

Drybridge Gardens, Monnow Court, Monmouth

Presentation to
Severn Wye, Energy Agency

by
Charter Housing
in conjunction with
Monmouthshire County Council

17 October 2003

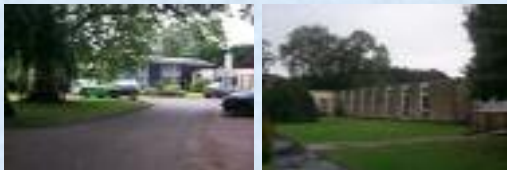


Charter Housing

- The Association employs 400 people and manages 4,500 homes in South Wales. Charter's activities encompass:
 - > Housing Services
 - > Care & Repair Services
 - > Low Cost Housing
 - > Housing for medical personnel / students
 - > Services for other organisations on an agency basis
 - > An extensive Community Investment Programme
 - > Major care provider



Monnow Court



Background

- Provider of long term, residential care for people under 65 with a physical disability
- Opened in mid 1960s
- Non-compliance with current residential/registration standards
- Originally 30 residents, only 6 remain
- The 6 residents needed specific reprovision that provides:
 - > 24 hour care including waking night cover
 - > Location in Monmouth near support facilities
 - > Safe and consistent care support in accordance with their individual needs
 - > Accommodation that is suitable to the physical needs of the individual
 - > An independent environment



Walled Garden



- Conservation area
- Grade II Listed Wall
- Used for growing vegetables for Drybridge House



Partnering

- The key Partners:
 - Residents
 - Monmouthshire County Council
 - Charter Housing
 - Consultants
- The importance of Partnering:
 - Identifying a clear objective
 - Team performance



Scheme Design

- The Design Team:
 - Architect: Ainsley Gommon Architects
 - Quantity Surveyor: Roger Richards Partnership
 - Contractor: Carter Lauren Ltd
- Close consultation with residents / care providers
- An independent environment
- A scheme design that blended modern technology with a traditional history and culture



3-D Image



Scheme Layout



Innovative Technology

- Tradis Timber Frame Construction
- Solar panels
- Recycled rainwater management
- SMART Technology



Tradis Timber Frame Construction



- Factory produced wall panels, floor cassettes and roof plates
- Rapid build
 - Delivered by lorry on day of erection
 - Each section lifted into position and secured
 - Monnow Court took 7 days to erect. By comparison traditional construction will have taken approx 3 months
- Energy efficient
 - 'U' value of between 0.10 / 0.224 W/m²k compared to 0.35 W/m²k for traditional construction
 - Insulation is recycled locally



Solar Panels

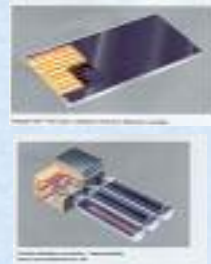
(Solar Water Heating)



- Solar energy conserves resources and effectively reduces emissions
- A saving of £24.00pa for each bungalow for hot water usage

Solar Panels

(Solar Water Heating)



- Using a vacuum tub collector as opposed to a flat collector
- The optimum absorber within the tube can be directed accordingly to maximise its output



Rainwater Management



- A collection tank is located at a central point beneath the ground
- Water is collected and pumped to individual storage tanks
- Individual tanks are stored within each bungalow
- Rainwater is used to flush the toilet
- A saving of £37.00pa for each bungalow on water usage

SMART Technology

- SMART Technology:
 - Communal door
 - Front door
 - Internal doors
 - Patio door
 - Curtain to patio door
 - Hydraulic sink/hob
 - Hydraulic washhand basin to bathroom



- **Completion Date**
Early December 2003

