



GMB Building

Client: GMB Union

Location: Cardiff, UK

Project Value: £2.2M

The project involved the comprehensive refurbishment of the GMB Union's Welsh headquarters in Cardiff. The original building, Williamson House, was opened in 1958 and extended at the rear during the 1980s. The building became run down, both internally and externally, was poorly ventilated - a situation exacerbated by later secondary glazing installed to deal with excessive traffic noise - and lacked the appropriate appearance in relation to the Union's aspirations for the future.

The design sought to provide the GMB with an environmentally comfortable new regional headquarters that would portray a contemporary, yet timeless, image. It was important to the GMB that the materials chosen for the building were sourced as far as possible within the UK to sustain local business and to avoid the high embodied energy associated with transporting materials from afar.

Sustainability was further improved by retaining as much of the original building as possible, in particular the steel, concrete and earthenware structure, while the new staircases were manufactured from oak to reduce the need to upgrade the building's existing foundations.



A stone rain screen over-cladding was employed to improve the thermal performance, increase the depth of reveal for solar protection, and improve the appearance of the building, providing the opportunity to completely re-fashion the building - the original fragmented components of the existing structure - the 2-storey rendered block with its set-back brick top floor and the rear 2/3-storey brick extension - could be united as a single re-proportioned architectural composition to provide a new expression of heritage and longevity. This provided opportunity to increase the building's apparent scale from the street, and by bringing the top storey 'out' flush with the two storey block below, additional area was added to the plan, and depth to the façade.

Improvements to the internal layout of the building provided a welcoming double height entrance and reception, an efficient, light and airy working environment, new vertical and horizontal circulation zones, generous new toilet, shower and other staff welfare facilities, and, an off-street car parking area at ground floor for staff including designated motor cycle and cycle parking. The floor plans were completely revamped to provide a mixture of well proportioned meeting, education, debating and office spaces and staff facilities, which met the needs of the GMB employees and members. This was most notable in the external cantilevered glazed corridor which provided a way to by-pass the retained first floor debating chamber within the original building to the office spaces behind, adding compositional interest and character.

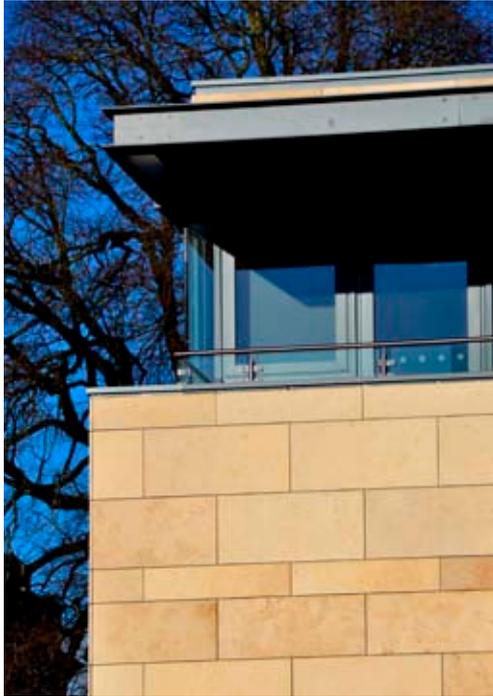
The external design of the building was approached with a view to meeting the functional, environmental and aesthetic needs of the GMB Union. In this way, the building has been provided with a heightened presence onto what is a prominent junction on Newport Road, a legible and accessible entrance and a 'fresh' image.

The finer detailing of the façades was painstakingly coordinated with the contractor in order to ensure that the coursing, jointing and connections between the stone, metal, glass and masonry units was of highest standard and undertaken in a craftsman like manner. Care was also given to the signage zones of the building which are an integral part of the design and celebrate the Welsh regional situation through a slate backdrop and large industrial stainless steel letters.

The project was procured under a single contract period against a very tight budget, for a fixed price sum of approximately £2.2M, and funded exclusively by the GMB Union.

Sustainability

The key environmental feature of the building is its significantly improved environmental performance. The over-cladding and re-roofing has improved thermal characteristics of the building, the deep reveals and solar protection measures have improved the working environments for the staff and visitors - the building previously suffered over-heating at certain times of the day.



Sound insulation has also been improved – another intolerable feature of the original situation.

Completely new and efficient (sensitively installed) heating, cooling and lighting systems have not only offered the opportunity for individual control over working environments, but have significantly reduced the building's energy demand. The GMB Union's inherent sensitivity to running costs, value for money, locally sourced materials, labour and goods have all engendered the spirit of sustainability in relation to the building's design and specification. Critically, the building's re-worked internal layouts have provided working environments that are light, airy and pleasant, engendering feelings of well being and comfort.

In summary, the building offers:

Health and Wellbeing

- Provision of windows that provide as much natural light as possible, providing both energy savings, as well as benefits to the health and wellbeing of occupants.
- Provision of double glazed windows which consider noise insulation from excess noise produced by the traffic on Newport Road.
- Provision of a design that considers the orientation and protection of glazing to control glare and unwanted solar gains.
- Provision of occupant controlled opening lights to windows where possible and appropriate.

Transport

- The building benefits from close proximity to regular public transport links.
- The building provides a suitable area for cycle storage, and an ancillary shower, a drying and storage area are being considered with a view to encouraging the use of cycling as a means to commute

Energy

- Consideration has been given to the incorporation of an occupant controlled local heating/cooling system.
- Provision of a system of over-cladding which will significantly improve the thermal efficiency of the building.
- Provision of a rainwater harvesting system - the collection tank is located within the redundant basement - in combination with low water use sanitary fittings.

Construction and Waste Management

- Provision of responsibly sourced materials for the construction of the building.
- The design and construction of the building was developed to minimise the generation of waste in construction.
- The building is a good example of the re-use of an existing structure



Air Quality and Noise

- The refurbishment has incorporated mitigation measures to deal with unacceptable noise and levels of NO₂ from West Grove and Newport Road in particular, as appropriate.

Inclusive Design and Accessibility for All Users

Various representatives of the GMB Union were consulted throughout the design process and construction period. Decisions about the building's organisation, the choice of materials, fittings, colours, etc were all taken in conjunction with their steering group. The high profile nature of the building's situation meant that extensive consultation was also undertaken with representatives of the Local Authority. For example, when choosing external stone cladding, the initial Aerolite system was rejected as the stone was quarried in Europe, then shipped to China, then shipped back to the UK via Africa - high embodied energy. The choice of Real Stone, although not perfect, did ensure the use of a local supplier and installer - the stone was mined in Germany, however all other operations were carried out in the UK. Local stone masons brought in to polish ends of stone to required quality.

A key criterion for the project was the over-whelming improvement in accessibility. The building now offers full disabled access throughout new building including the original debating chamber. Staff are known to be very pleased with their new working environment both in terms of appearance and environmental comfort and staff facilities. There has also been much positive feedback from Cardiff residents, and the project was featured in Architect's Journal.

Community Impact and Engagement

The project has provided a well considered improvement to the street scene of both Newport Road and West Grove. The building is admired and frequently (positively) commented upon. The GMB Union have fulfilled their aspiration to provide a welcoming, fully accessible building that projects an image of heritage and solidity, progression and dependability. The use of stone as the over-cladding material of choice has given the building a semi-civic expression, and the improvements to the entrance and the primary façades, have created a building with inherent visual interest and character. The architectural language employed, of framing, layering and depth of reveal has provided a richness and clarity to the elevations, and through the general re-fashioning process (described above) the building is now well mannered with strong compositional and proportioning clarity, but above all, it has a true sense of civic pride.