

Cardiff Central Library

The Cardiff Central Library, located on The Hayes, is at the southern end of the city centre, which is a commercial area, began construction in 2007 and was completed in 2009, designed by Building Design Partnership (BDP) Architects and commissioned by Cardiff Council to replace the previous Central Library located at St David's Link (from 1988 to 2006).



It is a great example of contemporary architecture in Wales and the new approach Cardiff is taking towards redeveloping its city centre with a focus on sustainable urban living and moving towards a more walkable city centre.



The original library was located at the Cardiff Free Library (from 1861 to 1882), where after it was transferred to the Old Library (from 1882 to 1988) at the northern end of the Hayes, which is now the home to the Cardiff Story Museum. During the construction of the Cardiff Central Library, the St David's link library had to be demolished to accommodate the grand plan for the redevelopment of the area, resulting in the library being moved to a temporary location on John Street (from 2006 to 2009) until the new building was completed.



This redevelopment of St-Davids was part of a wider retail focused redevelopment scheme by Cardiff City Council that had a 2-phase plan which ranged between 1982 (First Phase) and 2009 (Second Phase) to accommodate the nearly average of 39 million people it attracted annually, to create a more modernised and accessible by foot city centre. This second phase cost £675 million, with the Cardiff Central Library making up £15-18 million of the total cost of redevelopment.

BDP mainly has a focus on civic projects, serving the global market with their designs and values, and specifically for the Cardiff central Library regarding the design and its brief BDP were tasked with “creating an important modern civic landmark, enhancing the existing services on offer, with sustainable design.” (BDP, online).

Their approach to designing the contemporary aesthetic of the Cardiff Central Library incorporated sustainability in the form of an insulating sedum grass roof, combined with the design choice of fenestration that allows plenty of natural light into the space that has been combined with colourful blue cladding to



resemble the random appearance of books on shelves and Cardiff's maritime history, emphasising the primary function of the building.

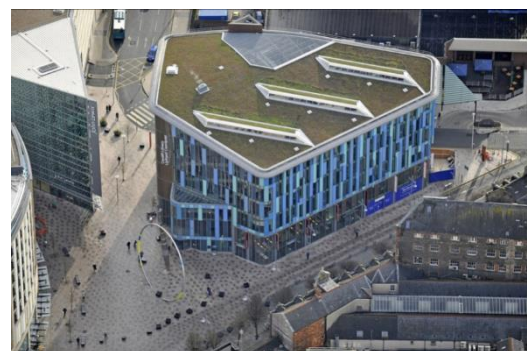
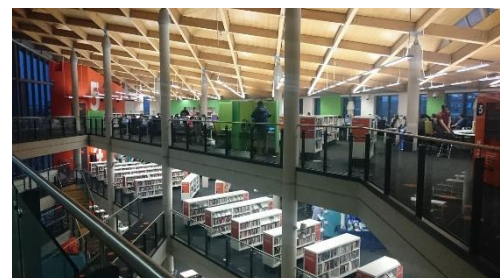
The specific focus on the colours used and the shape of the building shows an intricate and unique understanding of the surrounding area that combines the buildings function as well as the history of Cardiff as a city.

The overall structure consists of two separate elements that are joined together to create the unique structure of the building; with one side being mainly open and transparent acting as 'a lantern' and the other having been constructed with a more solid and enclosed façade that contains cellular accommodation. It is enclosed in brass cladding to mimic the appearance of leather-bound lined bookshelves.

It is a 6-storey building with ground floor amenities such as restaurants and bars including a Wagamama's, Wi-Fi throughout the building, lifts, escalators and stairs for accessibility. The upper floors are used for study and meeting areas whilst also housing the main library, and at the time of opening, it's vast collection of around 90,000 books (10,000 of which are written in Welsh), and roughly 10,000 digital media in the form of CDs and DVDs, with its current collection being a size around 122,000.

The two building elements are connected by a 4-storey atrium space that provides ventilation, natural lighting and an open feel to the interior, with a timber ceiling for a welcoming atmosphere to the interior space. It combines a colourful yet sleek interior design that was bespoke made for the project has the intended effect of creating an atmosphere that inspires learning, creativity and reinforces the core values of the library. The library space covers 5,100m² with the additional A3 retail space contributing around 1500m² to the total floor space of the building.

Regarding the sustainability of the design, the library achieved a BREEAM excellent rating, however this is excluding the new rating scheme which introduced an additional tier of 'outstanding' which was added under BREEAM 2008 and was unavailable at the time of construction for this building. Regarding the BREEAM assessment, a bespoke criteria had to be created specifically for classifying the design



as no standard BREEAM tool is available for libraries. This rating far exceeded the intended minimum outlined in the brief which required the design to achieve a minimum rating of 'very good'. This was due to the library being provided to the council under a S106 agreement to replace the original library, which simply means that the proposed design has a positive impact or



contribution to the community, which the St David's Partnership and BDP design team were fully committed to delivering in the final design, all which were achieved within the set budget for the development of the Cardiff Central Library.

The green sedum grass roof helps reduce the environmental impact of the building by providing insulation for the building, enhancing the biodiversity in the city centre, which often lacks such features, while also having natural passive ventilation systems that help regulate the temperature within the library and reduces costs and environmental impacts through the reliance on mechanical systems.

Regarding the long-term maintenance of the library, it was designed to be sustainable and long lasting, with mostly passive solutions, such as solar shading fins and coatings on glazing panels to reduce solar heat gains and glare. The building is fitted with efficient water measures to reduce overall consumption, and green roof can reduce rainwater run-off by over 50% compared to a structure lacking such a feature.

In 2011 a glazing panel unexpectedly shattered on the fifth floor causing a temporary closure and minor damage to the escalator. It is unknown what caused the failure of the glazing panel whether it was a structural failure; however, they took active measures by performing a building wide inspection on the glazing and installing protective films to prevent future issues.

The library greatly complements its surrounding area having a contemporary design, like many of the buildings east of the site, which are mainly commercial and retail buildings, while also serving its function as a civic service building on the upper floors, creating a perfect blend of street level commercial spaces and a hub for educational and cultural significance. The surrounding area has fully been pedestrianised compared to the original state of the site when it had finished construction, allowing for an accessible and welcoming area that caters to the public and wider community.

However, in this regard, in my opinion, the structure of the building has plenty of personality, being a major improvement on design compared to some other mid-rise buildings nearby such as St Davids shopping centre, which feel repetitive and are constructed mainly out of structural concrete. It provides a beacon of hope for what Cardiff City Council can provide to the fabric of the city centre for future projects, while maintaining the historical fabric of existing buildings in the same area. The footpath to the west of the library is utilised as outdoor dining spaces for the restaurants that line the opposite side of the walkway, creating a lively space for people to hang out and

socialise, adding a sense of vibrancy and colour that the original St David's shopping centre doesn't fully provide.

In conclusion, the Cardiff Central Library is a great example of how contemporary architecture can satisfy the needs of a modern urban population, while integrating the fabric and identity of the area and city it resides in. It tackles sustainability and accessibility all while retaining visual appearance. It both functions as a library while also conforming to Cardiff's transformation as a city into the 21st century and beyond. It may not be to everyone's liking, and it has a unique design to it, however at its core it still stands strong as a testament to the importance of having a physical space for people to gather, expand their knowledge and have access to valuable information resources, showing the value of libraries in an increasingly digital world and the power that architecture has to shape and reflect the character of a city.

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(1380 Total Word Count, excluding references)