FRANKHAM

DESIGN AND ACCESS STATEMENT

IN SUPPORT OF THE PLANNING APPLICATION FOR REPLACEMENT WINDOWS AND DOORS

At

LITHOS ROAD BLOCKS NW3 6ER, NW3 6ES & NW3 6EY

For

PREPARED BY:

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FILE REFERENCE: 227603-FCG-XX-XX-RP-B-0401-S2-P01

Notting Hill Genesis

NOTTING HILL GENESIS
BRUCE KENDRICK HOUSE
2 KILLICK STREET
LONDON
N1 9FL

CONTENTS

APPENDICES

1.0 INTRODUCTION AND SCOPE

1.1 Notting Hill Genesis (NHG) are proposing to replace the existing single glazed timber framed windows and balcony doors to 6no. blocks of flats:

- Laurel House, Lithos Road, NW3 6ER
- Sandalwood House, Lithos Road, NW3 6ER
- Ebony House, Lithos Road, London, NW3 6ES
- 54A to 54D Lithos Road, London, NW3 6EY
- Jacaranda House, Lithos Road, London, NW3 6EY
- Juniper House, Lithos Road, London, NW3 6EY

This Design and Access Statement has been prepared in support of the planning application to replace these windows.

1.2 There are no changes proposed to the: Amount of housing, the Layout, Scale, Landscaping, Use or Access to the buildings. Therefore, this Design and Access Statement addresses Appearance and some contextual planning requirements/policies only.

1.3 These blocks date from around 1991 and the existing (presumably original) double-glazed timber windows and balcony doors are in a state of disrepair. These have proven difficult to maintain due to significant access restraints as explained below which has led to a long-standing issue for NHG to manage. New aluminium framed windows and aluminium balcony doors are proposed.

1.4 The proposed replacement with low maintenance products will lead to an insignificant change in appearance but greatly improved living conditions for occupiers and reduced environmental impact and costs. The proposed windows and doors will comply or exceed current building regulations and provide a low maintenance solution, helping NHG to fulfil their commitments to the residents and leaseholders.

1.5 The proposed windows and doors will be of a close visual appearance to the existing windows and balcony doors. White aluminium windows and doors are proposed. The installation will address and comply with the following documents:

- BSI Certificate of Registration Environmental Management System – ISO 14001:2015 (Certificate Number: EMS554307).
- BSI Certificate of Registration Quality Management System – ISO 9001:2015 (Certificate Number: FM 21582).
- BSI Certificate of responsible sourcing of construction products- BES 6001: Issue 3.0 (Certificate Number: BES668681).
- Smart Architectural Aluminium – Alitherm series brochure.
- Smart Architectural Aluminium – Responsible Sourcing Report 2018.

A full list of the submitted drawings and documents are provided in the Appendices.

2.0 PREVIOUS PLANNING APPLICATIONS

2.1 The following planning applications have been submitted for the replacement of the windows and balcony doors to some of the properties:

Reference	Block	Status
2019/0091/P	Jacaranda House	Registered Jan 2019
2019/0090/P	Ebony House	Refused March 2019
2019/0089/P	Juniper House	Refused Match 2019
2018/3390/P	Ebony House	Withdrawn October 2018
2018/3389/P	Juniper House	Withdrawn October 2018
2018/3343/P	Jacaranda House	Withdrawn October 2018

3.0 SITE LOCATION

3.1 The estate comprises of low and high rise blocks are located on a small estate between two converging sets of mainline railway lines (see Site Location Plan – drawing ref: 1001) to create a dead-end street. The external facades are closely bordered by railway tracks making the erection of scaffolding and access to the external elevation for maintenance very difficult. These constitute exceptional circumstance that should be given weight in the decision.

3.2 The estate is generally viewed from a distance across railway lines and away from public footfall and comparator buildings and streets within the Finchley Road area.

4.0 PLANNING REQUIREMENTS AND POLICIES

4.1 Planning permission is needed for any alterations that "materially affect the external appearance of the building"[1]; to materially affect the external appearance the change must be visible from a number of normal vantage points and judged for its materiality in relation to the building as a whole and not be reference to a part of the building taken in isolation[2]. Typically, the replacement of existing doors and windows on a 'like for like' basis with those of similar external visual appearance are not considered to be constitute 'development' and planning consent not required. This is however a matter for the decision maker and a precautionary approach has been taken here and a planning application submitted.

4.2 Notwithstanding, we consider the proposed windows and balcony doors to be of a very similar design, opening function and dimensions to be existing providing a very close visual appearance to the existing that will be insignificant and go unnoticed when viewed in context.

4.3 Laurel House, Sandalwood House, Ebony House, Jacaranda House, Juniper House and 54A to 54D Lithos Road are not located within or near to any Conservation Area and are not Listed Buildings. The works would not impact the 'setting' of any heritage assets.

[1]Section 55, Town and Country Planning Act 1990 as amended.
[2]Journal of Planning Law, P55.17

4.4 The Following planning policies/documents have been considered as part of this planning application:

- Camden Local Plan 2017: Policies CC1 Climate change mitigation and CC2 Adapting to climate change.
- Camden Local Plan 2017: Policy D1 Design.
- Camden Planning Guidance: Design (March 2019). Chapter 2. Design Excellence.

4.5 Camden Local Plan Policies CC1 Climate change mitigation and CC2 Adapting to climate change, supports alterations to improve the energy performance, reduce carbon emissions and improve the adaptability and 'life' of existing buildings. Policy D1 design supports high quality design in developments that use materials that are of high quality and complement local character. The environmental properties of the proposed aluminium windows are outlined in section 9.0 of this statement.

4.6 Informal pre-planning discussions were held with Camden planners before the submission of this application. See appendices for correspondence.

5.0 APPEARANCE OF BLOCKS

5.1 The blocks are of modern construction, design and appearance. The existing magnolia painted timber windows with single glazed units are a mix of side opening casement, top hung casement and fixed pane. The windows are single (double glazed) pane and do not include any decorative details or resemble any period features.

5.2 Secondary glazing panels have been added to some of the windows (Photos 17-18 and 21 are typical) presumably to increase the thermal performance/comfort levels for the residents. Condensation issues and timber decay can be found on the windows (Photos 17-18 are typical).

5.3 Some ground floor timber windows have been painted white. These windows are in accessible location that would not have required scaffolding to access.

5.4 The existing balcony doors are magnolia painted timber, with sliding and hinged doors. There are no decorative detailing on the doors or windows. Some of the balcony doors have been painted white.

5.5 A small number of existing windows and balcony doors have previously been replaced with white PVCU double glazed units because of the timber decay and need for urgent and essential replacement on a one-off basis. They were all carried out with 'like for like' replacements; the opening fenestration of the removed windows and balcony doors have been maintained.

6.0 APPEARANCE OF SURROUND AREA

6.1 Lithos Road approaching the estate has a mixture of building appearances and ages along its length. These range from Victorian to modern contemporary blocks of flats. Some existing Victorian properties which would have originally had timber sash windows have been replaced with PVCU double glazed units.

6.2 The estate itself stands fairly isolated at the end of the 'dead end' of the road, surrounded by railway lines on three sides and only seen in distant views across these.

6.3 Planning permission was granted in August 2015 for the replacement of timber framed windows with double glazed aluminium windows to Rosemont Mansions, Lithos Road. Rosemont Mansions is a Victorian block of flats in close proximity to Laurel House.

7.0 APPEARANCE OF THE PROPOSAL

7.1 The building is circa 1991 being of a modern contemporary design and construction with plain timber side hung casements, top hung casements, fixed windows and sliding balcony doors. The new proposed windows and balcony doors will not detract from the existing appearance and character of the building.

7.2 Comparison of the existing and proposed drawing details shows that the framed dimensions of the windows and area of visible glass are minimal (Drawings 2400, 2401, 2402 and 2403). The total visible window frame/casement dimensions will increase by 4.5mm from the existing 80mm to the proposed 84.5mm, whilst the sliding patio door frame/casement measurement will reduce by 31mm and 6mm, top and bottom rails respectively.

7.3 The proposed aluminium windows and balcony doors will match the existing timber windows as close as possible in colour and appearance, including dimensions and glazing patterns. Product brochures for the proposed windows and doors can be found in the Appendix B.

8.0 NOTTING HILL GENESIS

8.1 NHG are the owners of the six blocks and many others within the London Borough of Camden, providing affordable and social housing for local residents. As part of NHG responsibilities is for the maintenance and upkeep of the blocks to ensure suitable, affordable, manageable accommodation that is fit for purpose and complies with the NHG accommodation standards.

8.2 The blocks of Lithos Road are in between two mainline railways – London Overground on the North side and the Metropolitan Line and Jubilee to the South side. This creates noise at all times of day and night and means that the erecting scaffolding to maintain the timber windows is providing to be both difficult and costly due to the Health and Safety issues of erecting scaffolding next to the electrified railway lines.

8.3 Should there be a collapse the railway lines are within striking distance and there is a risk of arcing. The National Access and Scaffolding Confederation state: "Never erect scaffolding within 3 metres of an overhead power line that is feeding houses or within 15 metres of a high voltage overhead line unless you have checked with your local electricity company and they have confirmed it is safe to do so by, for example, isolating the power at source or shrouding the cables".

8.4 Ebony House is situated beside a power grid and in order to reach the upper windows of the block it will require constructing scaffolding that bridges over the National Grid power station. The windows and balcony doors which face the South stretch of railway line have proved difficult to maintain due to their close proximity to the railway lines, limited access to the rear of the blocks and steep terrain.

8.5 The above mentioned access restrictions have made the regular repainting that is essential to maintenance impractical to achieve with large costs attributed to providing safe access for the works. All these restrictions have made cyclical maintenance and repair of these asset difficult and costly and so now replacement of the existing timber windows and balcony doors is required. The windows are currently is disrepair, photos 17-18 and 21 are typical of their condition.

8.6 These restrictions hinder the cyclical maintenance of the windows and balcony doors, reducing their lifespan and effectiveness. Maintaining the current windows and doors has been too great cost to NHG and inconvenience to the residents. Replacement with a low maintenance solution will reduce large cyclical expenditure and provide further funding for property maintenance, refurbishment and building within the area.

8.7 The introduction of new aluminium windows and balcony doors will provide a low maintenance, long-life solution lasting 30 years or more and eliminating the need for cyclical redecoration.

9.0 ENVIRONMENTAL AND SOCIAL CONSIDERATIONS

9.1 The supporting documents (included within Appendix B) demonstrate that the chosen window and door manufacturer has achieved accreditations in quality and environmental management systems for their products.

9.2 The improved energy performance will reduce occupier costs and allow NHG to fulfil their duty to the residents of the blocks who have long suffered from condensation and decay issues linked to the existing windows and balcony doors. It should also be stressed that cooling and ventilation is a critical social and health concern also, the existing balcony doors in particular prove difficult to operate for some residents due to the timber swelling. Solar control glass can also be incorporated in the most exposed facades to further assist management of unwanted solar gain.

9.3 The supporting document Smart Architectural Aluminium: Responsible Sourcing Report 2018 (page 13) highlights that once their products reach the end of their lifespan, they have a typical recycling rate of 95%.

9.4 The proposed windows will have a Window Energy Ratings (WER) of A, the highest rating. The proposed doors will comply or exceed current building regulations.

10.0 SUMMARY

10.1 Notting Hill Genesis (NHG) are proposing to replace the existing defective timber windows and balcony doors with new thermally efficient, low maintenance and fully recyclable windows and balcony doors. These will have a longer life span than

the existing timber products have proved to have and allow NHG to fulfil their duty to the residents of the blocks who have long suffered from condensation and decay issues linked to the existing windows and balcony doors. Energy cost will be reduced by better insulation performance and easier opening allow for superior ventilation.

10.2 The new proposed aluminium windows and doors will also eliminate the cyclical decoration requirement of the current timber windows. This is critical as the circumstances of the sites adjacent to the railway lines mean that this has proven unachievable and this is most unlikely to change in future.

APPENDIX A
LIST OF SUBMITTED DRAWINGS

Drawing Reference	**Drawing Name**
LAUREL HOUSE	
227603-FCG-LA-ST-DR-B-1000-S4-P01	Site Location and Block Plans
227603-FCG-LA-EL-DR-B-2200-S4-P01	Existing Elevations
227603-FCG-LA-EL-DR-B-2201-S4-P01	Proposed Elevations
SANDALWOOD HOUSE	
227603-FCG-SA-ST-DR-B-1000-S4-P01	Site Location and Block Plans
227603-FCG-SA-EL-DR-B-2200-S4-P01	Existing Elevations
227603-FCG-SA-EL-DR-B-2201-S4-P01	Proposed Elevations
EBONY HOUSE	
227603-FCG-EB-ST-DR-B-1000-S4-P01	Site Location and Block Plan
227603-FCG-EB-EL-DR-B-2200-S4-P01	Existing Elevations
227603-FCG-EB-EL-DR-B-2200-S4-P01	Proposed Elevations
54A TO 54D LITHOS ROAD	
227603-FCG-LI-ST-DR-B-1000-S4-P01	Site Location and Block Plan
227603-FCG-LI-EL-DR-B-2200-S4-P01	Existing Elevations
227603-FCG-LI-EL-DR-B-2201-S4-P01	Proposed Elevations
JACARANDA HOUSE	
227603-FCG-JA-ST-DR-B-1000-S4-P01	Site Location and Block Plan
227603-FCG-JA-EL-DR-B-2200-S4-P01	Existing Elevations
227603-FCG-JA-EL-DR-B-2201-S4-P01	Proposed Elevations
JUNIPER HOUSE	
227603-FCG-JU-ST-DR-B-1000-S4-P01	Site Location and Block Plan
227603-FCG-JU-EL-DR-B-2200-S4-P01	Existing Elevations
227603-FCG-JU-EL-DR-B-2201-S4-P01	Proposed Elevations
WINDOW/DOOR DETAILS	
227603-FCG-ZZ-DE-DR-B-2400-S4-P01	Typical Existing Window Elevation & Section
227603-FCG-ZZ-DE-DR-B-2401-S4-P01	Typical Proposed Window Elevation & Section
227603-FCG-ZZ-DE-DR-B-2402-S4-P01	Typical Existing Patio Door Elevation & Section
227603-FCG-ZZ-DE-DR-B-2403-S4-P01	Typical Proposed Patio Door Elevation & Section

APPENDIX B
SUPPORTING INFORMATION – SMART ALUMINIUM WINDOWS/DOOR

By Royal Charter

Certificate of Registration

ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

Smart Systems Limited
Incorporating Smart Extrusions
Arnolds Way
Yatton
BS49 4QN
United Kingdom

Holds Certificate Number: EMS 554307

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The design and supply of aluminium curtain walling, door and conservatory roof systems, extrusion of aluminium, powder coating of aluminium products. The manufacturing and supply of clipped and thermal break assembled profiles.

For and on behalf of BSI:

Andrew Launn, EMEA Systems Certification Director

Original Registration Date: 2010-02-02
Latest Revision Date: 2018-12-14

Effective Date: 2019-02-03
Expiry Date: 2022-02-02

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By Royal Charter

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that:

Smart Systems Limited
incorporating Smart Extrusions
Arnolds Way
Yatton
Bristol
BS49 4QN
United Kingdom

Holds Certificate Number: FM 21582

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

The design and supply of aluminium curtain walling, window, door and conservatory roof systems, extrusion of aluminium, powder coating of aluminium products. Note: This registration excludes the supply of glass and double glazing units. The manufacture and supply of clipped and thermal break assembled profiles.

For and on behalf of BSI:

Andrew Launn, EMEA Systems Certification Director

Original Registration Date: 1992-09-21
Latest Revision Date: 2018-09-21

Effective Date: 2018-10-10
Expiry Date: 2021-10-09

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By Royal Charter

Certificate of Registration

RESPONSIBLE SOURCING OF CONSTRUCTION PRODUCTS

This is to certify that:

Smart Systems Limited
Incorporating Smart Extrusions
Arnolds Way
Yatton
BS49 4QN
United Kingdom

Holds Certificate Number: BES 668681

and complies with the requirements of BES 6001: Issue 3.0 - Framework Standard for the Responsible Sourcing of Construction Products for the following scope. This Responsible Sourcing certification has been carried out under licence using BRE's Responsible Sourcing scheme methodology and underpinning processes.

Product Group: Extruded, thermally broken, powder coated aluminium profile.

Overall Assessment Score: Very Good.

For and on behalf of BSI:

Andrew Launn, EMEA Systems Certification Director

Original Registration Date: 2017-03-01
Latest Revision Date: 2019-03-08

Effective Date: 2017-03-01
Expiry Date: 2020-02-29

...making excellence a habit.™

Certificate No: BES 668681

Section	A	B	C	D	Bonus
3.2.1 Responsible sourcing policy	1				
3.2.2 Legal compliance	1				
3.2.3 Quality management system		2			
3.2.4 Supplier management system	1				
3.3.1 Material traceability through supply chain			3		
3.3.2 EMS in the supply chain				4	
3.3.3 H&SMS in the supply chain			3		
3.4.1 Greenhouse gas emissions			5		
3.4.2 Energy management	1				
3.4.3 Resource use			5		
3.4.4 Waste prevention and management		3			
3.4.5 Water abstraction		2			1
3.4.6 Life cycle assessment (LCA)	1				
3.4.7 Ecotoxicity					
3.4.8 Transport impacts	1				
3.4.9 Employment and skills		2			
3.4.10 Local community engagement	1				
3.4.11 Business ethics	1				1
Key		Not Compulsory Element			
		Not applicable			
		Possible score			
Total section scores	15	Sections 3.2. and 3.3			
	24	Section 3.4			
Overall Assessment Score	Very Good				

Original Registration Date: 2017-03-01
Effective Date: 2017-03-01
Latest Revision Date: 2019-03-08
Expiry Date: 2020-02-29

Certificate No: BES 668681

Location	Registered Activities
Smart Systems Limited Incorporating Smart Extrusions Arnolds Way Yatton BS49 4QN United Kingdom	Product Group: Extruded, thermally broken, powder coated aluminium profile. Overall Assessment Score: Very Good.

Original Registration Date: 2017-03-01

Latest Revision Date: 2019-03-08

Effective Date: 2017-03-01

Expiry Date: 2020-02-29

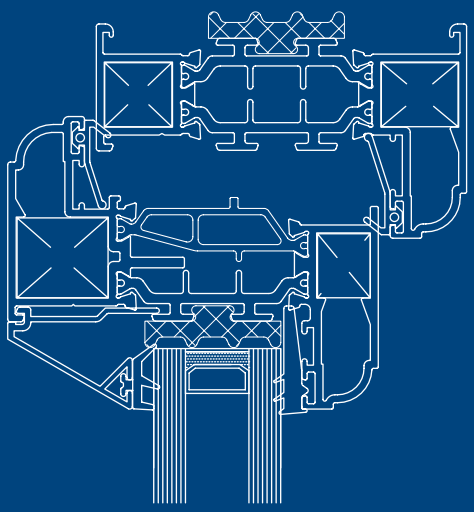
smart
architectural aluminium

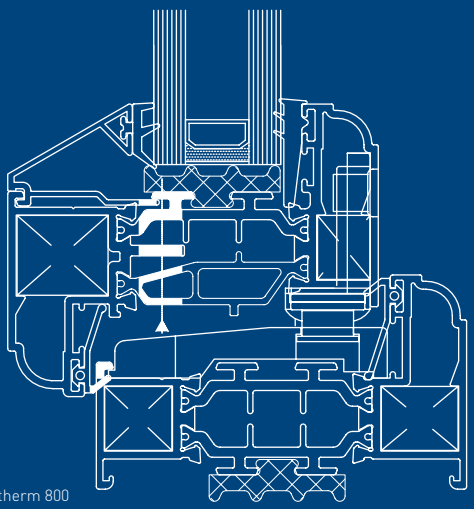
Alitherm Series

The Alitherm series of windows offer a range of high quality glazing solutions for side hung, top hung open out, top swing reversible and parallel opening casements, suitable for both the residential and commercial markets.

The series features products that achieve:

- Window Energy Rating A
- BRE Green Guide A
- U Values up to 1.2 W/m²K depending on system and glass unit
- Includes the Kitemarked systems Alitherm 600 & 800 with PAS 24: 2012 Security





Alitherm 800

Alitherm Series

This versatile range of profiles can provide many solutions such as traditional casement windows inspired by the elegance and styling of timber products, or automatic parallel opening commercial windows designed to provide a balanced airflow in multi-storey commercial buildings.

All Alitherm profiles utilise Smart's innovative polyamide thermal break technology which creates a barrier between the cold air outside and the warm air inside. This technology significantly reduces thermal transmittance and enhances the overall U Value of a product. Alitherm products are available in a choice of standard or non-standard colours, including metallic, dual colour, Smart's Sensations textured, and Alchemy anodised effect finishes. The series features the new Alitherm 300, Alitherm 600, Alitherm 700 and Alitherm 800 windows, designed to meet the exacting requirements of Document L 2010.

Alitherm 300

Application

All general light use applications

Features

- The system features an extended polyamide thermal break which improves the overall U Value of the profile, allowing Alitherm 300 to achieve a Window Energy 'A' Rating when used in conjunction with the correct double or triple glazed unit
- The system is suitable for both internally or externally beaded, side or top hung open out windows
- Profiles have the option of either ovolo, chamfered or square edges
- Frame options for both standard and slim-line stays
- Option of either multi-point or cockspur locking handles

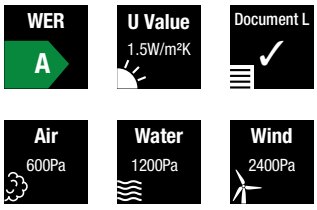
Technical Performance

Finish	Single or dual colour, marine quality polyester powder coat as standard
U Value	U Value 1.5W/m²K using 1.0 centre pane U Value 1.2W/m²K using 0.7 centre pane
WER	A
Air	Class 4, 600Pa
Water	Class E 1200Pa
Wind	Class AE, 2400Pa
Document L Compliant	

Dimensions

Frame Depth	53mm & 76mm
Glass	24mm, 28mm, 32mm & 36mm double or triple gazed units
SH Max o/a Width	700mm
SH Max o/a Height	1400mm
TH Max o/a Width	1400mm
TH Max o/a Height	1300mm

(For sizes outside of these parameters, contact Smarts Technical).



Alitherm 600

Application

All general light use applications inc commercial.

Features

- An enhanced system designed to comply with the revisions to the Building Regulations
- Document L compliant
- System can achieve Window Energy 'B' Rating
- Profiles feature an extended polyamide thermal break to enhance thermal performance
- Fabrication is by method of crimped or mechanical corners
- Ovolo, chamfered or square profiles
- British Standard Kitemarked system
  KM 81580
  KM 81543

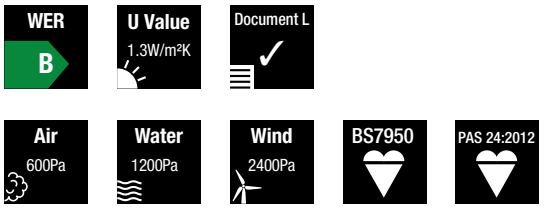
Technical Performance

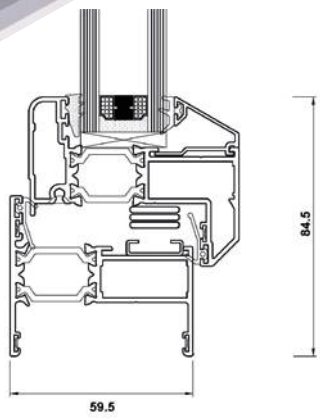
Finish	Single or dual colour, marine quality polyester powder coat as standard
U Value	1.3W/m²K using correct sealed unit
WER	B
Air	Class 4, 600Pa
Water	Class E, 1200Pa
Wind	Class AE, 2400Pa
Document L Compliant	

Dimensions

Frame Depth	59mm & 70mm
Glass	28mm to 38mm double or triple glazed units
SH Max o/a Width	1000mm
SH Max o/a Height	1400mm
TH Max o/a Width	1400mm
TH Max o/a Height	1500mm

(For sizes outside of these parameters, contact Smarts Technical).





Alitherm 800

Application

All general light use applications

Features

- Highest thermal performance window suitable for all general use applications
- Will achieve U Values under 1.6w/m²K when used in conjunction with correct double glazed sealed unit
- Alitherm 800 windows achieve a Window Energy 'A' Rating
- Extended chambered polyamide thermal breaks provide excellent thermal performance
- British Standard Kitemarked system
  KM 81580
  KM 81543

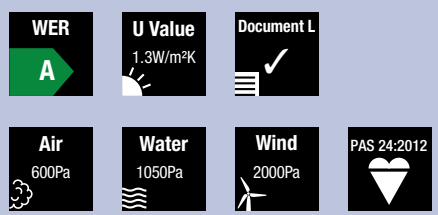
Technical Performance

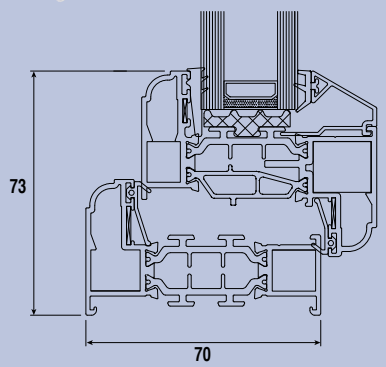
Finish	Single or dual colour, marine quality polyester powder coat as standard
U Value	1.3W/m²K using 0.7 centre pane 1.5W/m²K using 1.0 centre pane
WER	A
Air	Class 3, 600Pa
Water	Class E, 1050Pa
Wind	Class A5, 2000Pa
Security	PAS 24:2012
Document L Compliant	

Dimensions

Frame Depth	70mm
Glass	24mm, 28mm double or triple glazed units
SH Max o/a Width	700mm
SH Max o/a Height	1400mm
TH Max o/a Width	1400mm
TH Max o/a Height	1300mm

(For sizes outside of these parameters, contact Smarts Technical).





Alitherm 700

Alitherm Parallel is an innovative solution for enhanced natural ventilation. The system allows for a balanced, effective airflow whilst maintaining security and safety. The system can also be either a side or top hung casement, or top swing reversible window.

Application

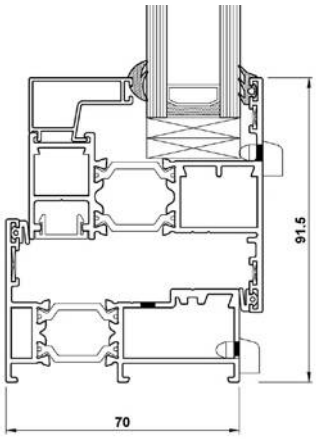
Commercial applications, suitable for multi-storey

Features

- Alitherm 700 is ideal for insertion into curtain wall facades in both low and high rise commercial buildings
- The system is suitable for use as either replacement windows in existing buildings, or for installation into new builds
- Alitherm 700 incorporates internally beaded vents suitable for either cockspur or shoot-bolt locking.
- The system is also suitable for use with chain-operators, operated either individually or as part of an integrated automated solution for building climate control

Technical Performance

Finish	Single or dual colour, marine quality polyester powder coat as standard
U Value	1.6W/m²K using correct sealed unit 1.3W/m²K using triple glazed unit of correct sealed unit
Air	Class 4, 600Pa
Water	Class 9A, 600Pa
Wind	Class E, 2400Pa
Security	BS 7950 (Casement and Parallels) PAS24:2012 (Reversible)

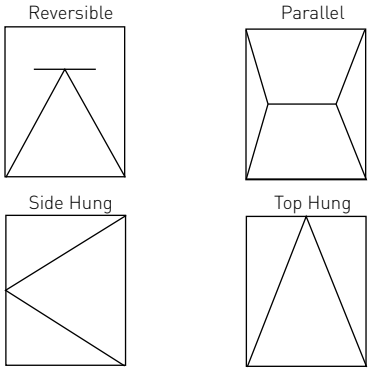


Dimensions

Frame Depth	70mm
Glass	28mm double or triple glazed units
PL Max o/a Width	2000mm
PL Max o/a Height	3000mm
SH Max o/a Width	838mm
SH Max o/a Height	1729mm
TH Max o/a Width	1729mm
TH Max o/a Height	2000mm
Rev Max o/a Width	1500mm
Rev Max o/a Height	1558mm

*Parallel windows over 1500mm wide or weighing over 100kg should be motorised operation only

Drawings not to scale



Smart Systems Limited

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W www.smartsystems.co.uk | **E** sales@smartsystems.co.uk

IMS100ALS.201504

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Responsible Sourcing Report 2018


'smart


bsi.
Certificate of Registration
ENERGY MANAGEMENT SYSTEM - ISO 50001:2011
bsi.
Registration

Sustainability at Smart

About Smart Architectural Aluminium

Over the past forty years, Smart has grown to become the UK's leading supplier of aluminium systems and bespoke aluminium extrusions, building a reputation for both the quality of its products and its product innovation, design and technical expertise. Our products and systems are proven in a wide range of new-build and refurbishment projects throughout the UK, spanning the complete range of commercial, public sector and residential applications.

Based in Yatton, North Somerset, our purpose-built premises house state-of-the-art extrusion, finishing, warehousing and distribution facilities. Our own fleet of lorries makes daily deliveries to a network of fabricators and installers across the UK. Employing over 400 people, we have an annual turnover in excess of £80 million.

Our Approach

We are fully committed to working towards a greener, more sustainable environment, ensuring every aspect of our activities, from the procurement of raw materials to the delivery of finished goods, is conducted in accordance with sound environmental practices and in line with both UK and EU environmental regulations and legislation.

In the context of our business, we aim to promote an understanding of environmental issues among our staff, customers, suppliers and stakeholders, recognising our responsibilities to the delivery of long term, sustainable benefits. Our common goal is to ensure we continually improve the environmental impact of our global activities.

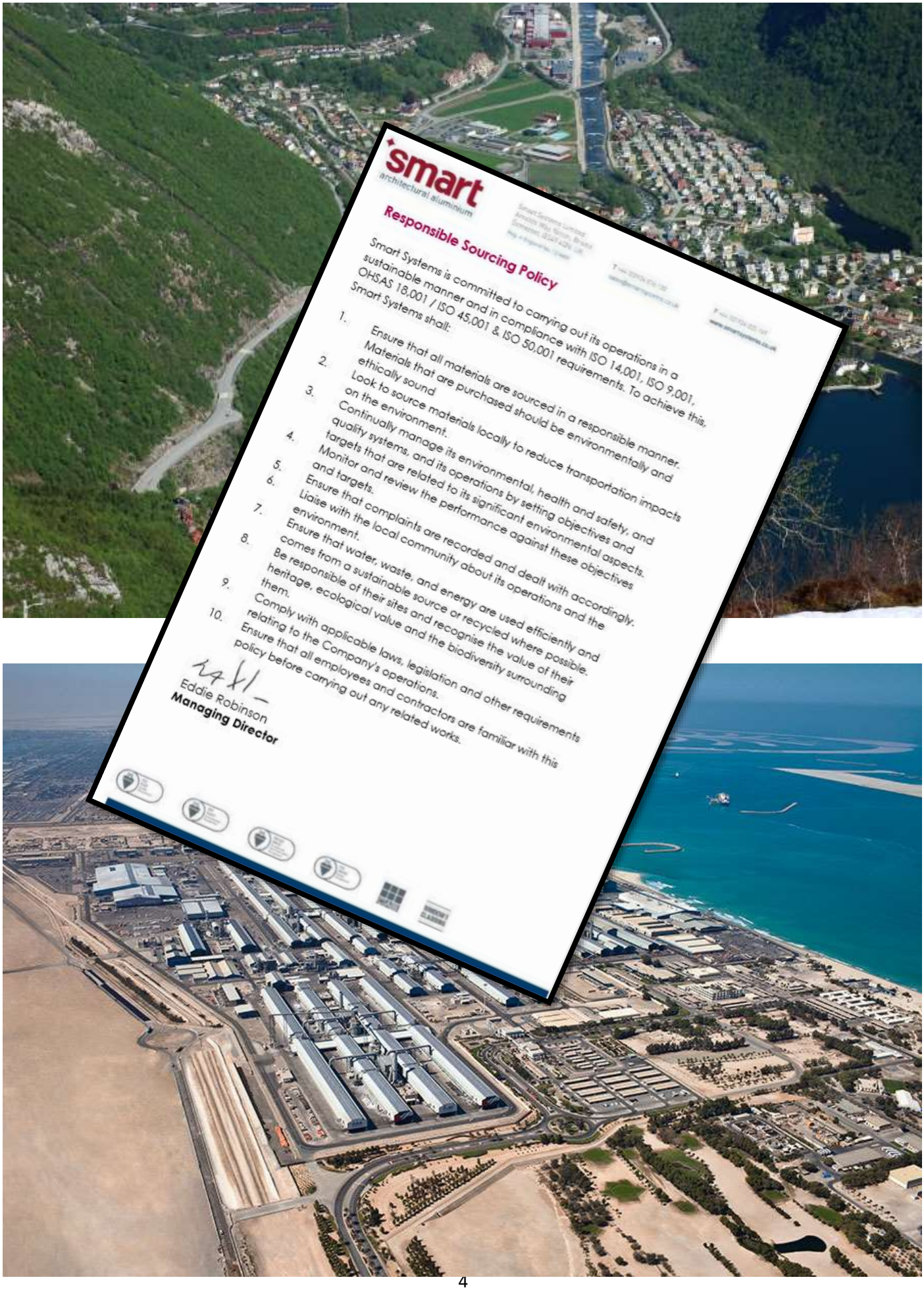
Throughout our development, environmental considerations have been central to our planning. To help formalise our processes and procedures, in 2011 we first achieved ISO 14001 Environmental Management Systems certification.

As an ISO 14001 company, we regularly re-evaluate our working practices, ensuring we continually work to minimise the impact of our activities on the environment. As a result, we continue to invest in efficient machinery, effective environmental management systems and waste capture and recycling systems, as well as the use of sustainable power generation.

Responsible Sourcing and BES 6001

Governments, specifiers and architects are increasingly focusing on sustainable development and the source of construction materials. BRE's standard, BES 6001, enables manufacturers to ensure and then prove their products have been made with constituent materials that have been responsibly sourced, providing an approach based on governance, supply chain and community interaction, with a focus on environmental performance improvements.

In 2016 we made the decision to pursue certification to BES 6001 following clarification regarding traceability of commodity traded materials, such as Bauxite in aluminium production.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Responsible Sourcing Policy
Smart Systems is committed to carrying out its operations in a sustainable manner and in compliance with ISO 14,001, ISO 9,001, OHSAS 18,001 / ISO 45,001 & ISO 50,001 requirements. To achieve this, Smart Systems shall:
1. Ensure that all materials are sourced in a responsible manner.
2. Materials that are purchased should be environmentally and ethically sound
3. Look to source materials locally to reduce transportation impacts on the environment.
4. Continually manage its environmental, health and safety, and quality systems, and its operations by setting objectives and targets that are related to its significant environmental aspects.
5. Monitor and review the performance against these objectives and targets.
6. Ensure that complaints are recorded and dealt with accordingly.
7. Liaise with the local community about its operations and the environment.
8. Ensure that water, waste, and energy are used efficiently and comes from a sustainable source or recycled where possible.
9. Be responsible of their sites and recognise the value of their heritage, ecological value and the biodiversity surrounding them.
10. Comply with applicable laws, legislation and other requirements relating to the Company's operations.
Ensure that all employees and contractors are familiar with this policy before carrying out any related works.
Eddie Robinson
Managing Director

Responsible Sourcing & Supply Chain Management

How and from whom a company purchases materials can impact in many ways on the broader environment. By purchasing materials from suppliers who adopt responsible practices, we aim to stimulate demand for socially- and environmentally-preferable products.

Our finished profiles contain well over 90% of either aluminium or polyamide (which provides the thermal break to give a high performing u-value). We purchase raw materials and components from renowned suppliers with a proven ability to provide high quality goods at competitive prices.

However, we require much more than affordability from our suppliers; requiring them to have management systems in place to identify and reduce their quality, environmental and health and safety risks. As a direct result of this, one supplier generated 10.9TWh of renewable energy in 2015 - enough to power over 2.5 million homes.


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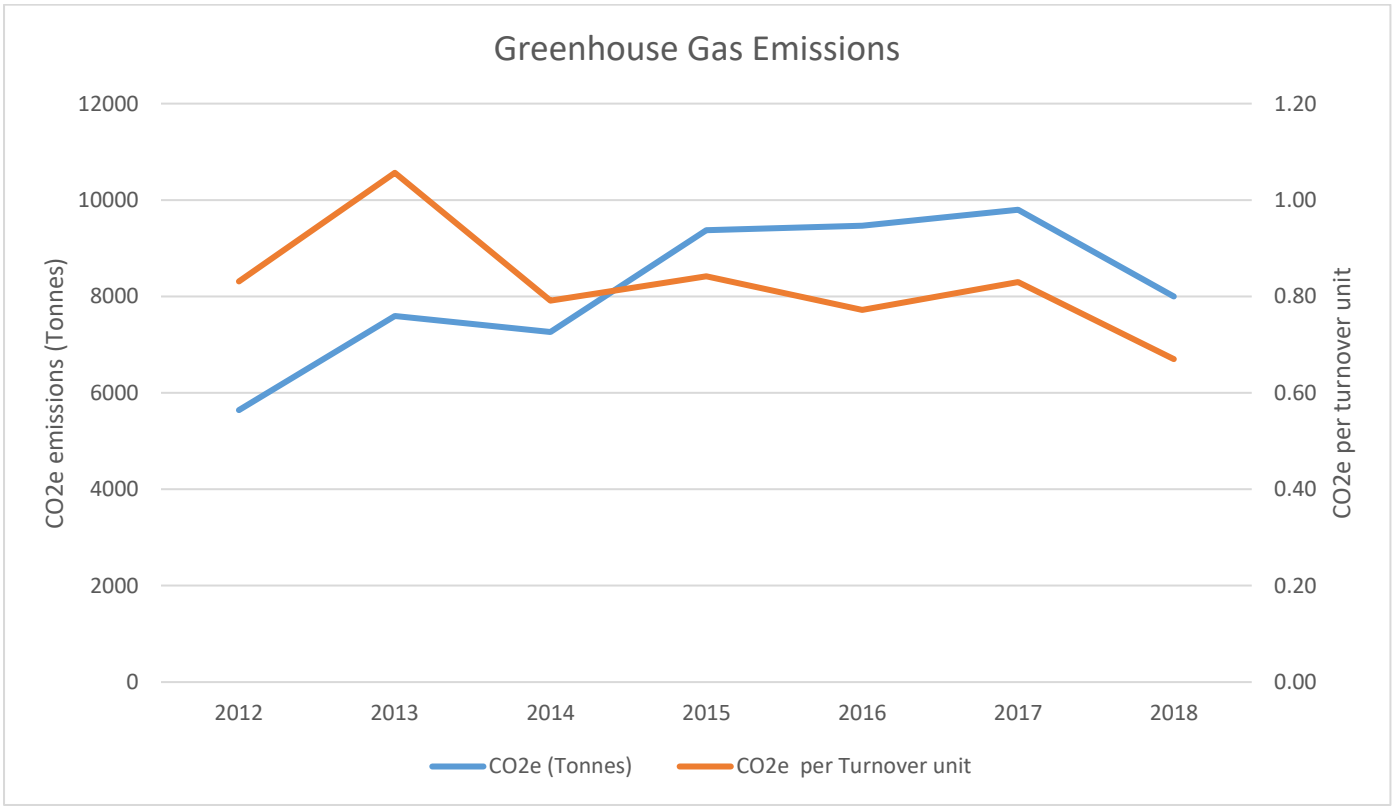
Greenhouse Gas Emissions
Smart Systems are committed to carrying out our operations in a sustainable manner and in compliance with ISO 14001 and legislative requirements. In order to improve our 'carbon footprint' and achieve continual improvement in regard to Greenhouse Gases we shall:
1. Seek to continually reduce the greenhouse gas emissions in our transport and production processes where possible.
2. Seek to generate power from renewable sources.
3. Seek to reduce our energy consumption and improve our energy performance
4. Set targets and objectives and monitor and review the performance against these objectives and targets.
5. Report these targets and objectives to the Company's stakeholders.
6. Comply with applicable legislation and other requirements relating to the Company's operations.
7. Ensure that all employees and contractors are familiar with this policy before carrying out any works.
Eddie Robinson – CEO

Greenhouse Gas Emissions

We recognise that our operation is energy-intensive, and according to our ethics and legislative requirements, we aim to reduce greenhouse gas emissions in line with national commitments to the 2015 Paris Agreement.

Greenhouse emissions are produced from the combustion of natural gas and diesel on our site, as well as from our transport activities (including our delivery fleet, company vehicles and employee travel) and the electricity we purchase from the national grid.

Since 2010, restrictions of electricity supply to our site have required our extrusion operations to be powered by diesel generators. However, following significant capital investment in 2016, we gained our own independent grid supply, removing the inherent inefficiency of burning fossil fuels. In addition, we have planning permission to install two wind turbines on our site, which will potentially generate more than 15% of our extrusions electricity supply.




bsi.
Certificate of Registration
ENERGY MANAGEMENT SYSTEM - ISO 50001:2011
This is to certify that:
Smart Systems Ltd, Incorporating Extrusions and Tooling
Integrated Management System Policy
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Smart Systems Ltd are engaged in the procurement, production, sale, supply and stockholding of aluminium Architectural Glazing Systems, together with associated design activities; the extrusion of aluminium profiles via designed dies; the powder coating of aluminium profile and accessories, the provision of precision engineering, and the transportation of aluminium billet and extruding to specified profiles, tooling. Smart Systems Ltd is capable of taking aluminium profile in a range of finishes, rolling and clipping pre-treating and powder coating aluminium profile in a thermally broken system, warehousing, and delivering these finished aluminium profiles to provide a thermally broken system, warehousing, and delivering these finished products across the UK.
It is the policy of Smart Systems to follow management practices with the objective of achieving continual improvement to the benefit of the business and its stakeholders. Smarts are committed to the improvement in quality & energy performance and the prevention of injury, ill health, and pollution; to support this Smart Systems will ensure that information and resource is made available to allow objectives and targets to be realised. We shall abide by all relevant legislation and other requirements to which we subscribe.
In particular we will meet the requirements of the management systems standards, guides and other documents listed at the foot of this statement, these will be regularly reviewed together with this policy.
Furthering this commitment Smart Systems shall take into account energy and sustainability performance when purchasing equipment or services and during any design activities.
Hazards, risks, aspects, impacts and energy consumption associated with our activities shall be identified and objectives shall be set to minimise our negative impacts and to seek positive impacts upon our overall sustainability including inclusivity, integrity, stewardship and transparency.
This statement of policy will be communicated to all employees and sub- contractors and be made available to stakeholders or other interested parties upon request.
Standards to which Smarts subscribe:
ISO 14001 : 2004, ISO 9001 : 2008, BS EN 18001 : 2007, ISO 50001 : 2011, BS 4873, BS 7950/4783
Eddie Robinson : CEO

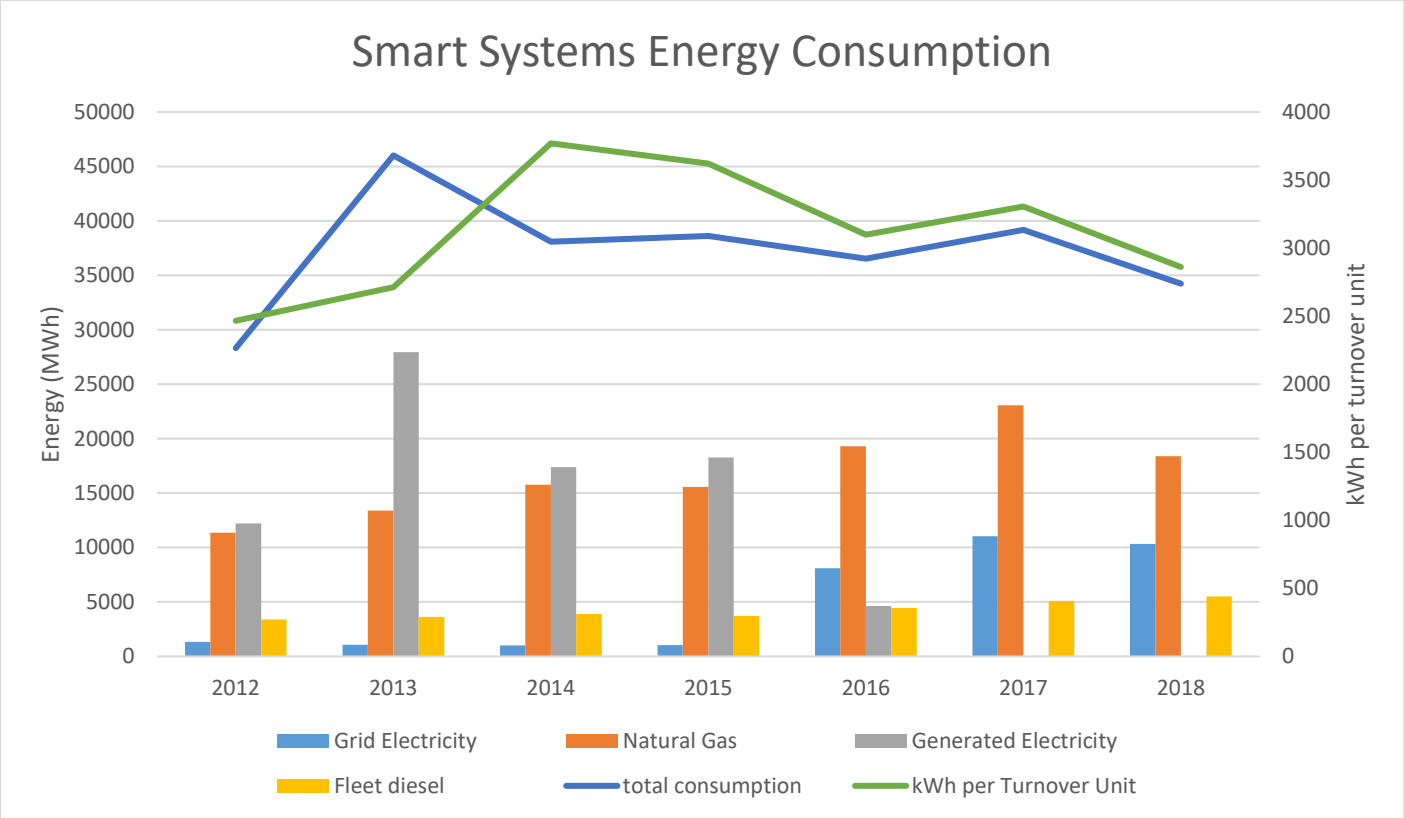
Energy Use and Management

Energy management is a crucial element of our management of capacity, cost, emissions and future development. In 2015 in line with the energy savings opportunities scheme, we achieved ISO 50001:2011 certification.

ISO 50001 is based on the continuous improvement business model, which is also used for standards such as ISO 9001 and ISO 14001. This makes it easier for organisations to integrate energy management into their quality and environmental management systems.

ISO 50001:2011 provides a framework of requirements for organisations to develop policy; set targets and objectives; use data to better understand and make decisions about energy usage; measure the results and then take appropriate improvement actions to continually improve energy management based on reviews of the system.

Since 2015 we have put in place a number of projects and plans to reduce our electricity and diesel consumption, improving our energy performance with respect to our overall output: and we are now beginning our transition journey to ISO 50,001:2018.



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Waste prevention and management

As part of our commitment to the protection of the environment and continual improvement in our environmental performance, with regard to waste it is the policy of Smart Systems to:

1. Seek to continually reduce waste from our production process.
2. Seek to continually decrease the waste which goes into landfill in accordance with the waste hierarchy.
3. Set targets and objectives and monitor and review the performance against these objectives and targets.
4. Report these targets and objectives to the Company's stakeholders.
5. Comply with applicable legislation and other requirements relating to the Company's operations.
6. Ensure that all employees and contractors are familiar with related processes before carrying out any works.

Eddie Robinson – CEO

Waste Prevention and Management

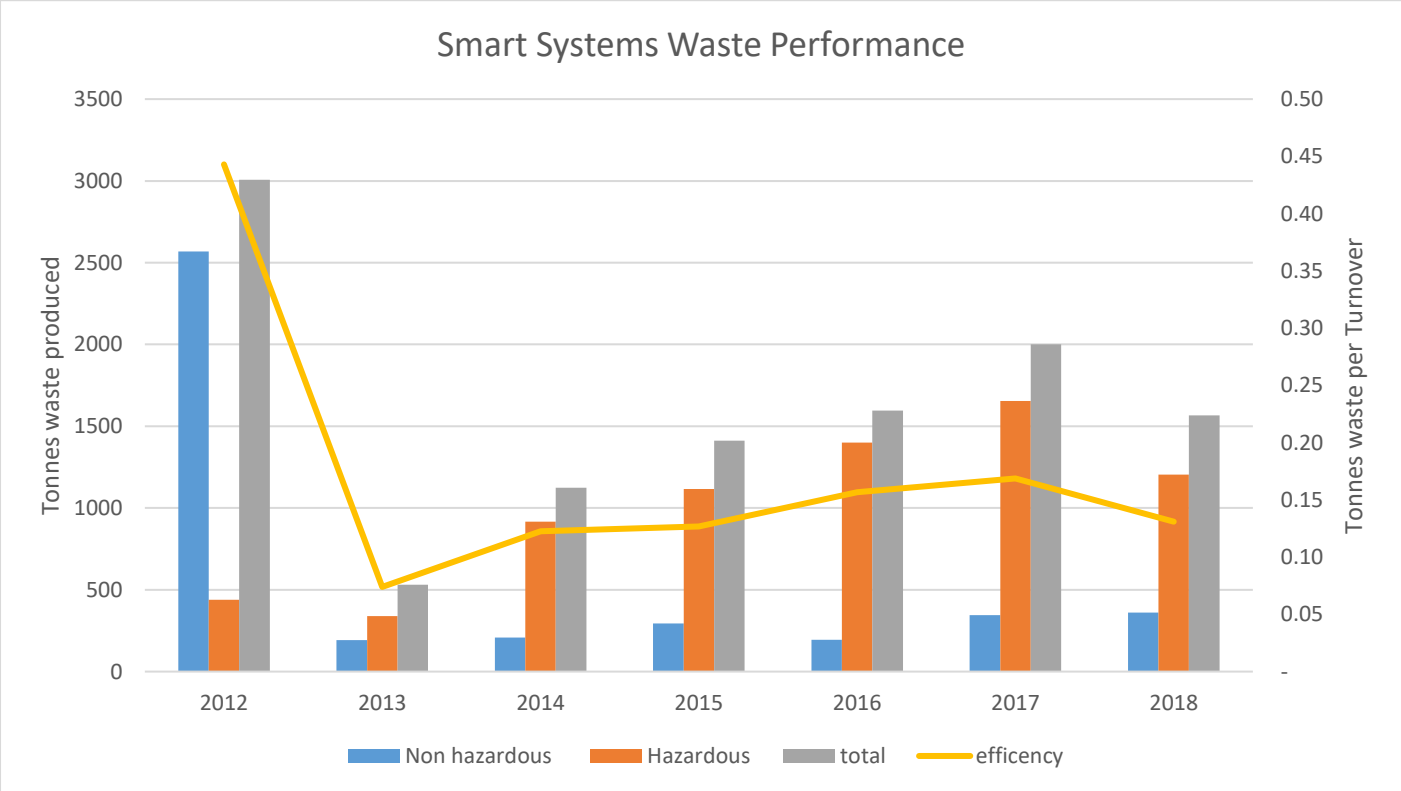
As a large manufacturing company, we generate waste in various forms - from routine inert office wastes to spent chemicals. As part of our commitment to prevent pollution and fully adhere to legal requirements, we ensure our waste is correctly separated and stored, ready for collection by our selected waste contractors, with whom we are pursuing a zero-to-landfill contract.

Across the aluminium extrusion sector, it is estimated that around 20% of extrusions will not be fit for their intended purpose. Rather than this material being declared waste, we instead collect it and transport it for re-melting, receiving re-formed billet in return.

We have also considered waste when developing our manufacturing processes. Our powder coating lines recover and reuse up to 95% of excess powder to reduce our waste burden; powders we use are chromate free to reduce the amount of hazardous waste we produce; incoming packaging is reused onsite for material storage and we deliver our profiles in fully reusable stillages.

Furthermore, by ensuring that nothing we add to our profiles impedes recycling when an installed system reaches the end of its useful life, it can easily be recovered and sent for re-melting. However, the performance of our systems allows simply for the glazing component of an installed unit to be replaced in order to encourage post-consumer reuse; whilst installed accessories can be replaced to update the look of the unit.

Smart Systems waste performance targets less than 0.15 Tonnes per Turnover Unit, and which we have achieved in 2018 through implementation of research and management projects allowing a reduction in liquid wastes produced.



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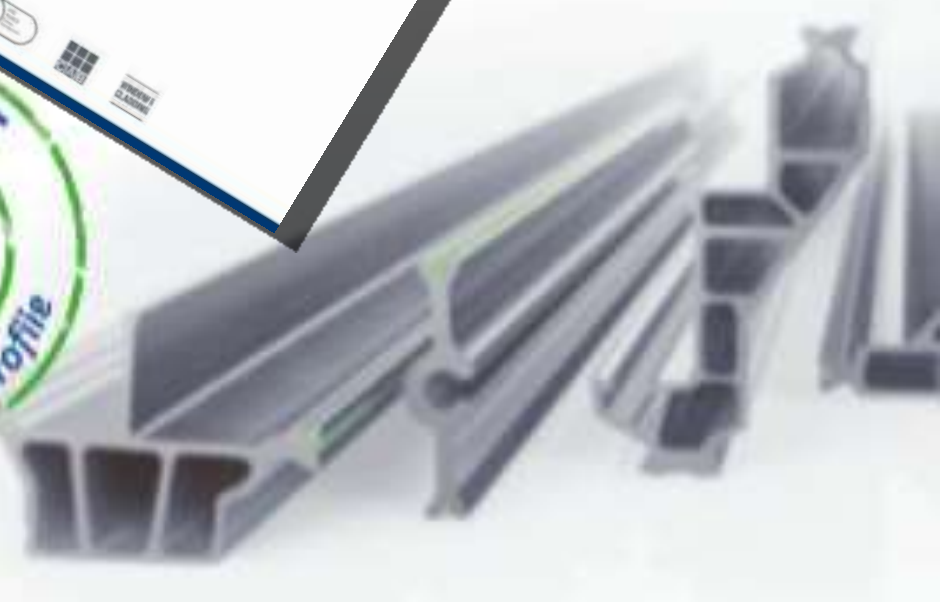
Resource use

As part of our commitment to the protection of the environment and continual improvement in our environmental performance, with regard to resource use it is the policy of Smart Systems to:

1. Seek to continually reduce extrusion scrappage and rejection rates in production processes.
2. Ensure that any rejected material is recycled for reuse.
3. Seek to improve on the percentage of recycled materials used in the products.
4. Seek to improve refurbishment, maintenance and repair services through licenced installers.
5. Set targets and objectives and monitor and review the performance against these objectives and targets.
6. Report these targets and objectives to the Company's stakeholders.
7. Comply with applicable legislation and other requirements relating to the Company's operations.
8. Ensure that all employees, suppliers and contractors are familiar with related processes before carrying out any works.

Eddie Robinson – CEO

insulbar® RE
The recycled profile

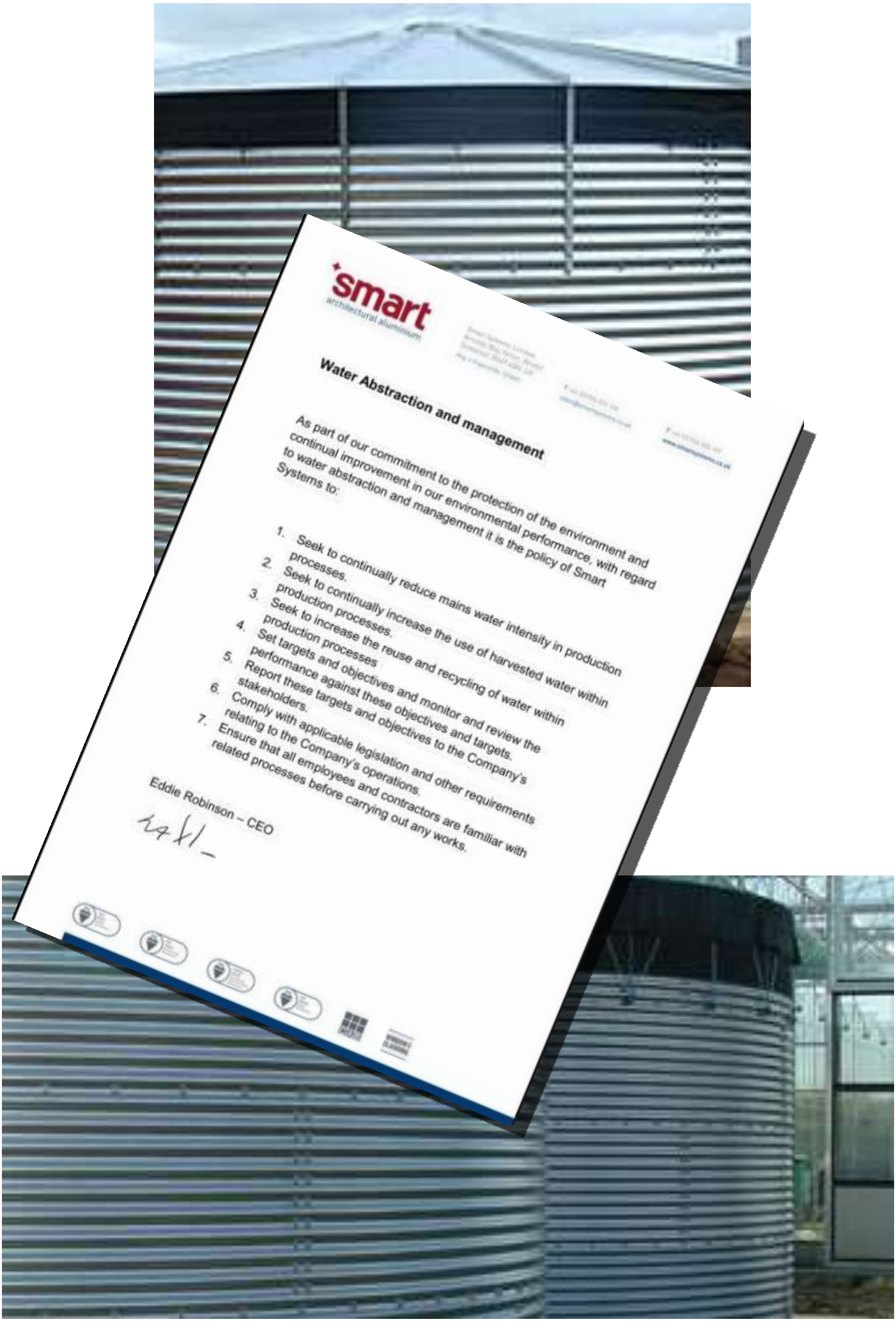


Resource Use

We are committed to reducing the environmental impact of our products, the constituent materials of which are aluminium (supplied to us as billet) and polyamide insulating profiles. We then offer a 60um powder coat to ensure long life and offer a range of colours. It is pleasing to report that in 2016, ~25% of our incoming billet was recycled rather than first-use and both our vertical paint line captures and reuses 98% of excess powder.

Through the design of our systems and their related profiles, we seek to minimise the amount of material used, whilst retaining the strength and durability of the finished products. To that end, we provide software tools and training to our customers, enabling them to assess minimum profile criteria based on wind load/specification; reduce wastage by optimising cutting of material during fabrication and offer bespoke, project-specific designs tailored to meet specific performance requirements.

We also recognise that our products have an impact on resource use at the end of their lives, and as such have taken measures to allow repairs, maintenance and upgradability through glazing and hardware to be carried out. Once our products reach the end of their life, they have a typical recycle rate of 95% and, as aluminium is widely recycled and contains no hazardous material, it requires no dedicated retrieval scheme.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Water Abstraction and management
As part of our commitment to the protection of the environment and continual improvement in our environmental performance, with regard to water abstraction and management it is the policy of Smart Systems to:
1. Seek to continually reduce mains water intensity in production processes.
2. Seek to continually increase the use of harvested water within production processes.
3. Seek to increase the reuse and recycling of water within production processes
4. Set targets and objectives and monitor and review the performance against these objectives and targets.
5. Report these targets and objectives to the Company's stakeholders.
6. Comply with applicable legislation and other requirements relating to the Company's operations.
7. Ensure that all employees and contractors are familiar with related processes before carrying out any works.
Eddie Robinson – CEO

Water Abstraction

Recognising the impact water abstraction has on the environment, in 2011 we installed a combined attenuation and rainwater harvesting system to reduce the amount of water we need to abstract from mains supply. With an overall capacity in excess of 900,000 litres, the system collects rainwater from our roof and stores it ready for filtration and use.

Since 2011 we have been recycling and re-using the ionized water used in our powder coating lines' pre-treatment processes, reducing our demand on local water resources through mains water abstraction.

As part of our expansion programme, in 2014 we installed the first of two state-of-the-art vertical powder coating lines, which have a lower water consumption rate than our horizontal line. Utilising best available technologies, we have significantly improved our water-use efficiency.

In early 2017, we commissioned additional harvesting/attenuation system, with a capacity of 1,920,000 litres. This has substantially reduced both the overall water abstraction demand of the site, and the overall intensity for the factory in the future. This approach is a fundamental strategy of our development process for all suitable roofing installation.

Although a smaller consideration we have a series of water management awareness campaigns operating across our site.

ENVIRONMENTAL PRODUCT DECLARATION

ALUMINUM EXTRUSION

MILL FINISHED, PAINTED, AND ANODIZED

ENVIRONMENTAL PRODUCT DECLARATION

THERMALLY IMPROVED ALUMINUM EXTRUSIONS

MILL FINISHED, PAINTED, AND ANODIZED

ALUMINUM EXTRUDERS COUNCIL

smart architectural aluminium

Life Cycle Assessment

As part of our commitment to the protection of the environment and continual improvement in our environmental performance, with regard to life cycle assessment it is the policy of Smart Systems to:

1. Seek to continually improve the performance from upstream and downstream significant environmental aspects and impacts of the product.
2. Seek to continually increase the recyclability of the end of life of the product.
3. Seek to increase the recycled content of purchased constituent materials.
4. Set targets and objectives and monitor and review the performance against these objectives and targets.
5. Report these targets and objectives to the Company's stakeholders.
6. Comply with applicable legislation and other requirements relating to the Company's operations.
7. Ensure that all employees and contractors are familiar with related processes before carrying out any works.

Eddie Robinson – CEO

Action Pla

ENVIRONMENTAL

EXTRU

INDUSTRY-A

MANUFACT

CERTIFIED

Aluminum Metal

Rolled Products

Extruded Products

Cast Products

Use

The Environmental Footprint of Semi-Finished Aluminum Products in North America

A Life Cycle Assessment Report

The Aluminum Association

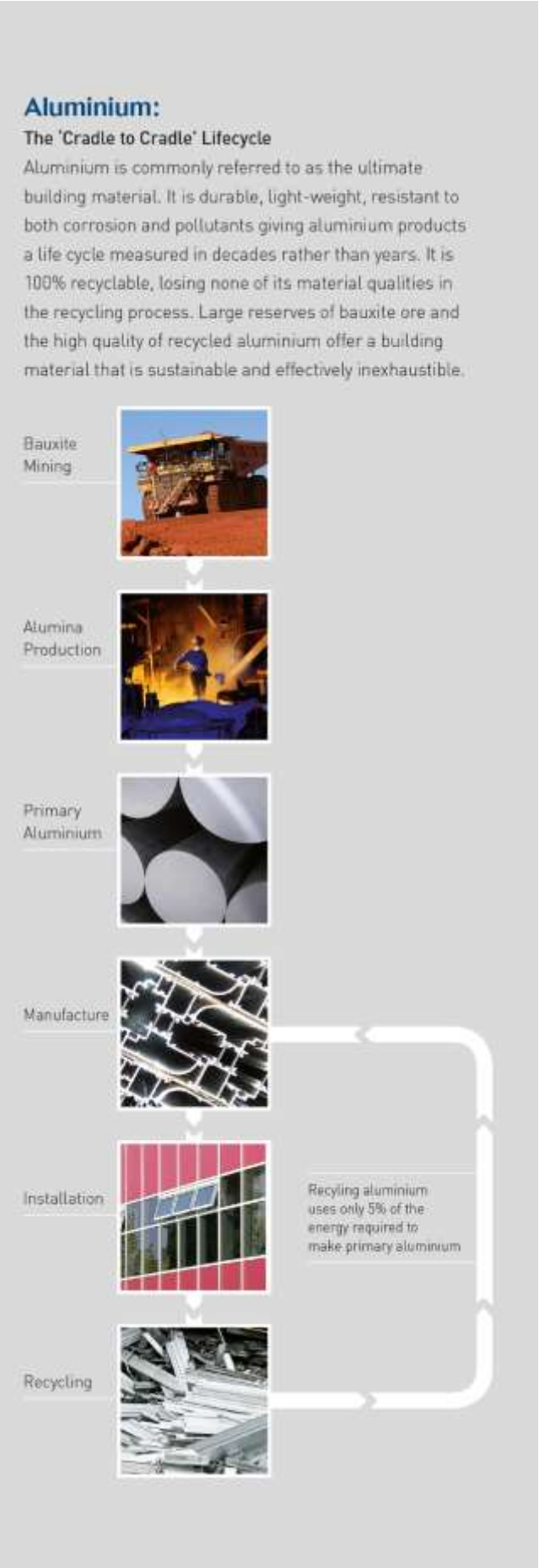
December 2013

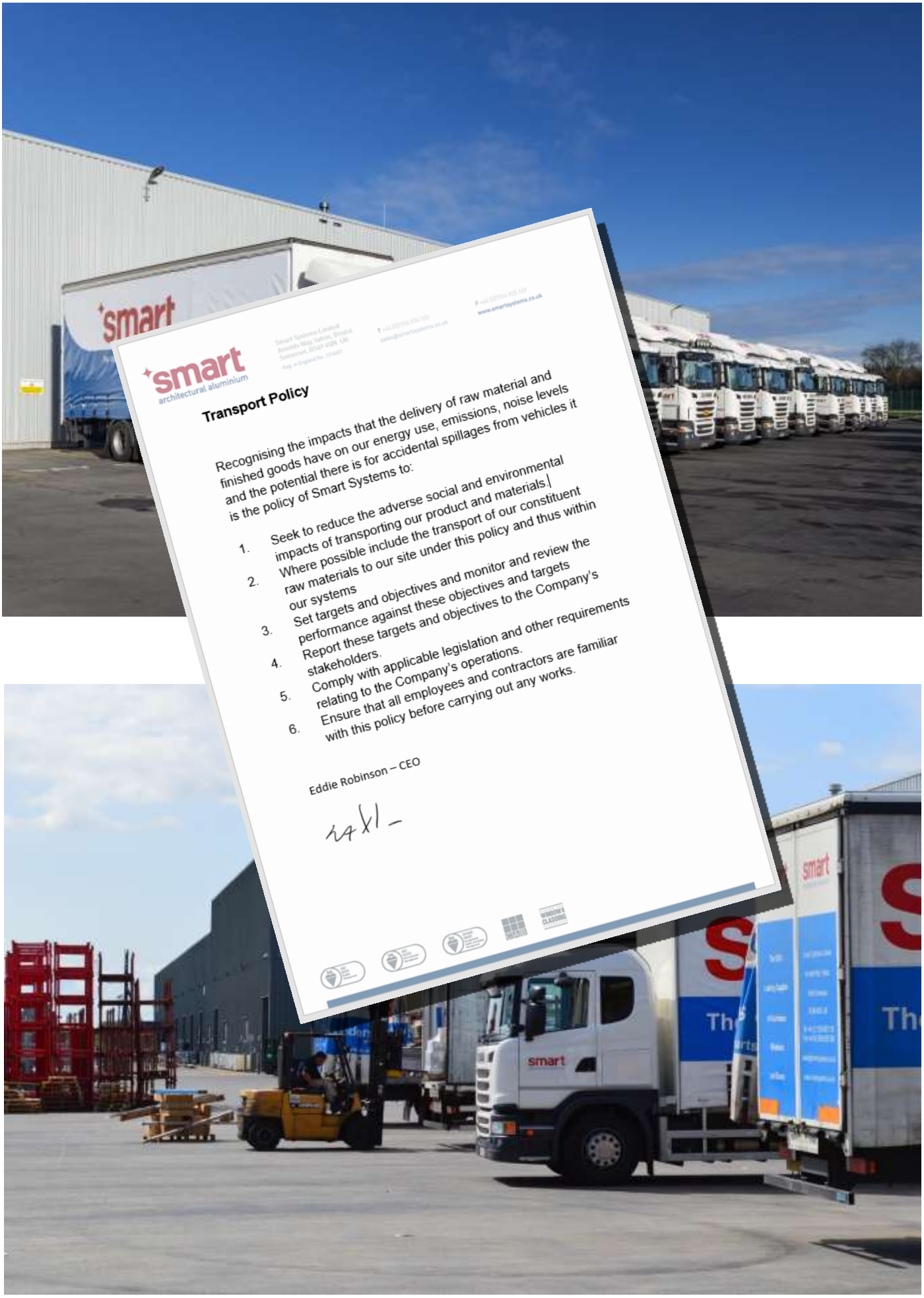
Lifecycle Assessment

The lifecycle of aluminium, and aluminium profiles is widely known and understood. With aluminium products recycled worldwide, it is believed that 75% of aluminium produced in the 1880s is still in use today.

We consider the lifecycle of our products from the design room drawing board, through to production and beyond, identifying, for example, the risks that chromates hold in powder coating; the impact of energy demand in extrusion and the transportation of our products across the UK. Our objective is to improve the impact of our product across its lifecycle.

Detailed and thorough environmental product declarations, footprint calculations and lifecycle studies have been carried out by various aluminium sector trade bodies, action groups, and industry councils - as well as our own specific examples.

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architectural aluminium
Transport Policy
Recognising the impacts that the delivery of raw material and finished goods have on our energy use, emissions, noise levels and the potential there is for accidental spillages from vehicles it is the policy of Smart Systems to:
1. Seek to reduce the adverse social and environmental impacts of transporting our product and materials
2. Where possible include the transport of our constituent raw materials to our site under this policy and thus within our systems
3. Set targets and objectives and monitor and review the performance against these objectives and targets
4. Report these targets and objectives to the Company's stakeholders.
5. Comply with applicable legislation and other requirements relating to the Company's operations.
6. Ensure that all employees and contractors are familiar with this policy before carrying out any works.
Eddie Robinson – CEO

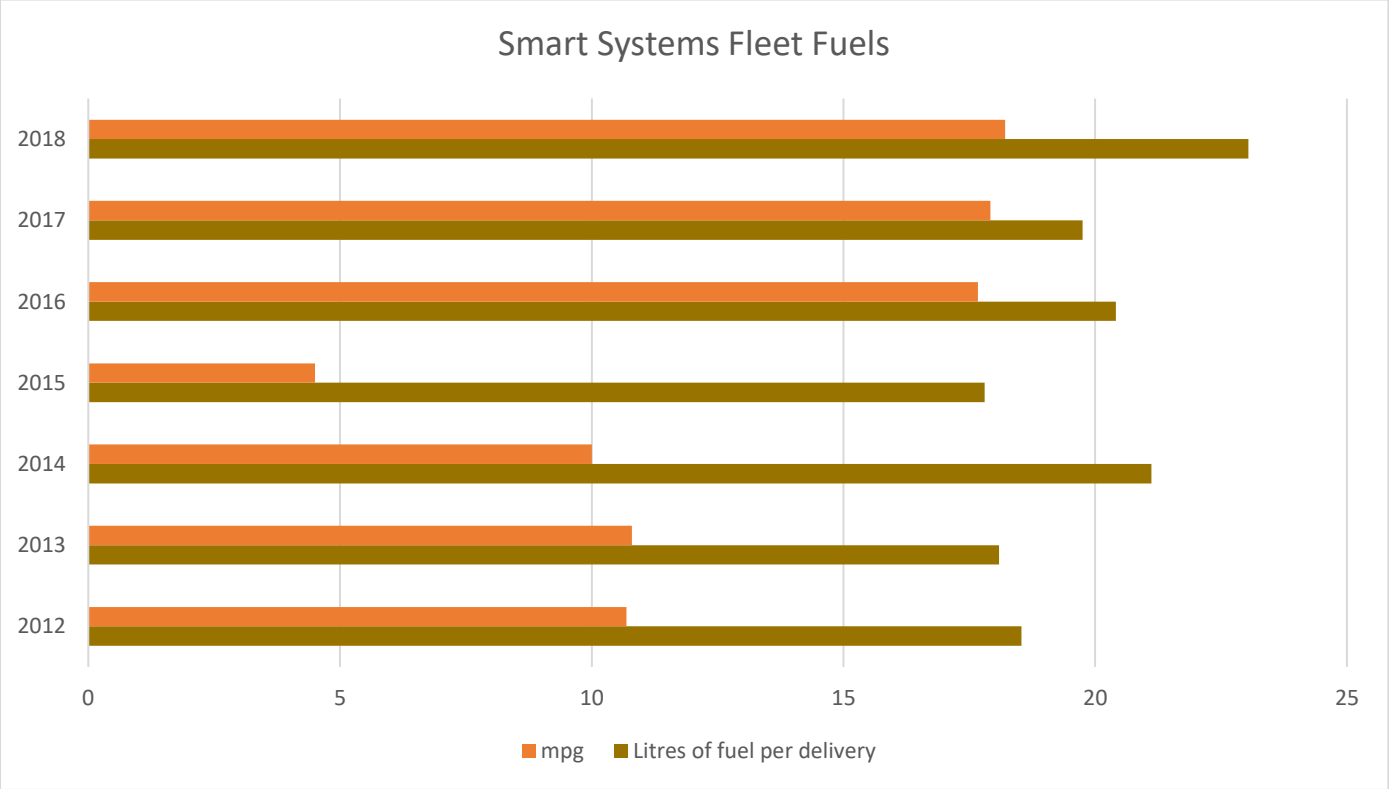
Transport Impacts

We operate our own delivery fleet of rigid vehicles, with wagon and drags, supplemented by efficient national haulage companies to reduce vehicle movements to and from our site.

In 2015, using expanded capacity provided by national haulers, we implemented a network of hubs around the UK, enabling our vehicles to pick up material without having to return to Yatton, reducing empty runs. Whilst this led to a lower overall MPG rate, as our drivers are doing more shorter, less efficient journeys, we have increased overall output by 20%, with only a 5% increase in fleet mileage.

In order to mitigate all the potential impacts of our transport activities (spillage and pollution, emissions, addition to congestion, noise etc.), we continue to invest in our fleet; by leasing and upgrading our vehicles regularly, we can meet current Euro V emission requirements. We also ensure each vehicle is maintained by the manufacturer in line with their recommendations, to reduce the risk of spills and leaks. Furthermore, we have installed 360-degree external camera systems on all our vehicles, giving drivers greater vision when operating in tight spaces, as well as the ability to assess their driving style.

From 2015, we set an annual target of a further 5% reduction in litres per delivery and by the end of the first half of 2016, we had already achieved a 3% reduction. With additional distribution hubs coming on line later in 2016, we are confident of achieving the full 5% reduction for the year.



Employment and Skills

We employ around 500 people at our Yatton site. Whilst most of our employees live within a 15-mile radius, we have a diverse and inclusive workforce, with colleagues hailing from across the UK, Europe and beyond.

Where possible, we seek to develop and promote employees within the business, with advancements to supervisory and management roles, the development of technical skills and apprenticeships.

Our team leaders are responsible for identifying training needs and developing potential, enabling people to grow and develop organically without the pressure of ‘management involvement’. When a training need is identified, if it is appropriate and practical, it is addressed by third party training, delivering certification for the trainee and aiding their continuing professional development.

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Arnolds Way, Yatton
North Somerset, BS49 4QN
Tel 01934 876100

smart
aluminium extrusions

Smart Systems and Smart Aluminium Extrusions

Learning and Development Policy

Introduction

This policy sets out Smart Systems Limited and Smart Aluminium Extrusions Limited actions to understand the learning and development needs for employees and to provide appropriate training.

1. Provide an induction programme for all employees tailored to the relevant requirements of their role.
2. Continual review of training and development of staff as roles evolve, keeping in line with current legislation and company policy.
3. Continue to be an equal opportunity employer, enhancing the diversity and inclusiveness of its workforce where appropriate to the role.
4. Ensure those persons involved in purchasing are trained in responsible sourcing where relevant.
5. Perform team skill gap analysis to identify learning needs, setting targets to ensure that we are continually enhancing skills sets within teams. This will include selecting the most appropriate training provider and sharing knowledge and best practice within the organisation.
6. Report these targets and objectives to the company's stakeholders.
7. Record and maintain all training records (internal and external), storing them centrally and incorporating relevant review dates.

Eddie Robinson
Managing Director

Anti-Slavery and Human Trafficking Statement November 2016 Page 1 of 1

Ecotoxicity

Chemicals within the European Union must be classified under the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) legislation. REACH addresses the production and use of chemical substances, and their potential impacts on both human health and the environment. At the time of writing no products manufactured by Smart Systems Ltd are above the REACH threshold.

However, although a number of chemicals used within our processes utilise REACH registered substances, none are classified as Substances of Very High Concern (SVHC) under article 57 of the legislation.

Chemicals used regularly in our processes are Sodium Hydroxide: Registration Number 01-211945-7892, Powder Paints: No known SVHC or SVHC candidates, Hydrochloric Acid: 231-595-7, and Ferric Chloride: 231-729-4.

Business Ethics

We operate in a business environment where the potential for business ethics to be violated or breached exists. Whilst we are able to operate with a large degree of freedom, we are bound not only by our own ethics, but also by those of our parent company, Corialis.

On completion of their induction, each employee signs a group-wide code of conduct, in which they are expected to follow the established Whistleblowing Policy, should the need arise.

The risk associated with bribery and corruption is assessed by the business regularly, to ensure legal and ethical compliance.

Local Communities

As one of the largest local employers and the most active manufacturing facility in the area, we realise that our activities can have both positive and negative impacts on the local community. The nature of our operation makes it difficult for us to host groups of local stakeholders, however through meetings and consultations, we have involved the community at each stage of our site development.

We are proud to support local companies where possible and practical, including catering, consultancy, technical services, hotels and transport businesses.

As with any relationship, there are times when parties disagree, and we treat any community complaint with the same degree of seriousness and level of importance as we would if it were from a customer or regulator.

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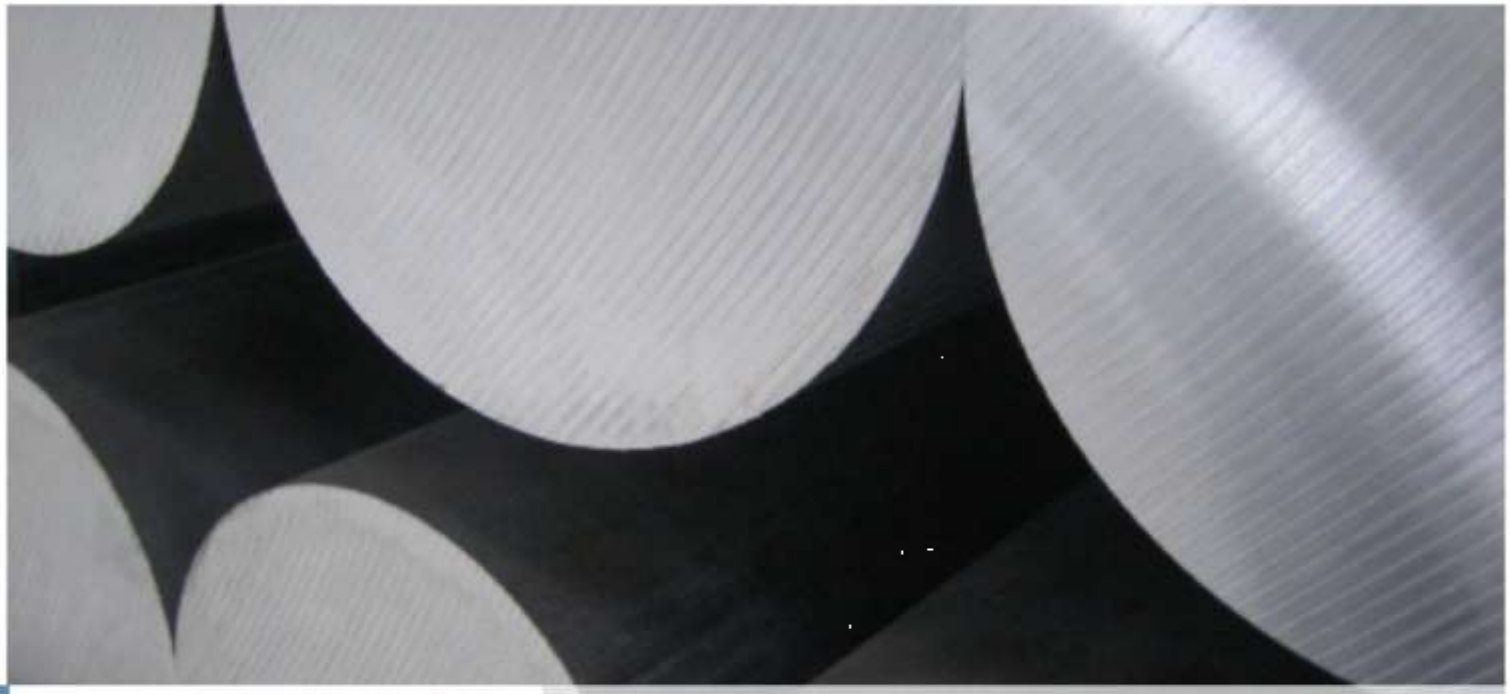
Local communities

Smart Systems play a central role in community we are located in and beyond, as such we shall:

1. Identify those within the local community that are to be considered stakeholders
2. Seek to continually consult with local community stakeholders affected by production and development processes.
3. Ensure that any complaints from community stakeholders are treated in the same manner as a complaint from a customer or regulator
4. Review our relationship with the community, the degree of stakeholder engagement, and the results of any complaints.
5. Source materials, services and goods locally where appropriate and practical.

Eddie Robinson
Managing Director



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Data within this report has been verified by Dudden Ltd

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Reorder Code: SME1955AE

APPENDIX C

SUPPORTING INFORMATION – PRE-PLANNING DISCUSSIONS

t: 020 8309 7777
m: 07595 281501
w: www.frankham.com

Project reference :

BRINGING IDEAS TO LIFE

FRANKHAM

Sidcup (Head Office) 020 8309 7777 | **Central London** 020 7651 0790 | **Oxford** 01865 322500

www.frankham.com

Registered Office : Frankham Consultancy Group Limited, Irene House, Five Arches Business Park, Maidstone Road, Sidcup, Kent, DA14 5AE.

Registered in England & Wales. No 4409614

From: Whittredge, Emily [mailto:Emily.Whittredge@camden.gov.uk]
Sent: 30 August 2018 11:48
To: Jack Ditch
Subject: Planning applications 2018/3343/NEW and 2018/3347/NEW Lithos Road

Dear Mr Ditch,
I write in regards to two planning applications we have received for Lithos Road:

-2018/3343/NEW Jacaranda House, 48 Lithos Road NW3 6EY
-2018/3347/NEW 54 Lithos Road NW3 6EY

Both applications seek to replace existing timber windows with uPVC units. I must advise that our policies do not support the use of uPVC in principle on sustainability grounds, and therefore we are unlikely to be able to grant approval for the proposed development.

Camden Planning Guidance 1 Design (July 2015 updated March 2018) Paragraph 4.7 states:
"Where timber is the traditional window material, replacements should also be in timber frames. uPVC windows are not acceptable both aesthetically and for environmental reasons, including their relatively short lifespan and inability to biodegrade. Similarly, where steel is the traditional window material, steel replacements will be sought wherever possible, see also CPG3 Sustainability (Sustainable use of materials chapter), which gives guidance on the use of sustainable materials). "

The Fortune Green & West Hampstead Neighbourhood Plan para. A9 also requires all developments to use the highest quality materials.

Given the above initial assessment, I recommend that both applications are either withdrawn or amended in respect of the frame material. Timber frames would be acceptable, or alternatively, aluminium frames could be supported subject to details.

I have not yet registered the applications, so please advise as soon as possible how you wish to proceed. If you would still like a determination of the current proposals, which are likely to be refusals, I can proceed on this basis.

Kind regards,

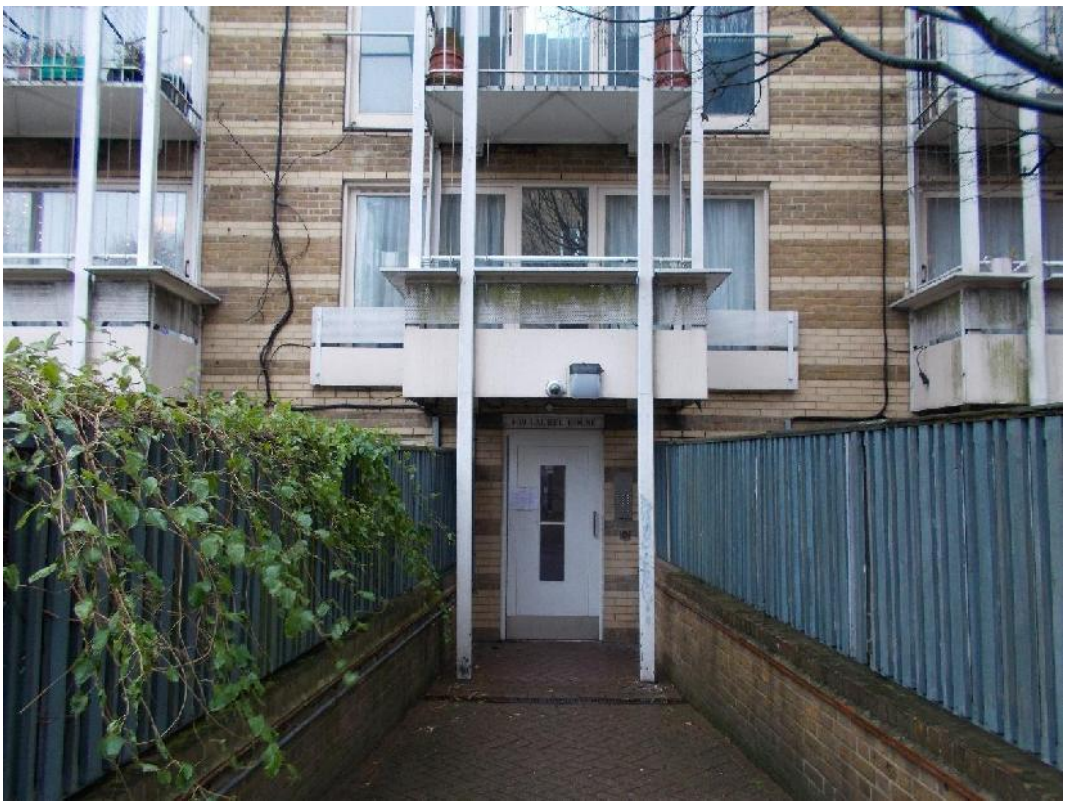
Emily Whittredge MSc, PgDip
Junior Planner
Regeneration and Planning
Supporting Communities
London Borough of Camden

Telephone: 020 7974 2362
Web: camden.gov.uk
2nd Floor
5 Pancras Square
5PS
London N1C 4AG

Please consider the environment before printing this email.

APPENDIX D
PHOTOS

Photograph 01 – Laurel House Front Elevation



Photograph 02 – Laurel House Entrance

Photograph 03 – Laurel House Sliding Balcony Doors

Photograph 04 – Laurel House Rear Elevation

Photograph 05 – Laurel House Rear and Side (hidden) Elevation

Photograph 06 – Laurel House Side (hidden) Elevation

Photograph 07 – Sandalwood House Front Elevation

Photograph 08 – 54A-D Lithos Road Front Elevations

Photograph 09 – 54A-D Lithos Road Front Elevations

Photograph 10 –54A-D Lithos Road Elevation

Photograph 11 – 54A-D Lithos Road Rear Balcony Door

Photograph 12 – Ebony House Front Elevation

Photograph 13 – Ebony House PVCU and Timber Windows

Photograph 14 – Ebony House

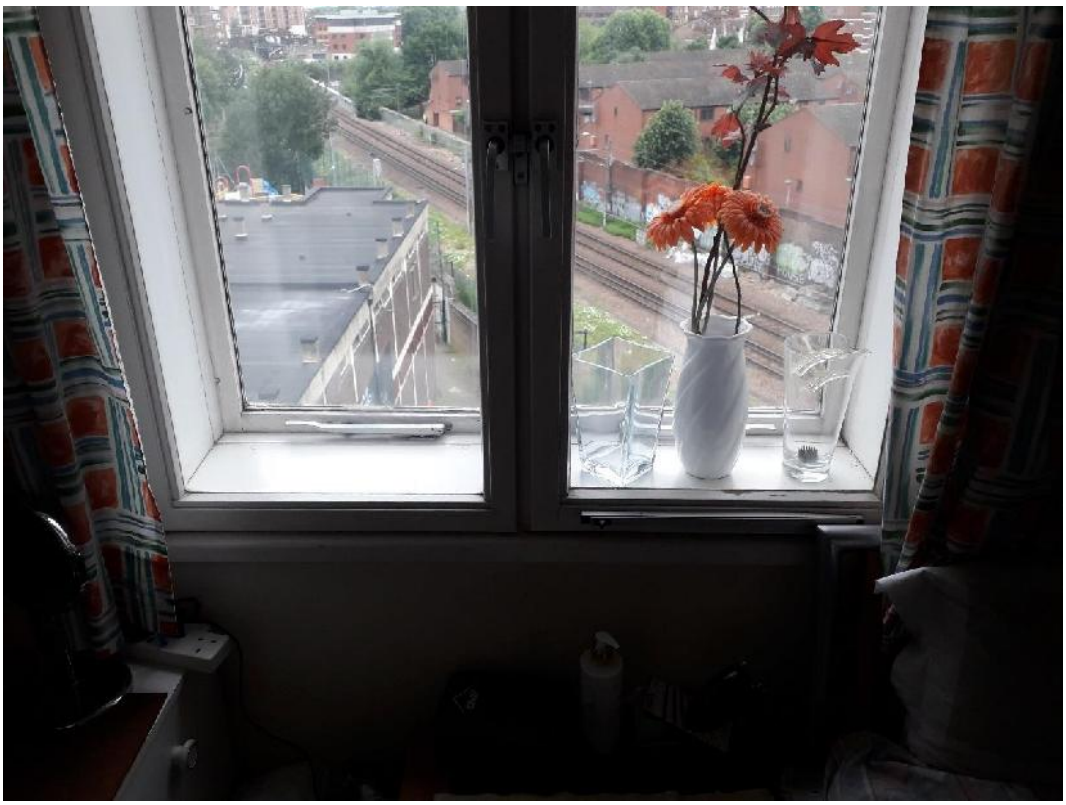
Photograph 15 – Ebony House Rear Elevations

Photograph 16 – Ebony House Rear Elevations

Photograph 17 – Secondary Glazing, Flat 4 Ebony House

Photograph 18 – Timber Winodw, Flat 4 Ebony House

Photograph 19 – Balcony Door Flat 4 Ebony House



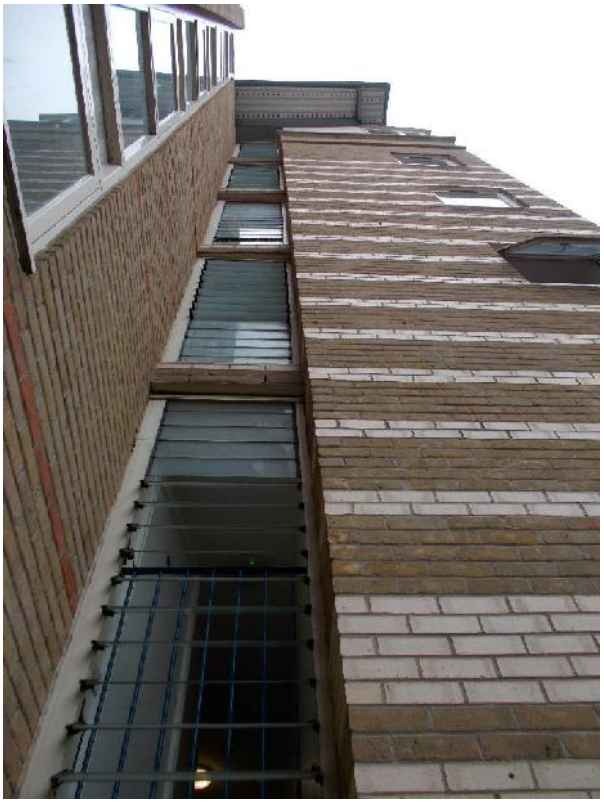
Photograph 20 – Secondary Glazing, Flat 21 Ebony House

Photograph 21 – PVCU Winodw, Flat 21 Ebony House

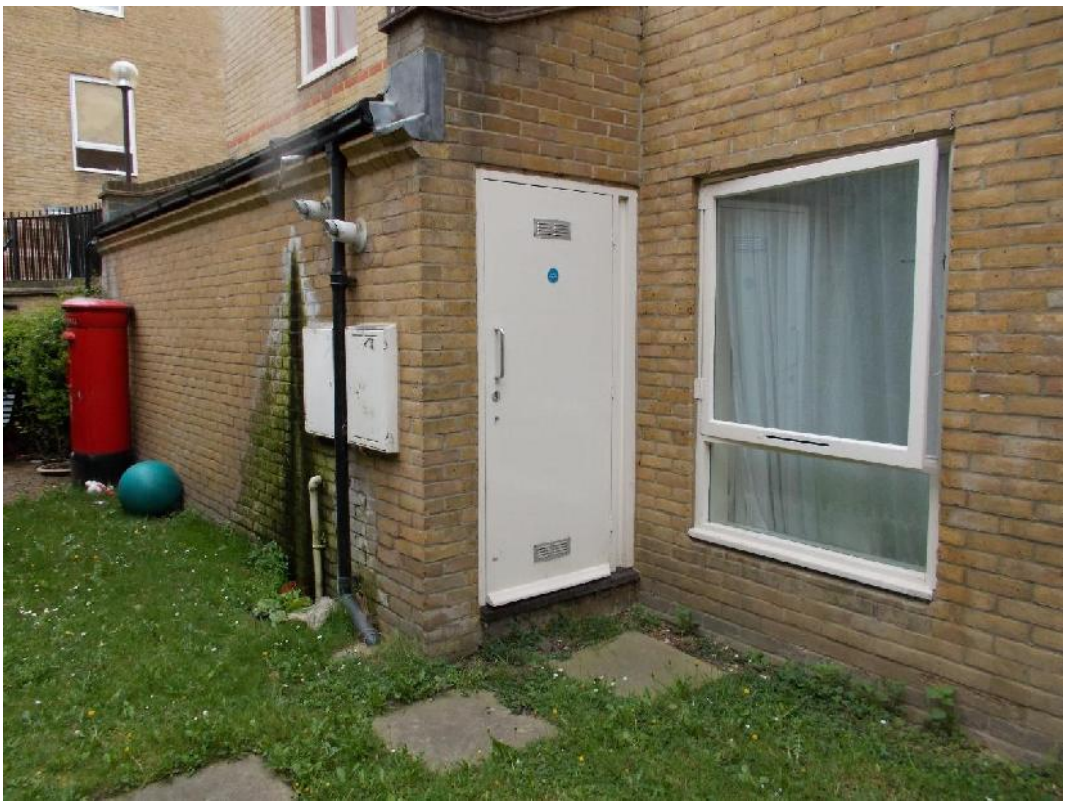
Photograph 22 – Jacaranda House Front Elevation

Photograph 23 – Jacaranda House Rear Elevation

Photograph 24 – Jacaranda House PVCU Doors



Photograph 25 – Jacaranda House Side Elevation



Photograph 26 – Jacaranda House Rear Elevations

Photograph 27 – Jacaranda House Timber Windows

Photograph 28 – Juniper House

Photograph 29 – Juniper House Front Elevation

Photograph 30 – Juniper House PVCU Patio Doors

Photograph 31 – Juniper House Side Elevation

Photograph 32 – Juniper and Jacaranda House Rear elevations