

NBS_loft_conversion

NBS_TA20

Containing:

JCT 2005 Minor Works Building Contract (MW)

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JCT 2005 Minor Works Building Contract (MW)

110 First Recital - The Works and the Contract Administrator

- The work comprises: Loft conversion of existing storage space in common rafter and purlin roof, to include access stair, strengthened floor, roof windows and roof insulation.

120 Second Recital - Contract documents

- Contract drawings: None.
- Documents that have been prepared which describe the work to be done: This NBS Domestic specification/ work schedules (the Contract specification).

130 Third Recital - Priced documents

- Documents that are to be priced or provided by the Contractor: Contract specification.

210 Article 3 - Architect/ Contract Administrator

- Architect/ Contract Administrator:
 - Name: NBS_CA
 - Address: The Old Post Office, Newcastle, NE1 1RH.

310 Fourth Recital and Schedule 2 - Base date

- Base date: 17/11/2010.

320 Fourth Recital and clause 4.2 - Construction Industry Scheme (CIS)

- Employer at the Base Date: Is not a 'contractor' for the purposes of the CIS

330 Fifth Recital - CDM Regulations

- The project: Is not notifiable.

350 Seventh Recital and Schedule 3 - Supplemental provisions

- Collaborative working: Paragraph 1 applies.
- Health and safety: Paragraph 2 applies.
- Cost savings and value improvements: Paragraph 3 applies.
- Sustainable development and environmental considerations: Paragraph 4 applies.
- Performance indicators and monitoring: Paragraph 5 applies.

370 Contract Clause 1.1 - CDM Planning period

- Shall mean the period of:
 - Ending on: The date for commencement of the Works.

380 Contract Clause 2.2 - Commencement and Completion

- Date for Commencement of the Works: 01/12/2010.
- Date for Completion: 24/12/2010.

400 Contract Clause 2.10 - Rectification period

- Rectification period from the date of practical completion: 3 months.

410 Contract Clause 4.3 - Percentage of the total value of the work etc

- Percentage: 95%.

420 Contract Clause 4.4 - Percentage of the total amount to be paid to the Contractor

- Percentage: 97½%.

430 Contract Clause 4.8.1 - Supply of documentation for computation of amount to be finally certified

- Period from the date of practical completion: 3 months.

440 Contract Clause 4.11 and Schedule 2 - Contribution, levy and tax changes

450 Contract Clause 5.3.2 - Contractor's insurance - Injury to persons or property

- Insurance cover (for any one occurrence or series of occurrences arising out of one event): Not less than £2,000,000.

460 Contract Clauses 5.4A, 5.4B and 5.4C - Insurance of the works etc

- Alternative provisions: Clause 5.4C (Existing structures insurance by Employer in own name) applies.

470 Contract Clauses 5.4A.1 and 5.4B.1.2 - Percentage to cover professional fees

- Percentage: 15 %.

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A9 General technical requirements

System Outline

145 Submit evidence for sustainable timber procurement

- Timing: Not less than one week before placing orders.
- Extent:
 - Certification verifying managed sources: For all timber/ timber products.

150 Moisture content (maximum) of wood and wood based products at time of fixing

- Structural wood and wood based boards:
 - Location:
 - Covered and generally unheated: 18%.
 - Internal and continuously heated.: 12%.
- Joinery:
 - External: 12–19%.
 - Internal heated rooms 12–21° C.: 9–13%.

Execution

610 Precedence

- Document precedence: Where documents conflict, information written into (or selected in) 'System outline' clauses and 'Product' clauses overrides contract drawings, which override information in the 'Execution' clauses.

612 Existing services

- Identification: Before starting work, check and mark positions of services. Where positions are not shown on drawings, obtain relevant details from service authorities, statutory undertakers or other owners.

614 Plant and materials

- Site equipment: Provide all necessary equipment including appliances, vehicles, consumables, tools, temporary works, scaffolding, cabins and other site facilities.
- Materials: Supply all necessary materials and products, including components, equipment and accessories.

616 Building construction vocabulary

- Definitions:
 - Submit: Submit documentary information to the Employer's agent (the consultant) on request.
 - Give notice: Inform Employer's agent (the consultant) in writing of outcome of action or instruction.
 - Remove: Disconnect, dismantle as necessary and take out designated products or work and associated fastenings, supports and bedding materials. Dispose of materials not identified for retention.
 - Fix: Unload, handle, store, place and fasten in position including labours and use of site equipment.
 - Set aside for reuse: Do not damage designated products or work. Clean off bedding and jointing materials. Stack neatly, adequately protect and store until required.
 - Make good: Execute local remedial work to designated area; make secure, sound and neat.
 - Replace: Supply and fix new products matching those removed. Execute work to match original state of that removed.
 - Repair: Execute remedial work to designated products; make secure, sound and neat.
 - Refix: Fix removed products identified for reuse.
 - Ease: Adjust moving parts of designated products or work to achieve free movement and good fit in open and closed positions.
 - As existing: Provide products and work of the same appearance and features as the original, excluding ageing and weathering. Make joints between existing and new work as inconspicuous as possible.

618 General quality

- Products and execution:
 - Products generally:
 - Source: From the same source or manufacturer.
 - Whole quantity of each product required to complete the work: Consistent kind, size, quality and overall appearance.
 - Product tolerances: Where critical, measure a sufficient quantity to determine compliance.
 - Execution generally:
 - Fixing: Fix, apply, install or lay products securely, accurately, plumb, neatly and in alignment.
 - Colour batching: Do not use different colour batches where they can be seen together.
 - Dimensions: Check on-site dimensions.
 - Finished work: Not defective, e.g. not damaged, disfigured, dirty, faulty or out of tolerance.
 - Ducts, chases and holes: Form during construction rather than cut. Where cutting/ drilling is necessary submit proposals before beginning operation.

620 Sizes

- General dimensions: Nominal.
- Cross section dimensions of timber: Finished dimensions.

622 Substitution

- Products:
 - Argument for substitution: If an alternative product to that specified is proposed, submit reasons for proposal.
 - Documentation: Submit relevant documentation including manufacturer and product reference, cost, availability, relevant standards and copy of warranty/ guarantee.
 - Approvals: Obtain approval before ordering alternative products.
- Work:
 - Reason for substitution: If alternative work to that specified is proposed, submit reasons for proposal.
 - Approvals: Obtain approval before execution.

624 Manufacturers' recommendations

- General: Comply with manufacturers' current printed recommendations and instructions. Keep copies on site.
- Changes to recommendations or instructions since close of tender: Submit details.
- Ancillary products and accessories: Use those supplied or recommended by main product manufacturer.
- Agrément certified products: Comply with limitations, recommendations and requirements of relevant valid certificates.

626 Defects in existing work

- Reporting undocumented defects: When discovered, immediately give notice. Do not proceed with affected related work until response has been received.
- Documented remedial work: Do not execute work which may hinder access to defective products or work, or be rendered abortive by remedial work.

628 Accuracy, appearance and fit

- Tolerances and dimensions: If likely to be critical to execution or difficult to achieve, as early as possible either submit proposals, or arrange for inspection of appearance of relevant aspects of partially finished work.
- General tolerances (maximum): To BS 5606 'Accuracy in building', tables 1 and 2.

Total for A9 General technical requirements
To be carried forward to Tender Summary

G1 Packaged frames and structural steelwork

System Outline

130 Steel beams supporting floor joists

- Drawing references: NBS_003, NBS_004.
- Beams:
 - Type: Hot rolled steel universal column sections (UC).
 - Flange and end plates: Not required..
 - Drilled holes: As drawings.
- Preparation: See section M1.

Products

320 Steel beams

- Source: Contractor's choice.
- Standards:
 - Steel: To BS EN 10025-2, grade S275 JR.
 - Dimensions: To BS 4-1.
- Beams:
 - Universal column (UC) sections: 2 no. 152 x 152 x 23 UC.
- Finish as delivered: Primed.

Execution

620 Preparing and installing hot rolled steel sections to support floor joists

- Fabrication:
 - Cuts and holes: Accurate and neat.
 - Welding: Metal arc method to BS EN 1011-23BSI.
Site welding: Not permitted.
- Shop priming:
 - Preparation: Remove loose scale, loose rust, burrs, fins, sharp edges and weld spatter. Clean out crevices. Thoroughly degrease surfaces, rinse using clean water and allow to dry.
 - Priming: One full coat within eight hours of preparation.
- Installation:
 - Accuracy: Position members true to line. If necessary, level with steel packs of sufficient area to allow full transfer of loads to bearing surfaces.
- Fixing: Prepare pockets in existing masonry. Supply and build in precast concrete padstones 100 x 100 x 450 mm (minimum). Build in beam ends with 100 mm (minimum) bearing. Make good to masonry and finishes.

G1/130 Steel beams supporting floor joists

Total for G1 Packaged frames and structural steelwork
To be carried forward to Tender Summary

G2 Structural timber and general carpentry

System Outline

112 Timber joist upper floor structure

- Drawing references: NBS_004, NBS_005.
- Joists:
 - Type: Floor joists.
 - General spacing: As existing.
 - Support: Build in alongside existing.
- Timber blocking: As drawings.
- Strutting: Softwood herringbone.
- Lateral restraint straps to joists: Not required.
- Rigid sheet floor bases: Required.

126 Timber stud partitions

- Drawing references: NBS_004, NBS_005.
- Studs:
 - Type: Partition studs.
 - General spacing: 400 mm.
 - Support: Framing anchors.
- Plates:
 - Type: Section as partition studs.
 - Fixings: Screws to floor plates. Framing anchors to head plates.
- Timber noggings: Required.

128 New opening in timber floor for access stair

- Drawing references: NBS_004, NBS_005.
- Preparation: Remove existing plasterboard ceiling sufficient only to allow trimming of opening.
- Form structural opening:
 - Size: 2100 x 900 mm.
 - Joist trimmers and trimming joists: Depth, as floor joists. Width, 25 mm (minimum) greater than floor joists.
 - Lining: 18 mm plywood, lipped to bottom edge.
- Making good:
 - Ceiling: Make good.

132 New openings in pitched roof for roof windows

- Drawing references: NBS_006.
- Preparation: Roof coverings – see section H6.
- Form structural opening:
 - Size: 3 no. 600 x 900 mm.
 - Rafter trimmers and trimming rafters: Depth, as existing rafters. Width, 25 mm (minimum) greater than rafters.
 - Lining: Proprietary – see section L1.

Products

306 Floor joists

- Source: Contractor's choice.
- Type: Softwood.
- Certification: Forestry Stewardship Council (FSC) chain of custody.
- Strength class:
 - Standard: To BS EN 338.
 - Class: C16.
- Size: 47 x 195 mm.

310 Rigid sheet floor base

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Type: Plywood to BS EN 636, structural use, bonding class 2..
- Certification: Forestry Stewardship Council (FSC) chain of custody.
- Thickness: 18 mm.

342 Partition studs

- Source: Contractor's choice.
- Type: Softwood.
- Certification: Forestry Stewardship Council (FSC) chain of custody.
- Size: 47 x 72 mm.

344 Blocking

- Source: Offcuts from structural timbers.
- Type: Softwood.
- Size: As adjacent structural timbers.

346 Noggings

- Source: Contractor's choice.
- Type: Softwood.
- Size: 50 x 50 mm.

348 Timber herringbone struts

- Source: Contractor's choice.
- Type: Softwood.
- Size: 38 x 38 mm (minimum).

356 Framing anchors

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Material: Galvanized steel.
- Type: To suit connection.

374 Fasteners

- Material: Stainless steel or galvanized or sherardized low carbon steel.
- Nails to timber substrate:
 - Standards: To BS 1202-1 or to BS EN 10230-1.
 - Length (into supporting structure): 40 mm, or full depth if less than 40 mm.
 - Shank diameter (minimum): 3 mm.
- Screws:
 - Standard: To BS 1210.
 - Length (into supporting structure):
 - To timber supports: 30 mm, or full depth if less than 30 mm.
 - To supporting masonry (minimum): 40 mm.
 - Shank diameter:
 - Wood screws (minimum): 8 s.g. (4.17 mm).
 - Plugs for masonry fixings using wood screws: Size to match screws.

Execution

610 Fixing timber floor joists

- Standard: In accordance with BS 8103-3.
- Bowed joists: Install with positive camber.
- Herringbone strutting between joists:
 - Spacing:
 - Joist spans of 2.5–4.5 m: One row at centre span.
 - Joist spans over 4.5 m: Two rows equally spaced.
- Joists against masonry walls: Position about 50 mm from masonry. Insert softwood folding wedges between joist and masonry on line of strutting and at 2 m (maximum) centres.

<p>618 Fixing partition studs</p> <ul style="list-style-type: none">• Timber stud partitions:<ul style="list-style-type: none">- Fixing: Use framing anchors or skew nail.	
<p>624 Work to existing generally</p> <ul style="list-style-type: none">• Replacement timber size generally: As material being replaced.• Forming openings in existing sawn softwood floor/ roof:<ul style="list-style-type: none">- Extent: Minimize removal of existing structure.	
G2/112 Timber joist upper floor structure	
G2/126 Timber stud partitions	
G2/128 New opening in timber floor for access stair	
G2/132 New openings in pitched roof for roof windows	
Total for G2 Structural timber and general carpentry To be carried forward to Tender Summary	

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H6 Slate and tile pitched roof coverings and cladding

System Outline

110 Insulation to existing rafters

- Drawing references: NBS_010.
- Roofing type: Natural slates.
- Insulation:
 - Location:
 - Below rafters: Mineral wool boards.
 - Between rafters: Mineral wool boards.

120 Alterations to existing roof coverings

- Drawing references: NBS_010.
- Roofing type: Natural slates.
- Extent: Form 3 no. new openings each 600 x 900 mm (nominal). Remove existing ridge tiles.
- Reason for removal: Alterations.
- Disposal or reuse:
 - Ridge and hip tiles: Set aside for reuse by the Employer (ridge tiles only).
 - Roofing units: Set aside for reuse.
 - Battens and counterbattens: Remove from site for recycling.
 - Underlay: Remove from site.
- Replacement ridge tiles: Ventilating ridge tiles.

Products

316 Ventilating ridge tiles

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Type: Clay.
- Profile: Plain end. Angled.
- Colour: Terracotta.

340 Mineral wool board insulation

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Type: Mineral wool (MW) boards to BS EN 13162, Agrément certified.
- Thickness: 60 mm between rafters (50 mm (minimum) residual gap above). 100 mm below rafters.

350 Fasteners

- Nails for slate or tile fixing:
 - Type: Aluminium, copper or stainless steel.
 - Size: 60 x 2.8 mm (minimum).

Execution

614 Reclaiming natural slates

- General: Clean. Dress to remove defective material and redrill if necessary.
- Defective material: Remove from site.
- Quantity: Make up required unit quantities.

618 Fixing roof insulation

- Insulation fitted between rafters: Fit neatly with no gaps. Use fasteners where necessary to prevent slumping.

Employer: NBS

Project Address: The Old Post Office, St Nicholas Street, Newcastle upon Tyne. NE1

Project name: NBS_loft_conversion



630 Fixing ridge tiles

- Ventilated (dry-fix) ridges: As manufacturer's fixing specification.

H6/110 Insulation to existing rafters

H6/120 Alterations to existing roof coverings

Total for H6 Slate and tile pitched roof coverings and cladding
To be carried forward to Tender Summary

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K1 Wood internal flooring, linings and trim

System Outline

116 Rigid sheet flooring on insulation

- Drawing references: NBS_007.
- Membrane: Not required.
- Insulation: Acoustic insulation for flooring.
- Flooring panels: Plywood.
- Jointing: Glued.

126 Wood and wood based trim

- Drawing references: NBS_007..
- Architraves: Softwood.
- Skirtings: Softwood.
- Fasteners:
 - Architraves: Lost head nails.
 - Skirtings: Lost head nails.

Products

314 Plywood flooring panels

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standard: To an approved National Standard.
- Profile: Tongued and grooved all edges.
- Thickness: 18 mm.

338 Softwood architraves

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standard: To BS 1186-3.
- Species: European redwood.
- Profile: Ogee.
- Size: 59 x 18 mm.

340 Softwood skirtings

- Standard: To BS 1186-3.
- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Species: European redwood.
- Profile: Taurus.
- Size: 129 x 18 mm.

344 Acoustic insulation for flooring

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Type: 5 mm closed cell polyethylene foam.

360 Glue for jointing

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Adhesive: PVA to BS EN 204, class D3.

Execution

610 Moisture content

- Moisture content of wood and wood based products at time of fixing: 9–13%.

615 Priming and sealing concealed surfaces

- Surfaces of linings and trim inaccessible after installation: Prime or seal before fixing components.

620 Setting out board and sheet flooring

- Long edges: Run across joists.
- End joints: Set out centrally over joists and stagger joints of adjacent boards or sheets.
- Expansion provision: Allow 10 mm clear expansion gap around floor perimeter.

630 Fixing plywood flooring

- Fixing to joists: Fix at 150 mm (maximum) centres around floor perimeter and along short edges of each board. Fix at 300 mm (maximum) centres along intermediate supports.

K1/116 Rigid sheet flooring on insulation

K1/126 Wood and wood based trim

Total for K1 Wood internal flooring, linings and trim
To be carried forward to Tender Summary

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L1 Windows, roof windows and patent glazing

System Outline

120 Roof windows

- Drawing references: NBS_007
- Type: Roof windows.

140 Sash window refurbishment

- Drawing references: NBS_008
- Preparation: Remove staff beads, parting beads and sashes. Detach cords from sashes.
- Hanging fittings: Clean and refix pulleys. Renew sash cords.
- Glazing: Clean and refix existing glazing; supplement with matching new glazing to complete the work.
- Beads: Replace parting beads with proprietary weatherstripped PVC parting beads. Size to suit.
- Weatherstripping: Sash weatherstripping to meeting rail and to bottom rail of lower sash. Rout grooves to suit.
- Hardware: Clean and refix existing hardware; supplement with matching new hardware to complete the work.

175 Secondary glazing system addition

- Drawing references: NBS_008.
- Extent: To refurbished sash window in gable of loft (window ref. W24).
- System addition: Secondary glazing.

Products

326 Sash window weatherstripping

- Manufacturer: Contractor's choice.
- Product reference: Contractor's choice.
- Type: PVC parting beads with integral brush strips. Brush strips, push in type, to meeting rail and lower sash bottom rail.
- Gap size: Check on site.

330 Roof windows

- Manufacturer: XYZ roof window company.
- Product reference: XYZ_0609.
- Type:
 - Operation: Manual.
- Size: 600 x 900 mm (nominal).
- Frame and finish: Treated softwood with anodized aluminium outer sheath.
- Glazing: Manufacturer's standard.
- Hardware: Manufacturer's standard.
- Flashings: Manufacturer's standard for natural slate roofing.
- Linings: White laminate.

332 Blinds for roof windows

- Manufacturer: As roof windows.
- Product reference: XYZ_B0609.
- Size: 600 x 900 mm (nominal).
- Pattern and colour: To be agreed.

346 Secondary glazing

- Manufacturer: Contractor's choice.
- Product reference: Contractor's choice.
- Type: Vertically sliding.
- Size: To suit window ref. W24.
- Frames: Powder coated aluminium; colour, white.
- Glazing: 4 mm toughened glass.
- Hardware: Manufacturer's standard.

Execution

610 Priming and sealing concealed surfaces

- Surfaces of wood frames and trim inaccessible after installation: Prime or seal before fixing components.

645 Reglazing putty-fronted single glazing

- Glass: Locate centrally in surround with setting and location blocks. Secure with glazing sprigs, cleats or clips at 300 mm (maximum) centres.
- Finished thickness of back bedding after inserting glazing (minimum): 1.5 mm.
- Front putty: Finish to a smooth, neat triangular profile stopping 2 mm short of sight line. Brush surface lightly to seal putty to glass.
- Sealing putty: Seal as soon as sufficiently hard by applying either the full final finish, or two coats of undercoat applied locally.

System Completion

810 Testing

- Hardware: Check, adjust and lubricate all hinges, operators and openers. Ensure correct operation.

	L1/120 Roof windows	
	L1/140 Sash window refurbishment	
	L1/175 Secondary glazing system addition	
	Total for L1 Windows, roof windows and patent glazing To be carried forward to Tender Summary	

L2 Doors and frames

System Outline

118 Internal doors

- Drawing references: NBS_007
- Doors: Wood internal doors.
- Frames: Wood internal door frames.
- Internal door hardware: Required.

Products

328 Wood internal doors

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Type: Moulded panel.
- Fire resistance: FD20 to BS 476-22.
- Material: Manufacturer's standard.
- Sizes: 1981 x 762 x 35 mm.
- Finish as delivered: Manufacturer's standard.

330 Wood internal door frames

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Frame type: Fire and smoke resisting, matched to door.
- Certification: FSC chain of custody.
- Material: Softwood.
- Sizes:
 - For doors: 1981 x 762 x 35 mm.
- Finish as delivered: Primed.

332 Hardware for internal doors

- Source: Contractor's choice.
- Product range or reference: Contractor's choice.
- Hinges:
 - Material and finish: Brass.
 - Type: Plain butts.
 - Size: 76 x 76 mm.
- Furniture:
 - Material and finish: Polished brass.
 - Latches: Horizontal mortice latch.
 - Fittings: Lever handles, Victorian pattern.
- Fasteners:
 - Type: Wood screws to BS 1210.
 - Finish: To match hardware.

Execution

610 Priming and sealing concealed surfaces

- Surfaces of wood frames inaccessible after installation: Prime or seal before fixing components.

615 Fixing door frames

- Position of fasteners: Not more than 150 mm from ends of each jamb, adjacent to each hanging point and at 600 mm (maximum) centres.
- Fire resisting frames: Fill gap between back of frame and reveal with plaster.

L2/118 Internal doors

Total for L2 Doors and frames
To be carried forward to Tender Summary

L3 Stairs and guarding

System Outline

110 Internal stairs

- Drawing references: NBS_007.
- Stair flights: Purpose made.
- Intermediate landings: As drawings.
- Guarding:
 - Posts: Newel posts.
 - Infill: Balusters.
 - Handrails: Guarding handrails.
- Wall handrails: Wall fixed handrails.

Products

315 Purpose made stair flights

- Manufacturer: Contractor's choice.
- Product reference: Contractor's choice.
- Design: In accordance with BS 5395-1.
- Material certification: FSC chain of custody.
- Configuration: As drawings.
- Risers (quantity): 14.
- Components:
 - Strings:
 - Material: European redwood.
 - Thickness: 38 mm.
 - Treads:
 - Material: European redwood.
 - Thickness: 21 mm.
 - Risers:
 - Type: Closed.
 - Material: Plywood.
 - Thickness: 9 mm.
- General dimensions:
 - Rise (overall): As drawings.
 - Width over strings: 855 mm.
- Finish as delivered: Unfinished.

320 Guarding posts

- Manufacturer: Contractor's choice.
- Product reference: Contractor's choice.
- Standard: In accordance with BS 5395-1.
- Certification: FSC chain of custody.
- Type: Stop chamfered newel posts.
- Material: Hemlock.
- Dimensions (nominal): 90 x 90 mm.
- Terminal: None.
- Finish as delivered: Unfinished.

325 Guarding infill

- Manufacturer: Contractor's choice.
- Product reference: Contractor's choice.
- Standard: In accordance with BS 5395-1.
- Certification: FSC chain of custody.
- Type: Stop chamfered balusters.
- Material: Hemlock.
- Dimensions (nominal): 32 x 32 mm.
- Finish as delivered: Unfinished.

330 Guarding handrails

- Manufacturer: Contractor's choice.
- Product reference: Contractor's choice.
- Standard: In accordance with BS 5395-1.
- Certification: FSC chain of custody.
- Type: Moulded.
- Material: Manufacturer's standard.
- Dimensions (nominal): 67 x 45 mm.
- Finish as delivered: Unfinished.

335 Wall fixed handrails

- Manufacturer: Contractor's choice.
- Product reference: Contractor's choice.
- Standard: In accordance with BS 5395-1.
- Certification: FSC chain of custody.
- Type: Moulded.
- Material: Manufacturer's standard.
- Dimensions (nominal): 45 x 45 mm.
- Finish as delivered: Unfinished.
- Brackets:
 - Source: Handrail manufacturer.
 - Material: Manufacturer's standard.

Execution

610 Installation generally

- Structural members: Do not modify, cut, notch or make holes in structural members, except as indicated on drawings.
- Temporary support: Do not use stairs, walkways or balustrades as temporary support or strutting for other work.

L3/110 Internal stairs

Total for L3 Stairs and guarding
To be carried forward to Tender Summary

M1 Plastering, rendering and screeding

System Outline

110 Plasterboard backings to timber framed walls and partitions

- Drawing references: NBS_004, NBS_005.
- Insulation between studs: Cellulose. To reduced height partitions below purlins only.
- Plasterboard: Standard.
- Fixing: As recommended by plasterboard manufacturer.

112 Plasterboard backings to ceilings below rafters

- Drawing references: NBS_004, NBS_005.
- Plasterboard: Vapour check.
- Fixing: As recommended by plasterboard manufacturer.

118 Gypsum skim plaster to plasterboard backings

- Drawing references: NBS_004, NBS_005.
- Beads and stops: Thin coat plaster beads.
- Gypsum finish plaster: Required.

120 Gypsum plaster coatings to masonry

- Drawing references: NBS_004, NBS_005.
- Beads and stops: Plaster beads.
- Gypsum undercoat plaster: Browning.
- Gypsum finish plaster: Required.

136 Defective plaster coating removal

- Drawing references: NBS_004, NBS_005.
- Type: Damaged.
- Disposal: Remove from site.
- Exposed defective masonry: Repoint. Recess joints for plaster key.

Products

310 Standard plasterboards

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standard: To BS EN 520.
- Thickness: 12.5 mm.
- Edge: Square.

314 Vapour check plasterboards

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standard: To BS EN 520.
- Thickness: 12.5 mm.
- Edge: Square.

324 Gypsum browning undercoat plaster

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standard: To BS EN 13279-1.
- Thickness: 11 mm.

330 Gypsum finish plaster

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standard: Finish plaster to BS EN 13279-1.
- Thickness: Contractor's choice.

332 Plaster beads

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standard: Internal plaster beads to BS EN 13658-1.
- Material: Stainless steel.

334 Thin coat plaster beads

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standard: Internal plaster beads to BS EN 13658-1.
- Material: Stainless steel.

348 Cellulose insulation between joists or studs

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Certification: Agrément certified.
- Thickness: Full depth.

Execution

610 Fixing plasterboard generally

- Joint widths (maximum): 3 mm.
- End joints: Stagger between rows.

614 Fixing plasterboard backings

- Joints and angles: Apply joint reinforcement tape except where coincident with metal beads.
- Fixing centres (maximum):
 - Nails: 150 mm.
 - Screws to partition and wall boards: 300 mm. Reduce to 200 mm at external angles.
 - Screws to ceiling boards: 230 mm.
- Position of nails and screws from edges of boards (minimum):
 - Bound edges: 10 mm.
 - Cut or unbound edges: 13 mm.
- Position of nails and screws from edges of supports (minimum): 6 mm.
- Nail and screw heads: Set below surface. Do not break paper or gypsum core.

618 Fixing plaster beads and stops

- Location: At all external angles and stop ends.
- Fixing: Fix securely and true to line and level.

620 Applying plaster undercoats

- General: Apply coatings firmly and achieve good adhesion.
- Appearance of finished surfaces: Even and consistent. Free from rippling, hollows, ridges, cracks and crazing. Finish to a true plane, with walls and reveals plumb and square.
- Drying out: Prevent excessively rapid or localized drying out.
- Keying undercoats: Cross scratch plaster coatings. Do not penetrate undercoat.

624 Applying plaster finish

- Thickness: 2–3 mm.
- Appearance of finished surface: Tight, matt, smooth surface with no hollows, abrupt changes of level or trowel marks.

644 Removing damaged plaster

- Extent: Remove, except where damage limited to surface defects. Cut back to a square, sound edge.
- Mortar joints: Rake out.

648 Exposed defective or damaged masonry <ul style="list-style-type: none">• Isolated defective units or areas: Cut out and replace.• Extensive defects: Notify.	
M1/110 Plasterboard backings to timber framed walls and partitions	
M1/112 Plasterboard backings to ceilings below rafters	
M1/118 Gypsum skim plaster to plasterboard backings	
M1/120 Gypsum plaster coatings to masonry	
M1/136 Defective plaster coating removal	
Total for M1 Plastering, rendering and screeding To be carried forward to Tender Summary	

DRAFT

M6 Painting, staining and varnishing

System Outline

110 Coating systems to plastered walls

- Drawing references: NBS_004, NBS_005.
- Preparation: As coating manufacturer's recommendations.
- Priming and sealing: As coating manufacturer's recommendations.
- Coating systems: Emulsion paint.

115 Coating systems to plastered ceilings

- Drawing references: NBS_004, NBS_005.
- Preparation: As coating manufacturer's recommendations.
- Priming and sealing: As coating manufacturer's recommendations.
- Coating systems: Emulsion paint.

130 Coating systems to wood trim and staircase components

- Drawing references: NBS_004, NBS_005.
- Preparation: As coating manufacturer's recommendations.
- Priming and sealing: As coating manufacturer's recommendations.
- Coating systems: Gloss paint.

135 Coating systems to internal door frame

- Drawing references: NBS_004, NBS_005.
- Preparation: As coating manufacturer's recommendations.
- Priming and sealing: As coating manufacturer's recommendations.
- Coating systems to frames and architraves: Gloss paint.

140 Coating systems to windows internally

- Drawing references: NBS_004, NBS_005.
- Preparation: As coating manufacturer's recommendations.
- Priming and sealing: As coating manufacturer's recommendations.
- Coating systems to internal surfaces of windows and frames: Gloss paint.

150 Coating systems to windows externally

- Drawing references: NBS_004, NBS_005.
- Preparation: As coating manufacturer's recommendations.
- Priming and sealing: As coating manufacturer's recommendations.
- Coating systems to external surfaces of windows and frames: Exterior gloss paint.

Products

315 Emulsion paint

- Manufacturer: Contractor's choice.
- Product range or reference: 'Trade' range for application to new plaster..
- Coats: As coating manufacturer's recommendations.
- Colour: White.

320 Exterior gloss paint

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Undercoats:
 - Coats: Two.
 - Colour: White.
- Topcoats:
 - Coats: As coating manufacturer's recommendations.
 - Colour: White.

340 Gloss paint

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Undercoats:
 - Coats: Two.
 - Colour: White.
- Topcoats:
 - Coats: As coating manufacturer's recommendations.
 - Colour: White.
- Type: Water based.

355 Preparation materials

- Biocides: Listed in Health and Safety Executive (HSE) 'Pesticides', Part B, as surface biocides.
- Primers:
 - Primers for resinous wood: Aluminium primers to BS 4756.
 - Primers for wood: To BS 7956.

Execution

610 Minimum drying times for substrates before application of coatings

- Walls:
 - Brick or block: 6 weeks.
 - Gypsum plaster: 4 weeks.
 - Render: 2 weeks.
- Floors:
 - Concrete slabs: 6 weeks.
 - Cementitious screeds: 3 weeks.

615 Preparation for coatings

- Preparation: In accordance with BS 6150.
- Substrates: Sufficiently dry in depth to suit coating.
- Efflorescence salts, dirt, grease, oil, corrosion, loose and flaking material: Remove.
- Surface irregularities (including plaster nibs, trowel marks and splashes): Abrade to a smooth finish. Lightly round arrises.
- Joints, cracks, holes and other depressions: Fill with stoppers or fillers. Abrade to a smooth finish. Remove residues.
- Existing fixtures, fittings and ironmongery: Remove before commencing work. Refurbish as necessary, refit when decoration is dry.
- Doors, opening windows and other moving parts: Ease if necessary before coating. Prime resulting bare areas.
- Wood resinous areas and knots: Apply two coats of knotting.

620 Applying coatings

- Priming coats:
 - Application: Apply as soon as possible on same day as preparation is completed.
 - Concealed joinery surfaces: After initial priming, apply additional coats to surfaces that will be concealed when component is fixed in place.
 - To putty glazing: Seal putty with oil based primer within 21 days of application. Extend finishing coats onto glass up to sight line.
 - Bead glazing to coated timber: Apply first two coats to rebates and beads before glazing.
- Topcoats: Even, smooth and of uniform colour. Free from brush marks, sags, runs and other defects. Cut in neatly.

M6/110 Coating systems to plastered walls	
M6/115 Coating systems to plastered ceilings	

Employer: NBS

Project Address: The Old Post Office, St Nicholas Street, Newcastle upon Tyne. NE1

Project name: NBS_loft_conversion



M6/130 Coating systems to wood trim and staircase components	
M6/135 Coating systems to internal door frame	
M6/140 Coating systems to windows internally	
M6/150 Coating systems to windows externally	
Total for M6 Painting, staining and varnishing To be carried forward to Tender Summary	

DRAFT

T9 Heating systems

System Outline

130 Extend central heating system into loft space

- Drawing references: NBS_004, NBS_005.
- Completion of design for hot water heating system: Required.
- Heat emitters: Hot water radiators.
- Controls:
 - Thermostatic radiator valves: Required.
- Pipelines: Copper.
- Pipeline insulation: Required.

Products

330 Hot water radiators

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standards: To BS EN 442-1, -2 and -3.
- Sizes: Contractor's choice.

336 Thermostatic radiator valves

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standard: To BS EN 215 and capable of providing isolation.
- Finish: Manufacturer's standard.
- Lockshield valves: To BS 2767 with matching finish fitted to return side of radiator.

340 Copper heating system pipelines

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standard: To BS EN 1057, Kitemark certified.
- Finish: Plain.
- Sizes: Contractor's choice.
- Joints: Contractor's choice.
- Connections to appliances and equipment: Compression fittings to BS EN 1254-2, Kitemark certified.

344 Insulation for heating system pipelines

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Type: Preformed flexible closed cell or mineral fibre split tube.
- Thickness: To BS 5422 tables 19 and 20 and in accordance with 'TIMSA guidance for achieving compliance with Part L of the Building Regulations', table 6.1.1.
- Fire performance: Class 0 spread of flame then tested to BS 476-7.

Execution

612 Completing the design for heating systems

- Design: Complete the design and detailing of the heating system.
- Calculations: Submit heat loss calculations for each room using the HEVACOMP suite of programmes based on room temperatures and ventilation rates taken from BS EN 12831.
- Proposals: Submit drawings (showing equipment positions and pipeline routes), technical information, calculations and manufacturer's literature.

614 Installing hot water heating systems generally

- Performance: Free from leaks and the audible effects of expansion, vibration and water hammer.
- Fixing of equipment, components and accessories: Fix securely, parallel or perpendicular to the structure of the building.
- Corrosion resistance: In locations where moisture is present or may occur, use corrosion resistant fittings/ fixings and avoid contact between dissimilar metals by use of suitable washers, gaskets, etc.

System Completion

812 Testing and commissioning hot water heating systems

- Standard: To BS EN 14336.
- Notice (minimum): 3 days.
- Preparation: Secure and clean pipework and equipment. Fit cistern/ tank covers if necessary.
- Leak testing: Start boiler and run the system until parts are at normal operating temperatures and then allow to cool to cold condition for a period of 3 h.
- Pressure testing:
 - Methods:
 - Systems fed directly from the mains and systems downstream of a booster pump: Apply a test pressure equal to 1.5 times the maximum pressure to which the installation or relevant part is designed to be subjected in operation.
 - Required outcome: At both hot and cold conditions joints, fittings and components must be free from leaks and signs of physical distress when tested for at least 1 h.
- Setting to work and commissioning:
 - Equipment: Check and adjust operation of equipment, controls and safety devices.
 - Outlets: Check operation of outlets for satisfactory rate of flow and temperature.

814 Documentation

- Manufacturers' operating and maintenance instructions: Submit for equipment and controls.
- Record drawings: Submit drawings showing the location of circuits and operating controls.

T9/130 Extend central heating system into loft space

Total for T9 Heating systems
To be carried forward to Tender Summary

V9 Electrical systems

System Outline

115 Electrical distribution

- Drawing references: NBS_013
- Circuits:
 - Power circuits:
 - Zones: New zone for loft area.
 - Cables: Electrical cables.
 - Lighting circuits:
 - Zones: New zone for loft area.
 - Cables: Electrical cables.
- Conduits: PVC conduits and fittings.
- Accessories: Electrical accessories.
- Luminaires:
 - Internal luminaires:
 - Ceiling mounted: Downlighters.

135 Fire detection and alarm installations

- Drawing references: NBS_013.
- Detectors: Smoke detectors.
- Sounders: Integral.
- Cables: Fire detection and alarm low voltage cables.
- Conduits: PVC conduits and fittings.

Products

312 PVC conduits and fittings

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standard: To BS 4607-5 or to BS EN 50086-1 and -2-1 or to BS EN 61386-1 and BS EN 61386-21.
- Size: Contractor's choice.

316 Electrical cables

- Source: Contractor's choice.
- Standard: To BS 7671.
- Approval: British Approvals Service for Cables (BASEC) certified.
- Sizes: Submit proposals and calculations.

318 Electrical accessories

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standards:
 - Accessories: To BS 5733.
 - Switches: To BS 5733 and to BS EN 60669-1.
- Finish: White plastic.
- Mounting: Recessed.

328 Internal ceiling mounted downlighters

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standards: To BS EN 60598-1 and BS EN 55015.
- Approval: Kitemark certified.
- Lamp: Low energy compact fluorescent.

358 Smoke detectors

- Manufacturer: Contractor's choice.
- Product range or reference: Contractor's choice.
- Standard: To BS EN 14604.
- Approvals: Kitemark certified.
- Local alarm: Audible indication integral within detectors.

360 Fire detection and alarm low voltage cables

- Source: Contractor's choice.
- Conductor size and number of cores: Contractor's choice.
- Sheath: Low smoke zero halogen type(LSZH) to BS 7211.

Execution

610 Completing the design for electrical distribution

- Standards: To BS 7671 and the requirements of the electricity distributor.
- Design: Complete the design and detailing of the electrical installation.
- Proposals: Submit drawings, technical information, calculations and manufacturers' literature.

618 Completing the design for fire detection and alarm systems

- Standard: In accordance with BS 5839-6.
- Purpose: Protection of life.
- Grade: D.
- Category: LD2.
- Individual smoke alarms: Design to maintain individual smoke alarm operation during an interconnection wiring fault.

622 Electrical installation generally

- Standard: To BS 7671.
- Installation: Provide a safe, well insulated, earth protected system capable of serving the building.
- Equipment: Provide electrical supplies to equipment requiring power.
- Fixed equipment: Install supplies.

624 Installing electrical cable

- Routes: Position vertically or horizontally in line with equipment served, and parallel with building lines. Allow 150 mm (minimum) clearance from other services running parallel. Place cables below heating pipes where running parallel.
- Installation: Install neatly and securely. Conceal wherever possible.

626 Installing electrical conduits and fittings

- Routes: Position vertically or horizontally in line with equipment served, and parallel with building lines. Locate where accessible.
- Fixing: Fix securely. Fix boxes independently of conduit.
- Jointing: Minimize number of joints. Remove burrs. Plug during building works.
- Changes of direction: Use machine-formed bends, junction boxes and proprietary components. Do not use elbows or tees. Alternatively, use conduit boxes.
- Connections to boxes, trunking, equipment and accessories: Screwed couplings, adaptors, connectors and glands, with rubber bushes at open ends. Provide earthing coupling/ male brass bush and protective conductor at conduit connections to boxes and items of equipment, other than those with threaded entries.

628 Installing electrical accessories and equipment

- Location: Coordinate with other wall or ceiling mounted equipment.
- Positioning: Place accurately and square to vertical and horizontal axes.

632 Installing fire detection and alarm systems

- Installing fire detection and alarm system: In accordance with BS 5839-6.
- Power supply: Dedicated circuit from the building's main switchboard or consumer unit.

System Completion

810 Completion and testing of electrical distribution systems

- Standard: To BS 7671.
- Notice before commencing tests (minimum): 24 hours.
- Labels and signs: Fix securely before system is tested.

814 Completion and testing of fire detection and alarm systems

- Standard: In accordance with BS 5839-6.

V9/115 Electrical distribution

V9/135 Fire detection and alarm installations

Total for V9 Electrical systems
To be carried forward to Tender Summary

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Employer: NBS

Project Address: The Old Post Office, St Nicholas Street, Newcastle upon Tyne. NE1

Project name: NBS_loft_conversion



Tender Summary	£
A9 General technical requirements	
G1 Packaged frames and structural steelwork	
G2 Structural timber and general carpentry	
H6 Slate and tile pitched roof coverings and cladding	
K1 Wood internal flooring, linings and trim	
L1 Windows, roof windows and patent glazing	
L2 Doors and frames	
L3 Stairs and guarding	
M1 Plastering, rendering and screeding	
M6 Painting, staining and varnishing	
T9 Heating systems	
V9 Electrical systems	
Total £	
Signed _____	
For and on behalf of _____	
Date _____	

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