

In previous issues we have reported on the important Medicinema development for hospitals, and in this article Cinema Architect Bill Chew MBKS describes the design and construction of a groundbreaking new cinema within the Hanover Housing Association care home at Tibble Court, Dagenham

Watching films as an activity in a home cinema or multiplex is more often than not associated with the younger generation or, in the case of home cinemas, more affluent sections of society. It is certainly less common to see older people going to the cinema on a regular basis. Therefore when I was approached by a contractor to design a home cinema for a care home in Dagenham for their housing association client it came as both a surprise as well as a challenge. The project is a 'pilot scheme' for a care home which provides support for people suffering from dementia. I have been designing cinemas, screening rooms and home cinemas for many years now; it seems, at last, I have been commissioned to design a cinema project which could be said to offer some 'value' to society as opposed to merely providing general entertainment. It is all the more poignant as my father died some years ago, having suffered from dementia.

The project is being undertaken on a design and build basis by Cinestructures International Ltd for Jackson Construction Ltd of Ipswich. **Hanover Housing Association** The end user, Hanover Housing Association, founded in 1963 is a pioneering not-for-profit organisation which was the first housing association to build, manage and maintain sheltered housing for older people on a national basis. Hanover aims to provide flexible and imaginative solutions to the changing needs of older people for

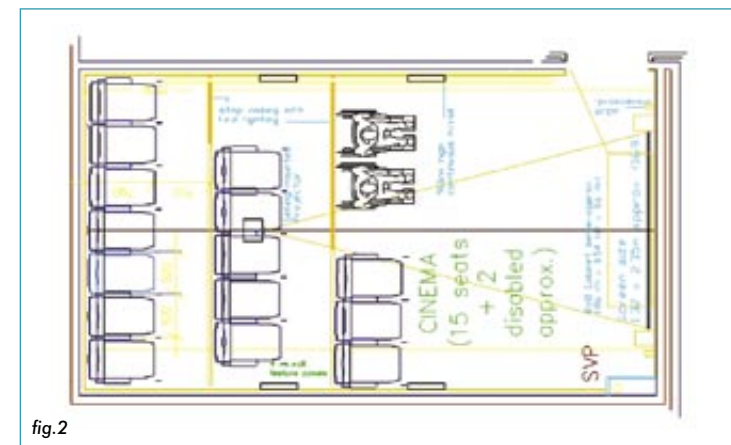


fig.2

housing and support. The association manages over 10,000 rented properties owned by the Group on over 370 estates throughout England. It also manages more than 500 homes on behalf of other organisations including charitable trusts and almshouses.

The project in Dagenham (see fig.1, artist's impression), which is being completed in June, is promoted under the banner of 'Extracare' - the model that Hanover uses for housing with care (otherwise also known as very sheltered housing). 'Extracare' houses frail older people in self contained flats built to a high design specification in sheltered housing schemes with additional facilities and support. The facilities in the 32 unit development include library, cinema facility, lounge and dining facilities. The cinema will be used as an important focus of interest and activity- for reminiscence opportunities, for educational purposes and seminars

and to develop links with the wider community.

**Cinema**

The cinema is housed in a room approximately 7m x 4 m x 2.5 m high located adjacent to the development's entrance (see fig.2). Entrance to the cinema is via a single door wide enough for wheelchair access. The cinema comprises 15 seats organised in 3 rows with space for 2 wheelchairs. The two rear rows are raised on timber stepped flooring to improve sight lines. The seating arrangement is staggered with the back to back dimension being 1500mm (much wider than most cinemas) to enable a helper to assist someone to their seat should this be needed. A continuous timber handrail (warm to the touch) along the actor's right wall is provided and changes in floor level is highlighted by low voltage LED stair nosings.

The seat selected for this project is the 'Otelos' Club seat from Euro Seating International SA of Spain (see fig. 3), upholstered with an easy to clean healthcare fabric. Timber armrests provide additional warmth to the feel of the cinema.

The screen, located adjacent to the entrance door, is wall mounted and has a dvd cabinet (housing all the technical equipment, amplifier and sub-woofer) below it (see fig.4). Due to space constraints in the cinema, a Smartview screen from Harkness Hall with matt white screen surface (see fig.5) has been selected. The screen size is approximately 1.32 high x 2.35 wide (16:9 ratio). To replicate the appearance and ambience of a cinema, a symbolic 'pros arch' has been designed made of laminated mdf and finished in a contrasting darker veneer to the dvd cabinet.

# A real cinema in a care home



fig.1



fig.3

The visual input for the cinema is being provided by a ceiling mounted Optoma H56 DLP projector (see fig.6) controlled from a hand held remote. The cinema is also fitted with an induction loop system for the hearing impaired.

**Concept**

Due to the limitations of space and height in the room, the design concept is focussed on accentuating the verticality of the room (see fig.7, wall elevation). This is achieved by featuring 'vertical wall panels', using the pattern in the Decorcord wall covering in a vertical motif and introducing a vertical pro arch at the screen end. The main colour of the Decorcord wall covering is intended to complement the colour of the carpet, whilst a contrast colour Decorcord wall carpet has been used for the feature panels.

**System design for Cinema**

Our brief was for a DVD cinema, quite large for "Home Cinema", but too small for a professional set-up. Additional concerns were that the prospective audience for a large part of the time that the cinema is in use would be elderly infirm and that the operation of the cinema would be undertaken by non-skilled personnel.

The room is located amongst public areas of the development, but directly below residential units. Sound insulation was therefore an important consideration. Best-practice building techniques were used during shell construction to eliminate possible sound leakage, and a compromise in the audio design was reached over the maximum amplitude of the sub-bass effects-channel. Although the primary use for the room was specified as DVD cinema, it also had to allow viewing of VHS tape programme, Digital Free-to-Air broadcasts, and Laptop Computer presentations. The whole programme chain was thus chosen to be as flexible as possible; Sources could be DVDs of any region, PAL or NTSC VHS tapes, multi-resolution computer graphics cards and Freeview programmes, all with various aspect ratios.

In addition to the highly versatile

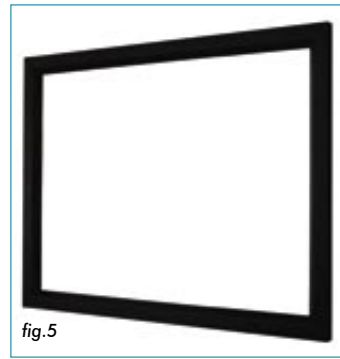


fig.5

picture delivery, the sound system is designed to be similarly adaptable. From all the above picture sources, a multifunction AV amplifier can decode any flavour of Dolby or DTS soundtrack, presenting the audio to a full 7.1 channel surround speaker installation. Virtual matrixing can even deliver pseudo-surround from stereo sources, including addition of "room acoustics" synthesising anything from a cosy jazz club to a concert hall.

As important as flexibility is ease of use. Most day-to-day tasks can be undertaken with a single pre-programmed remote controller. Even the theatre lights are under automation control, with "scenes" preset for various activities; Entry/Exit, Film Presentation, Laptop Presentation – including key lighting for the presenter, etc. The controller can even use stored macros, so that the push of a single button can dim the lights and start the show.

All equipment is hidden from view inside a custom manufactured and stylish cabinet, but is fully controllable from anywhere in the cinema by virtue of remote control relay.

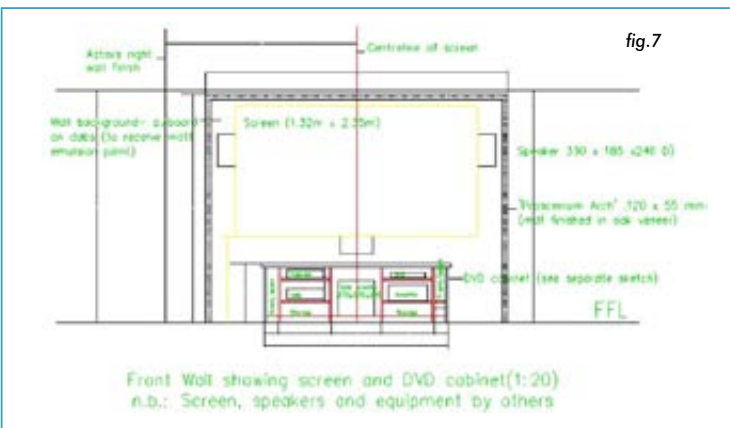
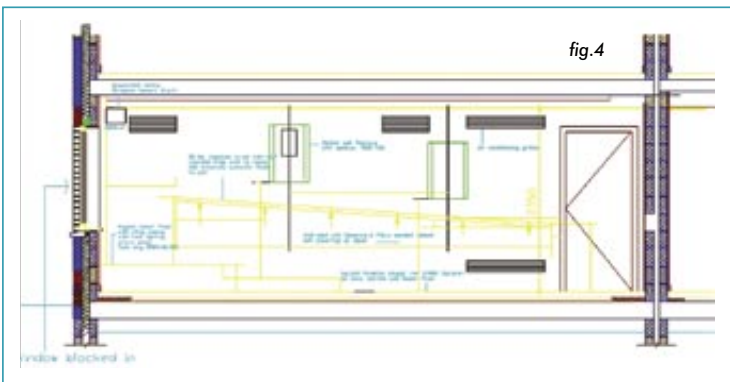


Fig.1-Artists impression (courtesy: Jackson Construction Ltd)

Fig.2-Cinema Plan (Copyright:Bill Chew Associates)

Fig.3-Cinema Seat (Courtesy:Euro Seating International S.A.)

Fig.4-Side Elevation (Copyright: Bill Chew Associates.)

Fig.5-Screen Details(Courtesy: Harkness Hall)

Fig.6 -Optoma projector (Courtesy-Optoma UK Ltd)

Fig.7- Wall Elevation (Copyright: Bill Chew Associates.)



fig.6

The author wishes to acknowledge the help and co-operation of Hanover Housing Association, Jackson Construction Ltd and Alan Kay, AMIEE in the preparation of this article. Thanks also to Cinestructures International Ltd's suppliers in providing pictorial material used in this article. Bill Chew is a chartered architect and the principal of Bill Chew Associates and Managing Director of Cinestructures Ltd, 27 Belgrave Road, Cambridge CB1 3DE Tel:01223 210158, Mobile:07762 337834, email:billchew@ntlworld.com. Web:www.cinestructures.co.uk Copyright © Bill Chew 2004