

AW Hawksley aluminum permanent bungalows

Peter Lobner, 15 June 2020

The firm AW Hawksley Ltd. was formed in April 1940 through the consolidation of several British aviation firms. The company's name is a contraction of **Armstrong Whitworth Hawker Siddeley**. During WW II, the factory at Brockworth, Gloucestershire manufactured and repaired aircraft with both aluminum and timber construction. Toward the end of the WW II, the UK Ministry of Aircraft Production requested that AW Hawksley switch production from aircraft to non-traditional houses.

AW Hawksley became one of the members of the Aircraft Industries Research Organization on Housing (AIROH) and collaborated with the consortium to produce AIROH aluminum prefab bungalows under the Government's Temporary Housing Program. The consortium members had access to aluminum, including a particularly desirable high-strength alloy called Hiduminium (**High duty Aluminium**), from a large stockpile salvaged from scrapped WW II aircraft.

AW Hawksley engaged Structural and Mechanical Development Engineers (SMD) of Slough to develop designs for permanent detached and semi-detached (duplex) aluminum bungalows. These became known as BL8 aluminum bungalows, which were designed for a long service life. The AW Hawksley BL8 bungalows were not part of the Government's Temporary Housing Program.

The AW Hawksley factory at Brockworth, Gloucestershire had 750,000 square feet of space available for manufacturing the prefabricated aluminum bungalows. Space in the factory was allocated to the following manufacturing functions:

- Floors
- Walls and partitions
- Kitchen and bathroom unit
- Roofs
- Final assembly and paint

The journal *Flight* (3 Feb 1949) reported that the company was producing a complete house every 15 minutes, which would yield four per hour, 32 per day, and 160 per week.

The BL8 bungalows had an extruded aluminum frame that was externally clad with profiled aluminum sheeting. The roof also was made of profiled aluminum sheeting. The windows had steel frames. Interior walls and ceilings were finished in plasterboard and the floors were timber-boarded.

The bungalow included an entrance hallway, living room, three bedrooms with built-in wardrobes, a bathroom, and a kitchen outfitted with a refrigerator, gas or electric cooker, and water boiler. The fireplace in the living room drew cold air from the entrance hall, which was then ducted into the bedrooms for heating.

Built between 1946 and 1951, AW Hawksley detached and semi-detached BL8 aluminum bungalows providing housing for about 17,000 families. A 1949 British Pathé newsreel reported that 2,000 BL8 bungalows were shipped to Northern Ireland and thousands were ordered by New Zealand (see link below).



AW Hawksley BL8 detached aluminum bungalow. Source: <http://www.crisimatec.com/1494399529/mnc/f8f6bcf661b89116/>



AW Hawksley BL8 semi-detached (duplex) aluminum bungalow in Cambridgeshire. Source:

<https://www.facebook.com/PalacesForThePeople/>



AW Hawksley BL8 semi-detached (duplex) aluminum bungalow in Cambridgeshire. Source: Jane Hearn, Prefab Museum



*Living room (above) and kitchen (below) in an
AW Hawksley BL8 bungalow.
Source: Screenshots from YouTube video (see link below)*



To bring a BL8 bungalow up to the UK modern “Decent Home” standards, two major changes typically are made to the building’s exterior. First, a brick veneer wall is built around the metal walls of the homes and an insulation layer is added during the process. The other major alteration is a new roof with added insulation.



A refurbished AW Hawksley Bungalow with new brick veneer walls and lightweight steel roofing tile. Source: <https://www.metrotile.co.uk/case-studies/hawkley-bungalows/>

For more information, see the following online resources:

- Paul Francis, “AW Hawksley Ltd and the factory at Brockworth - guest blog,” Prefab Museum: <https://www.prefabmuseum.uk/content/history/aw-hawksley-ltd-and-the-factory-at-brockworth-guest-blog>
- “Hawksley Bungalows – Case Study,” describes renovation of a five building renovation ‘pilot’ project at Davis Road, Doncaster: <https://www.metrotile.co.uk/case-studies/hawkley-bungalows/>
- Philip Wilkinson, “Brockworth, Gloucestershire,” 26 March 2015: <https://englishbuildings.blogspot.com/2014/03/>

Video:

- “1947 Hawksley BL8 Prefabricated House” (5:01 minutes), Montbrehain, : <https://www.youtube.com/watch?v=scppoi8zPol>
- “A New Export - Houses! 1949” (1:32 minutes), Pathe Newsreels, shows AW Hawksley prefab sections being delivered by truck for shipment by sea to Ireland, 17 April 1949: <https://www.britishpathe.com/video/a-new-export-houses>