHOULD REMAIN IN PLACE UNTIL THE ROOF IS WIND-BRACED.
3. TEMPORARY BRACING THAT PROVIDES RACKING RESISTANCE SHOULD NOT BE REMOVED UNTIL THE WALL LINING IS INSTALLED.

BLOCKWORK:-

1. BLOCKWORK TO BE DENSE CONCRETE BLOCKWORK WITH A MINIMUM CRUSHING STRENGTH OF 7.3N/mm² UNLESS OTHERWISE NOTED.
2. ALL BLOCKWORK WALLS TO BE CONSTRUCTED WITH 1:1.5 TO 6 (M4) MORTAR UNLESS OTHERWISE NOTED, ALL IN ACCORDANCE WITH C+R'S MASONRY SPECIFICATION.
3. SUGGESTED LOCATIONS OF MOVEMENT JOINTS ARE DENOTED (MJ) ON PLANS. MOVEMENT JOINTS SHOULD BE PROVIDED AT NO MORE THAN 6m CENTRES AND 3m FROM CORNERS. NO MOVEMENT JOINT SHOULD BE LOCATED WITHIN 600mm OF ANY OPENING.
4. AT OPENINGS AND MOVEMENT JOINTS, WALL TIES SHOULD BE SPACED AT A MAXIMUM OF 225mm CENTRES VERTICALLY WITHIN 150mm OF THE OPENING OR JOINT.
5. LINTELS TO EXTERNAL LEAF OPENINGS TO BE GRADE RC35 (C28/35) CONCRETE WITH 35mm CONCRETE COVER TO REINFORCEMENT. TOP OF ALL LINTELS TO BE INDELIBLY MARKED.
6. LINTELS TO EXTERNAL LEAF OPENINGS TO BE ROBESLEE, OR EQUAL APPROVED. ALL LINTELS TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. ALL COMPOSITE LINTELS WITH SPANS GREATER THAN 1500mm MUST BE SUPPORTED AT 1/4 POINTS UNTIL THE MORTARWORK HAS MATURED.

MASONRY SPECIFICATION:-

1. ALL MASONRY CONSTRUCTION TO BE IN ACCORDANCE WITH BS 5628 AND BS 8000.
2. WALL TIES TO CAVITY WALLS TO BE IN ACCORDANCE WITH BS 5628-3 AND BSEN 845-1 AT A MAXIMUM OF 900mm CENTRES HORIZONTALLY AND 450mm CENTRES VERTICALLY, OR 2.5m² UNLESS NOTED OTHERWISE.
- 7.3N BLOCKS REFER TO DENSE CONCRETE BLOCKS WITH A MINIMUM COMPRESSIVE STRENGTH OF 7.3N/mm².
4. THE DESIGN OF MASONRY HAS ASSUMED SPECIAL MANUFACTURING CONTROL IN ACCORDANCE WITH TABLES 4a) AND b) OF BS 5628: PART 1 AND IT SHOULD BE ENSURED THAT ALL BRICKS AND BLOCKS USED MEET THIS REQUIREMENT.
5. 140/150mm THICK BLOCKS TO BE CONSTRUCTED USING LIGHTWEIGHT BLOCK WITH A MINIMUM CRUSHING STRENGTH OF 7.3N/mm² OR WITH DENSE CONCRETE SHORTENED BLOCKS, (IE. 325mm LONG), NO UNIT TO WEIGH MORE THAN 20kg.

RENDERED TIMBER KIT PANELS:-

1. ALL RENDERED PANELS TO BE STUCANET RENDER PANEL BY BEAKERT, OR SIMILAR APPROVED FIXED IN ACCORDANCE WITH MANUFACTURER'S DETAILS.

SUPPLEMENTARY STEELWORK:-

1. FABRICATION IS TO BE CARRIED OUT IN ACCORDANCE WITH BS EN 1090-2, EXECUTION CLASS 2 (EXC2).
2. ALL INTERNAL STEELWORK EXCEPT HOT ROLLED HOLLOW SECTIONS TO BE OF MINIMUM GRADE S355 JR IN ACCORDANCE WITH BS EN 10025.2.
3. ALL EXTERNAL STEELWORK EXCEPT HOT ROLLED HOLLOW SECTIONS TO BE OF MINIMUM GRADE S355 JO IN ACCORDANCE WITH BS EN 10025.
4. ALL HOLLOW SECTIONS TO BE HOT ROLLED AND BE OF GRADE S355J2H STEEL IN ACCORDANCE WITH BS EN 10210.
5. ALL BLACK BOLTS TO BE ISO METRIC BLACK HEXAGONAL BOLTS TO BS 4190 GRADE 8.8 UNLESS OTHERWISE SHOWN.
6. ALL WELDING TO BE CARRIED OUT IN ACCORDANCE WITH BS 5135.
7. PAINTING.

A. FOLLOWING FABRICATION, THE STEELWORK SHALL BE BLAST CLEANED TO BS 7079 SECOND QUALITY.

B. IMMEDIATELY AFTER CLEANING THE STEELWORK, IT SHALL BE PROTECTED WITH ONE COAT OF HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD PRIMER TO A DRY FILM THICKNESS OF 80 MICRONS.

C. STEELWORK BUILT INTO EXTERNAL WALLS SHALL RECEIVE TWO SITE APPLIED COATS OF HIGH BUILD BITUMEN TO 100 MICRONS THICKNESS, TO CONCEALED FACES.

D. FOLLOWING ERECTION OF THE STEELWORK, ANY DAMAGED PAINTWORK SHALL BE MADE GOOD.

E. FOR FINISHING COATS TO EXPOSED STEELWORK REFER TO ARCHITECT'S DRAWINGS. CONTRACTOR TO ENSURE DECORATIVE PAINTS ARE COMPATIBLE WITH THE PRIMER COAT.
8. GALVANISING.

A. GALVANISING (MINIMUM THICKNESS OF 710 G/m²) TO BE IN ACCORDANCE WITH BS EN ISO 1461. FOR SUBSEQUENT FINISHING COATS REFER TO ARCHITECT'S DRAWINGS.

B. ALL CLOSED SECTIONS TO BE ADEQUATELY VENTED PRIOR TO GALVANISING AND MUST BE SUBSEQUENTLY SEALED. WHERE THESE VENT HOLES ARE EXPOSED IN THE FINISHED WORKS THE ARCHITECT MUST BE ADVISED AND IS TO APPROVE THE METHOD OF SEALING.

C. ALL WELDS TO BE CONTINUOUS 6mm FILLET WELDS UNLESS NOTED OTHERWISE. WHERE OVERLAPPING PLATES ARE WELDED PRIOR TO GALVANISING, WELDING IS TO BE CARRIED OUT ON A HIT AND MISS BASIS, WELD SEAMS ARRANGED SYMMETRICALLY.

D. PRIOR TO FABRICATION ADVICE OF THE GALVANISER IS TO BE SOUGHT IN RESPECT OF THE PROPOSED DIPPING PROCEDURE AND POTENTIAL DISTORTION.

E. ALL GALVANISED COMPONENTS ARE TO CONFORM TO THE FABRICATION AND ERECTION TOLERANCES AS SPECIFIED IN BS 5950 PART 2.
9. FABRICATOR IS TO ENSURE THE STEELWORK SHOULD EITHER BE PROTECTED DURING SITE STORAGE AND ERECTION, OR GIVEN A SUITABLE PRIMER COAT. THE DRY FILM THICKNESS SHOULD BE APPROPRIATE FOR THE EXPECTED STORAGE TIME AND SEVERITY OF THE STORAGE ENVIRONMENT. IF IN DOUBT, PLEASE ASK.
10. WASHERS TO BE PROVIDED UNDER ALL NUTS INCLUDING THOSE AT PURLINS AND SHEETING RAILS.
11. EXACT LENGTHS OF NEW STEELWORK SHALL BE DETERMINED BY THE CONTRACTOR.
12. CONTRACTOR TO AGREE ERECTION SEQUENCE WITH PRINCIPAL CONTRACTOR AND MUST ENSURE THE WORK IS SECURELY BOLTED AND, IF NECESSARY, SHALL PROVIDE TEMPORARY BRACING OR OTHER MEMBERS TO CATER FOR ALL ERECTION STRESSES AND CONDITIONS INCLUDING THOSE DUE TO ERECTION EQUIPMENT AND ITS OPERATION.
13. FOR FIRE PROTECTION TO STEELWORK REFER TO ARCHITECT'S DRAWINGS.
14. STEEL MEMBERS TO BE FABRICATED WITH LIFTING HOOKS/EYES TO ALLOW MEMBERS TO BE LIFTED ON-SITE. POSITION OF HOOKS/EYES TO TAKE INTO ACCOUNT THE LIFTED MEMBER'S CENTRE OF GRAVITY. STEEL MEMBERS TO ROOF TO BE PROVIDED WITH HOOKS TO SUPPORT ROOF SAFETY NETS.

1. ALL GLAZING AND FRAMES TO BE FROM THE MATRIX 70 FULLY SCULPTURED WINDOW SYSTEM, BY STEVENSWOOD, OR SIMILAR APPROVED SYSTEM, OR ALL GLAZING AND FRAMES TO BE FROM THE SPECTRUS U-PVC WINDOW SYSTEM, BY SASH, OR SIMILAR APPROVED SYSTEM, OR ALL GLAZING AND FRAMES TO BE FROM THE ALUCLAD WINDOW SYSTEM, BY NORDAM, OR SIMILAR APPROVED SYSTEM.
2. IF AN ALTERNATIVE SYSTEM IS USED ALL GLAZING PANELS MUST BE PROVIDED, BY THE WINDOW SUPPLIER/MANUFACTURER, TO CAMERON + ROSS ALONG WITH CALCULATIONS OR CERTIFICATION FOR THE WINDOW SYSTEM PRIOR TO MANUFACTURE OF WINDOWS.
3. GLAZING TO BE DESIGNED FOR A CHARACTERISTIC WIND PRESSURE q_s = 0.82 kN/m².
4. GLAZING TO BE TOUGHENED AND BE SUITABLE TO WITHSTAND PEDESTRIAN IMPACT LOADING UP TO A HEIGHT OF 800mm TO COMPLY WITH BUILDING REGULATIONS' REQUIREMENTS, AS PER ARCHITECT'S DRAWINGS.
5. GLAZING INSTALLATION TO COMPLY WITH BS 6262:2005 - PARTS 1 TO 7 AND BS 5516:2004 - PARTS 1 AND 2.
6. LUG FIXING TO MASONRY AND CONCRETE TO BE 1NO. RAWLPLUG FFK-K-44 NYLON FRAME FIXING WITH COLLAR HEX HEAD PER LUG AT MAXIMUM 300mm CRS AROUND THE PERIMETER OF WINDOW. LUG FIXING TO STEEL TO BE 1NO. 5.5 X 40mm HILTI S-DUGZ SELF DRILLING SCREW PER LUG. LUG FIXING TO TIMBER VIA 6.0mm DIAMETER SCREWS AT 600mm CRS AROUND THE PERIMETER OF THE WINDOW.
7. ANY GLASS INSTALLED IN A NON-VERTICAL APPLICATION SHOULD BE DESIGNED TO COMPLY WITH BS 5516:2004 - PART 1.

GLAZING PANELS:-

1. ALL GLAZING AND FRAMES TO BE FROM THE MATRIX 70 FULLY SCULPTURED WINDOW SYSTEM, BY STEVENSWOOD, OR SIMILAR APPROVED SYSTEM, OR ALL GLAZING AND FRAMES TO BE FROM THE SPECTRUS U-PVC WINDOW SYSTEM, BY SASH, OR SIMILAR APPROVED SYSTEM, OR ALL GLAZING AND FRAMES TO BE FROM THE ALUCLAD WINDOW SYSTEM, BY NORDAM, OR SIMILAR APPROVED SYSTEM.
2. IF AN ALTERNATIVE SYSTEM IS USED ALL GLAZING PANELS MUST BE PROVIDED, BY THE WINDOW SUPPLIER/MANUFACTURER, TO CAMERON + ROSS ALONG WITH CALCULATIONS OR CERTIFICATION FOR THE WINDOW SYSTEM PRIOR TO MANUFACTURE OF WINDOWS.
3. GLAZING TO BE DESIGNED FOR A CHARACTERISTIC WIND PRESSURE q_s = 0.82 kN/m².
4. GLAZING TO BE TOUGHENED AND BE SUITABLE TO WITHSTAND PEDESTRIAN IMPACT LOADING UP TO A HEIGHT OF 800mm TO COMPLY WITH BUILDING REGULATIONS' REQUIREMENTS, AS PER ARCHITECT'S DRAWINGS.
5. GLAZING INSTALLATION TO COMPLY WITH BS 6262:2005 - PARTS 1 TO 7 AND BS 5516:2004 - PARTS 1 AND 2.
6. LUG FIXING TO MASONRY AND CONCRETE TO BE 1NO. RAWLPLUG FFK-K-44 NYLON FRAME FIXING WITH COLLAR HEX HEAD PER LUG AT MAXIMUM 300mm CRS AROUND THE PERIMETER OF WINDOW. LUG FIXING TO STEEL TO BE 1NO. 5.5 X 40mm HILTI S-DUGZ SELF DRILLING SCREW PER LUG. LUG FIXING TO TIMBER VIA 6.0mm DIAMETER SCREWS AT 600mm CRS AROUND THE PERIMETER OF THE WINDOW.
7. ANY GLASS INSTALLED IN A NON-VERTICAL APPLICATION SHOULD BE DESIGNED TO COMPLY WITH BS 5516:2004 - PART 1.

ROOF TILE FIXINGS - SINGLE LAP TILES:-

1. ALL TILES AND THEIR FIXINGS SHOULD BE IN ACCORDANCE WITH BS 5534:2014. MECHANICAL FIXINGS SHOULD BE SPECIFIED BY THE MANUFACTURER TO SUIT THE CHOICE OF TILE AND TO RESIST A WIND PRESSURE, q_s = 0.82 kN/m².
2. FOR NIBLESS TILES, TWO NAILS SHOULD BE USED TO EVERY TILE.
3. FOR NIBBED TILES, FOR RAFTER PITCHES BELOW 60°, TILES MUST BE FIXED WITH 2 NAILS TO EACH TILE AT EVERY 5TH COURSE. ON PITCHES STEEPER THAN 60° (INCLUDING VERTICAL), ALL TILES MUST BE NAILED TWICE.
4. AT VERGES, ABUTMENTS AND AT EACH SIDE OF VALLEY AND HIPs, THE END TILES IN EVERY COURSE MUST BE NAILED TWICE, OR MECHANICALLY FIXED (IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS).
5. NAILS TYPICALLY TO BE ALLOY, COPPER OR SILICON BRONZE AND COMPLY WITH BS 1202, BUT ALWAYS IN ACCORDANCE WITH CL.4.12 OF BS 5534:2014. CLOUT HEAD NAILS OF 3.35mm OR 2.65mm DIA SHOULD BE USED AND SHOULD BE A OF A LENGTH THAT PROVIDES AT LEAST 15mm PENETRATION IN THE TIMBER BELOW. NO NAIL SHOULD BE LOCATED CLOSER THAN 17mm TO THE EDGE OF A BATTEN.

ROOF TRUSSES:-

1. DETAILED TRUSS INFORMATION WILL BE PROVIDED TO CERTIFYING ENGINEER AT LEAST ONE WEEK BEFORE DELIVERY TO SITE, TO ALLOW COMPLETION OF FORM Q.
2. ALL TIMBER TO BE IN ACCORDANCE WITH C+R'S TIMBER SPECIFICATION.
3. TIMBER TO BE CLASS TR26 WITH MAXIMUM MOISTURE CONTENT OF 18% UNLESS SHOWN OTHERWISE.
4. ROOF SARKING SHALL BE 9mm OSB (OSB/3 OR OSB/4) OR 22mm BOARDING FOR TILED OR SLATED ROOFS RESPECTIVELY, UNLESS NOTED OTHERWISE. PROVIDE 3mm DIA GALVANISED NAILS, 50mm LONG, AT 200mm CRS MAXIMUM. 22mm SARKING BOARDS TO BE NAILED TWICE TO EVERY RAFTER, NO MORE THAN 1 IN 4 JOINTED ON ANY RAFTER.
5. 100x22mm LONGITUDINAL CEILING TIE BRACING TO BE PROVIDED AT EACH TRUSS NODE POINT, FIXED AT EACH INTERSECTION BY 2NO. 3.35mm DIA NAILS.
6. 100x22mm DIAGONAL CEILING TIE BRACING IS TO BE PROVIDED TO THE FULL LENGTH OF THE BUILDING IN THE ABSENCE OF PLASTERBOARD OR SIMILAR RIGID MATERIAL, FIXED DIRECTLY TO THE BOTTOM CHORDS OF THE TRUSSES. BRACING IS TO BE NAILED TO EVERY TRUSS VIA 2NO. 3.35mm DIAMETER x 55mm LONG NAILS.
7. ALL OVERLAPS IN BRACING SHOULD BE OVER A MINIMUM OF TWO TRUSSES.
8. TRUSSES AT A MAXIMUM OF 600mm CRS UNLESS NOTED OTHERWISE.
9. TRUSSES TO BE DESIGNED AND FABRICATED TO BS 5268 : PART 3: 2006 AND FOR LOADINGS BELOW.

SITE ALTITUDE - 87 m ABOVE ORDNANCE DATUM

SITE SNOW LOAD - S_s = 0.50 kN/m²

CHAR. WIND PRESSURE - q_s = 0.82 kN/m²
- RAFTER

SUPERIMPOSED (AS BS 6399 : PART 3) - 1.23 kN/m²

DEAD LOAD (ON PLAN) - 0.50 kN/m²
- FIRST FLOOR

SUPERIMPOSED (AS BS 6399 : PART 3) - 1.50 kN/m²

DEAD LOAD - HOUSES - 0.75 kN/m²
10. THIS EXCLUDES SELF WEIGHT OF TRUSSES AND STORAGE TANKS, WHICH SHOULD BE ALLOWED FOR ADDITIONAL LOADING FROM ROOF PV PANELS SHOULD ALSO BE ALLOWED FOR BY THE SPECIALIST TRUSS MANUFACTURER. PV PANELS FIXINGS AND ALL ASSOCIATED BRACKETS TO THE ROOF STRUCTURE TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S DATA SHEETS AND INSTALLATION MANUALS.
11. BRACING REQUIRED AS AN INTEGRAL PART OF THE DESIGN OF THE TRUSS, AND IN ADDITIONAL TO THAT SHOWN IS CONSIDERED PART OF THE TRUSS, AND COSTS THEREFORE ARE TO BE INCLUDED IN TENDERS.
12. WIND LOADS ARE TO BE IN ACCORDANCE WITH BS 6399 : PART 2: 1997, USING CHARACTERISTIC PRESSURE PROVIDED ABOVE.
13. CONTRACTOR TO PRODUCE LAYOUT DRAWINGS, DETAILS OF ROOF TRUSSES AND CONNECTIONS AND FULL SET OF DESIGN CALCULATIONS WHICH ARE TO BE USED IN CONJUNCTION WITH THIS DRAWING IN CONSTRUCTION OF THE ROOF.
14. SEE ARCHITECT'S DRAWINGS (AND SKETCHES) FOR DETAILS AT EAVES, ETC.

FACTORY NAILING SCHEDULE:-

EXTERNAL AND APEX PANELS					
COMPONENT	FROM	TO	NAIL SIZE (mm)	TYPE	QTY. SPACING
RAILS	STUD	88x3.1	Screw Galv. Strip	2"	EACH END
		STUD DWANG			
STUD	DWANG	88x3.1	Screw Galv. Strip	2"	EACH END
LINTEL	LINTEL	75x2.8	RING GALV. STRIP	2	300mm CRS BOTH FACES
STUD	STUD	75x2.8	RING GALV. STRIP	2	300mm CRS BOTH FACES
STUD	LINTEL	88x3.1	Screw Galv. Strip	4	EACH END
TOP RAIL	LINTEL	88x3.1	Screw Galv. Strip	2"	SEE RACKING PANEL SUMMARY
TRANSOME	STUD	88x3.1	Screw Galv. Strip	2"	
OSB	ALL	50x2.8	PAPER/PLASTIC GALV. COLLATED	1	75mm CRS PERIMETER OF SHEET
					150mm INTERMEDIATE STUDS
INTERNAL PANELS					
COMPONENT	FROM	TO	NAIL SIZE (mm)	TYPE	QTY. SPACING
RAILS	STUD	88x3.1	Screw Galv. Strip	2"	EACH END
		STUD DWANG			
LINTEL	LINTEL	75x2.8	RING GALV. STRIP	2	300mm CRS BOTH FACES
STUD	STUD	75x2.8	RING GALV. STRIP	2	300mm CRS BOTH FACES
STUD	LINTEL	88x3.1	Screw Galv. Strip	4	EACH END
TOP RAIL	LINTEL	88x3.1	Screw Galv. Strip	2"	SEE RACKING PANEL SUMMARY
TRANSOME	STUD	88x3.1	Screw Galv. Strip	2"	
OSB	ALL	50x2.8	PAPER/PLASTIC GALV. COLLATED	1	75mm CRS PERIMETER OF SHEET
					150mm INTERMEDIATE STUDS
* DENOTES 3 NAILS PROVIDED FOR PANELS OVER 2400mm HIGH					

SITE NAILING SCHEDULE:-		
CONSTRUCTION DETAIL (NOTE - ALL NAILS TO BE GALVANISED STEEL UNLESS NOTED OTHERWISE BELOW)	NAIL / SCREW SIZE (mm)	NO. AND/OR SPACING
FOUNDATIONS		
25/38mm WALLPLATE TO UNDERBUILDING	SPT HIT 8-60/90	AT CRS AS PER RACKING PANEL SUMMARY
HOLDING DOWN STRAPS (SHOWN ON PLAN)	50x2.65	AT 6NO. PER STRAP
FLOOR FRAMING		
RING BEAM TO WALLPLATE	75x3.75 OR 75x3.1 PASLODE	AT 600mm CRS - SKEW NAILED 1 EACH SIDE
JOISTS TO WALLPLATE	75x3.75 OR 75x3.1 PASLODE	1 EACH SIDE - SKEW NAILED
RING BEAM TO JOISTS AT RIGHT ANGLES TO WALL	100x4.5 OR 90x3.1 PASLODE	2NO. - END NAILED
JOISTS/JOIST (LAPPED OVER DWARF WALL)	100x4.5 OR 90x3.1 PASLODE	2NO. - FACE NAILED
JOISTS/JOIST (BUTT JOINTED ON DWARF WALL)	100x4.5 OR 90x3.1 PASLODE	2NO. - SKEW NAILED
JOINT/GUSSET PLATE (JOISTS BUTT JOINTED)	75x3.75 OR 50x3.1 PASLODE	4NO. - PER PLATE
TRIMMERS TO STAIRWELLS	32x2.36 SQ TWIST	JOIST HANGER FULLY NAILED
ALL DWANGS OR NOGGINS	EITHER 100x4.5 OR 90x3.1 PASLODE OR 75x3.75 OR 75x3.1 PASLODE	2NO. - FACE NAILED 3NO. - SKEW NAILED
22mm T&G CHIPBOARD FLOORING	55x4.2 (FLOORING SCREW)	AT 200mm CRS ON PERIMETER AND 300mm CRS INTERMEDIATE
(NOTE - ALL JOINTS TO BE GLUED WITH WATERPROOF PVA ADHESIVE)		
WALL FRAMING		
CILL PLATES TO RING BEAM/JOIST	65x3.75 OR 75x3.1 PASLODE	AT CRS AS PER RACKING PANEL SUMMARY
BOTTOM RAIL OF PANEL TO CILL PLATE	100x4.5 OR 90x3.1 PASLODE	AT CRS AS PER RACKING PANEL SUMMARY
STUD TO STUD	EITHER - 75x3.75 OR - 75x3.1 Paslode	AT 400mm CRS - FACE NAILED EACH FACE AT 300mm CRS - FACE NAILED EACH FACE
STUD TO CORNER POST	EITHER - 100x4.5 OR - 90x3.1 PASLODE	AT 400mm CRS - FACE NAILED AT 200mm CRS - FACE NAILED
HEAD BINDER TO TOP RAIL OF PANEL	75x3.75 OR 90x3.1 PASLODE	AT CRS AS PER RACKING PANEL SUMMARY
FIRE STOPS TO PANELS	100x4.5 OR 90x3.1 PASLODE	AT 600mm CRS - FACE NAILED
CAVITY CLOSERS TO PANELS	100x4.5 OR 90x 3.1 PASLODE	AT 600mm CRS - FACE NAILED
DOOR FRAMES/WINDOWS TO CAVITY CLOSERS	65x4.5 OR 63x2.8 PASLODE	AT 450mm CRS - FACE NAILED
FRAME TIES (BLOCKWORK TO TIMBER FRAME)	50x3.00 STAINLESS	AS PER WALL PANELS NOTES
ALL DWANGS OR NOGGINS:	EITHER - 100x4.5 OR - 45x3.75, OR - 75x3.1 PASLODE	FACE NAILED - 2NO. EACH SKEW NAILED - 4NO. EACH
TWO STOREY - GABLE STRAP ACROSS FLOOR ZONE	75x3.75	3NO. EACH END OF STRAP 2NO. TO HEADER JOISTS
ONE & HALF STOREY - GABLE RESTRAINT STRAPS	75x3.75	4NO. TO GABLE PANEL 2NO. TO EACH JOIST/TRUSS
PLASTERBOARD TO STUDS	2.65 PLASTERBOARD NAILS	150mm CENTRES AROUND THE PERIMETER OF THE SHEET AND 300mm INTERNALLY
ROOF FRAMING		
TRUSSES TO HEAD BINDER	TRUSS CLIPS / TRUSS ANCHORS FULLY NAILED	
WIND BRACING TO ROOF TRUSSES	75x3.75 OR 75x3.1 PASLODE	2NO. FACE NAILED TO EACH TRUSS.
GABLE LADDER TO TRUSS	75x3.75 OR 90x3.1 PASLODE	AT 600mm CRS - FACE NAILED
GABLE LADDER (SPROCKETS-SPANDREL PANEL)	75x3.75 OR 75x3.1 PASLODE AND - 32x2.36 SQ TWISTS	2NO. PER SPROCKET TOE NAILED. TRUSS CLIP EVERY 3rd SPROCKET FULLY NAILED
PLY/OSB SARKING TO TRUSSES	50x3.00 OR 50x2.85 PASLODE	AT 200mm CRS
13mm BITUMEN BOARD SARKING TO TRUSSES	50x3.00	AT 200mm CRS
COUNTER BATTENS TO SARKING	50x3.0 OR 50x2.8 PASLODE	AT 600mm CRS
TLING BATTENS	75x3.75 OR 75x3.1 PASLODE	1NO.
PLASTERBOARD FILLET ON GABLE	75x3.75 OR 75x3.1 PASLODE	AT 600mm CRS FACE NAILED
FASCIA DWANGS TO TRUSS	75x3.75 OR 75x3.1 PASLODE	2NO. FACE NAILED
PLASTERBOARD TO BEARER	75x3.75 OR 75x3.1 PASLODE	3NO. SKEW NAILED
FASCIA BOARD TO TRUSS	60x3.35 LOST HEAD	2NO. FACE NAILED PER TRUSS
PLY SOFFIT TO FRAMING	50x2.36 LOST HEAD	AT 150mm CRS
TRUSSES AND WALLPLATE OR BLOCKWORK WALLS	30x2.5mm STRAPS AT 1800mm CRS	2NO. 75x3.75 NAILS TO TRUSS. 7NO. 6-5/32 SPT HIT ANCHORS TO BLOCKWORK
SPANDREL PANEL TO SPANDREL PANEL	EITHER - 100x4.5 OR - 90x3.1 PASLODE	AT 400mm CRS EACH FACE AT 300mm CRS EACH FACE
HIP RAFTERS	100x4.0 RPH OR 90x3.1 PASLODE	2NO. EACH FACE - CHEEK NAILED
GABLE RAFTER TO HIP RAFTER	75x3.75 OR 75x3.1 PASLODE	2NO. FACE NAILED
DIMINISHING TRUSS TO TRUSS	75x3.75 OR 75x3.1 PASLODE	2NO. CHEEK NAILED
LOOSE RAFTERS	75x3.75 GALV. RPH OR 75x3.1 PASLODE	MINIMUM 2NO. PER FACE
ROOF MEMBRANE (NOTE - STAPLES SHOULD NOT BE USED FOR FIXING ROOF MEMBRANE)	20x3.0 GALV. EXTRA LARGE HEAD	AT 600mm CRS MAXIMUM
INTERNAL WORKS		
PARTITIONS TO CONCRETE FLOOR	SPT HIT 8-60/92	AT CRS AS PER RACKING PANEL SUMMARY
PARTITIONS TO FLOOR JOISTS OR FLOOR DWANGS	75x3.75 OR 75x3.1 PASLODE	AT CRS AS PER RACKING PANEL SUMMARY
PARTITIONS TO TRUSSES OR CEILING DWANGS	75x3.75 OR 75x3.1 PASLODE	AT CRS AS PER RACKING PANEL SUMMARY
DWANGS OR NOGGINS	EITHER 100x4.5 OR 90x3.1 PASLODE OR 75x3.75 OR 75x3.1 PASLODE	2NO. EACH END FACE NAILED 2NO. EACH END SKEW NAILED
PARTITION TO PARTITION	75x3.75 OR 75x3.1 PASLODE	AT 600mm CRS EACH SIDE, FACE NAILED
PARTITION TO EXTERNAL WALL PANELS	75x3.75 OR 75x3.1 PASLODE	1NO. TOP & BOTTOM, & 1NO. THROUGH SITE FIXED DWANGS AT MID HEIGHT.