Grounds of Appeal

On behalf of

Mr & Mrs Stuart Lindsay

Replacement PVCu Sliding Sash windows at 18 Hopetoun Terrace, Gullane

Planning ref – 13/00124/P
Date of refusal – 19 April 2013

Property History & Introduction

The following statement is to be read in conjunction with our appeal against the ***refusal of replacement windows at 18 Hopetoun Terrace, Gullane.*** The proposals are to replace existing timber sash and case windows with new white PVCu Sliding Sash windows.

The planning department has rejected our application to replace the existing timber windows on the grounds that the proposed materials will adversely affect the integrity of the conservation area. The client's property is two-story terraced house located within the Gullane conservation area.

The property at present has timber sash and case windows installed. However years of patch-up repairs and upkeep have left the windows inefficient. They allow draughts to pass through the building, cause a vast amount of heat loss and also take away from the appearance of the property due to poor condition of the window frames.

Grounds of Appeal

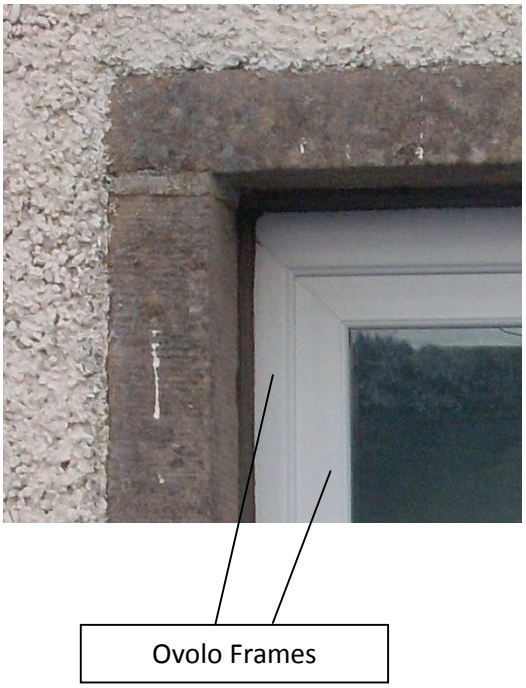
It has been brought to our attention that a number of properties in and around Hopetoun Terrace have had PVCu installed. Permission was also granted for PVCu at no. 12 in 2005. (*Please see enclosed photos of PVCu windows in the area).*

As a company, CR Smith has always been faced with difficulties in having PVCu windows accepted within conservation areas. We appreciate that as a window framing material, timber can have a certain presence and appeal if specified correctly. However, timber windows are much more expensive than PVCu options, are not draught proof and do not perform as well as PVCu under the current U-value or WER (Window Energy Ratings) system.

Mr & Mrs Lindsay's decision to choose PVCu was a holistic approach taking into account;

- Sustainability
- Current & future energy costs
- Desire to maintain a traditional appearance through split dimension
- Actual window performance – U Value
- Cost of ongoing maintenance & ease of cleaning

Much research and development has gone into our sash & case windows to ensure that the traditional look is retained while still being able to maintain an aesthetic balance across the property. To relate this more closely to our appeal, the replacement windows we used incorporate:



- Deep bottom rail
- Ovolo frame & sash
- Slim sight lines

We appreciate that there are various PVCu window designs that would be inappropriate for this property and may therefore have created a negative attitude towards PVCu. However, we believe that the frames we have chosen are suitable for this area.

Another positive aspect of PVCu is its contribution to sustainable development. The environment no longer has to deal with the effects of heavy metal (lead, barium, cadmium) which were once component factors in the production of PVCu. In our case this ceased in 2005. Our factory in Cowdenbeath has been recycling PVCu for the past 12 years, by sending all our PVCu off-cuts back to our supplier (*LB Plastics*) for recycling. In doing so, we are adhering to the voluntary European Vinyl 2010 Charter, and can ensure that disposal is carried out with total environmental efficiency. Furthermore, the traditional aluminium and steel reinforcement has now been almost completely replaced with recycled co-extruded cellular materials, made from our original waste.

Our virgin PVCu is as easily recycled since it is free from lead, cadmium and barium, all of which are hazardous to human health. In fact, PVCu was chosen as a material that could contribute to sustainable development in the 'passive house' concept*. Here it was used in a variety of applications such as roofing, covering sheets, insulating membranes, resilient flooring, gutters, windows and roller shutters, cables, pipes and greenhouses.

** The Passivhouse project is a by-product of the Passivhaus standard for energy efficiency in buildings, aka (**Passivhaus** in German)*

The replacement windows (if accepted) within the client's property will have a minimum life expectancy of 60 years maintenance free, as opposed to timber windows which would have to be sanded down and repainted every 3-5 years (approximate estimation). Timber is also more troublesome when it comes to recycling at end of use, especially when you consider that frames can be contaminated with a vast range of preservatives, fillers, cements, paints and solvents. Additionally, according to CIRIA, 62% of timber from demolition sources goes straight to landfill *(Taken from 'Window of Opportunity' report, published by WWF-UK)*.
We believe the proposed replacements are far superior to the previously existing units from a maintenance and energy consumption point of view. Of course, PVCu does not have the same qualities as timber with respect to CO_2 absorption, however the life span of these windows is such that they do not have to be maintained or recycled within short periods of time, unlike timber.

Advances in PVCu window construction have allowed CR Smith to be able to fabricate windows with a centre pane U-Value of 0.8W/m2. This will be essential to any zero or low carbon home and is another great example of progress made to the overall efficiency of PVCu as a material. I

have attached the LB Plastics 'Sheerframe' - *Guide to Sustainable Windows, Doors & Conservatories* - for your assessment, which states that:

- PVC frames can be easily collected and recycled. Both the end life and manufacturing process waste materials are routinely recycled to eradicate any unnecessary waste.
- The frame material is 100% recyclable.
- Average of 50 years or more durability over timber.
- PVC windows are amongst the most rigorously tested and approved of all construction products, unlike some self-governing approval schemes run by the timber industry. With reference to our products, we currently have certification from BBA, BSI and ISO 14001.
- Co-extruded weather-seals ensure maximum air and water tightness and prevent heat being lost easily through draughts. This is one of the most underrated measures of energy efficiency, but one of the most important to any developer.
- Aluminium reinforcement within the frames is insulated using thermoplastic compound, thus improving the thermal efficiency of the PVCu window further.
- In non-structural areas (*e.g. sash & case*) the reinforcement is made from 100%-recycled material. This also applies to the windows used in the client's property.
- LB Plastics 'Sheerframe' windows were the first UK extruded PVC windows to become heavy metal (lead-free), with the use of lead additives phased out as a precautionary measure and replaced with calcium organic stabilisers.

The proposed replacements are designed to be superior to the existing timber units in terms of their safety, security maintenance and energy consumption. Again, we would also ask that the Local Review Body take into account of the poor condition of the existing units and the effect on the building and its users.

Conclusion

We believe our replacements not only improve the general aesthetic of the building, but they are also an environmentally friendly option. As there are numerous examples of PVCu present in the area, it is clear that approval for these windows (which also match the existing styles) would be far from setting a precedent for the installation of PVCu in the street, and conservation area as a whole.

We do not believe that the refusal should be over-ruled on the basis that possibly illegal replacements already exist, but we do firmly believe that our PVCu units will not compromise

the character of the building in any way. Furthermore, the existing window units allow for an unacceptable level of draft and heat loss and have already begun to deteriorate.

Examples of PVCu in the area


GULLANE POST OFFICE

NOVEMBER 2005

The environmental window

A guide to sustainable windows, doors & conservatories

SHEERFRAME®

The sustainability challenge

"Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs."

The World Commission on Environment and Development (1987)

The materials and components we use to create our new buildings and refurbish existing ones are coming under the spotlight more than ever before as we strive towards a highly sustainable society.

The battle against climate change is constant and buildings are a major CO_2 contributor. Nationally in the UK, around 40% of all carbon emissions result from energy used to power our buildings and in London that figure is as high as 70%*.

To ensure our buildings are energy efficient in the long term and created using materials that have not cost the earth to produce, product selection and specification must take into account the whole life cycle and consider post-use disposal.

Unlike other materials used in window frames, PVC performs extremely well in terms of sustainability. PVC is extremely resource-efficient in its manufacture and in the case of Sheerframe, creates windows which offer excellent thermal performance over a long lifetime. In addition, when PVC frames are eventually replaced, they can be easily collected and recycled compared with other materials.

*According to the London Climate Change Agency June 2005.

Choosing what's best

The nature of the glass has an important bearing, especially the perimeter spacer bar, the presence or absence of gas, and the emissivity and clarity of the glass, and the effect all these points have on solar gain and heat retention.

Recycling waste materials without compromising the technical performance of the end product is also a valuable achievement. In the PVC industry, like other forward thinking industries such as glass and metals, both the end of life and manufacturing process waste materials are routinely recycled to eradicate any unnecessary waste.

Heat retention during the window's lifetime, combined with low toxicity materials in manufacture and the cleaning up of waste products without compromising performance is key to the 'environmental window'.

Sheerframe windows now lead the industry in combining an optimum arrangement of thermoplastics recyclate being used in a unique encapsulation process for reinforcement – Thermlock®. This delivers strength and additional insulation without corrupting performance.

The excellent performance of Sheerframe in-use is complemented by the PVC being organically stabilized.

The use of thermal reinforcement within the new British Standards for Extrusions, BS EN 12608, when combined with Class A wall thickness (2.8mm minimum) means the insulation thickness of thermoplastic, from inside to outside, is between 13mm and 16mm. Combining Class A with Thermlock® gives more than twice the insulation value from the thermoplastic.

Organic Stabilised
LEAD-FREE PROFILE

The benefits of PVC

PVC is very resource-efficient in its production and most importantly, throughout its long life span, a PVC frame will maximise the energy retention within a building. This is unlike low performing thermally inefficient metal windows or timber windows, which have traditionally been poor at keeping the weather out and the heat in. With 50 years or more durability and 100% recyclability, the PVC frame represents an energy store which can be retrieved and reprocessed at any time in the future.

Sheerframe windows are designed to deliver the highest performance in-use. A continuous development programme ensures that Sheerframe is always one step ahead of government legislation, beating the thermal performance requirements of Part L of the Building Regulations and Part J in Scotland.

PVC windows are amongst the most rigorously tested and approved of all construction products. Unlike some self-governing approval schemes run by the timber industry, the PVC sector believes in the values of independence and continuity of assessment carried out by the British Standards Institute (BSI) and the British Board of Agrément (BBA).

BS7412 (KM21785)

BS EN 1279 (KM24911)

BBA BRITISH BOARD OF AGREMENT CERTIFICATE NO. 88/2010 SHEERFRAME

BS7950/7413 (KM33522)

BS EN 12608 (KM12877)

UKAS QUALITY MANAGEMENT

BS EN ISO 9001 2000 FM 01727

PAS 23 KM57120

PAS 24 KM57121

BS7950/7412 (KM33521)

Organic Stabilised LEAD-FREE PROFILE

This informaton booklet is produced on recycled paper.

Material matters

The raw materials that are used to produce Sheerframe windows are carefully selected to ensure any risk to humans or the environment – whether perceived or actual – is kept to an absolute minimum.

Sheerframe windows were amongst the first PVC windows to become lead-free, with the use of lead additives phased out as a precautionary measure and replaced with calcium organic stabilisers. It is steps like this that ensure the health of the people that manufacture Sheerframe windows and Sheerframe customers can be assured of total safety.

What is PVC?

Polyvinyl chloride (PVC) is a major thermoplastic material used in a very wide variety of applications and products. The essential raw materials for PVC are derived from salt and oil. The electrolysis of salt water produces chlorine, which is combined with ethylene, obtained from oil, to form vinyl chloride monomer (VCM). Molecules of VCM are polymerised to form PVC resin, to which appropriate additives are incorporated to make a customised PVC compound.

PVC can be plasticised to make it flexible for use in flooring and vital medical products or rigid “PVC-U”, the U stands for "unplasticised" – which is used extensively in building applications including window frames.

PVC is used for hundreds of life saving and healthcare products every day – products used in surgery, pharmaceuticals, drug delivery and medical packaging, for example. It is also used to manufacture packaging for food and to make numerous components in the automotive industry – resource-efficient products which enable manufacturers to mass produce the things we demand in today’s world and improve our everyday lives.

Organic Stabilised
LEAD-FREE PROFILE

Recycling

With its manufacture process already extremely resource-efficient, PVC fits perfectly with the approach of reducing, reusing and recycling.

The Vinyl 2010 Voluntary Charter across Europe ensures that the production and disposal of PVC is carried out with total environmental responsibility.

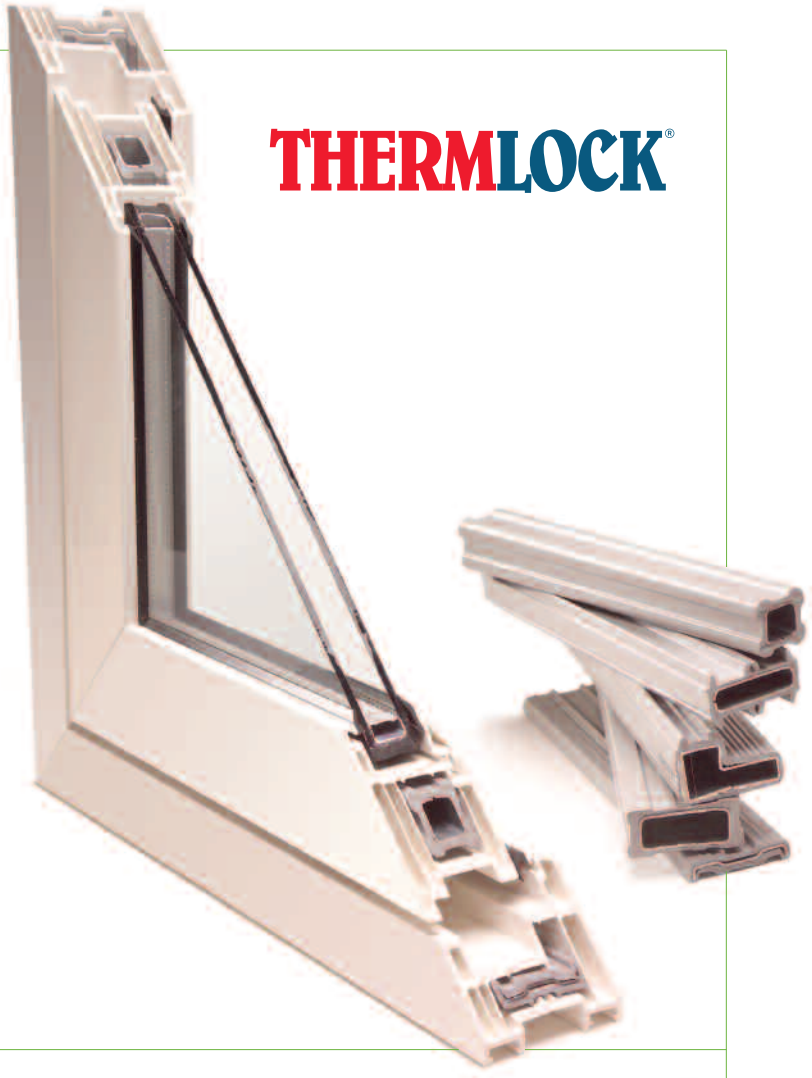
More specifically, the PVC window industry as a whole has made some major advances in recycling, setting and achieving targets that other industries would find it hard to achieve. It already recycles 50% of the collectable end of use frames and is working hard to keep increasing this figure.

On the contrary, recycling of end of use timber windows is more troublesome. Timber frames can be contaminated with a vast range of preservatives, fillers, cements, paints and solvents. Despite this pollution danger, 61%* of timber from demolition sources goes straight into landfill.

PVC is a much more straightforward process thanks to the presence of the chlorine molecule. This means PVC can be easily identified and separated from other plastics for recycling.

*According to CIRIA / Defra figures quoted in Window of opportunity published by WWF-UK.

Uniquely optimising energy efficiency



Throughout its life, Sheerframe PVC windows offer exceptional performance. The system's advanced design to BS EN 12608 ensures the highest quality windows through a series of design innovations.

Superior weathersealing

Co-extruded weatherseals ensure maximum air and water tightness and prevent heat being lost easily through draughts. This is one of the most underrated measures of energy efficiency, but one of the most important to any householder.

Multiple chamber profile

Sheerframe windows feature four or five chamber profiles, increasing the honeycomb effect of the frame to reduce thermal conductivity.

Thermlock® reinforcement

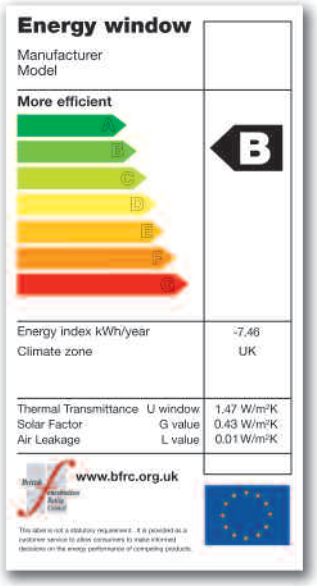
Steel and aluminium reinforcement often let down the overall thermal performance of the window. Sheerframe PVC windows are different. They feature Thermlock®, developed by encapsulating the metal in a specialist insulating thermoplastic compound.

Intelligent glass combination

The glass has a significant bearing on the window's performance. Sheerframe's design maximizes the role of the glass to take advantage of the positive contribution made by solar gain and heat retention.

Top energy ratings

This combination of design innovations delivers a window capable of achieving very good ratings under the BFRC window energy rating system. Depending on the configuration, Sheerframe windows can achieve B ratings – even when reinforced – representing an exceptional energy efficiency performance.



Organic Stabilised
LEAD-FREE PROFILE

Choice of styles

A wide range of Sheerframe window and door styles means homeowners, housebuilders and Registered Social Landlords can take advantage of PVC's sustainability benefits whatever the property.

The range reflects traditional British window and door styles and caters for almost any architectural design. Balance and modernity, as well as an acknowledgement to historical detail, provide original and elegant design solutions.

From pivot and fully reversible windows to tilt and turns and traditional casements, Sheerframe windows are designed for maximum visual appeal. But it is the Sheerframe vertically sliding sash window that really is in a league of its own.

The Sheerframe vertically sliding sash is widely acknowledged by architects, specifiers and planners as the most stylish design in its class. It is a truly unique window which dispels the myth that traditional timber sash windows cannot be replicated in PVC. Planners love it too, with the Sheerframe VS increasingly being approved for use within conservation areas across the UK and Ireland.

The advanced design of Sheerframe windows brings nothing but a positive aesthetic impact. White PVC is the most popular choice, but Sheerframe windows also come in a wide variety of colours including woodgrain finishes which perfectly replicate the look of different timber grainings.

SHEERFRAME®

L.B. Plastics Ltd,

Firs Works, Nether Heage,

Derby, DE56 2JJ.

Tel: 01773 852311 Fax: 01773 857080

Email: sheerframe@lbplastics.co.uk

Website: www.sheerframe.co.uk

Organic Stabilised LEAD-FREE PROFILE

This informaton booklet is produced on recycled paper.

Making the grade with Sheerframe

SHEERFRAME®

A technically challenging replacement window project on the Grade II listed buildings of Hearsall Community Primary School, Coventry. A compromise between the requirements of the local conservation officers, to maintain the period features of the building, and the wants of the teachers and pupils in terms of low maintenance, ease of use and thermal efficiency, had to be met. The solution – Sheerframe vertically sliding sash windows.

CASE STUDY 15

Problem solving

Teachers and pupils had been struggling for some time with the timber sashes, which had become rotten, draughty and difficult to operate. They were looking for a solution that would mean the buildings were well ventilated in the summer months and warm in the winter, as well as being easy to operate by staff and easy to keep clean and maintain. The obvious choice for them was plastic framed, double-glazed, Sheerframe VSS.

However, local conservation officers were keen to replace like with like in order to preserve the period features of the building. But having seen how closely the Sheerframe VS matched the existing timber windows, and taken into account the needs of the teachers and pupils, Sheerframe PVC sash windows were specified.

Paying attention to detail

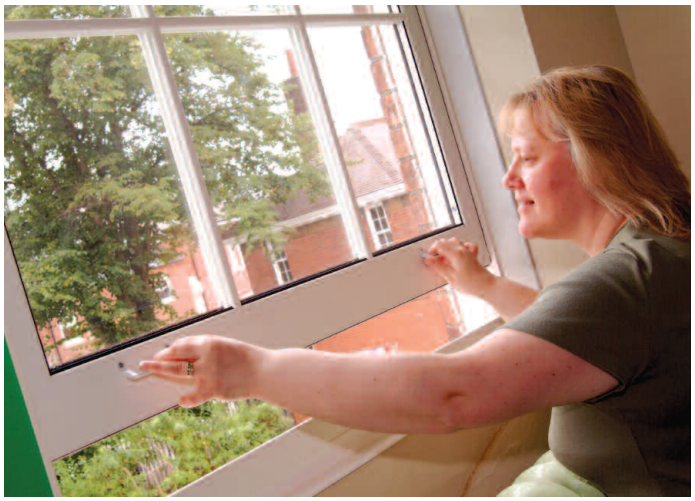
Each Sheerframe sash was modelled exactly on the existing timber windows and featured Georgian glazing bars, astragals and decorative horns in order to maintain the traditional character of the building. The goal was not to create a new look for the building, but to simply enhance the existing features and make it look much fresher, cleaner and brighter. Strict guidelines set out by the council conservation officers were meticulously followed, and the look of the finished window was no different to that of a freshly painted timber sash, but without any of the associated problems.

A technical challenge

The high ceilings in the turn of the century buildings meant that some of the window openings were very large. This posed a technical problem to the window makers who needed to create a window which was strong, secure and safe, but that also satisfied the conservation officers in terms of aesthetics. The versatility of the Sheerframe system and the technical ability of the design team, allowed two large sliding sash windows to be joined together with two large fixed lights to produce a window up to 2.4 metres by 2.8 metres in size.

As well as large single windows, there were also many different sizes of openings, including some large circular windows, throughout the school buildings. A careful and thorough audit needed to be done in order to ensure that the correct windows were manufactured and installed.

As easy as A, B, C



Due to the large size of some of the windows, operating the timber sashes had become difficult and sometimes even impossible for the teachers. Many of the existing timber windows had expanded in their frames and stuck, creating problems with ventilation. The smooth surface and qualities of PVC means that Sheerframe windows will not warp, twist, expand or contract with changes in moisture and will never become stuck. The design of the window opening mechanism means that even very large windows can be opened with ease.

Cleaning the windows has also become child's play now as the Sheerframe sash can be tilted in using a custom made tool and safely cleaned from inside the building.

Draughts from the old timber windows were a common complaint from staff and pupils alike, forcing the school to compensate by increasing the heating. Sheerframe sashes are thermally efficient and are fully compliant with Part L (England) and Part J (Scotland) of the Building Regulations.

Heating costs are now set to fall with the additional benefits of improved comfort levels.

Testimonial

"After all the problems we have had with our old windows I was very reluctant to replace them with timber. Although I did appreciate that the character of the building should be retained, I also wanted to ensure that the windows were easy to maintain, secure and most importantly worked! I was very impressed with the way the Sheerframe sashes looked, and now they are installed, the only difference I can see is that they look much better."

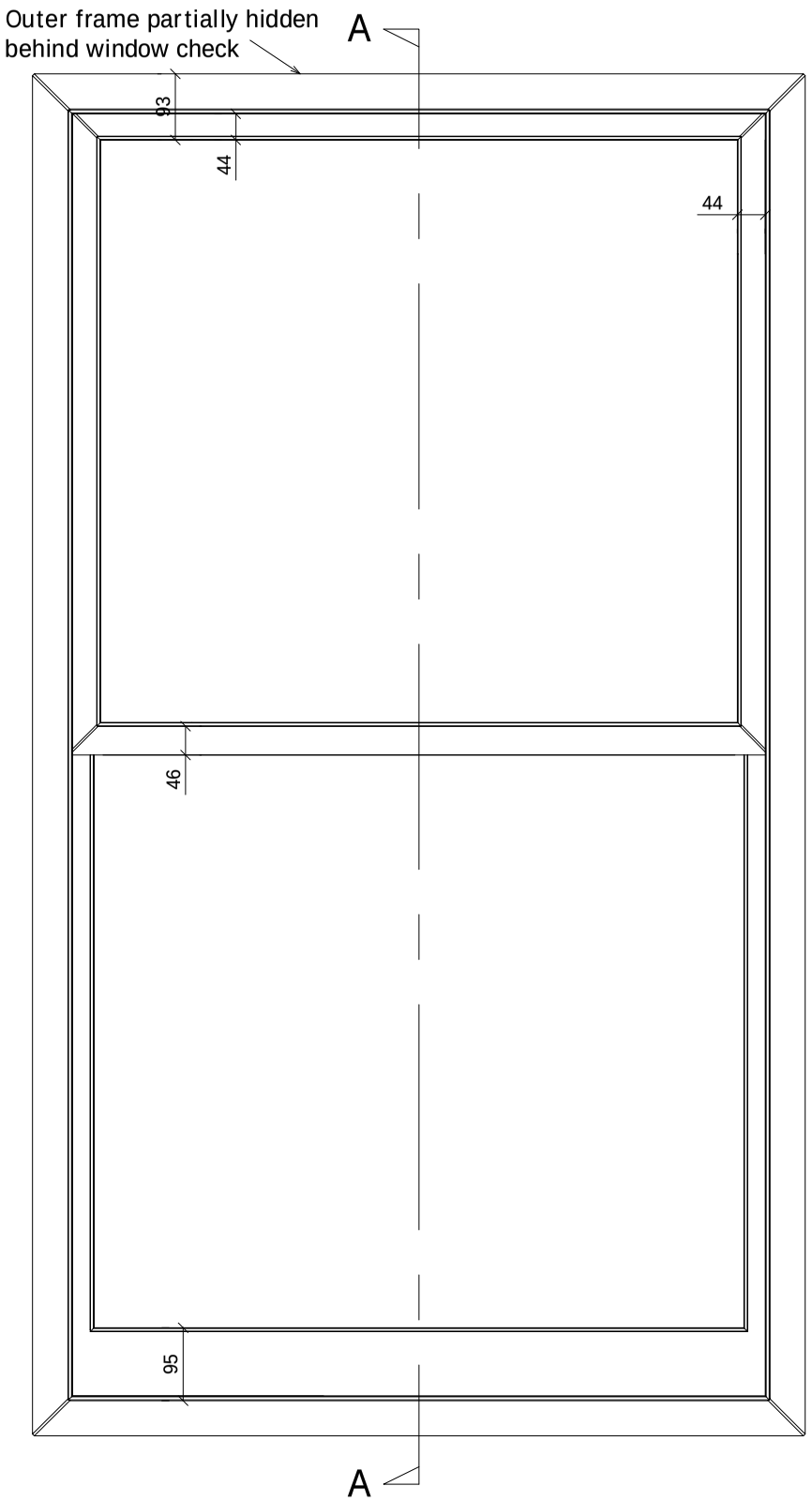
Ruth Winters, Head teacher, Hearsall Community Primary School.

Project details

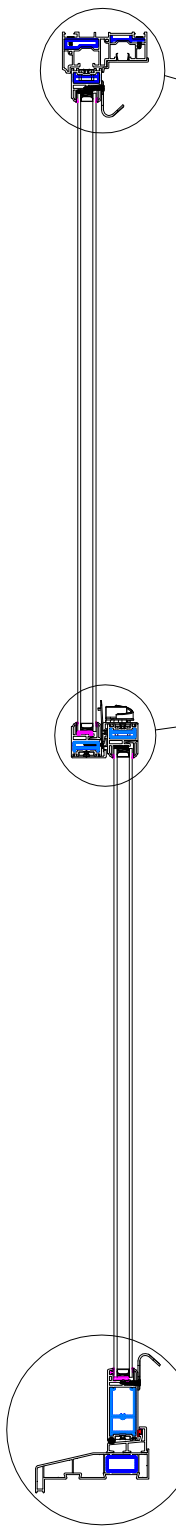
Project	Grade II listed buildings. Hearsall Community Primary School, Coventry.
Fabricator	Radway Door & Windows
Window System	Sheerframe VSS with Georgian glazing bars, astragals and decorative horns. Sheerframe system 7000 round casement windows.
Contract Value	£90,000
Specification	Low maintenance, thermally efficient windows in the style of the original.

SHEERFRAME®

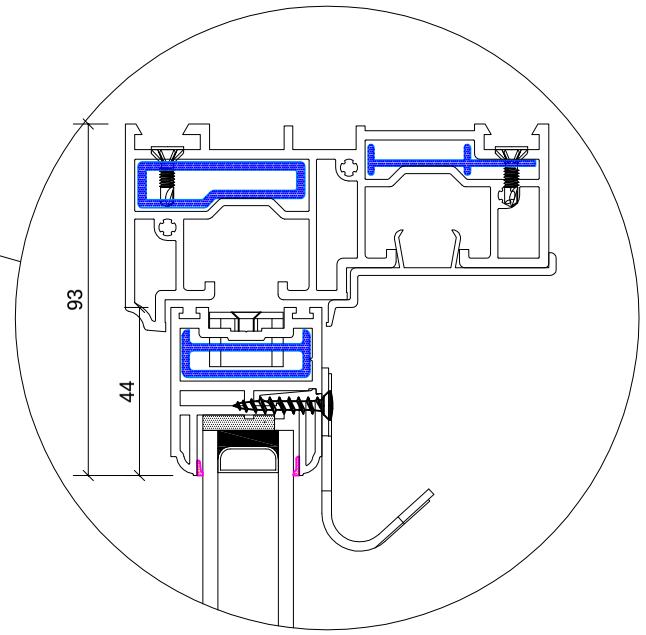
L.B. Plastics Ltd,
Firs Works, Nether Heage,
Derby, DE56 2JJ.
Tel: 01773 852311
Fax: 01773 857080
Email: sheerframe@lbplastics.co.uk
Website: www.sheerframe.co.uk



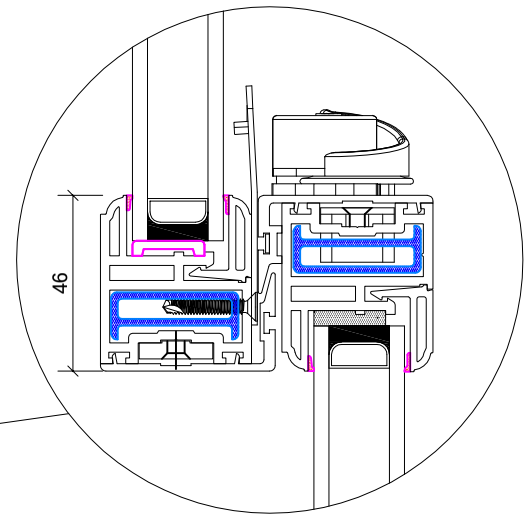
Sliding Sash Elevation
Scale 1:10



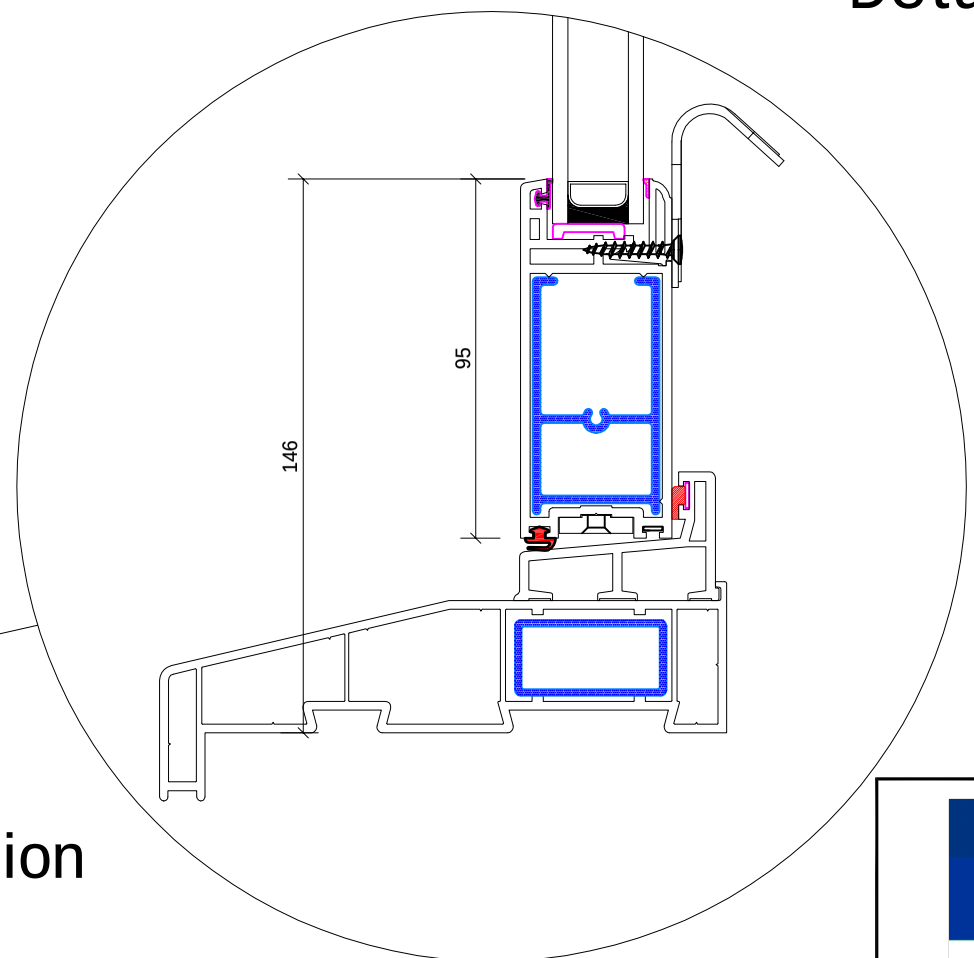
Sliding Sash Section
Scale 1:10



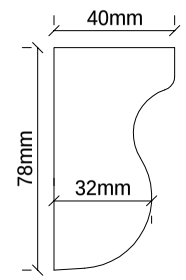
Detail B Scale 1:2



Detail C Scale 1:2



Detail D Scale 1:2



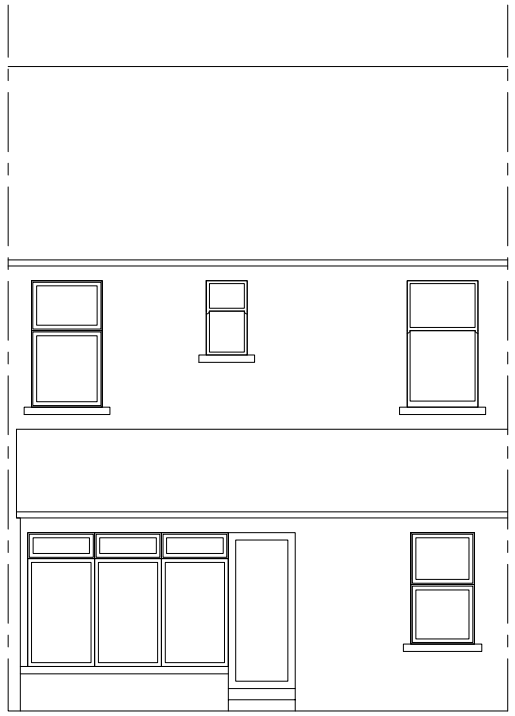
Decorative
Horn Detail

CR SMITH
home sweeter home

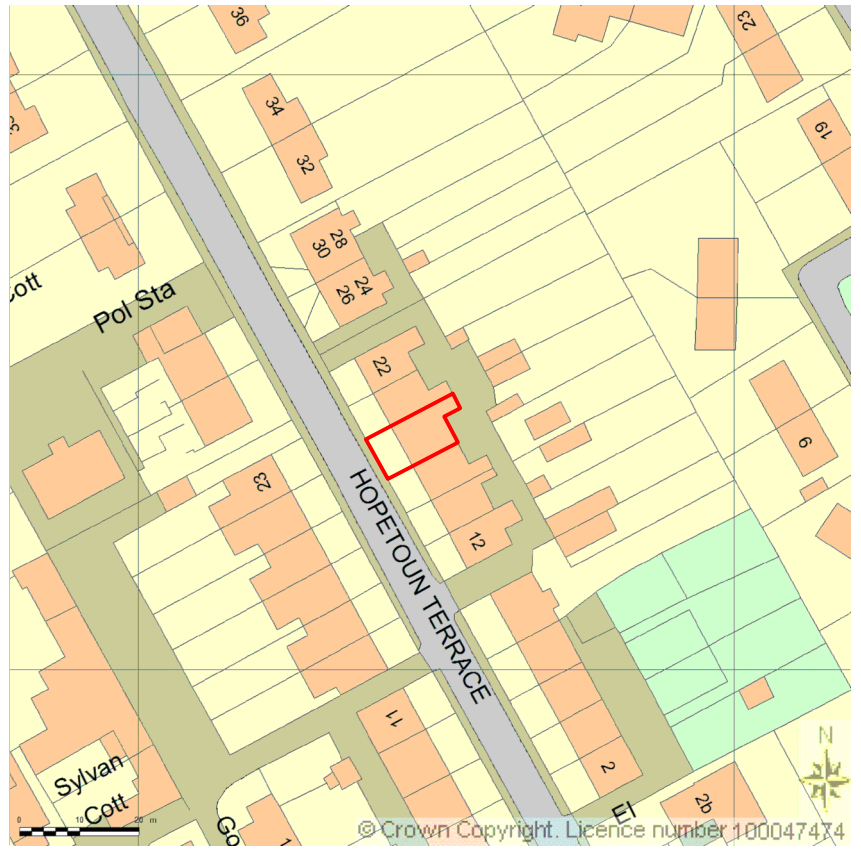
Lorimer Sliding Sash

DRAWING BY	John Cowan	DATE	September 2010

Existing Front Elevation Scale 1:100



Existing Rear Elevation Scale 1:100



LOCATION PLAN
SCALE 1:1250

Proposed Front Elevation Scale 1:100

Proposed Rear Elevation Scale 1:100

General Specification

All glazed units to be argon filled made from toughened safety glass to BS6262. Low E glazing fitted as standard. Window units consist of 2 x leafs of 4mm glass and 16mm airspace cavity. PVCu frame colour to be white. 8000mm² trickle ventilation to be fitted. Window u-value to be 1.6W/m²K. All windows to be Sliding Sash.

CR SMITH
home sweeter home

This drawing is for illustration purposes only therefore nothing contained herein shall constitute or form any part of any contract.

CLIENT Mr & Mrs Stuart Lindsay
18 Hopetoun Terrace
Gullane
East Lothian POSTCODE EH31 2DE
TELEPHONE 01620 843987

PROJECT SPECIFICATION
Proposed replacement windows

CONTRACT No 64392801	DRAWING No 01
DRAWING BY John Cowan	
SCALE As illustrated	DATE 11 February 2013

REVISIONS

WE CERTIFY THAT THIS IS A TRUE AND ACCURATE PLAN OF THE WORKS REFERRED TO IN THE APPLICATION FOR WARRANT / PLANNING CONSENT.

SIGNED:.....DATE:.....

Proposal Details

Proposal Name	Lindsay - 64392801
Proposal Description	Replacement of 8 windows
Address	18 HOPETOUN TERRACE, GULLANE, EH31 2DE
Local Authority	East Lothian Council
Application Online Reference	000067548-001

Application Status

Form	complete
Main Details	complete
Checklist	complete
Declaration	complete
Supporting Documentation	complete
Email Notification	complete
Payment Method	incomplete

Attachment Details

Drawing 01	Attached	A3
Grounds of appeal	Attached	A4
Notice of Review	System	A4
Notice of Review	System	A4
scotapp	System	A4
Sheerframe brochure	Attached	A4
Sheerframe case study	Attached	A4
Sliding sash sheet	Attached	A3