

48 Murray Road

Approval (Discharge) of Condition 3

Prior to above ground works, details of all materials and external surfaces, including details of balconies have been submitted to and approved in writing by the Local Planning Authority. Thereafter the development shall be constructed in accordance with the approved details and be retained as such.

Details should include information relating to make, product / type, colour and photographs/images.

REASON

To ensure that the development presents a satisfactory appearance in accordance with Policy DMHB 11 of the Hillingdon Local Plan Part 2 (2020).

Quality Assurance – Approval Status

Issue	Date	Prepared by	Checked by	Approved by
Issue 2	24 March 2021	Igors Smirnovs	Hillingdon Planning Authority	Hillingdon Planning Authority

Prepared by:

ECBC Group Ltd

129 Upton Road,

Bexleheath,

London,

DA6 8LS

Website:

www.ecbcgroup.com

Client name:

Design & Build Limited

Site address:

48 Murrey Road

London, Harrow,

HA6 2YL

Project #

D233

Planning application #

9357/APP/2020/2502

Date of Application:

10.08.2019

Date of Decision:

20.10.2020

Project			Demolition of the existing bungalow & Erection of 4 x 2-storey detached dwellings			Status				
Client:			Design & Build Limited							
Address			48a Murray Road, Northwood, Middlesex, England, HA6 2YL							
Date		24 March 2021		Job. No		Section		Sheet no.	Rev	
By		IS		D233				2 of 9	1	
Checked		AS								
Rev		Date		Details: Application number: 9357/APP/2020/2502 Demolition of the existing bungalow and the erection of 4 x 2-storey detached dwellings with habitable roof space with parking, amenity, cycle provision, refuse and external landscaping and associated works					Phone	+44(0) 7949250275
									Email	info@ecbcgroup.com
									Website	www.ecbcgroup.com
Part										
Condition 3, Details of materials and external surfaces, including details of balconies										

Details to Condition 3

Please find below details of all materials and external surfaces, including details of balconies.

Note:

Hard and soft landscape materials can be found within the Landscape Report by Henshall Green.

External wall

Facing Brick: **Chiltern London Brick**

Supplier: <https://www.forterra.co.uk/bricks/brick-detail/chiltern-london-brick>

Specification:

Manufactured to BS EN 771-1

Width: **215 mm**

Height: **65 mm**

Depth: **102.5 mm**

Compressive Strength: **25 N/mm²**

λ Layer: **0.51**

Configuration: **Frogged 15-20% voids**

Dimensional Tolerance Mean: **T2**

Dimensional Tolerance Range: **R1**

Dry Weight: **1.95 kg**

Durability Rating: **F1**

Soluble Salts: **S2**

Water Absorption: **23 %**

Manufacture Type: **Pressed**

Textures: **Light Texture**

Factory: **Whittlesey**



Benefits

The original London brick

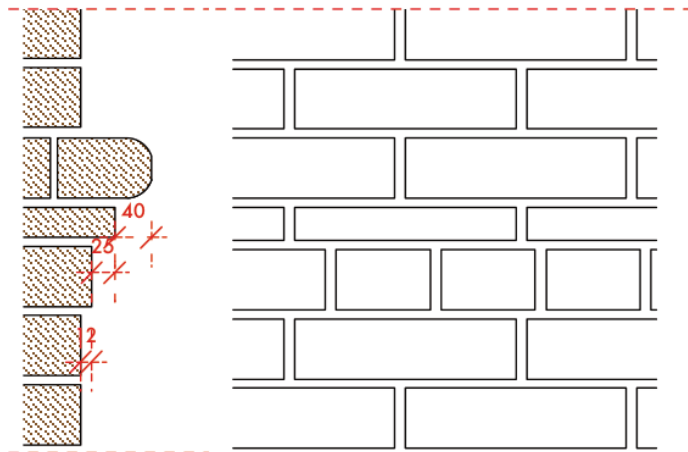
High quality facing brick

Can be recycled at the end of their use

Contribute to thermal mass

BES 6001 Responsible Sourcing certification

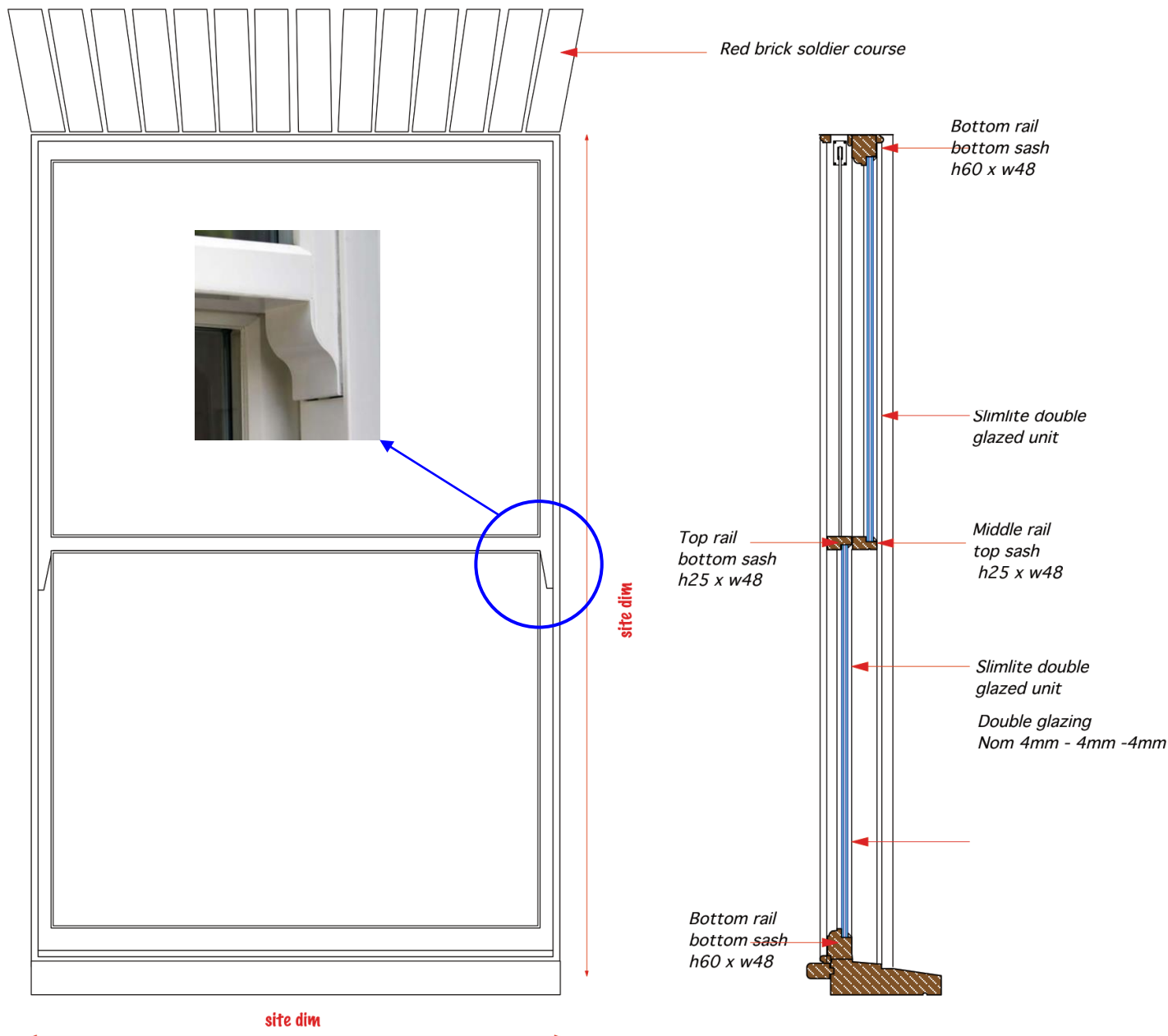
Red brick banding details (see elevation drawings A10-12 A18-20 A26-28 A34-36)



Picture 1, Red brick banding details and visual example (read with drawing A-42)

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Windows



Picture 2, Sash windows with horn details

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Date 24 March 2021	Job. No D233	Section	Sheet no. 3 of 9	Rev 1	
By IS					
Checked AS					
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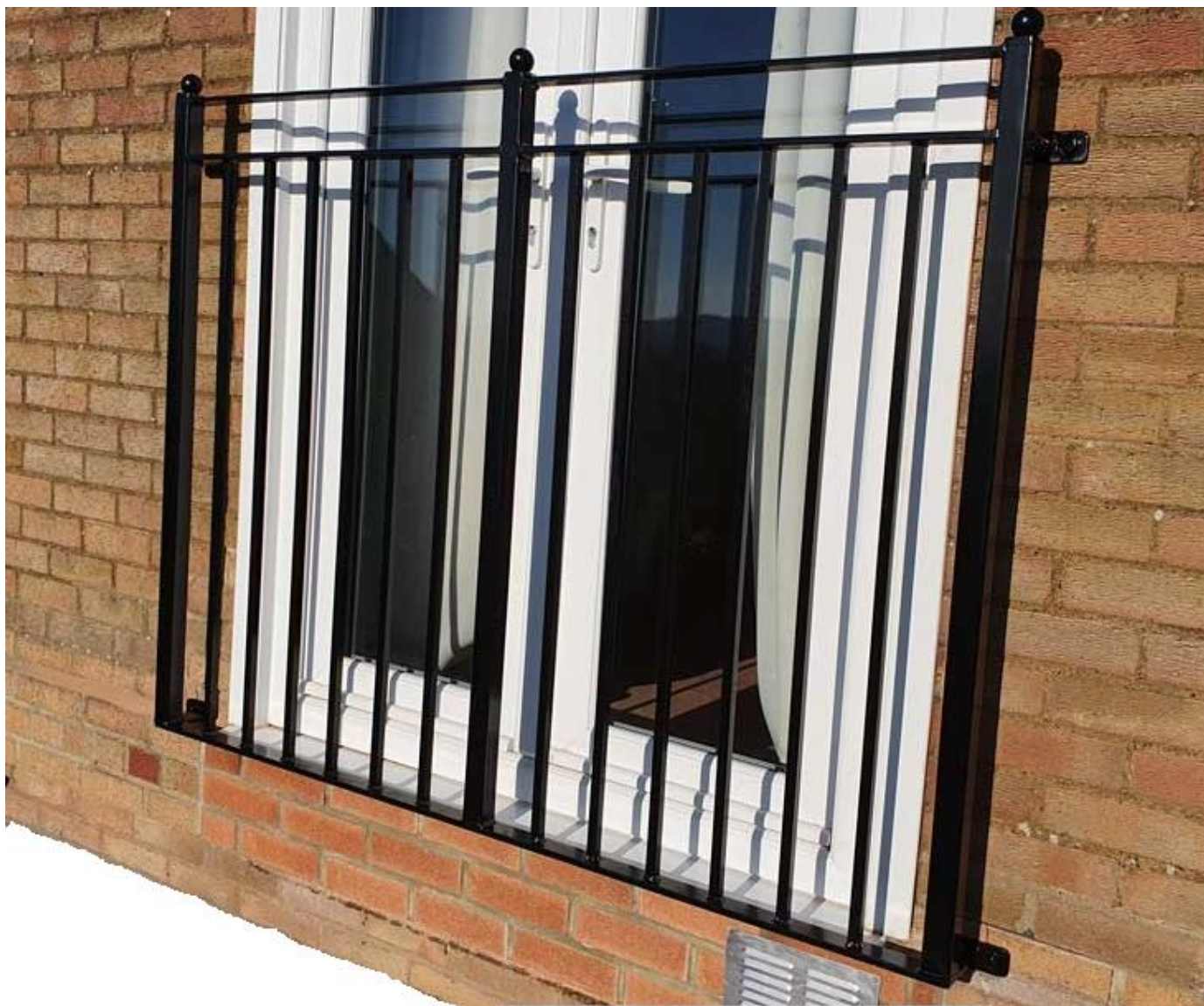


Picture 3, Windows visual example. Red brick soldier course above the sash windows and sills

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Balconies

For connection details refer to drawing A-43



Picture 4, Juliet balcony, visual example. Metal railing painted black (design may vary)
Please also refer to drawing A43 in attachment with more details

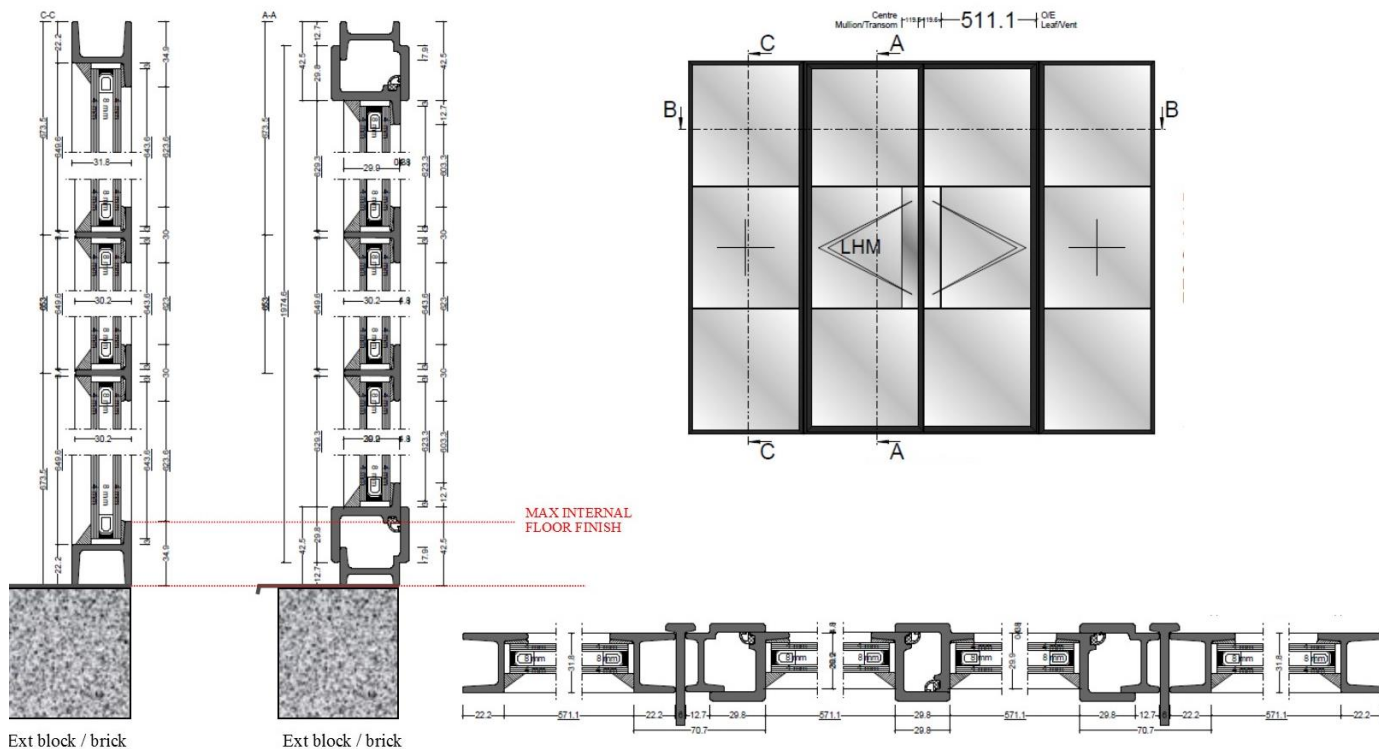
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Metal framed Crittall style external doors



Picture 5, Crittall style external doors, visual example.

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Picture 6, Crittall style external doors, sections. Sections may vary depends on supplier

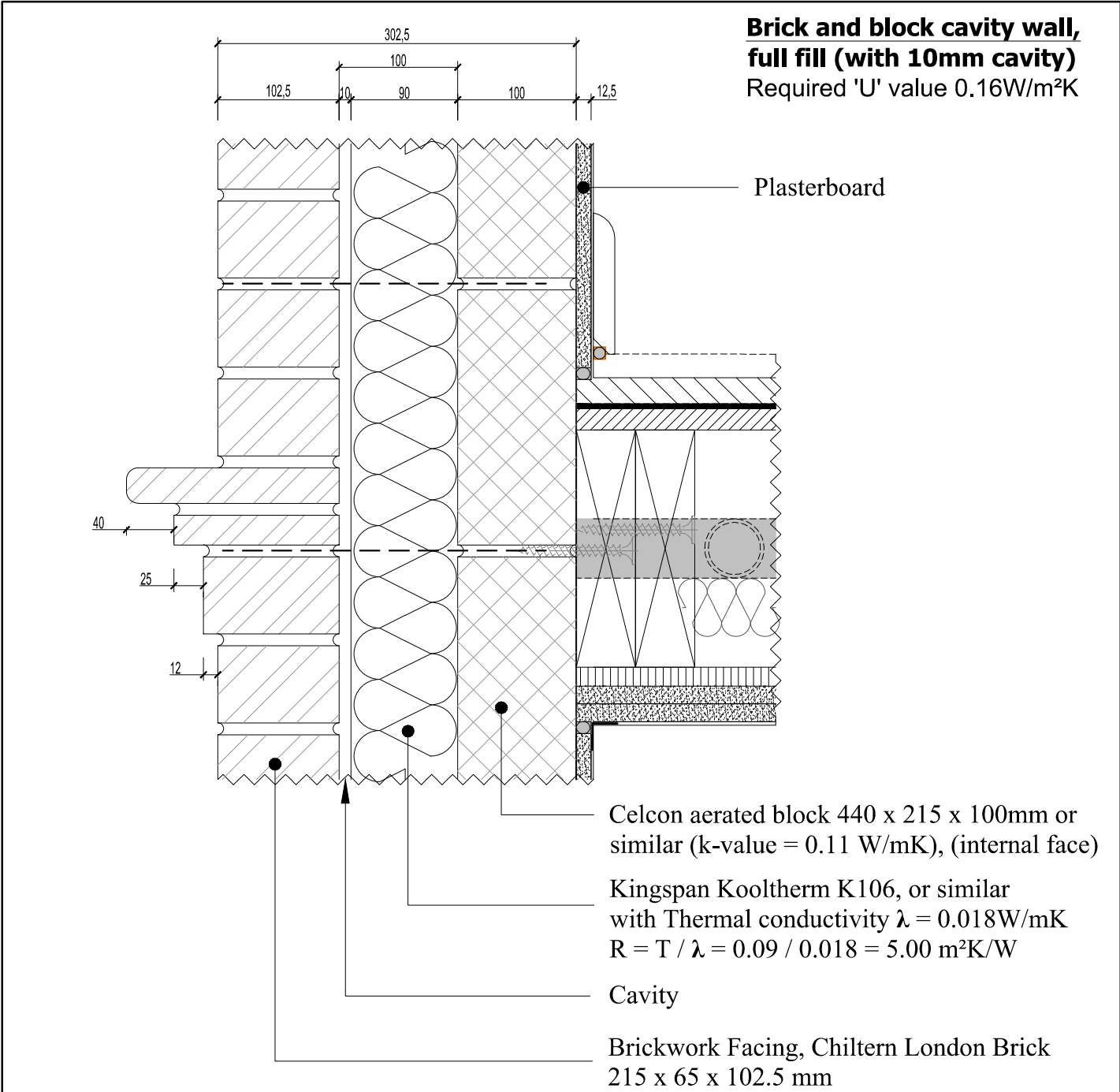
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Picture 7, Grey slate tile roof and Timber Skylights

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Attachments to support condition



Element Description	Element Thickness (mm)	Thermal Conductivity (W/mK)	Thermal Resistance (m²K/W)	Vapour Resistivity (MNs/gm)	Vapour Resistance (MNs/g)	Mean T (K)	Delta T (K)
Outside surface resistance	-	-	0.040	-	-	78.25	0.09
BRICKWORK FACING	102.5	0.770	0.133	42.00	4.31	78.45	0.30
UNV. A/SPACE; KOOLTHERM K106	10.0	-	0.150	-	0.05	78.77	0.34
AERATED BLOCK (k-value = 0.11 W/mK) 6.6% Mortar (100.0mm)	90.0	0.018	5.000	-	100.00	84.58	11.28
PLASTER DABS CAVITY. 20.0% Plaster dabs (15.0mm)	15.0	-	0.180	-	0.05	92.47	0.41
PLASTERBOARD	12.5	0.190	0.066	50.00	0.63	92.75	0.15
PLASTER SKIM	3.0	0.180	0.017	60.00	0.18	92.84	0.04
Inside surface resistance	-	-	0.130	-	-	93.00	0.29

Rev	Date	Description
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Client	Design & Build Limited
Project	Four x 2-storey detached dwellings
Address	48 MURRAY ROAD, HARROW, HA6 2YL
Drwg. title	Detail 4 External walls (EW1) and Banding details

U-Value Calculator Results

Calculated 'U' value = 0.16W/m²K (Calculated in accordance with BS EN ISO 6946:2007)

Detailed U-value Calculation Results

Construction includes 3 bridged layers.

Non-bridged layers	m²K/W
Outside surface resistance	0.040
BRICKWORK FACING	0.133
UNV. A/SPACE;	0.150
KOOLTHERM K106	5.000
PLASTERBOARD	0.066
PLASTER SKIM	0.017
Inside surface resistance	0.130
Resistance of non-bridged layers, R _{NB} =	5.535

Not all insulation thickness shown may currently be stocked, so please check with Kingspan Insulation Customer Service Department on 01544 388601.

Fraction of face area of materials

Brickwork facing, FL1 = 93.3%

Mortar, FB1 = 6.7%

Aerated block (k-value = 0.11 W/mK), FL2 = 80.0%

Mortar, FB2 = 20.0%

Fraction of face area of heat flow paths

FP1 = FL1 x FL2 = 0.747; FP2 = FL1 x FB2 = 0.187

FP3 = FB1 x FL2 = 0.053; FP4 = FB1 x FB2 = 0.013

Upper resistance limit

R_{upper} = 1/((FP1/RP1) + (FP2/RP2) + (FP3/RP3) + (FP4/RP4))

R_{upper} = 1 / ((0.747/6.625) + (0.053/5.829) + (0.187/6.479) + (0.013/5.684)) = 6.536m²K/W

Lower resistance limit

R_{lower} = RNB + 1 / ((FL1/RL1) + (FB1/RB1)) + 1 / ((FL2/RL2) + (FB2/RB2)) + 1 / ((FL3/RL3) + (FB3/RB3))

R_{lower} = 5.535 + 1 / ((0.9333/0.9091) + (0.0667/0.1136)) + 1 / ((0.8000/0.1804) + (0.2000/0.0349)) + 1 / ((0.0000/0.0000) + (1.0000/0.0000)) = 6.254 m²K/W

Total resistance of wall, 0.16W/m²K

RT = (R_{upper} + R_{lower}) / 2 = (6.536 + 6.254) / 2 = 6.395 m²K/W

(Correction for mechanical fasteners, Delta Uf = 0.0027W/m²K | Correction for air gaps, Delta Ug = 0.0000W/m²K)

(Alpha 0.8 m⁻¹ | Fasteners per square metre 2.5000)

(Fasteners cross-sectional area 12.500 mm² | Thermal conductivity of fastener 17.00 W/mK)

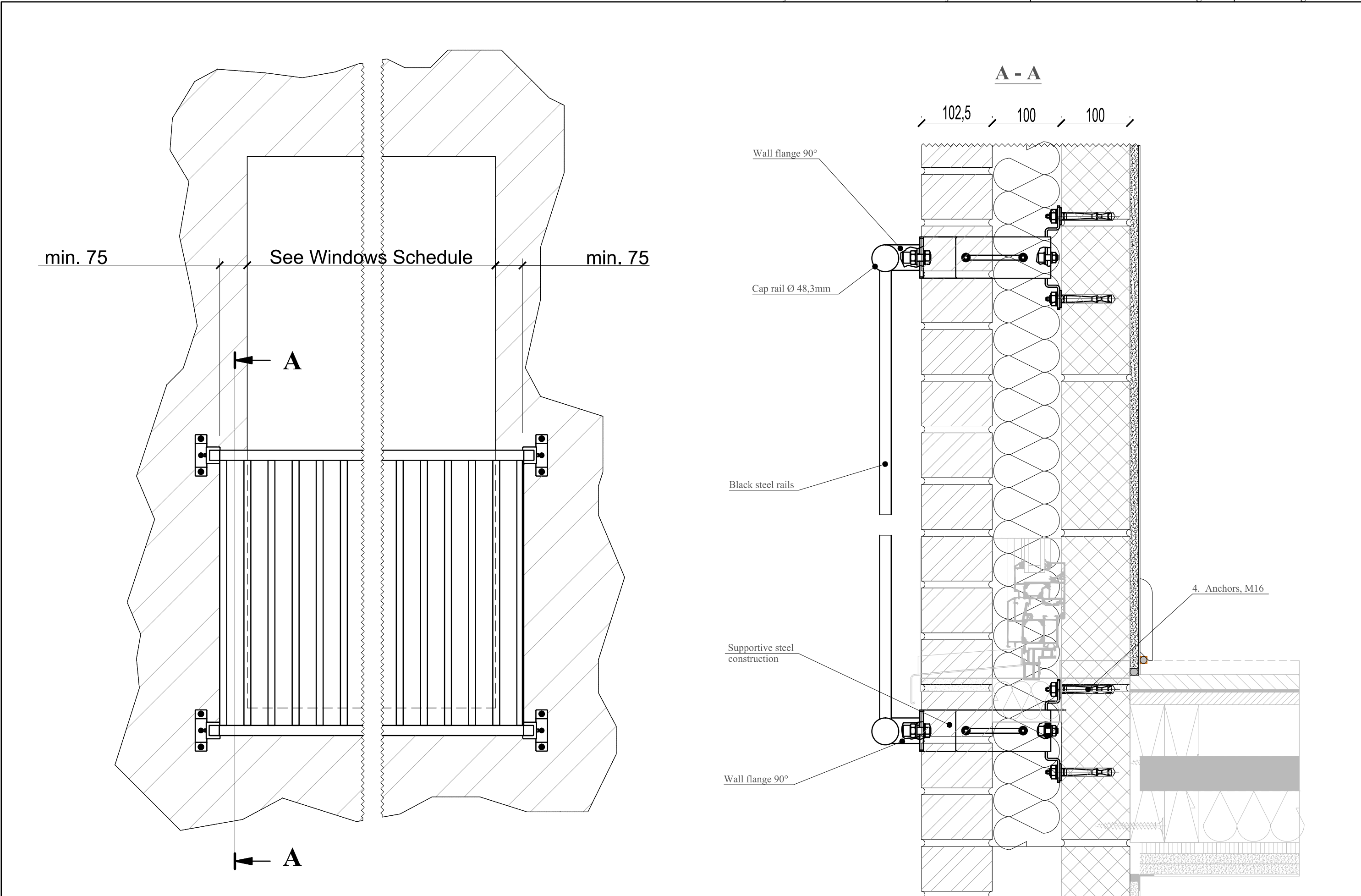
(Delta Uf + Delta Ug) is less than 3% of (1 / Rt) so U = (1 / Rt) = 0.16W/m²K

Recommended U-Values – England

	Domestic			Non-Domestic		
	New Build	Existing Buildings		New Build	Existing Buildings	
	Best Starting Point (Fabric Only)	Extension	Refurbishment	Best Starting Point (Fabric Only)	Extension	Refurbishment
Wall	0.16	0.28	0.30 / 0.55 *	0.22	0.28	0.30 / 0.55 *
Floor	0.11	0.22	0.25	0.18	0.22	0.25
Pitched Roof - Ceiling Level	0.11	0.16	0.16	0.14	0.16	0.16
Pitched Roof - Rafter Level	0.11	0.18	0.18	0.14	0.18	0.18
Flat Roof	0.11	0.18	0.18	0.14	0.18	0.18

* A U-value of 0.55 W/m2K is used for cavity insulation and 0.30 W/m2K for internal or external wall insulation.

Client	Design & Build Limited	Scale @ A1	1:5	Job No.	Drawing No.	Rev
Project	Four x 2-storey detached dwellings	A3	1:10	D000233	A-42	00
Address	48 MURRAY ROAD, HARROW, HA6 2YL	Drawn by	IS	Status of drawing	Design Stage	
Drwg. title	Detail 4 External walls (EW1) and Banding details	Checked by	AS	Construction	3	
		Date	02/02/21	Building control		



Rev	Date	Description	Client Design & Build Limited Project Four x 2-storey detached dwellings Address 48 MURRAY ROAD, HARROW, HA6 2YL Drwg. title Detail 6 Balcony connection details	Scale @ A1 N/A A3 1:5 Drawn by IS Checked by AS Date 02/02/21	Job No. Drawing No. Rev D000233 A-43 00 Status of drawing Design Stage Construction 3 Building control
-	-	-			
-	-	-			
-	-	-			
-	-	-			
-	-	-			
-	-	-			