

CASE STUDY

CRAUD CINA

## **Bord Gáis Energy Theatre**

Developing in the Docklands

#### **Project Information**

Building owner Chartered Land Ltd

Architect
Studio Daniel Libeskind

Sub-Contractor John Sisk & Sons Ltd The Bord Gáis Energy Theatre is the largest in Ireland. It presents a very diverse programme of theatrical experiences including ballet, concerts, drama, comedy, musicals, family shows and opera.

#### **Project Overview**

The concept of the Bord Gáis Energy Theatre was to construct a powerful cultural presence within the existing commercial and residential surroundings of the Grand Canal Square, and to provide a visual icon mirroring the joy and drama of Dublin itself. The auditorium design concept draws on shipbuilding imagery in reference to this former Docklands area of Dublin. Suspended 'sails' were used to conceal the technical gantries and equipment from public view, while the large protruding 'rib' volumes on the side walls of the auditorium evoke the timber members of an old boat's hull.

#### **The Challenge**

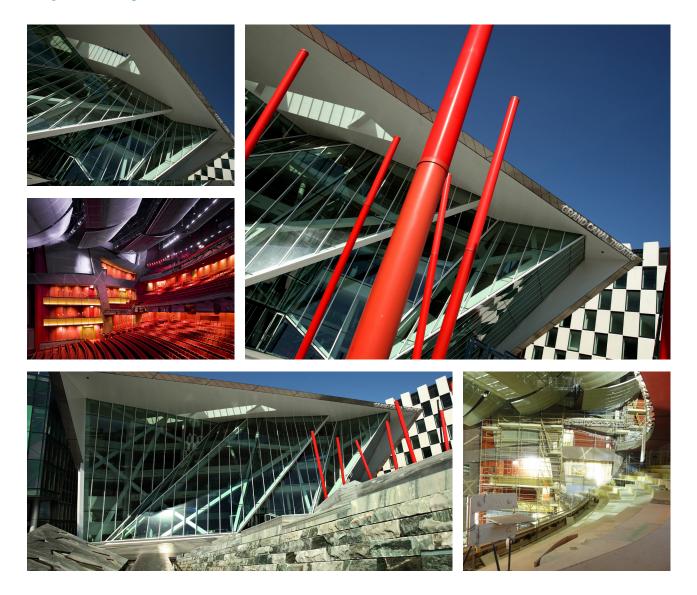
Acoustics were the primary concern for the Bord Gáis Energy Theatre. Creating a comfortable acoustic setting for all patrons of the theatre, irrespective of their seated location within the auditorium, was difficult because large, plane flat surfaces can potentially create a 'zone' for poor acoustic performance. Within the public circulation areas, low reverberation was required due to the large quantities of glazing and tiled surfaces.

## **The Approach**

The use of angled, or 'Zig-Zag', wall lining systems was felt to be the optimum method of directing sound towards its desired direction. The zig-zag wall shaping on the side walls helped redirect sound towards the centre of the room, aiding clarity and the feeling of spaciousness, while larger, similar scale shaping on the rear wall helped prevent any echoes of amplified sound returning to the stage.



## **Project Gallery**



# **Gyproc Products Used**

An angled, or 'Zig-Zag', wall lining system was constructed by the innovative use of pairs of Gypframe 70170 metal studs, braced to the concrete structure using Gypframe 70mm Floor channel and Gypframe GA2 angles, and lined with two layers of Gyproc SoundBloc. The concern within the sound lobby was the absorption of extraneous sound and maintaining low reverberation. This was achieved by the use of a Gypframe CasoLine MF Ceiling System and the inclusion of Rigitone 8-18 ceiling boards, which provide a high level of performance without compromising aesthetic appeal.

#### **Product List**

CasoLine MF Ceiling Channels & Accessories

Gyproc SoundBloc

Gyproc Moisture Resistant

Gypframe 'I' Studs

Gypframe Floor & Ceiling Channels

Gypframe Steel Angles

Rigitone Activ'Air®