

Lustron Corporation Housing



Lustron Home, Haswell, Colorado (ca. 2010)

The Swedish-born Chicago engineer Carl Standlund (1899-1974) founded the Lustron Corporation in 1946 in parallel to the Federal Housing Administration's incentivization of pre-fabricated, high-volume home construction. Effectively in operation from September 1948 to June 1950, the Lustron Corporation sought to capitalize on the housing shortage created by servicemen returning *en masse* from World War II. Steel-framing, porcelain-enamel exterior panels, and metal roof tiles characterized the mass-produced type, developed from a contemporary design using similar materials for Standard Oil of Indiana stations. Strandlund, vice-president of the Chicago Vitreous Enamel Product Company, effectively exploited his intimate knowledge of the possibilities of the material as an entrepreneurial endeavor (O'Connell 37).

The concept for pre-fabricated, mass-produced, low-income housing originated in social ideologies widespread in America as well as Europe at the turn of the twentieth century. Precursors to Lustron included examples exhibited by Ferro Enamel Corporation and ARMCO Steel at the 1933 Century of Progress Exposition, to name but two. In turn, Lustron extensively marketed steel homes as maintenance and pest-free as well as fireproof and rustproof. Standlund advertised that the homes would never need repainting or reroofing.

Through a network of licensed dealers, the corporation ultimately produced between 2498 and 2680 residential units in 36 states, the District of Columbia, Alaska, and Venezuela. By 1949 234 licensed dealers were franchised, although not all have been definitively identified, notably dealers believed likely to have existed in Colorado (Rosin). Lustron production officially began on September 4, 1948 (Liccese-Torres and O'Connell 2). An estimated 1200 to 1500 buildings remain extant. Prior to the recent identification of a Lustron residence in Haswell, Colorado by Front Range Research Associates, no other examples had previously been surveyed in the state.

Chicago architects Roy Burton Blass and Morris H. Beckman, former draftsman with the prominent national firm of Skidmore, Owings, and Merrill, provided the initial design template for a two-bedroom, 1000-square-foot ranch-style house, with other models soon to follow. Boston architect Carl Koch subsequently retooled the design in 1949 from a production efficiency perspective, reducing the number of components and amount of material used; however, this re-engineering was not fully implemented by closure of the factory. All models were on one level, however. Roof, gutters, and downspouts were seamless to the structure. Amongst the few choices for personalization in a rigid production system, families could select from Dove Gray, Desert Tan, Surf Blue, and Maize Yellow for the exterior panels and six interior color schemes. Howard Ketchum, Inc. devised these schemes through a subcontract with Lustron. Other options included aluminum screen doors, storm-door inserts, storm windows, steel Venetian blinds, garage panel kits (to be attached to wood framing) and breezeway packages (www.lustronpreservation.org).

Lustron exteriors were simple and Minimal Traditional stylistically, despite the modernity of the materials, echoing the FHA evaluation system for resale values as well as the rising popularity of the Ranch style (Rosin). Character-defining features include: large plate-glass picture and sash windows; window screens; asphalt tile flooring; concrete slab on grade foundations (without basements); enameled steel exterior panels; space-saving sliding pocket doors; and an open floor plan. Amenities included a radiant ceiling-mounted furnace for most models (which proved highly inefficient in some climates), ample storage, and several built-in features. Kitchens featured a Thor washing machine that fit under the sink and could also serve as a dishwasher (Thornton). Each home was tagged with serial number located in the utility room. Finally, in 1948 the company issued "Suggested Land Operations Policies" providing direction regarding siting Lustron homes, lot types, and plantings (Rosin).

Of hundreds of fledgling firms developing pre-fabricated housing in the post-World War II era, such as the William Harman Corporation with its Lindsay bungalow, Lustron was among only three financed by significant loans from the Reconstruction Finance Corporation (Rosin). After some political wrangling, legislation authorized an initial \$15.5 million for Lustron in 1947, which, when coupled with subsequent loans, ultimately totaled \$32.5 million. Strandland had testified to Congress that the Lustron Corporation would be

capable of producing 100 homes per day, each at a cost of \$7500 with an operating budget of \$52 million (Rosin). However, at the height of productivity, Lustron only produced a one-month maximum of 270 homes, and was thus not solvent economically.

The first model home, the Esquire two-bedroom, was open to visitors in Chicago on August 11, 1948. A previous prototype was constructed in Hinsdale, Illinois in late 1946 (www.lustronpreservation.org). Model homes were subsequently shown in most major cities east of the Rockies with over 2 million visitors by the end of 1949 (Lustron Fact Sheet). The model types available included the lower-income Newport (1949) and two or three-bedroom Meadowbrook (1949), as compared to most expensive Westchester. Differences lay largely in the number of built-ins, appliances, and details of the heating system. Newports and Meadowbrooks also featured front-end gables, although none of the latter have been identified in the field (www.lustronpreservation.org). Westchesters are the most commonly identified extant type.

Lustrons were produced in 1949 and 1950 at the former Curtiss-Wright Navy airplane plant in Columbus, Ohio, leased by the War Assets Administration. The plant offered an assembly space comparable to 22 football fields and modeled on car manufacturing lines. However, although the company received more than 20,000 back orders, it was unable to speed production. The company paradoxically went bankrupt in 1950, closing definitively on June 6. This failure was paralleled by RFC foreclosure actions against the company, and the forced firing of Strandlund himself (Jandl 199). Subsequent analysis has attributed this spectacular failure to a variety of factors, including higher-than-expected start-up expenses, difficulty in obtaining the primary material of steel, challenges from local building codes, and slow mortgage approvals. Other speculation, as advanced by the historian Tom Feters, includes the infighting of trade unions and other corporations vying for the same market. Ultimately, far over budget, Lustron was denied further federal funding due to combination of antagonistic lobbying and its failure to complete required financial reporting. The company's inability to meet production orders and weaknesses in the dealership system, including the heavy costs incurred by dealers for lots and infrastructure installation up front, contributed to the failure.

Each home ultimately cost more than the \$6000 and \$10,000 advertised, with additional cost consideration for on-site assembly of about 350 hours, assuming an experienced team. 3000 individual components, packed in order of construction, were shipped via special open-sided Freuhauf trucks (among those, 168 standard exterior 2' x 2' wall panels and 242 roof panels). The company offered an erection manual as well as an erection training school.

Lustrons have recently garnered increased critical attention, due in part to the high-profile Section 106 consultation surrounding disposition of 57 Lustron homes at Quantico Marine Corps Base in Virginia as well as showcasing of the disassembled Arlington, Virginia Krowne House in the Museum of Modern Art's "Home Delivery: Fabrication of the Modern

Dwelling” exhibition. Numerous Lustron residences have been listed, both individually, as historic districts, and as multiple property submissions on the National Register of Historic Places in Kansas, New York, Alabama, Florida, and elsewhere. Meanwhile, owner enthusiasts have long networked via the internet to exchange information and best practices. For additional information, please reference the sources cited below.

Common elements:

- Steel-framing
- Porcelain enamel exterior panels
- Metal roof tiles
- Large plate glass picture and sash windows
- Concrete slab on grade foundation (no basement)
- Asphalt tile flooring
- Space-saving sliding pocket doors
- Open floor plan

Prepared by Astrid Liverman, Ph.D., 2010 (website links updated 2018).

Bibliography

Alvarez, Kimberly Konrad. “The Lustron House: The Endangered Species of the Post-War Prefab Industry.” *do_co_mo_mo_us* (Summer 2008).

“American Steel Prefabricated Bungalow.” *The Architect and Building News* (12 Mar 1948): 7.

Fetters, Thomas T. Lustron Homes: The History of a Postwar Prefabricated Housing Experiment. North Carolina: McFarland & Company, Inc., 2002.

Fields, Darell Wayne. “Douglas Knerr, *Suburban Steel: The Magnificent Failure of the Lustron Corporation, 1945-1951* [book review],” *Journal of the Society of Architectural Historians* 64.3 (Sep 2005): 387-9.

Jandl, H. Ward, ed. Yesterday’s Houses of Tomorrow: Innovative American Homes, 1850 to 1950. Washington, DC: The Preservation Press, 1991.

Knerr, Douglas. Suburban Steel: The Magnificent Failure of the Lustron Corporation, 1945-1951. Columbus: Ohio State University Press, 2004.

Liccese-Torres, Cynthia and Kim A. O'Connell. The Illustrious Lustron: A Guide for the Disassembly and Preservation of America's Modern Metal Marvel. Virginia 2007 Centennial Program. Arlington: Community Planning, Housing and Development, 2007.

O'Connell, Kim A. "Loving Lustrons." Preservation: The Magazine of the National Trust for Historic Preservation (Jul/Aug 2007): 34-39.

Rosin, Elizabeth, with assistance from Dana Cloud and Jon Taylor. "Lustron Houses of Kansas." National Register of Historic Places Multiple Property Documentation Form. Kansas City, MO: Historic Preservation Services, LLC, 2000.

Strandlund, Carl G. Fact Sheet, Lustron Corporation. Typescript dated 31 Dec 1949.
www.lustronpreservation.org

Websites:

<http://www.arlingtonva.us/departments/CPHD/ons/CPHDOnsHistoricPreservationLustron.aspx>, archived at <http://archive.li/AiwK3>

<https://www.ohiohistory.org/lustron> formerly, <http://www.lustronpreservation.org/>
(National Trust for Historic Preservation)

https://en.wikipedia.org/wiki/Carl_Strandlund

Thornton, Rosemary. "Lustron Homes, Part I." <http://www.oldhouseweb.com/architecture-and-design/lustron-homes-part-1.shtml>

<https://whitehallhistoricalsociety.weebly.com/lustron.html>