



GILLESPIE

case study

The Wales Millennium Centre

architect

Capita Percy Thomas

main contractor

Sir Robert McAlpine



crafting an icon

Sitting upon reclaimed dockland alongside Cardiff Bay, The Wales Millennium Centre is a work of art in itself, designed not only to showcase artistic talent but to celebrate a nation, its landscape, its traditions and its people.

As befits a national icon, the construction of the building is as much a part of the attraction of the venue as the performances. A highly complex design built in just 33 months, the project called for close collaboration by a multi-disciplined team.

letters to create the desired effect. This presented a unique construction challenge. Initial proposals for forming the fifty four, 3.6m high letters were difficult to achieve and prohibitively expensive, threatening to compromise the grandeur of the architect's original designs.

Gillespie's early input was invaluable in helping to determine a way forward. From the very beginning, Gillespie was highly proactive, developing prototype profiles to assist with evaluating the options for manufacturing and support, and subsequently coordinating input from other trades.

**John Shovlin, Commercial Manager,
Sir Robert McAlpine, main contractors**

The front of the theatre shell, which leans out over the main entrance to form a curved elevation, is a particularly impressive feature of the structure. Cut through the stainless steel cladding is a monumental inscription in the Roman and Celtic traditions, providing natural light to the interior by day and illumination to the exterior by night in sharp contrast to the stainless steel background. The inscription reads: 'In these stones horizons sing' in English, and in Welsh: "Creating truth like glass from inspiration's furnace".

With a reputation for problem solving, Gillespie were able to produce a variety of design mock-ups and prototypes to resolve this serious design issue at a significantly reduced cost, enabling the architect's original concept to be saved.

The concept architects Capita Percy Thomas sought a precise finish for the

The design solution led to a value-engineered combination of glass reinforced polyester (GRP) and Zerodec, Gillespie's patented laminated glass reinforced gypsum (GRG) product. The exterior lettering was precision manufactured by Gillespie and clad in bronzed stainless steel, with the interior lettering created in natural gypsum, as sought by the architect. Gillespie also engineered a range of other interior features in Zerodec laminated GRG, including circular columns with raised mouldings, finished with a special pigment to resemble fossilised trees, commonly found underground in Welsh mines.

The Wales Millennium Centre is a landmark development, as much a showcase for technical expertise in construction as new talent, demonstrating what can be achieved through collaborative working.

