



# ST PAUL'S EARLY LEARNING CENTRE



# TOWILL DESIGN GROUP IS COMMITTED TO HIGH QUALITY ARCHITECTURAL & ENVIRONMENTAL DESIGN IN EDUCATION.

Established back in 2008, Towill Design Group provides a full architectural service from feasibility studies & master planning through to tendering & administering the contract on behalf of the client.

Experience in educational design particularly in the area of environmental design now sets Towill Design Group apart from most traditional architectural firms.

Director, Rachel Towill, has been specialising in the environmental design of educational facilities since 2003 when she worked for award winning architectural firm Collard Clarke Jackson.

Rachel has a direct hands-on approach to all of the projects in the office and is always the client contact and designer of our educational projects.



# REGGIO EMILIA

St Paul's required the design of the kindergarten facility to embrace the schools chosen approach to early learning, Reggio Emilia.

Reggio Emilia is teaching philosophy which began in Italy after WWII where parents created learning environments for their children from old war ruins and used a collection of recycled & natural materials to form their teaching environments.

In this philosophy, the physical environment actively participates as part of the educational process for the children, often being referred to as 'the third teacher'.



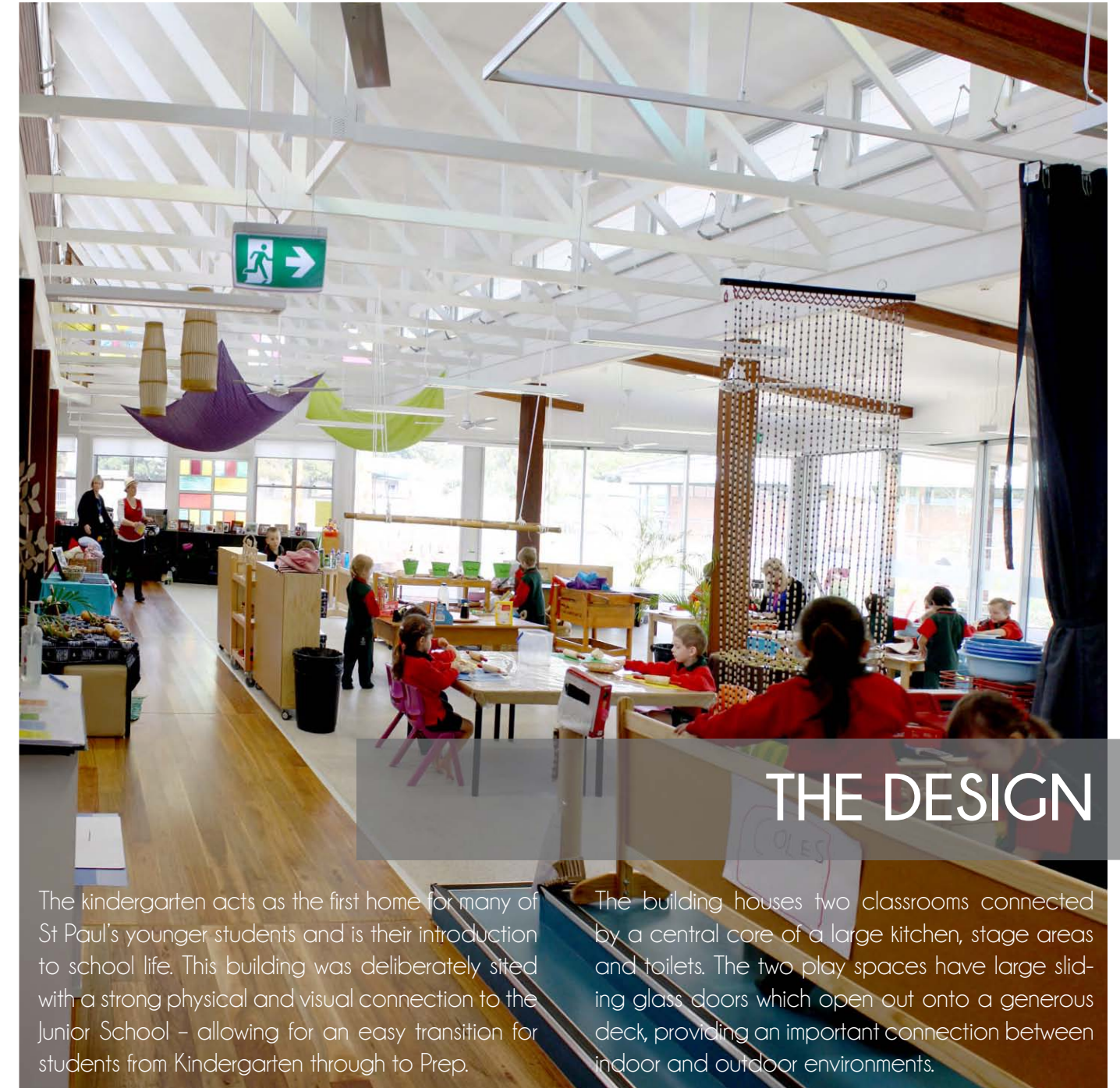
THE COMBINATION OF LARGE, OPEN PLAY SPACES, EXPOSED STRUCTURE & VARIED FLOORING TYPES GIVE THE TEACHERS FLEXIBILITY TO EASILY SHAPE LARGER SPACES INTO SMALLER PLAY AREAS THROUGH THE RELOCATION OF MOBILE FURNITURE



# WORKSHOPPING

By researching Reggio Emilia, visiting kindergartens that follow this teaching philosophy and working closely with the Prep teachers, Towill Design Group became aware of the fundamental design & social issues that the new kindergarten needed to address.

In addition to working with the schools teachers, a workshop was held with the schools children to explore their own ideas about what they wanted their play spaces to be like. The children's drawings were collected and then printed on a decorative strip on all of the glazing of the kindergarten.



## THE DESIGN

The kindergarten acts as the first home for many of St Paul's younger students and is their introduction to school life. This building was deliberately sited with a strong physical and visual connection to the Junior School – allowing for an easy transition for students from Kindergarten through to Prep.

The building houses two classrooms connected by a central core of a large kitchen, stage areas and toilets. The two play spaces have large sliding glass doors which open onto a generous deck, providing an important connection between indoor and outdoor environments.



# SUSTAINABLE PRINCIPLES

## material selection

A variety of recycled & natural materials have been sourced from local Brisbane companies to provide a highly tactile palette for the children to interact with. Materials selected are assessed based on their content, manufacturing process & where they are produced.

## insulation

High levels of recyclable insulation are in the walls and roof, decreasing heat transfer through the roof.

## paint & adhesives

Low VOC providing a healthier environment for children and teachers

## energy

Low energy light fittings and appliances have been used & infrastructure is in place for the future installation of solar panels.

## water collection

rain water is collected by three above ground tanks for toilet flushing & irrigation.

## natural light

High level louvres and large windows provide a connection to the outdoors as well as encouraging natural light to enter the indoor areas.

## natural ventilation

The play spaces of the kindergarten are not air conditioned - they are naturally ventilated through operable windows, large sliding doors & ceiling fans, encouraging cool breezes to enter through the building, while naturally dispersing hot air out through high level louvers.

NATURAL LIGHT ENTERS THROUGH HIGH LEVEL LOUVRES, CUSTOM MADE STAIN GLASS WINDOWS, DOUBLE HUNG WINDOWS & SLIDING DOORS - PROVIDING A STRONG VISUAL CONNECTION WITH THE OUTDOORS.





# MATERIALS

Selection of natural and non toxic materials is always a priority with the health of the end user groups always being the first consideration.

## recycled timber structure

The exposed columns & beams are actually old power poles which have been remilled by a local Brisbane company.

## cork perimeter walls

Cork made of recycled Australian cork tops was used for perimeter walls to allow children to display artwork at low levels.

## concrete flooring

The concrete slab has a 30% Fly Ash content, and has been honed and exposed, avoiding excess layering of materials. The floor has been finished with a water based sealer.

## fixed joinery

All fixed joinery is made of E0 (low formaldehyde) joinery boards with 100% biodegradable pinboard faces made by a local joiner.

## internal timber flooring

The internal timber flooring is made from a recycled mixed timber species - sourced from a local Brisbane company. The flooring was finished with a wax made of natural materials.



The kindergarten was designed by selecting as many natural, local or recycled products as possible, providing a stimulating and tactile learning environment for the children.



A STIMULATING & TACTILE ENVIRONMENT HAS BEEN CREATED THROUGH A COMBINATION OF HEIGHTENED PLAY SPACES, DESIGNING WITH NATURAL LIGHT, & PLAYING WITH COLOURS & NATURAL TEXTURES.





### external brickwork

The entry wall and low perimeter walls of the kindergarten are made of a local base brick sprinkled with colourful glass bricks. Overtime, passionfruit vines will grow over parts of this brickwork along the entry wall.

### timber cladding + decking

The exposed timber cladding & external decking are made from recycled spotted gum timber, sourced from a local Brisbane company.

### timber portals

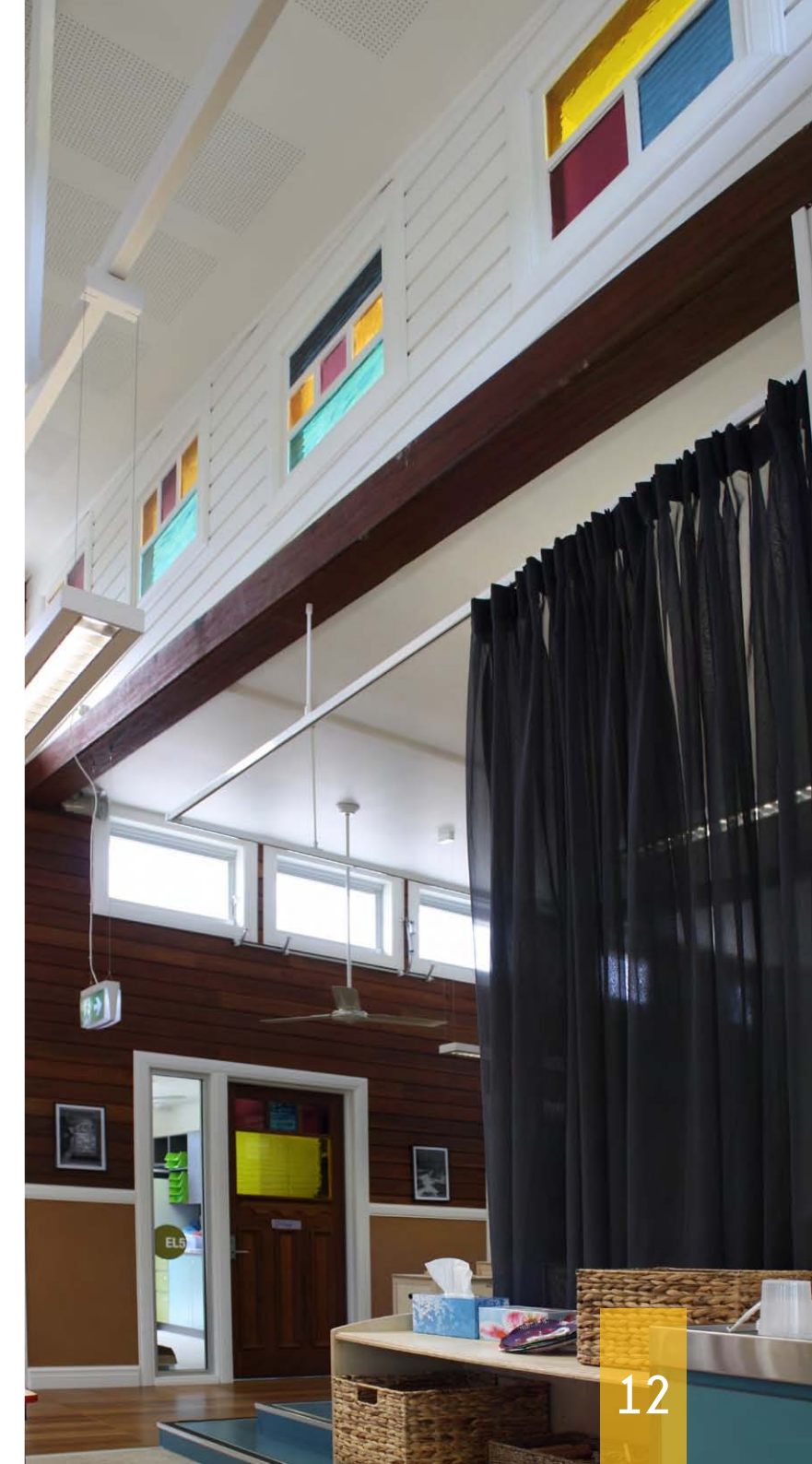
The timber portal frames in the entry are made from old power poles sourced by a local Brisbane company.

### VJs & weatherboards

The VJ wall cladding & weatherboards are all recycled boards, sourced from a local Brisbane company.

### stain glass windows + doors

Custom made feature stain glass doors & highlight windows have been made with stain glass supplied by a local Brisbane company. The frames and doors are made of a mixed recycled timber species, all made in Brisbane.





# FURNITURE

## story telling chairs

Both indoor play spaces have large wing back reading chairs with matching footstools.

These chairs are ex-Hotel chairs reupholstered with over forty Australian themed tea towels, made by a local Brisbane joiner.

One chair features all native Australian birds & the other chair showcases a collection of Australian animals.

FURNITURE HAS BEEN SELECTED BASED ON ITS RECYCLED OR RECYCLABLE CONTENT, MANUFACTURING PROCESS & WHERE IT IS PRODUCED, SUPPORTING LOCAL COMPANIES WHERE POSSIBLE.



## art tables

Large art tables & mobile science tables are made by a local joiner out of reclaimed timber palings.

## childrens chairs

These colourful chairs are made in Australia, out of polypropylene which can be recycled at the end of its use.

## pine tables & mobile furniture

The children's small pine tables & mobile furniture come in a variety of shapes and sizes - made by an Australian owned company & using only Australian plantation pine.





# THE ENVIRONMENT ACTS AS THE THIRD TEACHER





# LANDSCAPING

The landscaping has been designed with a focus on learning through the senses - seeing, hearing, touching, smelling, and tasting.

- The environment has been designed responding to the visual, tactile, olfactory, kinesthetic, gustatory + emotional senses of children
- Creation of spaces for social interaction, problem solving, drama, story telling & fantasy
- Each garden has a distinct sensory quality including a sand pit, a hard climbing spaces, areas to run & a herb garden & cubby house



THE PHYSICAL ENVIRONMENT ACTIVELY PARTICIPATES IN THE EDUCATIONAL PROCESS, ENCOURAGING MULTI-SENSORY LEARNING BY PROVIDING A NATURAL LANDSCAPE ENVIRONMENT WITH DIFFERENT SENSORY QUALITIES.



# CREATIVE PLAY

THE LANDSCAPING HAS BEEN DESIGNED WITH A FOCUS ON LEARNING THROUGH THE SENSES - SEEING, HEARING, TOUCHING, SMELLING, AND TASTING.

VEGGIE AND FLOWER PATCHES ARE MADE OF RECLAIMED BATH TUBS AND SHOWER HEADS & THE CUBBY IS MADE OF RECLAIMED TIMBER



CIRCULAR SAND PITS ARE PROTECTED FROM THE SUN BY A LARGE COLOURFUL UMBRELLA





# PHYSICAL PLAY



## physical play is encouraged through

- Climbing totems poles (made locally)
- Slide
- Balancing rocks and timber steppers
- Swirling gravel track with steel arbour
- Hand water pump connected to rain water tank on deck area

## imaginative play is created by

- Cubby house (made of reclaimed timber)
- Circular concrete steppers act as performance platforms
- Timber Bridges over dry creek bed
- Light and shadow play with coloured resin & mirrored screens - these can be painted on and washed down after use

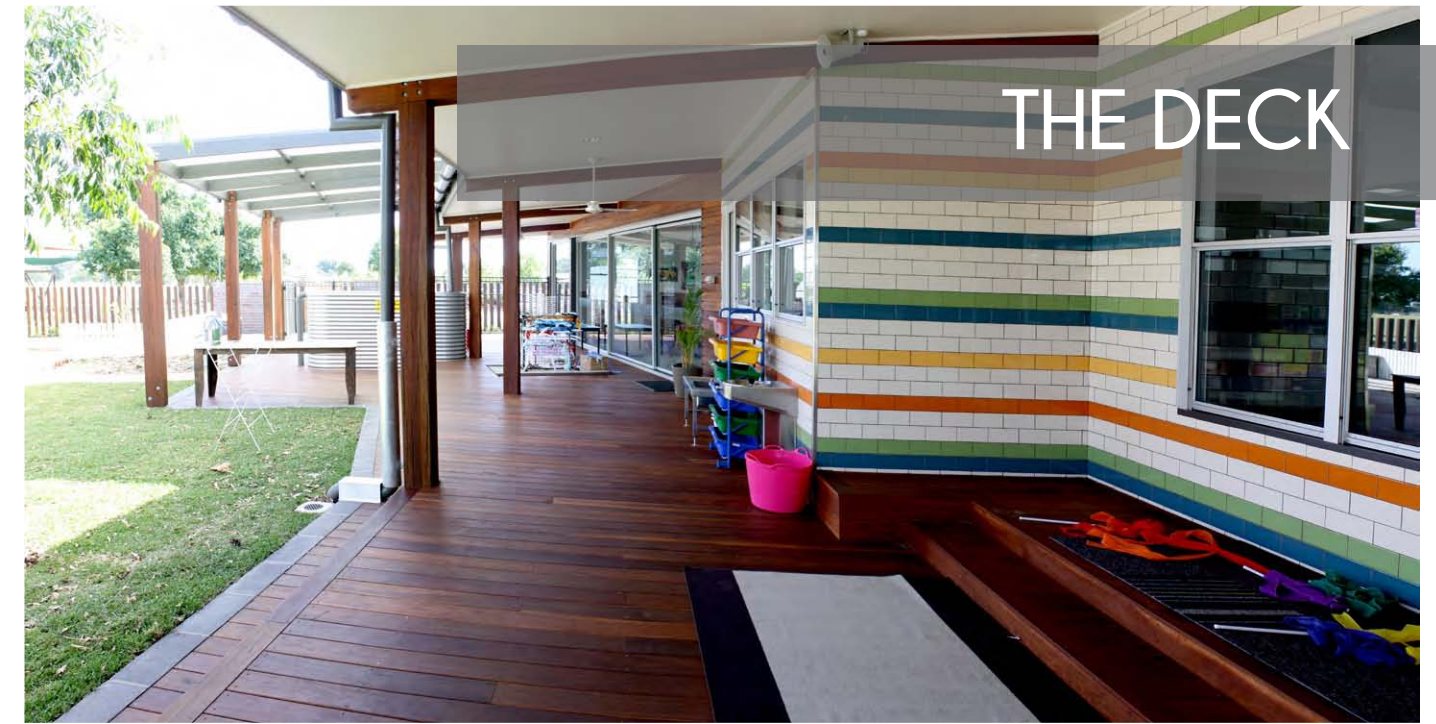
# IMAGINATIVE PLAY











LARGE GLASS SLIDING DOORS OPEN UP ONTO A GENEROUS DECK MADE OF RECYCLED TIMBER. THE DECK PROVIDES A COVERED CONNECTION BETWEEN INDOORS & OUTDOORS.



# THE TEAM

## rachel towill [architect/director]

Rachel Towill has worked in the industry for 15 years with degrees in both Architecture & Interior Design. Originally from the ACT, Rachel specialised in environmental sustainable design over a range of award winning projects from scientific to residential projects.

As a director of the practice Rachel ensures she is an integral part of each project phase to enable the successful delivery of each project.

## louise booth [architect]

Louise Booth is a registered architect who has had over 7 years of industry experience. Graduating in 2007, Louise received the Australian Institute of Architect's Graduation Prize for her final design.

Louise has gained experience on a range of projects ranging from high end residential, hospitality fitouts to public infrastructure and sustainable master planning for regional communities. Louise has been working for Towill Design Group since the beginning of 2010.