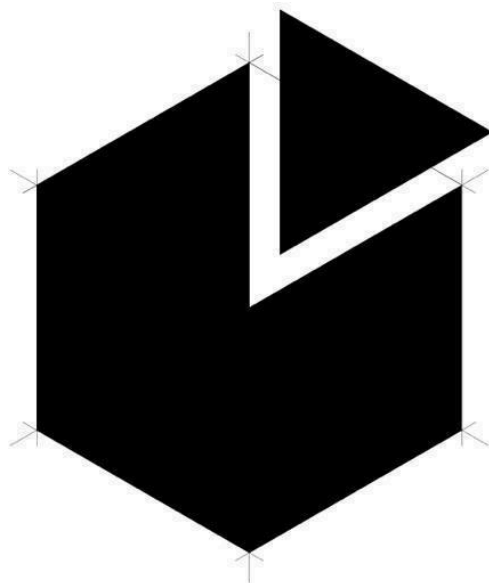




SIXthART
ARCHITECTURE

ALL ELEVATIONS – WINDOW & VENTILATION CLARIFICATION

Address: 31-34 Commercial Street NP20 1RL

Newport /Wales

Prepared by: Sixthart Ltd

05/06/2025

FRONT ELEVATION – WINDOW & VENTILATION CLARIFICATION

1 | Existing Context & Design Intent

The main façade presents five distinct window sub-types (Codes **A, B, C, D & E**). The proposal follows a **contemporary classical** approach, preserving the historic rhythm while discreetly upgrading performance.

2 | Works Summary by Window Code

Code	Existing typology	External treatment	Internal / performance upgrade	Rationale
E	Painted-timber vertical-sliding sash	Unaltered – all box-frames, architraves and glazing bars retained (will be repair where necessary)	Install slim-line white UPVC secondary sash, side-hinged inwards to allow purge ventilation (finished-floor level has risen ≈ 400 mm)	Safeguards heritage fabric while meeting Part F ventilation, Part L thermal and Part B escape height rules
A	Single-light timber casement	Remove & replace with white slim-line UPVC casement replicating sight-lines, mullion depth and cill profile	Argon-filled low-e IGU ($U_w \leq 1.2$ W/m ² K), concealed trickle vent, safety glass below 800 mm	Improves energy efficiency and durability, no change to façade character
B	Paired timber casement	As per Type A	As per Type A	As above
C	Tripartite timber casement (central fixed, side opens)	As per Type A; maintain three-light rhythm	As per Type A	As above
D	Small fanlight-over-casement	Replace with white slim-line UPVC fixed+top-hinged unit, matching transom height	Integrated trickle vent; IGU $U_w \leq 1.2$	Provides balanced background ventilation without visual change

3 | Compliance Statement (Summary)

- **Conservation Area Policy (Newport LDP CE7):**
 - Original sash boxes (E) retained; replacement units (A-D) replicate subdivision, reveal depth and colour, safeguarding streetscape character.
- **Building Regulations (Wales) 2022:**
 - **Part L:** All new units $U_w \leq 1.4 \text{ W/m}^2\text{K}$ (specified ≤ 1.2).
 - **Part F:** Trickle vents sized per Table 2.1; secondary sash to E-type provides purge opening $\geq 0.33 \text{ m}^2$.
 - **Part B & N:** Any glazing < 800 mm from FFL will be safety glass; escape windows clear-opening $\geq 0.33 \text{ m}^2$ and 450 mm min in both directions.
- **Acoustic & User Comfort:**
 - Double-glazing with 39 dB Rw average; internal secondary glazing to E-type enhances noise attenuation without external alteration.

Design Intent Phrase for Reports:

“The front elevation is conserved in its original classical hierarchy; sash windows (Code E) remain intact with an internal white UPVC secondary sash, while ancillary casements (Codes A–D) are replaced with white slim-line UPVC replicas. This approach preserves the façade’s historic articulation and colour palette while achieving current thermal, acoustic and ventilation standards.

BACK ELEVATION – WINDOW & VENTILATION CLARIFICATION

1 | Existing Context & Design Intent

The rear façade comprises four timber casement variants (Codes A–D). The proposal replaces each with white slim-line UPVC replicas to improve thermal and acoustic performance while retaining the original glazing-bar rhythm and reveal depths.

A-TYPE ① New white slim-line UPVC casement; profiles & sash divisions replicate existing.

A-TYPE ② Low-e argon IGU ($U_w \leq 1.2 \text{ W/m}^2\text{K}$) + concealed trickle vent; safety glass <800 mm FFL.

B-TYPE ① Paired UPVC casements in white; mullion & cill depth match original.

B-TYPE ② Low-e IGU $U_w \leq 1.2$ + trickle vents; acoustic $R_w \approx 39 \text{ dB}$.

C-TYPE ① Three-light UPVC casement set; original rhythm maintained (fixed centre, opening sides).

C-TYPE ② Argon low-e IGU, trickle vent; RAL 9016 finish.

D-TYPE ① Fanlight-over-casement replaced with white slim-line UPVC fixed + top-hung light.

D-TYPE ② Integrated background vent; $U_w \leq 1.2$; reveal depth unchanged.

3 | Compliance Statement (Summary)

- All new units **$U_w \leq 1.4 \text{ W/m}^2\text{K}$** (Approved Doc L Table 4.2B)
- Trickle vents sized per **Approved Doc F Table 2.1** ($E_a \geq 8\,000 \text{ mm}^2$)
- Safety glazing below 800 mm FFL (Approved Doc K §4.3)
- Escape windows clear-opening $\geq 0.33 \text{ m}^2$ (Approved Doc B §2.10)
- Works preserve rear elevation character (Newport LDP **Policy CE7**).

SIDE ELEVATION – WINDOW & VENTILATION CLARIFICATION

1 | Existing Context & Design Intent

Side elevation windows (Codes A–D) are mixed-condition timber casements set within deep brick reveals. All will be exchanged for white slim-line UPVC units, reproducing cill heights and mullion dimensions.

2 | Works Summary by Window Code

A-TYPE ① White slim-line UPVC casement; existing stone/brick reveals retained.

A-TYPE ② Argon low-e IGU $U_w \leq 1.2$ + trickle vent.

B-TYPE ① Paired UPVC casements; mullion thickness replicated.

B-TYPE ② Low-e IGU + trickle vent; safety glass to Part N.

C-TYPE ① Triple-light UPVC casement; match transom & glazing-bar positions.

C-TYPE ② Argon IGU $U_w \leq 1.2$; acoustic spec $\approx 39 \text{ dB}$.

D-TYPE ① Fanlight + casement unit renewed in white slim-line UPVC.

D-TYPE ② Background vent concealed; reveal depth & cill height retained.

3 | Compliance Statement (Summary)

- **$U_w \leq 1.4 \text{ W/m}^2\text{K}$ & $E_a \geq 8\,000 \text{ mm}^2$** (Approved Docs L & F)
- Safety glazing & escape dimensions per Approved Docs K & B
- Units rated **PAS 24:2022** for security (Approved Doc Q §1.2).

COURTYARD ELEVATION – WINDOW CLARIFICATION

1 | Existing Context & Design Intent

The internal courtyard contains Codes F, G and H. Timber frames are weather-worn; replacements will be white slim-line UPVC units matching sight-lines, ensuring longevity and energy efficiency while invisible from the public realm.

2 | Works Summary by Window Code

F-TYPE ① Existing timber casement replaced with white slim-line UPVC; original sight-lines replicated.

F-TYPE ② Low-e argon IGU $U_w \leq 1.2$ + concealed trickle vent.

G-TYPE ① Paired casement/sash unit renewed in white slim-line UPVC; mullion, transom & cill profiles match original.

G-TYPE ② Double-glazed IGU $U_w \leq 1.2$ + trickle vent; safety glazing <800 mm FFL.

H-TYPE ① Tall service/lobby window replaced with white slim-line UPVC fixed + top-hung light; reveal depth unchanged.

H-TYPE ② Low-e IGU + background vent; acoustic spec ≈ 39 dB.

3 | Compliance Statement (Summary)

- $U_w \leq 1.4 \text{ W/m}^2\text{K}$; $R_w \approx 39 \text{ dB}$ (Acoustic Report JA0595 §5.2)
- Background & purge ventilation comply with Approved Doc F
- No impact on principal elevation; conforms to Cadw “Managing Change to Windows” § 4.1.

NOTE : All replacement window units (Codes A–H) shall match existing openings in overall dimensions, frame profile and colour (white RAL 9016); reveal depths and external finishes to remain unaltered. Works comply with Newport LDP Policy CE7 and Building Regulations Parts L, F, B, K & Q.

INSTALLATION & FABRIC PROTECTION METHOD

1. **No cutting or widening** of existing brick/stone reveals; defective mortar raked out by hand and repointed in **NHL 3.5 lime mortar**.
2. Frames fixed with **A4 stainless screws** into sound masonry; plastic packers at jamb mid-points; no expanding foam.
3. Continuous **EPDM airtightness tape** to external perimeter; internal junction sealed with low-modulus silicone (colour-matched).
4. All putty, paint and debris from existing reveals are removed with **non-abrasive methods**.
5. New cills formed with **projecting UPVC clip-on nose**; original stone cill retained beneath.
6. On completion, brickwork gently cleaned with **nebulous water spray**; no acids permitted.

Cod e	Elevation	Overall size (mm) <i>typical</i>	Opening type	Uw (W/m²K)	Rw (dB)	Ea (mm²)	Safet y glass < 800 mm?	Escape compliant ?	Colour / finish	Existing frame condition
A	FRONT	1000 × 1600	AS ORIGINA L9AO)/P AIR SASH	1.2	39	8 000	NA	NA	White RAL 9016	Timber casements rotten / cracked – full replacement
B	FRONT	1000 × 1800	AO/PAIR SASH	1.2	39	8 000	NA	NA	White RAL 9016	Timber casements beyond repair – replace
C	FRONT	1000 × 1800	AO/PAIR SASH	1.2	39	8 000	Yes	Yes	White RAL 9016	Timber frames failed glazing – replace
D	FRONT	900 × 1400	AO/PAIR SASH	1.2	39	4 000	n/a	n/a	White RAL 9016	Timber split & distorted – replace
E	FRONT	1800 × 1100 †	Pair sash	—	42	n/a	NA	NA	Exterio r timber white / interna l UPVC white	Historic timber box-frames retained; repair only (no removal)
F	Courtyar d /BS	800 × 1200	Pair sash-AO	1.2	39	8 000	NA	NA	White RAL 9016	Timber casements rotten – replace
G	Courtyar d/BS	800 × 1200	Pair sash / casemen	1.2	39	8 000	Yes	NA	White RAL	Timber casements unsalvageabl

			t						9016	e – replace
H	Courtyard/BS	1010 x 1600	AS ORIGINAL	1.2	39	4 000	n/a	n/a	White RAL 9016	Timber warped – replace

Sincerely

Sixthart LTD

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