

<b>ProductDataCollection</b>	
CAWS work section	H11
Clause Number	110K
NBS Clause Number	H11/110K
<b>For ProductPageSchedule</b>	
Product Name:	Kalwall+ Lumira
Product description:	Insulated, translucent, light-diffusing, wall and roof systems.
	<p>Kalwall+ Lumira is the most highly insulating, diffuse-light-transmitting system available. Transmitting useable daylight with insulating U-values between 0.74 and 0.28 W/m2K (overall panel excluding frames), conductive winter heat loss is kept to a minimum.</p> <p>Additionally, compared to other light transmitting products Kalwall's low shading coefficients significantly reduces solar heat gain, with subsequent reductions in the buildings' heating and cooling costs.</p> <p>The primary element is a structural composite sandwich panel formed by permanently bonding, under heat and pressure, specially formulated, fiberglass-reinforced translucent faces to a grid core constructed of interlocked, structural aluminum/composite, thermally broken or standard "I" beams.</p> <p>Panels can only be flat.</p> <p>Every job is custom pre-engineered from standard components to assure a perfect fit.</p> <p>Applications: external wall, shallow and pitched sky-roof, skylight, sky-roof, pyramid roofs.</p> <p>(Introductory text provided by UK Supplierinstaller edited by GreenSpec UK)</p> <p>Fibreglass faces, aerogel core, aluminium frame.</p>
Manufacturer's Promotion Information:	
Material/s:	yes
Environmental statement:	None
EPD (to ISO 14025):	unrated
BRE Ecopoints:	Gifford Sustainability Appraisal Process (GSAP)
	Energy Star (USA);
	Lumira insulation alone is MBDC 'Cradle to Cradle' rated (USA)
Environmental labelling:	None
Environmental management: ISO 14001/EMAS	
3rd party product accreditation:	CE Mark: EN 13830: Curtain walling
3rd party product endorsement:	NFRC National Fenestration Ratings Council (USA) Systems Certified
GreenSpecPASS endorsement	GreenSpec (USA)
	GreenSpecPASS (UK) pending
	ICC-ES (USA);
	Underwriters Laboratory (UL) (USA);
	FM Factory Mutual Global
Quality Management Certification:	FPC Factory Production Control
	panels are reusable;
	fibreglass is recyclable;
	aluminium is recyclable
Reusability/Recycleability:	aluminium: 20 - 25%
Recycled content (to ISO 14021/WRAP):	25+ years (verified by ETA)
Life expectancy:	Structural glass plank cladding system
Substitute for or new materials / method:	USA
Country/s of manufacture:	From UK ports: Liverpool, Southampton
UK distribution location:	
<b>Downloads</b>	
Product brochure	605 KB kalwall+lumira.pdf
Introduction to Kalwall	45 KB kalwall1.pdf
Choosing the panel	171 KB kalwall2.pdf
Performance data	41 KB kalwall3.pdf
Technical performance	424 KB kalwall4.pdf
Sustainability	26 KB kalwall5.pdf
Typical specification	23 KB kalwall6.pdf
ETA for Kalwall-Curtain-walling	
Standard details	6 MB kalwall8.pdf
<b>Manufacturer</b>	
Manufacturer:	Kalwall Corporation USA,
Address:	
Telephone:	
Fax:	
Email:	
Website:	
Images:	
Images:	
<b>Supplier</b>	
Supplier: (Name) from drop down list	
Supplier: Other	Structura UK Limited
Address:	7 The Glenmore Centre, Moat Way, Sevington, Ashford, Kent TN24 0TL
Telephone:	01233 501504
Email:	<a href="mailto:Kalwall@structura.co.uk">Kalwall@structura.co.uk</a>
Website:	<a href="http://www.structura-uk.com">www.structura-uk.com</a>
Images:	
Date:	
<b>Get Price Supply information:</b>	
Product	Kalwall+ Lumira
<b>PASS Schedule</b>	
Manufacturer: (Name)	Kalwall Corporation USA,
Supplier: (Name)	Structura UK Limited
Website:	www.structura-uk.com
Product Reference:	Kalwall+ Lumira
Description of product/system:	Insulated, translucent, light-diffusing, wall and roof systems.
Application: (promoted by manufacturer):	External wall, shallow and pitched sky-roof, skylight, sky-roof, pyramid roofs.
Is it competent in this application?:	
Claims made appear in:	
Literature	Yes
Advertising	
Website:	

Review based upon:	Product brochure: Kalwall+ Lumira Brochure Introduction to Kalwall Choosing the panel Performance data Technical performance Sustainability Typical specification (in all respects except Insulation) Standard details
Webpage URL/PDF URL:	
Document name/File name:	
Date of document:	
Revision of document:	
Assessor initials:	BRM
Assessment date: (DD/MM/YYYY)	10-11/06/2013
Reviewer initials:	BRM
Last review date: (DD/MM/YYYY)	18/07/2013
<b>GreenSpec Assessment:</b>	
Description of 'Normal' or 'Average' Product in the same category:	Few if any Products compete with this Product in the UK market, it sets the standard for normal or average in this category
Normal or Average Product: Characteristics: 1	U value better than triple glazing
Normal or Average Product: Characteristics: 2	Thin construction Panel: 70 mm. Overall: 75 mm.
Normal or Average Product: Characteristics: 3	Translucent, light diffusing, good light qualities transferred
Normal or Average Product: Characteristics: 4	High embodied energy materials, petro-chemical & mineral materials
Normal or Average Product: Characteristics: 5	Flat and curved panels, made to order
Normal or Average Product: Characteristics: 6	Modular sizes offered, bespoke can be made
Normal or Average Product: Characteristics: 7	Corporate Social Responsibility: Strong socially inclusive policy
<b>How is this product better than 'normal' or 'average' product in the same category?</b>	
Features:	
Benefits: Characteristics: 1	Flexibility to maximise 'translucent skin' without big increase in energy demands of building
Benefits: Characteristics: 2	Industry preoccupation with thin construction accommodated
Benefits: Characteristics: 3	Light quality suitable for indoor sports and other detail activities
Benefits: Characteristics: 4	Versatile product addresses many design and performance requirements
Benefits: Characteristics: 5	Versatile application in flat external envelope surfaces
Benefits: Characteristics: 6	Resource efficient when module sizes are acknowledged by design
Benefits: Characteristics: 7	Feel good factor
Benefits: Materials: 1	Outstanding core thermal insulation material
Benefits: Materials: 2	Tough cladding material
Benefits: Materials: 3	Hydrophobic materials should maintain performance
Benefits: Materials: 4	Repairable cladding materials
Benefits: Properties: 1	Thermally broken framing sections & assembly sections
Benefits: Properties: 2	Life can be extended with maintenance and insitu refurbishment
Benefits: Properties: 3	
Benefits: Properties: 4	
Benefits: Applications: 1	Comprehensive, very versatile set of installation jointing/assembly profiles
Benefits: Applications: 2	Short Life (but maintainable and replaceable within 60 year Normal life)
Benefits: Applications: 3	Structura UK Limited provide approved installer service
Benefits: Applications: 4	
Benefits: competence: 1	Comprehensive Technical Literature, Performance Data and Test Evidence
Benefits: competence: 2	Many permutations of materials and components, possible to meet project requirements
Benefits: competence: 3	
Benefits: competence: 4	
Benefits: Accreditations: 1	
Benefits: Endorsements: 1	USA, EU & UK endorsements enables adoption in UK
<b>How is this product worse than 'normal' or 'average' product in the same category?</b>	
Features:	
Problems: Characteristics: 1	Translucent skin is not a substitute for glazing with views
Problems: Characteristics: 2	
Problems: Characteristics: 3	Artificial lighting may well be used as well as natural light
Problems: Characteristics: 4	Non-breathing construction needs passive/mechanical/ac ventilation for interior spaces
Problems: Characteristics: 5	No curved surfaces or compromise on U value
Problems: Characteristics: 6	Programme time for bespoke order processing
Problems: Characteristics: 7	
Problems: Materials: 1	Petro-chemical synthetic non-renewable binder in skin and coatings
Problems: Materials: 2	
Problems: Materials: 3	
Problems: Materials: 4	
Problems: Properties: 1	Short Life (25 years+)
Problems: Properties: 2	High embodied energy and carbon materials
Problems: Properties: 3	High embodied energy and carbon insitu repairs/refurbishment
Problems: Properties: 4	
Problems: Applications: 1	
Problems: Applications: 2	
Problems: Applications: 3	
Problems: Applications: 4	
Problems: Product competence: 1	Needs accurate specification to ensure requirements are met
Problems: Product competence: 2	Weak General Specification, No dedicated Specification
Problems: Product competence: 3	Thermal flanking through wide perimeter and joint frame assembly
Problems: Product competence: 4	Risk of condensation on joints (manufacturer provides U value calculation including joints)
	Some building types require air conditioning to manage condensation
Problems: Accreditations: 1	ETA is pending
Problems: Endorsements: 1	USA technical information not always accepted by UK Building Control
<b>GreenSpec PASS result</b>	
Pass or Fail	PASS
The evidence rating (no LCA/EPD = Bronze)	Bronze