

# outline specification

**M10029: Haydon Drive**, Pinner, Hillingdon, HA5 2PW

Proposed Construction Build-ups

Residential (Traditional construction)

Height of top floor from ground

Block A1 = 56.55-56.775m (up to 18m) 60min FR

Block A2 = 55.590-57.165m (up to 18m) 60min FR

Block B = 53.775-54.150m (up to 18m) 60min FR

Block C = 54.400-54.700m (up to 18m) 60min FR

Block D = 56.55-56.775m (up to 18m) 60min FR

26.09.2025

Document Reference

M10029\_HUN\_OS\_REPORT0001

Revision

P01 – Preliminary issue for comments

T01 – Issued for Tender

T02 – 11.11.2025 - Window G-value updated

Black = As issued previously

Red = New or Revised item

Green = Performance to be validated

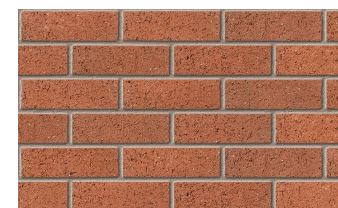
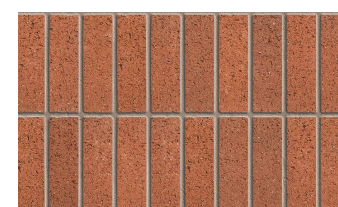
Blue = Specification to be confirmed

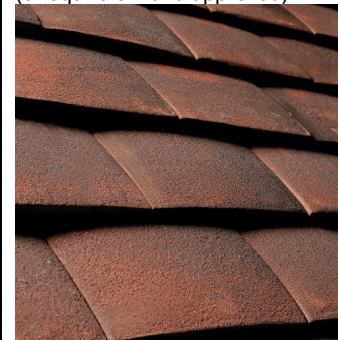
Target U-Values for building fabric elements

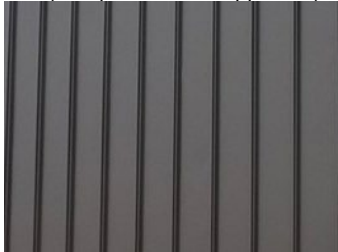
Target values set in the Energy Assessment by eight versa, submitted for planning.


Element	U-Value W/m2K
Flat roof	0.10
Pitched roof	0.10
External walls	0.16
Ground floor slabs	0.10
Windows	1.2
	g-value 0.5
Rooflights	1.2
	g-value 0.5
Doors	1.0

Air permeability (m3/hn2@50Pa): 3

1.0 External wall types	Construction	Performance Requirement				Facing Material
		Thermal Target U- value <sup>a</sup>	Fire <sup>b</sup>	Acoustic <sup>e</sup>	Other	
WT1.1	<u>External – Brickwork</u> <b>Wall thickness = Nom 427.5mm</b> <ul style="list-style-type: none"> <li>- 102.5mm Facing brickwork (subject to approval from LPA)</li> <li>- Mortar colour: TBC – Bucket handle joint.</li> <li>- 200mm Rockwool full fill cavity batt (or similar approved)</li> <li>- Wall ties to SE's specification.</li> <li>- 100mm medium density concrete blockwork (1400-1450 kg/m3) to SE's details.</li> <li>- Blowproof Liquid applied airtight membrane (or similar approved)</li> <li>- 12.5mm plasterboard on dabs skim and jointed</li> </ul>	0.16W/m²K	<p>All materials which become part of an external wall or specified attachment achieve class A2-s1, d0 or class A1, other than those exempted by regulation 7(3).</p> <p>FR to external façade &amp; structure = 60mins</p> <p>Membranes to achieve class B-s3, d0.</p> <p>External surfaces to be Class 0</p>	N/A		<p>Ibstock Bristol Red (or equivalent approved) Mortar colour: dove holes white</p> <div data-bbox="1590 510 1926 718">  <p>Stretcher Bond</p> </div> <div data-bbox="1590 766 1926 973">  <p>Stack Bond</p> </div>
	<u>External – Brickwork – 15mm Recessed</u> <b>Wall thickness = Nom 412.5mm</b> <ul style="list-style-type: none"> <li>- 102.5mm Facing brickwork (subject to approval from LPA)</li> <li>- Mortar colour: TBC – Bucket handle joint.</li> <li>- 185mm Rockwool full fill cavity batt (or similar approved)</li> <li>- Wall ties to SE's specification.</li> </ul>					
WT1.1-2	<u>External – Brickwork – 15mm Recessed</u> <b>Wall thickness = Nom 412.5mm</b> <ul style="list-style-type: none"> <li>- 102.5mm Facing brickwork (subject to approval from LPA)</li> <li>- Mortar colour: TBC – Bucket handle joint.</li> <li>- 185mm Rockwool full fill cavity batt (or similar approved)</li> <li>- Wall ties to SE's specification.</li> </ul>	0.17W/m²K	<p>All materials which become part of an external wall or specified attachment achieve class A2-s1, d0 or class A1, other than those exempted by regulation 7(3).</p> <p>FR to external façade &amp; structure</p>	N/A	15mm recess to facing brick	

	<ul style="list-style-type: none"> <li>- 100mm medium density concrete blockwork (1400-1450 kg/m<sup>3</sup>) to SE's details.</li> <li>- Blowproof Liquid applied airtight membrane (or similar approved)</li> <li>- 12.5mm plasterboard on dabs skim and jointed</li> </ul>		<p>= 60mins</p> <p>Membranes to achieve class B-s3, d0.</p> <p>External surfaces to be Class 0</p>			
	<p><u>Thermal breaks</u></p> <p><b>Thickness = Nom 100mm</b></p> <ul style="list-style-type: none"> <li>- 100x140mm Foamglass Perinsul HL thermal break</li> <li>- (or similar approved 102.5mm Facing brickwork (subject to approval from LPA)</li> </ul>	$\lambda D \leq 0.068$ W/(m·K)	<p>Core material Euroclass A1</p>		<p>Compressive strength CS <math>\geq 2.75</math> MPa</p>	
<b>WT1.2</b>	<p><u>External – Tile Hanging</u></p> <p><b>Wall thickness = Nom 500mm</b></p> <ul style="list-style-type: none"> <li>- Plain clay tiles hanging (subject to approval from LPA)</li> <li>- Treated timber battens.</li> <li>- Breathing membrane.</li> <li>- 100mm medium density concrete blockwork (1400-1450 kg/m<sup>3</sup>) to SE's details.</li> <li>- 200mm Rockwool full fill cavity batt (or similar approved)</li> <li>- Wall ties to SE's specification.</li> <li>- 100mm medium density concrete blockwork (1400-1450 kg/m<sup>3</sup>) to SE's details.</li> </ul>	<p>0.16W/m<sup>2</sup>K</p>	<p>All materials which become part of an external wall or specified attachment achieve class A2-s1, d0 or class A1, other than those exempted by regulation 7(3).</p> <p>FR to external façade &amp; structure = 60mins</p> <p>Membranes to achieve class B-s3, d0.</p>	N/A		<p>Wienerberger Alban Plain Tile 75 Sussex Blend (or equivalent and approved)</p> 

	<ul style="list-style-type: none"> <li>- Blowproof Liquid applied airtight membrane (or similar approved)</li> <li>- 12.5mm plasterboard on dabs skim and jointed</li> </ul>		External surfaces to be Class 0			
<b>WT1.3</b>	<p><u>External – Zink Cladding Masonry</u> <b>Wall thickness = Nom 475mm</b></p> <ul style="list-style-type: none"> <li>- Zink folded seam cladding – VMZink or similar approved</li> <li>- Separation membrane</li> <li>- 12mm Plywood substrate</li> <li>- 25mm ventilated layer with battens</li> <li>- Breathing membrane</li> <li>- 100mm medium density concrete blockwork (1400-1450 kg/m3) to SE's details.</li> <li>- 200mm Rockwool full fill cavity batt (or similar approved)</li> <li>- Wall ties to SE's specification.</li> <li>- 100mm medium density concrete blockwork (1400-1450 kg/m3) to SE's details.</li> <li>- Blowproof Liquid applied airtight membrane (or similar approved)</li> <li>- 12.5mm plasterboard on dabs skim and jointed</li> </ul>	0.16W/m²K				<p>VMZinc Folded Seam Cladding Colour: Pimento Storm grey</p> <p>(or equivalent and approved)</p> 
<b>WT1.4</b>	<p><u>External – Dormer wall Zink Cladding</u> <b>Wall thickness = Nom 375mm</b></p> <ul style="list-style-type: none"> <li>- Zink folded seam cladding – VMZink or similar approved</li> <li>- Separation membrane</li> </ul>	0.16W/m²K				<p>VMZinc Folded Seam Cladding Colour: Pimento Storm grey</p> <p>(or equivalent and approved)</p>


	<ul style="list-style-type: none"> <li>- 12mm Plywood substrate / 12mm cement board</li> <li>- 50mm ventilated layer with battens</li> <li>- Breathing membrane</li> <li>- 12mm Plywood sheeting board</li> <li>- 50mm Rockwool Flexi insulation between 50x50mm battens</li> <li>- 240mm timber studs 210mm Rockwool Flexi insulation between (or similar approved)</li> <li>- Polyethylene VCL</li> <li>- 12.5mm plasterboard on dabs skim and jointed</li> </ul>					
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2.0 Internal wall types	Construction	Performance Requirement			
		Thermal <sup>a</sup>	Fire <sup>b</sup>	Acoustic <sup>e</sup>	Other
WT2.1	<p><u>Separating wall - Compartment wall</u></p> <p><b>Wall thickness = Nom 350mm</b></p> <ul style="list-style-type: none"> <li>- 12.5mm plasterboard on dabs skim and jointed</li> <li>- Parge Coat</li> <li>- 100mm medium density concrete blockwork (1400-1450 kg/m3) to SE's details.</li> <li>- 100mm Rockwool Full fill cavity batt (or similar approved)</li> <li>- Type A wall ties (as per AD Part E).</li> <li>- 100mm medium density concrete blockwork (1400-1450 kg/m3) to SE's details.</li> <li>- Parge Coat</li> <li>- 12.5mm plasterboard on dabs skim and jointed</li> </ul>	0.0 W/m²K	<p>EI 60 min.</p> <p>For fire ratings refer to Fire Strategy Plans</p>	<p><math>D_{nTw} + C_{tr}</math></p> <p>54dB</p>	

WT2.2	<p><u>Separating wall - Compartment wall</u></p> <p><b>Wall thickness = Nom 450mm</b></p> <ul style="list-style-type: none"> <li>- 12.5mm plasterboard on dabs skim and jointed</li> <li>- Parge Coat</li> <li>- 100mm medium density concrete blockwork (1400-1450 kg/m<sup>3</sup>) to SE's details.</li> <li>- 200mm Rockwool Full fill cavity batt (or similar approved)</li> <li>- Type A wall ties (as per AD Part E).</li> <li>- 100mm medium density concrete blockwork (1400-1450 kg/m<sup>3</sup>) to SE's details.</li> <li>- Parge Coat</li> <li>- 12.5mm plasterboard on dabs skim and jointed</li> </ul>	0.0 W/m <sup>2</sup> K	EI 60 min. For fire ratings refer to Fire Strategy Plans	D <sub>n</sub> Tw+C <sub>tr</sub> 54dB	
WT2.4	<p><u>Internal – Internal metal stud partition</u></p> <p><b>Wall thickness = 100mm</b></p> <ul style="list-style-type: none"> <li>- 12.5mm Gyprock Wallboard plasterboard skim and jointed (or similar approved)</li> <li>- 70mm Gypframe 70 S 50 'C' studs at 600mm centres</li> <li>- 12mm WBP plywood pattressing as requires.</li> <li>- 50mm Isover Acoustic Partition Roll in cavity</li> <li>- 12.5mm Gyprock Wallboard plasterboard skim and jointed (or similar approved)</li> </ul>	N/A	EI30 For fire ratings refer to Fire Strategy Plans	Airborne Sound insulation (min.) 40dB	
WT2.5	<p><u>Internal – SVP duct</u></p> <p><b>Wall thickness = 117mm</b></p> <ul style="list-style-type: none"> <li>- 2 x15mm Soundbloc (MR board to kitchen / bathroom) with 2-5mm plaster skim coat.</li> <li>- 12mm WBP plywood.</li> <li>- 50mm metal framing (48mm Metal C Studs) with mineral wool in stud zone.</li> <li>- 25mm thick pipe insulation.</li> </ul>	N/A	N/A	TBC	



3.0 Floor Types	Construction	Performance Requirement			
		Thermal <sup>a</sup>	Fire <sup>b</sup>	Acoustic <sup>e</sup>	Other
FT3.1	<p><u>Ground Floor</u></p> <p><b>Floor thickness = 326mm</b></p> <ul style="list-style-type: none"> <li>- 75mm fibre reinforced sand and cement screed. TBC by MEP</li> <li>- Underfloor heating pipes</li> <li>- 500-gauge polythene separation layer.</li> <li>- 150mm rigid thermoset phenolic insulation– Kingspan K103.</li> <li>- DPM</li> <li>- 225mm Beam and block floor.</li> <li>- Min 250mm ventilated sub floor.</li> </ul> <p>P/A ratio – 0.43</p>	0.11W/m²K	N/A	N/A	
FT3.2	<p><u>First floor</u></p> <p><b>Floor thickness = 300mm</b></p> <ul style="list-style-type: none"> <li>- Nom 100mm fibre reinforced sand and cement screed. Min 75mm at highest point of camber.</li> <li>- 500-gauge polythene separation layer.</li> <li>- 25mm Acoustic ROCKFLOOR insulation.</li> <li>- 200mm precast concrete plank.</li> <li>- Min. 150mm service void. TBC</li> <li>- 12.5mm plasterboard Wallboard ceiling with 2-5mm plaster skim coat, on MF system. MR board to wet areas.</li> </ul>	N/A	60 minutes	<p>Airborne sound insulation: 53 dB (8dB improvement over Building Regulations) minimum value</p> <p>Impact sound insulation: 62 dB (maximum value)</p>	

4.0 Roof Type	Construction	Performance Requirement				
		Thermal <sup>a</sup>	Fire <sup>b</sup>	Acoustic <sup>c</sup>	Other	Facing Material
RT4.1	<p>Pitched roof</p> <p><b>Roof thickness = 365.5</b></p> <p>Roof make-up to achieve BroofT4</p> <ul style="list-style-type: none"> <li>- Clay roofing tiles.</li> <li>- Nominal 50x38mm treated SW timber battens.</li> <li>- 30mm well ventilated layer</li> <li>- Breather membrane</li> <li>- 60mm Rockwool Hardrock Multi-Fix (DD)</li> <li>- 200mm Rockwool Flexi insulation between rafters (To SE design)</li> <li>- Polyethylene / polythene CVL.</li> <li>- 12.5mm plasterboard Wallboard ceiling with 2-5mm plaster skim coat.</li> </ul>	<p>Target: 0.10W/m²K</p> <p>Achieve: 0.15W/m²K</p>	B- ROOF(t4)	N/A	.	<p>Wienerberger Alban Plain Tile 75 Sussex Blend (or equivalent and approved)</p> 
RT4.2	<p><u>Flat Roof - Sedum</u></p> <p>Roof make-up to achieve BroofT4</p> <ul style="list-style-type: none"> <li>- Bauder SB and WB blankets ready planted. Refer to Landscape Architects specification for species</li> <li>- 100mm Bauder Extensive Plant Substrate</li> <li>- lightweight growing medium</li> <li>- Filtration fleece</li> <li>- 40mm BauderGREEN SDF L drainage filtration and protection layer (or similar approved)</li> <li>- Bauder reinforced Bitumen Membrane waterproofing system</li> <li>- 2x185mm BauderROCK Flatboard Insulation (or similar approved) mechanically fixed</li> <li>- Concrete Topping to Falls I</li> <li>- Precast planks to SE design</li> </ul>	0.10W/m²K	B- ROOF(t4)	N/A		

<b>RT4.3</b>	<p><u>Roof Terrace</u></p> <p>Roof make-up to achieve BroofT4</p> <ul style="list-style-type: none"> <li>- Luxura decking</li> <li>- Adjustable pedestals</li> <li>- Bauder reinforced Bitumen Membrane waterproofing system</li> <li>- 2x150mm BauderROCK Flatboard Insulation (or similar approved) mechanically fixed</li> <li>- Concrete Topping to Falls I</li> <li>- Precast planks to SE design</li> </ul>	<p>Target: 0.10W/m²K</p> <p>Achieve: 0.12W/m²K</p>	<p>B- ROOF(t4)</p> <p>Decking to be A1 Non- combustible</p>	N/A		<p>Luxura Decking Natural Hickory</p> 
<b>RT4.4</b>	<p><u>Flat Roof - Dormer</u></p> <p><b>Roof thickness = 350mm</b></p> <ul style="list-style-type: none"> <li>- Bitumen Membrane waterproofing system</li> <li>- 115mm+105mm Rockwool Hardrock Multi-Fix insulation (or similar approved) mechanically fixed</li> <li>- VCL</li> <li>- 12mm plywood</li> <li>- 100mm SW structure to SE design</li> <li>- 12.5mm plasterboard Wallboard ceiling with 2-5mm plaster skim coat.</li> </ul>	<p>Target: 0.10W/m²K</p> <p>Achieve: 0.16W/m²K</p>				

5.0 Windows & Doors	Construction	Performance Requirement				
		Thermal <sup>a</sup>	Fire <sup>b</sup>	Acoustic <sup>e</sup>	Other	
5.1	<u>Windows &amp; Balcony Doors</u> <ul style="list-style-type: none"> <li>Aluminium timber composite</li> </ul>	1.2W/m <sup>2</sup> K <sup>e</sup> G value = 0.5	Subject to relevant boundary & unprotected area calculation.	N/A	To comply with PAS 24 2022 where scheduled.	Velfac In Timber-aluminium composite Tilt and Turn Windows (with fixed side or bottom panels where applicable). Matt powder coated external finish in RAL 8019 Grey Brown Lacquer Internal Finish  Velfac In Timber-aluminium composite Side hung, inward opening patio doors. Matt powder coated external finish in RAL 8019 Grey Brown Lacquer Internal Finish
5.1-2	<u>Sliding Balcony Doors</u> <ul style="list-style-type: none"> <li>Aluminium timber composite</li> </ul>	1.2W/m <sup>2</sup> K <sup>e</sup> G value = 0.5			To comply with PAS 24 2022 where scheduled	Velfac In Timber-aluminium composite Side sliding patio doors. Matt powder coated external finish in RAL 8019 Grey Brown Lacquer Internal Finish
5.1-3	<u>Block B and C Ground Floor Windows</u> <ul style="list-style-type: none"> <li>Aluminium timber composite</li> </ul>	1.2W/m <sup>2</sup> K <sup>e</sup> G value = 0.5			To comply with PAS 24 2022 where scheduled	Velfac In Timber-aluminium composite Top hung Matt powder coated external finish in RAL 8019 Grey Brown Lacquer Internal Finish

5.2	<u>Aluminium Access Doors &amp; Glazing</u> <ul style="list-style-type: none"> <li>Aluminium timber composite</li> </ul>	$1.2\text{W/m}^2\text{K}^e$ G value = TBC	Subject to relevant boundary & unprotected area calculation.	N/A	Doors to comply with LPS 1175 SR2 and/or PAS 24 as scheduled.	Velfac Ribo wood / alu doors Combined with Velfac 200 top light with glazing / spandrel panel.  Matt powder coated external finish in RAL 8019 Grey Brown Lacquer Internal Finish  Plain door with long rectangle glazing panel. Glazing to be obscure. Provide through door letter box opening.  Block B and C – spandrel panel above door Insulated aluminium composite panel Matt powder coated finish RAL 8019
5.3	<u>Steel Ancillary Doors</u> <ul style="list-style-type: none"> <li>TBC</li> </ul>	N/A	N/A	N/A	To comply with PAS 24 2022.  Free area ventilation tbc.	
5.4	<u>Rooflights</u> <ul style="list-style-type: none"> <li>Aluminium timber composite Velux</li> </ul>	$1.2\text{W/m}^2\text{K}^e$ G value = TBC	N/A	N/A		

**NOTE:**

<sup>1</sup> Plasterboard to be taped and jointed with drywall finish (MR board to wet areas)

<sup>2</sup> Install 12mm WBP ply to all bathroom and kitchen walls receiving fixtures and fittings, also to walls where TV mounting required.

<sup>3</sup> Subject to Building Control/Warranty approval.

<sup>a</sup> Refer to Energy strategy

<sup>b</sup> Refer to Fire Strategy.


<sup>e</sup> Refer to Acoustic report.

\* Concrete dimensions as Structural Engineer specification.

- Allow for \*\*mm Deflection heads.

- Pa Ratio of \*\* used for all buildings.

- Ensure VCL is sealed against EPDM, Structure, and penetrations to maintain Airtightness.

6.0	Construction	Performance Requirement				
		Thermal <sup>a</sup>	Fire <sup>b</sup>	Acoustic <sup>c</sup>	Other	
6.1	<u>Rainwater goods</u>  PPC aluminium square profile RW gutters and downpipes.				Non-climbable brackets for downpipes	Colour: RAL 8019
6.2	<u>Entrance canopies</u> <ul style="list-style-type: none"> <li>- Zink folded seam cladding for top surface fascia and soffit – VMZinc or similar approved</li> <li>- Cantilevered structure to SE design</li> </ul>					VMZinc Folded Seam Cladding Colour: Pigmento Storm grey  (or equivalent and approved) 
6.3	<u>Parapet copings</u> <ul style="list-style-type: none"> <li>- Poder coated profiled aluminium coping. Alumasc or similar approved</li> </ul>					Colour: RAL 8019

6.4	<u>Roof terrace railings</u> <ul style="list-style-type: none"> <li>- Steel flat bar railings galvanised, and powder coated.</li> <li>- Railing height to be 1100mm from terrace FFL</li> </ul>					Colour: RAL 8019
6.5	<u>Front garden fence</u> <ul style="list-style-type: none"> <li>- 215mm brick wall in Flemish bond. Brick to match facing brick on buildings</li> <li>- Contrasting header brick course</li> <li>- Steel flat bar railings galvanised, and powder coated. Vertical bars to be angled at 45 degrees</li> </ul>					Railing Colour: RAL 8019