

IAR Library: 07.00.00 Brochure
Roofing
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<u>PRODUCT INFORMATION</u>	TYPE OF PRODUCT	Roofing Systems
	COMPANY NAME	Duro-Last Roofing, Inc.
	PRODUCT/COLLECTION NAME	Duro-Last Cool Zone Roofing System Duro-Last Custom-Fabricated Membrane Systems Duro-Last Rock-Ply Roofing System Duro-Last Shingle-Ply Roofing System Duro-Tuff Roofing System Duro-Fleece Roofing System Duro-Last EV Roofing System Duro-Last Duro-Bond Roofing System Duro-Shield Roofing System
	DESCRIPTION	The Duro-Last flagship membrane is a proprietary thermoplastic formulation that provides exceptional flexibility, reflectivity, and resistance to UV radiation, fire, and a broad range of chemicals. Custom-fabrication roofing that dramatically reduces rooftop labor and addresses the critical transition areas of a roof, providing a long-term, low-maintenance solution. Duro-Last PVC roofing membrane has proven to be durable, serviceable, flame resistant, highly flexible, and recyclable.
<u>MATERIAL FEEDSTOCK</u>	MATERIAL CONTENT	PVC Thermoplastic formulation of resins, plasticizers, stabilizers, biocides, flame retardants, and U.V. absorbents.
	RECYCLED CONTENT %	7% pre-consumer recycled content. 0% post-consumer recycled content. Duro-Last offers a take-back program so old roofing systems can be recycled into new product. The Duro-Last product also contains post-industrial recycled content.
	RAPIDLY RENEWABLE CONTENT %	N/A
	HARMFUL ADDITIVES	None
	HARMFUL EMISSIONS	None
	EMISSION STRENGTH OVER TIME TREATMENTS	None
	MANUFACTURING	MANUFACTURING PROCESS

		<p>A fastening tab is welded into the membrane sheet for attachment to the roof deck.</p> <p>Orders are measured and squared-up on the folding floor.</p> <p>Folding floor inspectors examine every factory seam of the Duro-Last roofing system before it leaves the manufacturing facility.</p> <p>Custom-made pieces are then folded from fastening tab to fastening tab, making installation easier.</p> <p>During production, edge trim and scrap is kept clean and recycled back into production, eliminating virtually all manufacturing waste.</p> <p>Manufacturing utilizes a closed-loop water cycle, reducing wasteful water discharging.</p>
	HARMFUL EMISSIONS	None
	LOCATION OF MANUF. PLANT	<p>Grants Pass, Oregon</p> <p>Jackson, Mississippi</p> <p>Sigourney, Iowa</p> <p>Carrollton, Texas</p> <p>Ludlow, Massachusetts</p> <p>Saginaw, Michigan (Headquarters)</p>
	TESTS/CODES	<p>Thickness-Nominal - ASTM D 751</p> <p>Breaking Strength - ASTM D 751 - Grab Method</p> <p>Elongation at Break - ASTM D 751 - Grab Method</p> <p>Heat Aging - ASTM 3045, 56 days @ 176 °F</p> <p>Factory Seam Strength - ASTM D 751 - Grab Method</p> <p>Tearing Strength - ASTM D 751 - Procedure B</p> <p>Low Temperature Bend - ASTM D 2136 @ -40 °F</p> <p>Accelerated Weathering - ASTM G 154</p> <p>Linear Dimensional Change - ASTM D 1204 - 6 hrs. @ 176 °F</p> <p>Water Absorption - ASTM D 570 - 166 hrs. @ 158 °F</p> <p>Static Puncture - ASTM D 5602</p> <p>Dynamic Puncture - ASTM D 5635</p> <p>Fungi Resistance - ASTM G-21</p> <p>Solar Reflectance - ASTM C1549</p> <p>Thermal Emittance - ASTM C1371-98</p> <p>Thermal Emissivity - ASTM E408</p> <p>EMMAQUA Exposure - ASTM G90, Desert Sun</p> <p>Moisture Vapor Transmission - ASTM E-96, Proc. B, Method A</p> <p>Weight - ASTM D 751</p> <p>Underwriters Laboratories - UL-790</p> <p>Factory Mutual Research - ASTM E-108; FM 4450 & FM 4470</p>
	3RD PARTY CERTIFICATION	<p>ICC ES, FM Approved, Miami-Dade County Approved, Classified C UL US, US Green Building Council Member, Cool Roof Rating Council (CRRC) Charter Member, EnergyStar, Single Ply Roofing Industry (SPRI)</p>
<u>INSTALLATION</u>	INSTALLATION PROCEDURE	<p>Year-round installation is quiet and safe, without loud machinery, hazardous materials, noxious fumes, hot tar, or mess. A new Duro-Last roofing system can often be installed over an existing roof without a costly tear-off, virtually eliminating debris that could disrupt building activities or damage sensitive and expensive equipment.</p> <p>Up to 85% of the seams can be completed in the factory-controlled environment before the roofing system is delivered to the job site. This dramatically reduces maintenance, the potential for leaks, and creates a faster, quieter, and easier installation.</p> <p>Duro-Last roofing systems can be mechanically attached, adhered, or induction welded using the Duro-Bond system.</p> <p>For fast and efficient roof installation, Duro-Last offers different products like fasteners and adhesives. The fasteners come from sister company TIP-TOP Screw Manufacturing, Inc. which includes concrete screws, heavy-duty fasteners, construction fasteners, insulation fasteners, and insulation plates.</p>

		The Duro-Last Duro-Bond roofing system is a mechanically attached installation option using non-penetrating “induction weld” technology. This technique bonds the Duro-Last PVC membrane to a PVC-coated fastening plate beneath the roofing membrane, which also fastens insulation and recovery board materials to the roof deck. The OMG RhinoBond is the preferred induction fastening system.
	INSTALLATION ADHESIVES	For adhered applications, Duro-Last offers both solvent-based and water-based adhesives for membrane
	UNIT COST	Varies
	LIFE CYCLE ANALYSIS EXTRACTION	The product is energy efficient. White Duro-Last Roofing Systems can greatly reduce energy consumption and electricity bills by exceeding industry standards for reflectivity and thermal emissivity.
	END OF SERVICE LIFE	Old Duro-Last roofs can be recycled. To date, they have recycled more than 80 million pounds of PVC material through their sustainable manufacturing operations and Recycle Your Roof program. Up to 100% recyclable. Post-industrial scrap from the manufacturing of Duro-Last can be recycled into walkway pads, concrete expansion joints and resilient flooring.
<u>MISC. PROPERTIES</u>	QUALITIES/PROPERTIES OF PRODUCT	The Duro-Last roofing system is fire retardant, resistant to chemicals, grease, high winds, and punctures, and easily accommodates wide temperature extremes. Duro-Last’s custom flashing resists ponding water and helps solve roof problems before they happen. Once installed, Duro-Last roof is watertight and virtually maintenance free.
	MISC. COMMENTS	Duro-Last comes with all accessories included, as well as warranty options that expressly cover consequential damages..
	CONTRIBUTION TO LEED POINTS	Sustainable Site, Energy and Atmosphere, Materials and Resources
<u>COMPANY PROFILE</u>	GREEN PHILOSOPHY	Sustainability has been a part of the Duro-Last culture for more than 20 years. Their founder, John R. Burt, came up with the idea of reimagining old PVC roofs and manufacturing excess into resilient flooring, walkway pads, and concrete expansion joints. Duro-Last has a focus on recycling at every step of the product life cycle. In addition to their manufacturing process that allows excess material to be recycled back into production, Duro-Last’s custom-fabricated roof systems allow roofing contractors to reduce scrap on the job site, meaning less waste ends up in a landfill.
	CONTACT	Duro-Last®, Inc. 525 Morley Drive Saginaw, MI 48601 800-248-0280 duro-last.com
<u>MAINTENANCE</u>	AFTER INSTALLATION	Duro-Last roofing systems are virtually maintenance-free.