syte
ARCHITECTS

83-84 Berwick Street London W1F 8TS T 020 7 7348310 F 020 7 7348301 studio @sytearch.com www.sytearch.com

Design & Access Statement

July 2013

6 Leigh Street
London
WC1H 9EW

Directors Oliver Barsoum AA Dipl RIBA Rob Whitlock BA (Hons) Dip Arch RIBA

Syte Architects Limited Registered in England number 4565774 Registered Office 59a Brent Street London NW4

syte
ARCHITECTS

CONTENTS

1.0 INTRODUCTION

This Design and Access statement is submitted in support of a planning application submitted in respect of the following property.

6 Leigh Street
London
WC1H 9EW

The property is Grade II listed and dates from c 1810-1813. It is arranged over four storeys with a cellar. The property is currently configured as retail use on the ground floor with a shopfront and residential accommodation in the Basement.

There is a three-storey outbuilding towards the rear of the site; at Basement level this space is part of the basement accommodation of the shop space. At first floor level this rear building has been converted to a flat, accessible from the main staircase. The First, Second and Third floors in the main house are each currently configured as a self contained flat.

This report should be read in conjunction with the following documents.

Michael Barclay Partnership structural report - March 2013 - "6 Leigh Street London WC1H 9EW Modeling and Improvement"

Heritage Statement prepared by Squire Heritage Consulting

Planning Statement prepared by Resolution Planning

1.1 PRE-APPLICATION ADVICE (ENQ/2013/1724) AND DESIGN DEVELOPMENT

An initial scheme design was submitted as part of an application for pre-application advice from Camden Planning and Conservation. A pre-application meeting was held on site with Hugh Miller and Charles Rose of Camden Planning on 26 April 2013. Written advice was issued by letter dated 24 May 2013.

The comments advice given by the officers at the meeting and subsequently in writing have informed the application scheme. A brief summary of the key issues in the design evolution is outlined in the text immediately below, with reference to the advice received at pre-application stage and the manner in which this has informed the design of the submitted scheme. Further information is also contained in the more detailed design descriptions in the subsequent sections of text below.

1.1.1 REMOVAL OF THE PROPOSED SIDE EXTENSION IN THE COURTYARD

Concerns were raised in connection with a proposed side extension into the courtyard area at Basement level to the side of Flat B. These concerns were in connection with the outlook from the flats and levels of natural lighting to the proposed residential accommodation in the Basement storey, together with the level of intervention required to the adjacent historic fabric. Pre-application advice received was that there should not be a reduction in the amount of outdoor space as a result of the proposal.

The proposed side extension has been removed as part of this application. The benefits of this are:

- The proportions and character of the existing courtyard space are maintained;
- The façade to the flank wall of the rear building will remain as existing and enjoy the same relationship with the adjacent external space as that which currently exists;
- There will be a larger area of glazing to the Basement accommodation in Flat B, leading to improved outlook and levels of natural light;

- There will be an increased amount of outdoor space. The proposal represents a less intensive development of the site. In fact as a result of the proposal the amount of external space at Basement level will increase over the existing amount;
- As a result of the increased area of external space, the bedroom to Flat A would enjoy an improved outlook through a larger courtyard. In addition this results in improved levels of daylight and as a result the windows to the bedroom in Flat A comply with CPG standards in terms of area in relation to floor area and light angles.

1.1.2 EXISTING FABRIC BETWEEN MAIN HOUSE AND REAR BUILDING

Concern was raised about the proposed changes to the various additions present between the main house and the rear building. At the pre-application meeting it was agreed that further work should be undertaken to understand the relationship between the different parts of the building and the sequence of development on the lower levels.

The results of those investigations are outlined in the addendum to the Heritage Statement prepared by Squire Heritage Consulting. In summary these investigations revealed that the rear extensions are later additions. Therefore it is considered that this element of the proposal maintains the form of the historical intervention that has occurred.

1.1.3 YORK STONE ENTRANCE SLAB

Pre-application advice was that the existing York stone external entrance step at ground floor level should be retained. It is proposed to enclose under the York stone. Drawing 205.501 shows how this would be achieved, with an independent lining that keeps out moisture but is designed to allow the existing fabric to breathe.

1.1.4 FIRST FLOOR KITCHEN

Concerns were raised in connection with the proposed insertion of a kitchen within the front room of the main house at First Floor level. The kitchen and adjacent shower space have been designed to read as an object within the front room First Floor. As a result of discussions at the pre-application site meeting, the wall units were removed from this element to further reduce the impact of the installation. See drawing 205.503.

2.0 THE EXISTING BUILDING

The Heritage Statement prepared by Squire Heritage Consulting contains a detailed description of the existing building. A set of existing photographs is attached as an Appendix to this document. Each of these As Existing photographs is referenced on the As Existing drawings.

The plans have divided the existing structures through the use of lettered gridlines that run through the site. Essentially the plan form of the building is three rooms deep. In relation to the gridlines those three spaces are arranged as follows. See Section 3.0 of Heritage Statement for a more detailed description.

Gridlines A: – C Main house (A)
Gridlines C: – D Central link space (B)
Gridlines D: – E Rear outbuilding (C)

Within the main house the main Ground Floor space functions as a retail unit, with a shopfront onto Leigh Street. Beside the shopfront is the main front door which leads into the common entrance hall and stair.

The Basement flat is accessed from the common entrance hall and was principally built and used as a self contained residential unit by the hired hands or staff. Despite it's current rather unkempt appearance, it has been used residentially in its current form and sub let by the

previous owners over their period of occupation (30 years). The accommodation, like the remainder of the upper floors is therefore identified as having a lawful C3 residential use. See Planning Statement for further information.

The space in the rear outbuilding at First Floor level combines with space within the Central link space (B) at First Floor level to form a separate flat. This area of the First floor is between the Ground and First floor levels in the main house and this flat is accessed from the winders on the stair that runs from Ground to First floor. The manner of access to this space is difficult, being directly off the winders. Within the main house there is an existing self-contained flat at each of First, Second and Third floor levels.

The Central Link space (B) sits at the centre of the plan between the rear outbuilding and the main house. This space appears to have accumulated a number of walls, partitions and infill construction over time. These form part of the Basement flat and the ground floor back of house to the shop. The exact nature of these various elements of construction fabric that sit within the Central link space (B) was discussed at length with Charles Rose during the pre-application visit. It was agreed that further research should be undertaken to try and establish the relationship of the various pieces of fabric in relation to the main house in an effort to determine their relative value. This details of this research alongside some carefully selected investigations that have been undertaken since the pre-application meeting are outlined in the accompanying Heritage Report.

At Basement level the Rear outbuilding (C) is accessed separately from an external courtyard. At Ground level the space within the rear outbuilding forms part of the back of house space for the commercial unit.

3.0 GENERAL DESIGN APPROACH

The Design approach adopted is discussed in more detail in the subsequent sections that deal with the various flats and locations through the building.

In general it is proposed that the rear outbuilding will be retained for refurbishment as a residential accommodation. The area between that rear outbuilding and the main house, the Central link space (B), has been reconfigured to provide accommodation for the ground floor shop, the basement flat and to provide access to the new residential accommodation in the rear outbuilding. This reconfiguration leads to a significantly improved layout, both in terms of access and fire safety, for the First Floor Flat at the rear. It is proposed that the existing flats at First, Second and Third Floor levels will be refurbished with some amendments to the internal layouts.

Principally the reconfiguration has enabled the creation of suitable residential spaces. The flats have been designed to meet the areas stated in the Camden Planning Document *Camden Planning Guidance - Housing* (CPG2) Paragraph 4.14 for area and occupancy wherever possible. With the exception of Flat B these proposals are for the refurbishment of existing residential units. Within the confines of an existing listed building it is not possible to meet the requirements in full in every location. It is maintained that the proposals represent the optimum solution within these units and result in a significant improvement to the quality of the living spaces.

In addition there are a number of existing situations which do not comply with current building regulations, in terms of means of escape and the performance of the existing building fabric. Within a building of this age, particularly one with the constraints of listed status, it is difficult to design a refurbishment to comply with current standards. Together with a general upgrading of the fabric the proposed reconfiguration seeks to deal with many of these issues as possible so that the proposed scheme will represent a significant improvement in terms of fire safety for future occupants.

In terms of fire strategy the reconfiguration of the Central link space (B) also allows the opening up of the main entrance hall at ground floor to the original configuration. It is maintained that, taken as a whole, these layout changes within the main house are of net benefit to the building as a whole in conservation terms.

3.1 FLAT A - BASEMENT

The front lightwell will be opened up and will accommodate a new external stair. At street level the new lightwell will be enclosed with a new set of railings. The new entrance stair has been kept away from the windows to maximize light into the basement.

At ground floor level the large York stone flag to the front step will be retained, with the new stair to the Basement being designed so that the top riser will suit the position of the existing York stone slab. The area under the York stone will be enclosed to form an entrance lobby.

Within the main house the basic plan form is maintained. The front and rear rooms are opened to one another to create and open plan Kitchen/ Living area. At the pre-application meeting it was indicated that this was acceptable. The existing openings to the reopened front lightwell would be glazed.

The new construction between gridlines C and D includes a new bedroom and shower room for Flat A. The area of existing built fabric at basement and ground level currently runs up to Gridline D (see existing drawings). The proposal represents a reduction in coverage of built fabric at basement and ground levels. This creates the space for a courtyard at Basement level which provides natural light to the bedroom of Flat A. At upper levels the walls are set back (see proposed section drawings) which further increases the openness in this space. As a result of the proposal there will be an increase in external area at Basement level.

The use of a simple language of white render for the new elements of construction ensure that these read as infill additions against the retained elements. This is accentuated by the positioning of the new rendered infill elements away from the corners of the rear outbuilding. The crispness of the white render will contrast with the patina of the aged adjacent brickwork. In addition the white surfaces will maximize light reflectance within the new courtyards.

The opening between Bedroom and the Courtyard is made as generous as possible, with the space created by the setback glazed with a rooflight. The total glazed area is 4.15 square metres, over 30% of the bedroom floor area. This window complies with the 30° light angles in CPG standards.

There are a number of flagstones present in the Basement. It is anticipated that the there may be more slabs where the floor is currently covered by hardboard, which it was not possible to remove during the pre-application visit. It is intended to reuse these within the development within the external areas.

There is an existing partition between the front room in the Basement and the passage that is part of the stair enclosure within the Basement. This is currently formed of timber sections mounted on a frame. It was agreed at the pre-application meeting that this could be replaced with a partition with the timber boards reused as a facing.

3.1.1 LOWERED BASEMENT FLOOR AND TANKING

As noted above the headroom in the existing Basement accommodation is very limited. It is proposed to lower the existing floor throughout the basement. Some initial investigations have been undertaken and the results of those investigations have informed initial advice received from Michael Barclay Partnership. The MBP report shows an underpinning detail for the existing walls. The underpinning is limited enough in scope to be undertaken in engineering brick. A new slab, tanking membrane and insulation will also be incorporated into the new floor construction. This slab design works with existing drainage levels. Currently there is no

slab in certain areas of the building, with the boards in the front basement laid directly on earth.

It is proposed to use the Delta tanking system to the walls and floor of the Basement flat. The Delta system has been used successfully in many basement projects in listed buildings including Hylands House, Chatsworth house, Castle Howard, Kensington Palace and the houses of Parliament.

It is proposed to use Delta MS 500 to line the walls and Delta MS 20 for the floors. These products are moulded HDPE membranes. The product is resistant to the transmission of water and water vapour and is very durable.

The product is fixed with plugs to the existing wall. The profile of the sheet means that new plaster can be applied to the sheet. This fixing process makes it a reversible process. The profile also creates an air gap between the existing walls and slabs, which allows moisture present in the existing structure to evaporate or be drained away by drainage channels. See drawing 205.502.

The Delta system is both sympathetic to traditional structures and is also a reversible process. The system allows the creation of healthy interiors, free from the effects of damp associated with many basement spaces in older properties. At the same time it avoids the problems that can occur when modern impervious materials are introduced into older properties of traditional construction.

3.1.1 NEW BASEMENT ENTRANCE LOBBY

Drawing 205.501 shows an indicative construction detail of how the enclosure of the new entrance lobby under the York stone entrance would be formed. It is important that the construction detail is designed to permit the new elements to ‘breathe’ and allow any moisture present to escape by means of ventilation. An insulated frame would be installed under the structure of the front step. This would need to be assembled in stages out of prefabricated sections of timber and plywood frame. This would allow the lining to be installed from below and engage with a perimeter frame. The use of a breather membrane on top and ‘intelligent’ vapour barrier at ceiling level would mean that any moisture present in the structure would be able to migrate back into the internal space of the flat or our via the ventilated void present between the stone flag and the new insulated ceiling lining.

This lobby gives access to the vaults under the pavement as well as the Basement flat. It was suggested by Charles Rose as part of the pre-application discussions that just one of the existing vaults should be tanked. It is logical that this should be the vault that is accessible from the flat. This would be undertaken as part of the Delta tanking carried out in the flat as part of one integral system.

3.2 FLAT B - BASEMENT AND GROUND

Flat B is created by conversion of the Ground and First floors of the rear building and is arranged as a maisonette. Entry is via the existing Ground Floor entrance hall in the main building and a new lobby that is shared with Flat C above. (See Section 3.2) This lobby provides fire separation between the new Flats B and C from the common stair and means the existing lobby in the Ground Floor entrance hall can be removed, which is of significant Conservation benefit for this space.

Within Flat B an internal stair from the entrance hall leads down to the basement accommodation, which consists of a double bedroom with access via the existing openings to the the existing linear courtyard.

3.3 FLAT C – FIRST FLOOR

The proposed Flat C occupies part of the existing rear building and part of the new construction between gridlines C and D. Effectively Flat C is a replacement for the existing Flat that is located to the rear of the property between Ground and First Floor levels and that is accessed directly from the winders of the main stair.

Access to Flat C is via the new lobby shared with Flat B (See Section 3.1 above). An internal stair with a rooflight at the head gives access to the accommodation at First Floor level. This arrangement is a significant improvement in terms of ease of access and also of fire separation between the stair and residential accommodation. It also allows the occupant to enter at the centre of the plan and so create separate access for a bedroom and living kitchen space.

As part of the rebuilding between gridlines C and D it is proposed that the profile of the new roof be amended to create more headroom internally. This can be achieved by using a shallower slope while keeping the ridge height and position and the party wall parapet height as existing. The area of construction in this area that it is proposed to replace is of poor quality and appearance.

Initial investigations have revealed that the intermediate floor structures are not adequate for residential loadings. Therefore it is proposed to introduce additional joists between the existing joists to improve this situation. Refer to MBP report.

3.4 GROUND FLOOR RETAIL UNIT

It is proposed to retain the existing commercial unit and shop front. New back of house accommodation will be created at Ground Floor level. Access to the common stair will be prevented by fixing shut the door between the commercial unit and the common stair. Keeping this space separate, with access solely from the front via the shopfront door, significantly reduces the fire risk posed by the shop to the common stair and offers complete separation of the different uses within the building.

Following the pre-application a series of investigations have been undertaken into the partition between the stair and the common entrance hall, see Heritage Statement. As part of the pre-application discussions it was agreed that this wall would be lined on the shop side to improve the fire separation, while leaving the original fabric undisturbed.

3.5 FLAT D – FIRST FLOOR

It is proposed to refurbish the existing flat at First Floor level to a new layout. Broadly the bedroom would be located in the rear room, with a kitchen living space in the front room.

It is proposed to position a shower room centrally astride the spine wall. The shower room would be located so that it does not come further into the front room than the corner of the chimneybreast. Access to the shower room would be from the bedroom. This would require some limited modification to the spine wall.

Within the front room the kitchen and shower room enclosure would be treated as a ‘pod’, reading as a piece of joinery set against the existing walls, with the existing cornice remaining visible above. As a result of the pre-application discussions the wall units have been removed from the design so that the presence of the chimney breast is more evident. See drawing 205.503.

Within the rear room the shower room enclosure would continue full height. This creates the opportunity to run a service riser through the full height of the building. Soil pipes would run down to a new drainage connection in the Basement and be vented at the head through the rear slope of the roof. Extract ventilation would run up to a terminal on the roof. Each terminal

could take the form of a slate ventilator, discreet in appearance and set in the line of the slope of the roof. This solution is considered the least disruptive servicing solution option available. The riser would be generous enough on plan to allow the services to run clear of cornices.

It is maintained that the use of a clear pod solution results in an improvement to the internal layout of the flat. It is acknowledged that the layout does involve the insertion of the shower volume within the front room, a principal space. The proposed layout also allows the removal of the partitions that subdivide the rear room and the relatively large open kitchen that currently sits at the centre of the flat, and have a significant impact on the atmosphere of the space upon entry and when sitting within the front room.

Any proposals have to be considered in light of the fact that this is an existing flat. An important additional benefit that should be considered is that the proposed layout results in a significantly improvement to fire safety. Currently the open kitchen is located next to the sole exit door. The relocation of the kitchen and the reintroduction of the second door removes all the “inner room” situations.

Syte Architects have used the same ‘riser’ solution with a shower room astride the spine wall, in their recent consented scheme for the redevelopment of the nearby property 93 Judd Street. (Application Reference 2010/4985/L).

3.6 FLAT E – SECOND FLOOR

It is proposed that Flat E at Second Floor be refurbished to the same layout as at the first floor. It is not proposed to treat the shower room as a ‘pod’ on this floor due to the lower ceiling height.

3.7 FLAT F – THIRD FLOOR

It is proposed that the existing Third Floor flat be refurbished to the same basic layout as existing on this floor.

3.8 BUILDING REGULATIONS

New construction generally will be designed to meet current building regulations. One of the principle concerns, in terms of building regulations, in developing the design has been to carefully consider the means of escape strategy. With regards to this the proposed design represents a significant improvement on the existing situation in that the new flats are separated from the common stair by a lobby as per the requirements of current Building Regulations. In addition the existing Basement space and Ground Floor commercial space are completely separated from the common stair. This significantly reduces the impact on the common stair.

The proposed revisions to the internal layout to the First floor flat removes inner room situation.

It is also proposed to upgrade the fire performance of the existing walls and doors to the common stair through the use of envirograf intumescent paint. The floors will be upgraded through the use of insulation within the floor void. Drawing 205.500 shows how this would be achieved, particularly in relation to the existing construction fabric. These measures increase the separation between the individual units of residential accommodation. The envirograf products have been widely used in Heritage projects and Syte Architects have used this approach as part of the fire strategy at the consented scheme for Judd Street. Specification notes are contained on the drawings.

A building wide system of emergency lighting, fire escape signage and fire detection will be installed. Elements such as the existing meters in the entrance hall would be enclosed in fire resisting joinery.

These project specific measures have been discussed with Salus Approved Inspectors and are broadly similar to the fire strategy adopted for the scheme for Judd Street.

3.9 SUSTAINABILITY

As indicated above new elements of construction will be to latest Building Regulations, for example the new basement floor, the new roof and the new rendered infill construction between gridlines C and D. In addition it is proposed to internally insulate the existing walls of the rear outbuilding as part of that construction. It is anticipated that it may be possible to incorporate some thermal insulation as part of the roof to the rear outbuilding and over the main house, though the practicality of this would need to be investigated as part of the remedial works to the roof. Taken together these measures represent a significant improvement in energy efficiency of the building as a whole.

Looking at wider definitions of sustainability the property will be improved generally through being refurbished throughout, in particular through the improved provision of mechanical ventilation and sound insulation between units.

Ultimately the building's listed status limits the ability to thermally improve the fabric, through the limitations of retaining features such as single glazed windows, and restrictions on internal linings in relation to decorative features, and internal joinery and details.

The combination of a tight site and the building's listed status also mean that it is difficult to incorporate on site renewable energy provision.

3.10 ACCESS

There are no significant changes proposed to the access arrangements, and potential amendments are limited by the building's listed status. The redesign of the access to the flat to the rear so that it is not accessed directly off the winders of the stair between Ground to First is a significant improvement, as is the provision of a new external entrance to the Basement flat.

All new bathrooms have been designed to Part M compliant layouts. Lifetime Homes measures have been adopted wherever possible, with accessible showers provided in both Flats A and B, though the constraints of a listed existing building do limit the application of this design standard.

3.11 CYCLE STORAGE

Flat A contains a number of location internally that could be used for cycle storage, in the vaults, or in the space under the retained internal stair. The external courtyard of Flat B is secure and could accommodate cycles. The nature of the existing property, combined with the building's listed status, means that here is not a suitable location to provide cycle storage for the existing flats.

3.12 REFUSE STORAGE

Flats C, D, E and F are an existing situation and refuse storage and collection arrangements will remain as existing. The vaults in the front courtyard of Flat A and the external courtyards space in Flat B are both capable of accommodating appropriate refuse containers.

4.0 CONCLUSION

The application proposal is a considered approach to the refurbishment of an existing building that seeks to retain and work with the principal historic elements, as identified by careful

analysis, to create new and refurbished residential units that make a valuable contribution to the borough's local housing need.

Where new elements are introduced these are designed to respond in scale to the existing retained elements and read as a layer of infill additions so that the historic form of the building can be read and remain evident. In many areas the sub-division of original rooms and the common entrance hall have been removed. Where new internal elements and services are introduced these are designed to read as additions within the space, with the proportions of the original room remaining evident and important details visible.

The consideration of Building Regulations has been integral to the design approach. The scheme design results in a significant improvement to the fire safety provisions within the building. Where it is proposed to upgrade existing fabric detailed consideration has been given to developing details and specifications that retain important elements of construction fabric. In addition these details have been developed to take account of the manner in which traditional building fabric will behave.

APPENDIX 1 – AS EXISTING PHOTOS

Fig. 1 Front Elevation

Fig 2 Front Elevation

Fig 3 Shop Front

syte ARCHITECTS

Fig 4 Shop front

Fig 5 Entrance door to common parts


Fig 6 Concrete covering to front lightwell


Fig 7 Pavement light to front lightwell

Fig 8 Entrance door to shop

Fig 9 Shop window

Fig 10 High level window within shop

Fig 11 High level window within shop

Fig 12 Infill between outbuilding to rear and main buiding

Fig 13 Corridor at side of infill building

Fig 14 Infill between outbuilding to rear and main building. Door to corridor space.

Fig 15 Internal stair to basement

Fig 16 basement corridor and stair to Ground floor

Fig 17 Basement belwo main building

Fig 18 Timber partition within Basement below main building

Fig 19 Ground floor structure seen from Basement

Fig 20 Basement below main building

Fig 21 Basement front lightwell with concrete roof covering

Fig 22 Front lightwell with concrete roof covering

Fig 23 Right hand vault

Fig 24 Left hand vault

Fig 25 Basement space below ground floor infill

Fig 26 Basement space belwo ground floor infill

Fig 27 Basment space belwo ground floor infill

Fig 28 Basement space below main building

Fig 29 Basement space below main building

Fig 30 Basement corridor below ground floor infill

Fig 31 Basement corridor belwo ground floor infill

Fig 32 Fire place and chimney breast to front room

Fig 33 Window and cornince to front room

Fig 34 Window and cornince to front room

Fig 35 Cornince and architrave to spine wall

Fig 36 Bathroom within back room

Fig 37 Bathroom within back room

Fig 38 Kitchen opening through spine wall

Fig 39 Timber shutter to front windows

Fig 40 Kitchen area within infill between outbuilding and main building

Fig 41 Showeroom within first floor infill

Fig 42 Witin first floor infill

Fig 43 Back room at first floor

Fig 44 Window to back room

Fig 45 Step up between back room and infill

Fig 46 Front room at second floor

Fig 47 Front room at second floor

Fig 48 Openings in spine wall to kitchen and shower

Fig 49 Front windows at second floor

Fig 50 Cornince at front room, second floor

Fig 51 Kitchen within back room

Fig 52 Kitchen within back room

Fig 53 Shower room at second floor

Fig 54 Below stair cupboard at second floor

Fig 55 Front windows at third floor

Fig 56 Front window at third floor

Fig 57 Chimney breast at third floor

Fig 58 back window at third floor

Fig 59 Kitchen within back room

Fig 60 Kitchen within back room

Fig 61 Front window at third floor

Fig 62 Ceiling and cornice at third floor

Fig 63 Chimney breast to front room at third floor

Fig 64 Landing at third floor

Fig 65 Rooflight to third floor bathroom

Fig 65 Lightwell at back of main building

Fig 66 Lightwell at back of main building

Fig 67 Lightwell at back of main building

APPENDIX 2 – ENVIROGRAF PRODUCT INFORMATION

ENVIROGRAF® PRODUCT 92

FIRE RETARDANT COATING FOR TIMBER

DESCRIPTION

A water-based clear or white coating for internal/external application by brush, roller or spray. Achieved Class 0/Class 1 protection with two applications at 12-15m² per litre. Coverage on the first coat may vary according to the density and type of timber. UV protection is available.

USE

Can be used on bamboo, chipboard, decorative laminates, furniture, plywood, MDF, melamine, timber, etc. ES/VFR can be applied first and then be coated over with paints or varnishes such as Sikkens stains or existing coatings. A top coat must be applied over ES/VFR (either water-based or spirit-based). Where coating over existing gloss paint, use ES/VFR primer first.

PERFORMANCE

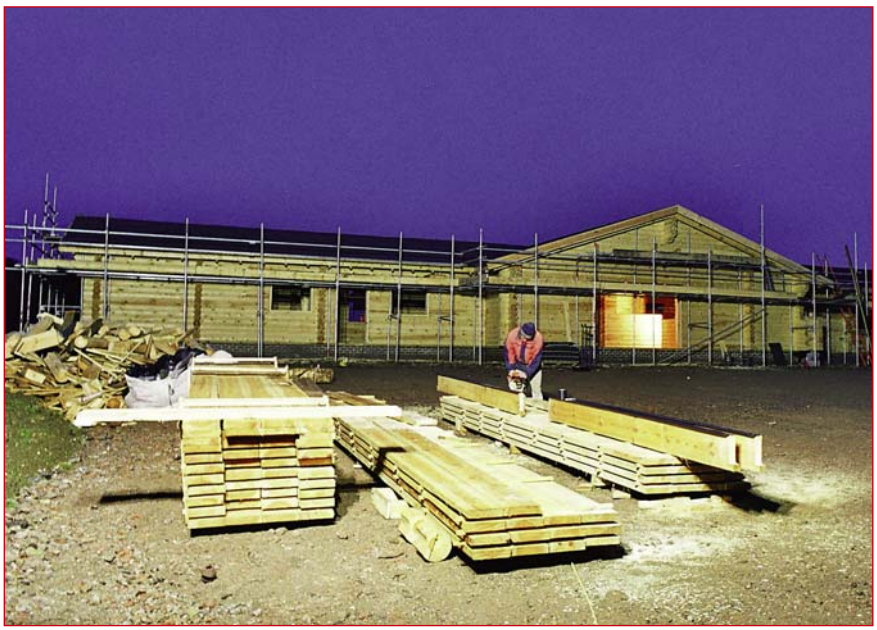
VFR coatings have had numerous tests on many surfaces and over coated surfaces to meet BS476 Part 6 (1989) Spread of Flame and BS476 Part 7 (1989) Spread of Flame, and **this coating system now complies with Classification B/S1/d0 of European Standard EN13501 Parts EN13823 (2002) single burn test (SBI) and EN11925-2 (2002) ignitability**.

ORDERING REFERENCES:

PATENTED

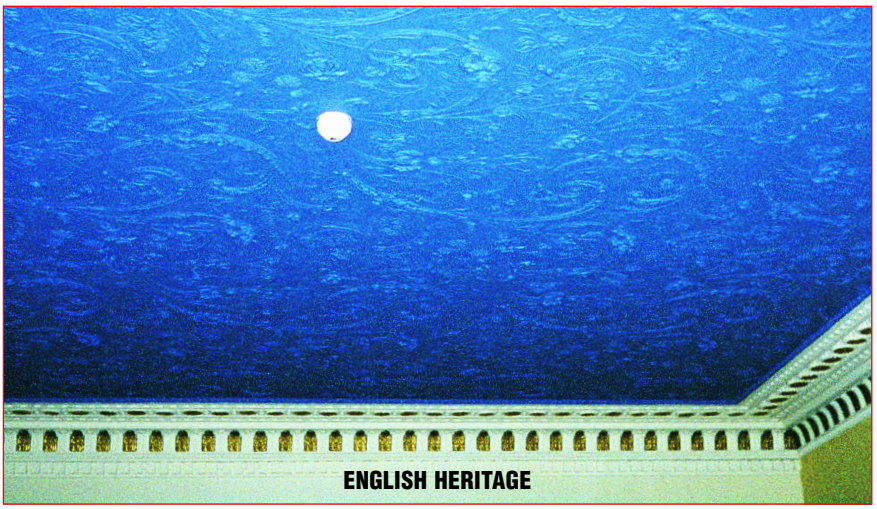
Ref	Coating	Based on	Int/Ext	Finishes
VFR	Clear protection	Water	Both	M
VFR/W	White protection	Water	Both	M
VFR/P	Primer	Water	Both	–
VFR/TC	Clear top coat	Water	Internal	M, SG
HW03UV	Clear top coat	White Spirit	Both	M, SG
HW04UC	White undercoat	Water	Internal	M
HW04UC	White undercoat	White Spirit	Internal	M
HW04TC	White top coat	Water	Internal	SG, G
HW04TC	White top coat	White Spirit	Internal	G
HW05	Clear hard-wearing top coat	White Spirit	Internal	M, SG, G
HW/OPAQUE	White top coat	White Spirit	External	M, SG
AEC	White acrylic top coat	Water	Internal	SG

Finishes: M=matt, SG=semi-gloss, G=gloss)



ENVIROGRAF® PRODUCT 105

FIRE-RESISTANT SMOOTH FINISH FOR UPGRADING 9mm - 12½mm PLASTERBOARD AND LATH-AND-PLASTER CEILINGS TO ONE HOUR OF FIRE PROTECTION



ENGLISH HERITAGE

DESCRIPTION

A white or coloured aqueous dispersion coating, offering protection to plasterboard and lath-and-plaster ceilings of various thicknesses. It develops a microporous intumescent layer with a smooth decorative finish. When attacked by fire, the intumescent material protects the coated area's integrity and insulation for a period in excess of one hour. Envirograf® Product 92 (ES/AEC acrylic emulsion coating) can be applied over the smooth coating.

USE

Apply to 9mm or 12½mm thick plasterboard or lath-and-plaster ceilings in two coats at 8m² per litre per coat, which upgrades the substrates to give fire protection in excess of 60 minutes . For a smooth finish, apply by brush, roller, or spray. For a stippled finish, apply with a short-pile roller. For textured finish, see Envirograf® Product 96. This product can be painted over with any external emulsion or undercoat and gloss paint.

PERFORMANCE

This product underwent a fire resistance test in accordance with BS476 Parts 20, 22, and 23 (1987), applied to plaster-coated 9mm thick plasterboard and nailed to a timber-stud partition. The treated partition system achieved a fire resistance (insulation and integrity) of 71 minutes. The product also underwent a fire resistance test in accordance with BS476 Part 21 (1987), applied to 12½mm thick plasterboard beneath a loaded timber floor. The timber floor system achieved a fire resistance of 61 minutes (insulation, integrity, and load-bearing capacity). Also tested to BS476 Part 21 load-bearing lath-and-plaster ceiling for 60 minutes (insulation, integrity, and load-bearing capacity).

ORDERING REFERENCES:

PATENTED

EP/CP	**Smooth Coating for 9mm and 12½mm Plasterboard**
AEC	**Acrylic Emulsion Coating (semi-gloss top coat ONLY)**