

Site Address: 39 Vallance Road, Wood Green, London N22 7UD.

Reference No: 39/N227UD.



Photo 1 – rear elevation of the existing building.

HLCL01 General

HLCL02 Construction (Design and Management) Regulations

HLCL03 Temporary Works and Stability

HLCL04 Demolition

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HLCL06 Structural Timber

HLCL01 General

1. THIS SPECIFICATION is to be read with Preliminaries/General Conditions.
2. DO NOT SCALE DRAWINGS The Contractor is to check all dimensions on site before carrying out any works.
3. All dimensions are in millimetres unless noted otherwise.
4. THIS SPECIFICATION together with the Structural Engineer's drawings should be used to verify layout, setting out, finishes etc. Any discrepancies are to be reported to the Structural Engineer before proceeding with the works.
5. SETTING OUT details are shown on the Architect's drawings unless noted otherwise on the drawings.
6. Materials & Workmanship - All works are to be carried out in a workmanlike manner. All materials and workmanship must comply with Regulation 7 of the Building Regulations, all British Standards, European Standards, Agrément Certificates, Production Certification of Schemes (Kite Marks) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking.
7. WEIGHT STRUCTURAL ELEMENTS Any element weighing more than 20kg should be lifted by double (or greater) handling or by using mechanical assistance. Elements greater than 20kg have not been specified unless it has been necessary to do so, and the contractor should make allowance for the correct handling of heavier elements.
8. THE CONTRACTOR is to inform the Structural Engineer if the existing fabric, including foundations, is opened, and found to be inadequate, unsuitable to support the proposed works, or at variance from the details shown on the drawings.
9. ITEMS NOTED on the drawings to be checked or verified on site are to be exposed by the Contractor for inspection by the Structural Engineer at the earliest opportunity.
10. HOLES OR CHASES must not be cut through any structural members without the written consent of the Structural Engineer.
11. THE CONTRACTOR is to ensure that Building Control is notified so that they can carry out their inspections prior to concreting new foundations, slabs etc., and other structural items prior to them being covered up.
12. NOTHING included or omitted from this outline specification will relieve the Contractor of his duty to carry out the works in accordance with current standards of safety and good building practice.
13. ALL ARTICLES materials and goods shall be new and of good quality, suitable for the required purpose and shall conform to the appropriate British Standard where such exists. Where references to the above are made it shall be inferred that the latest edition applies, together with subsequent amendments, unless otherwise specified.

14. ALL TOLERANCES are to be agreed with the Structural Engineer, and the Contractor will be responsible for ensuring that sufficient tolerances are provided and integrated throughout all elements of the works.
15. THE CONTRACTOR is to take account of tolerances detailed elsewhere on the drawings, appended specifications, and British Standards when complying with the above clause.

HLCL02 Construction (Design and Management) Regulations

1. THE CONTRACTOR should prepare a method statement covering the sequencing and temporary works proposals for the structural alterations. The statement should set out the order in which works are to be carried out and the layout and position of temporary works, providing calculations for these as required. A series of sketch drawings is often the best way to illustrate a complex series of works. The Method Statement should be submitted to the Principal Designer for comment 10 days prior to any works commencing.

The designer can take on the duties, provided there is a written agreement between the client and the designer to do so.

The Health and Safety Executive (HSE) are to be notified as soon as possible before the construction works commence at the site if:

The works last longer than 30 working days and has more than 20 workers working simultaneously at any point during the project or.

The works exceed 500-person days.

HLCL03 Temporary Works and Stability

1. THE CONTRACTOR is entirely responsible for maintaining the stability of all existing buildings and structures, within and adjacent to the works, and of all the works from the date of possession of the site until practical completion of the works.
2. DESIGN AND SUPERVISION of temporary works should be in accordance with BS 5975:2008.
3. THE CONTRACTOR shall design, install, and maintain all necessary temporary works and shall advise the Structural Engineer at least ten working days from commencement of the works, of his proposals for temporary supports and sequence of construction for the works. These proposals shall be supported by design calculations if requested.

Under no circumstances will any structural alterations be carried out prior to the Structural Engineer commenting on the Contractors temporary works proposals.

4. THE DESIGN of temporary works shall include an assessment of the loads to be resisted and is to be undertaken by a competent person. Due regard shall be given to lateral stability as well as to the support of vertical loads.

5. THE CONTRACTOR is to familiarise himself with the building and its structure so that he is aware of the nature and magnitude of the loads to be supported.
6. PARTICULAR care is to be taken to ensure that temporary props remain adequately seated and tightened so that support to the structure above is not allowed to yield during building operations.
7. THE CONTRACTOR is to ensure that a temporarily propped structure is adequately wedged, pinned, or packed off the permanent works prior to removal of any temporary supports.
8. THE CONTRACTOR shall ensure that any completed or partially completed structural element is not overloaded by storage of materials, demolition debris or plant used in the works. Details of permitted loads may be obtained from the Structural Engineer.

HLCL04 Demolition

1. DEMOLITION is to be carried out in accordance with BS 6187 and current relevant Health and Safety legislation and HSE guidance.
2. OPERATIVES should be appropriately experienced and skilled in this type of work, holding relevant CITB certificates of competence.
3. SITE STAFF responsible for supervision and control of work, should be experienced in the assessment of the risks involved and methods of deconstruction and demolition to be used.
4. DEMOLITION is to be undertaken in the reverse order of construction. No part of the structure is to be left in an unsupported condition overnight or for long periods.
5. DEMOLITION is to be undertaken in a manner which avoids excessive noise and nuisance.

All work is to be well-watered to minimise dust. All material is to be carted away from site as soon as practicable.

6. RECYCLED MATERIALS arising from the demolition/deconstruction work can be reused elsewhere in the project subject to compliance with the appropriate specification and in accordance with the site waste management plan.
7. ASBESTOS-CONTAINING MATERIALS—UNKNOWN OCCURRENCES discovery: Give notice immediately of suspected asbestos-containing materials when discovered during deconstruction/ demolition work. Avoid disturbing such materials.

Removal: Submit statutory risk assessments and details of proposed methods for safe removal.

8. UNFORESEEN HAZARDS discovery: Give notice immediately when hazards, such as unrecorded voids, tanks, chemicals, are discovered during deconstruction/ demolition. Removal: Submit details of proposed methods for filling, removal, etc.

HLCL05 Structural Steelwork

1. ALL workmanship is to comply with BS 5950:Part 2 and the National Structural Steelwork Specification (NSSS) for Building Construction 5th Edition CE Marking Version.
2. ALL fabricated steel should be CE marked in accordance with the NSSS and obtained from certified fabricators
3. EXECUTION CLASS to be EXC2.
4. The steelwork contractor is to conduct an accurate site survey to determine final dimensions for all new steelwork.
5. ALL hot rolled structural steel sections to be Grade S275 to BS EN 10025 except steel hollow sections which are to be Grade S355, unless noted otherwise on the drawings.
6. ALL bolts are to be M16 bolts in 18mm diameter holes, grade 8.8 Precision Bolts to BS 3692. Bolts to have a class 1 sherardised finish to BS 4921.
7. Bolts to be in accordance with BS4190 for Hex bolts, and BS4604 for HSFG bolts.
8. If steel beams are in pairs, then bolt together using 12mm diameter bolts at 600mm c/c.
9. BOLTS for connecting beams to the top of columns, where the head plates project and where steels are being fitted in tight to ceiling and wall finishes should be countersunk with the heads flush with the underside of column head plates
10. ALL welding is to comply with BS 5135. Site welding shall not be permitted except with the written approval of the Structural Engineer.
11. ALL welds are to be minimum 6 mm full profile fillet welds or full-strength butt welds, unless noted otherwise on the drawings.
12. ALL welds are to be continuous unless specified otherwise or as agreed by the engineer.
13. THE steel fabricator is to obtain dimensions from site.

14. SPECIAL connections between steel members will be detailed by the engineer. Connections not shown on drawings should be detailed by the fabricators, in accordance with good practice and using a minimum of 2 × M16 bolts. Where 4 bolts are used bolt sizes not to be less than 12 mm wide in diameter. Design loads for connection will be shown on the drawings but if in doubt the fabricator should confirm these before proceeding.
15. ALL existing steelwork in external walls or other exposed steelwork is to be thoroughly power brushed clean down to bright steel. Wipe over prepared area with cleanser thinners (e.g., Thinner №5 by Leigh's Paints) immediately prior to painting.

Preparation: All existing steelwork should be thoroughly power brushed to clean it down to bright steel, in line with BS EN ISO 8501-1 (Preparation grades of steel substrates).

Prepared surfaces must be wiped down with cleansing thinners (e.g., Thinner №5 by Leigh's Paints) immediately prior to painting.

A primer coat of high-build epoxy aluminium primer (e.g., Epigrip M902 by Leigh's Paints) is to be applied to achieve a dry film thickness of 125 microns, as per BS EN ISO 12944-5 (Protective paint systems).

Once the primer has cured to an overcoatable condition, a second coat of Epigrip M902 is to be applied, also to a dry film thickness of 125 microns.

Alternative paint suppliers must receive prior approval to ensure compatibility and compliance with these specifications.

16. Blast-clean all new steelwork to BS 7079: Part A1 preparation grade SA2½. This ensures the removal of all mill scale, rust, oil, grease, and other contaminants, while achieving an adequate surface profile for coating adhesion.
- Apply a coat of Leigh's Epigrip C400 Compliant Epoxy Primer to achieve a dry film thickness of 75 microns prior to erection, unless otherwise specified in the drawings.
17. For steel beams with ends built into cavity walls or solid brick walls, an additional on-site coat of Leigh's Epigrip K267 M10 should be applied to a dry film thickness of 125 microns, to protect against moisture ingress and comply with BS EN ISO 12944 (Corrosion protection of steel structures).

Contractor to ensure that all coating materials to be used are recommended by their manufacturers for the particular surface and conditions of exposure, and that they are compatible with each other.

18. FIRE In accordance with Approved Document B (Fire Safety) of the UK Building Regulations:

Steelwork should be encased in fire-resistant materials such as 2 layers of 12.5mm plasterboard, finished with a 5mm skim coat and wire binding at 100mm pitch, or other equivalent systems (e.g., Supalux or Gyproc) to achieve a minimum of 30 minutes fire resistance.

Fire protection specifications must adhere to the architect's details.

19. Steel beams must bear onto concrete padstones to a minimum depth of 150mm or the full thickness of the padstone, if less, unless otherwise noted in the structural drawings. This is essential to comply with BS EN 1993 (Eurocode 3) and Approved Document A for structural stability.
20. While unprotected steel lintels or beams may technically outlast the lifespan of the building, omitting corrosion protection is considered poor practice and may compromise durability in exposed or high-moisture environments. Corrosion protection is essential for meeting BS EN 1090 standards for structural steel and ensuring the long-term integrity of the building.
21. ENSURE that insides of hollow sections are dry and clear of debris, before sealing ends and openings.
22. THE finish of any steelwork that is to remain visible or is of an Architectural nature must be agreed with the structural engineer prior to manufacture.

All welds in areas noted above are to be ground smooth.

23. WHERE mild and stainless steels are in contact bi-metallic corrosion is to be avoided using an isolating material between the different metals. Also provide non-conductive waterproof gaskets and nylon washers and bushes.
24. FABRICATION drawings together with connection calculations are to be submitted to the Structural Engineer for comments prior to any fabrication.
25. New mass concrete padstones to be 1:2:4 Mix or precast concrete type.
26. Where steel bearing plates or beams are used to spread the loads onto masonry walls from steel beams bearings, the beams are to be connected to the spreaders using a continuous 3mm FPFW to either side of the steel beam.
27. Steel beams to be fixed to concrete padstones using 75mm long, M10 Hex Concrete Screw Bolts in 12 mm diameter holes.

HLCL06 Structural Timber

1. WHERE POSSIBLE use timber that has been independently certified under a fully participatory and objective timber certification scheme, i.e., FSC or PEFC.

Where independently certified timber is not available, use timber and wood products from suppliers that have adopted a formal Environmental Purchasing Policy for those products, and can provide evidence of commitment to that Policy.

The contractor should confirm and provide evidence of the source of timber before placing an order.

2. NEW timber in the works is to be selected timber not inferior to European Redwood/ Whitewood grade C24 to BS EN 14081, unless noted otherwise on the drawings.

3. NEW structural timber in internal dry environments is to be double vacuum impregnated with preservative to BS 5268: Part 5 and the manufacturer's recommendations. Where available, use water-based treatment products such as ARCH Timber Protection 'Vacsol Aqua' or Osmose 'Protim Aqeos' to remove the use of VOCs in the treatment process.

New timber in the works either in contact with the ground, exposed to the weather or severe condensation is to be vacuum pressure impregnated with preservative to BS 5268: Part 5 and the manufacturer's recommendations. As from 30 June 2004 the EC will restrict the use of CCA treated timber as a treatment option in all residential buildings and other public locations where skin contact is possible. This does not apply to 'as built' CCA treated timber.

Use water based, heavy-metal free treatment products such as ARCH Timber Protection 'Tanalith E' or Osmose 'Naturewood' as an alternative to CCA treated timber.

Cut ends are to be thoroughly treated with brush applied coats of appropriate preservative, preferably water based similar products as above, before fixing. All preservatives are to be to the Architect's approval.

4. STRUCTURAL timbers may only be drilled or cut for services as noted below.

Notches in the rafters are to be at the top and located between 0.1 and 0.25 of the span from the support. Notch cannot be deeper than 0.125 of the joist depth.

Holes in the rafters are to be along the centre with maximum diameter of 0.125 of the joist depth.

5. SIZES of new structural timbers noted on drawings are shown as sawn basic sizes, however all structural timbers should be regularised to ensure accuracy of construction.
6. UNLESS noted otherwise on drawings joists to be supported on proprietary hangers to BS 6178 Part 1 size to suit joist. Hangers should be installed, and joists fitted strictly in accordance with the manufacturer's instructions.

Particular care should be taken to see that the hanger is fitted tight to walls, with a level bearing and that that joists are cut to the tolerances specified and fully nailed. Hangers should not be loaded until the minimum height of masonry specified in manufacturer's instructions has been constructed and cured.

7. PROPRIETARY timber fixings to be Simpson Strong tie, www.strongtie.co.uk. References on drawings will be for these products, which should be fitted in accordance with the manufacturer's instructions. Alternative products should not be used without the Engineers approval.

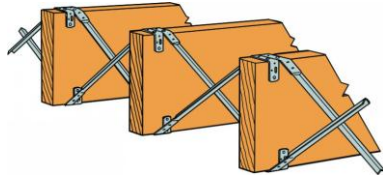


Photo 2 – Use solid timber noggins or alternately use herringbone strutting by Simpson strong tie (or similar) at the mid span of the timber rafters throughout.

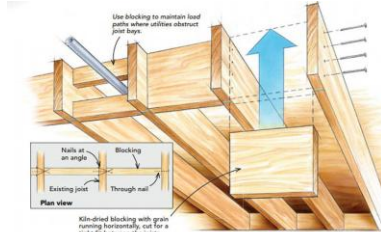


Photo 2 – Alternate to the use of herringbone strutting, use solid timber noggins or at the mid span of the timber rafters throughout.

8. LATERAL Restraint Straps Galvanised mild steel. To be 30 × 5 mm cross section 1200 mm long including 150 mm turndown.

For straps parallel to joists provide an additional half twist to allow them to be fixed to side of joists then turn to pass through bed joint of wall adjacent to the joist hanger. Fix to joist with minimum 4 x 4 mm sheradized countersunk screws evenly spaced along strap.

Ensure that turndown end of strap is in tight contact with cavity face of wall inner leaf, pointing downwards.

Straps to be in position shown on drawings or 1200 mm spacings.

If in doubt about any of the details – ASK – do not guess!

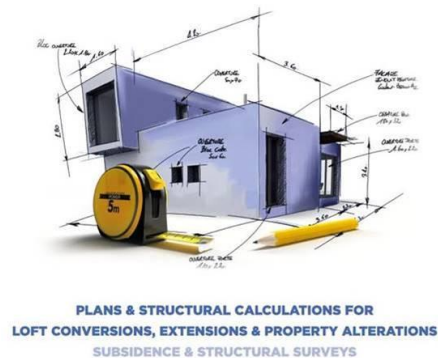
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I belong to a network of quality professionals able to recommend a wide range of other quality professionals to help you. How else can I help you today?