

PRODUCT INFORMATION	TYPE OF PRODUCT	Aluminum or Metal roofing
	COMPANY NAME	CM Charleston Metalworks
	PRODUCT/COLLECTION NAME	Kenloc Stayloc Mechloc Fastpanels
	DESCRIPTION	Loc – a fastening system, requiring no clips and is available in a wide array of materials, gauge options and color selections
MATERIAL FEEDSTOCK	MATERIAL CONTENT	Recycled materials, polyester powder coatings
	RECYCLED CONTENT %	25% minimum recycled content – post industrial 100% post consumer
	RAPIDLY RENEWABLE CONTENT %	None
	HARMFUL ADDITIVES	Polyester powder, oil canning
	HARMFUL EMISSIONS	N/A
	EMISSION STRENGTH OVER TIME	N/A
	TREATMENTS	Oil canning
MANUFACTURING	MANUFACTURING PROCESS	Shipments made to stores
	HARMFUL EMISSIONS	
	LOCATION OF MANUF. PLANT	Charleston, SC
	TESTS/CODES	
	3RD PARTY CERTIFICATION	EPA Energy Star compliance standard
INSTALLATION	INSTALLATION PROCEDURE	Does not need nails, has a clip system within itself
	INSTALLATION ADHESIVES	A seam is sometimes ran down where loc is attached
	UNIT COST	\$2.60-3.60 depending on gauge per every 1/2" x 16"
	LIFE CYCLE ANALYSIS	100+
	END OF SERVICE LIFE	100% recyclable
MISC. PROPERTIES	QUALITIES/PROPERTIES OF PRODUCT	Durable, long lasting
	MISC. COMMENTS	Saves up to 40% on heating and cooling costs
	CONTRIBUTION TO LEED POINTS	MR Recycled content
COMPANY PROFILE	GREEN PHILOSOPHY	
	CONTACT	2256 Wren Drive - North Charleston South Carolina 29406 Phone: (888) 235-4452 Fax: (843) 569-0902 www.charlestonmetalworks.com
MAINTENANCE	AFTER INSTALLATION	None

Translucent Daylighting Systems

07.40.00

2009

PRODUCT INFORMATION	TYPE OF PRODUCT	Translucent Daylighting Systems
	COMPANY NAME	Kalwall
	PRODUCT/COLLECTION NAME	Kalwall
	DESCRIPTION	Building panels that extracts and converts free energy from the sun to heat, cool, naturally light, and dramatically "electrify" buildings. Used for Wall Systems and Curtainwalls, Window Systems and Window Replacements, Skylights, Clearspan Skylights/Skyroofs, Walkways/Canopies and Complete Structures Kalwall is the most highly insulating, diffuse light-transmitting, structural composite sandwich panel technology in the world. The company has

		perfected a unique composite fenestration that combines controlled, usable, natural daylight with properties of the ultimate in energy efficiency. Panels can be curved or flat.
MATERIAL FEEDSTOCK	MATERIAL CONTENT	Fiberglass-reinforced translucent faces are bound to a grid core constructed of interlocked, structural aluminum/composite, thermally broken "I" beams.
	RECYCLED CONTENT %	Aluminum
	RAPIDLY RENEWABLE CONTENT %	0%
	HARMFUL ADDITIVES	Fiberglass
	HARMFUL EMISSIONS	Some emissions from fiberglass
	EMISSION STRENGTH OVER TIME	N/A
	TREATMENTS	None
MANUFACTURING	MANUFACTURING PROCESS	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 "I" beams
	HARMFUL EMISSIONS	None
	LOCATION OF MANUF. PLANT	
	TESTS/CODES	<ul style="list-style-type: none"> -Factory Mutual approved Class I Wall and Roof Systems for unsprinklered buildings -FM approved for Pressure Venting Systems -U.L. tested and listed -South Florida Hurricane Systems developed -ICC requirements of "Criteria for Sandwich Panels" for panels and adhesives -AAMA 1503.1-88 tested for air and water infiltration, structural integrity and overall thermal properties -NFRC-100 based U values fully tested -Institute for Research and Construction/National Research Council Canada -UFC 4-010-01 DoD Anti-Terrorism Specifications
	3RD PARTY CERTIFICATION	
INSTALLATION	INSTALLATION PROCEDURE	<p>All Kalwall Systems are pre-engineered and factory prefabricated, delivering the ultimate in quality control. Large, lightweight modular units are created in the factory in order to eliminate most field joints. Installation costs and time are reduced and performance greatly advanced. Although Kalwall panels are created from standard specifications, a wide variety of options are available to meet every application. Because of this design flexibility, each and every system is factory fabricated to the specifications of a specific job.</p> <p>Kalwall arrives on the job site in complete, factory-assembled "panel units" wherever possible or practical. The superfluous structure required with most other systems is eliminated. No additional finishing or assembly is required; the panels are ready for final installation. Kalwall employs a system of interconnected structural components, forming rigid, modular units, which replace the heavy mullions, and floating panels of other curtainwalls. Normal loads are dispersed throughout the panels, rather than converging on the mullions. Clamp-tite™ closures at the perimeter and panel-to-panel serve only a sealing function in most cases.</p> <p>The unique construction and superior structural strength of the components permit the largest panels to be installed quickly and efficiently and for far less than conventional building materials.</p>
	INSTALLATION ADHESIVES	N/A
	UNIT COST	For over 50 years, Kalwall has been renowned for its quality, performance, engineering expertise, aesthetic value and total company integrity. But there is even more to the Kalwall story. The cost effectiveness of this lightweight, highly durable, unique translucent building panel technology is unparalleled. Although often selected for its aesthetic value and performance features alone, Kalwall is also more affordable! From initial purchase price to installation costs, maintenance and energy savings, Kalwall is the most affordable solution to countless design challenges.
	LIFE CYCLE ANALYSIS EXTRACTION	Low initial financial cost, reduced maintenance and energy costs
	END OF SERVICE LIFE	Unknown, landfill?
MISC. PROPERTIES	QUALITIES/PROPERTIES OF PRODUCT	Kalwall is exceptional at reducing thermal heat/cooling loss and controlling solar heat gain to deliver significant savings in HVAC costs. During the manufacturing process, the panels can be infilled with translucent insulation. Optional thermally broken panels yield the ultimate in energy

		<p>performance and condensation control. U-factor performance ranges from a standard .29 to include options from .53 to .05 in the standard 2-3/4 inch (70 mm) panel thickness. Unlike gas-filled technology, which eventually leaks out, Kalwall's highly insulating properties remain constant, forever.</p> <p>Kalwall Skylights and Skyroofs passed an unusual test when a 16-foot span of Kalwall, held up only by two sawhorses, easily supported the weight of twelve plant workers standing on it -- nearly 3,000 pounds! The integrity of an entire project, and those responsible for its design and construction, rests on the quality of the products and systems utilized. OSHA fall-through standards met? YES! There is no other Kalwall.</p> <p>Lightweight, shatterproof and has impressive structural integrity. Strength-to-weight ratio of less than 2 pounds per square foot.</p>
	MISC. COMMENTS	<p>Kalwall has the unique ability to fill a space with diffused, natural daylight, even on cloudy, dark days. Millions of prismatic glass fibers imbedded in the faces of Kalwall refract sunshine and even overcast daylight, in a balanced, diffuse wash of glare-free, usable light. Even on bright sunny days, there is no harsh glare. The quality of light is truly exceptional, especially where computer screens or video monitors are used. Shades, curtains and light shelves can be eliminated.</p>
	CONTRIBUTION TO LEED POINTS	<p>One of the easiest ways to gather LEED credits revolves around lighting. Kalwall's translucent skylight and wall systems, as well as clearspan skylights and pool enclosures from our affiliated company Structures Unlimited, Inc., are uniquely suited to achieve the desired results. Many LEED credits are possible by incorporating into your design Kalwall's translucent panel systems blended with Structures Unlimited's unique, self-supporting aluminum structure technology.</p>
<u>COMPANY PROFILE</u>	GREEN PHILOSOPHY	<p>Kalwall, a producer of sustainable fenestration systems since long before the "green" philosophy became popular, is a world leader in daylighting technology, energy conservation, and participation in LEED®-certified buildings.</p>
	CONTACT	<p>Call 800-258-9777 (N. America) FAX 603-627-7905</p> <p>KALWALL 1111 Candia Road PO Box 237 Manchester, NH 03105 Phone: 603-627-3861 Email: info@kalwall.com</p>
<u>MAINTENANCE</u>	AFTER INSTALLATION	<p>The cost savings of Kalwall go far beyond installation costs and energy savings. Kalwall is virtually maintenance-free. No more scraping or painting window sashes or trim. Unlike glass, natural rainfall is all that's needed to keep the surface clean and streak-free. Kalwall is also shatterproof and highly vandal-resistant. The exclusive glass veil erosion preventer overcomes periodic maintenance. Graffiti is easily removed.</p>