Creating safe facilities

A guide to building and renovating education and care services

October 2021

Education Standards Board
early childhood to senior schooling

Government of South Australia

Contents

Introduction

This guide provides important information when building a new education and care service or undertaking significant renovations. In particular, it covers legally required safety aspects at a service as well as other good-practice considerations.

It is designed for:

- developers
- builders
- providers of education and care services
- architects
- council planning professionals.

The main part of this guide is relevant for both a new build and a significant renovation. The final part of the document, 'Renovation', refers particularly to renovating an already approved education and care service.

Gaining council approval does not necessarily mean your proposal will meet the requirements stated in the National Quality Framework (NQF), which are needed for approval of the service. The NQF provides a national approach to regulation, assessment and quality improvement for early childhood education and care across Australia.

This guide provides information to ensure that, once built, the development meets the physical requirements for the subsequent service approval application. It references relevant sections from the Education and Care Service National Regulations 2011 specific to the physical environment.

The Education Standards Board is the South Australian regulatory authority responsible for assessing the suitability of education and care services.

Note: This guide is not relevant for family day-care services.

Initial matters to consider

The location

You will need to consider the suitability of a location for a new education and care service. Each local government area has its own planning controls and approval processes.

There are many factors to consider. These include:

- suitable internal and external spaces
- access to a natural environment, including trees and a variety of play experiences
- landscaping (which should benefit children and nearby neighbours)
- privacy and security for children (visual and auditory)
- car parking
- shade.

It's also important to consider whether the location is compatible with nearby buildings. Being near schools, parks, employment areas, shops, and/or public transport is usually an asset. However, being near gambling facilities, noisy industry or agriculture that involves spraying would not be suitable.

New or existing building?

There are different options for establishing a new education and care service. One is building a new purpose-built premises. Another is refurbishing an existing building to convert it into an education and care service.

With either option, the building must meet certain requirements of the National Construction Code, including the Building Code of Australia (BCA) for a class 9b building. It must also meet requirements of the *Education and Care Services National Law* (South Australia) (the National Law) and the *Education and Care Services National Regulations 2011* (the National Regulations).

Designing and building a new centre-based education and care premises can avoid the potential difficulties and constraints of working with existing buildings.

Concept design

You may wish to show us a concept or preliminary plan before seeking council approval. This process is useful for identifying potential issues in the development stage and can save time and money later.

Facilities and physical environment

Information required with an application for service approval includes:

- site and floor plans prepared by a building practitioner showing the location of all buildings (including entries and exits), structures, outdoor play areas, shaded areas and boundary fencing, gates and elevation plans of the premises
- detailed floor plan indicating all encumbrances and facilities provided, such as toilet and handwashing facilities, nappy-changing bench and bath, food-preparation areas, including details of how the rooms will be used
- calculations carried out by a building practitioner of the unencumbered indoor and outdoor space
- plans of the outdoor learning environment specifying the landscaping and natural environments that will be provided.

In addition, a Certificate of Occupancy must be submitted to us. In this, the building certifier needs to sign off that the premises complies with 9b of the Building Code. In particular, it must meet

Initial matters to consider

the requirements for:

- toilets
- handwashing
- nappy-change and bath facilities
- natural light and window requirements.

The relationship of rooms and the interaction between the indoor and outdoor environments is an important factor in the design. The design of the building should:

- facilitate effective supervision
- allow children to easily move between spaces
- provide convenient access to toilet and handwashing facilities.

The National Quality Standard (NQS) outlines characteristics of service facilities.

The pre-approval inspection

Before service approval is granted, we will conduct a pre-approval visit to the service premises to assess whether it is suitable and safe for the education and care of children. This visit is to confirm that the approved provider has taken every reasonable precaution to protect children being educated and cared for by the service from any harm and hazard likely to cause injury.

At this stage of the approval process, the education and care service should be ready to commence operation. All building works, fit-out and development of outdoor play spaces should be finalised before the pre-approval visit.

Applying the National Regulations and other considerations

Internal physical environment

Regulations

Administrative space

Regulation 111

There must be adequate areas provided for administration, including private meetings with families and staff.

Emergency and evacuation procedures

Regulations 97 and 168

Emergency evacuation procedures, including instructions about what must be done in the event of an emergency and emergency evacuation floor plans, must be clear and concise and displayed near each exit in a prominent position to show the specific location and emergency evacuation routes to be taken to the nominated assembly point.

You must have conducted a risk assessment in preparing the evacuation plan.

Equipment must be included at the service for safe evacuation of children in an emergency. This includes emergency cots for children who do not walk. Keep emergency routes clear of items.

If your service is in a bushfire risk area, you need specific plans for a bushfire emergency and sufficient resources to deal with this. You should develop your plan with relevant authorities.

If your service is located in a multi-storey building, evacuation plans can be more complex. Consider the most appropriate location to provide care for babies or children with mobility issues.

Laundry and hygiene facilities

Regulation 106

There must be a laundry or access to laundry facilities to deal with soiled clothing, nappies, towels, etc. that need cleaning or disposal. An onsite laundry must be located and cleaned in a way that will not be harmful to children. The laundry cannot be included as unencumbered play space for children.

An external laundry service may be used instead. However, services without onsite laundries still need to have spaces and methods for dealing safely and hygienically with soiled items.

Premises designed to facilitate supervision

Regulation 115

The premises must be designed and maintained in a way that facilitates supervision. For example, unobstructed viewing windows are to be provided to children's toilet areas, nappy-change areas and sleep rooms to assist staff with effective supervision. Avoid creating hidden corners where supervision would be difficult.

Space requirements: indoor space

Regulation 107

For each child being educated and cared for by the service, there must be at least 3.25 m^2 of unencumbered indoor space.

When calculating unencumbered indoor space, the following areas are excluded:

- passageways or thoroughfares (including door swings)
- toilet and hygiene facilities
- nappy-changing areas or areas for preparing bottles

Applying the National Regulations and other considerations

- areas permanently set aside for the use or storage of cots
- areas permanently set aside for storage
- areas or rooms for staff or administration
- other spaces that are not suitable for children, e.g. laundry.

The area of a kitchen is also to be excluded unless the kitchen is primarily to be used by children as part of the educational program of the service. As prescribed in the Building Code, the kitchen facilities must be protected by a door or gate with childproof latches to prevent unsupervised access to the facilities by children younger than five.

Passageways or thoroughfare areas, including door swings, are not counted as play spaces. They are entry/exit spaces: to allow for the movement of adults or children. In these circumstances, 1 m^2 for each single door opening (and 2 m^2 for double doors) is deducted from the total space that can be counted for capacity purposes. This applies to all thoroughfares into and between children's rooms regardless of where the thoroughfare is located or how doors are configured.

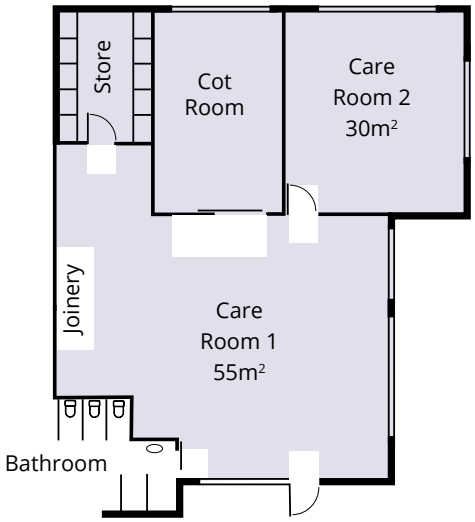
Where the thoroughfare is between children's activity areas, 1 m^2 is deducted from both activity areas because the single door impedes use of both areas, resulting in a deduction of 2 m^2. Also, if the door is a double door, then 2 m^2 is deducted from both areas.

Similarly 1 m^2 or 2 m^2 deductions also apply to thoroughfare openings, gates and doors located in the outdoor space. Additionally, other encumbrances (such as built-in cupboards, sinks, lockers, etc.) are also deducted from the total space to determine the unencumbered space available to children.

This information must be provided by the building practitioner and detailed in a schedule used to calculate the maximum number of children that can be educated and cared for at the service premises.

If you want to include a verandah as indoor space, you need written approval from us. Under the current legislation, an approved provider can apply to have a verandah area included when calculating the area of indoor space. Once it is counted as indoor space, it cannot also be counted as outdoor space. Please refer to our fact sheet called *Verandah areas counted as indoor space.*

Diagram 1: Calculating indoor space



Care Room 1
55 m^2
Doorways: 6 m^2
Joinery: 2 m^2
Total unencumbered space: 47 m^2

Care Room 2
30 m^2
Doorway: 1 m^2
Total unencumbered space: 29 m^2

Total unencumbered space: 76 m^2

Applying the National Regulations and other considerations

Toilet and hygiene facilities and nappy change facilities

Regulations 109 & 112

Adequate developmentally and age-appropriate toilets must be provided. A minimum of one toilet and handwashing facility per 15 children is required. Ideally, toilets will be directly accessible from inside and outside play spaces by children.

Consideration should be given to maintaining the dignity and rights of children. This can be done by solid walls in children's toilet cubicles and privacy from neighbours' windows. Consider including doors on toilet cubicles for older children. However, there need to be windows into the toileting area for educators to supervise the children.

Soap dispensers and hygienic hand-drying facilities must be provided in children's toilet areas. Foaming-type dispensers are recommended as their use presents less of a slip hazard than other liquid dispensers, which often drip.

Hygienic nappy-changing facilities must be provided. If a service accommodates children younger than three years, a properly constructed nappy-change bench is required with a bench-type baby bath and separate adult handwashing facilities located within 1 m of the nappy-changing bench.

Nappy-changing facilities must comply with the Building Code. The bench must not be less than 0.9 m^2 in area, and at a height of not less than 850 mm, but not more than 900 mm above the finished floor level. The bench must have a space not less than 800 mm high, 500 mm wide and 800 mm deep for the storage of steps. It must be positioned to allow a staff member changing a nappy to see the play areas at all times.

In addition, there needs to be one shower, bath or shower–bath combination in each service.

See also '*Premises designed to facilitate supervision*' and '*Stairs and stairways*'.

Ventilation and natural light

Regulation 110

Education and care services must be well ventilated, have natural light and meet minimum ceiling height requirements. Refer to the Building Code. They must also be maintained at a suitable temperature. It is best practice for sleep spaces to have natural ventilation and natural light.

Other considerations

Blind cords

Blind cords pose a strangulation hazard and must be made inaccessible to children at all times. Cords should be secured in a position that is out of children's reach, which ordinarily is at approximately 1500 mm above floor level, but may be higher if adjacent to cots or other play equipment.

Bottle-preparation spaces

You need to consider where you will prepare bottles. It is best practice to have bottle-preparation spaces close to children's play spaces so children can still be effectively supervised. Kitchenettes can work well for this purpose and should be considered as part of the initial design. Ensure that any bottle-warming resources do not pose a risk to children, i.e. burns from hot water, and are inaccessible to children at all times.

Doors and finger guards

Education Standards Board policy

Severe injuries to children's fingers can occur in education and care services. This can include amputations and crushing injuries. These can be prevented by fitting finger guards to the hinge edges of doors that may be accessed by children. Finger guards are required on the hinged side of the door/gate and may also be required on the unhinged side depending on the risk to children.

Door finger guards must be fitted on new buildings and when undertaking renovations, as per this policy.

Common rooms where door finger guards are applicable include doors to:

- children's activity rooms
- toilet areas
- front entrances
- offices or store rooms
- staff preparation rooms
- laundries
- staff rooms.

This also includes children's toilet cubicle doors, doors or gates to kitchens and reception areas. In some cases these doors may lead directly from children's activity rooms or they may lead from corridors or passageways.

An alternative hinge arrangement can be used on children's toilet doors, creating a larger gap to prevent fingers being caught on the hinge side.

Doors that children may access must be self-closing, adjusted to a slow close using a cushioning device. This allows children time to react.

Sliding doors should be fitted with stoppers that prevent the door being shut on a hand. They should be able to be secured in an open position and fitted with devices that prevent crushing of fingers.

Room dividers, such as bi-fold doors or foldable walls, should be effectively secured for adult operation only.

Applying the National Regulations and other considerations

For doors located in high-traffic areas for children, it is recommended the doors are able to be secured in an open position, when required. For example internal and external toilet doors and doors leading from children's activity rooms to outside play spaces. The recommended securing position is preferably out of children's reach, e.g. a high cabin hook located at 1500 mm may be used.

Door handles are to be fitted at approximately 1500 mm from the finished floor level to doors leading from corridor areas to children's activity rooms and to areas not to be accessed by children. For example, doors leading to:

- offices
- staff rooms
- storerooms
- kitchens
- staff preparation rooms
- staff toilets (except disabled)
- laundries
- front entrance doors.

For high-traffic areas, in particular to toilet and handwashing areas and to outside play spaces, door handles should be located at children's height to:

- provide easy access
- avoid reliance on adult assistance
- foster children's independence with toileting and handwashing.

Glazing

As in the Building Code, any glazing less than 1 m above floor height must be of safety glass standard in all areas accessible to children. For existing glazing, a qualified glazier may apply an approved film to achieve the same purpose.

Hot water

To ensure children's safety, hot water delivered in areas accessible to children must be tempered to not exceed 45°C, with a recommended setting at

approximately 40–42°C. For example, hand-wash basins, bath taps, sinks, troughs and showers. See also 'Bottle-preparation spaces'.

Stairs and stairways

Stairs to nappy-change benches must be secured in a manner that is not accessible by children. The stair treads are to be non-slip. Hand rails should be provided for children where possible, to assist with children's access. The Building Code specifies appropriate stair dimensions. See also 'Toilets and hygiene facilities and nappy change facilities'.

Additionally, stairways should be fitted with a childproof gate to prevent free access by children to upper levels.

It is recommended that stairs to nappy-change facilities are able to be secured in the open and closed position to ensure the safety of children.

Storage areas and joinery

Storage and joinery are needed for the many things required to be stored at an education and care service. We recommend per child:

- external: minimum of 0.3 m^3 of external storage space
- internal: minimum of 0.2 m^3 of internal storage space.

Storage areas cannot be included when calculating the indoor space.

Applying the National Regulations and other considerations

Outdoor physical environment

Regulations

Fencing

Regulation 104

Fences and gates must be of a height and design that prevent children of preschool age or under from going under, over or through. It is important to ensure effective fence heights are maintained at all times by not locating objects or structures close by. A minimum 1.2 m clearance should be provided. Any gaps in fences or gates are not to exceed 100 mm, including gaps under or adjacent to structures or between vertical bars.

Boundary fences need to be at least 1.8 m high. They must be constructed so that children will not be able to climb over them. This means they should not include a horizontal rail that might enable climbing. See the Kidsafe SA information sheet: *Fencing playspaces.*

Self-closing and self-latching mechanisms on all perimeter gates should also be operating effectively. This can be tested by opening the gate to a variety of positions, such as approximately 25 mm open, half open and fully open positions. In all circumstances, upon release, the gate should subsequently close and latch properly.

If kept locked, emergency access gates must have a key readily available and accessible to all staff for use in the event of an emergency.

Outdoor space: natural environment

Regulation 113

Children must have access to natural environments. There are great benefits for children being able to engage in free play in a natural environment.

We also recognise the value to children of exploring and experiencing natural environments and have a policy on this: *Outdoor play areas in education and care services.*

Kidsafe NSW and ACECQA both publish information sheets on the value of natural play spaces and safety considerations.

Outdoor space: shade

Regulation 114

Adequate shade must be provided in all children's outdoor play areas. This can be achieved through the use of shade structures, verandahs and plantings, such as trees and large shrubs.

You may find it useful to conduct a shade audit. Information on this is available on the SunSmart website.

Approved providers must also ensure they take every reasonable precaution to protect children from harm and hazard. This is covered in s. 167 of the *Education and Care Services National Law (South Australia)*. Arborists may be able to provide specialised guidance on tree safety management.

Premises designed to facilitate supervision

Regulation 115

The design and configuration of the outdoor play area should ensure that children can be actively supervised at all times. Children should not have free access to areas behind structures, such as storage sheds, cubby houses and water tanks.

Space requirements: outdoor space

Regulation 108

For each child, there must be at least 7 m^2 of unencumbered outdoor space. When calculating unencumbered outdoor space the following areas

are excluded, any:

- pathway or thoroughfare, except where used by children as part of the education and care program
- car parking area
- storage shed or other storage area
- other space that is not suitable for children.

Similar to the calculation of indoor play space, either 1 m^2 or 2 m^2 is deducted per single or double thoroughfare opening to determine the total unencumbered play space. For example gates, doors leading from indoor areas and storage sheds, etc. are considered as encumbrances.

Dense hedging and plantings should not be included in space calculations if it's not accessible as play space. Fixed play equipment added in the future may affect outdoor space.

Other considerations

Carparks and double gates for vehicle access

Carparking areas need to ensure the safety of all visitors to the site. A safe environment for pedestrians is essential.

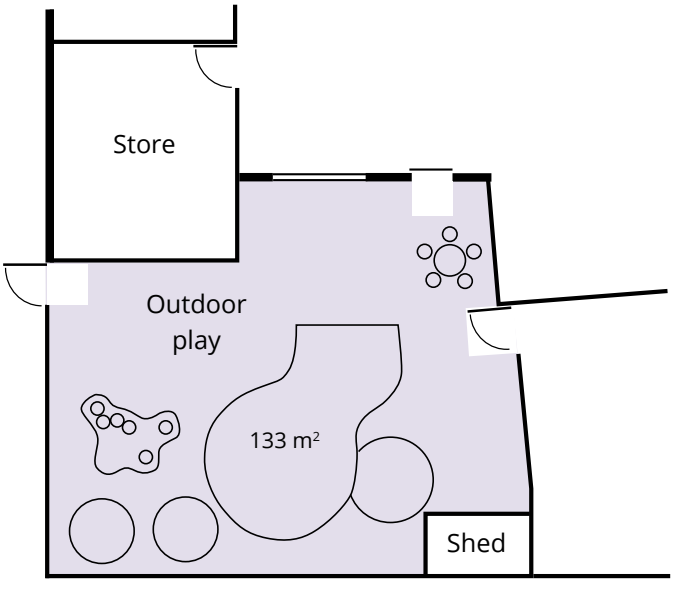
Where carparks are near main entrances, a suitably sized fenced holding area is recommended with self-closing, self-latching mechanisms fitted to gates.

If a service has a double gate to allow for vehicle access, the double gate must be effectively secured at all times children are in attendance—with no gaps greater than 100 mm.

Children under two and small objects

Children under two should not have access to small objects in outdoor play spaces (of a size that presents a choking hazard). This includes mulch, bark chips and stones. See our policies on safety in children's environments and *outdoor play areas in education and care services* for more information.

Diagram 2: Calculating outdoor space



Outdoor Play Area
133 m^2
Doorways: 3 m^2
Shed: 2 m^2
Total unencumbered space: 128 m^2

Applying the National Regulations and other considerations

Kidsafe and ACECQA both publish information sheets on the value of outside play spaces and safety considerations. The ACECQA information sheet on babies and outdoor play recommends that anything smaller than a D-size battery is a choking risk.

Hot-water services and air-conditioning units

Hot-water services and air-conditioning units are to be inaccessible to children at all times.

Sharp corners, edges and rocks

Sharp corners and sharp edges on rocks and timbers must be made well rounded and smooth, e.g. sharp corners or edges on garden beds and borders, decking and boardwalks, balancing beams and sandpits.

Timbers on structures, posts, equipment and garden beds may require sanding to make them smooth. Otherwise they may be rough and likely to contain splinters. Timbers used in the outside play areas are to be certified safe and free from any copper chrome arsenate (CCA) products.

Any large rocks that may be unstable are to be secured. Protruding small branches with sharp ends are to be above children's head height only.

Soil testing

As part of the service approval application, you will need to conduct soil testing or provide a statement that, to the best of your knowledge, the site does not indicate it is likely to be contaminated in a way that poses an unacceptable risk to children.

In Australia, there is a national guidance document for the assessment of site contamination called the National Environment Protection (Assessment of Site Contamination) Measure 1999. It outlines the process for the assessment of site contamination.

Further information and advice about conducting soil assessments can be obtained from the Environment Protection Authority (EPA).

Stormwater grates/drains

The diameter of grate holes of stormwater drainage should not be between 5–25 mm, as they could trap a child's finger. See *Entrapment* information sheet by Kidsafe SA.

Surfaces under play equipment

A suitable impact-absorbing surface must be provided in the impact (fall-zone) area where free height of fall is 600 mm or greater to meet current Australian standards. For example if wood chips are used, a minimum depth of 300 mm is to be maintained at all times (installed at 400 mm).

A suitable impact-absorbing surface must also be provided for fall heights less than 600 mm where equipment causes a forced movement on the body of the user, e.g. swings, slides and rocking equipment.

An appropriate fall space clearance is also required. To meet current Australian standards, the impact area clearances provided around play equipment require a minimum impact zone of 1.5 m. For example a fall height of 600 mm requires a minimum impact-attenuating zone of 1.5 m. This can increase proportionally as the free height of fall height increases, noting that the maximum fall height for an education and care service is 1.8 m. For such a height, the fall zone area must be a minimum of 1.7 m. Kidsafe SA has a useful information sheet called *Impact areas* for further guidance.

The maximum free height of fall for moveable play equipment is 1.5m. As per our policy, woodchip softfall in outdoor play areas for children under two years of age must not be used, as this is a

potential choking hazard. (See also 'Children under two and small objects'.)

If a rubber impact-attenuating surface is used, attention must be given to the temperature of the surface on hot days. This product absorbs heat readily and can cause burns to children. It also needs to be maintained regularly, in line with manufacturer's recommendations. A simple test is for an educator to hold their hand on the surface. If they can do so comfortably for five seconds, it is fine.

Seek guidance from Kidsafe SA or a qualified landscape designer to meet the current Australian standards for playground safety.

Swings and fixed play structures

Swings and fixed play structures must be suitable for the ages of children, meet current Australian standards and be installed strictly in accordance with the manufacturer's instructions.

Renovation

Renovation of education and care services may affect the approved capacity of the service. There are also some special provisions in the law about renovations at services approved before 1 January 2012.

Renovating an approved service premises

As the approved provider, you are required to notify the Education Standards Board if a renovation is planned for the service premises.

You are required to submit a *Notification of change to information about an approved service (SA12)*. This outlines proposed changes to the centre. Similarly, you need to submit a current floor and site plan, indicating all details together with building practitioner calculations of the unencumbered indoor and outdoor space available.

If a renovation is linked to an amendment to the maximum number of children that can be educated and cared for at a service, you are also required to submit an *Application for amendment of service approval (SA03)* and include a copy of the current floor and site plan. This should indicate all details, along with building practitioner calculations of the unencumbered indoor and outdoor space available for children's use.

If you are intending to renovate your service, we recommend you contact us to discuss your proposal and any implications it may have. You could provide a preliminary plan so we can discuss the design and suitability of the renovation before formal plans are prepared. This can help identify issues before plans are submitted for council approval or any building work starts.

What is a renovation?

The National Regulations define *renovate* as either:

- construction, demolition, removal or relocation of a building or other fixed structure (or part of a building or other fixed structure)
- carrying out structural alterations on a building or other fixed structure.

In addition to any requirements under the National Regulations, building work classed as development requires development approval, generally obtained from local government (council).

Renovate relates to the whole education and care service premises. Any construction, demolition, removal or relocation of all or part of a building, or other fixed structure, on the service premises is captured in the definition of renovate.

Fixed means attached to the ground, or to another building or structure, on the premises.

A renovation also includes structural alterations to a building or other fixed structure. This means work that changes or affects the fabric of the structure of a building or other fixed structure.

Here are some examples of a renovation:

- the demolition of a storage shed and construction of a larger storage shed
- construction of a new stand-alone building or shed
- the construction or demolition of a fixed verandah
- replacement of an existing verandah (if larger or substantially different to the existing one)

Renovation

- removal or installation of a wall in a building
- replacing a window in a wall of a building with a door.

What is not considered a renovation?

Here are some examples of what is not considered a renovation:

Repair, maintenance or replacement of equipment

- Replacing paving or concrete paths or impact-absorbing surfaces
- Removing, replacing or erecting fencing
- Replacing internal flooring and floor coverings
- Replacing structures that have deteriorated, such as an existing verandah or pergola (if replaced with one that is similar or if the main reason is to increase shade)

Work related to health and safety issues and identified hazards

- Removal of equipment due to corrosion or deterioration
- Replacing shade structures or relocating shade structures to be more effective
- Rectifying drainage issues

Improving the outdoor environment to incorporate or expand the natural environment

- Playground design and upgrade
- Addition of moss rocks or dry creek beds
- Addition of timber decking

Work that increases energy sustainability of premises

- Installation of solar panels without affecting the structure of the roof

Replacement or refurbishment of a kitchen, bathroom or staff area will not necessarily mean that maximum capacity will need to be recalculated. You should discuss your proposal with an authorised officer from the Education Standards Board before the renovation work begins.

Useful resources

- ACECQA
- Education Standards Board website
- Education Standards Board Facebook page
- Kidsafe SA
- National Construction Code

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early childhood to senior schooling

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