

ELITE ROOFING & CLADDING SYSTEMS

EUROCLAD







EUROCLAD

contents



Introduction	2																								
System benefits	4																								
Product selector	6																								
Roof systems	<table> <tr> <td>Introduction</td> <td>8</td> </tr> <tr> <td>Elite 1</td> <td>10</td> </tr> <tr> <td>Elite 2</td> <td>11</td> </tr> <tr> <td>Elite 3</td> <td>12</td> </tr> <tr> <td>Elite 4</td> <td>13</td> </tr> <tr> <td>Elite 5</td> <td>14</td> </tr> <tr> <td>Thermal performance</td> <td>15</td> </tr> </table>	Introduction	8	Elite 1	10	Elite 2	11	Elite 3	12	Elite 4	13	Elite 5	14	Thermal performance	15										
Introduction	8																								
Elite 1	10																								
Elite 2	11																								
Elite 3	12																								
Elite 4	13																								
Elite 5	14																								
Thermal performance	15																								
Wall systems	<table> <tr> <td>Introduction</td> <td>16</td> </tr> <tr> <td>Elite 51</td> <td>18</td> </tr> <tr> <td>Elite 52</td> <td>19</td> </tr> <tr> <td>Elite 53</td> <td>20</td> </tr> <tr> <td>Elite 54</td> <td>21</td> </tr> <tr> <td>Elite 55</td> <td>22</td> </tr> <tr> <td>Elite 56</td> <td>23</td> </tr> <tr> <td>Elite 57</td> <td>24</td> </tr> <tr> <td>Elite 58</td> <td>25</td> </tr> <tr> <td>Elite 60</td> <td>26</td> </tr> <tr> <td>Firewalls</td> <td>27</td> </tr> <tr> <td>Thermal performance</td> <td>28</td> </tr> </table>	Introduction	16	Elite 51	18	Elite 52	19	Elite 53	20	Elite 54	21	Elite 55	22	Elite 56	23	Elite 57	24	Elite 58	25	Elite 60	26	Firewalls	27	Thermal performance	28
Introduction	16																								
Elite 51	18																								
Elite 52	19																								
Elite 53	20																								
Elite 54	21																								
Elite 55	22																								
Elite 56	23																								
Elite 57	24																								
Elite 58	25																								
Elite 60	26																								
Firewalls	27																								
Thermal performance	28																								
Acoustics	30																								
Non-fragility	32																								
Elite partners	34																								
Other products	36																								



THE EASILY SPECIFIED SOLUTION

Elite Systems provide a package of components from leading manufacturers which combine to form guaranteed roof and wall systems with defined performance. Elite Systems offer superior, proven roofing and cladding solutions that are easy to specify and offer great performance throughout their lifetime.

Elite Systems can be used for a multitude of roof and wall applications, all with inherent design flexibility. Incorporating recyclable, non-combustible insulation cores, Elite Systems have outstanding acoustic and thermal performance.

Elite Systems are reliable, with a standard 12 year system guarantee and the option of an ElitePLUS system with a 25 year system guarantee.

introduction

EUROCLAD

Euroclad is the UK's home-grown, independent supplier of metal roof and wall products which provide exceptional acoustic and thermal performance for the life of a building. Products are sustainably credible with proven routes for recycling and disposal. Euroclad listens to the needs of its customers and offers high performance, cost effective solutions.

Founded in 1981 Euroclad has taken huge strides over three decades, consistently investing in people and technology to satisfy customer needs. Cutting edge UK manufacturing maintains Euroclad's position at the forefront of the metal roofing and cladding industry.

As part of its commitment to quality, service and the environment, Euroclad operates a Quality Management System approved to BS EN ISO 9001:2008 and an Environmental Management System approved to BS EN ISO 14001:2004.

ELITE – ROOFING SYSTEMS



ELITE – VERTICAL CLADDING SYSTEMS



ELITE – HORIZONTAL CLADDING SYSTEMS





Euroclad Elite Systems provide benefits in the four key areas of sustainability, performance, non-combustibility and design flexibility.

SUSTAINABILITY

All cladding used is recyclable* with no added greenhouse gases, minimising any potential ecological impact. Elite Systems also offer the World's first CarbonNeutral building envelope as part of Confidex Sustain® when specified with Colorcoat HPS200® Ultra and/or Colorcoat Prisma®.

PERFORMANCE

With the increasing pressure to meet new performance criteria for all building envelopes, Euroclad Elite Systems deliver on all counts, providing the flexibility of construction to comfortably deliver specified air tightness, sound reduction and thermal performance in accordance with Building regulations.

NON-COMBUSTIBILITY

Euroclad Elite Systems are non-combustible, being constructed from inert, fire-resistant materials like mineral fibre insulation and steel or aluminium skins. In the event of a fire, Elite Systems will maintain their insulation and integrity, reducing risk to the lives of building users and fire fighters.

DESIGN FLEXIBILITY

Specifiers and developers increasingly demand greater design flexibility. Euroclad systems offer complete visual freedom. On-going development, along with the ability to accurately convert your design into the correct aesthetic, means that Euroclad delivers at all levels.

*Source: Colorcoat® Technical Paper, End of life options for pre-finished steel buildings, 2006.



system benefits

WHY CHOOSE ELITE SYSTEMS

Elite Systems are a range of integrated constructions from Euroclad which are superior, specifiable metal roofing and cladding systems. Carrying 25 year or 12 year System Guarantees in addition to up to 40 year Guarantees for the external sheet materials. All Elite Systems feature fully tested and accredited performance, benefiting contractors with quick and easy installation and offering designers flexibility and peace of mind.

Elite represents a single-source solution; a one-stop shop for metal roof and wall systems. The range of systems available provides choice and flexibility, whilst offering a fully integrated and specifiable system.

Systems are unique in offering a comprehensive range of constructions covering all building types and almost every category of metal roofing and cladding.

A select group of regional and national specialist contractors are recommended for the selection, pricing and installation of Elite Systems.

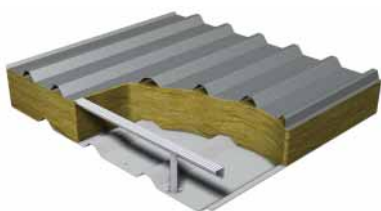
Part L of the building regulations is focused on the conservation of fuel and power. With buildings in the UK accounting for approximately 50% of the total UK emissions, the on-going changes to the Building Regulations are designed to ensure continued

improvements to energy efficiency and the reduction of CO₂ emissions.

Elite Systems provide excellent thermal and air tightness performance, efficient Psi values for linear details and further energy saving options such as high reflective liner and integrated rooflights. Integration of Renewables such as Tata steels Renew SC Transpired Solar Collectors and accessories for integration of Photovoltaic panels can further enhance CO₂ reduction for the building, offering unparalleled performance choice for compliance. Our growing library of BIM objects and CAD details have recently been complemented by a new Part L Design Check capability, which makes it even easier to specify Elite Systems to meet the requirements of the entire building.

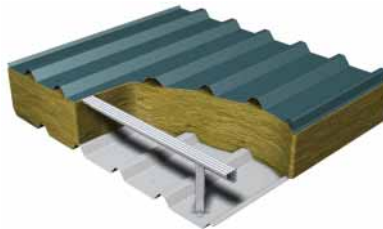
Euroclad can offer a wide range of 'penalty free details' in a range of formats, as well as the evidence for the Building Control Body to show the calculations have been done by experienced and qualified persons, meeting the government requirements. This service is offered when Elite Systems are specified.

Full technical details and NBS specifications are available at www.euroclad.com



ELITE SYSTEM 1 – PAGE 10

- Cost effective trapezoidal profile
- Lightweight system
- U-values down to 0.17W/m²K using 260mm Quattro spacer*
- Minimum recommended design pitch of 4°
- Self-curve down to 45m radius
- Good acoustic performance
- Ideal for industrial and warehouse applications.



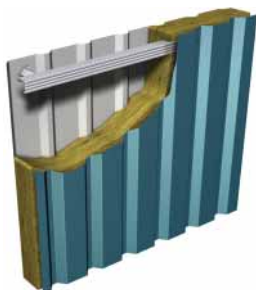
ELITE SYSTEM 2 – PAGE 11

- Popular trapezoidal profile
- More robust liner panel allows quicker installation
- U-values down to 0.14W/m²K using 320mm Quattro spacer*
- Minimum recommended design pitch of 4°
- Self-curve down to 45m radius
- Better acoustic performance than Elite 1
- Great for Industrial, warehouse and retail developments.



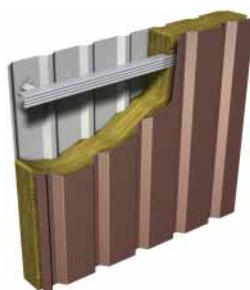
ELITE SYSTEM 3 – PAGE 12

- No endlaps or through fixings rolled as single length sheets self curve down to 50m radius
- Onsite manufacture on the ground or at building eaves
- U-values down to 0.14W/m²K using 320mm Quattro spacer*
- Minimum finished pitch 1°
- Self-curve down to 50m radius
- Excellent acoustic properties
- Developed for long-span distribution centres, education, leisure and retail.



ELITE SYSTEM 51 – PAGE 18

- Cost effective trapezoidal profile
- Typical modern cladding system
- U-values down to 0.14W/m²K using 320mm Quattro spacer*
- Recyclable profiled sheets, insulation and spacer system
- Fire rated wall system as standard
- 4 hour fire certificated versions
- Ideal for industrial and warehouse applications.



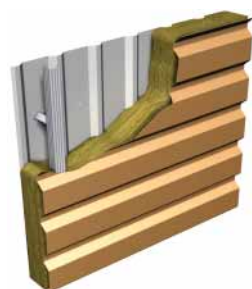
ELITE SYSTEM 52 – PAGE 19

- Popular wider-pitched trapezoidal profile
- Typical modern cladding system
- U-values down to 0.13W/m²K using 320mm Quattro spacer*
- Recyclable profiled sheets, insulation and spacer system
- Easy to detail, quick installation
- 4 hour fire certificated versions
- Great for Industrial, warehouse and retail developments.



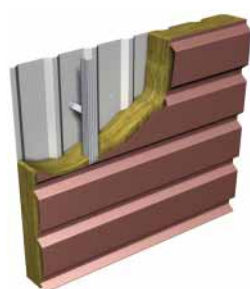
ELITE SYSTEM 53 – PAGE 20

- Sinusoidal profile provides retro finish
- Traditional cladding made from contemporary materials
- U-values down to 0.14W/m²K using 320mm Quattro spacer*
- Recyclable profiled sheets, insulation and spacer system
- Easy to detail, quick installation
- 4 hour fire certificated versions
- Popular for modern architectural applications.



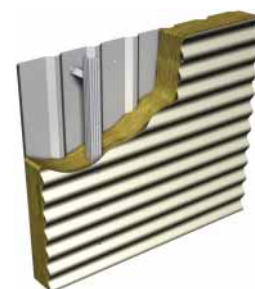
ELITE SYSTEM 55 – PAGE 22

- Cost effective trapezoidal profile
- Typical modern cladding system
- U-values down to 0.15W/m²K using 280mm Quattro spacer*
- Recyclable profiled sheets, insulation and spacer system
- Easy to detail, quick installation
- 4 hour fire certificated versions
- Ideal for industrial and warehouse applications.



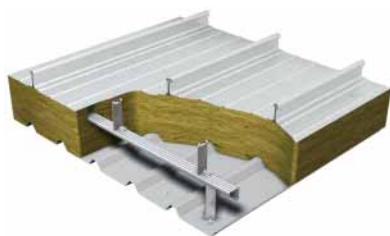
ELITE SYSTEM 56 – PAGE 23

- Popular wider-pitched trapezoidal profile
- Typical modern cladding system
- U-values down to 0.15W/m²K using 280mm Quattro spacer*
- Recyclable profiled sheets, insulation and spacer system
- Easy to detail, quick installation
- 4 hour fire certificated versions
- Great for Industrial, warehouse and retail developments.



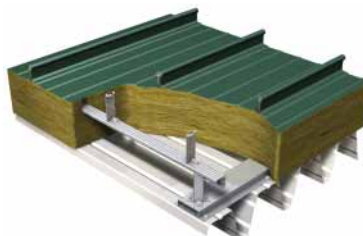
ELITE SYSTEM 57 – PAGE 24

- Sinusoidal profile provides retro finish
- Traditional cladding made from contemporary materials
- U-values down to 0.15W/m²K using 280mm Quattro spacer*
- Recyclable profiled sheets, insulation and spacer system
- Easy to detail, quick installation
- 4 hour fire certificated versions
- Often used for modern architectural applications



ELITE SYSTEM 4 – PAGE 13

- Premium, low pitch aluminium standing seam roof
- Single length sheets with no end laps
- Onsite manufacture including curved and tapered sheets
- U-values down to 0.13W/m²K using 320mm Quattro spacer*
- Minimum actual pitch of 1°
- Self-curve down to 45m, induced down to 8m radius
- Excellent acoustic properties
- Adaptable solution.



ELITE SYSTEM 5 – PAGE 14

- Bespoke aluminium standing seam with structural deck
- Structural deck with spans of up to 10m
- U-values down to 0.11W/m²K using 320mm Quattro spacer*
- Minimum actual pitch of 1°
- Self-curve down to 45m, induced down to 8m radius
- Excellent acoustic properties
- Superb choice for education, sports/leisure and retail.

These core Elite Systems offer the design flexibility and performance to suit the majority of applications. For very specific or niche applications other Elite Systems are available.

If you require an Elite System assembly that is not included in this brochure please contact the sales or technical department by calling **02920 790722** or emailing **sales@euroclad.com**



ELITE SYSTEM 54 – PAGE 21

- Opus flat plank cladding
- Concealed fix, adjustable joint system
- U-values down to 0.14W/m²K using 320mm Quattro spacer*
- Recyclable profiled sheets, insulation and spacer system
- Easy to detail, quick installation
- 4 hour fire certificated versions
- Excellent for commercial and retail applications.

These core Elite Systems offer the design flexibility and performance to suit the majority of applications. For very specific or niche applications other Elite Systems are available.

If you require an Elite System assembly that is not included in this brochure please contact the sales or technical department by calling **02920 790722** or emailing **sales@euroclad.com**



ELITE SYSTEM 58 – PAGE 25

- Premium flat plank cladding
- Concealed fix, adjustable joint system
- U-values down to 0.15W/m²K using 280mm Quattro spacer*
- Recyclable profiled sheets, insulation and spacer system
- Easy to detail, quick installation
- 4 hour fire certificated versions
- Excellent for commercial and retail applications.



ELITE SYSTEM 60 – PAGE 26

- Striking arced profile with 1m cover width
- UK manufactured from high quality pre-finished steel
- U-values down to 0.15W/m²K using 280mm Quattro spacer*
- Recyclable profiled sheets, insulation and spacer system
- Mitred corners or finned detailing available
- 4 hour fire certified versions
- Popular choice for modern building design across all industry sectors.

These core Elite Systems offer the design flexibility and performance to suit the majority of applications. For very specific or niche applications other Elite Systems are available.

If you require an Elite System assembly that is not included in this brochure please contact the sales or technical department by calling **02920 790722** or emailing **sales@euroclad.com**

*Standard system performance. Bespoke solutions with further enhanced U-Values are available – please refer to Sales.

Development
Location
Architect
Consultant
Roofing contractor

Ravenscraig Sports Centre
North Lanarkshire
Populous
Buro Happold
Lakesmere



Development
Location
Architect
Main contractor
Roofing contractor

International Broadcast Centre
Olympic Park London
RPS Burks Green
Carillion
Hathaway



Development
Location
Architect
Main contractor
Roofing contractor

Marks and Spencer Eco Store
Cheshire Oaks
Aukett Fitzroy Robinson
Simons Design
Northern Cladding



Development	Ravenscraig Sports Centre
Location	North Lanarkshire
Architect	Populous
Consultant	Buro Happold
Cladding contractor	Lakesmere



Development	Sytner Mini
Location	Leicester
Architect	AT Architects
Main contractor	Talbot Construction
Cladding contractor	WT Roofing



Development	Glamorgan Sports Park
Location	University of Glamorgan, Treforest
Architect	HolderMathias Architects
Main contractor	Midas Construction
Cladding contractor	MH Massey



Development	Bassetts Citroen dealership
Location	Bridgend
Architect	Citroën
Cladding contractor	National Cladding (Wales)



elite wall systems

The use of metal in the construction of buildings and other architectural structures was one of the most distinctive innovations of the Industrial Revolution. The performance and convenience of metal in construction was a revelation and it continues to evolve to meet the changing requirements of modern construction.

Today, Euroclad's Elite Wall Systems offer choice, performance and convenience, as well as the peace of mind afforded by an entire system guarantee and approved installers; all supported by Euroclad's position at the forefront of the metal cladding industry.

Elite Wall Systems are built on the same principle; site assembled systems comprising of a liner sheet separated by a spacer system, with an external profile in steel or aluminium and mineral wool sitting between the sheets to provide thermal insulation.

There is a great choice of exterior profiles, all of which have inherent benefits. The trapezoidal profiles in the majority of Elite Wall Systems are cost-effective and have excellent performance. They can also be used to create unique structures, as was the case at Ravenscraig Sports Centre, where the impressive roofs mentioned earlier are forced to share equal-billing with the remarkable diagonally-laid walls. With the ElitePlus 25 year system guarantee on both the roof and walls it will be an attractive and familiar part of the landscape for many years to come.

The half-round profile of Elite 60 provides a finish that stands apart; so it came as no surprise when Mini, a brand that represents products known for their striking good looks, installed it on a new garage in Leicester. The Sytner Mini garage features the eye catching Half Round profile laid horizontally on the walls in sleek metallic black and as such the showroom certainly stands out from the crowd.

Sinusoidal profiles form part of Elite 53 and 57. Corrugated profiles used to be synonymous with sheds and old industrial buildings.

With the move towards trapezoidal profiles the undulating curves of sinusoidal roofing and cladding fell out of favour.

But recent years have seen resurgence in their use, often with great visual effect as part of a modern building envelope. The new £3.7m state-of-the-art coaching and performance development Centre at Glamorgan Sport Park is one such building that takes full advantage of this attractive cladding option. It is also the first sports centre in the UK to receive a BREEAM excellent rating for its facilities.

Opus cladding featured in Elite Systems 54 and 58 can provide an attractive aesthetic that rivals composite panels and rainscreen cladding, whilst offering potential cost savings.

These efficient and effective cladding systems have been employed to great effect for refurbishments of Citroën dealerships across the UK; a great example being Bassetts in Bridgend. To reflect the garage's commitment to delivering a 'first class experience' Europlank provides an impressive, high quality finish; realising the Citroën corporate style of architecture whilst providing a functional and tailored finish.

The experience and manufacturing expertise available from Euroclad completes the picture, providing high quality manufacturing and customer service to complement the choice, performance and convenience of Elite Wall Systems.

Elite Roof Systems 51 to 60 offer the design flexibility and performance to suit the majority of applications. Also available is the Elite 50 systems, which incorporates the Half Round profile laid vertically.

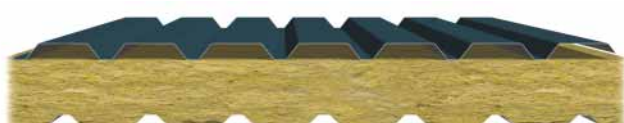
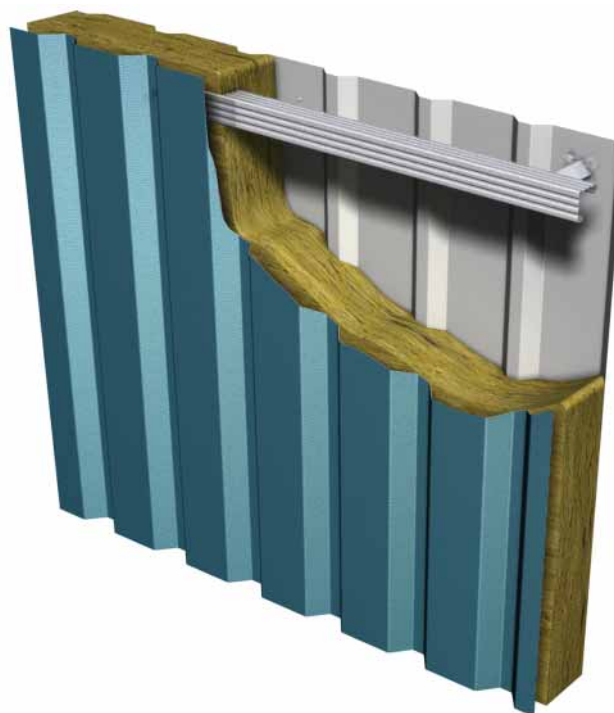
If you require an Elite System assembly that is not included in this brochure please contact the sales or technical department by calling **02920 790722** or emailing **sales@euroclad.com**

ELITE SYSTEM

51

High quality, cost-effective vertical cladding solution

Elite System 51 is an adaptable, sustainable and economical solution to vertical cladding. The system comprises of 32/1000 reverse profile steel or aluminium sheeting fixed to the Quattro spacer system. Mineral fibre insulation is housed between the outer sheet and the 19/1000 white enamelled liner.



SPECIFICATIONS

External	Euroclad 32/1000R 0.5mm steel Colorcoat HPS200® Ultra Colorcoat Prisma®
	Euroclad 32/1000R 0.9mm aluminium ARS coating PVDF coating
Spacer system	Quattro
Insulation	0.040 W/mK Lambda insulation as standard – other options available
Liner panel	Euroclad 19/1000 0.4mm steel
System components (available via Euroclad)	Fasteners · Flashings · Membranes Tapes, Mastics and Sealants Fabrications

SYSTEM BENEFITS

- All products CE Marked
- Recommended Installers
- Building Regulations Part L2 compliant
- Comprehensive technical support
- Can be installed as a fire wall
- Confidex® Guarantee with Colorcoat HPS200® Ultra and Colorcoat Prisma®
- Ease of specification, costing and installation
- Environmentally-friendly components and manufacture
- Euroclad Elite Plus 25 year guarantee available
- Euroclad Elite 12 year guarantee
- Fast installation
- Good acoustic performance
- Lightweight system
- Manufactured with ISO 14001:2004 accredited systems
- Manufactured with ISO 9001:2008 accredited systems
- Matching flashings
- NBS Specifications
- Non-combustible
- Proven components
- Single point procurement and responsibility
- Zero ODP and no added greenhouse gases.

PERFORMANCE

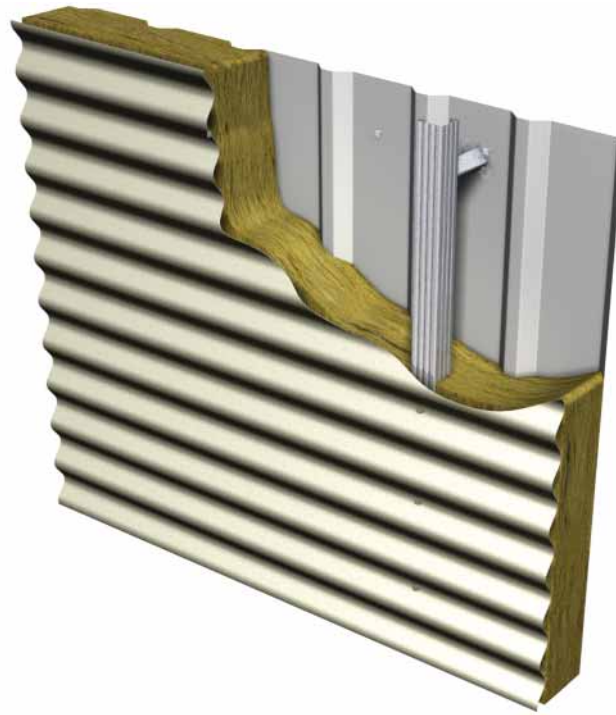
U-value	Quattro bracket	0.040 W/mK Quilt insulation depth and U-value
0.35W/m²K AD-L2A 2010 back stop value compliant	120mm	120mm (0.35W/m²K)
0.26W/m²K 2013 notional building value compliant	170mm	180mm (0.25W/m²K)

ELITE SYSTEM

57

Attractive, economical horizontal cladding solution

Elite System 57 is an attractive, sustainable and economical solution to horizontal cladding. The system comprises of a sinusoidal extended steel sheet fixed to the Quattro spacer system. Euroclad Elite Flexislab insulation is housed between the outer sheet and the 19/1000 bright white enamelled liner. The traditional sinusoidal (sometimes called corrugated) profile is increasingly popular for eye-catching modern metal constructions.



SPECIFICATIONS

External	Euroclad 13½/3 0.7mm steel Colorcoat HPS200® Ultra Colorcoat Prisma®
	Euroclad 13½/3 0.9mm aluminium ARS coating PVDF coating
Spacer system	Quattro
Insulation	0.040 W/mK Lambda insulation as standard – other options available
Liner panel	Euroclad 19/1000 0.4mm steel
System components (available via Euroclad)	Fasteners · Flashings · Membranes Tapes, Mastics and Sealants Fabrications

SYSTEM BENEFITS

- All products CE Marked
- Recommended Installers
- Attractive alternative to 'industrial' profiles
- Building Regulations Part L2 compliant
- Comprehensive technical support
- Confidex® Guarantee with Colorcoat HPS200® Ultra and Colorcoat Prisma®
- Can be installed as a fire wall
- Ease of specification, costing and installation
- Environmentally-friendly components and manufacture
- Euroclad Elite Plus 25 year guarantee available
- Euroclad Elite 12 year guarantee
- Fast installation
- Good acoustic performance
- Lightweight system
- Manufactured with ISO 14001:2004 accredited systems
- Manufactured with ISO 9001:2008 accredited systems
- Matching flashings
- NBS Specifications
- Non-combustible
- Proven components
- Single point procurement and responsibility
- Zero ODP and no added greenhouse gases.

PERFORMANCE

	0.037 W/mK Euroclad Elite Flexislab		0.040 W/mK Quilt insulation	
U-value	Quattro bracket	Insulation depth and U-value	Quattro bracket	Insulation depth and U-value
0.35W/m²K AD-L2A 2010 back stop value compliant	120mm	120mm (0.35W/m²K)	140mm	140mm (0.32W/m²K)
0.26W/m²K 2013 notional building value compliant	180mm	180mm (0.23W/m²K)	180mm	180mm (0.25W/m²K)

firewalls



Elite Wall Systems can offer a two or four hour firewall, with either 15 minutes or 30 minutes insulation rating. Some key considerations of firewall construction include:

Position

The firewall must be 1m or more from the boundary measured from the outer face of the cladding.

Type of building

In accordance with regulation B2 of the Building Regulations it must be as defined.

Height: Paragraph 13.7, Section 13, Part B4 of the Building Regulations states that “In a building with a storey 18m or more above ground level, insulation material used in ventilated cavities in the external wall construction should be of limited combustibility...” (Or be non-combustible).

Special requirements by local authorities: It may be that local interpretations of building regulations vary or that the building merits special consideration. It is essential that the building designer confirms that the Euroclad system selected complies with the relevant local authority requirements.

Structural frame

The fire resistant system must be fixed to sheeting rails, which are fixed to supporting cleats through slotted holes with the bolt incorporating a plastic or low-melt washer – both elements having the purpose of assisting movement due to thermal expansion in the event of a fire. The rails are to be at maximum 2080mm centres, and all bottom sheeting rails should be single span. All sheeting rails should be shorter than standard to allow an expansion gap. The remainder of the frame must be protected to the same period of protection as the rest of the wall.

Support of wall

When the sheeting rails heat up during a fire they will no longer function as a structural member. To prevent the wall moving downwards under its own weight, either a base support or securing to a protected eaves beam is required. This will allow the wall to continue to be supported during a fire, even when the sheeting rails are no longer providing adequate support.

In general terms the actual construction of a built up system firewall is relatively simple. Please note that this information is intended as a summary only, and full detailed information should be obtained from the Euroclad Firewall technical publication or from Euroclad's Technical Department.

THERMAL PERFORMANCE

Elite System 51

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.8m centres
120mm	120mm	0.040W/mK	153mm	0.35W/m²K
140mm	140mm	0.040W/mK	173mm	0.30W/m²K
150mm	150mm	0.040W/mK	183mm	0.28W/m²K
160mm	160mm	0.040W/mK	193mm	0.27W/m²K
170mm	170mm	0.040W/mK	203mm	0.25W/m²K
180mm	180mm	0.040W/mK	213mm	0.24W/m²K
200mm	200mm	0.040W/mK	233mm	0.21W/m²K
220mm	220mm	0.040W/mK	253mm	0.20W/m²K

Elite System 52

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.8m centres
120mm	120mm	0.040W/mK	152mm	0.35W/m²K
140mm	140mm	0.040W/mK	162mm	0.30W/m²K
150mm	150mm	0.040W/mK	172mm	0.28W/m²K
160mm	160mm	0.040W/mK	192mm	0.26W/m²K
170mm	170mm	0.040W/mK	202mm	0.25W/m²K
180mm	180mm	0.040W/mK	212mm	0.24W/m²K
200mm	200mm	0.040W/mK	232mm	0.21W/m²K
220mm	220mm	0.040W/mK	252mm	0.19W/m²K

Elite System 53

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.8m centres
120mm	120mm	0.040W/mK	140mm	0.37W/m²K
140mm	140mm	0.040W/mK	160mm	0.31W/m²K
150mm	150mm	0.040W/mK	170mm	0.29W/m²K
160mm	160mm	0.040W/mK	180mm	0.27W/m²K
170mm	180mm	0.040W/mK	190mm	0.26W/m²K
180mm	180mm	0.040W/mK	200mm	0.24W/m²K
200mm	200mm	0.040W/mK	220mm	0.22W/m²K
220mm	220mm	0.040W/mK	240mm	0.20W/m²K

Elite System 54

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.8m centres
120mm	120mm	0.040W/mK	153mm	0.35W/m²K
140mm	140mm	0.040W/mK	173mm	0.30W/m²K
150mm*	150mm	0.040W/mK	183mm	0.28W/m²K
160mm	160mm	0.040W/mK	193mm	0.27W/m²K
170mm	170mm	0.040W/mK	203mm	0.25W/m²K
180mm	180mm	0.040W/mK	213mm	0.24W/m²K
200mm	200mm	0.040W/mK	233mm	0.21W/m²K
220mm	220mm	0.040W/mK	253mm	0.20W/m²K
240mm	240mm	0.040W/mK	273mm	0.18W/m²K
260mm	260mm	0.040W/mK	293mm	0.17W/m²K
280mm	280mm	0.040W/mK	313mm	0.15W/m²K
300mm	300mm	0.040W/mK	333mm	0.14W/m²K

* Only available in Rockwool Cladding Roll.



EUROCLAD ELITE FLEXISLAB

Elite System 55

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.5m centres
100mm	100mm	0.037W/mK	133mm	0.40W/m²K
120mm	120mm	0.037W/mK	153mm	0.33W/m²K
140mm	140mm	0.035W/mK	173mm	0.28W/m²K
160mm	160mm	0.037W/mK	193mm	0.25W/m²K
180mm	180mm	0.037W/mK	213mm	0.22W/m²K
200mm	200mm	0.037W/mK	233mm	0.20W/m²K
220mm	220mm	0.037W/mK	253mm	0.19W/m²K
240mm	240mm	0.037W/mK	273mm	0.17W/m²K
260mm	260mm	0.037W/mK	293mm	0.16W/m²K
280mm	280mm	0.037W/mK	313mm	0.15W/m²K

Elite System 56

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.5m centres
100mm	100mm	0.037W/mK	133mm	0.42W/m²K
120mm	120mm	0.037W/mK	153mm	0.34W/m²K
140mm	140mm	0.035W/mK	173mm	0.28W/m²K
160mm	160mm	0.037W/mK	193mm	0.25W/m²K
180mm	180mm	0.037W/mK	213mm	0.23W/m²K
200mm	200mm	0.037W/mK	233mm	0.20W/m²K
220mm	220mm	0.037W/mK	253mm	0.19W/m²K
240mm	240mm	0.037W/mK	273mm	0.17W/m²K
260mm	260mm	0.037W/mK	293mm	0.16W/m²K
280mm	280mm	0.037W/mK	313mm	0.15W/m²K

Elite System 57

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.5m centres
100mm	100mm	0.037W/mK	120mm	0.42W/m²K
120mm	120mm	0.037W/mK	140mm	0.35W/m²K
140mm	140mm	0.035W/mK	160mm	0.28W/m²K
160mm	160mm	0.037W/mK	180mm	0.26W/m²K
180mm	180mm	0.037W/mK	200mm	0.23W/m²K
200mm	200mm	0.037W/mK	220mm	0.21W/m²K
220mm	220mm	0.037W/mK	240mm	0.19W/m²K
240mm	240mm	0.037W/mK	260mm	0.17W/m²K
260mm	260mm	0.037W/mK	280mm	0.16W/m²K
280mm	280mm	0.037W/mK	300mm	0.15W/m²K

Elite System 58

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.5m centres
100mm	100mm	0.037W/mK	120mm	0.40W/m²K
120mm	120mm	0.037W/mK	140mm	0.33W/m²K
140mm	140mm	0.035W/mK	150mm	0.28W/m²K
160mm	160mm	0.037W/mK	180mm	0.25W/m²K
180mm	180mm	0.037W/mK	200mm	0.22W/m²K
200mm	200mm	0.037W/mK	220mm	0.20W/m²K
220mm	220mm	0.037W/mK	240mm	0.19W/m²K
240mm	240mm	0.037W/mK	260mm	0.17W/m²K
260mm	260mm	0.037W/mK	280mm	0.16W/m²K
280mm	280mm	0.037W/mK	300mm	0.15W/m²K

Elite System 60

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.5m centres
100mm	100mm	0.037W/mK	150mm	0.40W/m²K
120mm	120mm	0.037W/mK	170mm	0.33W/m²K
140mm	140mm	0.035W/mK	190mm	0.28W/m²K
160mm	160mm	0.037W/mK	210mm	0.25W/m²K
180mm	180mm	0.037W/mK	230mm	0.22W/m²K
200mm	200mm	0.037W/mK	250mm	0.20W/m²K
220mm	220mm	0.037W/mK	270mm	0.19W/m²K
240mm	240mm	0.037W/mK	290mm	0.17W/m²K
260mm	260mm	0.037W/mK	310mm	0.16W/m²K
280mm	280mm	0.037W/mK	330mm	0.15W/m²K

QUILT INSULATION

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.5m centres
100mm	100mm	0.040W/mK	133mm	0.43W/m²K
120mm	120mm	0.040W/mK	153mm	0.36W/m²K
140mm	140mm	0.040W/mK	173mm	0.31W/m²K
160mm	160mm	0.040W/mK	193mm	0.27W/m²K
180mm	180mm	0.040W/mK	213mm	0.24W/m²K
200mm	200mm	0.040W/mK	233mm	0.22W/m²K
220mm	220mm	0.040W/mK	253mm	0.20W/m²K

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.5m centres
100mm	100mm	0.040W/mK	133mm	0.43W/m²K
120mm	120mm	0.040W/mK	153mm	0.36W/m²K
140mm	140mm	0.040W/mK	173mm	0.31W/m²K
160mm	160mm	0.040W/mK	193mm	0.27W/m²K
180mm	180mm	0.040W/mK	213mm	0.24W/m²K
200mm	200mm	0.040W/mK	233mm	0.22W/m²K
220mm	220mm	0.040W/mK	253mm	0.20W/m²K

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.5m centres
100mm	100mm	0.040W/mK	120mm	0.45W/m²K
120mm	120mm	0.040W/mK	140mm	0.37W/m²K
140mm	140mm	0.040W/mK	160mm	0.32W/m²K
160mm	160mm	0.040W/mK	180mm	0.28W/m²K
180mm	180mm	0.040W/mK	200mm	0.25W/m²K
200mm	200mm	0.040W/mK	220mm	0.22W/m²K
220mm	220mm	0.040W/mK	240mm	0.20W/m²K

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.5m centres
100mm	100mm	0.040W/mK	120mm	0.43W/m²K
120mm	120mm	0.040W/mK	140mm	0.36W/m²K
140mm	140mm	0.040W/mK	150mm	0.31W/m²K
160mm	160mm	0.040W/mK	180mm	0.27W/m²K
180mm	180mm	0.040W/mK	200mm	0.24W/m²K
200mm	200mm	0.040W/mK	220mm	0.22W/m²K
220mm	220mm	0.040W/mK	240mm	0.20W/m²K

Quattro bracket	Insulation thickness	Insulation value	Overall depth	U-Value at 1.5m centres
100mm	100mm	0.040W/mK	150mm	0.43W/m²K
120mm	120mm	0.040W/mK	170mm	0.36W/m²K
140mm	140mm	0.040W/mK	190mm	0.31W/m²K
160mm	160mm	0.040W/mK	210mm	0.27W/m²K
180mm	180mm	0.040W/mK	230mm	0.24W/m²K
200mm	200mm	0.040W/mK	250mm	0.22W/m²K
220mm	220mm	0.040W/mK	270mm	0.20W/m²K

Due to increasing demands for bespoke acoustic design for buildings Euroclad have developed Elite Systems to accommodate a wide range of performances. The built-up nature of the products allows far greater flexibility in this field when compared, for example, with composite panels.

Elite Systems can be modified to meet requirements by the inclusion of various components. Common applications for acoustic constructions are education establishments, swimming pools, sports halls, cinemas, hotel or private accommodation.

Part E of the Building Regulations and Building Bulletin 93 referenced therein have raised the stakes regarding acoustic performance of schools and other educational facilities. There has also been a general increase in the awareness of acoustic performances of buildings and 'noise pollution'.

There are three main performance criteria that need to be considered for acoustic systems:

SOUND REDUCTION SOUND ABSORPTION

SOUND INTENSITY (specifically relating to rain noise as referenced in BB93).

Euroclad Elite systems can provide solutions for all of the above and have been extensively tested, modelled and proven in the field. An ongoing test programme is underway.

Elite Systems cover constructions using both structural deck and twin skin liner and have been geared to achieve maximum performance flexibility whilst maintaining integral performance and basic system componentry. The systems do not use separate additional components such as plasterboard, additional perforated liners etc. This offers savings on both materials and installation.

Tests show that:

Sound reduction: Performance of Elite Systems is particularly good when compared to composite panel



as illustrated from compared test results (shown below) comparing standard 0.25 U-value roofs. 10dB reduction in acoustic terms is very significant, it will approximately halve the loudness. A further 10dB reduction will halve the loudness again, and so on.

Rain noise: Performance of Elite Systems is also good, particularly when compared to composite panel as illustrated below. Note: the lower the Sound Intensity generated by rain noise, the better the system performance.

Mineral fibre in direct contact with external sheets provides effective acoustic dampening, with enhanced sound reductions also possible. Euroseam systems achieved the lowest levels of sound intensity in the tests.

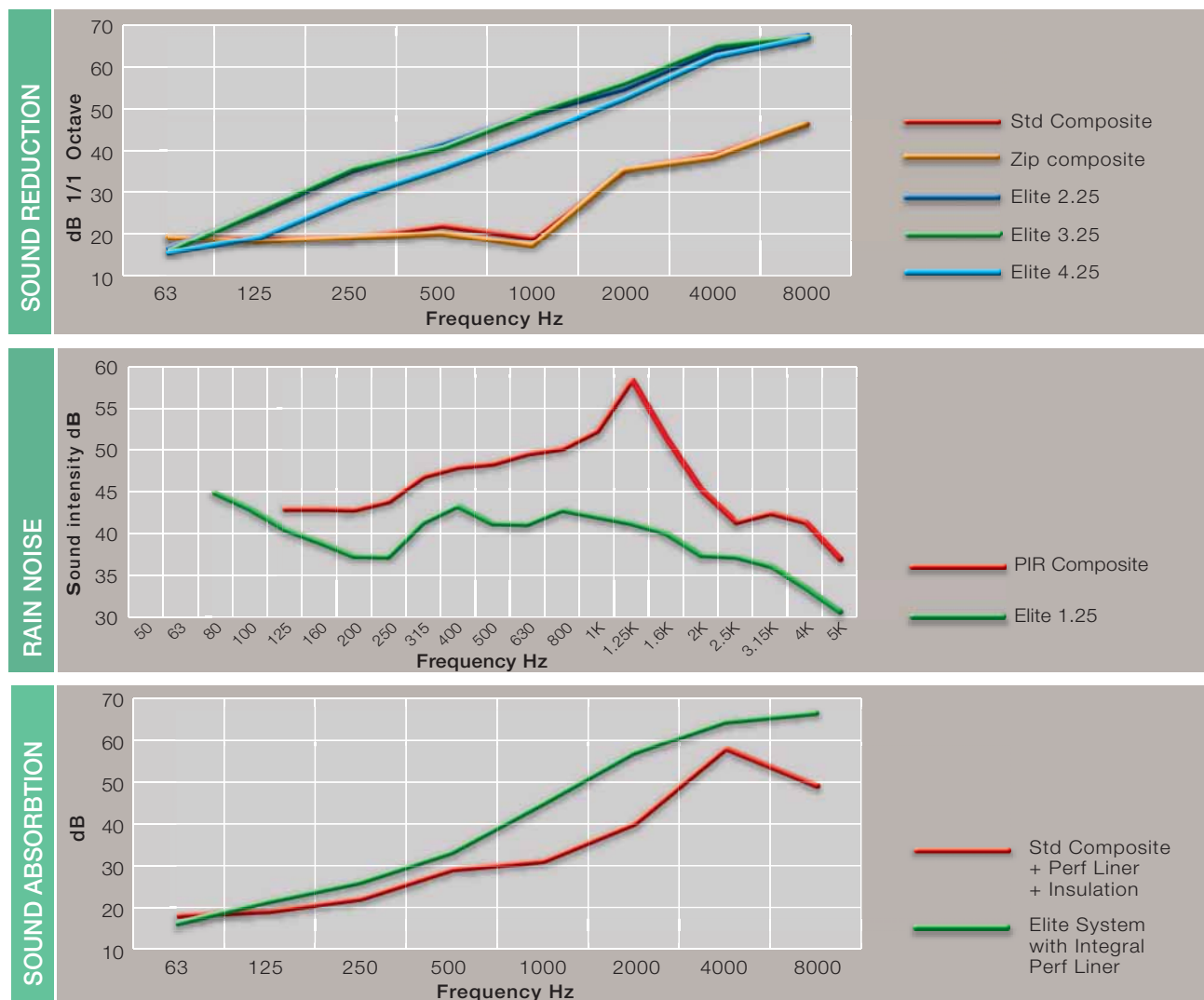
Sound Absorption: System performance is extremely good where a perforated liner or deck is included. This provides sound absorption performance and contribute to lowered reverberation time in rooms and internal spaces.

Elite Systems using perforated liner achieve Class A absorber classification, whilst still providing good sound reduction.

In addition to all of these advantages, the roof is the same overall thickness as a standard Elite System roof, with absorption performance that can be easily accommodated over individual areas of the same roof, if required. This offers savings where often deeper roof constructions are specified across the whole roof which accommodates a relatively small area requiring absorption performance. The system effectively deals with flanking occurring over walls through the liner troughs.

Due to the different acoustic requirements for each project it is advisable to consult with our Sales Team early in the design process to call on our extensive experience to develop a system that meets project requirements.

For full technical details and NBS specifications, please visit: www.euroclad.com



non-fragility status



In summary ACR(CP)001: 2003 Recommended Practice for Work on Profiled Sheeted Roofs states:

- That a non-fragile assembly should be specified
 - That a competent company is chosen to carry out roof work
 - That the classification of the roof assembly can be confirmed by the supplier and that test data can be provided to support the classification
 - That drawings are available which can be used to set out the sequence of operations to fit sheets to a non-fragile classification
 - That the conditions affecting guarantees of non-fragility should be clearly stated
 - That special consideration should be given to Class C constructions
 - That specific information relating to maintenance of the products and which is relevant to non-fragility is provided for inclusion in the health and safety file
 - That materials handling should be reduced wherever possible i.e. by ordering sheets to be packed in sequence as they will be used or by splitting packs on the ground before positioning on the roof
- In addition the HSE Question and Answer Brief for the Construction Industry on the Work at Height Regulations 2005 states that “Collective control measures should always take priority over personal control measures”.

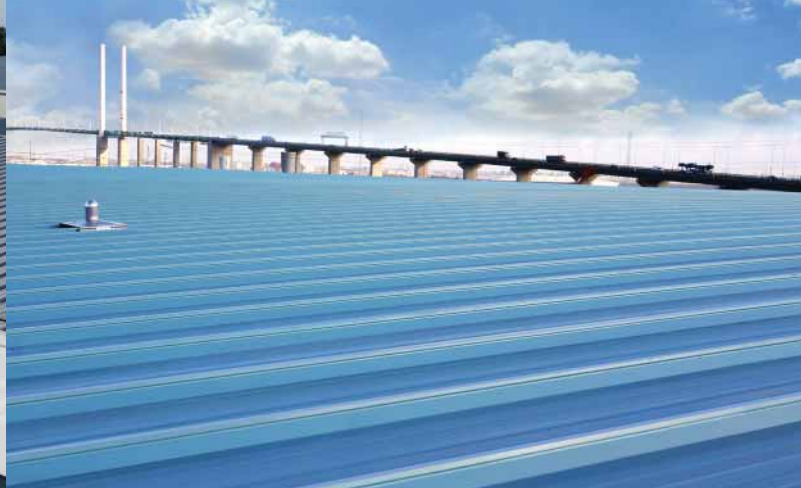
Euroclad Elite Systems comply to all of the above.

All elements should be regarded as Fragile until fixed to the specified standards.

19/1000 LINER 0.4mm STEEL

19/1000 0.4mm thick steel liner profile, fixed as shown in ‘Euroclad Ltd Drawing FR4’, can be classified C non-fragile on any span up to and including 1.8m, for both in plane and curved roofs, and for spans up to 1.8m on hips with any angle.

Also see ACR (CP)001:2007REV3 Recommended Practice for Work on Profiled Sheeted Roofs Annex B which gives recommendations regarding the use of crawl boards and gives a great deal of guidance re the usage of Class C Assemblies and the potential risks which need to be managed and considered.



The document recognises the potential risk from elements being “engineered to pass” Class C being “close to the boundary between fragile and non-fragile”. Euroclad did not engineer the system to pass, allowed a good margin for site error and normal site practice and this was confirmed by an independent consultant.

MW5 LINER 0.7mm STEEL

MW5 0.7mm thick steel liner profile, fixed as shown in Euroclad Ltd Drawing FR3, can be classified B non-fragile on any span up to and including 2.1m, for both in plane and curved roofs, and for spans up to 2.1m on hips with any angle.

MW5 ROOF PROFILE 0.7mm STEEL

MW5 0.7mm thick steel roof profile, fixed as shown in ‘Euroclad Ltd Drawing FR14’, can be classified B non-fragile on any span up to and including 2.1m, for both in plane and curved roofs, and for spans up to 2.1m on hips with any angle.

32/1000 ROOF PROFILE 0.7mm STEEL

32/1000 0.7mm thick steel roof profile, fixed as shown in ‘Euroclad Ltd Drawing FR15’, can be classified B non-fragile on any span up to and including 2.1m, for both in plane and curved roofs, and for spans up to 2.1m on hips with any angle.

EUROSEAM ESA400 ROOF PROFILE 0.9mm ALUMINIUM

EuroseamESA400 0.9mm thick aluminium profile, fixed as shown in ‘Euroclad Ltd Drawing FR16’ can be classified B non-fragile on any span up to and including 2.1m, for both in-plane and curved roofs and for spans up to 2.1m on hips with any angle.

SF500 PROFILE 0.7mm STEEL

SF500 0.7mm steel profile, fixed as shown in ‘Euroclad Ltd Drawing FR17’ can be classified B non-fragile on any span up to and including 2.1m, for both in-plane and curved roofs and for spans up to 2.1m on hips with any angle.

partners

The success of Euroclad and Elite Systems is down to great teamwork; within the knowledgeable and dedicated workforce and between the component suppliers to Elite Systems. Without the leading providers of system components Elite Systems would not be the reliable, high performance roof and wall solutions they are. By aligning with the biggest and most respected names in the industry the quality of products and service becomes unrivalled.

BRETT MARTIN DAYLIGHT SYSTEMS

Brett Martin Daylight Systems is the leading rooflight manufacturer, producing every type of rooflight: in-plane, vault, dome and pitched. It is the only company to manufacture both polycarbonate and GRP so is uniquely placed to provide impartial advice on the most appropriate rooflight option.

Telephone: **028 9084 9999**

Website: **www.brettmartin.com**



EJOT

EJOT U.K. Limited is a subsidiary of EJOT HOLDING GmbH & Co. KG, a company that employs 1,900 people in 11 manufacturing plants and 19 Sales and Distribution subsidiaries worldwide. EJOT specialise in cold forming and injection moulding and are one of Europe's largest manufacturers of fastener and anchor systems. This includes specialist products for the Roofing and Cladding industry

Telephone: **01977 68 70 40**

Website: **www.ejot.co.uk**

KNAUF

Knauf Insulation's sole purpose is to deliver comfort and protection – saving energy, money and the scarce resources of the planet whilst continuing to drive for improved comfort standards and further methods of reduced energy consumption. Knauf's knowledge and experience has created the industry's widest range of products for thermal, acoustic and fire protection insulation.

Telephone: **0844 800 0135**

Website: **www.knaufinsulation.co.uk**



ROCKWOOL

Rockwool Ltd, based in Pencoed, South Wales, is the UK's leading manufacturer of mineral wool insulation for thermal, fire and acoustic protection. Rockwool insulation is one of the most sustainable construction products available, reducing the need to burn fossil fuels, cutting emissions of greenhouse gases and protecting the environment.

Telephone: **0871 222 1780**

Website: **www.rockwool.co.uk**



SFS INTEC

To meet specifiers' demand for extended performance warranties, SFS intec have introduced Type A+, a new butyl sealant for roofing and cladding applications. As a Euroclad supply chain partner, SFS intec's new Type A+ butyl sealant is backed by a 25 year warranty when used within the Elite system as a package with SFS austenitic stainless steel fasteners, and a 12 year warranty with SFS intec carbon steel fasteners.

Telephone: **0113 2085 500**

Website: **www.sfsintec.biz/uk**

A. PROCTOR GROUP

The A.Proctor Group provides a wide range of quality, innovative solutions which are designed to meet the continuously evolving requirements of the construction industry. The commitment to keeping pace with this progress has led to the group's expansion, today encompassing five individual divisions. The A.Proctor Group is the official supplier of breather membranes and vapour control layers to Elite Systems.

Telephone: **01250 872 261**

Website: **www.proctorgroup.com**



PREMIER SEALANT SYSTEMS LIMITED

Premier Sealant Systems Limited is a leading manufacturer of profiled foam fillers, sealants and ancillary products for the roofing and cladding industry. The investment and experience Premier Sealant Systems has in the roofing and cladding industry enables the company to provide a high quality service, which is evidenced by our status as official supplier of fillers and sealants to Elite Systems.

Telephone: **01724 864100**

Website: **www.premseal.co.uk**

other products

Whilst Elite Systems offer a huge range of performance and aesthetics there are even more metal construction products available from Euroclad. The company is committed to a continuous process of improvement and innovation across products, processes and services.

VIEO

Charming, convenient and cost effective are terms that perfectly describe this new roofing system from Euroclad. It is a quickly installed alternative to traditional roofing and is manufactured using the latest technology to facilitate a straightforward installation, whilst offering the appealing aesthetic of time-honoured materials like lead or zinc.



The principle is simple and effective. A flat pan sheet features simple edges known as laps that fit over and under each other, either side of the sheet. These laps sit over a stainless steel clip that is fixed to the substrate. The laps are mechanically folded over the clip in a straightforward process.

QUATTRO

The revolutionary new Quattro bar and bracket system supersedes the existing Eurobar and Eurobar Extra systems, using intelligent product design to provide a stronger, more cost effective replacement. Put simply Quattro is a better product at a lower price.

Quattro has been developed to meet the challenge created by the revisions to Part L of the Building Regulations and is available in depths of 80mm right up to 400mm. With insulation depth continuing to increase this really is a future-proof system.



QUATTRO

Regulations and is available in depths of 80mm right up

Combined with existing Euroclad products, Quattro can accommodate the potential for increased construction depths and offer the stable performance needed for modern metal construction, while being compatible across the majority of metal building applications.

BOOTH MUIRIE – A EUROCLAD COMPANY

In response to changing market demand Euroclad Architectural Ltd has been restructured to provide the best possible service, products and prices.



boothmuirie

Architectural Cladding Systems

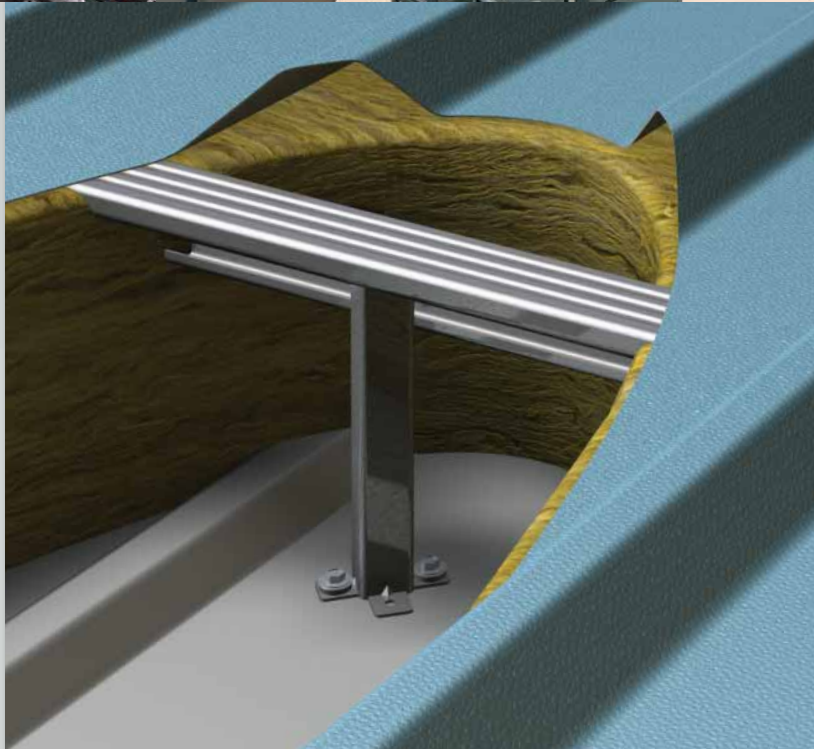
As a brand that listens to its customers Euroclad has taken the following steps to react to the changing landscape in the construction industry:

- Restructured the fabrications business providing greater focus on standard products to increase production efficiencies, reduce lead times and provide more consistent products
- Increased production capacity by 25%
- Developed integrated manufacturing and IT innovations to supply the highest levels of quality at the fastest possible lead time.
- Combined and refined the range of LINEAR and Booth Muirie rainscreen façades, which are now sold as BML Systems exclusively through Booth Muirie, providing greater choice, quality and efficiency.

For the best service, products and prices then the obvious choices are Euroclad Architectural for flashings and standard fabrications, and Booth Muirie for rainscreen facades.

BML SYSTEMS

BML Systems offer ten standard systems with exterior panels and support structures to suit almost every type of construction; hook-on, mechanically-fixed, face-fixed and open jointed panels can be produced in a variety of colours and materials, with proven support systems for attachment to the range of typical substrates.





Euro Clad Limited

Wentloog Corporate Park
Cardiff
CF3 2ER

Tel: +44 (0)29 20 790 722

Fax: +44 (0)29 20 793 149

E-mail: sales@euroclad.co.uk

Internet: www.euroclad.com



The details and information contained in this publication are correct at time of going to press. Euroclad reserves the right to change details and specifications without prior notice. No responsibility is assumed for errors or misinterpretations resulting from the information contained in this publication. Typical construction details are illustrative only and no liability is accepted. All gauges are nominal. Latest information is available at www.euroclad.com.

