

ALL DIMENSIONS IN mm UNLESS OTHERWISE NOTED  
ALL DIMENSIONS AND LEVELS TO BE CONFIRMED BY ARCHITECT  
SETTING OUT TO BE CONFIRMED ON SITE

KEY

- EXISTING WALL
- NEW LOAD BEARING BRICKWORK
- NEW LOAD BEARING BLOCKWORK
- NEW LOAD BEARING CONCRETE WALL
- NEW LOAD BEARING STUD PARTITION
- NEW NON LOAD-BEARING STUD WALL
- NEW WALL TO MATCH EXISTING

1. CATNIC STRONGHOLD SWC STAINLESS STEEL WALL STARTER KITS. POSITION AT JUNCTIONS OF EXISTING MASONRY WALL AND NEW MASONRY. INSTALL IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION. FULLY EMBED TIES IN MORTAR JOINTS.

2. RECESS ALL TIMBER JOISTS S STRAP TO BEAM / MASONRY USING 30x5x900 LONG GALVANISED STRAPS @ 1200 CRS MAX SCREW FIX TO JOIST IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION.

3. DO NOT BEAR NEW STEELWORK INTO EXISTING CHIMNEY FLUES. STRUCTURAL ENGINEER TO BE INFORMED IF THE ISSUE IS ENCOUNTERED ON SITE. CCTV SURVEY TO BE UNDERTAKEN TO CONFIRM POSITION OF EXISTING FLUES AND ALTERNATIVE SOLUTION TO BE AGREED.

4. 'DO NOT SCALE OFF THIS DRAWING. CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE AND ADVISE IF THERE ARE NW DISCREPANCIES BEFORE COMMENCING WORK/PLACING ORDER FOR STRUCTURE. ENGINEER TO BE ADVISED AND AN ALTERNATIVE SOLUTION AGREED UPON PRIOR TO COMMENCING WORK ON SITE. STRUCTURAL ENGINEER TAKES NO RESPONSIBILITY FOR ABORTIVE WORK CARRIED OUT AS A RESULT OF DISCREPANCIES FOUND ON CONSULTANTS DRAWINGS.

5. ALL DIMENSIONS IN mm UNLESS OTHERWISE NOTED. ALL DIMENSIONS AND LEVELS TO BE CONFIRMED BY ARCHITECT. SETTING OUT TO BE CONFIRMED ON SITE.

6. CONTRACTOR TO CONFIRM EXISTING JOIST SPANS ARE CONSISTENT WITH THOSE ASSUMED ON THESE DRAWINGS, PRIOR TO STEELWORK ORDER.

7. IT IS ASSUMED THAT ALL APPROPRIATE PERMISSIONS ARE IN PLACE. CLIENTS RESPONSIBILITY TO ENSURE THE RELEVANT PLANNING PERMISSION! PERMITTED DEVELOPMENT, PARTY WALL AWARDS. BUILDING CONTROL NOTICES ETC. ARE IN PLACE PRIOR TO COMMENCING CONSTRUCTION WORKS. BUILDING INSPECTOR REQUIRED TO CARRY OUT REVIEW OF STRUCTURAL DESIGNS PRIOR TO COMMENCING ON SITE. PROCEEDING WITHOUT THIS IS DONE SO AT CLIENTS RISK. STRUCTURAL. DESIGN INFORMATION AVAILABLE UPON REQUEST.

NOTE:  
ALL TIMBER IS TO BE STRAPPED DOWN TO THE EXISTING WALL VIA MS STRAPS. MS STRAPS ARE TO BE PROVIDED AT RIDGE LEVEL TO TIE ALL MEMBERS TO THE EXISTING ROOF.  
TJ1 TO HAVE JOIST HANGERS INTO TB2.  
  
TIMBER WALL STUD TO BE 50x100 C24s AT 400 C/C AND WALLS AND ROOF TO HAVE SHEATHING (PLY)

NEW TIMBER TRIMMERS ARE TO BE TIED TOGETHER TO BOTH SIDES OF THE ROOF PROVIDING STABILITY

ALL TIMBER JOISTS TO BE RECESSED & STRAPPED TO BEAM USING 30x5 900 LONG GALVANIZED STRAPS @ 600 CRS MAX TO BE SCREWED TO JOISTS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

2 No. TB2 HERE ONE AT TOP END & ONE AT BOTTOM TO SUPPORT TIMBER STUD WALL

ROOF LAYOUT  
SCALE 1:50

DO NOT SCALE FROM THIS DRAWING  
THIS DRAWING IS SUBJECT TO COPYRIGHT

P00534				TUDOR LODGE HOTEL, 50 FIELD END ROAD HA5 2QN							
REV	DATE	DESCRIPTION		REV	DATE	DESCRIPTION		REV	DATE	DESCRIPTION	
P1	27/02/24	INITIAL ISSUE									



**COGLEY**  
STRUCTURAL  
SOLUTIONS

e. [info@cogleystructuralsolutions.com](mailto:info@cogleystructuralsolutions.com)  
w. [cogleystructuralsolutions.com](http://cogleystructuralsolutions.com)  
t. +44 (0) 127 663662

ROOF LAYOUT						PRELIMINARY	
DRAWN	CHECKED	DATE	PAPER SIZE	SCALE			
AS	JC	27/02/24	A3	AS SHOWN		GA/01	P1

ALL DIMENSIONS IN mm UNLESS OTHERWISE NOTED  
ALL DIMENSIONS AND LEVELS TO BE CONFIRMED BY ARCHITECT  
SETTING OUT TO BE CONFIRMED ON SITE

KEY

- EXISTING WALL
- NEW LOAD BEARING BRICKWORK
- NEW LOAD BEARING BLOCKWORK
- NEW LOAD BEARING CONCRETE WALL
- NEW LOAD BEARING STUD PARTITION
- NEW NON LOAD-BEARING STUD WALL
- NEW WALL TO MATCH EXISTING

1. CATNIC STRONGHOLD SWC STAINLESS STEEL WALL STARTER KITS. POSITION AT JUNCTIONS OF EXISTING MASONRY WALL AND NEW MASONRY. INSTALL IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION. FULLY EMBED TIES IN MORTAR JOINTS.
2. RECESS ALL TIMBER JOISTS S STRAP TO BEAM / MASONRY USING 30x5x900 LONG GALVANISED STRAPS @ 1200 CRS MAX SCREW FIX TO JOIST IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION.
3. DO NOT BEAR NEW STEELWORK INTO EXISTING CHIMNEY FLUES. STRUCTURAL ENGINEER TO BE INFORMED IF THE ISSUE IS ENCOUNTERED ON SITE. CCTV SURVEY TO BE UNDERTAKEN TO CONFIRM POSITION OF EXISTING FLUES AND ALTERNATIVE SOLUTION TO BE AGREED.
4. 'DO NOT SCALE OFF THIS DRAWING. CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE AND ADVISE IF THERE ARE NW DISCREPANCIES BEFORE COMMENCING WORK/PLACING ORDER FOR STRUCTURE. ENGINEER TO BE ADVISED AND AN ALTERNATIVE SOLUTION AGREED UPON PRIOR TO COMMENCING WORK ON SITE. STRUCTURAL ENGINEER TAKES NO RESPONSIBILITY FOR ABORTIVE WORK CARRIED OUT AS A RESULT OF DISCREPANCIES FOUND ON CONSULTANTS DRAWINGS.
5. ALL DIMENSIONS IN mm UNLESS OTHERWISE NOTED. ALL DIMENSIONS AND LEVELS TO BE CONFIRMED BY ARCHITECT. SETTING OUT TO BE CONFIRMED ON SITE.
6. CONTRACTOR TO CONFIRM EXISTING JOIST SPANS ARE CONSISTENT WITH THOSE ASSUMED ON THESE DRAWINGS, PRIOR TO STEELWORK ORDER.
7. IT IS ASSUMED THAT ALL APPROPRIATE PERMISSIONS ARE IN PLACE. CLIENTS RESPONSIBILITY TO ENSURE THE RELEVANT PLANNING PERMISSION! PERMITTED DEVELOPMENT, PARTY WALL AWARDS. BUILDING CONTROL NOTICES ETC. ARE IN PLACE PRIOR TO COMMENCING CONSTRUCTION WORKS. BUILDING INSPECTOR REQUIRED TO CARRY OUT REVIEW OF STRUCTURAL DESIGNS PRIOR TO COMMENCING ON SITE. PROCEEDING WITHOUT THIS IS DONE SO AT CLIENTS RISK. STRUCTURAL. DESIGN INFORMATION AVAILABLE UPON REQUEST.

TB2 BEYOND ALLOWING  
FLAT ROOF SUPPORT

WALLS TO BE TIMBER STUD  
50x100 AT 400 C/C  
(SHEATHED)

TB2  
AT FRONT

TB2

SIDE ELEVATION  
SCALE 1:50

DO NOT SCALE FROM THIS DRAWING  
THIS DRAWING IS SUBJECT TO COPYRIGHT

P00534				TUDOR LODGE HOTEL, 50 FIELD END ROAD HA5 2QN							
REV	DATE	DESCRIPTION		REV	DATE	DESCRIPTION		REV	DATE	DESCRIPTION	
P1	27/02/24	INITIAL ISSUE									



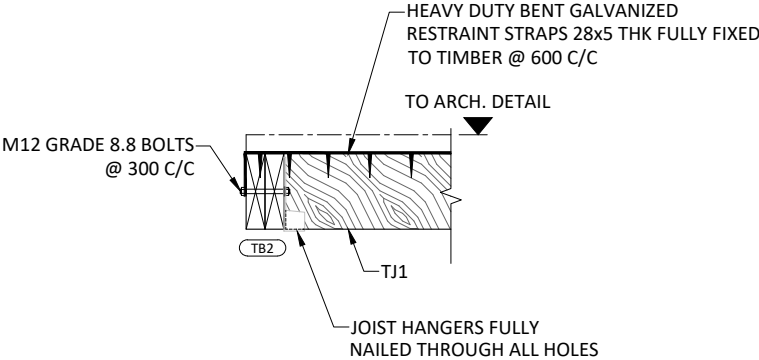
**COGLEY**  
STRUCTURAL  
SOLUTIONS  
e. [info@cogleystructuralsolutions.com](mailto:info@cogleystructuralsolutions.com)  
w. [cogleystructuralsolutions.com](http://cogleystructuralsolutions.com)  
t. +44 (0) 127 663662

SIDE ELEVATION

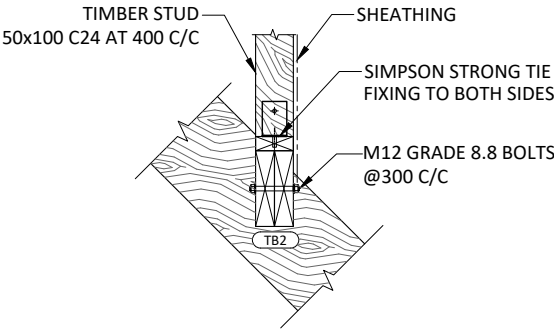
DRAWN	CHECKED	DATE	PAPER SIZE	SCALE
AS	JC	27/02/24	A3	AS SHOWN

PRELIMINARY

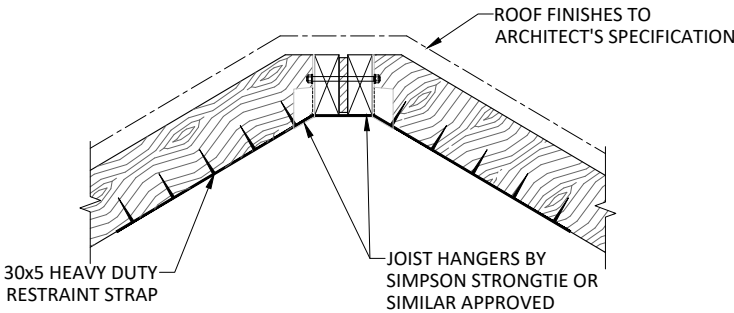
GA/02 P1



TOP DETAIL OF TB2 (FLAT ROOF)  
SCALE 1:20



BOTTOM DETAIL OF TB2 AT STUD WALL  
SCALE 1:20



ROOF RIDGE DETAIL  
SCALE 1:20

DO NOT SCALE FROM THIS DRAWING  
THIS DRAWING IS SUBJECT TO COPYRIGHT


P00534			TUDOR LODGE HOTEL, 50 FIELD END ROAD HA5 2QN			COGLEY STRUCTURAL SOLUTIONS			STRUCTURAL SECTIONS & DETAILS			PRELIMINARY	
REV	DATE	DESCRIPTION	REV	DATE	DESCRIPTION	REV	DATE	DESCRIPTION	DRAWN	CHECKED	DATE	PAPER SIZE	SCALE
P1	27/02/24	INITIAL ISSUE							AS	JC	27/02/24	A3	AS SHOWN

ALL DIMENSIONS IN mm UNLESS OTHERWISE NOTED  
ALL DIMENSIONS AND LEVELS TO BE CONFIRMED BY ARCHITECT  
SETTING OUT TO BE CONFIRMED ON SITE

ROOF BEAM SCHEDULE		
BEAM MARK	SIZE (mm)	COMMENTS
TB	2 No. 60x245 C24	BOLTED TOGETHER AT 300 C/C
TB2	2 No. 50x200 C24	

TIMBER SCHEDULE		
TIMBER MARK	SIZE (mm)	COMMENTS
TJ1	50x150 C24	TIMBER JOISTS @400 C/C

DO NOT SCALE FROM THIS DRAWING  
THIS DRAWING IS SUBJECT TO COPYRIGHT

P00534			TUDOR LODGE HOTEL, 50 FIELD END ROAD HA5 2QN						 COGLEY STRUCTURAL SOLUTIONS e. <a href="mailto:info@cogleystructuralsolutions.com">info@cogleystructuralsolutions.com</a> w. <a href="http://cogleystructuralsolutions.com">cogleystructuralsolutions.com</a> t. +44 (0) 127 663662				MEMBER SCHEDULES				PRELIMINARY	
REV	DATE	DESCRIPTION	REV	DATE	DESCRIPTION	REV	DATE	DESCRIPTION	DRAWN	CHECKED	DATE	PAPER SIZE	SCALE	S/50	P1			
P1	27/02/24	INITIAL ISSUE							AS	JC	27/02/24	A3	AS SHOWN					

GENERAL NOTES

- All dimensions to be confirmed on site by the contractor prior to fabrication or installation of any works. Responsibility for final dimensions and fit into the works is with the contractor.
- These drawings and calculations are for structural works only. All insulation, ventilation, damp proofing, fire protection etc to be detailed by others.
- Investigation of the ground conditions and assessment of bearing capacity is recommended prior to the commencement of any works.
- All approvals including building regulations and party wall agreements must be in place prior to commencing the works.
- The contractor is responsible for the design and installation of temporary works to ensure no significant movement, damage or collapse occurs to the remaining or adjacent structures.
- The client should make themselves familiar with their responsibilities under the CDM 2015 regulations to ensure adequate health and safety arrangements are put in place.

STRUCTURAL STEELWORK

- All materials, fabrication, workmanship and erection of steelwork shall be in accordance with the national steelwork specification for building construction, 5th edition as published by the British Constructional Steelwork Association.
- Steelwork connections shall comprise of not less than 4No M16 bolts grade 8.8 except where shown other wise. All connections to be designed by the steelwork and submitted to the engineer for comment.
- Steel beams shall have the minimum bearing as shown on the drawings. Where none specified then bearing is150mm or the full width of the padstone.
- Steel columns shall be levelled using steel packs not less than 75mm square off the foundation / masonry. Allowance shall be made for a nominal 25mm thickness of grout between baseplate and support. Grout shall take the form of neat cement with a non-shrink additive mixed strictly in accordance with the manufacturers recommendations and fluid enough to pour without leaving any air pockets.
- Site modifications shall not be carried out without prior approval from the engineer.
- All steelwork shall be blast cleaned to BS7079:A1 preparation grade SA2 1/2 and except where specified as galvanised shall be painted with a high build zinc phosphate primer to a dry film thickness of 75 microns. A pre-fabrication primer may be used at the fabricators discretion. The contractor shall ensure that the primer used is compatible with any subsequent coatings to be used.
- Steelwork specified as galvanised shall be blast cleaned as above and hot dip galvanised to BS729 with a minimum coating thickness of 85 microns.
- All steelwork below DPC level or in cavities shall be painted with a compatible high build zinc phosphate primer to provide a dry film thickness of not less than 125 microns in addition to the 75 micron shop coat to achieve an overall primer coating of 200 microns. Paint to be Sherwin Williams Macropoxy C400v3 zinc phospahte primer or equal. Steelwork encased in concrete to remain unpainted and have a minimum 100mm cover, concrete to be grade C25.
- Steelwork contractor to co-ordinate with the main contractor and cladding contractor to provide all necessary secondary steelwork, trimming etc as required around all doors, windows, corners and the like.
- Steelwork contractor to co-ordinate with the main contractor to provide adequate temporary support and bracing to allow the execution of the works.

MASONRY

- Refer to architectural drawings and specifications for masonry requirements in respect of acoustic, thermal, insulation and durability requirements. The engineer is to be notified immediately if any of these conflict with the structural requirements.
- Blockwork to have the minimum compressive strength as specified on the drawings. All blockwork to be solid unless specified otherwise otherwise and is to comply with BS5628 table 4 requirements for special category of manufacture. Blockwork to be adequately protected to avoid saturation.
- Blockwork below DPC to be of foundation quality as recommended by the manufacturer and have minimum compressive strength as specified for between lower ground and ground floor and in no case less than 7.0 N/mm2. Inner leaf of blockwork to extension to be min 7.0 N/mm2 LG to Ground, 2.9N/mm2 Ground to first floor and 2.9N/mm2 first floor to roof level.
- Brickwork to have a minimum compressive strength of 30N/mm2 and comply with special category of manufacture a set out in BS5628.
- Unless specified otherwise mortar designation to be.:  
Above ground - Class iii (1:1:6)  
Below ground - Class i (1:0.5:3)
- Refer to architects drawings for details of DPC's, waterproofing, insulation and sound proofing.
- The contractor is responsible for the stability of the works during construction.
- Lintels - Provide proprietary steel lintels as specified or equivalent by alternative manufacturer.
- All steel lintels to be galvanised and have a minimum of 150mm bearing.
- Provide movement joints in blockwork at max 6.0m centres and in brickwork at max 12.0m centres.

CONCRETE

- All concrete to be normal weight, strength Grade C28 /35, unless shown otherwise, to provide a minimum cube strength of 35N/mm2 at 28 days.
- Concrete to be sampled and tested with a minimum of 3 cubes per pour with no less than 3 for every 12 cum. Cubes to be sampled, cured and tested to BS EN 12350 and 12390 and results provided to the engineer with 5 days of testing. One cube from each pour to be tested at 7 days, one at 28 days and one held in reserve for testing should any cube fail to reach the target strength.
- All concrete below ground level (slabs, walls and foundations) to be designed for a sulphate class of DS-2.
- No concrete is to be poured if the expected air temperature is to fall below 5°C within the following 24 hour period.
- No admixtures to be added to the concrete without the written permission of the structural engineer. No water to be added to ready mixed concrete on site.
- The foundation design is based upon a safe ground bearing pressure of 100kN/Sqm. This is to be confirmed on site by building control or the engineer before placing any concrete or foundation. Underside of foundation to be min 1000mm below ground level. May need to be deeper dependent upon ground conditions and presence of any trees.
- All shoring for foundations and supports for concrete during construction to be designed by the contractor.

STRUCTURAL TIMBER

- All structural timber members to be of minimum size shown on the drawings. Sizes shown are nominal sizes and will be subject to reductions in finished size in accordance with BS 4471.
- Timber joists shall have minimum bearings of 100mm on masonry and 75mm on steel beams or timber plates except as noted on the drawings. Timber joists shall not be built into party wall but shall be supported on proprietary joist hangers at such locations. Restraint type joist hangers capable of resisting tensile forces in accordance with BS5268 -1 Appendix C to be used. Alternatively provide 30x5 restraint straps at not more than 1200mm centres with a turn down length of 100mm and a length of 600mm. Straps fixed to floor with 50mm, No 10 screws at not more than 110mm centres and a minimum of 4No fixings.
- Double joists shall be provided under non-load bearing stud work partitions running parallel with joists spans, under baths and airing cupboards.
- All members supported on proprietary hangers shall be accurately cut to provide full contact with the base of the hanger and shall be fixed in accordance with the manufacturers recommendations. Joists shall be rebated to lie flush with the underside of the hangers.
- All members fitted into steel beams shall provide a good fit into the web of the beam and shall be notched the minimum amount required to clear the beam flanges. Where steel beams are specified within the floor depth the underside of the joists shall be 5mm below the underside of the beams.
- External and party walls parallel with the joists spans shall be restrained at top of floor joist level at no more than 1200mm centres with 30x5 galvanised straps extending over a minimum of 3No joists. Noggins not less that 75% of the joist depth and timber blocking adjacent to walls shall be fixed between joists at all strap locations. Straps shall be fixed to members / noggins with not less than 4No 32 x 3.5mm galvanised or sheradised square twisted nails.
- End joists shall be positioned approximately 50mm from masonry walls. Joist centres generally shall be equal and not exceed the design centres shown on the drawings. Multiple joists, where shown, shall be be securley nailed together at not more than 600mm centres.
- Unless specified otherwise strutting shall be securely fixed between joists at the following centres:

Joist span of 2.5m to 4.5m - one row at centre of span  
Joist span over 4.5m - two rows equally spaced.


Strutting shall take the form of one of the following:  
38x38 softwood herringbone strutting located between 5 and 25mm clear of the top and bottom edges of joist.  
Proprietary galvanised metal strutting fixed in accordance with manufacturers instructions.  
Solid softwood strutting not less than 38mm thick at least three quarters of the depth of the joist.

All UB, UC and Hollow sections to be Grade S355 Hot rolled.

DESIGN RISK ASSESSMENT

ELEMENT	HAZARD(S)	ACTION REQUIRED / SEQUENCE
CDM Regulations 2015	Management and control of health and safety on all construction projects.	All clients, including domestic, are responsible for ensuring adequate arrangements are made for health and safety on their project.
Installation of new beams to support structure over walls to be removed.	Collapse of existing structure during installation of new beams.	Contractor to ensure that adequate temporary support is in place before removing existing walls.
Excavation for foundations.	Collapse of excavation. Cutting through services.	Contractor to provide designed shoring for excavations exceeding 600mm. Check for existing services before commencement.

DO NOT SCALE FROM THIS DRAWING  
THIS DRAWING IS SUBJECT TO COPYRIGHT

P00534			TUDOR LODGE HOTEL, 50 FIELD END ROAD HA5 2QN						<div><div></div><div>COGLEY STRUCTURAL SOLUTIONS e. info@cogleystructuralsolutions.com w. cogleystructuralsolutions.com t. +44 (0) 127 663662</div></div>					GENERAL NOTES					PRELIMINARY	
REV	DATE	DESCRIPTION	REV	DATE	DESCRIPTION	REV	DATE	DESCRIPTION	DRAWN	CHECKED	DATE	PAPER SIZE	SCALE	N/01	P1					
P1	27/02/24	INITIAL ISSUE							AS	JC	27/02/24	A3	AS SHOWN							



**COGLEY**  
STRUCTURAL  
SOLUTIONS  
e. info@cogleystructuralsolutions.com  
w. cogleystructuralsolutions.com  
t. +44 (0) 127 663662