# Partition & Wall Type Specifications

Project: 16009\_66-67 Guilford Street, London WC1N 1DF

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# Section 2 - External and internal fabric

2.1 Wall type **WN1** - new external cavity walls

U value = U value 0.22W/mK Fire Performance = N/A The wall to consist of:

- Outer leaf:
  - o Option **WN1r** 90mm medium density blockwork, sand cement render & paint finish
  - Option **WN1a & WN1b** 107.5mm imperial facing brick (As LBC approvals), laid generally in flemish bond, ref. dwgs for soldier courses and brick patterns around openings
    - LBC Approved product: Hammersmith London Stock supplied by Traditional Brick and Stone
- 100mm cavity partially filled with 70mm of Kingspan Thermawall TW50 insulation, wall ties to SE specification (85mm cavity w/ 60mm Kingspan Thermawall TW50 for type WN1b). NB: Allow for cavity fire stops at adjoining compartment floors.
- 140mm medium density blockwork (strength to SE detail)
  - o Dry areas: 13mm gypsum based plaster or 1x12.5mm fireline plasterboard & 2.5mm skimcoat on framework to suit required wall thicknesses.
  - o Bathrooms/WCs: 12.5mm moisture resistant standard plasterboard & 2.5mm skim to wet painted side.

Tiled areas to be lined with tile backer type board (Wedi or similar approved), provide ply pattressing where necessary.

- Cavity to be fully filled with closed cell type insulation below DPC level, Kingspan Stryrozone or equal approved
- Weep holes above all openings & cavity trays as section 8.16
- Cavity trays to be installed over all interruptions as section 8.17

# 2.2 Wall type WN2 - new dormer's cheeks

U value = 0.16W/m2K Fire Performance = NA The wall to consist of:

- Code 5 Lead Sheet cladding on,
- BS1521 class A underlay on,
- 18mm WBP Plywood on,
- Timber battens providing min 25mm ventilated cavity,
- · Kingspan Nilvent breather membrane,
- 60mm Kingspan K7 rafter insulation
- new timber structure to SE detail,
- 60mm Kingspan K7 rafter insulation between joists
- Tyvek Air Guard or Proclima Tescon 1 Vapour control layer,
- 1x 12.5mm plaster board c/w 2.5mm skim coat,
- Internal finish

VCL to be sealed around perimeter and along all other joints with proprietary tapes. Use proprietary pipe patches are detail tape around services penetrations

# 2.3 Wall type **WN3** - masonry faced structural steel

U value = N/A
Fire Performance = 60 minutes integrity and insulation
The wall to consist of:

- Min. 100mm brick / blockwork surround to steelwork all sides, see GAs for finished dimensions
- Bonding coat (BG Thistle Bonding Coat or similar approved) and 2.5mm skim coat

# 2.4 Wall type WN4 - Internal blockwork cavity wall

U value = N/A
Fire Performance = 60 minutes integrity and insulation
The wall to consist of:

- 100mm medium density blockwork (strength to SE details)
- 100mm cavity partially filled with 25mm 33Kg/m3 mineral wool batt, air gap to be maintained both sides
- 140mm medium density blockwork
- Bonding coat (BG Thistle Bonding Coat or similar approved) and 2.5mm skim coat

#### 2.5 Wall type **WN5** - Internal blockwork wall with offset finish

U value = N/A

Fire Performance = 60 minutes integrity and insulation

The wall to consist of:

- 100mm medium density blockwork (strength to SE details) w/ Bonding coat (BG Thistle Bonding Coat or similar approved) and 2.5mm skim coat one side
- Nominal 230mm cavity partially filled with 25mm 33Kg/m3 mineral wool batt, air gap to be maintained both sides
- Min. 75 x 50mm timber stud @ max. 600cc
- 2 No. layers 12.5mm Gyproc WallBoard or similar approved
- 2.5mm skim

#### 2.6 Wall type **WX1** - lining of existing masonry walls generally:

U value = 1.0-2.1W/mK - tbc Fire Performance = NA The wall to consist of:

Option WX1L - Lime plaster (Ground and first floor only)

Allow for making good as required. All new plaster to match existing.

- Small holes or damage to be filled using Natural Hydraulic Lime (NHL) 3.5 and Artex Whiting (chalk dust) at a ratio of 1:2)
- For larger areas: 3 coat work in Lime Plaster. Masonry surfaces are to be well wetted before plastering.
- Use a scratch coat of 1: 2.5 / lime putty: well graded sharp sand 3mm through to

fines gauged with finely chopped animal hair

- Apply intermediate coat of 1: 2.5 / lime putty: well graded sharp sand 3mm through to fines
- The finishing coat is to be prepared from one part lime putty and two parts of a well graded sharp sand, ranging from 1mm through to fines.
- Finishes build up to bathrooms/WCs

Option **WX1G** - Gypsum plaster (Elsewhere) Allow for making good as required.

- bonding coat (BG Thistle bonding coat or equal) and 2.5mm skim coat
- Finishes build up to bathrooms/WCs
- 2.7 Wall type **WX2** lining of existing masonry walls where inner face is offset by timber framework

U value = 0.43 W/m2K Fire Performance = NA The wall to consist of:

- Existing masonry wall
- Existing clear cavity
- Existing/new timber framing (Allow for making good as required. Replace rotten/damaged timbers)
- 60mm breathable wood fibre insulation between timber framing (PAVATEX Holzfaser or similar approved)
- Vapour barrier membrane (PAVATEX DB 3.5 or similar approved)
- 20mm wood fibre insulation board (PAVATEX Diffutherm or similar approved) fixed on 38mm battens located between joists
- Lime plaster as follows:
  - 4mm coat natural hydraulic lime plaster (Lime Green Solo or similar approved)
  - o Embed reinforcing mesh (Lime Green 454 mesh or similar approved) into first coat immediately while plaster is still tacky, mesh joints to be overlapped min. 100mm. Mesh to be doubled up with min. 200 x 400mm diagonal pieces at stress points around windows and doors.
  - o 4mm second coat natural hydraulic lime plaster (Lime Green Solo or similar approved)
  - o Internal finishes as per finishes schedule (NB: all painted finishes to be

# vapour permeable)

2.8 Wall type WX3 – lining of the existing vault converted into bathroom

U value = tbc W/m2K Fire Performance = NA The wall to consist of:

- Allow for making good and prepare surface, allow for sprayed concrete structural repairs
- Install cavity drain membrane as section 1.3 of Scope of works
- timber battens + insulation between studs + moisture resistant plasterboard
- 2.9 Wall type WX4 Lining of existing masonry walls with waterproof tanking

U value = as existing
Fire Performance = see GAs
The wall to consist of:

- Allow for preparation, repairs and making good as detailed in Damp Proofing specialist's General Preparation Checklist
- Bush hammer preparation, DPC injection and waterproof render application by specialist Sub-Contractor as per scope of works section 1.2
- 2.5mm Gypsum plaster skim by Main Contractor
- 2.10 Wall type WX5 Lining of existing masonry walls with waterproof tanking and insulation

U value = W/m2K TBC Fire Performance = N/A The wall to consist of:

> Allow for preparation, repairs and making good as detailed in Damp Proofing specialist's General Preparation Checklist

- Bush hammer preparation, DPC injection and waterproof render application by specialist Sub-Contractor as per scope of works section 1.2
- New 50mm timber framing (depth to increase as required to conceal SVPs, see GAs)
- Full fill insulation between timber framing
- Vapour control layer
- Single layer 12.5mm moisture resistant plasterboard
- 2.5mm Gypsum plaster skim

All tiled areas to be lined with tilebacker type board (Wedi or similar approved) - refer to bathroom drawings for extent and detail, provide ply pattressing where necessary.

2.11 Internal partition type PX1 - refurbished existing internal masonry walls generally

U value = NA

Fire Performance = see GA's

The partition to consist of:

Option PX1L - Lime plaster (Ground and first floor only)

Allow for making good as required. All new plaster to match existing.

- Small holes or damage to be filled using Natural Hydraulic Lime (NHL) 3.5 and Artex Whiting (chalk dust) at a ratio of 1:2)
- For larger areas: 3 coat work in Lime Plaster. Masonry surfaces are to be well wetted before plastering.
- Use a scratch coat of 1: 2.5 / lime putty: well graded sharp sand 3mm through to fines gauged with finely chopped animal hair
- Apply intermediate coat of 1: 2.5 / lime putty: well graded sharp sand 3mm through to fines
- The finishing coat is to be prepared from one part lime putty and two parts of a well graded sharp sand, ranging from 1mm through to fines.

Option PX1G - Gypsum plaster (Elsewhere)

Allow for making good as required.

- bonding coat (BG Thistle bonding coat or equal) and 2.5mm skim coat
- 2.12 Internal partition type **PX2** refurbished existing internal timber framed compartment partitions

U value = NA
Fire Performance = 60 minutes integrity and insulation
The partition to consist of:

- Resilient bars @ 450mm centres
- Existing timber framing, allow for making good as required, replace rotten/damaged timbers.
- 25mm 33Kg/m3 mineral wool batt between studs
- Resilient bars @ 450mm centres
- 2 No. layers 15mm Soundbloc plasterboard w/ joints staggered +
  - o Option **PX2L** Lime plaster (ground and first floor only)
    - 5mm application of natural hydraulic lime undercoat (Lime Green Prebond WP or similar approved). Embed reinforcing mesh (Lime Green 660 Mesh or similar approved) into first coat immediately while plaster is still tacky, mesh joints to be overlapped min. 100mm. Apply second 5mm coat immediately, thoroughly scratch in a horizontal direction no deeper than 3mm, using a render comb to produce a key
    - 5mm application of natural hydraulic lime top coat render (Lime Green Finish WP or similar approved)
  - o Option **PX2G** Gypsum plaster (elsewhere)
    - + 2.5mm skim coat
  - o Internal finish as per finishes schedule ((NB: all painted finishes on lime plaster to be vapour permeable)
- 2.13 Wall type **PX3** refurbished timber framed partition between internal space & external entrance lobbies

U value = 0.28tbc W/m2K Fire Performance = 60 minutes TBC The wall to consist of:

- 2 No. layers 15mm Soundbloc plasterboard w/ 2.5mm skim
- Resilient bars @450 centres
- Vapour control layer
- Existing timber framing; allow for making good as required, replace rotten/damaged timbers.
- full fill breathable wood fibre insulation between timber studs

- 40mm tongue and groove breathable wood fibre insulation board
- Lime render as follows
  - o 5mm application of natural hydraulic lime undercoat (Lime Green Prebond WP or similar approved). Embed reinforcing mesh (Lime Green 660 Mesh or similar approved) into first coat immediately while plaster is still tacky, mesh joints to be overlapped min. 100mm. Apply second 5mm coat immediately, thoroughly scratch in a horizontal direction no deeper than 3mm, using a render comb to produce a key
  - o 5mm application of natural hydraulic lime top coat render (Lime Green Finish WP or similar approved)
- Paint finish
- 2.14 Wall type **PX4** refurbished glazed partition below existing stairs

U value = N/A
Fire Performance = 60 minutes integrity and insulation
The wall to consist of:

- Existing glazing to be removed, timber framing to be repaired and made good as required,
- Existing frames to be single glazed with new 10mm opaque acoustic laminated glass
- 60 minute fire rated (integrity & insulation) solid partition installed behind existing retained glazing assembly, to be physically isolated from glazing assembly:
  - o Promat SUPALUX boards, 20mm + 15mm. Stagger Joints by min. 600mm. Layers either sandwich the perimeter angle or are fastened to one face.
  - o Steel angle frame, minimum 30mm x 30mm x 0.6mm bedded on Promat PROMOSEAL Intumescent Sealant
  - o M6 steel anchor bolt at nominal 500mm centres
  - o Self-tapping screws or similar. First layer 20mm, fixed to perimeter angle using M4 screws at 300mm centres. Second layer 15mm, fixed to first layer using M4 x 30mm screws at 300mm centres around the perimeter and on both sides of each joint. Take care not to overtighten screws.
  - o Intumescent seals between perimeter junction and surrounding building fabric TBC
- Acoustic build up to lower ground floor side of fire partition
  - o Resilient bars @ 450 centres

- o 1 No. layer 15mm Soundbloc plasterboard
- o 2.5mm skim coat

NB: Contractor to ensure partition is installed in full compliance with Promat Supalux specifications and requirements

2.15 Internal partition type **P1** - new standard internal partition

U value = NA

Fire Performance = see GA's

The partition to consist of:

 Min 75x50mm timber stud @ max 600cc (actual stud width can vary to allow linings to align with adjacent).

NB: Freestanding pod partitions to be braced together with ceiling element

- 25mm 33kg/m3 mineral wool batt between studs
- 12.5mm acoustic or fire plasterboard + 2.5mm skim coat to both sides
- Internal finish as per finishes schedule

2.16 Internal partition type **P2** - new standard bathroom partition

U value = NA

Fire Performance = see GA's

The partition to consist of:

New built standard partition as type P1 but with 15mm moisture resistant plasterboard to wet painted side.

All tiled areas to be lined with tilebacker type board (Wedi or similar or approved) – for extent and detail please refer to bathroom detailed drawings.

Provide ply pattressing where necessary

2.17 Internal partition type **P3** - new stud compartment partition

U value = NA

Fire Performance = 60 minutes integrity and insulation

Acoustics Performance = see preface

The partition to consist of:

- 2 No. layers 15mm Soundbloc plasterboard w/joints staggered + 2.5mm skim coat
- Resilient bars @ 450mm centres

- 100 x 50mm timber framing at 600mm centres (reduced to 75 x 50mm locally as required, see GAs)
- 25mm 33Kg/m3 mineral wool batt between studs
- Resilient bars @ 450mm centres
- 2 No. layers 15mm Soundbloc plasterboard w/joints staggered + 2.5mm skim coat
- Internal finish as per finishes schedule
- 2.18 Internal partition type **P4** New built wall liner to existing walls to offset wall line from the masonry.

U value = NA Fire Performance = NA Acoustics Performance = NA

The partition to consist of:

- Existing wall construction to be made good with all holes and cavities filled with material to match existing
- Gyplyner Universal metal framed system/timber framing at 400mm centres
- 12.5mm standard plasterboard + 2.5mm skim coat to dry areas
- 12.5mm moisture resistant standard plasterboard or Wedi Board to bathrooms
- internal finish as per finishes schedule
- 2.19 Internal partition type **P5** new SVP stack and services riser enclosure

U value = NA

Fire Performance = see GA's

Acoustics Performance = NA

The partition to consist of:

- 2x 12.5mm acoustic board with joints staggered+ 2.5mm skim coat on 50x50mm s/w timber framing
- 2 x 12.5mm moisture resistant standard plasterboard w/joints staggered + 2.5mm skim coat on 50x50mm s/w timber framing or Wedi Board to bathrooms.
- SVP Pipes to be fully wrapped with 25mm mineral wool quilt.

For SVP stacks Include for sealed access hatched as noted on M&E drawings, concealed or coordinated with tiling – detail tbc

Gaps to perimeter of walls to be fully filled with a flexible fire and acoustic sealer to avoid air paths through wall. For fire stopping to services penetrations please refer to section ??.?? of scope of works.