Signal boost

Elegant simplicity and attention to user needs are both in hand at this specialty school.

Kelston Deaf Education Centre (KDEC) provides educational services to Deaf and hard of hearing students throughout New Zealand's North Island. Students who enrol in the KDEC's day-to-day educational programmes are supported at a number of partner schools across Auckland, and also at the main KDEC campus located in West Auckland. But when its array of unconnected and underperforming 1960s buildings begun getting in the way of delivering their services to the community, ASC Architects was brought on board to assist with a full redevelopment.

In addition to providing new specialist learning facilities on site for the hearing impaired, a reworked campus was also required to provide space for the national administration, assessment and resourcing services for hearing impaired pre-schoolers and school-aged students. A residential accommodation facility was also needed to provide immersion programmes for hearing impaired and to provide support for students and their families.

"This project required ASC Architects to respond to a highly complex functional brief that needed to address contemporary educational requirements, and also to provide an architectural response to the particular ways that Deaf and hearing impaired people perceive and inhabit space and the built environment," explains Matt Every of ASC Architects.

Two new consolidated purpose-built buildings were designed to replace the scattered and aging buildings, with integrated amenities for staff, students and visitors. The redesign also enabled the park-like surroundings to be fully embraced, and the new simplified palette of materials and Resene paint colours create contrast against the natural landscape in a way that makes the greens seem even greener. Bagged blockwork facades painted in Resene Alabaster white really pop against the natural landscape beyond.

"The site also includes a number of mature pōhutukawa trees," says Matt. "The iconic crimson flowers of the pōhutukawa have been used as inspiration for the bright red projecting window surrounds that punch through the crisp white blockwork facades. This inspiration from the red pōhutukawa flowers continues to the entrances of each building, where the use of Resene Bullseye red is used to boldly signify and enhance arrival to each of the new buildings.

"The combination of Resene Alabaster, Resene Bullseye and matte black joinery also takes some inspiration from the abstract art movement, De Stijl, in their considered use to achieve a simple, strong and contrasting architecture set against the natural surroundings. Elements relating to KDEC's rich history on the site were also retained in landscape features integrated throughout the new campus redevelopment.

"The Deaf community is very close-knit, so one thing that was really interesting about the project was the original site and its importance in its collective memories. The site and its original buildings included countless items of special significance, and we worked very hard to preserve and repurpose as many of these elements into the new buildings as we could.

"This included incorporating original curved bench seating into the new landscape design. These specific bespoke elements were important for us to retain, because if you're sitting perpendicular to people when you're signing, it makes it quite difficult. In the new design, we rearranged these original bespoke furnishings to provide generous 'conversation circles' to allow clear sightlines and to assist more participants being included in group signing conversations.

"A number of trees and plants on site also had special significance to the Deaf community. One of these was a lemon tree that was originally going to be removed to

Resene Bullseye

Resene Alabaster

opposite and below: Inspired by the many pōhutukawa trees interspersed across the KDEC campus site, protruding entrance and window surrounds in Resene Bullseye punctuate the new main building, which is painted in Resene Alabaster. Further inspiration was taken from the De Stijl movement, which is evidenced in the shapes and simplified colour palette of red, white and black.

above left: Resene Alabaster was used throughout most of the interior of the main building, including on the surround of the colourful John Holmwood surrealist artwork – a mural titled 'Holiday by the Sea' – that was salvaged from one of the original campus buildings.

above centre and right: A neutral colour palette was used to reduce visual noise within the space. The walls, trims and ceiling of the main building are in Resene Alabaster, the doors are in Resene Concrete while warmer Resene Rice Cake was used throughout the accommodation building. Select colours have been brought in through acoustic material, as well as some of the seating. To create this colour combination in a paint finish, try Resene Koru and Resene Space Cadet.

Resene Concrete

Resene Koru

Resene Space Cadet

make way for one of the new buildings. When we arrived on site one day, we found it covered in personal messages requesting it be saved that let us know how important it was to everyone, so we found a way to keep it.

"Inside, we included a museum room that recreates one of the original KDEC hostel dormitory spaces and includes original 1960s furniture that was used to furnish these rooms. This room also displays other historic Deaf community memorabilia such as books, records, furniture and photographs, as well as educational, technical, communication and medical artifacts. Additional display cases also feature throughout the hallways to display additional memories and artifacts from the original buildings, because they just held so much importance."

The internal layout of the new main building integrates all the teaching, training and assessment functions of the facility and provides the interconnectedness the campus was previously lacking. "It has refined the way teaching and training is carried out. The open plan layout means teachers and students are more visible, and areas can be easily reconfigured if required," explains Matt.

"The concept of DeafSpace informed a lot of the planning and design of the spaces. Vision and touch are the primary means of spatial awareness and orientation for most Deaf and hearing impaired people. Many also use visual-kinetic sign language as their primary means of communication. With this project, it was a privilege to create built environments specifically tailored for the unique requirements and sensibilities of the Deaf community. Everyday built environments can present surprising challenges to Deaf people. When you're Deaf, you can't hear somebody coming when you're approaching a corner, so we had to take that into account in our design. It's probably not something that's often considered but it was especially important for this project."

Other acoustic issues were important to consider in the design. The building was not only designed for the Deaf, but also for those with other varying degrees of hearing impairment, including some who use assistive hearing devices. For many individuals who rely on these devices, background noise can be a real problem. To reduce reverberation, acoustic wall linings were incorporated throughout the buildings. While the main purpose for the acoustic material is to absorb reverberations, it also doubles as a pinboard and works with Velcro so that staff can hang up information or student work.

The new buildings also feature internal landscaped courtyards, and the interior colour scheme was designed to bring the landscaping of these interior outlooks into the building as much as possible. Resene Alabaster was used for the interior walls, ceilings and trims in the main building teamed with Resene Rice Cake, which was used for the interior of the accommodation space, and Resene Concrete, which was used for the interior doors.

The neutrality of the colour selections was also important for increasing communication. As Matt points out, "when people are signing, they need a clean visual background because it can be quite distracting if there are other things competing."

When it came down to the paint choice, Resene Lumbersider, Resene Lustacryl, Resene Zylone Sheen, Resene X-200 and Resene Uracryl were used throughout the project and chosen for their quality of finish, long term technical performance and environmental benefits.

"In addition to meeting the needs of the users, the project was also designed to achieve a Green Star 5 Star Built rating, and specification of Resene applied coatings contributed to achieving this," says Matt. "Resene was also preferred because of the helpful assistance of their representatives with colour matching paint finishes to other coloured finishes."

One of the project's special features – which was also one of its challenges – is the colourful John Holmwood surrealist artwork in the central interior common space of the main building. "This painting was originally a mural painted directly onto an internal plasterboard lined wall of one of the old KDEC buildings that needed to be demolished to make way for the new buildings. In order to salvage the artwork, a new structural steel frame was fixed to the back of the existing timber framed wall and then the steel frame, timber wall, plasterboard canvas and mural were all able to be successfully moved together to a new location to become a dramatic focal point in new building," says Matt.

After the Hawkins construction team removed it from the wall, it was transported to Mt Wellington where it was stored for a year before it was returned to the site. New walls were then constructed around the repositioned artwork to frame the work and conceal the extra structure required to successfully salvage it, and then the new surrounds of the artwork were painted Resene Alabaster to complement and highlight the colourful abstract art.

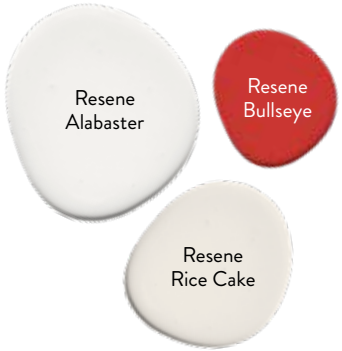
"When the school asked us if we could save it, we were able to design up quite a sturdy steel frame, cut it out of the wall and crane the painting out of the roof," says AJ Spicer, Construction Manager for Hawkins. "We braced up the whole wall, and when the time was right for it to come back, we forklifted it into position. It was really well preserved and it looked brilliant where it was reinstated, especially when it was framed up properly – it just looked great. It's a really good quality work of art, and someone wouldn't even need to know who the artist was to know it was a great piece."

Thoughtful and well considered, KDEC as it stands today has been built for, and with, the needs of its users at the forefront of the design and is sure to be embraced just as emotionally as what proceeded it – while also paying it proper homage.

"For us, working for the Deaf community to provide this new facility made the KDEC campus really one-of-a-kind. It was one of those unique projects where you know you'll probably never get to do anything like that again in your career," says AJ. "The specialised aspects of the design made the project quite unique for us, too, and getting to see how educational services are provided for the Deaf community and all the design considerations that made it work just made it so special to our team." BW

above right: At night, sconces illuminate and reflect off of the Resene Bullseye entrance surround. Window surrounds in Resene Bullseye and main cladding in Resene Alabaster.

below right: Matt says the original building footprints were used as a generator for some of the lines in the landscaping, which is especially evident in the courtyards. Walls in Resene Alabaster.



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