

Georgian House, London, W1K 7BY

Chimney Survey Report.



FLUES
CHIMNEYS
FLEXIBLE LINERS
REFRACTORY LINERS
CHIMNEY TOP FANS
INLINE FANS
SPECIAL FABRICATIONS



DESIGN FABRICATE DISTRIBUTE INSTALL



Date: 31-09-2017.

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^{*}Drawings attached showing flue routes.

^{*}Appendices attached providing technical information and data relating to recommended products and equipment.

^{*}All AutoCAD drawings, CCTV footage and report information is supplied on an electronic storage device to be delivered with hard copies of the written report.



Scope:

On week one we attended site to carry out internal measurements and prepared for drawing up of elevations in the rooms that contain relevant flues and fireplaces.

On week two we carried out break-ins in the loft space (fourth floor), to access flue routes at high level. We also opened relevant fireplaces where these were blocked off. Once opened we carried out power sweeping of the flue routes to clear obstructions and prepare the flues for CCTV surveys. We also needed to carry out break-ins lower down in the flue routes to clear blockages.

We then introduced CCTV camera equipment from the high-level openings to assess and record the condition of the chimney flues inside. We also lowered radio detection devices into each flue-way to locate and map the routes from high level to fireplace or point of origin.

Finally, we collated and interpreted all of the data gathered to produce a written report, along with CAD drawings and CCTV footage.

Our priority was to concentrate on the various flues that are for reinstatement as fireplace flue routes. Additionally, there are a further number of flues that required information on routing, size and whether they are clear throughout the building as these flues may be used for running services. Roof access was not available at the time of survey so all information was gathered from within the building.

Summary of Findings:

The majority of the flue runs were lined with 230mm internal diameter clay pipe linings. These clay lined flues were mostly deep set into the brickwork (circa 200mm – 300mm deep behind the outer face of the stack wall). Many flues had blockages internally and these were located and cleared where they were accessible. Some flues come to a full stop at high level and are terminated (i.e. leading to no obvious useful point of origin). Some flue routes are unlined and appear to be part of the original construction.



These in general are serving blocked-up or unused minor fireplaces on the upper floors or loft space.

*NB: Please note that some chimney pots – such as on stacks 7 etc. – were out of reach due to lack of roof access at the time of survey. Some possible flue routes were not accessible from within the loft space because they were situated behind accessible flues or were outside the roof line. Additionally, in some cases there were more pots indicated on drawings than there were flues located within the building. Some pots are redundant and do not serve viable flues.

Flue Routes & Composition:

Stack 1:

Stack 1 contains multiple clay flue liners. We could not drill pilot holes to locate the flue voids at high level because this stack is sitting on a party wall and there was a risk of damage to flues belonging to next door's demise. Our method was to run a radio detection device upwards from fireplace openings or break-ins just above fire place positions within the building. In this way we were able to trace the relevant flue routes upwards through the building. (See drawing GSQ-01230617-001).

<u>S1 Ground Floor Fireplace (S1-GF-FP):</u> This fireplace has a 230mm internal diameter clay liner which runs unobstructed up to termination point. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. FAMILY ENTRANCE HALL G.12.

S1 Second Floor Fireplace (S1-F2-FP): This fireplace has a 230mm internal diameter clay liner which runs unobstructed up to termination point. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. BATHROOM 2 L2.10.



Stack 2:

We did not carry out any break-ins on stack 2 because it is situated on a party wall containing flues belonging to next door's demise and contains no flues earmarked for investigation on the briefing documents we were supplied.

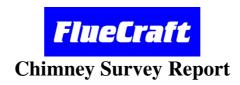
Stack 3:

Stack 3 contains four clay liners in a wall backing on to the lift shaft in the center of the building.

- <u>S3 Break-in No. 1</u> (north side). Contains a 230mm internal diameter clay liner. This runs down to the ground floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.
- <u>S3 Break-in No. 2</u> (north side). Contains a 230mm internal diameter clay liner. This runs down to the ground floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.
- <u>S3 Break-in No. 3</u> (north side). Contains a 230mm internal diameter clay liner. This runs down to a blockage on the third floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.
- <u>S3 Break-in No. 4</u> (north side). Contains a 230mm internal diameter clay liner. This runs down to an alcove on the third floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

Stack 4:

Stack 4 contains flues on both the north and south sides. (see drawings GSQ-01230617-004N-003N and GSQ-01230617-004S). We were able to locate a total of six flues within the building.



<u>S4 Break-in No. 1</u> (south side). This contains a 230mm internal diameter clay liner flue which runs down to a bricked-in fireplace on the second floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S4 Break-in No. 2</u> (south side). This contains an unlined brick flue leading to a bricked-up fireplace on the fourth floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

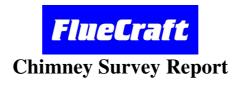
<u>S4 Break-in No. 3</u> (south side). This contains a 230mm internal diameter clay liner flue which leads down to a bricked-in fireplace on the third floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S4 Break-in No. 4</u> (north side). This contains a 230mm internal diameter clay liner which runs unobstructed down to a defunct fireplace recess on the ground floor. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. FORMAL DINING ROOM G.16.

<u>S4 Break-in No. 5</u> (north side). This contains a 230mm internal diameter clay liner which runs down unobstructed to an existing fireplace on the first floor. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. FORMAL SITTING ROOM L1.14.

<u>S4 Break-in No. 6</u> (north side). This contains a 230mm internal diameter clay liner which runs unobstructed down to the basement and passes the ground floor fireplace on the right-hand side. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

*NB: There is also a bricked-in fireplace on the third floor (S4 north side), situated on an angled section of wall in the corner to the left of the located flues.



Stack 5:

Stack 5 contains three flue routes; (see drawing GSQ-01230617-005). These flue routes are numbered at the break-in holes on the stack face on the fourth floor.

<u>S5 Break-in No. 1</u> contains a 230mm internal diameter clay liner. This runs down to what used to be a fireplace position on the ground floor in the room to the left of the entrance hall. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. FORMAL SITTING ROOM G.19.

<u>S5 Break-in No. 2</u> contains a clay liner measuring 230mm in diameter internally. This runs down unobstructed to a bricked-in fireplace on the first floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S5 Break-in No. 3</u> contains a 230mm internal diameter clay liner. This runs down unobstructed to a fireplace in the basement, via a route to the left of the old fireplace position on the ground floor which is served by S5 Break-in No. 1. *NB: This flue provides a possible joining route for the proposed new fireplace on the second floor, front of house room, (corner of Green St. and Dunraven St. BEDROOM 2 L2.01.)

This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

Stack 6:

Stack 6 is split into two adjacent chimney stacks facing Dunraven St. It contains potentially nine flue routes; (see drawing GSQ-01230617-006). We could not access all of these routes because we had no roof access at the time of survey and some routes are located behind the routes which were accessible from the inside of the building on the fourth floor. The flue routes that we could access are numbered at the break-in holes on the stack face on the fourth floor.



<u>S6 Break-in No. 1</u> has an unlined flue-way which serves a small bricked-up fireplace on the fourth floor. This flue dives back towards Dunraven St. as it ascends upwards, making it unlikely that there could be room for another flue behind it as indicated by the supplied briefing drawing showing the configuration of chimney pots on the stack. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

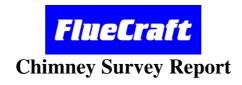
<u>S6 Break-in No. 2</u> contains an unlined rectangular brick flue which is blocked / scrubbed at floor level on the fourth floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S6 Break-in No. 3</u> contains a 230mm internal diameter clay liner which runs down to floor level on the third floor where it is scrubbed. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S6 Break-in No. 4</u> contains an unlined brick flue-way which is scrubbed at fourth floor level. This flue is not one of the fireplaces highlighted for reuse on the supplied brief drawings.

<u>S6 Break-in No. 5</u> contains a 230mm internal diameter clay liner. This runs unobstructed down to the first floor where it diverts from the Dunraven St. wall inwards into an internal wall to the position of a bricked-up fireplace. This flue route, as far as we could ascertain, is the only viable flue remaining in stack 6. *NB: This flue provides a possible joining route for the proposed new fireplace on the second floor, front of house room, (corner of Green St. and Dunraven St. BEDROOM 2 L2.01.) This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S6 Break-in No. 6</u> contains a 230mm internal diameter clay liner which is scrubbed at fourth floor level. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.



Stack 7:

Stack 7 contains eight flue routes; (see drawing GSQ-01230617-007). These flue routes are numbered at the break-in holes on the stack face on the fourth floor.

<u>S7 Break-in No. 1</u> gives access to a bricked-up fireplace on the fourth floor. The flue is unlined and appears to be part of the original fabric of the building. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S7 Break-in No. 2</u> contains a clay lined flue route measuring 230mm diameter internally. The flue route runs down to floor level on the first floor where there is a full blockage. We could not open and clear this blockage as it is situated just under floor level. The flue route is most likely to have served a fireplace or other type of origin within the basement as it appears to run adjacent to the right-hand side of the existing open fireplace on the ground floor in the room to the right-hand side of the entrance hall. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S7 Break-in No. 3</u> contains a clay lined flue route measuring 230mm diameter internally. The flue runs down to the fireplace on the ground floor in the room to the right of the entrance hall. There is a full blockage at ceiling height on the first floor – we could not break-in to clear this blockage because it is positioned behind the ornate ceiling coving. We did break-in and cleared a blockage just above floor level on the first floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings. It may be used to reinstate fireplace ANTE ROOM G.04 however.

<u>S7 Break-in No. 4</u> contains a clay lined flue measuring 230mm diameter internally. This flue runs down unobstructed to high level on the ground floor room, (to the right of the entrance hall). At this point it is scrubbed out where an alcove has been constructed to the left of the existing fireplace. We assume that this flue-way may have run down to a point of origin in the basement.



This flue could be used to provide a route for the proposed new fireplace in the MASTER BEDROOM SUITE L2.02. (see drawing GSQ-01230617-E).

<u>S7 Break-in No. 5</u> contains a clay lined flue measuring 230mm internal diameter. This runs down unobstructed to the existing entrance hall fireplace on the ground floor. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. ENTRANCE HALL G.03.

<u>S7 Break-in No. 8</u> contains a clay lined flue with a 230mm internal diameter. This runs down to a bricked-up fireplace on the first floor. We carried out further break-ins on the second and third floors to clear blockages. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. DRAWING ROOM L1.02.

<u>S7 Break-in No. 6</u> contains a clay lined flue with a 230mm internal diameter. This flue runs down to ceiling height on the third floor where it is completely blocked. We do not think that it ran much lower than this as flue No's 8 and 7 taper in to come close together at floor level on the third floor thus leaving no room for 6 to continue. Flue 6 may have been abandoned at the point of blockage - or it may have served a fireplace on the opposite (north) side of the stack on the third floor, (however this is unlikely). This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S7 Break-in No. 7</u> contains a 230mm internal diameter clay liner. This runs down to ceiling height on the second floor. At this point it stops completely and we could not pick it up again lower down using pilot holes to locate a void. *NB: This flue provides a possible joining route for the proposed new fireplace on the second floor, front of house room, (corner of Green St. and Dunraven St. BEDROOM 2 L2.01.)

This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.



Stack 8:

Stack 8 contains multiple flues which were not shown as earmarked for reuse on our briefing documents. However, we did locate and open several of these on our last day on site. Please see drawing GSQ-01230617-008 for assumed routes.

CCTV Results:

CCTV survey footage showed that the flues earmarked for re-use to serve fireplaces are all in relatively good condition; however, there are breaks in some flues and the jointing between clay pipes is often unreliable. These flues will need to be re-lined if they are to be brought back into use for fireplaces.

Stack 1:

<u>S1 Break-in No. S1-GF-FP</u>. CCTV footage shows that the clay liner is in relatively fair condition but with some poor joints. This runs down to the ground floor to an existing blocked fireplace opening. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. G.12.

<u>S1 Break-in No. S1-F2-FP</u>. CCTV footage shows that the clay liner is in relatively fair condition but with some poor joints. This runs down to the second floor to an existing blocked fireplace opening. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. L2.10.

Stack 2:

We did not carry out any break-ins on stack 2 because it is situated on a party wall and contains no flues earmarked for investigation on the briefing documents we were supplied.



Stack 3:

- <u>S3 Break-in No. 1</u> (north side). CCTV footage shows that the clay liner is in relatively fair condition but with some poor joints. This runs down to the ground floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.
- <u>S3 Break-in No. 2</u> (north side). CCTV footage shows that the clay liner is in relatively fair condition but with some poor joints. This runs down to the ground floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.
- <u>S3 Break-in No. 3</u> (north side). CCTV footage shows that the clay liner is in relatively fair condition but with some poor joints. This runs down to a blockage on the third floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.
- <u>S3 Break-in No. 4</u> (north side). CCTV footage shows that the clay liner is in relatively fair condition but with some poor joints. This runs down to an alcove on the third floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

Stack 4:

- <u>S4 Break-in No. 1</u> (south side). CCTV footage shows that the clay liner is in relatively fair condition but with some poor joints. This runs down to a bricked-in fireplace position on the second floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.
- <u>S4 Break-in No. 2</u> (south side). CCTV footage shows that the clay liner is in relatively fair condition but with some poor joints. This runs down to a bricked-in fireplace position directly below the access hole on the fourth floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.



<u>S4 Break-in No. 3</u> (south side). CCTV footage shows that the clay liner is in relatively fair condition but with some poor joints. This runs down to a bricked-in fireplace position on the third floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S4 Break-in No. 4</u> (north side). CCTV footage shows that the clay liner is in relatively fair condition but with some poor joints. This runs down to a bricked-in fireplace position on the ground floor. This flue should be relined with Furanflex liner if the fireplace is to be brought back into use as an open gas fire. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. G.16.

<u>S4 Break-in No. 5</u> (north side). CCTV footage shows that the clay liner is in relatively fair condition but with some poor joints. This runs down to an open fireplace position on the first floor. This flue should be re-lined with Furanflex liner if the fireplace is to be brought back into use as an open gas fire. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. L1.14.

<u>S4 Break-in No. 6</u> (north side). CCTV footage shows that the clay liner is in relatively fair condition but with some poor joints. This runs down to a bricked-in fireplace position in the basement. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S4 Break-in No. 7</u> (north side). CCTV footage shows that the clay liner is in relatively fair condition but with some poor joints. This runs down to a bricked-in fireplace position just below the access hole position on the fourth floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.



Stack 5:

<u>S5 Break-in No. 1</u> CCTV footage shows that the clay liner is in poor condition with multiple breaks and some poor joints. This runs down to a bricked-in fireplace position on the ground floor in the room to the left of the entrance hall, (front of house). This flue should be re-lined with Furanflex liner if the fireplace is to be brought back into use as an open gas fire. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. G.19.

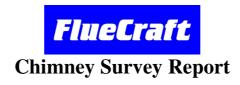
<u>S5 Break-in No. 2</u> CCTV footage shows that the clay liner is in good condition but with some poor joints. This runs down to a bricked-in fireplace position on the first floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

S5 Break-in No. 3 CCTV footage shows that the clay liner is in good condition but with some poor joints. This runs down to a bricked-in fireplace position in the basement. If this flue is to be re-used as a possible gas fireplace flue it should be re-lined with Furanflex liner. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings. *NB: This flue provides a possible joining route for the proposed new fireplace on the second floor, front of house room, (corner of Green St. and Dunraven St. BEDROOM 2 L2.01.)

Stack 6:

<u>S6 Break-in No. 3</u> CCTV footage shows that the clay liner is in poor condition with multiple breaks and some poor joints. Full blockage at third floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S6 Break-in No. 5</u> CCTV footage shows that the clay liner is in poor condition with multiple breaks and some poor joints. Bricked-in fireplace at first floor. If this flue is to be re-used as a possible gas fireplace flue it should be re-lined with Furanflex liner.



*NB: This flue provides a possible joining route for the proposed new fireplace on the second floor, front of house room, (corner of Green St. and Dunraven St. BEDROOM 2 L2.01.)

This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

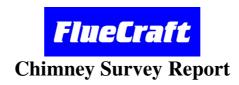
<u>S6 Break-in No. 6</u> CCTV footage shows that the clay liner is in poor condition with multiple breaks and some poor joints. Full blockage at third floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

Stack 7:

<u>S7 Break-in No. 1</u> gives access to a bricked-up fireplace on the fourth floor. The flue is unlined and appears to be part of the original fabric of the building. CCTV confirms this finding. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S7 Break-in No. 2</u> CCTV footage shows that the clay liner is in good condition but with some poor joints. The flue route runs down to floor level on the first floor where there is a full blockage. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S7 Break-in No. 3</u> CCTV footage shows that the clay liner is in good condition but with some poor joints. The flue route runs down to a blockage at ceiling level on the first floor. Below this blockage the liner runs down to an open fireplace on the ground floor front of house, (room on the right of entrance hall). This flue should be re-lined with Furanflex liner if the fireplace is to be brought back into use as an open gas fire. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings. It may be used to reinstate fireplace ANTE ROOM G.04 however.



<u>S7 Break-in No. 4</u> CCTV footage shows that the clay liner is in good condition but with some poor joints. The flue route runs down to a blockage above an alcove on the ground floor front of house, (room on the right of entrance hall). This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings. This flue could be used to provide a route for the proposed new fireplace in the MASTER BEDROOM SUITE L2.02. (see drawing GSQ-01230617-E).

<u>S7 Break-in No. 5</u> CCTV footage shows that the clay liner is in good condition but with some poor joints. The flue route runs down to the open fireplace on the righthand side of the entrance hall. This flue should be relined with Furanflex liner if the fireplace is to be brought back into use as an open gas fire. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. G.03.

<u>S7 Break-in No. 6</u> CCTV footage shows that the clay liner is in good condition but with some poor joints. The flue route runs down to a full blockage at ceiling height on the third floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S7 Break-in No. 7</u> CCTV footage shows that the clay liner is in good condition but with some poor joints. The flue route runs down to a full blockage at ceiling height on the second floor. This flue is not one of the fireplaces highlighted for re-use on the supplied brief drawings.

<u>S7 Break-in No. 8</u> CCTV footage shows that the clay liner is in good condition but with some poor joints. The flue route runs down to a bricked-in fireplace on the first floor. This flue should be re-lined with Furanflex liner if the fireplace is to be brought back into use as an open gas fire. This flue is one of the fireplaces highlighted for re-use on the supplied brief drawings. L1.02.



Conclusions & Recommendations:

We were provided with a set of PDF drawings highlighting the proposed fireplaces for reinstatement and our brief was to find viable flue routes for these and to locate other obsolete flue routes where possible that may be useful for other services.

We found viable flue routes for all earmarked fires except two, (see related drawings attached).

1). BEDROOM 2 L2.01

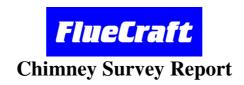
This proposed fireplace location is on the second floor in a room at the front of the building adjacent to Green St. and Dunraven St.

Currently there is no fireplace present in this position and no flue-way to serve the area. However, it may be feasible to build a fireplace with a stainless-steel gather and to run a twin wall insulated stainless-steel flue from the steel gather (above the fireplace). This flue could rise up to ceiling level and then turn through 90 degrees to run horizontally to make a connection with either the existing and redundant S5 H3 flue (north), or S6 H5 flue (east) or S7 H7 flue (west). (See drawings GSQ-01230617-E & GSQ-01230617-007).

2). MASTER BEDROOM L2.02.

This proposed fireplace location is on the second floor in a room at the front middle of the building facing Green St.

Currently there is no fireplace present in this position. There is a redundant and viable flue on the wall of Stack 7 just behind this position; (S7 H4). It is feasible to build a fireplace with a stainless-steel gather and to run a twin wall insulated stainless-steel flue from the steel gather (above the fireplace). This flue could rise up to ceiling level and then turn through 90 degrees to make a connection with the existing and redundant S7 H4 flue. (See drawings GSQ-01230617-E & GSQ-01230617-007).



*Note: When building a new fireplace enclosure, it is crucially important to design and construct it using suitable fireproof materials such as blockwork or Supalux / Monolux; (fire rated plasterboard is not acceptable).

There should be no combustible material present within the enclosure chamber itself and the flue must have 50mm clearance all round from any combustibles. Provision will need to be made for access hatches to view flue joints and supports as well as ventilation of the chamber.

Please see drawing notes on drawing GSQ-01230617-E). Contact FlueCraft for further advice if required at design stage.

Chimney Liners:

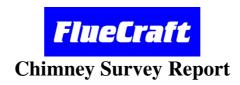
The flues that have been earmarked for re-use to serve fireplaces are all 230mm internal diameter clay pipe lined. As stated above there are areas of damage in some of these and many of the joints are old and suspect.

This presents the possibility of potential leakage of combustion gasses into the building. For that reason, we would strongly recommend that these flues are re-lined with a sealed liner to prevent any possibility of leakage.

There are two suitable types of internal liner that we would recommend for this purpose.

- 1. Stainless steel flexible liner.
- 2. Furanflex composite liner.

We noted, (when carrying out test pulls) that for most of the 230mm internal diameter clay lined flues, the largest stainless steel flexible flue liner that could fit was a 180mm / 7" diameter liner. In a few cases it may be possible to fit a 200mm / 8" diameter liner but this proved very difficult to pull through even on short and relatively straight flue runs – it is not a viable option for the longer flue runs with bends or offsets.



When calculating the working parameters for a fireplace all of the dimensional variables will have an effect on the performance of the fire; i.e. length of flue, diameter of the flue, number and angle of bends, fireplace opening size and so on.

It is important to maintain as much of the existing cross-sectional area as possible when re-lining so that the fireplace opening will not spill or have to be very small.

For this and other reasons, we would recommend the installation of Furanflex composite liner. If all of the fires are to be gas fueled then the black Furanflex liner would be ideal.

The advantages of Furanflex liner are many, but most importantly it can allow the fireplace designer to maintain the maximum amount of cross sectional area within the existing clay lined flue, thus providing the optimal internal flue dimensions to maximize the size of fireplace opening.

A Furanflex liner in this situation would provide a fully sealed flue with circa 215mm internal diameter. Please see the appendices for further detail and technical information relating to Furanflex liner.

Chimney Fans & Controls:

In most, if not all cases, it is highly likely that a chimney fan will be required to ensure that the gas fire appliance can be used at its optimal working settings without the risk of spillage (of combustion gasses), into the room.

We would recommend Exodraft chimney fans and controls which are designed for this purpose. These work very well with gas fire appliances operating a GV60 built-in control unit, (see drawing GSQ-01230617-W for wiring and connection details). Please see the appendices for further detail and technical information relating to Exodraft chimney fans and controls.



It is crucial to employ a competent flue and chimney specialist to advise on fireplace appliances, flue type, calculations for optimum fireplace working performance, installation sequence, interface with other utilities and appropriate equipment.

It is also recommended that experienced and competent installers are employed; preferably to install liners, fire appliances, fireplace gathers, chimney fans and controls so that there are no interface or handover gaps in the process.

Report end.

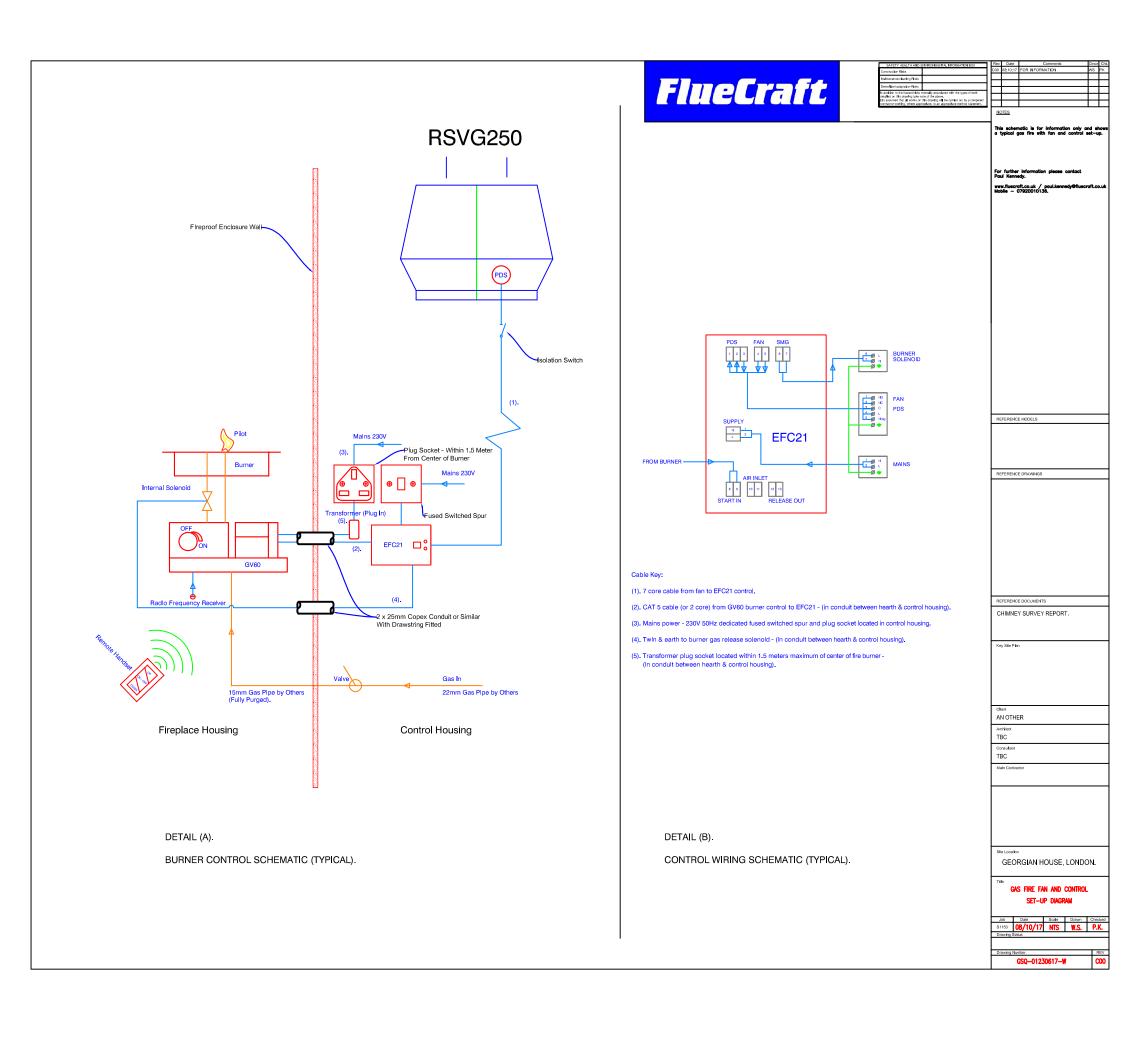
For further information or clarification, please contact...

Paul Kennedy, Managing Director, FlueCraft Ltd.

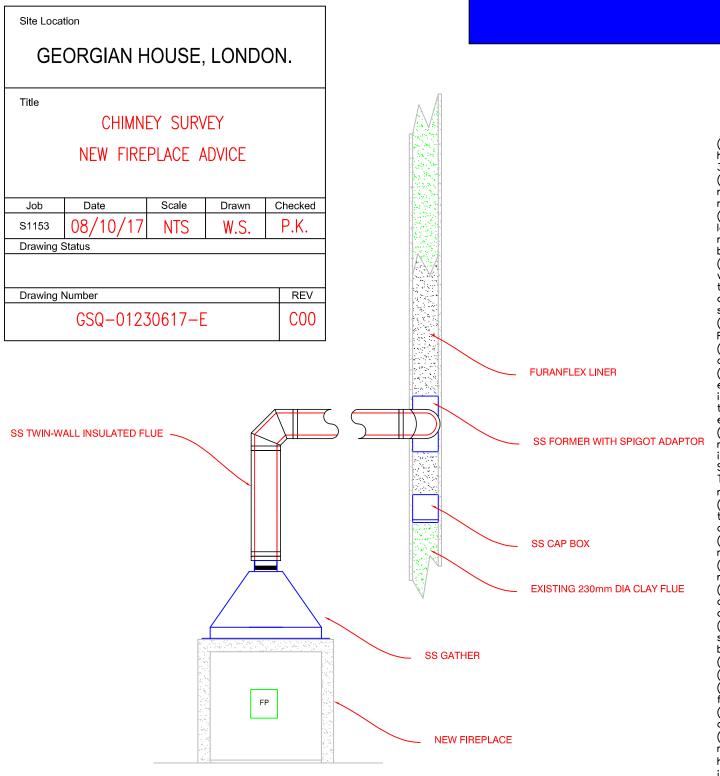
Mobile: 07920010136.

Email: paul.kennedy@fluecraft.co.uk

Web: www.fluecraft.co.uk







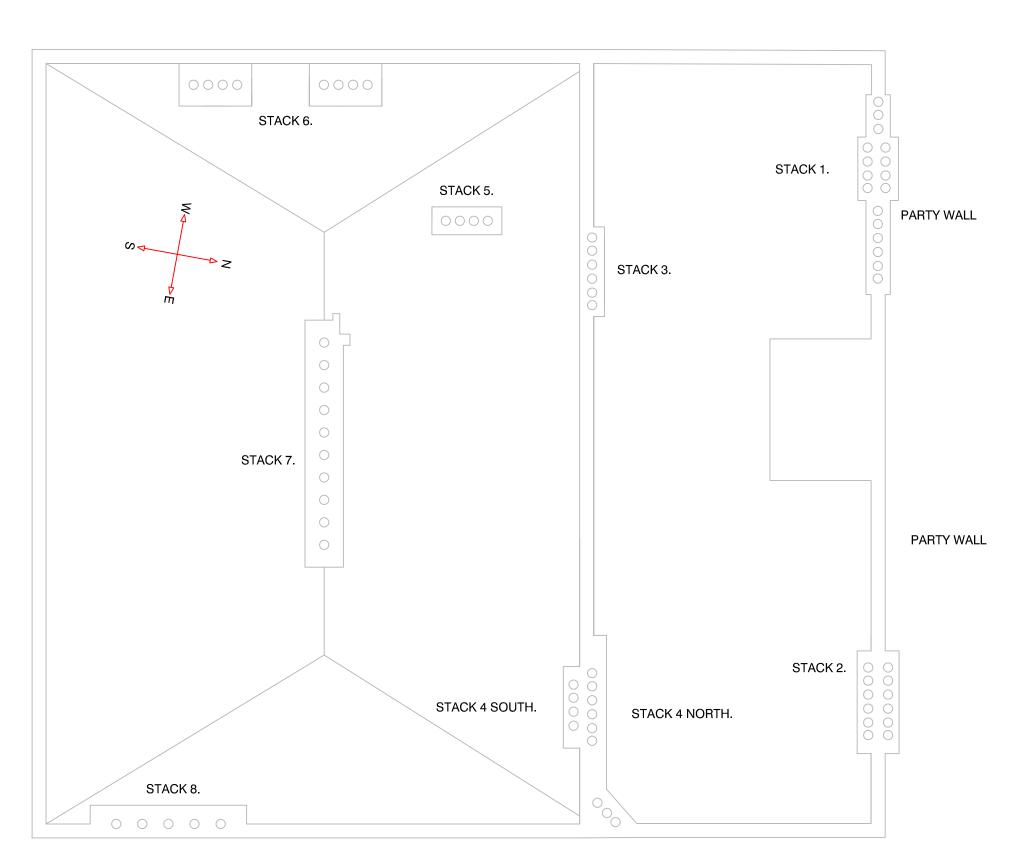
- (a). All voids containing concealed flues should have at least one inspection hatch measuring 300mm square minimum.
- (b). No flue joint within the void should be more than 1.5m away from the edge of the nearest inspection hatch.
- (c). Where possible inspection hatches should be located at changes of direction. Where this is not possible then bends should be viewable from both directions.
- (d). Access points are necessary to facilitate visual checks as follows;
- to ensure all joints appear correctly assembled and appropriately sealed; the flue is adequately supported throughout its length. (Source: Approved Document J The Building
- Regulations 2000, Updated 01/10/10),
- (e). All combustible material to be a minimum of 50mm away from all flue components.
- (f). Ventilation is required into the fireplace enclosure. The vents need to allow for the intake of fresh air from the room space into the enclosure to avoid excessive heat inside the enclosure.
- (g). Use non combustible and heat-resistant material for the fireplace enclosure, blockwork is best but fireproof materials such as Supalux or Monolux are the minimum requirement. The non-combustible
- material (supalux / monolux) to be minimum 15mm thick.
- (h). A minimum clearance of 500mm between the top edge of the fireplace opening and any combustible material is required.
- (i). The flue is supported using uni-channel and mechanical fixings.
- (j). In order to sign off on completion, all Gas Safe requirements must first be satisfied.
- (k). Gas feed to underneath of hearth is by others. Gas shut off valve to be fitted in control housing.
- (I). Mains supply dedicated fused / switched spur and plug socket are by others and must be adjacent to fireplace opening.
- (m). Flue is twin-wall, stainless steel
- (nominal 200mmi.d / 250mm o.d).

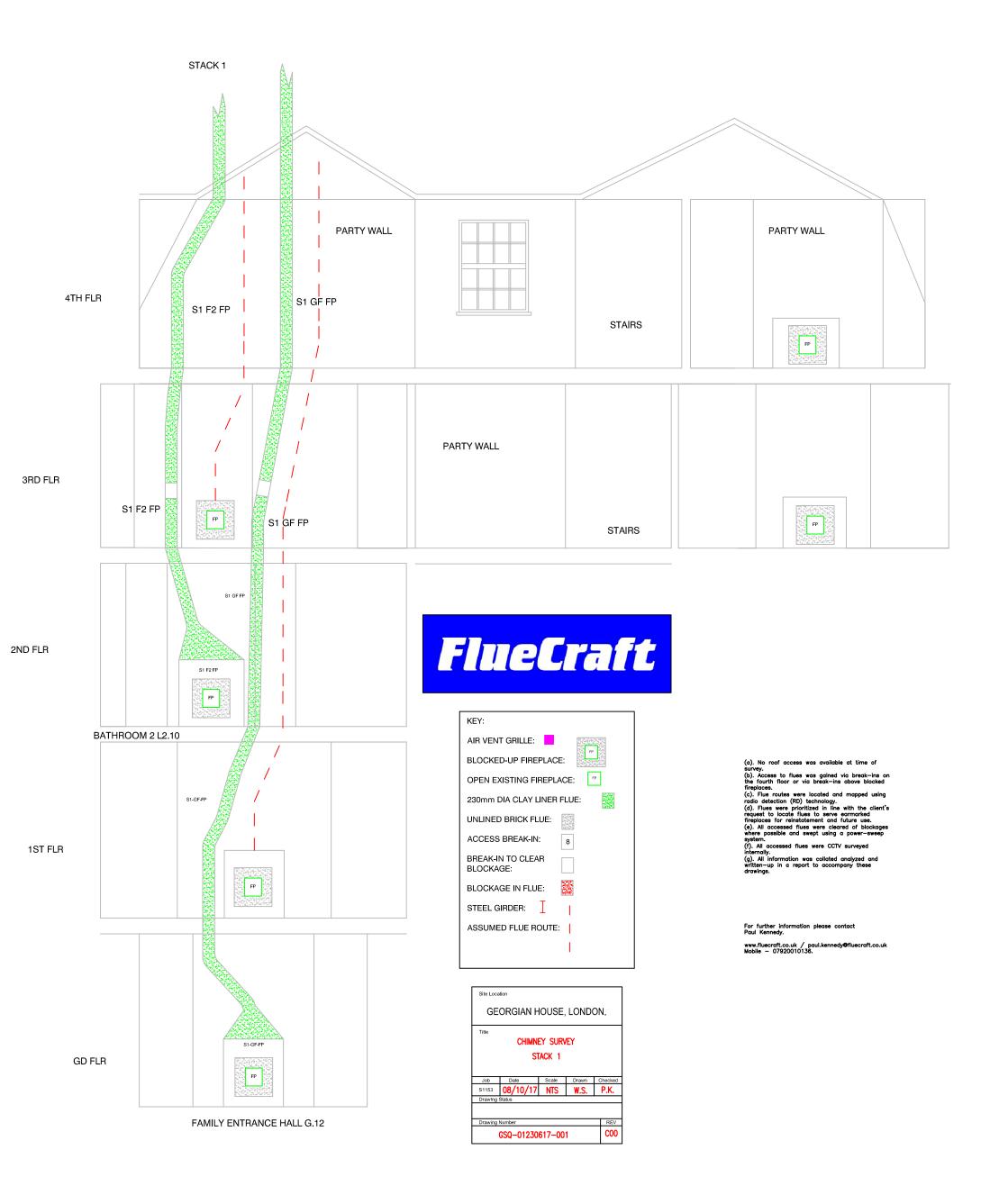
 (n). Full access must be available to install flue safely before outer enclosure is fitted. (o). Fireplace hearth and construction is by
- others. (p). Sufficient must be supplied from the outside via a horizontal grille / duct, (100cm2 free area
- (q). No combustible materials are to be present within the fireplace enclosure.

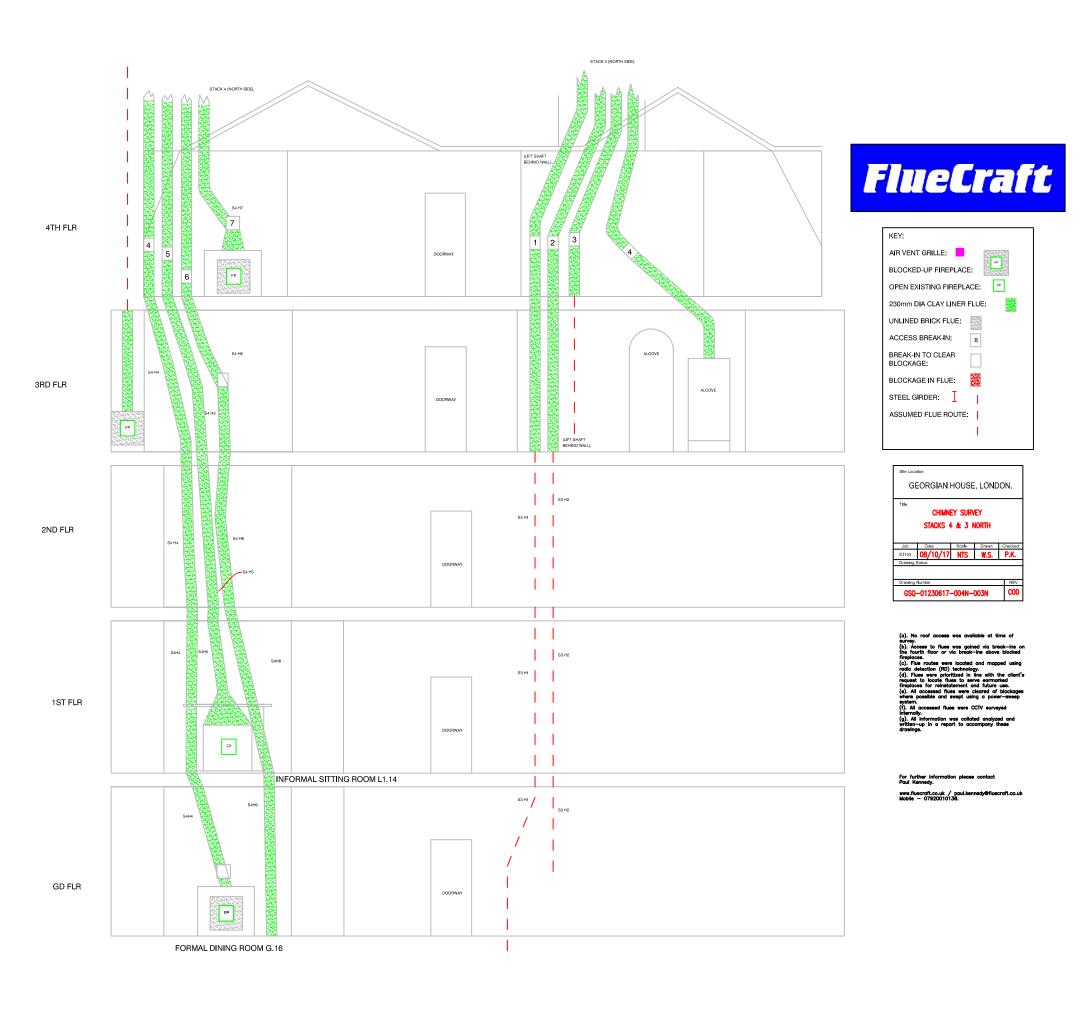














STACK 4 - (SOUTH SIDE). 4TH FLR 2 3 S4 H1 S4 H3

3RD FLR

2ND FLR

KEY: AIR VENT GRILLE: **BLOCKED-UP FIREPLACE: OPEN EXISTING FIREPLACE:** 230mm DIA CLAY LINER FLUE: UNLINED BRICK FLUE: ACCESS BREAK-IN: 8 BREAK-IN TO CLEAR BLOCKAGE: BLOCKAGE IN FLUE: STEEL GIRDER: ASSUMED FLUE ROUTE:

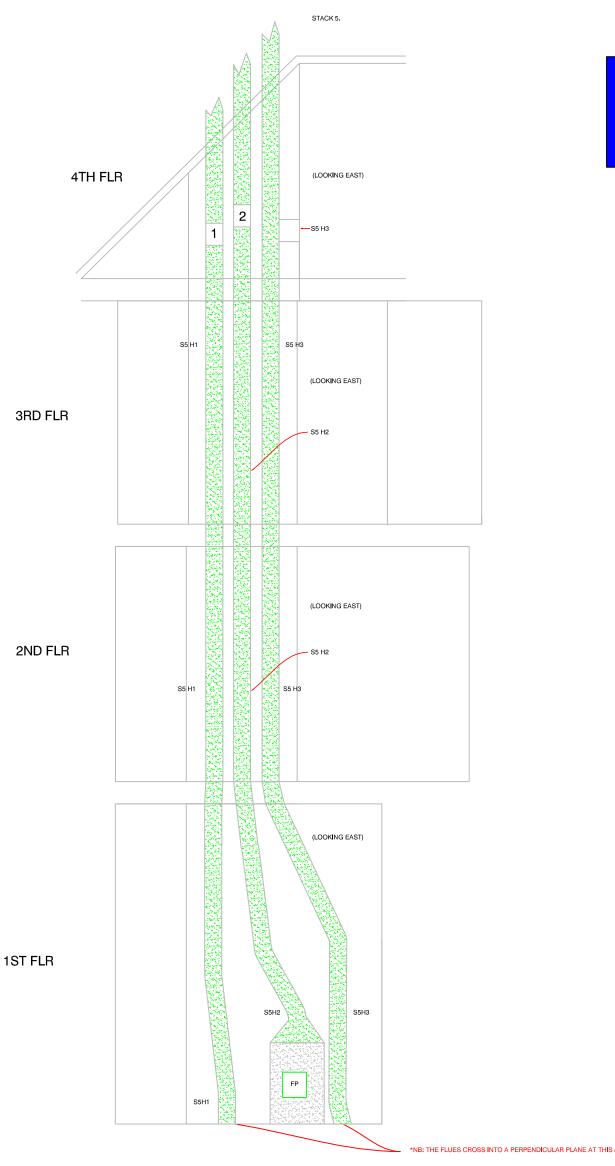
Site Location							
GEORGIAN HOUSE, LONDON.							
Title							
CHIMNEY SURVEY							
	STACKS 4 & 3 NORTH						
Job	Date	Scale	Drawn	Checked			
S1153	08/10/17	NTS	W.S.	P.K.			
Drawing	Status						
Drawing	Number			REV			
GSQ-01230617-004N-003N							

- (a). No roof access was available at time of survey.
- (b). Access to flues was gained via break-ins on the fourth floor or via break-ins above blocked
- (c). Flue routes were located and mapped using radio detection (RD) technology.

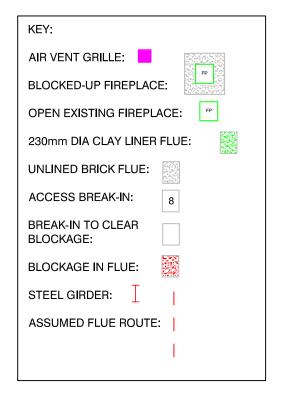
 (d). Flues were prioritized in line with the client's request to locate flues to serve earmarked fireplaces for reinstatement and future use. (e). All accessed flues were cleared of blockages where possible and swept using a power-sweep
- (f). All accessed flues were CCTV surveyed
- (g). All information was collated analyzed and written—up in a report to accompany these drawings.

For further information please contact Paul Kennedy.

www.fluecraft.co.uk / paul.kennedy@fluecraft.co.uk Mobile - 07920010136.







Site Loca	ation						
GEORGIAN HOUSE, LONDON.							
Title	0						
	CHIMNEY SURVEY STACK 5						
	0						
				T			
Job	Date	Scale	Drawn	Checked			
Job S1153	Date 08/10/17	Scale NTS	Drawn W.S.	Checked P.K.			
	08/10/17						
S1153	08/10/17						
S1153 Drawing	08/10/17 Status			P.K.			
S1153	08/10/17 Status	NTS	W.S.				

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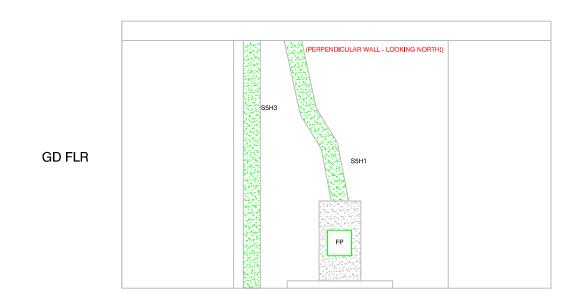
 (e). All accessed flues were cleared of blockages where possible and swept using a power—sweep system.
- where possible and stage and system.

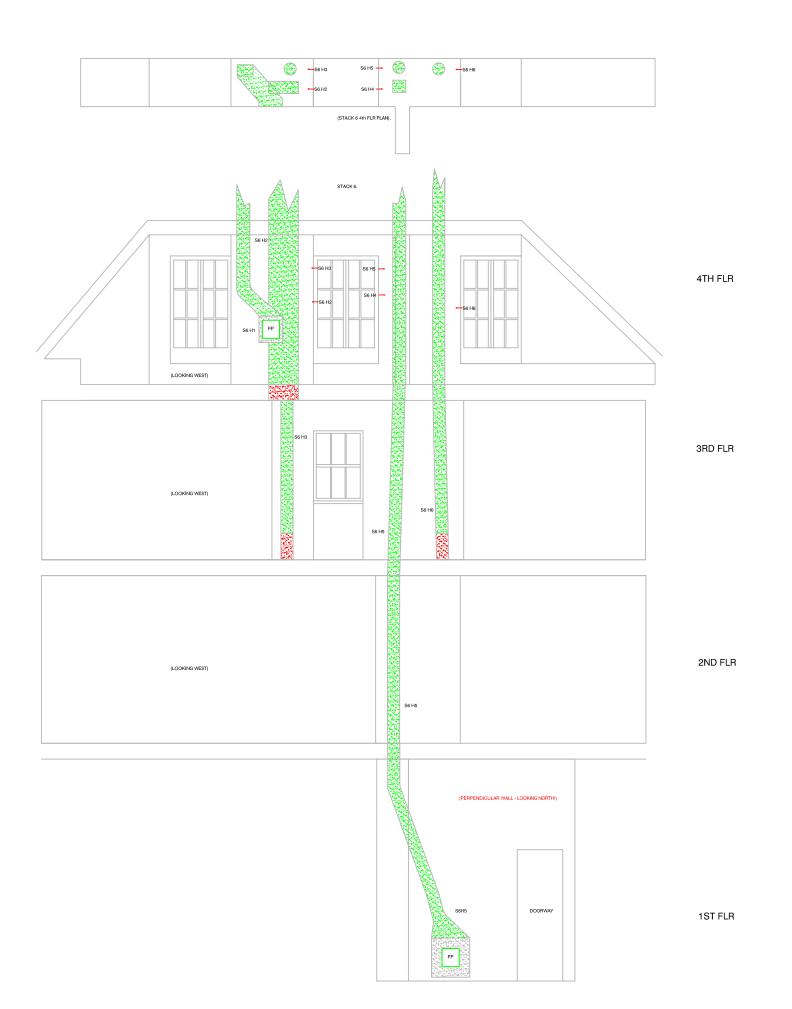
 (f). All accessed flues were CCTV surveyed internally.

 (g). All information was collated analyzed and written—up in a report to accompany these drawings.

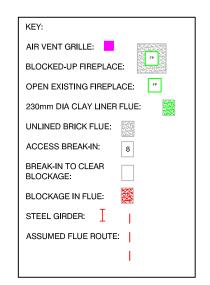
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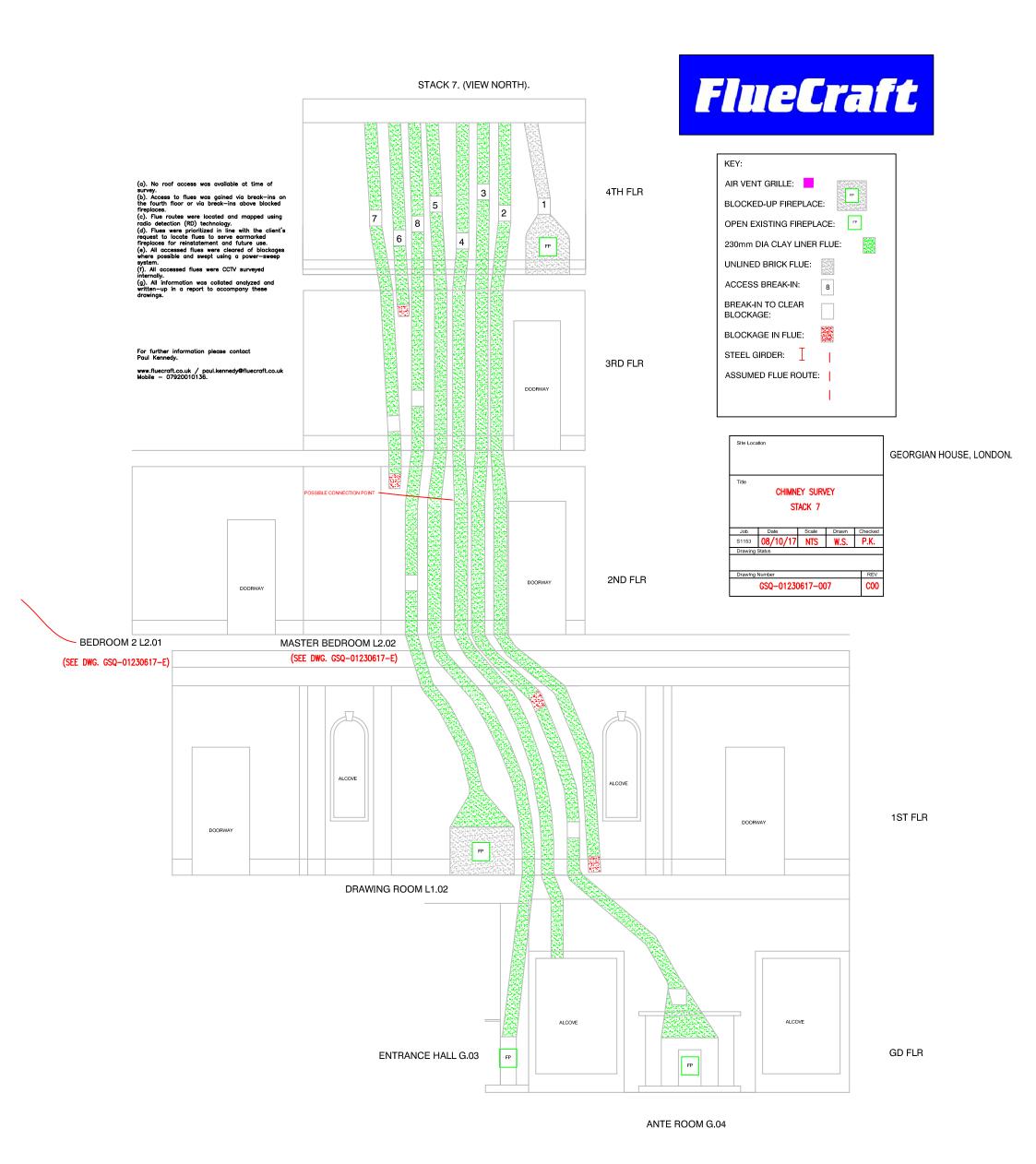
(e). All accessed flues were cleared of blockage where possible and swept using a power-sweep system.

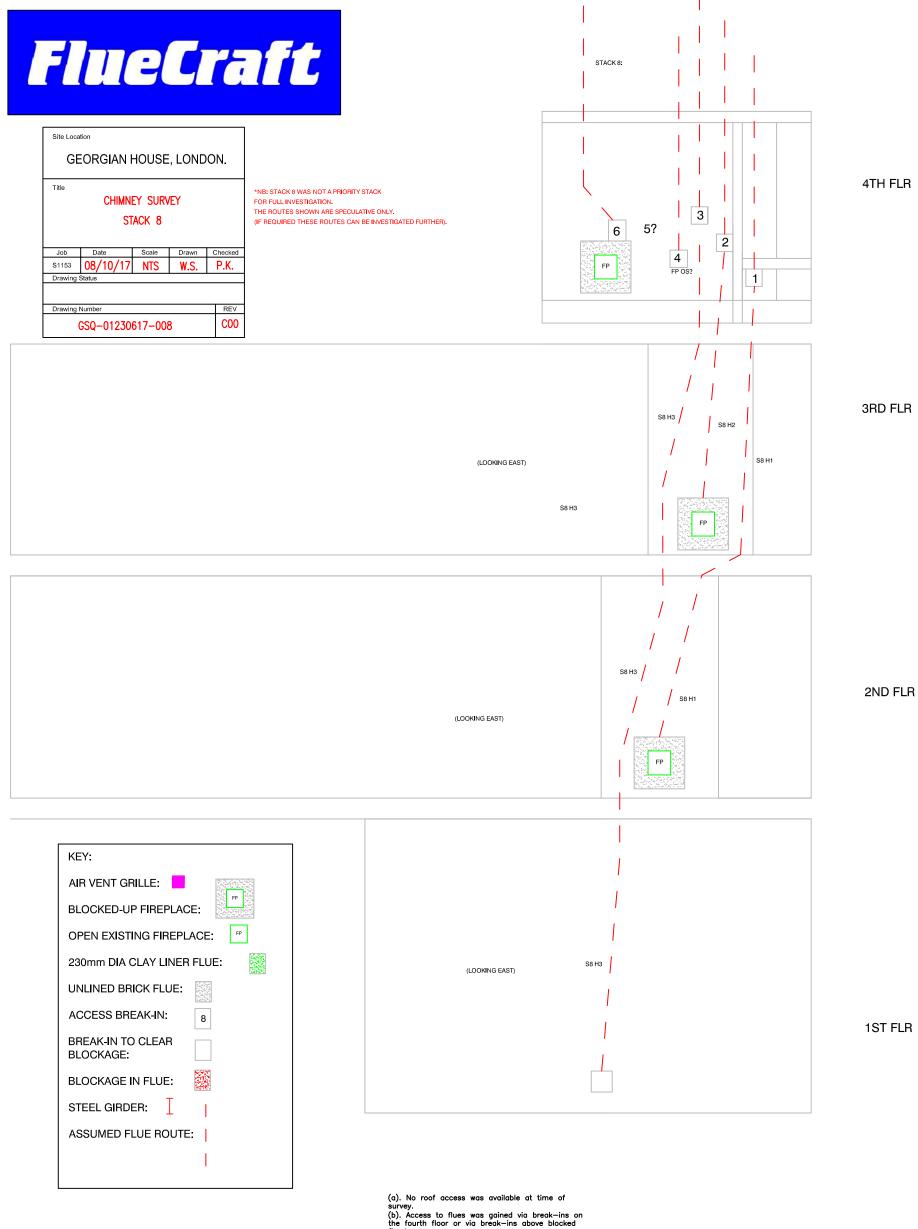
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