

Kirk Balk Community College

School and Adult Learning Centre

The Kirk Balk Community College is one of 11 schools being built as part of Barnsley Metropolitan Borough Council's (BMBC) ambitious Building Schools for the Future (BSF) programme; the most comprehensive school building programme in the UK. BMBC has seized the opportunity offered by BSF to deliver an educational vision that underpins the social regeneration of the Borough. 'Remaking Learning' is a radical transformational lifelong learning programme which aims to provide the best learning opportunities for the whole community. Kirk Balk Community College, by Allford Hall Monaghan Morris, is one of the first schools to be completed in the first wave of the programme and provides a bold, dynamic architectural form and unique civic building that symbolises Barnsley's ambition and vision.

Sector: Education

Location : South Yorkshire, UK

Address: Hoyland, Barnsley, South Yorkshire, S74 9HX

Client : Barnsley Metropolitan Borough Council

Private Sector Partner: Barnsley Partnership

for Learning (BP4L), a joint venture between Laing O'Rourke and

John Laing.

Main Contractor : Laing O'Rourke

 Value :
 £18.4m

 Start :
 August 2008

 Completion :
 April 2011

Contract Type : NEC Professional Services Contract

Key Dates

August 2008: ITSFB bid submission to BMBC

December 2008: Planning application submitted

March 2009: Contractor's proposals submitted for financial close

July 2009 : Financial close achieved

August 2009: Start on site

April 2011: Practical completion

Areas

Project Team

Client: Barnsley Metropolitan Borough Council

Private Sector Partner: Barnsley Partnership for Learning (BP4L), a joint

venture between Laing O'Rourke and John Laing.

Architect: Allford Hall Monaghan Morris

Main Contractor: Laing O'Rourke

Quantity Surveyor: Turner Townsend (to Contractor's Proposals); Laing

O'Rourke

Structural/Civil Engineer: Buro Happold

Services Engineer: BDP

Landscape Architect: Anthony Walker Partnership

CDM Coordinator: Cyril Sweett

Environmental Designer: Morag Myerscough / Studio Myerscough **Fire Consultant:** Tenos (to Contractor's Proposals)

Educationalist: Cocentra

M & E Consultant:Crown House TechnologiesAcoustic Consultant:Sound Research Laboratories

Planning Consultant: Turley Associates

Approved Inspector: HCD

Catering Consultant: Design Catering Equipment

ICT Consultant: Civica UK Limited
Civil Engineer / Highways Buro Happold

Billingtons (structural steel); Varla (cladding, rooflights and roofing); SG Aluminium (windows and curtain walling); Kingspan (SFS); SCS (ceilings and partitions); Flowcrete (screed and underfloor heating); Hall and Kay (sprinkler protection); Kone (lifts); TBS Fabrications (IPS); Farpod (joinery);

Gascoyne and Beever (architectural metalwork); Brockhouse (moveable walls); GeeTee Signs (graphics and signage); ESA Mackintosh (furniture);

Kingfisher (external lighting); Clymac

(M & E controls)

Bison (precast concrete stairs, floor and wall panels); Voltex (tanking); Visqueen (DPM), Ruukki UK Ltd (profile rainscreen panels), Eternit (cement coard cladding), Kawneer (windows), Regalit (profiled structural glass), Corus (standing seam roofing), Fatra (single ply membrane roofing), Latchways (fall restraint), Plant Louvres (Levolux), Constructional Timber Manufacturers Ltd (timber atrium structure), Lafarge (plasterboard), Hygienik Systems Ltd (hygienic wall finish), SAS

(metal ceilings), Rockfon (acoustic ceilings and baffles), Stretch Ceilings Limited (barisol fabric ceiling), TDSL (doors), Lloyd Worrall (ironmongery), Komfort (internal glazed screens), Twyfords (sanitary ware), Dynamik (timber flooring and sports hall flooring), Polyrey (vinyl flooring), Burmatex (carpet), Heckmondwike (barrier matting), Vitra (atrium Chairs), Very Good and Proper (Dining Chairs and tables), Whitecroft (internal lighting), Astralux

(blinds), Charcon (external paving)

Suppliers:

Sub Contractors:

Allford Hall Monaghan Morris Team

Paul Monaghan, Laura Stephenson, Peter Mayhew, Christian Moore, Simon Allford, Ben Clark, Paulo Costa, Ming Chung, Amrik Gaheer, Jonathan Hall, Jonathan Harris, Coralie Huon, Susie Le Good, Sylwia Kasprzyk, Barbara McGarry, Peter Morris, Gabriel Musat, Jasmin Noor, Joao Guedes Ramos, George Soiza, Graham Burn, Ana Sa, Rhys Winslade.

Project Summary

Kirk Balk Community College is a dramatic and bold building that symbolises the ambitious programme of Barnsley Metropolitan Borough Council to provide new learning opportunities for the whole community. The new school provides education for 1200 pupils, aged 11 to 16, and for 124 post-16 pupils.

Allford Hall Monaghan Morris (AHMM) has embraced this ambition, and a complex set of requirements, to create an educational environment that is both welcoming and inspiring. Kirk Balk Community College represents a new idea of how architecture can help deliver a social agenda of joined-up services within one place for councils that need to get the most from decreasing budgets and resources. Built with a standard BSF budget, Kirk Balk is setting the standard for what can be achieved.

Process and People

In 2008, Laing O'Rourke (Barnsley Partnership for Learning – BP4L) was awarded the £1.15 billion BSF programme, working with architects including AHMM, BDP and Atkins. Central to this success was the commitment of the bid team to work together with common approaches to maximise efficiencies and economies across the programme. Innovations have included the development and use of standard precast elements and other components at Laing O'Rourke's research facility, which will be used in later waves of the programme.

As well as working closely with Laing O'Rourke and the other design teams, AHMM's design team has also worked closely with the Head Teacher, Val Malcolm, staff, pupils and governors at Kirk Balk school to ensure the ambitions and requirements of the school community were met, and exceeded. Key members of the council, including Dave Russell, Programme Director for Barnsley BSF, have championed the programme, ensuring quality design and innovative solutions have been created to meet the aspirations of the Councils 'Remaking Learning' initiative.

Context and Form

Kirk Balk Community College is in Hoyland, an ex-mining village, located just off Junction 36 of the MI, on the outskirts of Barnsley. The new Community College is also an Adult Learning Centre (ALC) and it has replaced an existing comprehensive school serving Hoyland and the surrounding communities.

The position of the new school was determined by the brief and context. Major factors were the requirement for the existing school to remain in operation during construction, together with an existing 1970s leisure centre; the school then being demolished but the leisure centre remaining. This resulted in the new school being placed centrally on the site, where it was orientated to take advantage of the spectacular views out across the rural landscape to the north and east.

As a reaction to expensive form-making and exteriors, a compact triangular form was developed. This maximised the budget available for the internal environments and for special

features to animate the user's experience of the building, including graphics and furniture. Part of this process was the rationalisation of the roof into a stepped form to reduce the mass of the building. By lowering the atrium roof, the third floor science zone was able to be naturally ventilated and lit, with the added benefit of providing spectacular panoramic views to the countryside.

The topography of the site allows the building design to utilise the level changes to maximise views and connections to the surrounding landscape. In addition, the design also took advantage of the topography to provide level access wherever possible, thereby increasing the accessibility of the building and enhancing the connection between pupils and the landscape.

The link between landscape and building is further enhanced with teaching spaces that open onto the external balconies, terraces and walkways. This is most prominently expressed at the prow of the main building where raking columns support large triangular terraces, and the roof which projects and provides shelter. To prevent this from oppressing the terrace, a large oculus is cut into it. The terraces have seating areas which are largely used for learning resources, and to encourage people to use them as informal spaces to enjoy the surrounding landscape.

The landscape around the building is conceived as an extension of the learning experience and provides a variety of spaces (formal, informal, hard, soft, planted, natural, leisure and sporting) all located and designed to encourage students to engage with nature and make the most of their outdoor environment.

'Street' and Learning Zones

Four of the five learning zones - vocational/ technology, community, humanities/ communications and maths/ science are incorporated in the main, triangular element of the school; each with a social space at its heart and individual external spaces. The learning zones are focused around a 'street' at ground floor level that forms part of a dramatic tiered sequence of the learning and social spaces within the atrium, linked by a dramatic staircase that rises from the atrium base to the top floor of the building. Each learning zone has its own strong identity and the 'street' provides a visual link into each zone. This linking of different spaces creates a vibrant heart to the Community College and was a feature which the client strongly advocated. It also provides a sense of connectivity to all users whilst discretely allowing passive security of main circulation areas and break- out spaces.

Set above the 'street' is a glazed roof which serves to reinforce the street's delineation, as well as provide natural daylight to it and the atrium. Multi-coloured baffles are used to address overheating and glare and provide a calm, diffuse light. Set adjacent to the street are the servery for the main dining area and the café. This allows the dining areas to flow out into the street, thereby enlivening the communal space. The interlinking of spaces and functions assists in creating a more welcoming and informal environment, addressing and fulfilling Barnsley's new learning vision.

Project Description

The schools specialism is technology and aims to raise standards of learning and teaching through the use of innovative technological resources and state-of-the-art facilities throughout the building. The Technology Faculty is located at lower ground floor in the heart of the school and atrium; a position allowing the specialism to be prominently displayed, so encouraging participation from pupils and the wider community. The teaching spaces are organised around this faculty social space, and allow the activity of the classrooms to extend out. Group work, talks, demonstrations and exhibitions are accessible and visible from all levels of the atrium and the 'street'. The schools specialism is further reinforced by the design of the landscape, which creates an external' tech deck', directly accessible from the vocational teaching spaces at lower ground floor.

The fifth learning zone, the Expressives Block, contains all leisure facilities including the Sports Hall, changing rooms and drama studios. Access to sports pitches, MUGA and orienteering will also be easily accessible to the community out of normal hours. Programmes of learning, sport and leisure activities will provide families access to learn and play together after the core school hours, improving wellbeing and social interaction.

Flexibility and Transformation

The school required traditional teaching spaces but also required that the design allow for the flexibility to create a range of classroom sizes in the future. In addition, there was a requirement to provide break-out spaces for more informal learning which are located at the edge of the atrium. The design team has worked closely with the teaching staff to develop flexible learning zones. These zones allow for a variety of learning styles to be practiced, and the zones are able to transform individually at different rates, thereby allowing faculties to embrace new pedagogical methods at their own pace. For example, the design of a Science Super Lab, at third floor level, incorporates flexible island desks which can be configured in a number of arrangements to suit theory or practical teaching.

This flexibility was encouraged by Barnsley and the school, and is vital to enable the delivery of a diverse curriculum that allows for personalised learning which meets the needs of individual students. The range of formal and informal working environments is supported by an ICT infrastructure of intranet and internet. The design demonstrates on many levels how transformation can be achieved through a holistic approach to structural and servicing strategies, and FF&E and IT systems.

Community and Access

Kirk Balk Community College is also designed as an adult learning centre and community amenity with many co-located services. In Barnsley, the BSF programme has facilitated joined up working across a number of education, health and care agencies. At Kirk Balk Community College, the design of the Community and Wellbeing area provides office accommodation and interview facilities for visiting authorities and agencies. A conference room is provided to enable meetings and interviews to take place between the school, different agencies and

parents. The service will provide a focal point for the delivery of support from Education Welfare Officers, Educational Psychologist, Youth Workers, CAMHS Workers, Social Care Specialists, Behaviour Support Service staff and Police/CSO.

The Full Service area is situated near to the Pupil Referral Unit, enabling easy access to students who often need targeted support from a range of agencies. Many agencies within this facility will not be based full-time at the Community College but will require easy access into the building. The service area is, therefore, located close to the entrance to the faculty with a separate entrance from the Community Garden, adjacent to the main entrance and car park.

The design of the building allows access for the community at all times, through the location of entrances and learning zones, as well as significant flexibility for use in different configurations. Facilities located on the ground floor include the Community Learning Resource Centre and café, as well as a Youth Centre, with its own entrance, adjacent to the car park. A covered link connects the main, triangular building with the sports facilities in the Expressives Block, again providing easy access for community users.

The position of the Community Learning Resource Centre, set adjacent to the main entrance at ground level, will allow staff, pupils, learners and the wider community to gain easy access throughout the day. The Centre has been designed to provide quiet reading areas, with comfortable seating and multimedia resources. It is a key element in the design and organisation of the school, and contains a careers library and online access to Jobcentre Plus facilities, for both students and the wider community. The adjacency of this area to the hub and key learning zones of the school has been a fundamental element of the design solution. Positioning the ICT suites of the vocational design faculty at street level, allows additional learning opportunities and the potential to develop evening classes in a state of the art ICT environment, showcasing the Community College's specialism.

Cutting Edge Art/Design meets Technology

The design and identity of Kirk Balk reflects the school's specialism in Technology and Design technology. Across the school as a whole, a graphics and wayfinding scheme has been developed by leading designer, Morag Myerscough/Studio Myerscough, which is inspired by fractal geometry and shapes. From the school's new logo, to the supergraphics designed for each learning zone, the graphic and wayfinding design creates a contemporary and dynamic feel, enhanced by a restrained core palette of blue, black and gold and a more colourful secondary palette.

As well as an integrated graphic/art approach AHMM believe it is necessary to adopt an approach to FF&E that challenges the standard PFI offer. Significant consultation with the school, regarding detailed furniture and equipment layouts, lead to a solution that allowed for the provision of furniture by leading designers including Charles and Ray Eames and Jasper Morrison, as well as high quality furniture manufacturers such as Very Good and Proper – all within the standard BSF budget.

Project Description

The use of high quality, beautifully designed furniture in the social and communal spaces throughout the school, both create a contemporary, non-institutional feel as well as enhancing the dramatic nature of the spaces. Their use helps to redefine the idea of an educational environment.

Energy and Materials

The design of Kirk Balk Community College embraces sustainability on all levels, from environmental to social, and expresses this legibly in the design thus reinforcing the school's ethos and enhancing the power of the building to act as a learning tool in itself. Sustainable features include Biomass boilers, a wind turbine, earth tubes with environmental data linked to a monitor display in the heart of the school. Passive sustainable measures take the form of natural ventilation, natural daylighting and exposed concrete soffits which provide thermal mass. These initiatives have contributed to the school achieving a BREEAM 'very good' rating.

The materials chosen for the construction have been selected for robustness, low maintenance and cost-effectiveness, in keeping with the requirements of the brief.

In the main building, a dark Staffordshire blue brick plinth provides a robust base to the landscape and external technology terraces, contrasting with the gold coloured sinusoidal cladding above. The main building has a strong horizontal emphasis, accentuated by dark grey ribbon windows which, again, contrast with the gold coloured sinusoidal cladding. These ribbons of glazing maximise natural daylighting to the classrooms whilst also providing spectacular views to the countryside. A continuous louvred strip is provided at high level in the ribbon windows to provide natural ventilation to the majority of the teaching spaces. Noise ingress is controlled using actuated attenuators.

The roof is covered in standing seam metal cladding, along with the 'cheeks' to the stepped roofs, to create a folding roofscape as the building steps down the slope of the site. The roof overhang provides solar shading at first and second floors. The edge and soffit of this are formed using dark grey materials to express the roof edge. Set within the soffit is a recessed LED light strip which further emphasises the horizontality of the building at night.

The School's primary pedestrian entrance is from West Street via a wide boulevard, framed on one side by a 'green screen'. This leads to the main entrance into the building which is set in a double height recess, framed on one side with solid cladding and a light box with bespoke graphic design, the other formed using glazing which opens the building up to encourage and welcome people in. This recess is set into the main façade, where the expressed roof edge and sides frame the ribbon windows and gold coloured sinusoidal cladding. External teaching spaces are created at high level by cutting into the building form. These spaces are lined with a 'gold' cladding which matches those used on the Expressives Building.

Internally, colours and materials have been chosen to provide a calm, neutral environment which allows the students, graphics

and furniture to enliven and take prominence in the building.

The selection of materials for the main spaces of street and atrium is of a higher quality to reflect the importance attached to the main social hub. Perforated metal tiles, with continuous linear lighting strips, are used in main circulation spaces, with the light strip leading the eye into and then around the atrium. This linearity is continued in the atrium where open sided walkways and balustrades, clad in perforated plasterboard, flow around, broken only where sinuous forms protrude, such as the balconies and prow stair. The form of the prow stair, with its large circular windows, provides a strong start/end within the space.

Circulation around the atrium is designed to provide natural opportunities to overlook and linger. Lockers are set to one side, with integrated display cases set into the capping, so encouraging activity along the sides. The main internal elevation overlooking the atrium is punctuated by the timber lined main stair which rises up through it providing depth and articulation, so minimising its scale. The layering and openings provide glimpses of the fractal graphic designs which further animate the user's experience. The connection between learning and social space is enhanced by the internal ribbon windows, in the same colour as the external windows, which provide views to the street and atrium.

The atrium ceiling is formed using perforated stretch fabric which provides a large scale homogenous surface and excellent acoustic attenuation. Cut into this are circular rooflights which provide natural daylight and ventilation. Artificial lighting for the atrium is designed to be minimal and unobtrusive, utilising the lighting strips that run alongside the walkways, together with high level fittings.

The Expressives Block is a simple open ended extruded rectangle that allows the double height hall spaces to be incorporated and expressed. The box is clad in cement fibre vertical weatherboarding, powder coated glazed curtain walling, powder coated metal doors and ventilation grilles. The main double height spaces at either end of the building are expressed with high level structural glazing to the Sports Hall and full height glazed curtain walling to the Main Hall, the latter providing views out to the surrounding landscape. A picture window at the end of the main stair up to first floor frames views towards the sports pitches and landscape.

The Expressives Block is predominantly accessed via the link to the main building, which also provides additional dining and teaching space. Its entrance is emphasised by a lightbox, with bespoke graphic design, which is clearly visible from the street. This legibility and visual connectivity unites the two buildings. The lightbox also provides legibility and clear wayfinding for out of hours community participants visiting the school.

Existing Site

Located on the north west boundary of Hoyland, Kirk Balk Community College is surrounded by residential properties, St Peters Church and Cemetery, and an open countryside aspect to the north and west.

Set well back from the road, the existing school buildings have little street presence. The oldest of the blocks dating from the 1920s, are in a poor condition and are unsuitable for delivery of the modern curriculum and transformation agenda.

The site is also shared with the Hoyland Leisure Centre, which is located in the centre of the site, bisecting the existing school and playing pitches to the west. Now tired and outdated, the Leisure Centre will not be refurbished as part of the project.

The main vehicle and pedestrian access to the School and Leisure Centre is off West Street, creating a dangerous cross flow of pedestrians and traffic.









KEY

- Main entrance to existing school and leisure centre creating conflict of pedestrian and vehicle routes
- 2 Existing 1960s school buildings
- 3 Existing Victorian buildings
- 4 View of the site from street showing fall of land towards road



Existing Site



Existing School buildings to Kirk Balk Street



External view of Leisure Centre and playing fields to the west



Main Entrance to Kirk Balk School accessed through car park



External view of Hoyland Leisure, taken from car park



Hoyland Village



Existing school playground



St Peter's Church



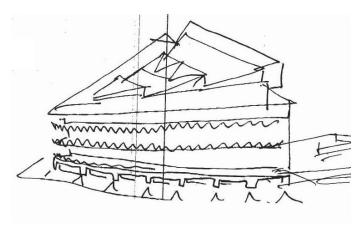
St Peter's Church Cemetery, north of the site

Context and Form

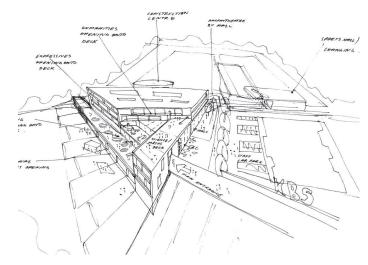
Site Layout

Allford Hall Monaghan Morris investigated several design

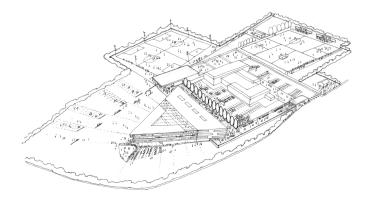
The triangular layout provides a strong, clear and dynamic architectural form, giving legibility to the learning zones internally, but also providing a strong identity externally, conveying the school's ethos and aspiration to the wider community.



Concept sketch



Early layout sketch of learning zones



options before settling upon the chosen triangular building.



Finger building



Strawberry building



Linear building



Arrow building



Chosen triangular building proposal

3D aerial plan

Site Strategy



Pedestrian access



Boulevard approach to main entrance with prominent street presence

Pedestrian access to school from street

- Main public entrance to school from square
- 4 Staff /visitor access from car park onto square
- Second entrance to building from school grounds allowing access to both sides of external landscape
- Access at grade from upper level of sports building to all-weather sports pitch



KEY

- Vehicular access to school car park (staff / visitors / servicing)
- Vehicular access to public leisure centre car park



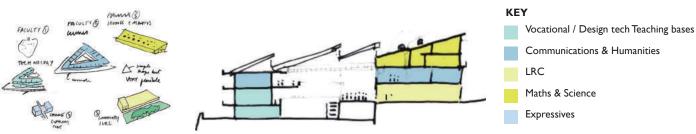
Vehicle access and car parking

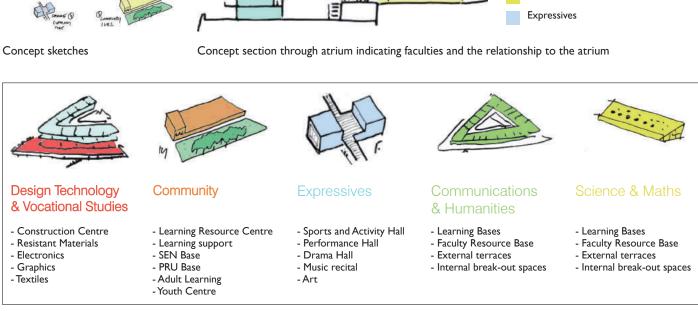


External amenity

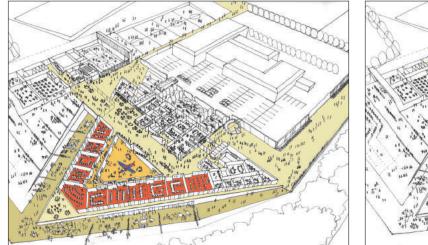
- **KEY**
- Hard landscape boulevard and square leading to main entrance
- 2 Hard landscape area allowing external teaching space adjacent to lower ground classrooms
- Soft landscape incorporating a variety of social and habitat environments
- MUGA courts adjacent to sports building
- All-weather pitch accessed at grade from first floor of sports building
- Grassed sport pitches
- Remote grasses sport pitches

'Street' and Learning Zones

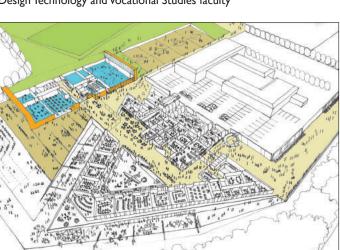




Learning zones



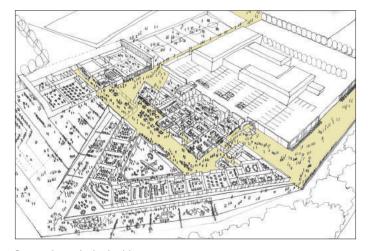
Design Technology and Vocational Studies faculty



Expressives faculty

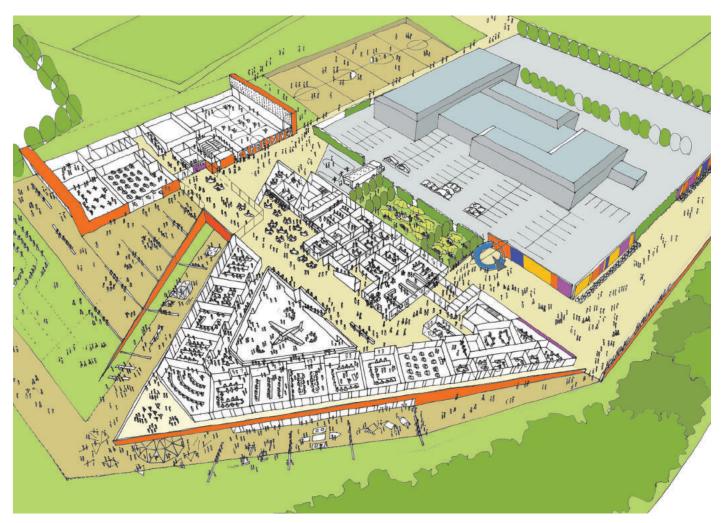


Community faculty



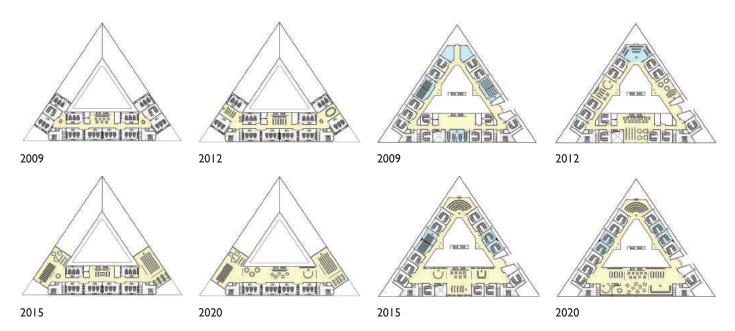
Route through the building

Design Development

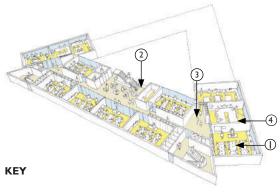


Aerial ground floor plan of Kirk Balk Community College

Flexibility and Transformation

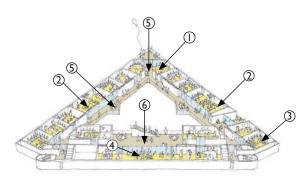


Maths and Science transformation diagrams - second floor



- ① Standard 85m² science lab
- 3 Breakout space
- 2 Faculty social space
- 4 60m² classroom

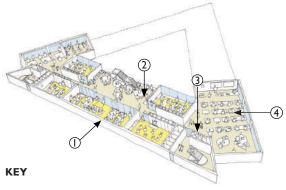
Maths & Science faculty 3D transformation diagram second floor 2009



KEY

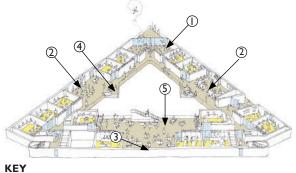
- 2x60m² Flexible classrooms with dividing screens
- 2x60m² Flexible classrooms with dividing screens to corridors for exams
- 3 Standard 60m² Classrooms
- 2x60m2 Classrooms with dividing screens
- Breakout space
- Faculty Space

Humanities & Communications transformation diagrams - second floor



- (I) Standard 85m² science lab
- Breakout space
- ② Faculty social space
- 3no partitions removed creating large breakout for exams / seminars

Maths & Science faculty 3D transformation diagram second floor 2015



- 120m² Flexible classroom
- 2no partition removed to create flexible space
- 2no partition removed to enlarge faculty space
- Breakout space
- Faculty space

Humanities & Communications faculty 3D transformation diagrams First Floor 2009

Maths & Science faculty 3D transformation diagram - second floor 2015

Early Design Development External concept sketches



Perspective of Main Entrance to school



Perspective of Main Building towards nose



Perspective of Main Building

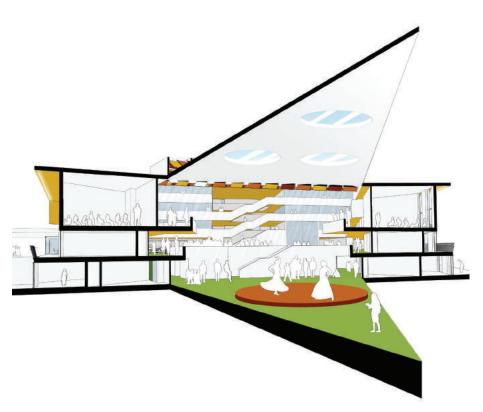


Perspective of Main Building towards nose

Early Design Development Internal Concept Sketches



Perspective of central atrium and dining area





Entrance to Link to Expressives Block



Perspective view through link to dining area



Perspective of link to Expressives dining area

Sectional perspective of central atrium space

External Façade Development



Study of gold and bronze for façade cladding





The ALC nose evokes the prow of a boat

Paper aeroplane evokes ideas of horizontality



New Entrance to ALC From West Street

External Perspectives



View of Kirk Balk Community College from the secondary entrance



Perspective of main entrance to Kirk Balk ALC from entrance boulevard

External Perspectives



View of the Main Building



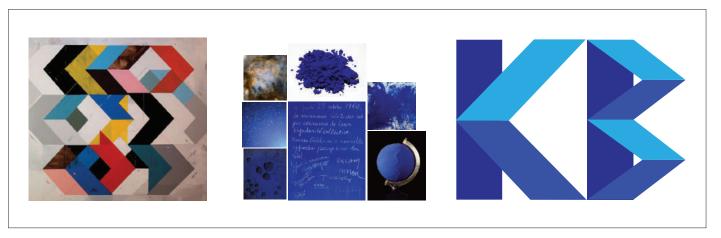
View of Entrance to Expressives Block and Link from sports pitches



New Entrance to ALC From West Street at night

Graphics Studio Myerscough

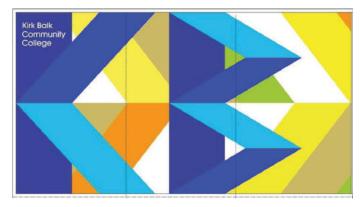
Kirk Balk Logo



Colour and Kirk Balk Community College logo development

Lightbox

The lightbox provides a bright, welcoming marker which highlights the entrance to Kirk Balk Community College. Designed my Morag Myerscough, Studio Myerscough, the lightbox design incorporates the new logo designed for Kirk Balk Community College. It is set on a background comprising of colours and motifs used in the internal graphics, so linking the inside with the outside.



Principle graphics for main building lightbox



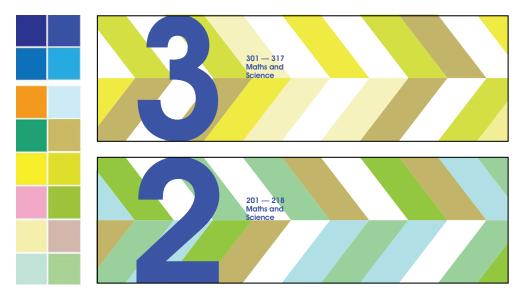
Proposed entrance with lightbox



Kirk Balk Community College entrance with lightbox

Graphics Studio Myerscough

Directional Signage

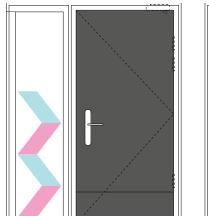


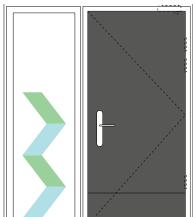


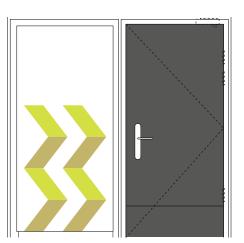


Final signage at Kirk Balk Community College

Door Signage





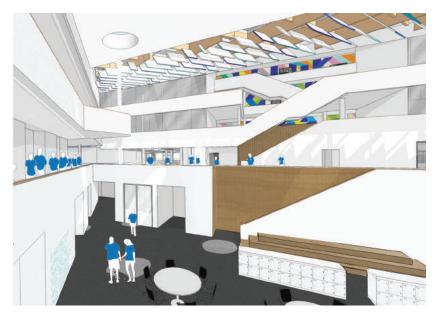


Proposed door graphics



Supergraphics as a background to faculties

Graphics // Studio Myerscough



Proposed graphics in the atrium



Final graphics at Kirk Balk Community College

'SCIENCE IS WHAT YOU KNOW, PHILOSOPHY IS WHAT YOU DON'T KNOW.

BERTRAND RUSSELL, 1872 — 1970, BRITISH PHILOSOPHER, LOGICIAN, MATHEMATICIAN, HISTORIAN, SOCIALIST, PACIFIST AND SOCIAL CRITIC NOBEL PRIZE IN LITERATURE 1950

Inspirational graphic quotations



Principle supergraphics as backdrop for each faculty



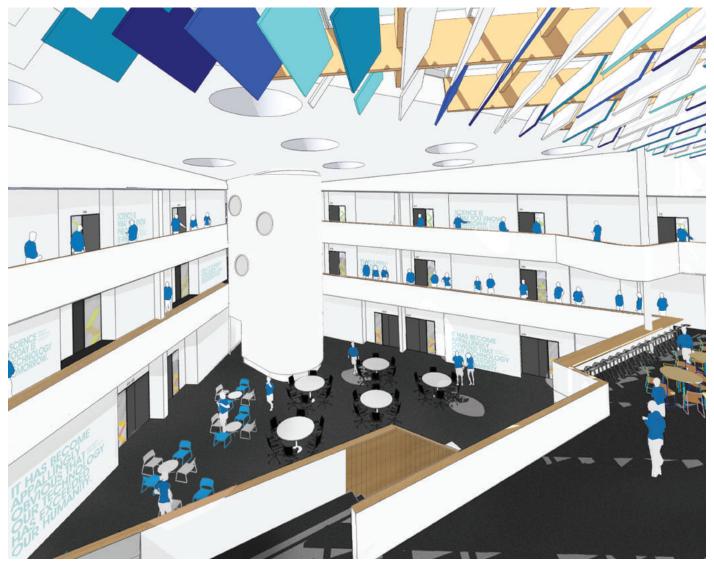


Supergraphics as backdrop for each faculty

Internal Perspectives



Entrance to Kirk Balk Community College



View into atrium overlooking design technology break-out space

Internal Perspectives



View of atrium dining



Linking street from the Main Building to the Expressives Building



Main atrium dining area



Learning Resource Centre

Sustainability



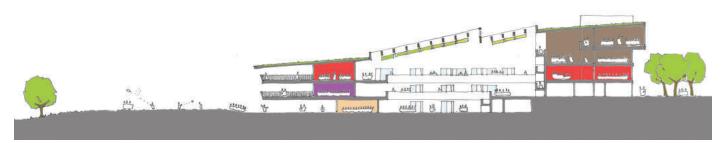
Sustainability landscape plan

KEY

- Environmental performance of the building demonstrated on control panels located around the main school
- ② Outlet for Earth tubes in Landscape
- 3 Rainwater Harvesting to Main Building
- 4 Reuse of earth from construction dig to form sculpted soft play area
- (5) Kitchen Garden

- 6 Science Garden including a demonstration area
- (7) Habitat including woodland planting, bog garden and wildflowers
- 8 Sensory Garden
- Windcatchers to Expressives Block
- (10) Biomass boiler

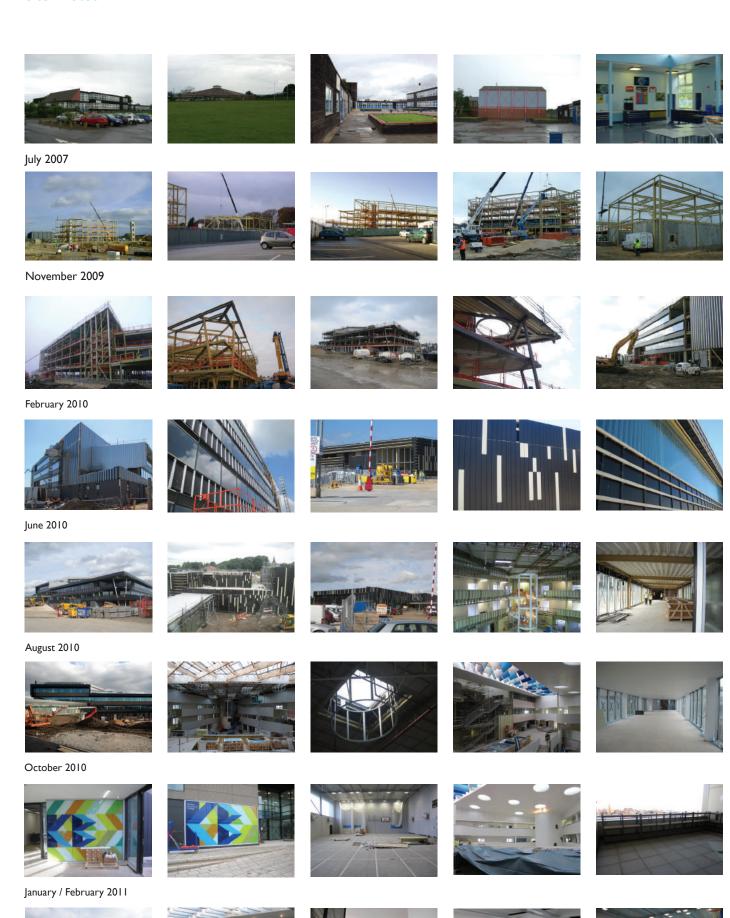
- Wind Turbine
- ① Orchard
- Bat and bird boxes
- (4) Weather station to terrace
- (5) Greenhouse



KEY

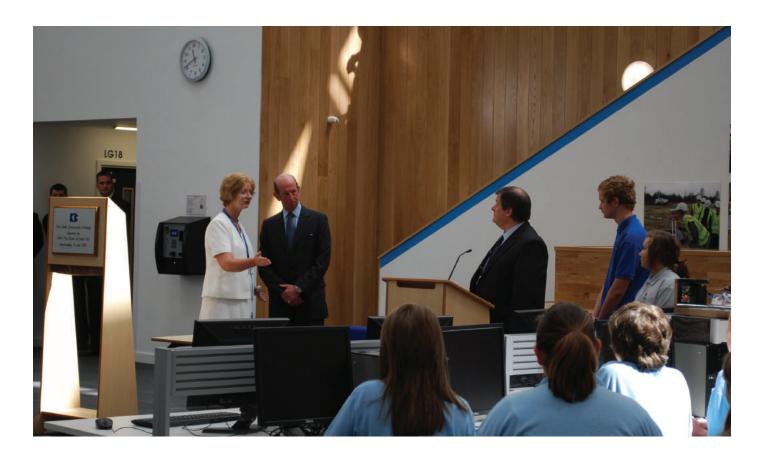
- ① Air supply via attenuated louvres
- 3 Air supply via earth tubes
- ② Extract via atrium
- Biomass Boilers

Site Photos



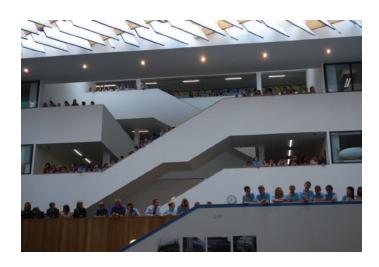
March 2011

Kirk Balk Community College Opening Ceremony

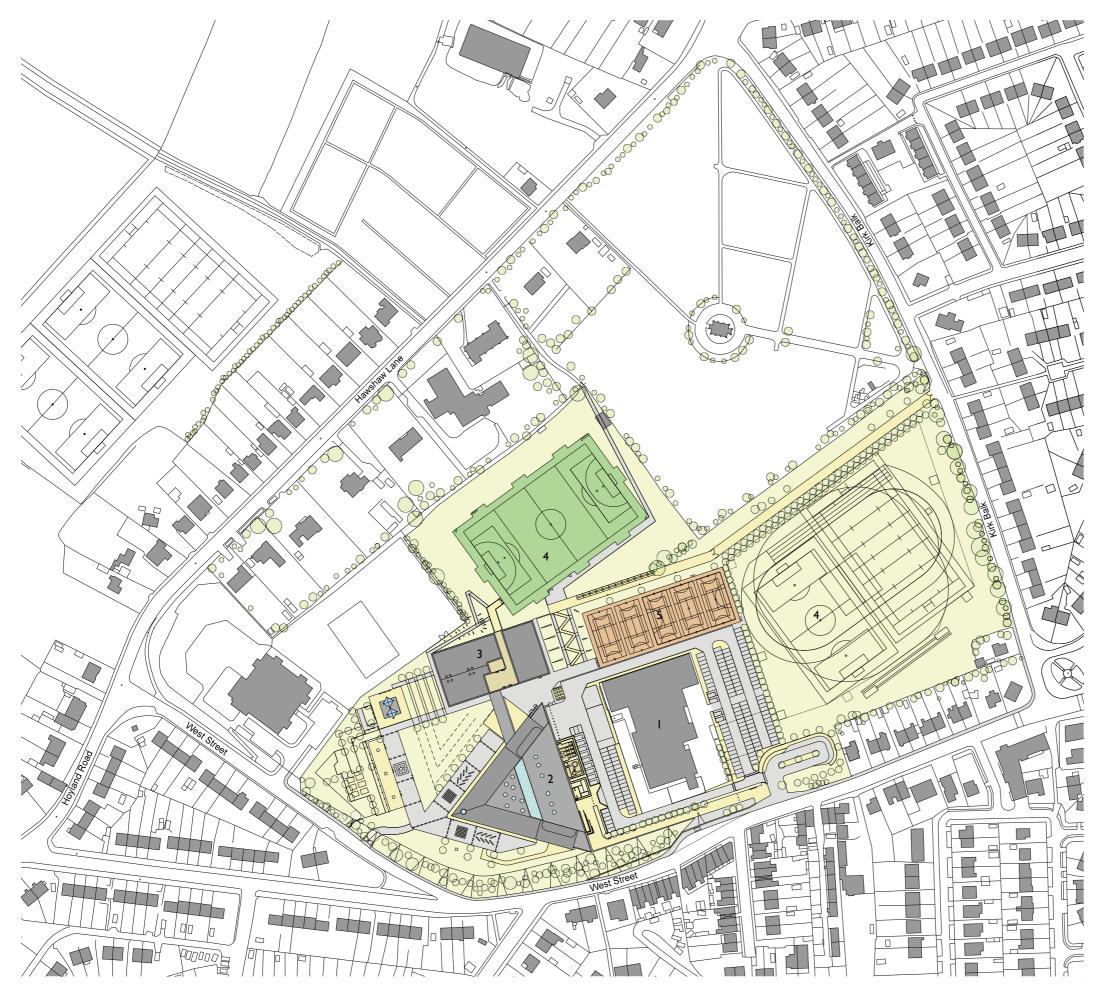






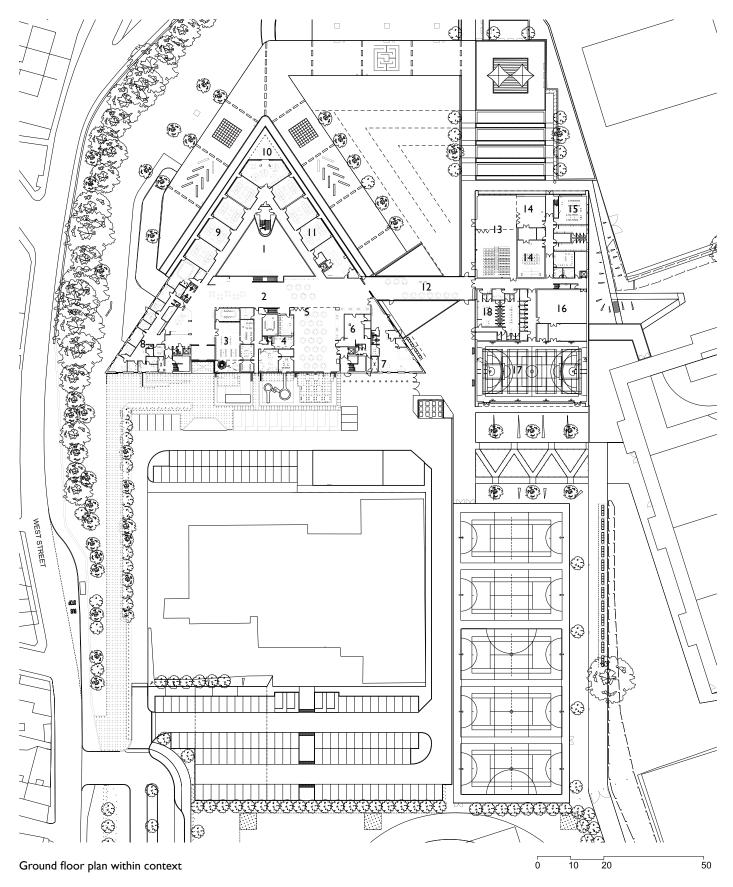


Kirk Balk Community College Opening Ceremony Royal Visit Wednesday 6th July 2011 © AHMM



- Existing Leisure Centre
 Kirk Balk Community College
- 3 Expressives Block
- 4 Sports Pitches 5 MUGA

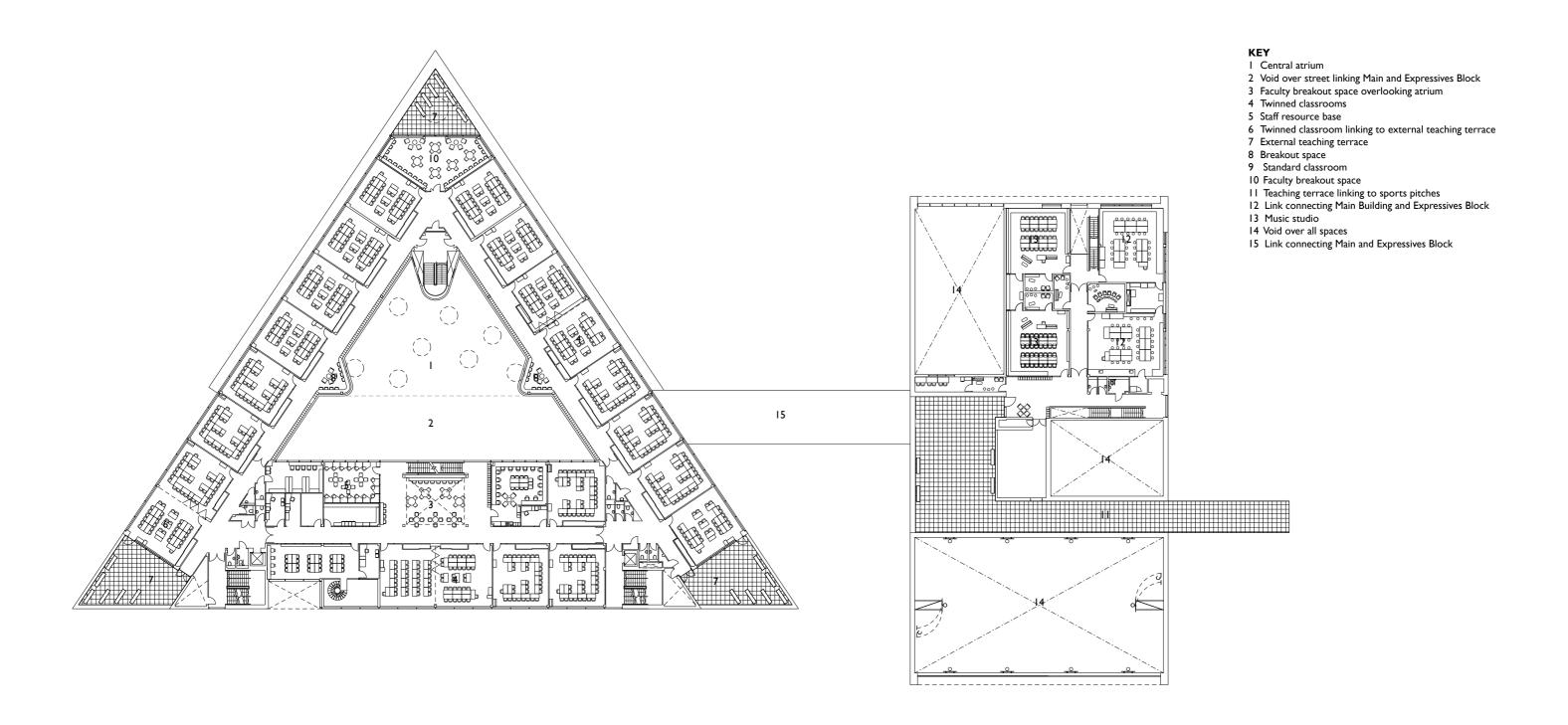
25 50



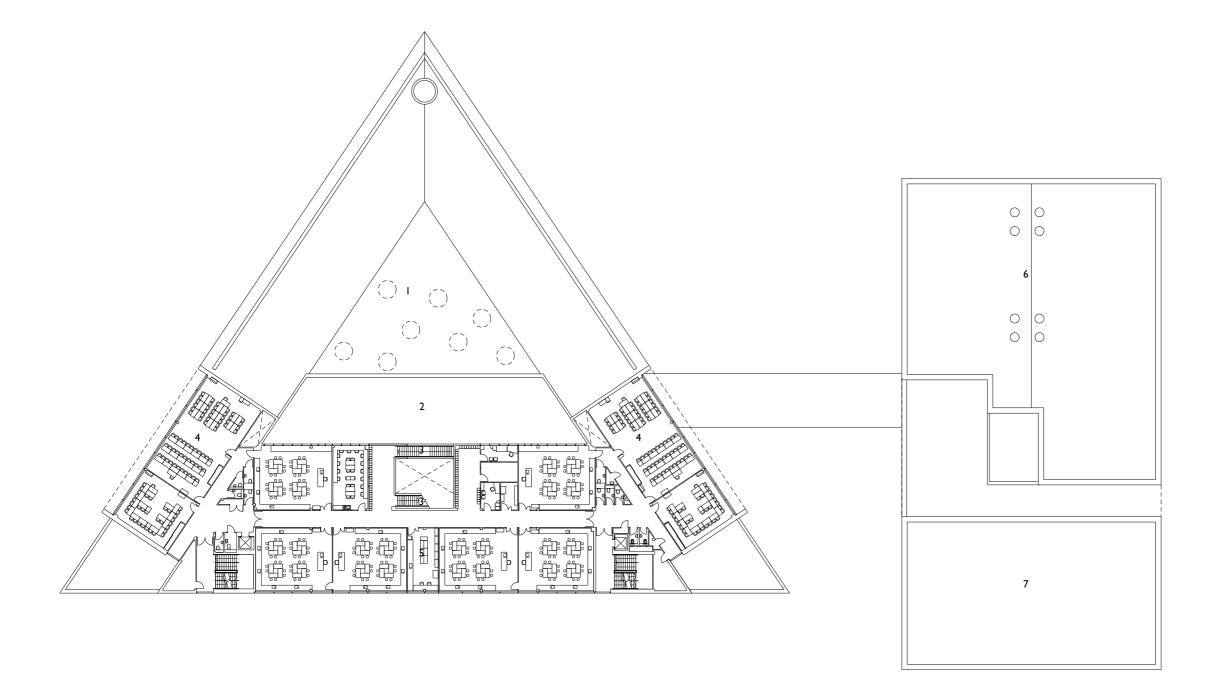
KEY

- I Central atrium
- 2 Street linking to Main Building and Expressives Block
- 3 LR
- 4 SEN and PRU base
- 5 Dining area
- 6 Kitchen

- 7 Youth Centre
- 8 Admin
- 9 Learning bases
- 10 Large learning base linking to external technology terrace
- II Post 16 catering kitchen
- 12 Link connecting Main Building and Expressives Block
- 13 Large and small drama hall
- 14 Drama studio
- 15 Creative Media
- 16 Activities hall
- 17 4-court Sports Hall

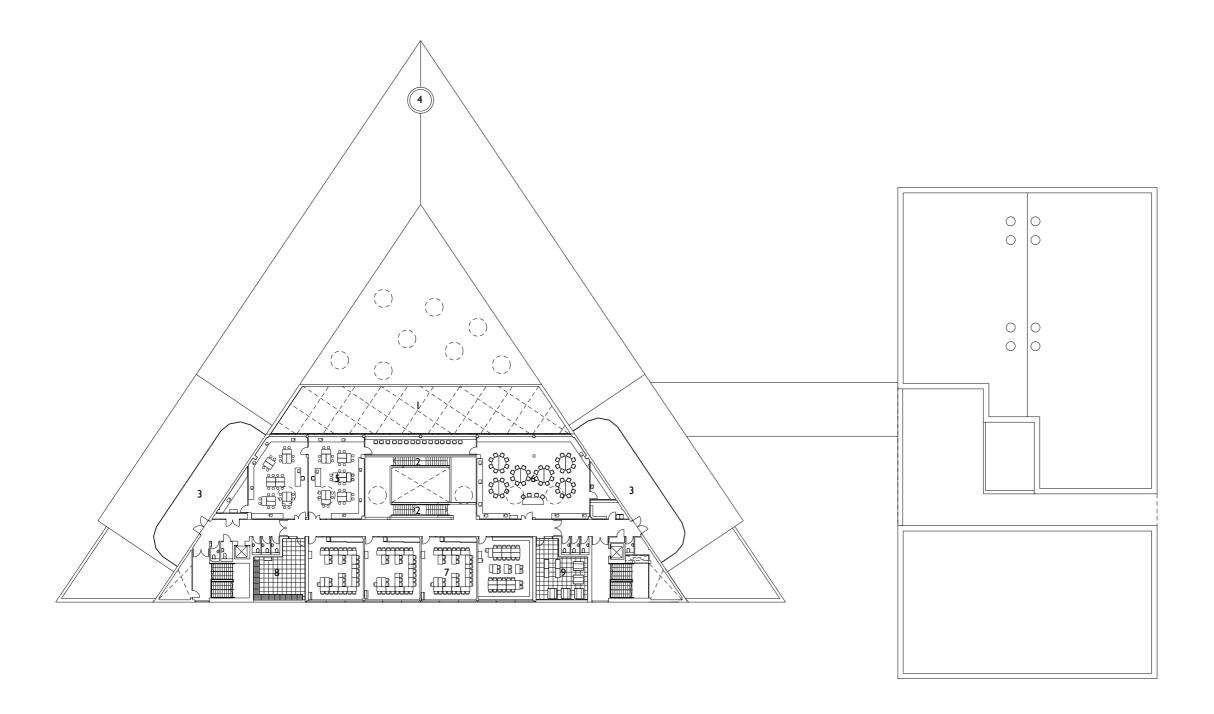


First floor plan 0 10 20 50



- REY
 I Roof over atrium
 Void over street
 Central stair
 Twinned learning bases
 Science labs
 Roof over terraces
 Roof over Sports Hall

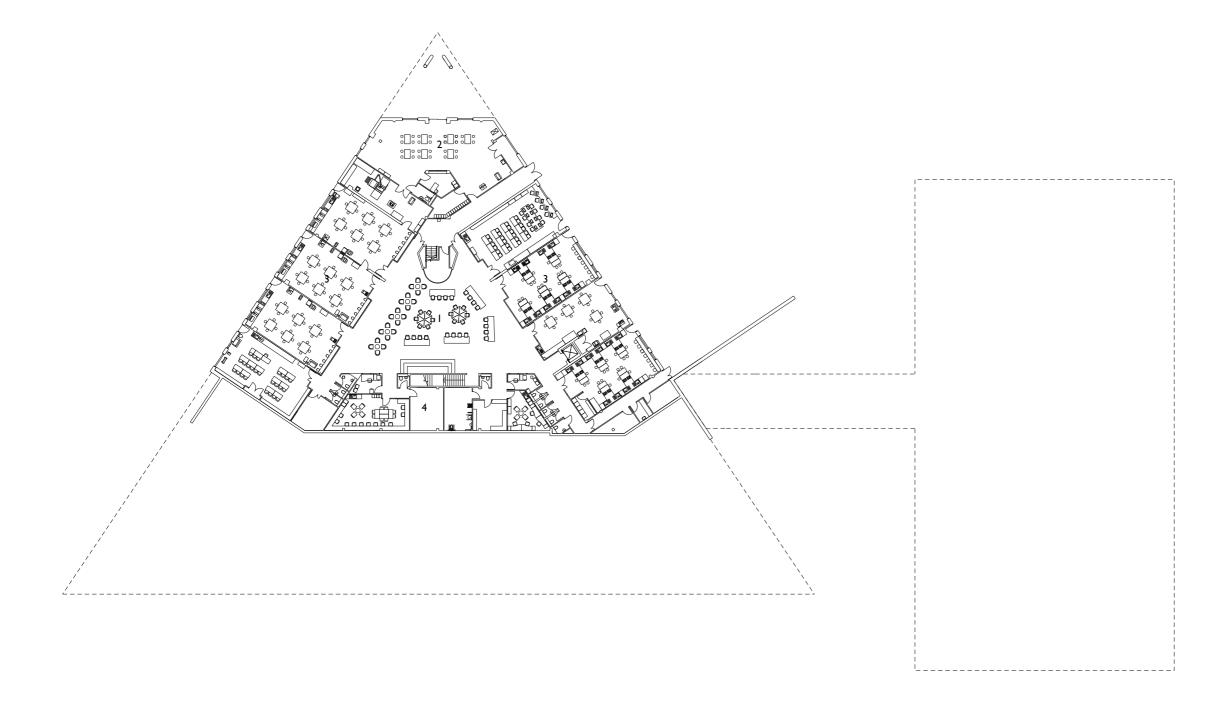
Second floor plan



- KEY
 I Glazed roof over street
 Central stair
 External plant
 Prow oculus

- 5 Science labs
 6 Super labs
 7 Learning bases
- 8 External science green house terrace
 9 Learning bases

Third floor plan 50 10



- KEY

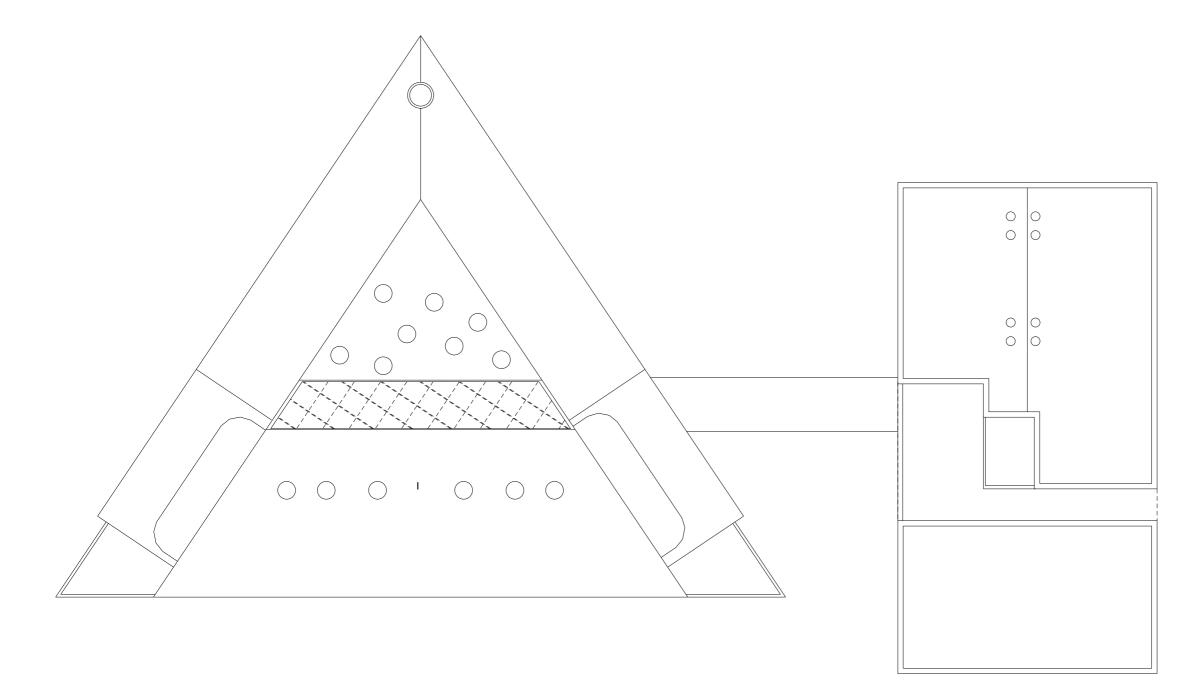
 I Vocational Design and Technology space

 Construction centre

 Design and Technology classrooms

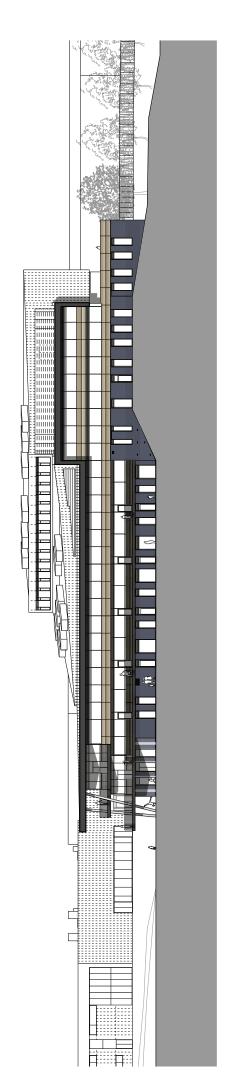
 Staff resource

50





KEYI Roof over third floor



Main Building south-west elevation

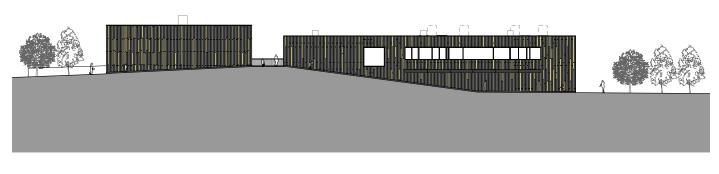
- 20

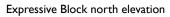
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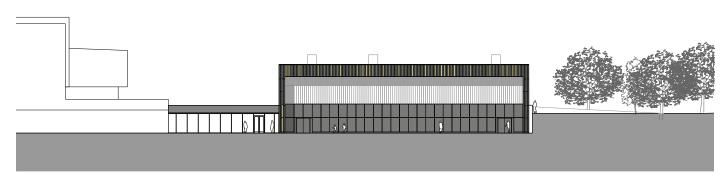


Main Building east elevation 0 10 20 50









Expressive Block east elevation





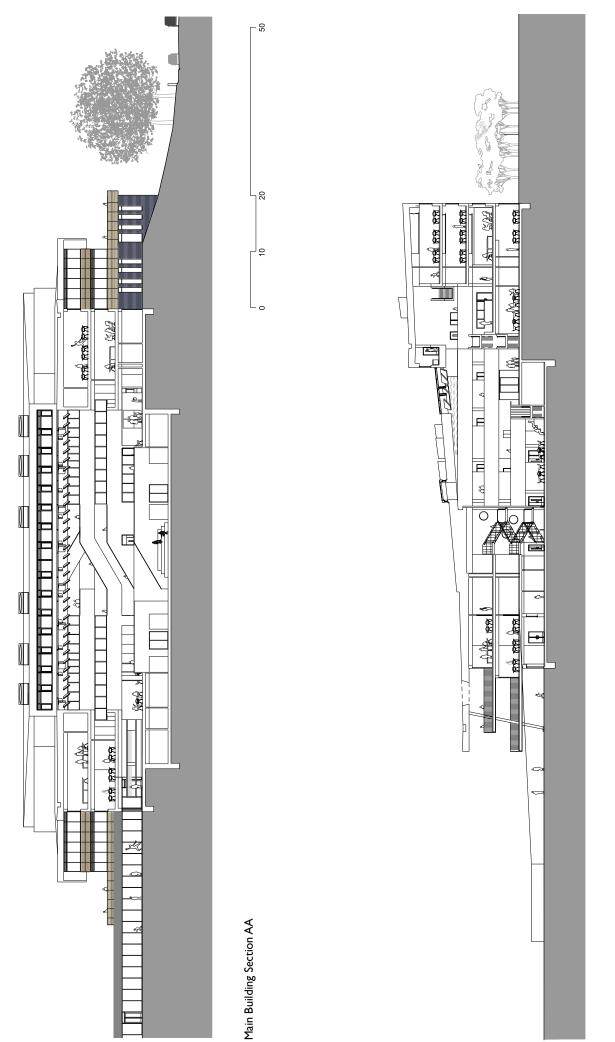
Expressive Block south elevation





Expressive Block west elevation



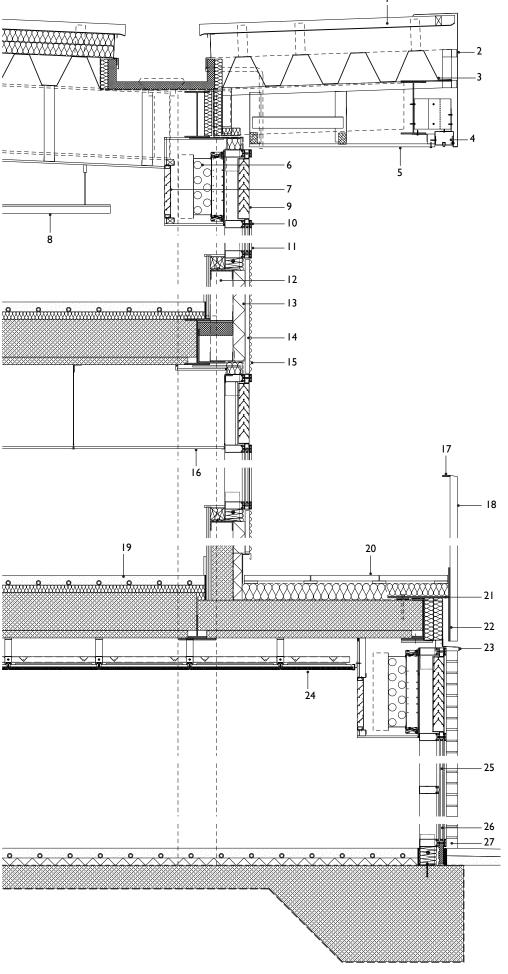


Main Building Section BB

- 29

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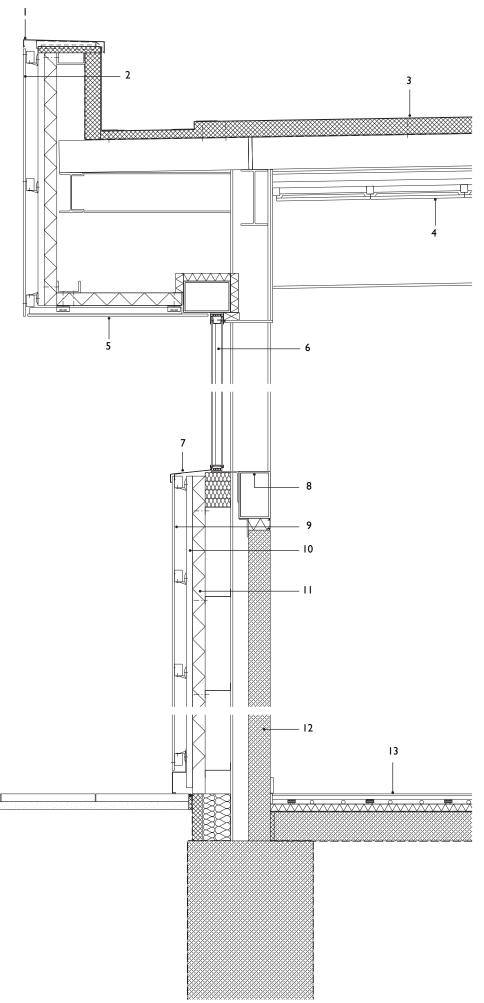


KEY

- I Standing seam metal roof
- 2 PPC flashing RAL 7021
- 3 Structural deck
- 4 Recessed LED striplighting clipped into ledger support angle
- 5 Cementitious board fixed to timber battens
- 6 Natural ventilation actuator
- 7 Internal PPC louvres
- 8 Suspended light raft providing acoustic attenuation, public address systems, sprinklers and lighting
- 9 PPC louvres, sed ink curtain walling
- 10 PPC curtain walling
- II 30.5mm low E double glazing
- 12 SFS framing system
- 13 80mm composite cladding panel providing insulation and air-tight line
- 14 Top hat support
- 15 Imm thick sinusoidal alumnium cladding
- 16 Suspended acoustic ceiling
- 17 10mm ppc welded to galvanised ppc top rail
- 18 10mm thick, 50mm vertical galvanised steel ppc post, bolted to balustrade support plate
- 19 Floor build-up
 - carpet/studded rubber
 - 65mm screed with underfloor heating
 - 50mm rigid insulation
 - 250mm inside reinforced concrete topping on 50mm pre-stressed precast planks
- 20 Floor build-up
 - 38mmx600x600 concrete pariors
 - 100mm insulation
 - hot melt applied to bituminous waterproofing
- reduced 200mm in-situ reinforced concrete topping on 50mm prestressed precast planks
- 21 Fixing galvanised steel ppc plate to slab
- 22 Balustrade support plate
- 23 Drip flashing
- 24 Suspended perforated metal tile ceiling
- 25 30.5mm Low E double glazing
- 26 30.5m Low E double glazing with ceramic frit, 2mm aluminium sheet RAL 7021 behind ceramic frit

500mm

27 Staffordshire blue brick base



KEY

- I PPC coping2 190mm x 10mm thick weather board, fixed to timber battens
- Single ply, mechanically fixed to roof membrane on 110mm insulation
- Peforated acoustic metal tile suspended ceiling
- Cementitious board to soffit
- Structural glazing, I 60mm deep, 2 layers, wired
- 7 PPC flashing
- 8 Horizontal support for structural glazing
 Cementitious board fixed to timber
- battens
- 10 Top hat support
- 11 80mm composite cladding panel providing insulation and air-tight line
- 12 140mm precast panel
- 13 Sprung tube flow with polyurethane finish and underfloor heating



View of Kirk Balk Community College and the village of Hoyland from the surrounding landscape

07034_250 © Tim Soar



View of the Main Building's strong horizontal emphasis, accentuated by dark grey ribbon windows

07034_289 © Tim Soar



View of the main building's folding roofscape

07034_291 © Tim Soar

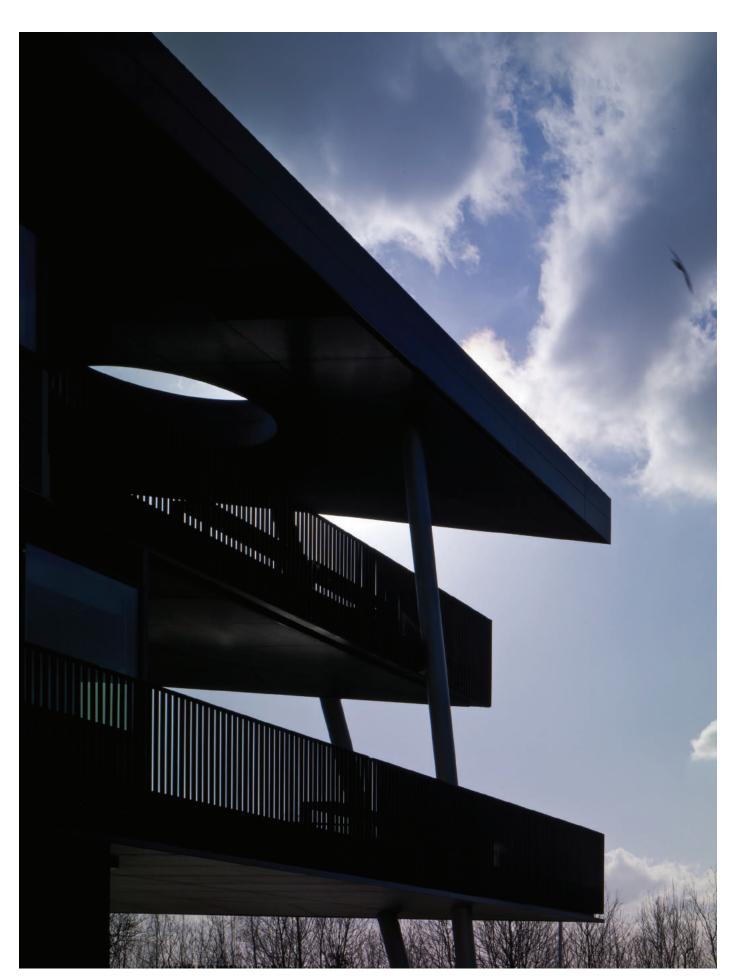


View of the Main Building's folding roofscape as the building steps down the slope

07034_284 © Tim Soar



Teaching terraces on the prow of the Main Building overlooking the landscaping

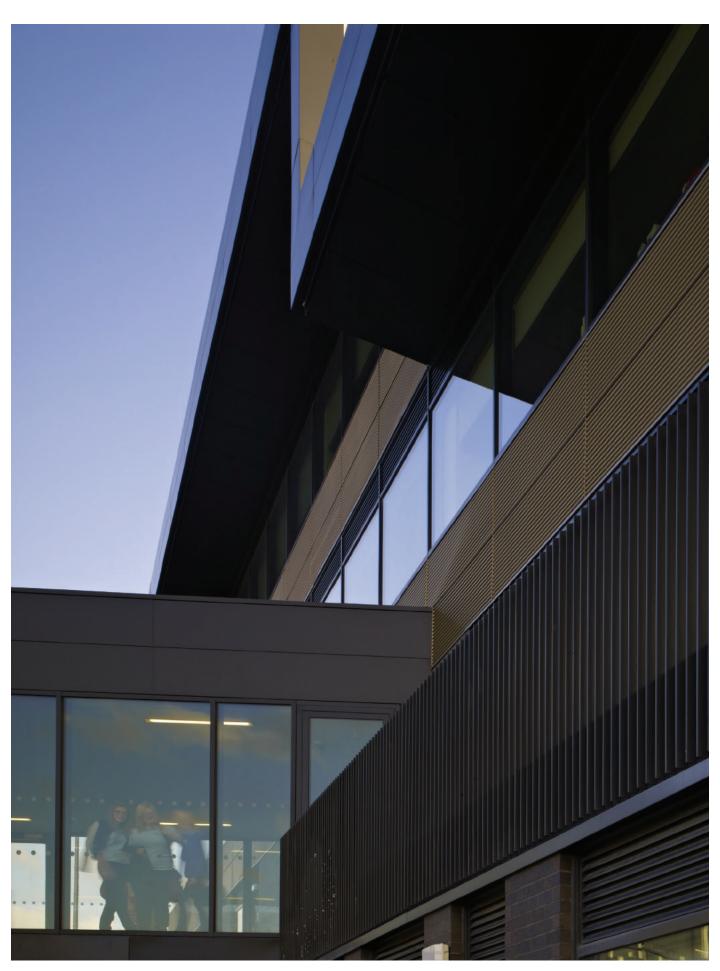


Teaching terraces on the prow of the Main Building

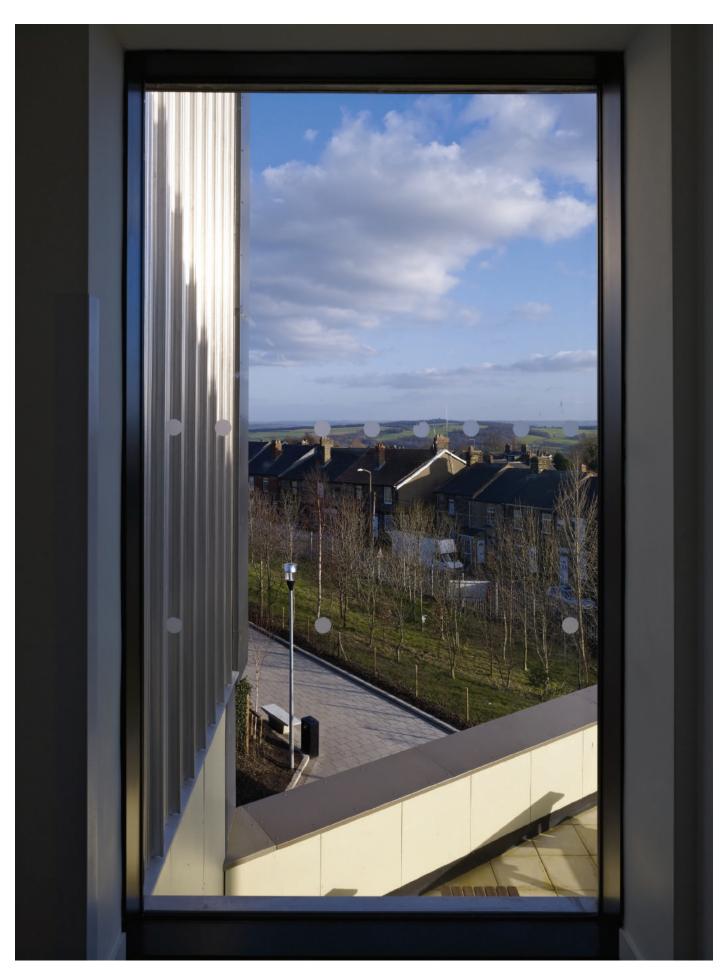


View of the Expressives Block from beneath the prow of the Main Building

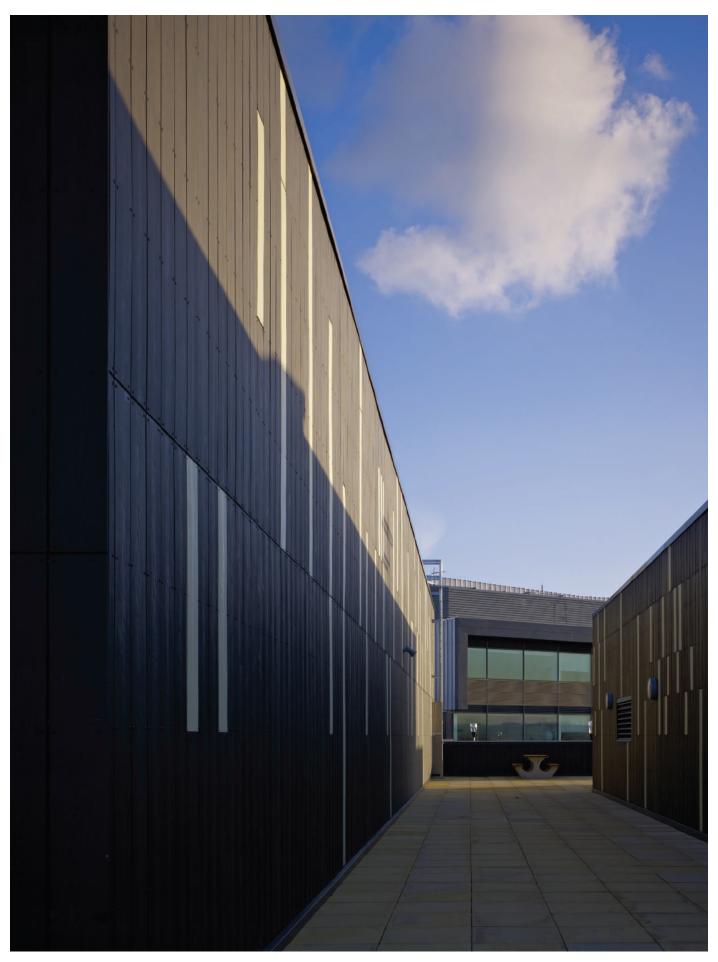
07034_285 © Tim Soar



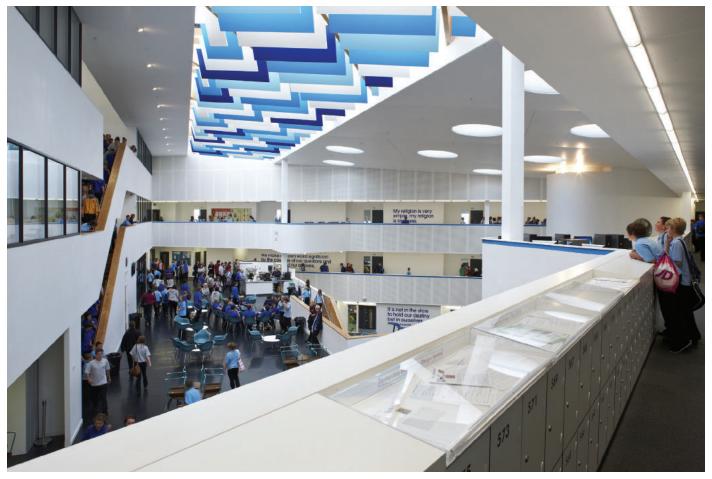
Detail view of the Main Building façade



View from the first floor window looking out onto technology deck and the surrounding countryside

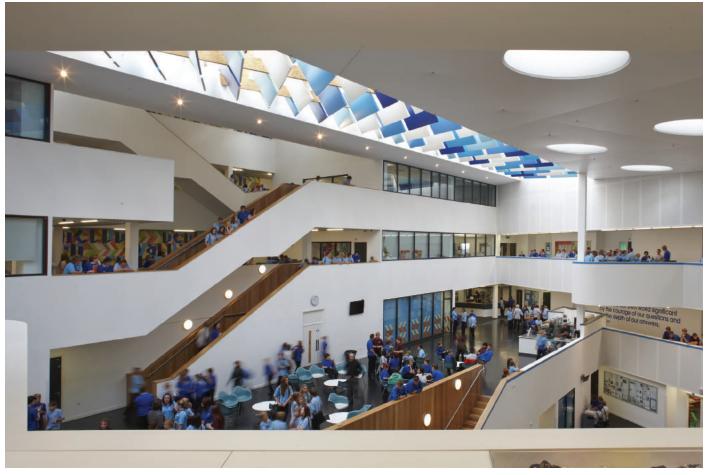


View of the courtyard 07034_290 © Tim Soar



View from the balcony into the central atrium

07034_263 © Tim Soar



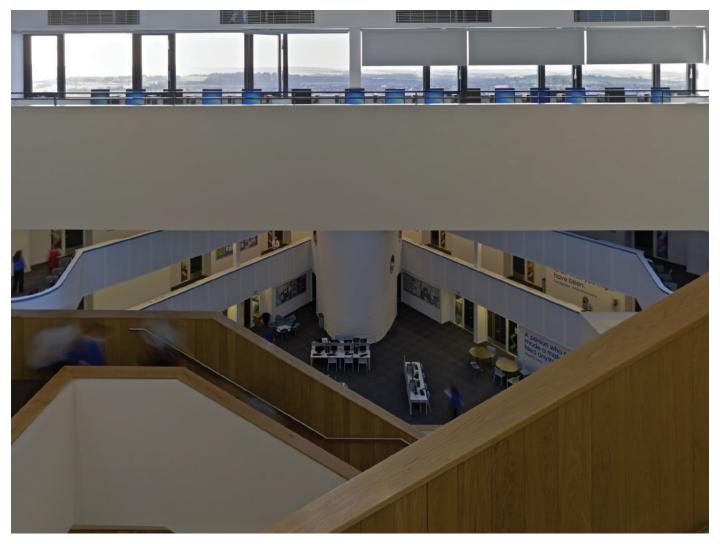
View from balcony towards main staircase

07034_271 © Tim Soar



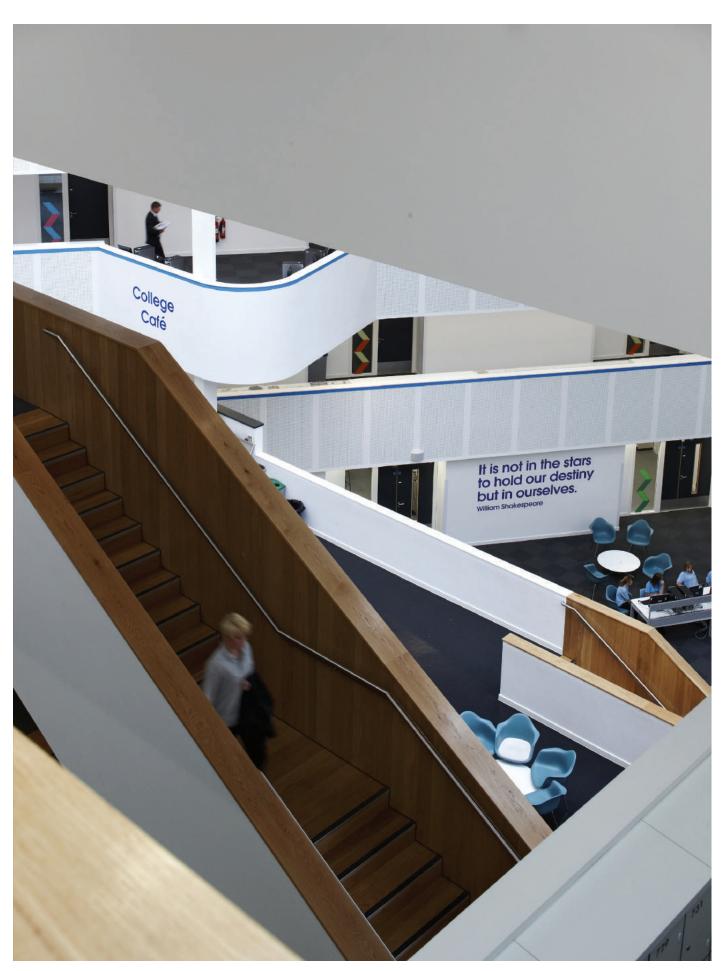
Supergraphics as backdrop for each faculty

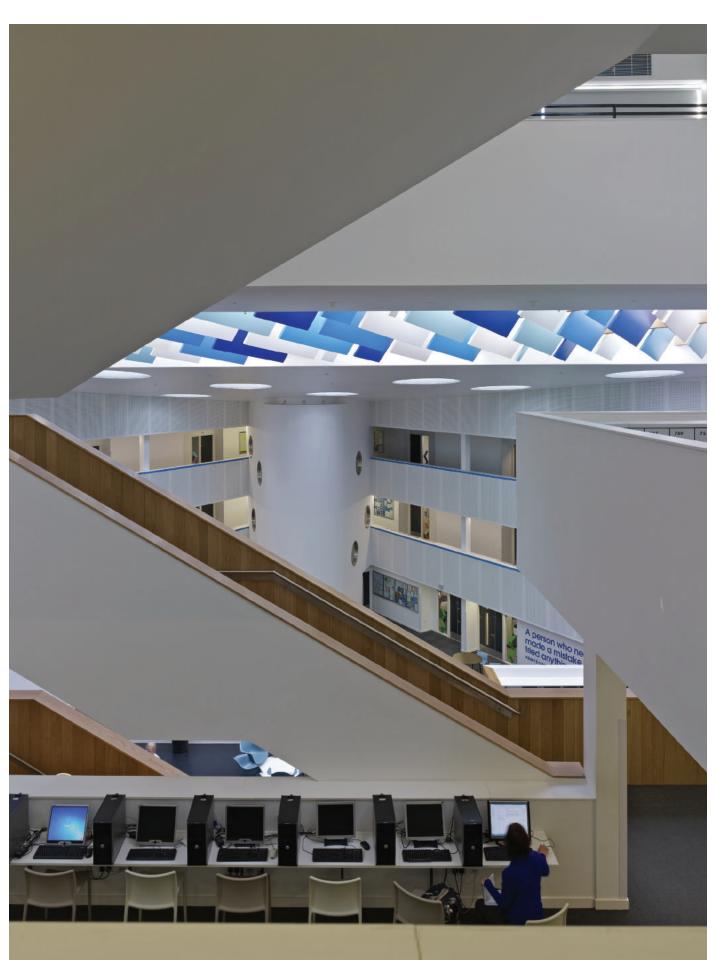
07034_294 © Tim Soar

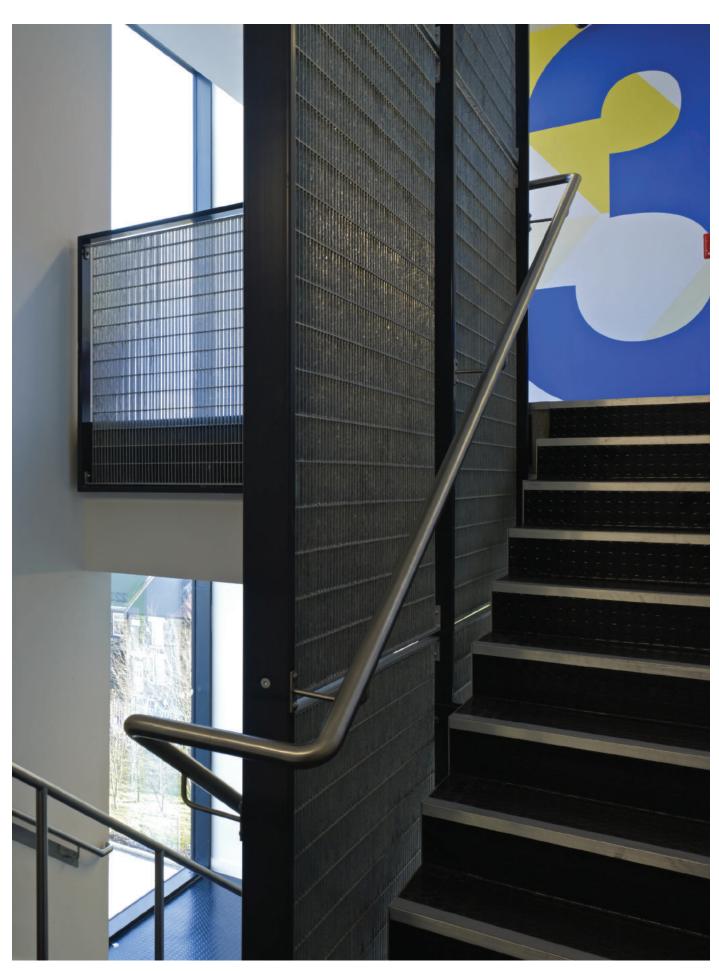


View from the main staircase through to central atrium

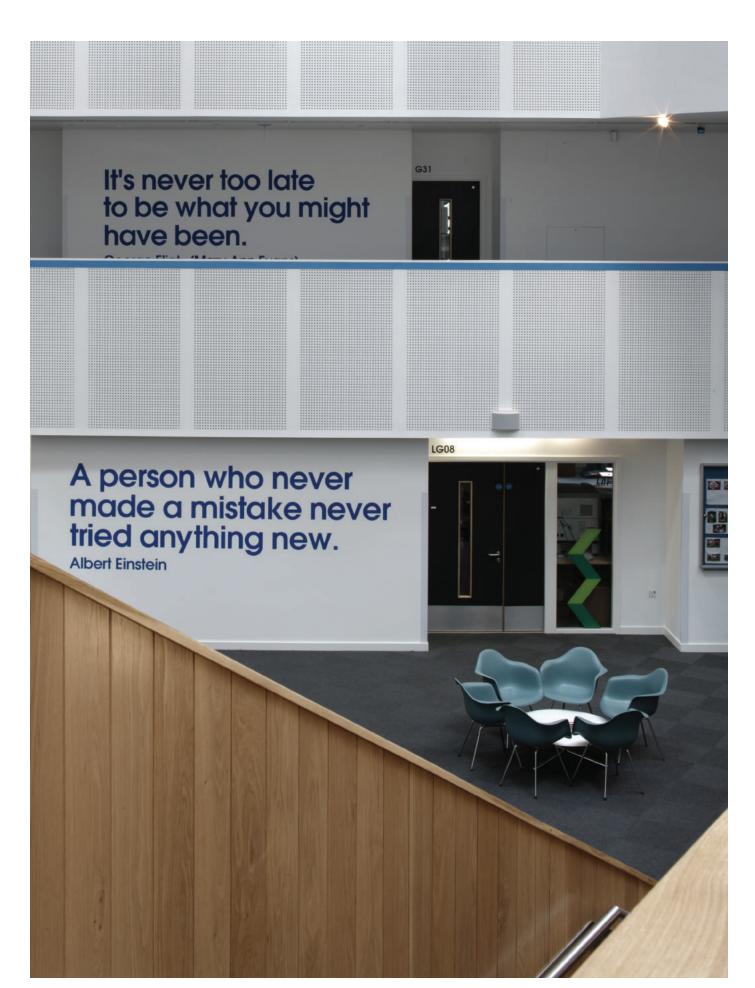
07034_296 ©Tim Soar

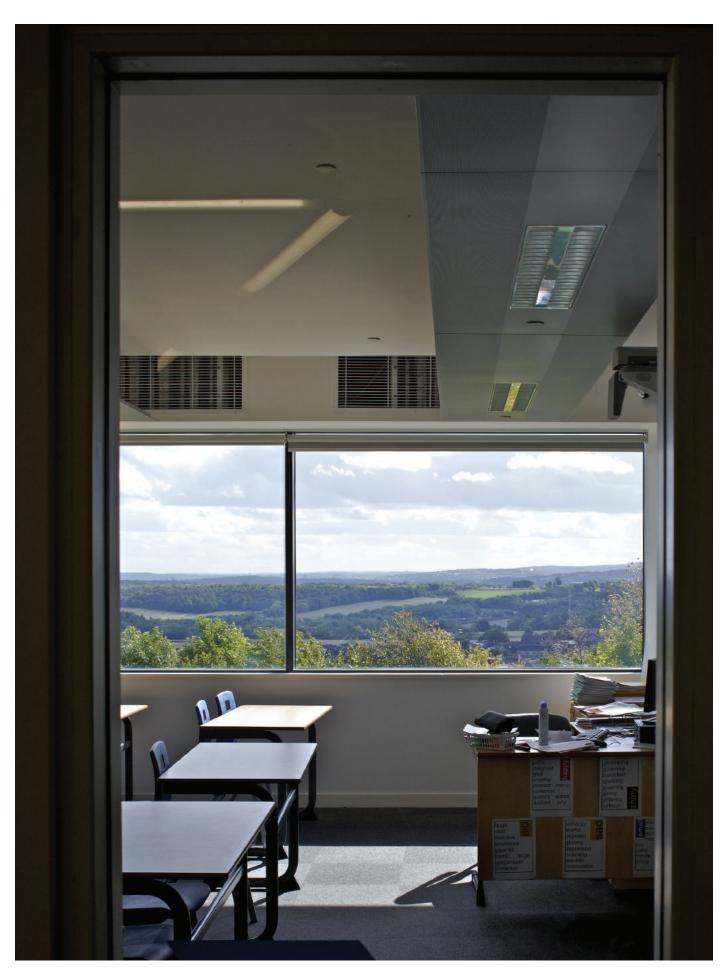






Wayfinding by Morag Myerscough/Studio Myerscough





View into a classroom, with views to the countryside beyond



Teaching spaces within the prow of the Main Building overlooking the countryside beyond

07034_260 © Tim Soar