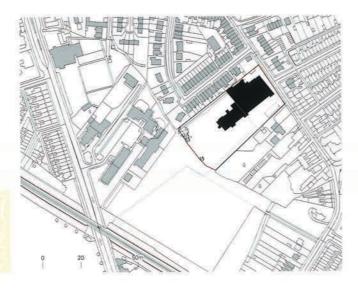


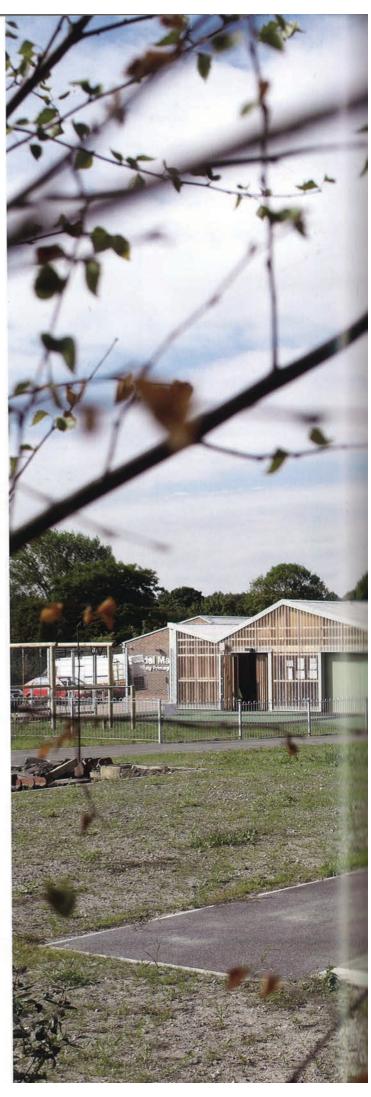
## Sandal Magna Primary School

Sarah Wigglesworth Archiects

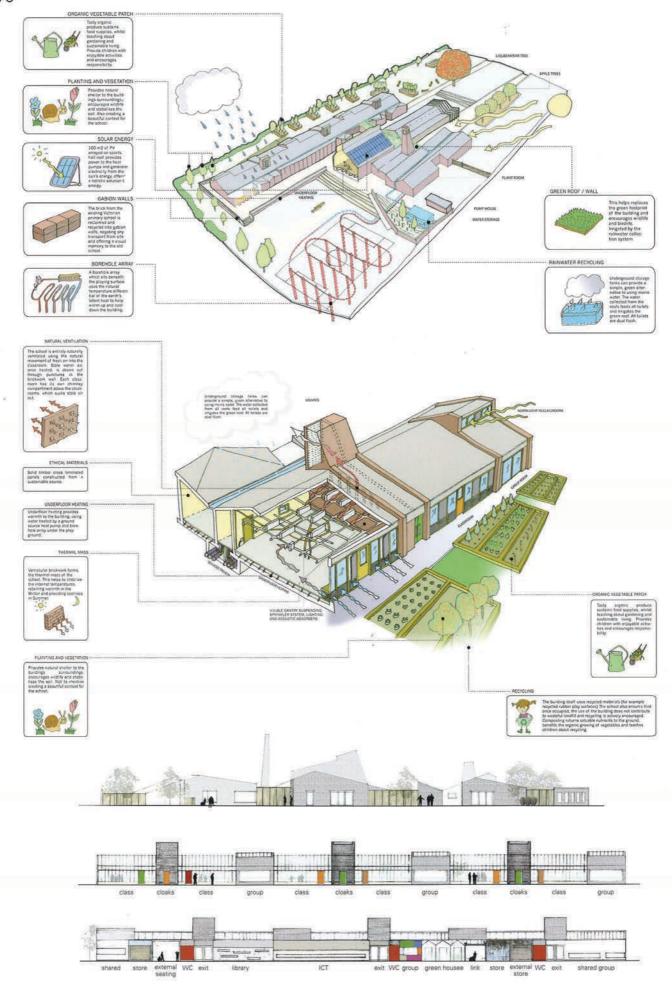
Sarah Wigglesworth Architects were appointed by Wakefield Council to design a replacement for the Victorian Sandal Magna Primary School, which had come to the end of its life. The brief called for a building to accommodate 210 pupils aged 5-11 years with capacity for future expansion alongside nursery provision for 26 children and a community room for use by parents for adult education and other activities. The school serves a deprived community with a high pupil turnover and SEN need.

The brief specified a high quality design addressing sustainability, efficiency, aesthetics and durability. A thorough consultation process involving site visits and meetings with Wakefield Council, staff, parents, the local community and other stakeholders produced a further set of key issues to inform the design including: creating new school identity while maintaining a sense of history and memory providing a secure and welcoming building with a positive street presence creating flexible spaces within the new building (including a community space) and a variety of play spaces outside energy efficiency and sustainability addressing issues of scale and the relationship of the new building to the site. The school's design takes its cue from its immediate context, and is laid out as three parallel single storey wings that reference the neighbouring pattern of terraced frontages and irregular back streets with their coal sheds, stores & privies. The red brick of those terraces is also used extensively in the new building. Along the teaching block, ventilation stacks echo the rooflines of nearby houses while, at the centre of the site, the school is crowned by a striking new bell tower that re-houses the original school bell and evokes the tall chimneys of Wakefield's industrial heritage.

















A range of cladding materials (timber, weatherboarding and corrugated rainscreens) characterizes different uses within the school. Inside the school, the spacious, day-lit and colourful classrooms have direct access to the playgrounds and views to the surrounding landscape. The class bases are flexible and adaptable for the needs of larger or smaller teaching groups. Generous corridors avoid hidden corners & blind spots and provide informal learning and meeting space.

The building is constructed of fair-faced brick cross-walls and cross-laminated timber which is left exposed. Services elements such as ventilation systems, soundproofing, sprinklers and a rainwater harvesting system are all proudly visible. This is quite deliberate: Sandal Magna has an inspirational and committed head teacher who worked closely with the architects to make the building a demonstrative tool to enhance the school's sustainability curriculum

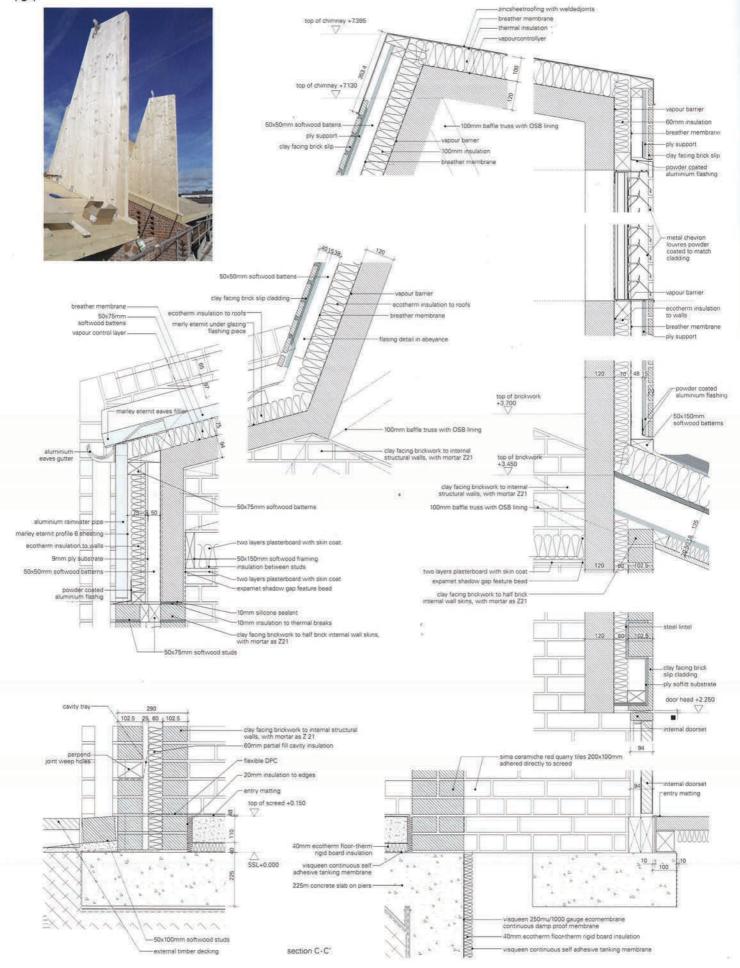
Careful landscaping provides different types of outdoor space including areas for learning, quiet zones and games. The local street typology is reinvented and our new 'back alleys' form play spaces adjacent to varied 'sheds'. A wildlife garden and allotments allow pupils to learn about ecology and food management.

Construction, which took place in phases and included an enabling contract for the demolition of the old school, began in April 2009 and was completed in September 2010. The old school remained in occupation throughout the construction period. The building was funded by Wakefield's Primary Capital Programme with additional support (£500K) from the DCSF's Standards Fund for the low energy equipment.

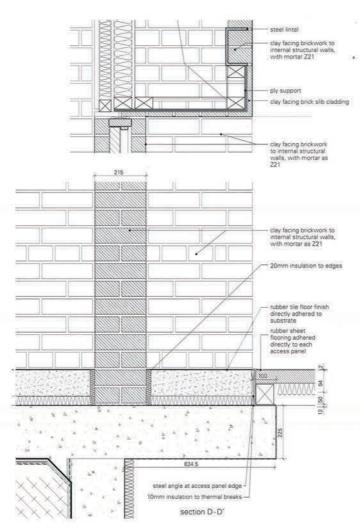








## clay facing brickwork to internal structural walls, with mortar 221 mariley eternit profile 6 sheeting aluminium eaves gutter vapour barrier ecotherm insulation to walls 50x70mm softwood batterns 21xc flashing aluminium rainwater pipe breather membrane 238.5 IS4.5 ply soffit substrate



## 지역과 하나 된 샌달 마그나 초등학교

영국 웨이크필드 시의회는 빅토리아 양식의 초등학교를 철거하고, 이를 대 신할 학교를 새로 짓기로 했다. 이 지역에는 초등학생 210명, 유치원생 26 명의 생활공간과 지역사회를 위한 공간, 그리고 미래의 확장 공사를 위한 여유 공간 및 다용도 공간이 있는 학교가 필요했다.

샌달 마그나 초등학교는 영국 아동학교 가족부의 에너지 효용 설비 지원과 웨이크필드 자본 투자 프로그램의 지원을 받아 사라 위글스워스 아키텍츠의 설계로 지어졌다. 의회의 결정으로 여러 곳에서 투자를 받아 지어지는 초등학교인 만큼 의회, 지역 대표, 교직원, 학부모와 같은 관계자들과 이야기를 조율해 하나의 방향을 잡는 것이 중요했다. 여러 번의 현장 방문과 미팅을 통해 의견을 하나로 모았다. 환경 친화성, 에너지 효율성, 미학적 특성, 내구성을 갖추는 것은 물론, 기존의 고풍스러운 건물과는 다른 새로운 정체성을 갖는 것이 설계의 핵심이었다.

가장 신경 쓴 것은 주변과의 조화였다. 근방의 낮은 주택들과 잘 어울리도록 건물 외벽에는 지역 주택에 쓰인 붉은 벽돌을 사용했다. 학교는 단층의 평행한 세 채의 건물로, 하나의 단지를 이룬다. 언뜻 보면 여느 주택단지와다를 것이 없어 보이지만 학교에는 상징적이고 뚜렷한 특징이 있다. 낮게 흐르는 학교 단지 위로 불쑥 솟은 환기 굴뚝들과 종탑이다. 환기 굴뚝은 산업도시 웨이크필드의 높은 굴뚝을 상징하며, 종탑은 기존 학교에 있던 종을 대신하는 동시에 학교를 지켜주는 등대와 같은 느낌을 준다.

건물들 사이의 골목은 마을의 불규칙한 뒷골목의 모습을 반영한 것이다. 골 목을 통해 교실 근처의 공간은 놀이터가 되며, 모퉁이와 벽이 운동장, 생태 텃밭과 같은 다양한 영역을 자연스럽게 나눈다.

알록달록한 교실에는 큰 창문이 있어 수업시간 내내 밝은 빛이 들어온다. 또한, 밖이 훤히 내다보여 활짝 열린 듯한 느낌을 준다.

교실은 수업 방법에 따라 유연하게 이용되며, 사각지대 없이 탁 트인 넓은 복도는 학생들이 쉽게 모여 이야기할 수 있는 또 다른 학습 공간이 된다.

이 학교는 사실 건물 자체가 학습장이 되도록 지어졌다. 환기, 방음, 빗물이용 같은 시설들은 모두 건물에 고스란히 드러난다. 건물을 통해 환경 교육이 이루어지도록 하는 것이다. 뿐만아니라 부지 곳곳에 남아있는 굴뚝과 같은 옛 건축의 잔여물은 역사교육의 시작이 된다.

샌달 마그나 초등학교는 형태나 그 프로그램으로 새로운 건물이 지역과 어떻게 하나가 되는지를 잘 보여주는 사례로, 학생과 지역 주민을 위한 공간을 마련한 것 외에도 마을을 닮은 학교라는 정체성을 통해 지역의 일부가 되었다.

Project: Sandal Magna Primary School
Location: Wakefield, England
Architects: Sarah Wigglesworth Architects
Project architect: Mark Hadden
Structural engineer: Techniker
M&E consultant: Max Fordham
Quantity surveyor; NPS North East
Planning supervisor: NPS North East
General contractor: Allenbuild North East

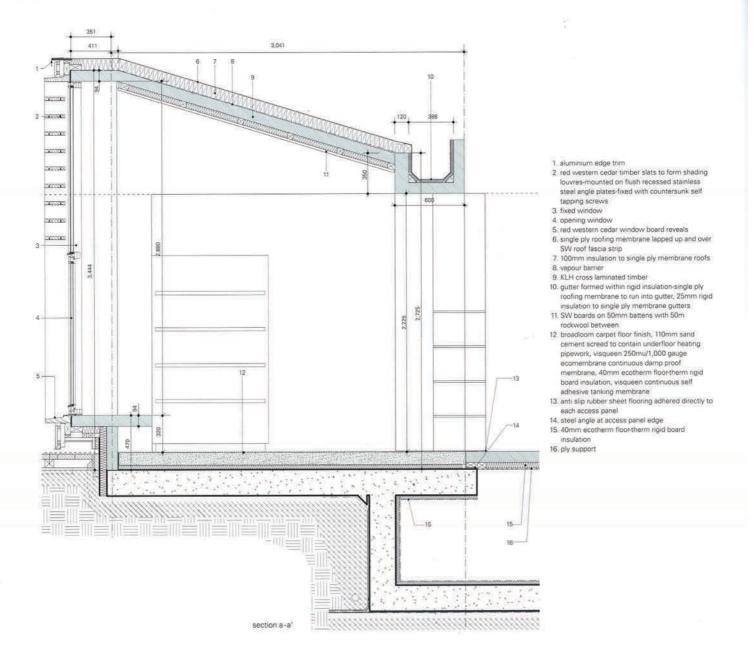
Client: Wakefield Metropolitan District Council and NPS North East

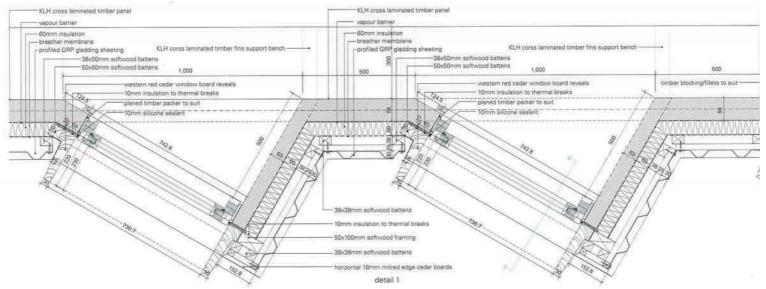
Site area: 9,380m<sup>2</sup> Bldg. area: 1,769m<sup>2</sup> Gross floor area: 1,740m<sup>2</sup>

Cost: EUR 5.19million Completion: 2010

Photograph: @Mark Hadden



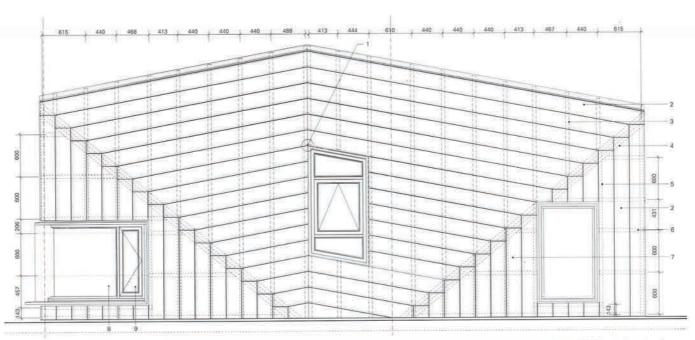










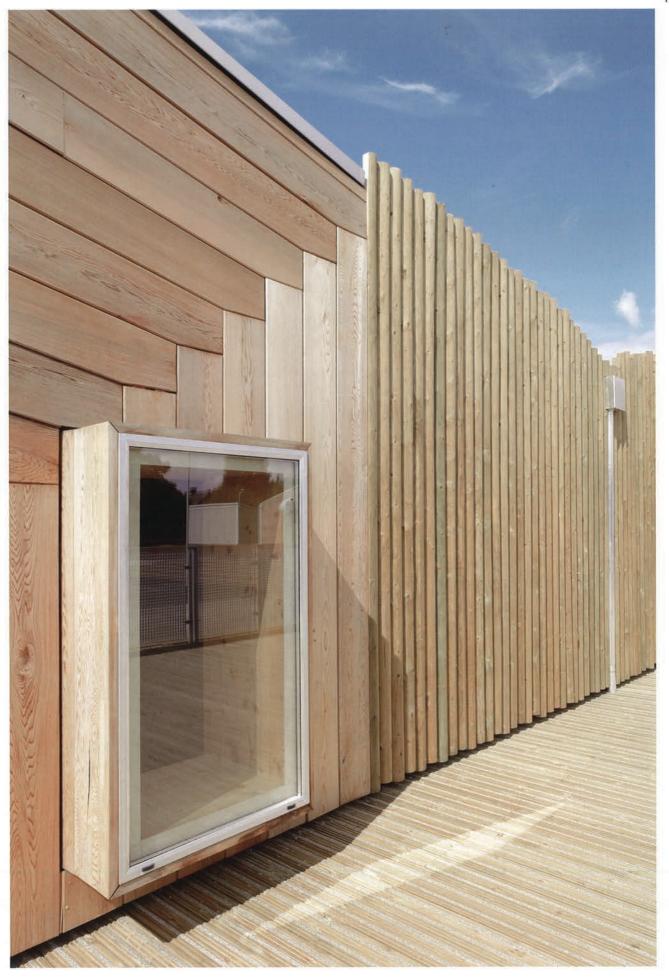


1. cladding to be set out from this point to ensure full boards achieved around window openings as shown 2. horizontal 18mm tongue and groove cedar boards w/concealed fixings 3. 50x75mm softwood studs
4. 25x50mm softwood battens fixed diagonally to vertical battens shown dashed 5. 50x50mm softwood battens 6. 25x50mm softwood battens shown dashed 7. lower section finished with external black falun paint as M60, shown shaded 8 fixed window 9. opening window

detail 2

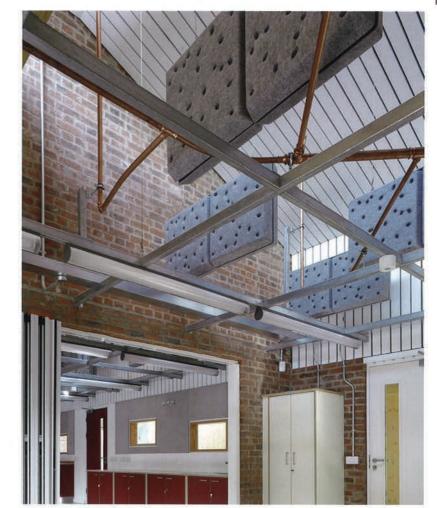








section E-E'



- 1. velux openable roof light
- 900mm radius to sprinkler distribution pipe
   600mm radius to sprinkler range pipes, typical
- ceiling grid suspension fixing point, fixed to roof.
- over
  5 acoustic baffles suspended from structure over,
- acoustic baffles suspended from structure over, to align with suspended ceiling grid
   SW boards on 50mm battens with 50m
- 6. SW boards on 50mm battens with 50m rockwool between, install acoustic boards with 20mm shadow gap from adjacent wall lining, setout full width boards neatly at nominal 120mm centers, adjusted to suit overall dimension
- unistrut ceiling grid, suspended from structural roof panels, coordinate with all M&E services to be supported on grid
- 8. underside of structure beyond, raking
- sprinkler head sand distribution pipe work to M&E engineer's specification installed to top of suspended ceiling grid
- Inear lighting to M&E engineer's specification suface mounted to suspended ceiling grid curved privacy curtain rail fixed to underside of the survey of
- curved privacy curtain rail fixed to underside of 11. suspended ceiling grid, wiht associated room
- dotted circles indicate fixing location for ceiling grid
- surface mounted cable sockets fixed with woodscrews
- stainless steel adjustable cable system. 4mm stainless steel cabel with threaded ball and swage adjuster
- back mounted cable sockets mounted to steel plate from rear
- 16. 7mm painted stell plate with preformed holes to accept cable sockets
- 17. 4m painted steel plate frame welded to top and bottom plate
- 18. offect sound wave acoustic panels direct fixed to steel plate frame

