

XCEL LEISURE CENTRE

COVENTRY, WARWICKSHIRE

Status: Completed 2008

Client: Midlands Sports Centre for the Disabled Trust Ltd

Value: £8m

Hailed as the flagship project for the Canley Regeneration Scheme, the Xcel Leisure Centre has been designed with the needs of the local community in mind. The modern and vibrant centre works in close partnership with the neighbouring Westwood School and offers state-of-the-art facilities to local residents and employees of the near-by Westwood Business Park.

The Centre consists of a 25 m competition swimming pool, health suite, 4-court sports hall, 60 station fitness suite, exercise studio, crèche, café, outdoor netball courts and two multi-use games areas (MUGA).

An emphasis on connectivity promotes an inclusive experience for users of all abilities. The centre has a strong, simple, rational plan laid out over two floors and a bright structural feature articulates the main entrance. All facilities are then accessed off the combined reception and café area and a wide 'spine' corridor that runs through the centre of the building. The spine corridor also provides a simple delineation between the wet and dry facilities on the ground floor. This keeps circulation space to a minimum and facilitates users to find their way around the building and for centre staff to manage the centre.

Key social spaces have been located at the front of the building to establish a vibrant 'shop window'. A double height atrium adjacent to the reception provides a visual link between floors and has an open feature staircase. At ground level there is a café bar with views out onto an outdoor terrace. On the first floor, a covered external terrace hosts summer community events.



10,000 users per week benefit from using the spacious, modern and accessible design features.



The simple rectangular building layout suited a very cost effective steel portal frame structure and this, combined with minimal circulation and plant space, enabled the building to be constructed for £1,600 / m².

The centre has a high percentage of users with disabilities and reflects best practice in inclusive design. It features some of the most modern access adaptations for people with a range of disabilities including innovations such as a moveable floor and independent access lift into the swimming pool for participants with mobility difficulties.

The external netball courts allow county standard competitions whilst also serving as a playground for the school. Similarly, the MUGAs host five-a-side leagues and are also used by school children during break times.

Usage of the centre has increased by an average of 150% over its predecessor with 500,000 users per annum. Fitness subscriptions have risen from 480 to 1,200 and children on the Learn to Swim programme from 900 to 2,400. The School Swim programme has increased from 6 to 28 schools. This has far exceeded expectations and the centre has established itself at the heart of the local community.

Sport England contributed £200,000 of funding to the project through their Community Investment initiative.



Ground Floor Plan

Key

- | | | | |
|-------------|-------------------|----------------------|---------------------|
| Entrance | Dry-side Changing | Fitness Suite | First Aid |
| Circulation | Pool Hall | Community Facilities | Plant Area / Stores |
| Cafe Area | Spa Area | Creche | |
| Sports Hall | Wet-side Changing | Internal Offices | |



General Section

Accessible design

As a replacement for the old Midlands Sports Centre with its high number of disabled users, it was imperative the new centre would also facilitate a wider range of sports to increase participation of both the local community and specialist disabled groups. For maximum accessibility, the plan was simplified to a rectangular form. The corridor widths are oversized to allow wheelchair users to pass each other easily and all fire doors are on hold open devices to encourage the flow of users through the building. The main lift size was also increased beyond building regulation minimum requirements to accommodate two wheelchair users and also serve as an evacuation lift.

The dry changing includes accessible changing rooms for users with assistants as well as provision for ambulant users in the showers, toilets and main changing space. The wet change village includes oversized assisted accessible change areas that accommodate mobile hoists for disabled users allowing easy transfer to the pool. An independent accessible lift allows safe access into the pool using a mobile control unit.

The centre also has a moveable floor that runs along the length of the main pool to give a large area of adjustable shallow water. It also allows disabled groups to be slowly lowered into the water for lessons. Most moveable floors are not used in this way, but along with the smaller platform lift, provide valuable facilities that help cater for large numbers of disabled users.

The health suite allows easy access for disabled users with the sauna and steam rooms designed to accept wheelchairs and the sunken spa bath made accessible using a mobile hoist. The accessible fitness suite features 20 items of specialist fitness equipment.

It was the inclusion of these features that attracted the attention of the Rotary Disabled Games. Xcel hosted the organisation's 28th event in October 2009 (opened by Nigel Murray, the returning British gold medallist in Boccia from the 2008 Beijing Paralympics) where 200 competitors took part in a range of paralympian sports. The new centre has continued hosting this event annually.

Schedule of Areas

Gross Site Area	10,000 m ²
Building Footprint Area	3,000 m ²
Gross Floor Area (all floors)	5,000 m ² (internal)

General Accommodation / Standards

Swimming Pool	25m x 13m x 1.8m deep 6-lane (competition) pool with moveable floor (3 lanes) for recreational, training & short course competition use, with raising floor and portable hoist for disabled and elderly access. Control point by pool entrance. Diving blocks, wall sockets for lane restraints, clock, timing clock. Elevated viewing area.
Sports Hall	Sub-dividable 4-court county standard hall for basketball, netball, badminton, volleyball, gymnastics, indoor hockey, cricket nets, handball, goal-ball, rhythmic gymnastics, short-mat bowls and regional level trampolining. Dedicated store. First floor viewing windows.
Exercise Studio	Full height mirrors to 50% of walls. Column free.
Health Suite	Sauna, steam room and jacuzzi.
Fitness Suite	60 stations, including 20 pieces of specialist equipment for people with disabilities
Changing Areas	Dedicated separate wet and dry side facilities.
Crèche	Includes wash room, unisex toilet for children, store, nappy change, internal play structure, sensory room & secure external play area
Café / Bar	50 capacity accessed directly off reception with balcony and views of the pool.
Kitchen	Large kitchen serving the bar and function rooms.
Function Rooms	150 capacity. Dedicated bar servery adjoining the kitchen. Sub-divides into 3 smaller rooms all with dedicated access.
Youth and Community Centre	A youth and community centre sub let to the Council for provision of youth services in the area.
Offices	Offices for centre management team.
First Aid Room	Accessed directly off the pool. Direct external access.
Reception Area	Open reception adjoining the café. Clear views to outside.
Outdoor Facilities	Four netball courts to 'county' standard plus MUGA.



General Description of Key Specifications and Materials

Frame	Steel	
Cladding	Composite metal cladding panels, brickwork and render	
Roofing	Standing seam aluminium	
Internal Walls and Partitions	Blockwork	
Internal Doors	Encapsulated for pool environments	
Wall Finishes	Plasterboard and painted blockwork	
Floors	Vinyl, tiled and carpet	
Lighting	Lux levels	Type
	Pool zone	300lux Metal halide floodlights
	Sports Hall	350lux Surface mounted linear fluorescent
	Fitness Suite	400lux Recessed linear fluorescent
	Exercise Studio	300lux Recessed linear fluorescent
	Changing Spaces	200lux Recessed fluorescent downlighters

Summary of Elemental Costs

	Element	Total Cost (£)	Cost (£) per m ²
1	Substructure	600,000	120
2	Superstructure	2,000,000	400
3	Finishes	600,000	120
4	Fittings and Furnishings	400,000	80
5	Services	2,100,000	420
6	External Works	1,400,000	280
7	Preliminaries	700,000	140
8	Design Fees	200,000	40
	TOTAL CONTRACT SUM	8,000,000	1,600

Notes:

1. Costs stated are approximate 'rounded-up' Autumn 2007 costs.

Lord Sebastian Coe KBE officially opened the Xcel Leisure Centre on 8th December 2008 by saying it was:

“

...a fantastic example of a modern leisure facility that would provide so much opportunity to disabled and community participants for some years to come...

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[Click here for 'User Guide'](#)

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Environmental Sustainability

- Combined Heat and Power plant
- Natural ventilation
- Air to pool heat recovery

Procurement / Programme

Tender	Single stage OJEU restricted procedure
Contract	Design and Build JCT '98
Duration	Approx 3 years from inception to completion

Specific Items of Interest

Element	Area (m ²)
Sport Hall	707
Exercise Studio	155
Fitness Suite	253
Swimming Pool	583
Creche	121
Café / Bar	142
Function Rooms and Kitchens	227



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