

Full works specification

Project: Net-Zero Transition – Establishment of Men’s and Women’s Shed Facility (10 ft × 22 ft)

Location: Holy Trinity Church, Church Road, Hartshill, Nuneaton, CV10 0LY

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1. Project overview

The church will host the Nuneaton Men’s and Women’s Shed by installing a 10 ft × 22 ft insulated timber workshop within the grounds. Works include a durable, low-impact base, shed procurement and assembly, full insulation and lining, electrical and water connections, tooling and storage fit-out, commissioning, and documentation. Interventions must be heritage-sensitive, reversible where feasible, and aligned with net-zero principles through energy-efficient fixtures, durable materials, and responsible waste practices.

2. Scope of works

- **Siting and permissions:**
 - **Location selection:** Discreet position to minimise visual impact; clear of roots and services.
 - **Consultation:** PCC, conservation/heritage officer; confirm any planning/listed considerations.
- **Base and access:**
 - **Base:** Reinforced concrete slab or modular paving system on compacted Type 1 sub-base (permeable edge detail).
 - **Access path:** Stable, low-trip surface suitable for barrow/wheelchair access.
- **Shed procurement and installation:**
 - **Structure:** 10 ft × 22 ft timber shed, framed walls, weatherproof cladding, secure doors/windows.
 - **Security:** Heavy-duty locks, hasp/staple, closed-shackle padlock.
- **Insulation and lining:**

- **Thermal envelope:** Mineral wool or PIR hybrid to walls/roof/floor; vapour control; OSB/ply lining.
 - **Air-tightness:** Sealing at openings; draught-proof door/window strips.
 - **Electrical works (BS 7671):**
 - **Supply:** Submain from church board (buried SWA cable), consumer unit with RCBOs.
 - **Circuits:** LED lighting, ring/twin sockets, external weatherproof outlet.
 - **Controls:** Smart schedules; efficient heater strategy.
 - **Water services (WRAS):**
 - **Cold feed:** Buried MDPE line with stop valve; frost protection; backflow prevention.
 - **Internal:** Sink, tap, trap, waste to soakaway or existing drain (subject to survey).
 - **Tools, benches, and storage:**
 - **Benching:** Heavy-duty workbenches, tool boards, shelving.
 - **Tools:** Core hand tools and selected low-risk power tools with PPE.
 - **Commissioning and documentation:**
 - **Testing:** Electrical certificates (EIC), pressure/leak tests; PAT for portable equipment.
 - **O&M:** Asset register, maintenance schedule, safety signage; user induction.
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3. Technical specification

- **Base:**
 - **Sub-base:** Type 1, 150–200 mm compacted; geotextile underlay; level tolerances ± 5 mm.
 - **Slab option:** C30/37 low-carbon concrete, 100–125 mm thickness; A142 mesh; expansion joints; perimeter land drain if required.
 - **Modular option:** 50–60 mm concrete flags on mortar bed with geogrid support; suited to reversible installations.
- **Shed:**

- **Frame:** Treated timber studs; sheathing; breather membrane; overlap cladding; pitched roof with felt or recycled polymer shingles.
- **Doors/windows:** Lockable door with anti-jemmy hinges; polycarbonate or double-glazed windows.
- **Insulation and lining:**
 - **Walls/roof:** 75–100 mm mineral wool (Euroclass A1) or 50–75 mm PIR; VCL; 11–18 mm OSB/ply lining.
 - **Floor:** 50 mm PIR between joists; damp-proof membrane; rubber floor tiles at benches.
 - **Fire safety:** Non-combustible or low-smoke materials; extinguishers (CO2, water mist).
- **Electrical:**
 - **Submain:** 25–40 m SWA cable (size per calc); gland kits; TT/TN-S/TN-C-S earthing per site; local consumer unit with RCBOs.
 - **Lighting:** 3–4 LED battens (IP-rated as needed), 4000 K; switching with presence sensor.
 - **Sockets:** 8–12 twin 13 A sockets; dedicated spur for low-power heaters; external weatherproof socket.
 - **Protection:** RCD/RCBOs; surge protection; labelling; test sheets.
- **Water:**
 - **Supply:** 25 m of 25 mm MDPE, stopcock, check valve; insulated entry; lagging; drain-down provision.
 - **Waste:** 32–40 mm waste to soakaway or existing gully (survey dependent); traps and air admittance valve if required.
- **Tools and furniture:**
 - **Benches:** 2–3 heavy-duty workbenches (≥250 kg rating).
 - **Storage:** 2–3 shelving bays; pegboard/tool rails; lockable cabinet for sharp tools.
 - **Tools:** Spanners, screwdrivers, saws, drills, sanders; clamps; measuring/layout tools; PPE (gloves, glasses, ear protection).
- **Controls and energy:**

- **Heaters:** Portable convection or oil-filled radiators (1–2 units, 1.5–2.0 kW) under smart control; consider infrared panel for task heating.
 - **Smart sockets:** Scene profiles for “Event”, “Shutdown”.
 - **Ventilation:** Trickle vents; low-energy fan if needed.
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4. Programme

- **Phase1 - Survey, design, and approvals:** site routing, base design, utilities load calc, heritage consultation.
 - **Phase 2 - Procurement:** shed, base materials, insulation, electrics, plumbing, benches/tools.
 - **Phase 3 - Installation:** base, shed, insulation/lining, electrics, plumbing.
 - **Phase 4 - Commissioning and handover:** testing, documentation, induction.
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5. Risk management

- **Groundworks:** Utility scan, exclusion zones, dust suppression.
 - **Lifting/assembly:** Team lifts for panels; compliant access equipment.
 - **Electrical safety:** Isolation, lock-out, BS 7671 certification, RCBOs.
 - **Water hygiene:** WRAS fittings, frost protection, backflow control.
 - **Fire safety:** Class-rated insulation/lining; heaters with tip-over cut-out; extinguishers.
 - **Heritage care:** Discreet siting, reversible base options, colour-matched finishes, oversight.
 - **Public safety:** Barriers/signage; works outside service times; housekeeping.
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6. Deliverables

- **Installed insulated shed** on durable base with secure access path.
- **Commissioned utilities** (electric and water) with certificates.
- **Fitted benches, storage, and tooling** with PPE and signage.
- **O&M documentation, asset register, induction** and energy-use guidance.

7. Cost Calculation

PROJECT MANAGEMENT: Inspection visit by Lead Supervisor, Photography/documentation	£	161
POST PROJECT ADMINISTRATION: Inspection visit by Lead Supervisor, Photography/documentation, Report drafting/submission to Grant Provider, Sign-off by PCC/DAC/Architect, Project close-out documentation, Archiving	£	262
SHED BASE/FOUNDATIONS AND MOBILITY ACCESS: Sub-base (Type 1 aggregate, 150–200 mm depth), Shuttering and supports, Concrete slab (C30/37, 100–125 mm) + mesh, Access path (2–4 m × 1 m): Slabs/gravel grid, edge restraint, Groundworks labour	£	2,226
SHED SUPPLY AND ASSEMBLY: Purchase of Shed; Framed, cladding, roof finish, doors/windows, Security hardware (locks, padlock, hasp/staple), Assembly labour, Anchors and fixings	£	2,041
INSULATION AND INTERNAL LINING: Wall/roof insulation ((PIR 75-100 mm, DPM), Floor insulation (PIR 50 mm, DPM), Internal lining (OSB/ply 11–18 mm), Air-tightness kit (seals, tapes, mastic), Insulation/lining labour	£	1,739
ELECTRICAL INSTALLATION: SWA submain (25–40 m cable, glands, clips), Consumer unit with RCBs + SPD, Lighting (3–4 LED battens + controls), Sockets (8–12 twin 13 A), External weatherproof socket, Earthing/rod, bonding, labelling, Electrical labour, Certification (EIC, test sheets)	£	1,104
WATER SERVICES: Cold feed (25 m MDPE 25 mm, stopcock, fittings), Lagging/frost protection, Sink, tap, waste (trap, pipe, fittings), Soakaway/gully connection, Plumbing labour	£	508
TOOLS, BENCHES, AND STORAGE: Workbenches, Shelving bays, Pegboard/tool rails, Lockable cabinet, Hand tools (sets of spanners, screwdrivers, saws, clamps), Power tools (drills, sanders, jigsaw, etc.), PPE (gloves, glasses, ear protection)	£	928
WHEELCHAIR ACCESS RAMP: Formwork & setting out, Concrete slab (C30/37, 100–125 mm), Reinforcement (A142 mesh), Control joints & sealant, Kerbs (stone/granite), Labour	£	2,116
SURVEY AND REPORTING: Structural Engineer, Travel/site time, Report drafting & photography,	£	338
OTHER DEVELOPMENT COSTS: Project planning and documentation, Community and stakeholder engagement, Consultation with Heritage Officer and DAC, Fundraising and compliance support, Project Administration, Planning Permission	£	1,320
Subtotal	£	12,743
Contingency: 10% of subtotal	£	1,274
VAT: 20% of subtotal	£	2,549
TOTAL	£	16,566