

Building Regulations Notes – Garage Conversion at 34 Halewood Oaks, L26 0TY		7. Fire Safety – Approved Document B (Fire Safety)																					
General		Entire garage converted to habitable use (no retained garage). New door openings into dwelling to be FD20 fire doors. Provide interlinked mains-powered smoke alarms with battery back-up to circulation spaces (BS 5839-6 Grade D1 LD3).																					
All works to comply with current Building Regulations (England, 2010 as amended), relevant Approved Documents, British Standards and manufacturer's recommendations.		8. Ventilation – Approved Document F (Ventilation)																					
Existing services (gas, electric, water, drainage) to be protected/relocated as necessary.		Habitable space: Background ventilation via trickle vents, and																					
Structural works to be carried out in accordance with engineer's design where required.		openable area ≥1/20th floor area.																					
1. Foundations – Approved Document A (Structure)		Utility room: Provide mechanical extract fan @ 30 l/s to external air.																					
New cavity wall to garage door infill to be built off a concrete strip foundation min. 600mm wide x 225mm deep (bearing onto suitable loadbearing strata min. 900mm below finished ground level, subject to Building Control approval).		9. Drainage – Approved Document H (Drainage & Waste Disposal)																					
Existing garage slab to be checked for integrity; any soft spots excavated and filled with concrete.		New utility wastes to connect to existing foul system via trapped connection with rodding access. New connections to existing drains to approval of building control officer																					
2. External Walls – Approved Document A & L (Structure & Conservation of Fuel and Power)		10. Thermal Bridging & Condensation – Approved Documents L (Energy) & C (Moisture)																					
Existing garage external walls: 350mm cavity wall (100mm brick outer, 150mm insulated cavity, 100mm block inner).		Insulate all window/door reveals with ≥25mm insulated plasterboard.																					
New front infill wall construction: 100mm facing brick outer leaf, 100mm full-fill PIR cavity insulation (Celotex CW4000, λ = 0.022), 100mm 7.3N blockwork inner leaf, 12.5mm plasterboard + skim. Stainless steel ties @ 750mm horiz. / 450mm vert. centres.		Seal all penetrations and junctions to limit thermal bridging and air leakage.																					
U-value achieved ≈ 0.18 W/m²·K (complies with Part L 2021).		11. Access – Approved Document M (Access to and use of buildings)																					
3. Floor Construction – Approved Document C (Site prep & moisture), L (Energy)		Level threshold maintained by raising garage floor to match house FFL.																					
Existing garage floor 150mm below house FFL. To achieve level access: 1200g polythene DPM lapped with existing DPC. 75mm PIR insulation (Celotex GA4000). 65mm sand/cement screed with fibres, level with house FFL.		12. Electrical Installations – Approved Document P (Electrical Safety)																					
U-value ≈ 0.22 W/m²·K (Part L compliant).		All works to be carried out by a Part P registered electrician. Electrical Installation Certificate to be provided to Building Control on completion.																					
4. Roof / Ceiling – Approved Document L (Energy)		13. Water Efficiency – Approved Document G (Sanitation, hot water, water efficiency)																					
If existing roof uninsulated: provide 100mm PIR between joists + 37.5mm insulated plasterboard under.		Any new sanitary fittings to comply with max. 125 litres/person/day water use requirement.																					
5. Windows & Openings – Approved Document L (Energy), N (Glazing Safety), F (Ventilation) U-value ≈ 0.16 W/m²·K (Part L compliant). New window to front: 2372mm × 1349mm (3.2m²).		◆ U-Values (calculated)																					
Spec: Double glazed, Low-E, argon-filled, warm-edge spacer, Uw ≤ 1.4 W/m²·K (Part L compliant).		<table><tr><th>Element</th><th>Construction (proposed)</th><th>U-value (W/m²·K)</th><th>Regulation Limit (Part L 2021)</th></tr><tr><td>Wall (new infill)</td><td>100mm brick / 100mm PIR / 100mm block + plasterboard</td><td>0.18</td><td>0.30</td></tr><tr><td>Floor</td><td>75mm PIR + screed over existing slab</td><td>0.22</td><td>0.25</td></tr><tr><td>Roof/Ceiling</td><td>100mm PIR + 37.5mm insulated plasterboard</td><td>0.16</td><td>0.18</td></tr><tr><td>Window</td><td>DG Low-E argon filled (Uw)</td><td>1.4</td><td>1.6</td></tr></table>		Element	Construction (proposed)	U-value (W/m²·K)	Regulation Limit (Part L 2021)	Wall (new infill)	100mm brick / 100mm PIR / 100mm block + plasterboard	0.18	0.30	Floor	75mm PIR + screed over existing slab	0.22	0.25	Roof/Ceiling	100mm PIR + 37.5mm insulated plasterboard	0.16	0.18	Window	DG Low-E argon filled (Uw)	1.4	1.6
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Safety glazing to BS EN 12150/BS 6206 where below 800mm of FFL (Part K).																							
Trickle vents: ≥5000mm² EA per habitable room (Part F).																							
6. Internal Stud Wall – Approved Document E (Sound)																							
100mm timber studs @ 400mm c/c, 100mm acoustic mineral wool insulation, 12.5mm plasterboard each side + skim. WITH 12.5mm Marine Ply to inner face of utility side																							
Achieves Rw ~40dB (Part E compliant).																							