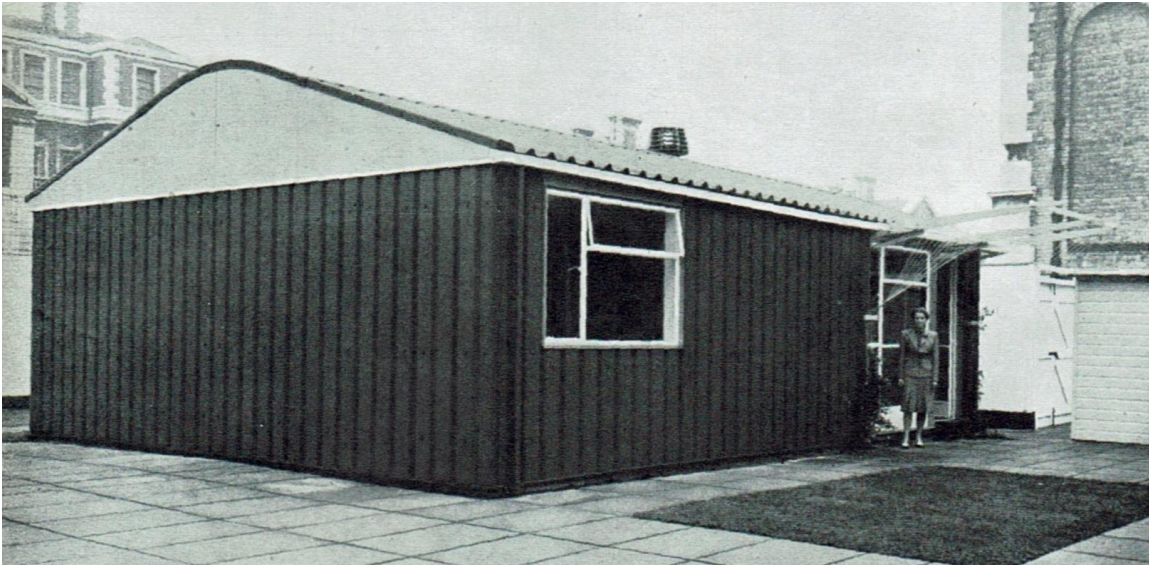


Arcon steel frame temporary bungalows

Peter Lobner, 15 June 2020

The firm Arcon (Architectural Consultants) was formed in 1943 by architects Edric Neel, Rodney Thomas and Raglan Squire and industrial designer Jack Howe. Their design was one of the prefabricated house designs to qualify under the UK's Emergency Factory Made (EFM) housing program. An Arcon prototype was one of the prefabricated temporary bungalows on display in 1944 at the Tate Gallery exhibition in London. The construction company Taylor Woodrow manufactured the Arcon bungalow from 2,500 components delivered by 145 suppliers.

Essentially, the Arcon was an asbestos cement panel-clad variant of the pressed steel Portal prototype prefabricated house. The Arcon prototype introduced the characteristic "roll-top" (semi-arched) roof.

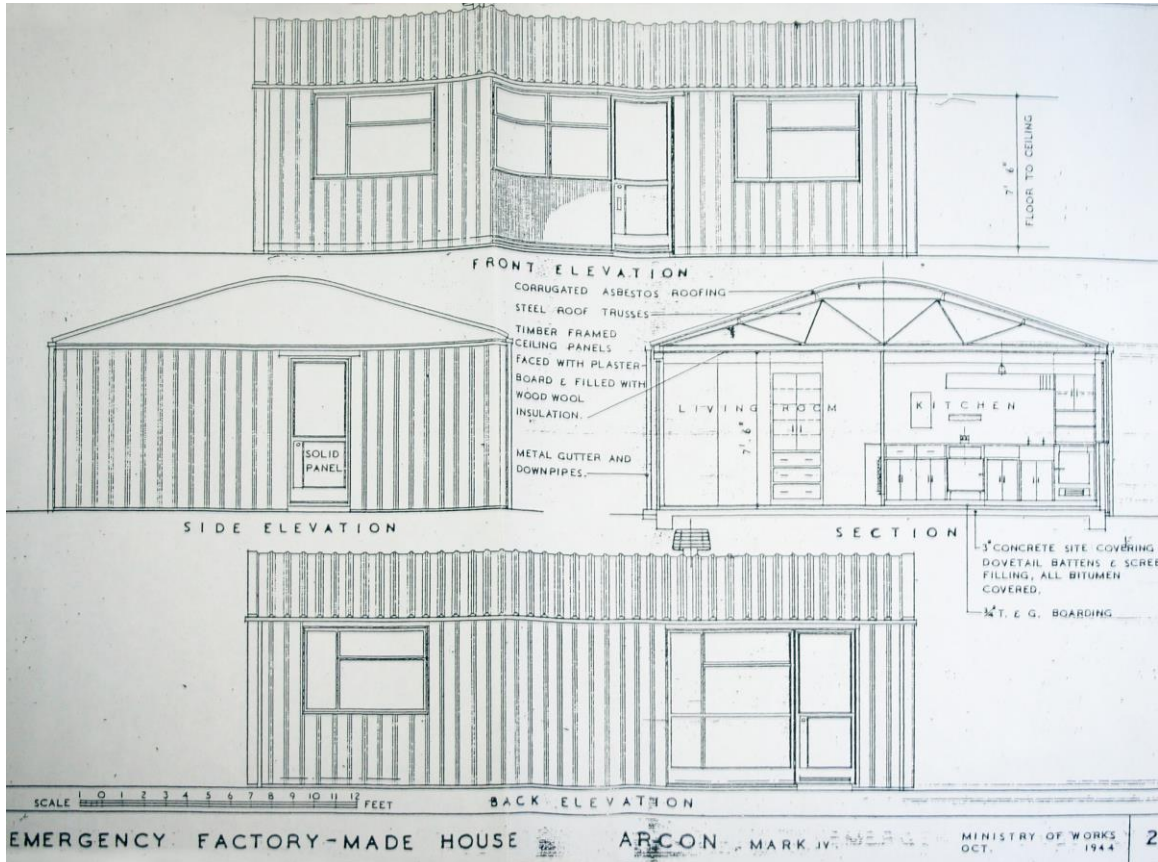


Arcon prototype on display at Tate exhibition in 1944.

Source: <https://www.prefabmuseum.uk/content/history/those-were-the-days-my-friend-sam-webb-riba>

The Arcon has a rolled steel frame with the exterior walls and roof made of corrugated asbestos cement sheets, thereby greatly reducing the amount of steel relative to the Portal prototype. The floor plan had a living room, two bedrooms, and a "service unit" (a prefabricated, back-to-back kitchen and bathroom unit that

simplified routing plumbing and electrical lines) similar to the Portal prototype. The fully equipped modular kitchen and bath included steel built-in cabinets, which also were included in the bedrooms and the living room. The kitchen table could be folded into a recess in the wall when not in use. The house had ducted warm air heating, pre-wiring using electrical cable harnesses, and prefabricated floor and ceiling panels.



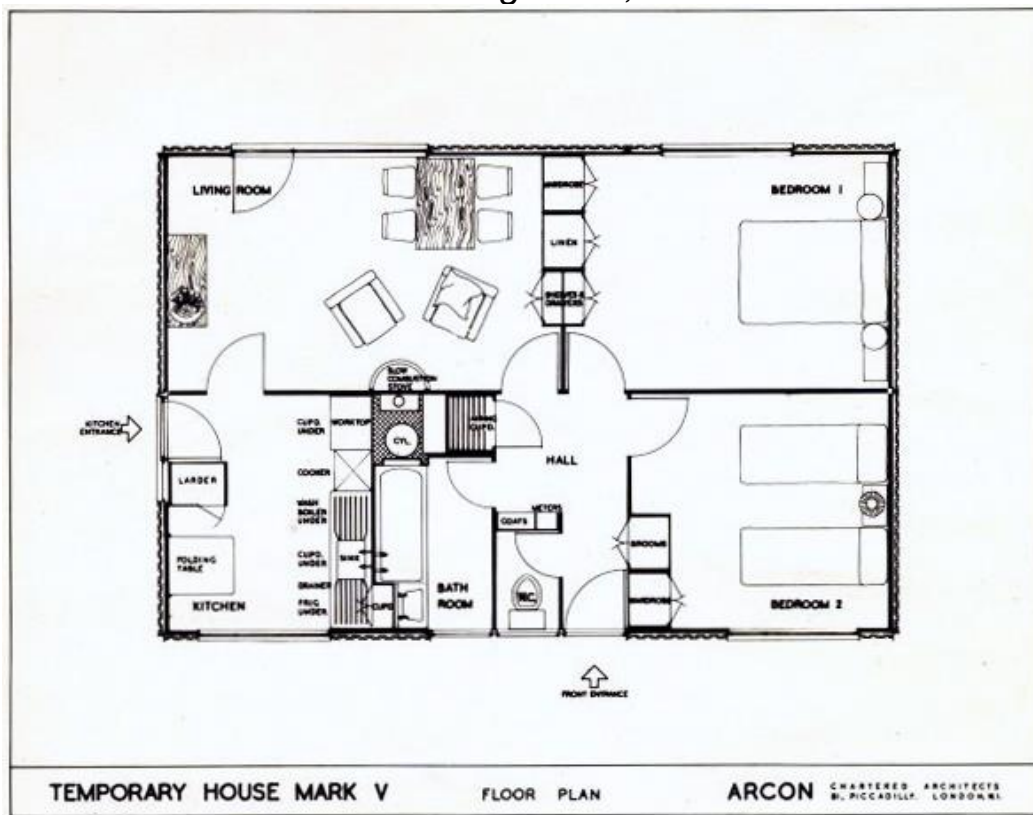
Arcon Mk IV, dated October 1944. Source:

https://www.prefabmuseum.uk/content/catalogue_item/emergency-factory-made-house-arcon-mk-iv-ministry-of-works-october-1944

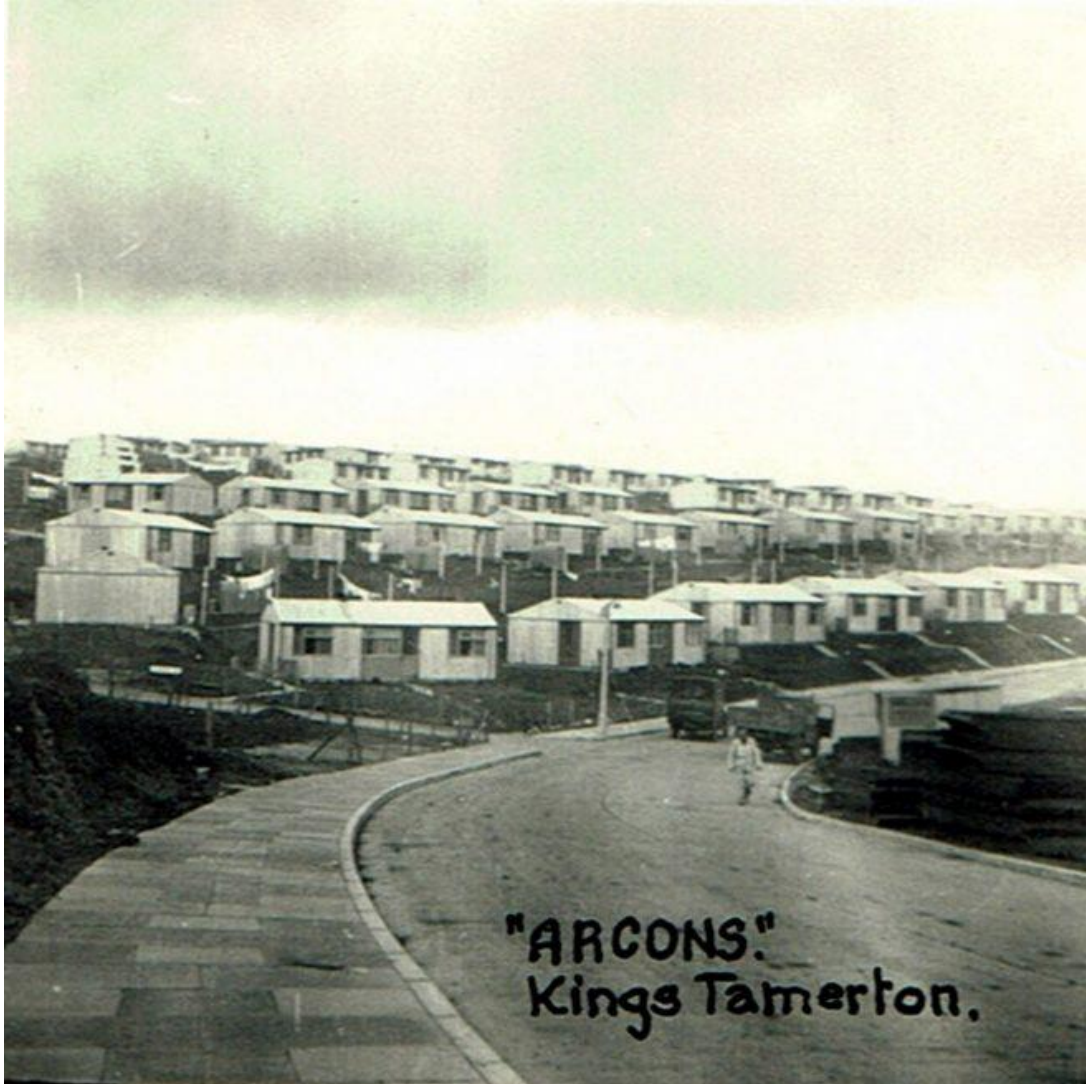
The Arcon was manufactured in four 7ft-6in (2.3 meters) wide sections to enable road transportation to a pre-prepared site where the house sections were bolted together on a simple slab foundation. In an April 1945 demonstration, an Arcon house was completed and handed over to its new occupants by a team of 22 workers in under eight hours.



Arcon Mk V, circa 1947. Source: MMU Visual Resources Centre via Manchester Evening News, 28 June 2018



Arcon Mk V bungalow floor plan. Source: https://www.prefabmuseum.uk/content/catalogue_item/arcon-mkv-floor-plan

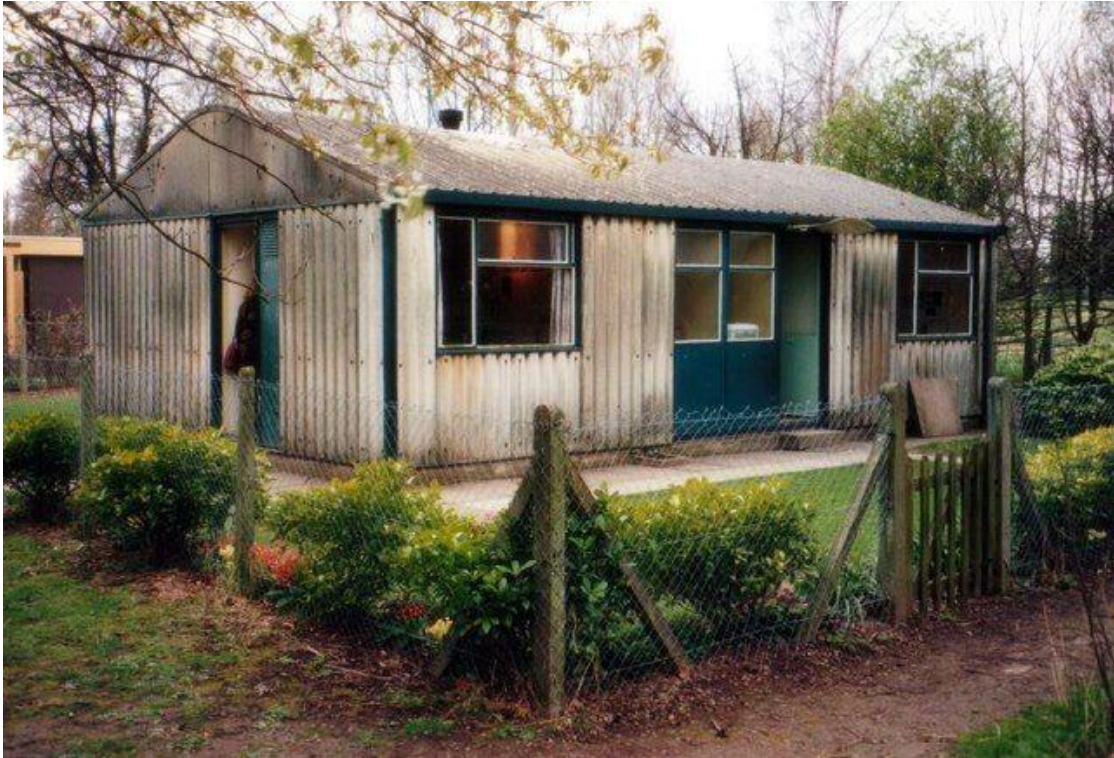


Arcon Mk V development in Plymouth, UK. Source: Prefab Museum

An Arcon house cost £1,209 each (\$4,872 U.S. @ \$4.03 USD/£ in 1947) to produce, plus the cost of the land and installation. A total of 38,859 Arcon houses were constructed between 1945 and 1949. The most popular model was the Arcon Mk V.

You can visit two Arcon Mk V prefabs at museums in the UK:

- **Avoncroft Museum of Historic Buildings** in Stoke Heath, Bromsgrove, Worcestershire:
<https://avoncroft.org.uk/avoncrofts-work/historic-buildings/>
- **Rural Life Living Museum** in Tilford, Farnham, Surrey:
<https://rural-life.org.uk/explore-discover/our-exhibits/>



Arcon Mk V at Avoncroft Museum of Historic Buildings in Stoke Heath Worcestershire. Source: Mike Goodwin via <https://www.geograph.org.uk/photo/693143>



Arcon Mk V at the Rural Life Living Museum in Tilford, Surrey. Source: <https://rural-life.org.uk/explore-discover/our-exhibits/>



Abandoned structure, likely an Arcon Mk V in Allanton, North Lanarkshire, 2006. Source: Paul Birrell via <https://www.geograph.org.uk/photo/217074>

The Arcon group existed until 1967, continuing its research into materials and techniques for prefabricated buildings. In the end it was absorbed into the Taylor Woodrow construction group.

For more information, see the following resources:

- Sir Ove Arup, “Exhibition site of Arcon prefabricated housing,” July 1944: <http://www.engineering-timelines.com/scripts/engineeringItem.asp?id=967>
- “One Arcon story,” Prefab Museum: <https://www.prefabmuseum.uk/content/history/one-arcon-story>
- “A permanent home for a temporary house - the prefab at St Fagans,” 18 January 2007: <https://museum.wales/articles/2007-01-18/A-permanent-home-for-a-temporary-house---the-prefab-at-St-Fagans/>