



EW10   Exterior Cavity Wall - Fully Filled With Insulation	
1. Outer Wall Leaf	Facing Brickwork – Refer to BK20 For Full Specification
1.1. Above DPC	Engineering Brickwork – Refer to BK10 For Full Specification
1.2. Below DPC	
2. Cavity Insulation	150mm Mineral Wool Insulation
2.1. Thickness	150mm
2.2. Material	Mineral Wool Insulation
2.3. Product	Knauf Dritherm Cavity Slab or equivalent
2.4. Performance	Alternatives must achieve a λ Value of 0.032 W/mK or lower
2.5. Installation	Ensure insulation is tightly fitted and joints are butted, vertical and horizontal joints between panels should be staggered.
2.6. Accreditations	CE marked and BBA certified for compliance
2.7. Standards	BS EN 13162:2012   Thermal insulation in buildings
3. Cavity Wall Ties	See RE10 For Full Specification of Ties And Masonry Restraints
3.1. Reference	
4. Inner Wall Leaf	Aircrete Blocks
4.1. Material	H+H Celcon
4.2. Product	Standard Grade - 3.6N blocks
4.3. Important	In areas of High Structural Loading, the density of blockwork may need to be increased. Consult the Engineer's Report to determine locations where blockwork should be upgraded to 7N blocks or higher for increased load-bearing capacity.
4.3. Dimensions	Block Length (L) - 440 mm   Block Height (H) - 215 mm   Block Width (W) - 100 mm
4.4. Performance	Alternatives must achieve a λ Value of 0.15 W/mK or better thermal value.
4.5. Note	Use a 1:6 mortar mix for inner leaf blockwork to provide adequate strength while maintaining good workability.
5. Internal Finish	Standard 12.5mm Plasterboard
5.1. Material	Boards to be applied to walls using plasterboard adhesive.
5.2. Installation	Apply a 3mm skim coat finishing the the board.
5.3. Finish	Ensure boards are tightly butted, with all joints taped and sealed before plastering.
6. Part L Compliance	
6.1. Required U-value	0.180 W/m²K - Min for Extension Walls Approved Part L 2022 Updates
9.2. Our Value	0.179 W/m²K - ✓ U-value Achieved ✓ - Exceeds Part L requirement



BK10   Brickwork – Below DPC Level	
1.1. Material	Use Engineering Bricks below the DPC Level.
1.2. Finish Type 1	Use Blue Smooth Faced Bricks for the splash course to ensure aesthetic consistency.
1.3. Finish Type 2	Bricks below the splash course should match the Red colouring of the host building.
1.4. Dimensions	Brick Length (L) - 215 mm   Brick Height (H) - 65 mm   Brick Width (W) - 102.5 mm
1.5. Grade	Minimum Class B engineering brick for use in below-ground conditions.
1.6. Resistance	Maximum water absorption rate ≤ 7% by weight to minimise moisture ingress.
1.7. Strength	Brick 75 N/mm² compressive strength   Approx. 50 to 60 N/mm² when bonded with mortar.
1.8. Critical Note	Ensure a minimum composite compressive strength of 50 N/mm² for the combine brick-mortar assembly.
1.9. Rationale	Engineering bricks are used below DPC for their low moisture absorption, minimising freeze-thaw spalling. Their high strength and water resistance ensure suitable durability below the DPC line or in ground-contact conditions.
1.10. Consideration	If the site falls within a known radon gas area, integrate a radon protection barrier membrane into the DPC to meet BS 8485:2015 standards for ground gas protection.
1.11. Standards	Comply with BS 8102:2009 for waterproofing below ground. Comply with BS EN ISO 10211 for thermal bridging. Comply with BS 8485:2015 for radon and gas protection.

BK30   Brickwork – Above DPC Level	
1.1. Material	Facing Bricks
1.2. Finish	A mix of red and dark reddish-brown tones; ensuring that the selected bricks match the existing host building in Colour, Finish & Texture to ensure visual consistency.
1.3. Dimensions	Advised: Imperial Guage Bricks; to match original host buildings brick gauging height. Brick Dimensions:   Length (L) 215 mm   Width (W) 102.5 mm   Height (H) 73 mm
1.4. Note	Add a Decorative Soldier Course Brickwork above openings where indicated on the Elevations Drawings.
1.5. Note	Where possible, Tooth In new brickwork to existing rather than using straight butt joints to ensure visual continuity. Areas requiring this treatment are marked BK30_05 on the drawings.
1.6. Consideration	Maintain the Existing Brickwork Bond where possible. The Front Façade features Flemish Bond, so its preservation is preferred to retain character. Client To Confirm.
1.5. Standards	Comply with BS EN 1996-1-1:2005 masonry structures.
1.6. Client Note	Existing Brickwork presumed to be Imperial Guage: Client To Confirm Brick Sizes



PE01 | Proposed West Elevation  
Printed Scale Factor | 1mm : 50mm Scale Valid When Printed At : ISO 216 A

#### Global Height Benchmark

Datum GCP | Ground Floor Finished Floor Level

All height measurements on this drawing are taken from the existing ground floor finished floor level, which serves as the universal site datum benchmark unless otherwise specified. Heights are set globally based on the primary ground control point established during the survey. If exact coordinates of this ground control point are required, please contact Noble Architecture.



#### <SceneDescription>

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