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Guidelines for Best Practice in the Design of Childcare Facilities



These Guidelines offer practical information and guidance on best practice in the planning, design and adaptation of childcare facilities.

They are intended for use by childcare providers, architects, building contractors and all who are interested in the quality care of children and best practice in the design of childcare facilities. Have fun!

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National Children's
Nurseries Association

introduction

Greater awareness as to what constitutes good quality childcare has led to increasing recognition of the influence and contribution that the design and layout of premises play in the provision of quality care of children aged 0-14 years.

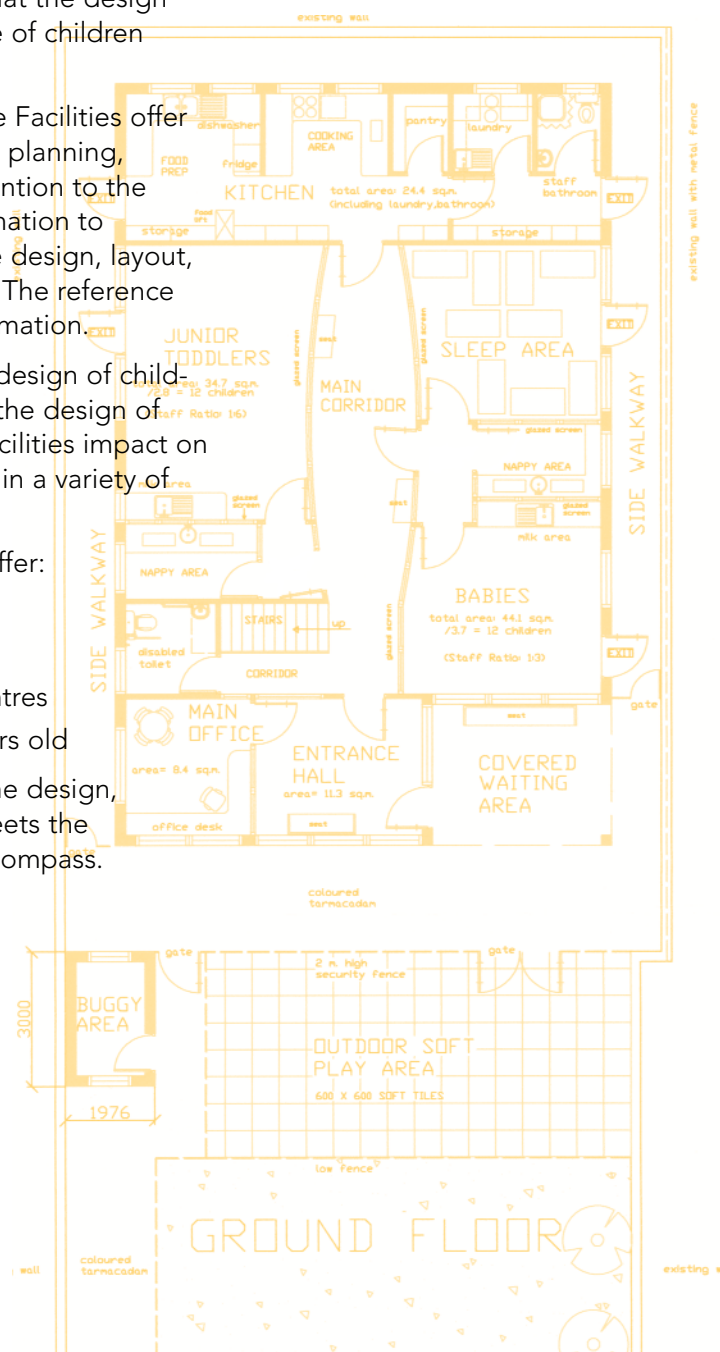
These Best Practice Guidelines for the Design of Childcare Facilities offer practical information and guidance on best practice in the planning, design and adaptation of childcare facilities and draw attention to the current statutory requirements. They aim to provide information to facilitate the reader to make informed decisions about the design, layout, alteration, renovation and extension of childcare facilities. The reference sections provide recommended resources for further information.

The Guidelines illustrate examples of best practice in the design of childcare facilities in Ireland, based on the understanding that the design of both the indoor and outdoor environments of childcare facilities impact on the quality of service offered to children and their parents in a variety of ways.

They are intended for use by providers of childcare who offer:

- full day-care (a period of over 3.5 hours)
- sessional care (a period of up to 3.5 hours)
- care for children for short periods of time in drop-in centres
- school-age services for children up to the age of 14 years old

The consultancy team intends that everyone involved in the design, planning, renovation or extension of childcare facilities meets the challenge of child centredness which these guidelines encompass.



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SPECIALIST SECTIONS:

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Awareness of children’s developmental stages and needs must be central to the design and planning of Childcare facilities - Babies (0-1 year), Toddlers (1-2 years), Pre-school (2-3 years).

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Environments for children from such a wide age range require special consideration - design and structure, sanitary arrangements, outdoor space.

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Essential legislation that needs to be considered
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Planning and Development Regulations, 2001
Building Control Act, 1990
Building Control Regulations 1997 and 2000
Building Regulations 1997 and 2000
Fire Services Act 1981
Childcare Act 1991. part 7
Childcare (Pre-school Services) SI No. 398 or 1996
Childcare (Pre-school Services) (Amendment) Regulations, 1997 SI No 268 of 1997 (Under review)

Help and Bibliography Section: 71

Provides resources and references for further reading and information.

service range

The range of childcare services varies from full day care, sessional, drop in centres and school age services. Regardless of which area of childcare you wish to cater for, or indeed if it is private, community or workplace, *all will have one thing in common*: The provision of a service that promotes the child's growth and development while at all times having due regard for his/her safety, health and well-being.

Full Day Care

Full day care means the total care of a child for a period of more than 3.5 hours. The age range can be from 3 months up to 6 years. Children in full day care will require nutritious meals, rest periods, and an educational care programme of well thought out activities. As children will spend most of their waking hours in full day care great care, and attention to detail, in association with the family, must prevail as this child's future depends on the life experiences he/she will meet.

In other areas, much detail has been given to the design and layout of the building. While this is important, we must not overlook the quality of the service provided and the calibre of staff employed.

All of the issues raised in each of the guidelines will impinge on full day care provision.

Sessional

A sessional pre-school service means the provision of a planned programme of activities for a period of up to 3.5 hours. The age range is usually 2 to 6 years.

As the children are in attendance for only part of the day, it may not be necessary to provide the same degree of facilities as a full day care service. The room layout for play activities may remain the same or vary according to number of children or the philosophy of the service. With the exception of the fully equipped kitchen, laundry room and separate sleep areas, all other design considerations and fixtures should be incorporated.

In certain circumstances, sessional services may offer cooked breakfast and lunch for the children. Where this service is offered, kitchens must comply with the standards set by the Area Health Board, and the Food Safety Authority of Ireland.

Drop In Centre

A drop-in centre is one that is provided in shopping centres, some training centres or similar establishment. It forms part of a customer/client service where children are cared for a short period of time while the parent avails of a service or event.

For the child's comfort, safety and enjoyment, it is vital that it is carefully planned.

Designated areas of play must be clearly defined. Quiet comfort zones





must offer the child peace and tranquillity in what can be a very noisy environment.

A well-designed, secure entrance/reception area will ensure that children are protected from intrusion, and the danger of wandering. Safe and child appropriate storage for personal items will offer comfort and security for both child and staff.

Child friendly toilets offering a combination of privacy and good supervision will make life easier for all concerned. Non-slip waterproof flooring, which is easily maintained, will ensure safety and good hygiene.

A counter area with sink and drinking water is essential to provide refreshments in what can be a very energetic area. Where an age restriction does not apply, there will be a requirement for a milk kitchen area for babies, nappy changing areas and sleep areas.



School-age Service

A school-age service will cater for children up to the age of 14 years. It is also referred to as an out of school or afterschool service.

School-age care is often provided in conjunction with sessional morning care. However great care needs to be taken here, as the needs of these two age groups are quite different. One service must not compromise the other. This combination of sessional morning pre-school services can only be implemented on the understanding that the sessional pre-school service closes when the school age children require full day care, i.e. mid-term breaks.

The additional design requirements of school age services are outlined in Specialist Section 2.



planning permission

This is a simple guideline to understanding planning. It is not a definitive legal interpretation of planning law. For more information you should consult your local planning authority.

Can I find out about local planning policies?

Before you even consider developing a site it is worthwhile getting to know the development policies and objectives of the planning authority in the local development plan. You can view the plan and discuss your project with the planning officer for your area by appointment.

When do I need planning permission?

If you want to develop any land or property you will require Planning Permission, unless the development is specifically exempted. By development we mean the carrying out of works such as building, demolition, alteration or the making of any material changes in use of the land or structure.

Where a service is carried on/in a protected structure, Planning Permission may be required for minor works or maintenance normally exempted and a determination should be sought from the Planning Authority on what works may or may not be carried out (see Guideline 9).

In addition to this, if you change the use of an existing residence or building to become a childcare facility, you will also need:

- Planning Permission
- Fire Safety Certificate (See Specialist Section 6: Legislation. Part 3)
- Commencement notice (See below)

What is exempted development?

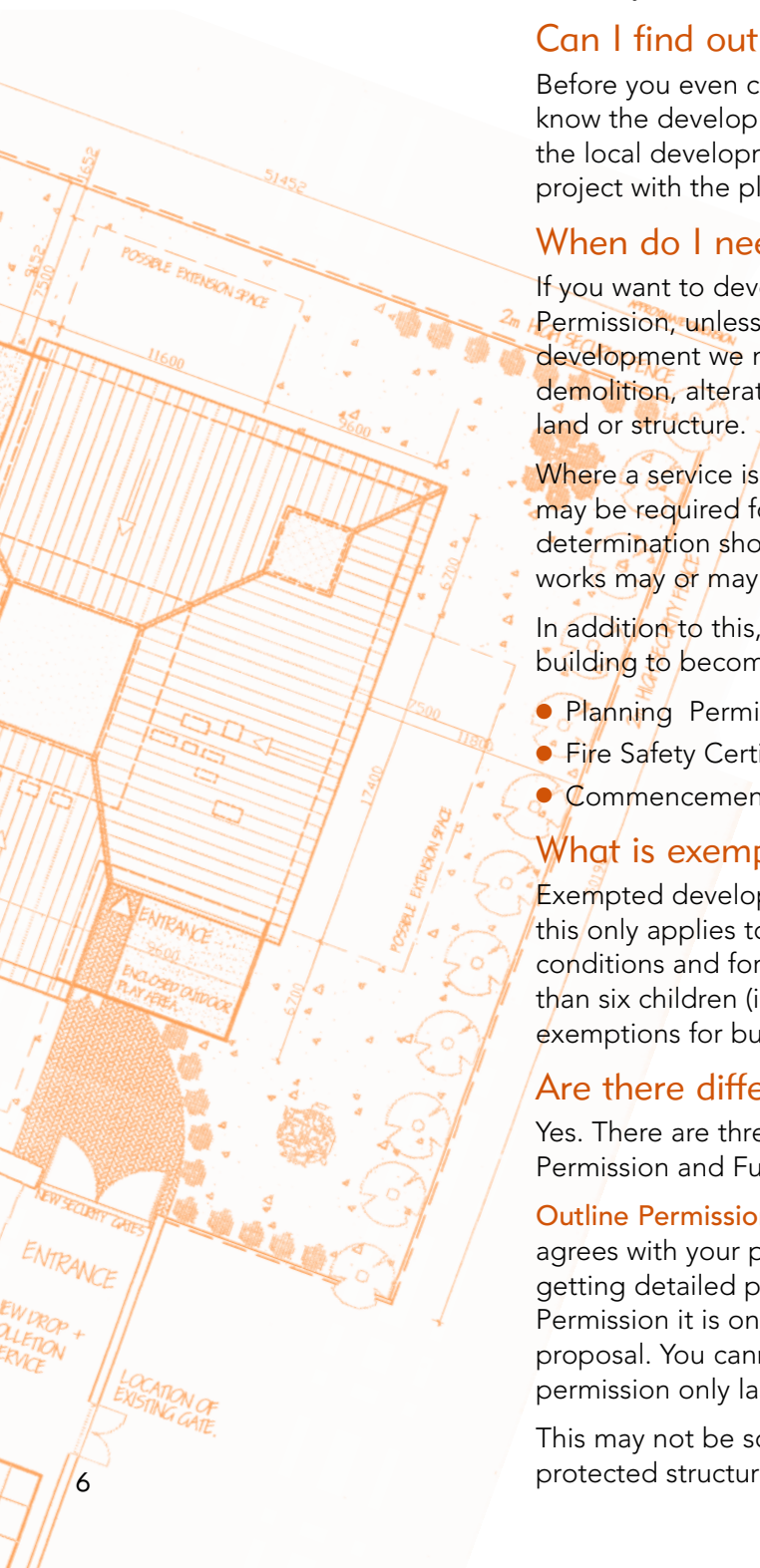
Exempted development is where Planning Permission is not required, but this only applies to minor domestic changes, of up to 40sq.m with conditions and for home-based childcare service catering for not more than six children (including the children of the minder). There are no exemptions for business premises.

Are there different types of permission?

Yes. There are three types: Outline Permission, followed by Grant of Permission and Full Permission.

Outline Permission is useful if you want to know if the planning authority agrees with your proposal in principle before you go to the expense of getting detailed plans. If the planning authorities grant you Outline Permission it is only an indication that they agree, in principle, with your proposal. You cannot commence work with Outline Permission and permission only lasts for 3 years.

This may not be sought for retention or continuance of use or for a protected structure.





Permission consequent on Grant of Outline Permission: If you have obtained Outline Permission you can now submit detailed drawings to get Grant of Permission before starting any work.

Permission: For this you need to submit detailed plans and all related particulars at the outset, without first applying for Outline Permission. Full permission may be granted with 'Conditions'. ('Conditions' might include connection to services and their costs, minor changes to original plans e.g. size of windows and boundary specifications.)

If the planning authorities grant you Permission: Provided there are no third party objections and that you agree with the planning permission conditions, then, once you have a fire safety certificate, commencement notice submitted and have a health and safety plan from the contractor, *building construction may begin immediately*. (The building must be completed within five years) (see Specialist Section 6: Legislation)

Retention Permission: Similar procedures to Permission but the site notice and newspaper notice must state retention and the planning fee is 3 times more than the standard fee to a maximum of €125,000.

Temporary Permission: This type of permission is very rare and should not be issued for a period of less than 5 years. It would only be granted once for any premises and, at the end of the period, a full approval or refusal would be granted. This type of permission should be avoided if possible¹.

How do I make a Planning application?

In making a planning application you will generally require the services of an architect and/or engineer. The following items will be required:

- A fully completed application form (These are available from the planning department from your local Authorities, who may also give you help and guidance)
- Include the nature of the facility, that is, full day care, sessional, number of children being catered for, proposed opening hours and nature of open space provided
- Planning application fee
- 1 copy of the newspaper (from approved list) showing the planning application notice (wording must be exactly the same as on the application form)
- 1 copy of site notice (notice must be erected on site at time of submission of planning application, for 5 weeks, and be highly visible. If the notice is damaged, it should be replaced immediately)
- 6 copies of the site location map
- 6 copies of the site layout plan showing the site location
- 6 copies of detailed drawings of plans, elevations and sections (except for Outline Permission)
- 6 copies of specifications detailing all materials that will be used in the



construction

- Note: 10 copies instead of 6 if relating to a protected structure
- The name and address of the person who prepared the plans
- All plans must indicate the north point other than floor plans;
- Details of car parking proposals must be shown in the plans;

Additional information, which must be supplied with your planning application for childcare facilities are:

- Provision for parking for staff and parents
- Provision for open play areas and proposed measures for management of these areas. Letters of support from neighbours, although not required, will make the planning process flow more smoothly

Applicants should consult with the Planning Department, Fire Officer, and the Pre-School and Environment Officers from the relevant Health Boards, for complete clarifications². It is important for the architect to consult with advisors from the relevant voluntary childcare organisations.

Applications should be submitted to the planning department in your local County Council Office. You may obtain information documents and forms here as well.

What are the planning fee requirements?

The current fee for Outline Planning Permission is 3/4 of relevant fee (*i.e. if Full Planning fee is €1000, cost will be €750*)

The current fee for the subsequent Permission is 1/4 of relevant fee

The current fee for Full Planning Permission is €3.30 per m²; (minimum charge €73, maximum planning fee €38,000 for standard application, €125,000 for retention)

The current fee for Fire Safety Certificate is €2.90 per m²; (minimum charge €125, maximum charge of €12,500)

The current fee for Retention is three times the full planning fee (see below)
Voluntary organisations may qualify for exemption from the fees.

Note:

- Additional fees are usually required in the conditions attached to your planning permission for connection of services (foul/surface and drinking water) to public mains, or the Planning Authorities may lay down any other Fee Conditions of Planning that they consider appropriate.
- Fees may vary depending on the local authorities but may be appealed;
- Planning fees do not include fees for architects, engineers, etc.

How long will it take to get planning permission?

Generally the planning authorities will deal with a planning application in **12 weeks** from the date of application to the final grant of permission.

Within the first **8 weeks** you will receive a Notification of Decision to either: Grant, Refuse or Seek Further Information. The minimum period for a decision is stipulated as 5 weeks. The final **4 weeks** is to allow for Appeals and Objections. However, the time period may vary, particularly if the authority requires further information, as is often the case.

What if my application is incomplete?

The planning authorities will not be able to process your application and will formally request further information. The statutory **8 weeks** period will begin again from the time you submit the missing information.

What happens when the planning authority accepts my application?

Your application will be placed on the planning register for public inspection. A council officer will usually want to inspect the development.

Can other people comment on my application?

Yes, the public can see and purchase a copy of your application and make within 5 weeks of the application written submission of observation to your development. The planning authorities when determining your application must consider these. apart from the applicant only those who have made observations during the planning process may object to An Bord Pleanala. Exceptionally an immediate neighbour affected by the planners conditions may object to An Bord Pleanala.

How will I know if my permission has been granted?

The decision to Grant Permission, with or without conditions, will be notified to you, and to anyone who commented on the application. You will receive after 8 weeks a notice of intention to Grant Permission. After a period of 4 weeks from this date, you may appeal to An Bord Pleanala. Under Planning Regulations 2001 once a planning application is validated additional information may not be sought. Where there is no appeal by any parties the planning authorities will formally give you the Full Grant of Permission. You must not commence work until you receive this notice. You must also not commence works until you receive a Fire Safety Certificate.

Commencement Notices

Before construction begins on site, the client, must give notice of their intention to commence construction, must submit a Commencement Notice. Construction may begin not earlier than 14 days and not later than 28 days from registration of notice.

Commencement notices are required for:

1. (a) The erection of a building
(b) The material alteration or extension of a building, and
(c) a material change of use of a building to which the Building Regulation 1997 and 2000 apply, other than exempted development

for the purpose of that Local Government (Planning and Development Act 2000).

2. Any other works for which Fire Safety Certificates are required under part 3 of the Building Control Regulations 1997 and 2000.

The notice may be obtained and submitted to the Building Control Department of the Planning Authorities with the appropriate fee.

What is the Appeal process?

All individuals, interested groups, have the right to object to any decision/condition in granting of planning permission. See above. For further details see Section 37 of the Planning Regulations. Every appeal must be made in writing and must be:

- sent by post to The Secretary, An Bord Pleanála
Floor 3, Block 6, Irish Life Centre, Lr. Abbey Street, Dublin 1.

Or

- Delivered by hand to an employee of the Bord at the Board's offices during office hours, 9.15am to 5.30pm on Monday to Friday.

How is the planning application decided?

The planning authorities take a number of matters into account including: proper planning and development of the area, appropriate land use (zoning), road safety, development density, location, their own development plan, submission and observations made by members of the public. It may not take non-planning issues into consideration, such as boundaries or other disputes or questions more properly resolved through legal means.

Can conditions be attached to my permission?

A planning permission may be subject to certain conditions, which will be listed on the decision. These may require changes to your proposal. You may be required to make a contribution to the local authority for services such as water and sewerage. The contributions vary from place to place. You must comply with all the conditions attached to your permission. You may, however, appeal these conditions to An Bord Pleanála.

How soon must I commence the development after receipt of Permission?

Your development must be completed within five years from the date of Grant of Permission. A longer period may be allowed/granted if the development is complex.

If planning permission expires and you apply for a new permission for the same development, the planning authority may refuse permission or attach different conditions.

Are there penalties for breaches of planning law?

Yes. It is an offence to undertake any work needing permission without the

permission. Planning authorities have power to stop unauthorised development and this may be a costly experience for the offender. You may be required to rectify any unauthorised works and pay whatever costs are involved.

Can I rectify a planning error?

Genuine mistakes can be made about the need for planning permission. If you undertake an unauthorised development you may apply for Retention of Existing Development. However, this approach should not be relied upon in order to avoid seeking planning permission, as you may not necessarily be granted permission for retention or you may be required to carry out costly modifications. Permission for retention does not automatically absolve you from prosecution if enforcement action has already been taken against you. If you are buying property, check that the building itself and any extensions or alterations to it have proper planning permission or are exempt from planning permission, since you, as the new owner, may be liable for enforcement action.

Conditions of Appointment and Scale of Fees for Architect's Services

The architect is a professional, trained not only to design buildings but also to advise on all matters related to building. The architect will act on behalf of the client in all matters set out or implied in his/her appointment, and take account of the client's budget.

The architect ideally should provide the client with a copy of his/her Professional Indemnity Insurance Policy before appointment. He/she should also outline in detail the services which are/are not included in the agreed fee.

The architect's fee may be charged as percentage fees, time charge fees or lump sum fees, and should be agreed in writing at the appointed time. The architect will require his/her fees in stage payments, depending on the works completed. In addition to the fees, the architect is usually reimbursed for all expenses properly incurred in connection with the appointment.

Are there any other requirements?

Yes, you will need the following:

- **Fire Safety Certificate:** The Fire Safety Certificate Guide may be obtained from the Fire Department or the Building Control Department. Fire Safety in Pre-Schools, 1999, is published by the Department of the Environment and Local Government.
- **Building Regulations:** The law governing the planning system is set out in the Local Government (Planning & Development) Acts, 1963 to 2000 and the Local Government (Planning & Development) Regulations, 1997 to 2001. The Planning Regulations 2001 revoke all Planning Acts 1963-1999. These may be purchased from the Government Publications Sales



Office, Sun Alliance House, Molesworth Street, Dublin 2. (These are continuously being updated).

- **Commencement Notice:** Building control department - local planning Authorities
- **Approval from Local Authorities Services:** Building control department - local Planning Authorities
- **ESB/Gas supply:** Local suppliers
- **Health Authority approval:** Local Planning Authorities

NOTE: The law governing the planning system is set out in the *Local Government (Planning & Development) Acts, 1963 to 2000* and the *Local Government (Planning & Development) Regulations, 1997 to 2001*. These may be purchased from the Government Publications Sales Office, Sun Alliance House, Molesworth Street, Dublin 2.

The *Fire Safety Certificate Guide* may be obtained from the Fire Department or the Building Control Department.

Fire Safety in Pre-Schools, 1999, is published by the Department of the Environment and Local Government.

Please note that the Planning and Building Regulation laws may be updated from time to time.

Checklist

- Identify a need
- Survey/research area
- Identify site or premises: check with Local Development Plan for zoned area use
- Appoint an architect
- Establish a brief
- Seek provisional opinion with local planning authorities for the area
- Plans viewed by Environmental Health Officer/Pre-School Officer
- Contact a National Voluntary Childcare Organisation for advice
- Contact County Childcare Committee Co-ordinator
- Quantity surveyor to estimate cost of planned building
- Planning permission (usually sought by architect)
- Lobby for local support
- Funding applications
- Seek tenders
- Hire contractor - should have signed contract, obtain Tax Clearance Certificate (C2)
- Liaise regularly with site manager and architect

site service size

This section provides relevant information on the selection of a site for the development of childcare facilities.

Site Assessment

When assessing a site careful consideration needs to be given to its overall feasibility. Check on adjoining land use, drainage, available services (i.e. water, sewage) parking, traffic and potential objections from neighbours.

The Location

The potential siting of a new development/ childcare facility within a community needs to take into account the demographic information available and information from the county childcare committee. This will give an indication of the childcare needs, the existing and projected population, housing and the commercial employment growth in the area. Even if there is no immediate demand for provision for children with special needs, all buildings must be wheelchair accessible.

In addition to these points, any potential site for a childcare facility should provide for possible future expansion for facilities for children aged 0-14.

The Site

The site must be able to accommodate the number of children projected in your business plan, and this should include the outdoor play area.

Take care to find out the future use of any adjoining lands or development. Your architect should be able to assist you in checking ground levels between adjoining properties in relation to connecting to local services (if available) and assessing what the local planning department would consider appropriate for the site. Other site checks include soil testing for contaminants, and determining the nature of the soil for foundations and loading. A rocky site could result in expensive construction costs. It is always worthwhile engaging a civil engineer to research this information at an early stage.

Engage the services of a solicitor to check on boundaries, fences, maps and easements to avoid disputes at a later stage.

Siting a childcare building near arterial or busy roads will require sound barriers, to reduce noise levels. Check with the local authority development plans with regard to the rules on 'set back building lines'. This would mean that a portion of the site cannot be built on.

Take care with the orientation of the site. Maximise the use of natural light and sunshine. The outdoor play area will require sunshine, shelter,



*note position of building
in the context of the site*

interesting shapes and views. Any natural positive features of the site will not only assist the aesthetics of the architecture but will create interest and excitement for all who use it.

The size of the site is a key factor of the development. Guidelines are set down with regard to indoor space requirement. However, at present there is no guideline in Ireland in relation to outdoor space. A minimum of 9m² per child is recommended based on the specific number of children for which space is intended to be used at any one time. This excludes car parking and the 'set back building line'.

The ideal site should be square or rectangle. A long narrow site restricts the width of the building and for this reason may necessitate erecting a two-storey structure. Single storey structures are the preferred option for ease of management and efficient evacuation if necessary. With a two-storey building, younger children must be accommodated at ground floor level allowing the older children who are able to climb to use the stairs.

An irregular shaped site with varying levels can produce an exciting structure with innovative designs, but it can be costly.

Services

For a new site, which has no services, you must investigate for a water supply via a sinking well. A septic tank must be provided and the Department of the Environment will require percolation test sites. A mechanical treatment unit must service all services from the new building, ('Biocycle' waste water (septic tank) treatment system), calculated to suit the occupation of the development.

For an existing building site, there may be sufficient services locally. Surface water and foul services will require careful assessment. These services will have to be connected to the existing public mains, for which there is a charge.

Parking and Traffic Flow

The local roads department will have an important say in the traffic flow to the childcare development. Parking areas must be provided for visitors and staff, with vehicular access for parents for short time parking to facilitate collection and delivery. The amount of car parking required will depend on the number of children catered for and staff employed.

Roads engineers will give consideration to the additional traffic generated by the facility. The design of the entrance and exit routes, in terms of safety for the public and nursery alike, is of key importance.

Estates

It is now recognised that commercial and domestic developments need to make provision for a childcare facility. Most planning authorities require at least one childcare facility for new housing areas, usually a minimum of one



facility per 75 homes³.

See following estimate cost of purpose building childcare facilities.

ESTIMATE COST OF PURPOSE BUILDING CHILDCARE FACILITY ON A GREENFIELD SITE BASED ON COST OF €1905 PER SQ. METRE (prepared by National Children's Nurseries Association, 2002)					
	17 Place	34 Place	51 Place	82 Place	122 Place
Clear Playspace:					
Baby Area	11 sq.mtrs	22 sq. mtrs	33 sq. mtrs	44 sq. mtrs	66 sq. mtrs
1-3 years	16 sq mtrs	32 sq. mtrs	48 sq. mtrs	50 sq. mtrs	134 sq. mtrs
3-5 years	19 sq. mtrs	38 sq mtrs	57 sq. mtrs	92 sq. mtrs	130 sq. mtrs
*Storage, 50% of playspace area	23 sq. mtrs	46 sq. mtrs	69 sq. mtrs	93 sq. mtrs	165 sq. mtrs
Sleep Room	12 sq. mtrs	24 sq. mtrs	36 sq. mtrs	60 sq. mtrs	96 sq. mtrs
Toilets & changing area	8 sq. mtrs	12 sq. mtrs	24 sq. mtrs	40 sq. mtrs	48 sq. mtrs
Manager's office	12 sq. mtrs	18 sq. mtrs	24 sq. mtrs	40 sq. mtrs	48 sq. mtrs
Staff Room	8 sq mtrs	12 sq. mtrs	20 sq. mtrs	24 sq. mtrs	30 sq. mtrs
Kitchen	16 sq. mtrs	16 sq. mtrs	32 sq. mtrs	50 sq. mtrs	64 sq. mtrs
Reception	6 sq. mtrs	10 sq. mtrs	14 sq. mtrs	20 sq. mtrs	28 sq. mtrs
Storage	6 sq. mtrs	9 sq. mtrs	18 sq. mtrs	24 sq. mtrs	36 sq. mtrs
Total sq. mtrs	137 sq. mtrs	239 sq. mtrs	375 sq. mtrs	537 sq. mtrs	845 sq. mtrs
Building Sub-total**	€260,985	€455,295	€714,374	€1,022,985	€1,609,725
Fit-out Sub-total***	€38,900	€77,710	€116,560	€187,400	€278,840
Total Costs	€299,885	€533,005	€830,935	€1,210,385	€1,888,565

* Fixture & fittings, shelving and other storage

** Building costs at €1,905 per sq mtr incl. of plumbing, wiring etc., but excludes site preparation and external site development

*** Fit-out costs at €2,290 per childcare place

Elements Which Affect Cost

The most common increases in costs are due to the following:

- Foundations or below ground works which can often not be fully known until exposed. Budgets are normally prepared on the basis of traditional strip foundations. Trial holes can be carried out at an early stage but this is no guarantee of full knowledge of ground conditions
- Non-competitive tendering
- High insurance premiums may apply where 24 hour site security is necessitated
- Necessity of expensive construction methods
- Specification of high quality materials or details
- Price variation clauses (PVC) in building contracts

-
- Inaccessibility of the site for plant and materials resulting in work by hand
 - Restrictions on carrying out the work or a phased access to the works
 - Client instructions during the course of construction

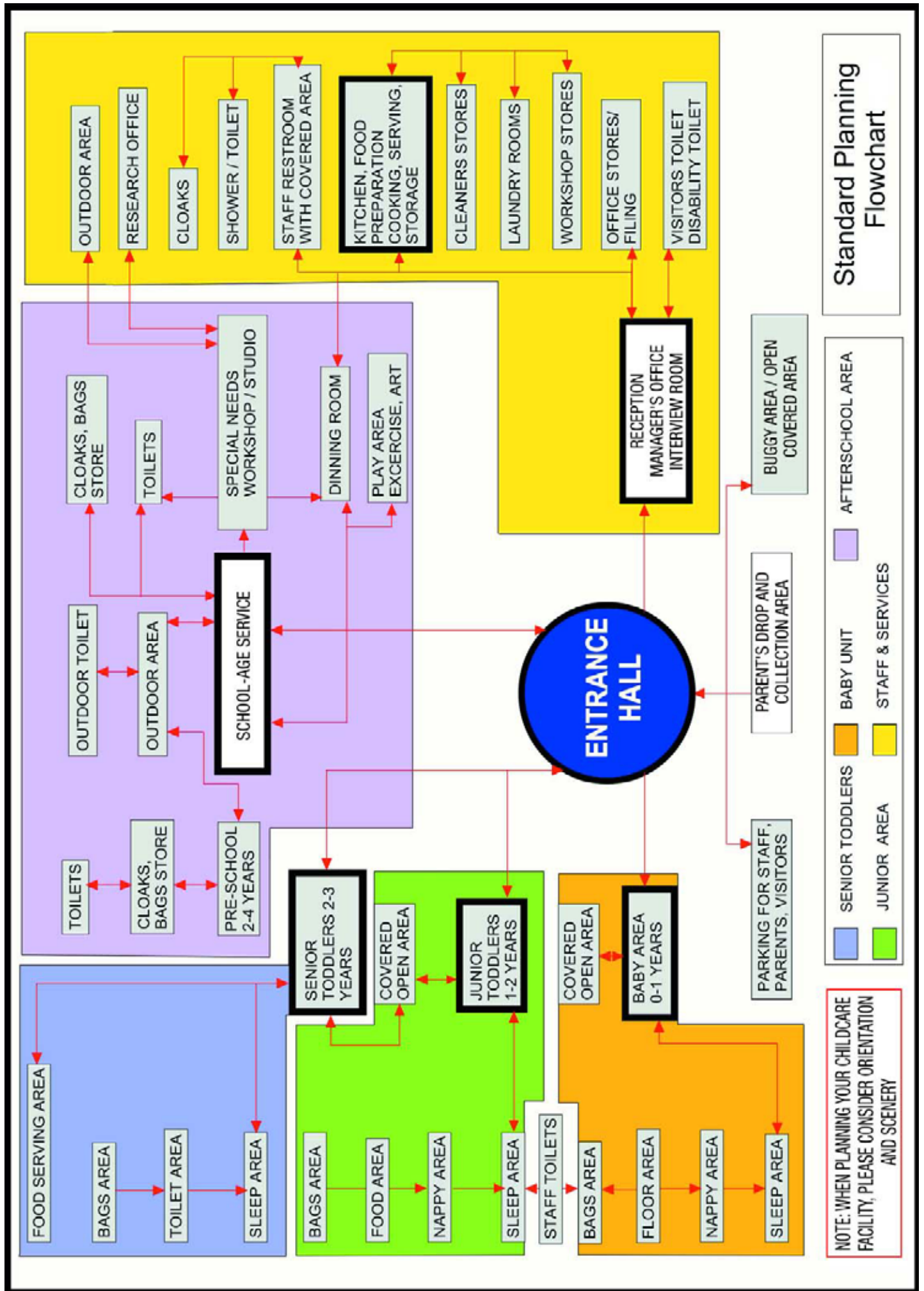
Professionals required to carry out this work:

- Auctioneer
- Architect
- Project Manager on larger developments
- Solicitor
- Quantity surveyor - budget assessment
- Planning officer
- Civil engineer - site assessment, services needs, structural recommendations

Checklist - Community Development Projects

This checklist will assist in the development of a childcare service within a community development project where the building combines a range of different functions.

- Establish a representative management structure
- Identify the needs of key stakeholders
- The projects' success will depend on a collaborative team effort
- Appoint a project leader
- Consultation with community groups and user groups is essential at design stage
- The following child safety and child development needs require priority at design stage
 - ▲ Separate secure accessible entrance
 - ▲ Access to secure outdoor play space
 - ▲ Ease of drop off and collection of children
 - ▲ Parking spaces designated to the childcare service close to the entrance
 - ▲ No shared toilet facilities
 - ▲ Childcare service situated on ground floor
 - ▲ Heating, plumbing and lighting are controlled separately from other parts of the building
 - ▲ If kitchen facilities are shared they should be managed through direct input from childcare management
 - ▲ Fire Safety requires safe fire assembly point for children
 - ▲ Dedicated convenient access to general assembly hall for use as indoor play facility
- Design features for childcare facilities should follow the guidelines as outlined in this publication



STANDARD CHILDCARE FACILITY PLANNING FLOWCHART

design layout



This guideline aims to outline the areas to be included in the design of a childcare facility. It includes advice and regulations within each area.

Great expectations abound when we hear of the words 'purpose built' or 'architecturally designed.' Our expectation is that there is one right design. So is it: a grandiose building, a homely atmosphere, large classrooms with big windows and lots of natural light, or a state of the art functional building? It can be all of these or none.

What is critical is that the building and its environment are suitably designed in such detail as to enhance the child's growth and development. It is vital for the designer to have a clear understanding of the way the building will be used, what age groups are being catered for and the needs of the children on a practical level. Architectural statements are of little value if the children and their carers do not have a clear understanding of the environment created.

The basic layout should have the following:

The Entrance

This is an important area for parents, children and staff. Therefore it should be bright and welcoming with adequate circulation space. On a practical level it needs to accommodate a buggy area, child coat storage space (if coat storage not available in the children's rooms), notice boards and public toilets. It needs to be sufficiently large to allow ease and safety of movement.

This will act as a waiting area, so seating will be required. If it is not feasible to have all of these areas inside the entrance, then consider extending the entrance to the outside. Buggies and additional seating can be accommodated in a covered outdoor area. Balancing ease of access and ensuring child safety is an important issue. The designer can introduce materials or colour themes to denote boundaries or level changes, in which case the building design itself now acts as the informer. The use of CCTV here will provide further inner security and help in keeping intruders out.

Once the practicalities are in place the entrance can be personalized and made welcoming by such things as photographs of the children or samples of their art work, the colour scheme etc.

Reception Area

The reception area should be near the entrance area, which should have enough space to accommodate meetings.

For small childcare units, it is important that the delivery and collection areas be well organised to ensure child safety.

Access for the Disabled

For the design of any facility, regulations and statutes must be consulted with regards to access for persons with disability. The building and all



note accessible entrance

facilities within must be available to all members of the general public, including disabled persons. (There are exemptions to this - see Part M of the Building Regulations).

The term 'disabled' may refer to ambulant disabled, wheelchair users, the elderly, the young, and the visually and hearing impaired⁴.

Parents' Room (recommended in full day care services)

The Parents' Room should be provided for private conversation, and this should include comfortable seating and tea/coffee facilities. In the absence of a parent room, a private or screened off area should be organised to facilitate breastfeeding.

Manager's Office (essential in full day care services)

Administration is an integral part of running a childcare service. Good storage, filing, and ease of retrieval are vital for the smooth running of the centre. The manager has overall responsibility for the running of the centre and therefore requires an area not just for record keeping, but for conducting meetings, interviews, meeting parents and generally dealing with the day to day activities.

Circulation Areas

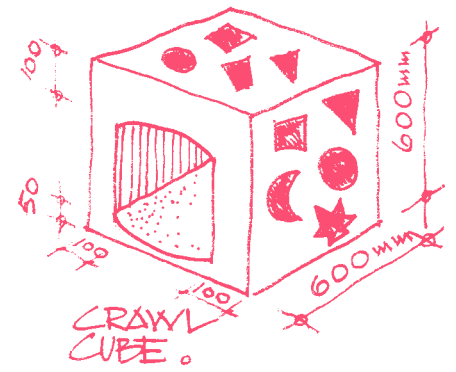
Circulation areas and corridors, whether inside or out, must be designed for the children to use with ease and safety and must cater for the disabled. Children need to see and understand the direction of an activity and how it is linked. Where corridors are used, it is worthwhile giving consideration to providing seating and/or small areas of play along the route. It is recommended that you avoid long corridors. This allows them to become more interesting circulation areas, for both child and staff.

Children's Rooms (see floor plans page 23)

Children require a whole range of different kinds of spaces to cater for their needs throughout the day. Each child should be able to identify with one particular room which affords him or her a sense of belonging. Play is seen as being vital for the healthy development of the child. The layout of the room must support the range of activities provided. It is important to allow children uninhibited access to areas which suit specific activities, such as a messy wet/paint area, or a quiet restful area to just sit and read or listen to a tape. If we consider that not all children will want to do the same thing at the same time we see the importance of creating spatial variations.

'Activity rooms for infants and toddlers should be designed in such a way that allow them to move freely but also take into





consideration their safety needs and is respectful of the needs of the caregiver^{1*}.

Successful architecture for pre-school children must include changes of space, shape, height, texture, colour and, most important, natural light and fresh air. The planning of the childcare facility is a key element and must incorporate different shapes or rooms for different activities. Include design concepts such as round rooms, semi-circular bay areas or other unusually shaped interior spaces. The interior vision must never end and should merge into various future stages of play and education.

Storage Space for Children's Personal Belongings

Storage space for children's personal belongings must be age and size appropriate and ideally located either within or adjacent to their activity area. Locating a parent notice board in this area would be good practice. Young children can be helped to recognise their storage area through the use of colour, photographs, or animal pictures. The storage areas must be secured to the wall and of a design that does not entice young children to climb.

Sleep Areas

The provision of areas for rest and sleep in children's centres is essential. The design of these areas should be influenced by current legislation and the individual needs of children. Children under the age of two years must be provided with sleep/rest areas away from the general play area.

At design and construction stage the key points for consideration are:

Sight and Sound Sleeping children need to be observed and heard by an adult. The design of sleep rooms needs to facilitate this through the use of vision panels in the dividing wall and/or through glass panels in the door.

Space The space requirement in a sleep room should be influenced by safety and comfort. The room needs to accommodate the number of cots required by the number of children using the adjacent play space. However, if the sleep room is designed to accommodate more than six cots it will not provide the quiet, calm atmosphere required by the children. The standard cot size is 114cm x 55cm. The space between or around each cot should have a minimum of 70cm circulation space on three sides if placed against a wall or 70cm on four sides if in a central floor space.

Storage Space The sleep room should have adequate space to accommodate the storage of extra cot mattresses and bed linen.

Ventilation The general guideline of three air changes per hour applies to sleep rooms.



Temperature The sleep room should be at a constant temperature of 16-18°C. A thermostatically controlled heating system is essential.

The challenges Careful consideration regarding the placing of doors, windows and radiators at design stage is vital. Cots should not be placed beside a door, window or radiator. Therefore adequate clear wall space is essential.

Infants Infants sleep area may be accommodated in the baby room. However, the overall space measurement of the baby room will then be 4.2 m² per child. The area for sleep should be in a section away from other activities. This area should have facilities to dim lights or block window light. This guideline should only be considered where the group size is no more than six babies.

Toilets

Children's Toilets and Nappy Changing

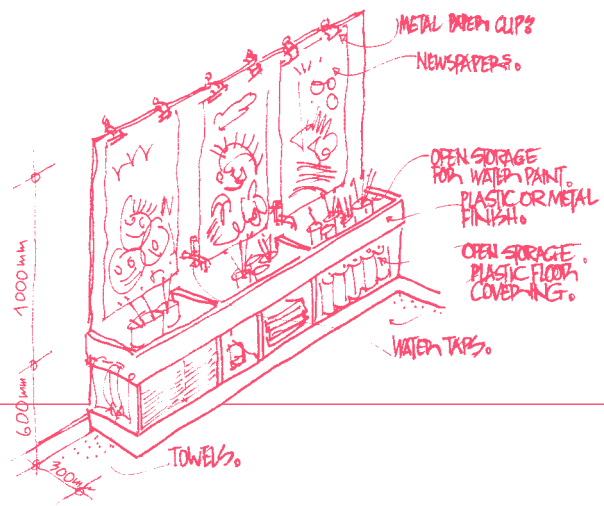
Ideally each unit should have its own toilet facility within easy access of the activity room. The idea of one or two central toilets is considered bad planning, from the point of view that the child would have to leave the activity area unsupervised. The children's toilet cubicles should be sufficient in size to allow a staff member to assist a child if necessary. The cubicle height should be sufficient to permit child privacy while allowing staff supervision. The wash hand basins must be at child level and the hot water thermostatically controlled with push-down taps or lever handles. It is good practice to have child-sized toilets suitable for children with disabilities. Toilets ideally should be located along external walls to facilitate ventilation and natural airflow. It is important that vision panels be put in place of solid walls in appropriate areas to ensure child safety and supervision. There should be a minimum of one toilet for every 10 toilet trained children. Vented lobbies are only required where toilets or nappy changing areas open on to where food is prepared or cooked.

Children at the toilet training stage of their development will need to have easy access to potties and child level toilets. For hygiene purposes a sluice sink will be a necessity in this toilet and appropriate flooring for spillage.

The nappy changing area needs to be located in an area that is separate from all other areas, but which allows clear vision for the staff and children. Hand washing facilities should be directly next to the nappy changing area, on the same worktop. The area must also include adequate ventilation and a minimum of 6-8 air changes per hour. It is preferable to have natural ventilation such as windows. It should be adequately heated to prevent the children from getting cold.

Access to toilets from external play areas should be considered.





Visitors' Toilets

Ideally public toilets need to be centrally located, the entrance area would seem to be a good location. Disabled toilets are often located here, and can double up as public toilets. Public toilets in a childcare facility should be in the region of 150cm x 200cm in size, to accommodate a parent trying to handle additional bags, toys etc.

Disabled toilets should cater for both wheelchair and ambulant users. It should have adequate manoeuvring space, free of obstructions. The overall recommended dimensions are 200cm x 150cm⁵.

Staff Toilets

Provision is already made for staff rest rooms. However, it is recommended that its location be away from the hub of child activity. Staff toilets ideally need to be located close to their working area. There is no reason why the staff toilet cannot be incorporated into the children's toilet area. It must be a separate toilet with high-level handle and independent hand washing facility. There should be a minimum of one toilet and hand-washing basin per 8 adults.

Staff Room

We have discussed the importance of appropriate areas for children for rest and play. The same is equally important for staff. Staff room accommodation ideally should be away from the view and noise of the children. Providing storage lockers, easy chairs, a sofa, dining table and chairs, radio and TV will ensure that staff return to work sufficiently relaxed to continue with their busy schedule. It will be necessary to provide a small, well-equipped kitchenette to facilitate the making of snacks. This space can also be used for staff training outside of centre opening times.

Laundry/Utility Area

Laundry facilities with washing machine, dryer and airing cupboard are an essential part of any full day care service, as is a room for cleaning equipment such as mops and vacuum cleaners. While it is not a requirement that dishwashers, cookers, refrigerators, washing machines and dryers be of industrial quality, you will find that in the long term they are worth the investment in terms of durability. No laundry work should be carried out in the kitchen.

This will also require a large sink with draining board. A locked storage area will be required for cleaning fluids and disinfectants together with storage space for sanitary material like toilet rolls, tissues and paper hand towels.

A low level sluice sink, with hot and cold water, should be available for the emptying of mop buckets. This area should be segregated from food storage/preparation area and be inaccessible to the children.

note braille signage



note staff room

The Kitchen

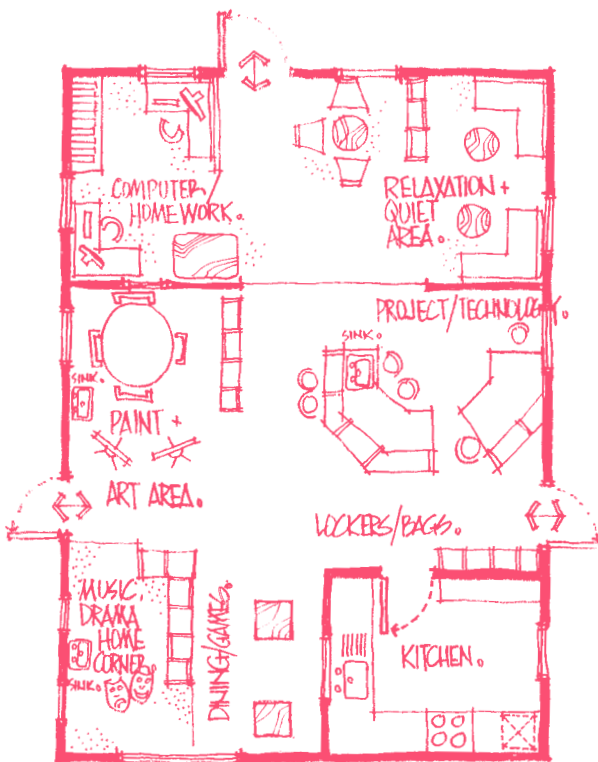
See Specialist Section 5.

Outdoor Play Area

Operating a childcare facility without the inclusion of an outdoor play area is unthinkable. We all need the feeling of 'getting out for some fresh air.' The size of your indoor area and numbers catered for should be reflected in the amount of outdoor space provided, be it on site or an adjacent public park. The provision of an on site outdoor play area is preferable as it lends itself to linking indoor/outdoor play activities. The more diverse the outdoor play area is the better. (This area is covered in more depth in Guideline 8).

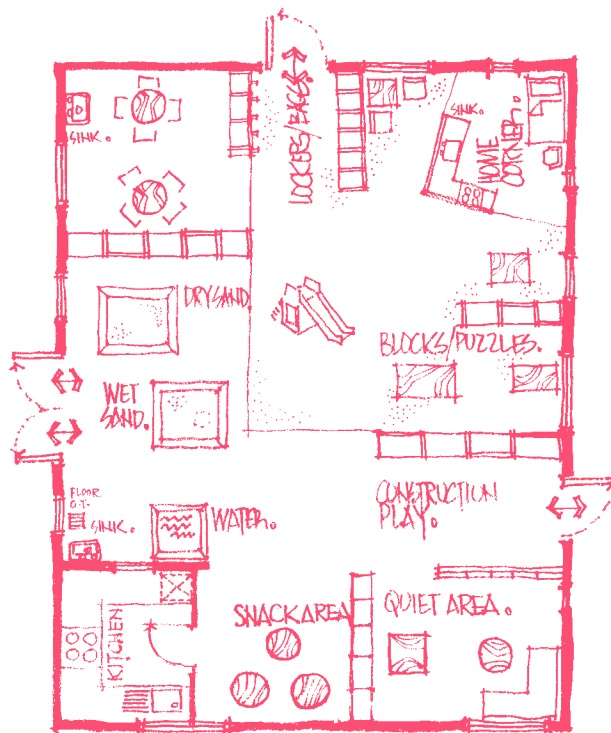
Security

The entrance door or gate should be fitted with either key pads, an intercom system or CCTV for the purpose of security in the collection and dropping off of the children.



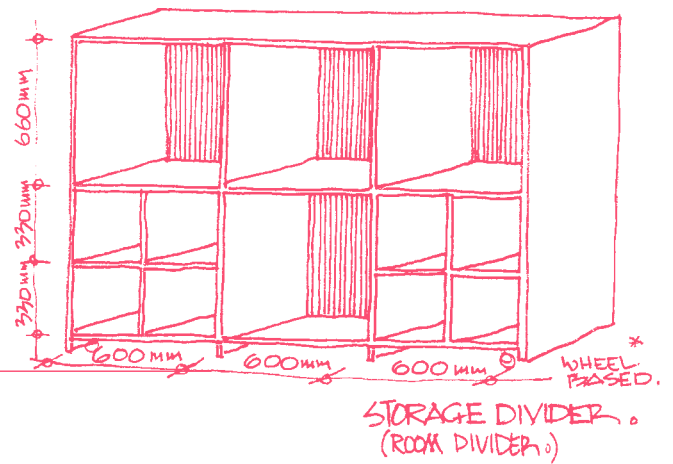
SUGGESTED PLAN
FOR SCHOOL AGE
LAYOUT

DESIGN NO 1.
*SIZE - APPROX
40m² = 15/18 CHILDREN



SUGGESTED PLAN
FOR PRE-SCHOOL
LAYOUT

DESIGN NO 2.
SIZE - APPROX
50m² = 20 CHILDREN



CHECKLIST 1: Key Aspects of Architecture for Young Children

1. Is the architecture interesting and engaging? Is the building designed from a child's imaginative perspective as well as that of an adult?
2. Is the architecture visible to its users? If children can see how the building is put together, the very act of discovery can elicit greater awareness of their surroundings.
3. Is the building designed with the scale of a child in mind? There should be child-oriented features at the correct height in order for young children to feel comfortable and to help them feel the environment is theirs.
4. Is there enough space? Minimum space requirements may not be sufficient.
5. Do the children have a range of spaces that will support different activities? From boisterous physical activities to quiet contemplative ones, the spaces must be designed specifically to support the needs of the children and their curriculum.
6. Are the routes through the building clear and uncluttered? Children should understand the way in which different spaces are connected within the building and be able to use them at all times.
7. Is the outdoor space readily accessible? There should be lots of things for children to do outdoors.
8. Do children feel safe and secure? Make the building welcoming and friendly yet secure from unwanted visitors. Bear in mind the need for inner security between different parts of zones of a building.
9. Do you understand the architecture? Be a part of the development process through effective consultation strategies.
10. Is the architecture flexible and extendible? It will undoubtedly need to change and evolve with the programme.

Source: *Building for young children* - Mark Dudek

⁴ Access for the Disabled 1: Minimum Design Criteria, National Rehabilitation Board, p.5 Part M, Building Regulations 2000

⁵ Access for the Disabled 1: Minimum Design Criteria, National Rehabilitation Board, p.27

* Excerpt from 'Spaces for Children'

the world of colour

The architectural design of childcare centres should not merely satisfy the basic needs of accommodation, they should also give great consideration to the correct allocation of spaces for particular activities in order to interest and stimulate the children.

A carefully designed interior and exterior will amplify its meaning as the threshold into a whole new world of imagination, exploration and sensitivity. When one considers that this will be the children's first experience of being separated from their parents, one gets an idea of the magnitude of the importance of creating the right environment and atmosphere. Children, regardless of age, will need to feel a sense of welcome, caring and nurturing and, of course, excitement. The design needs to balance the child's activities with the needs of the adults working in the services.

Psychology of Colour

Colour can affect us psychologically, making us feel happy or sad, anxious or relaxed. When carefully used in a particular way it can evoke highly emotive symbols to the imagination. In a sunny area a deep yellow will enhance the feeling of warmth, even on cold wet days, while the cosiest interior nook, dens and levels can be symbols of security, warmth and independence.

Red is closely associated with the sun and can actually raise the heartbeat. It is an extremely stimulating colour and symbolizes activity and a zest for life, and it also suggests warmth.

Orange is a less fiery version of red. It is tempered with the cheeriness of yellow. It provides joy and aids in the recovery from trauma. It points to a sunny, loving nature.

Blue In colour therapy blue has come to be known as the colour of transition, 'the door to the other side,' helping to come to grips with the potential for awakening within us. Blue offers support and protection and is the colour of peace, tranquillity and wisdom.

Pink like blue has a calming effect and suggests warmth and relaxation.

Green is the colour of youth, growth, hope, joy, life, and freshness. It is also the colour of harmony and balance.

Yellow is a colour of optimism and is effective as a stimulating sunny colour. It brings clarity to the mind.

Colour can change our perception of size and distance. A wall painted in a dark shade or a warm colour will advance it, making it seem closer than it really is. This is useful for decorating the end walls of narrow halls or corridors.

Tricks with Colour

It is possible to alter the apparent proportions of a room or area using colour. Small rooms can appear larger, large rooms can be made to look



smaller and narrow hallways can be made to look wider by the clever use of colour and tone.

Tints are tones of a colour to which white has been added
Shades are tones of colour which have been darkened with black or grey

The warming reds, yellows and oranges give the illusion of bringing the surface closer. Dark tones or shades have a similar effect. These are known as **advancing colours**.

On the other hand the cool blues, greens and light tones have the opposite effect. They make the surface appear to be further away than in reality. These are known as **receding colours**.

Painting a ceiling white or a light tint has the effect of making a room appear taller. Painting it dark colour or shade will make it look lower than it is in reality.

Painting a dark ceiling right down to the picture rail will seem to lower it even further. This is a very effective method for use in a tall room.

Small dark rooms need the enlarging qualities of the palest natural whites. However, do avoid brilliant white, which takes on a tinge of grey where natural light is limited.

Cold rooms, which face north, look warmer with a tint of rose, primrose or apricot.

Sunny rooms usually face south and welcome the freshness of a hint of green or lavender. Primary colours require a cool contrast, such as white or pale grey.

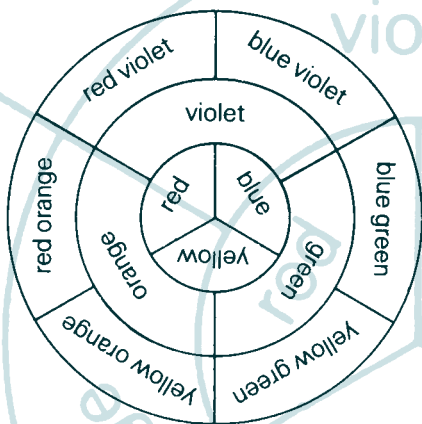
Neutral schemes need toning whites. If the scheme is cool, use brilliant white, apple white or grey. If it contains warmer shades such as beige or honey, opt for apricot or barley white, buttermilk or magnolia.

Textures and Patterns

Texture has a subtle way of refining a colour scheme. It is the tactile characteristic of a material and, like colours, may be categorized into warm and cool. Warm textures are wood, brick, cork and wool as they have a rough non-reflective surface. Cool textures are the opposite and are smooth, shiny and usually cold to the touch. They include stainless steel, glazed tiles, mirror, glass and gloss paint.

Care must be taken when choosing patterns on areas such as walls and windows. Large patterns have a tendency to make rooms look smaller while small pattern designs will have the opposite effect.

Colour is best used in abstract form in small areas depicting levels, recesses and outlines of, say, doors and windows. It is good to express the architectural shape to make it look more interesting.



Great consideration must be given to the number of wall symbols or murals, such as teddy bears, giants, or cartoon characters. These need to be strictly controlled so that children are not overloaded with such symbols. Adults often presume these to be 'fitting the bill', with the result that children may become over stimulated by too many.

The Use of Light and Shade

We have talked about tricks of colour and creating moods and atmospheres. We must not, however, overlook the natural educational 'asset' we may already have. Not all shapes and sizes are a problem. They can be used to good advantage. For example:

1. Check the fall of the sun on the various parts of the room or building
2. To where does it stretch, and what area is occupied in sunlight?
3. At what time of the day does this happen?
4. Are there areas that never see the sun?
5. Are shadows cast, and how long are they?

What fun it would be to incorporate a shading or colour code for our Winter Sun/Summer Sun fall on the walls of our playground. Soon it will be evident that it is not just the clock that can tell the time of day.

What to Use Where

Before we even begin to think about specific colours it is important to first establish how much natural light is available. Identify small and awkward areas. Determine what function the room and its areas will have, then establish what atmosphere is preferred, i.e. is it to be cool and harmonious or warm, welcoming and cosy?

The colours need to be carefully selected to create a balance of being both cheerful and calming. The activities taking place in the various areas will require different colour schemes, and by keeping the main colour scheme soft we can afford to use strong bolder colours on areas such as doors, windows, skirting and architraves.

The key is to get the balance right and one of the simplest and most successful ways of creating an interesting colour scheme is to use two, three or more colours that lie next to each other on the colour wheel such as peach, pink, apricot and orange or, green, blue-green, aquamarine and sky blue.

The use of these colour schemes is called blending or harmony, because all the colours are comfortably combined, and they are well balanced with no two colours clashing.

If a cool calm atmosphere is required then colours from the greens should be chosen: such as blue-greens, or green blues. A warm atmosphere can be created with the reds, pinks, oranges and yellows.



Entrance Halls, Corridors, Stairs & Landings

These areas are the highway of a busy childcare facility, with left and right turns, heavy traffic and exits. With all doors opening into various rooms, one overall sense of colour harmony is essential in these areas. The availability of natural light here must be taken into consideration.

If there is plenty of natural light, then it is possible to use a bold colour scheme. If however, you have to put up with borrowed light and artificial lighting, don't automatically think of pure white. By using the more comfortable pale creams with touches of terracotta or bright green you create an entrance that looks strong and welcoming. Remember to provide good lighting and lots of framed pictures, so that the glass can glimmer when the lights are on. Here, now you can paint doors to merge with the background and perhaps experiment with bolder colours for the door frames, skirting, dado rails and door handles.

note easy access for children to their belongings



The Rest Areas

Colour schemes that most often work in the rest areas are usually the simplest; colour based around one of the pastels, say cream, with touches of warm pink or yellow. The lighting in this area should be adjustable with louver or canvas blinds to help create a relaxed mood. Patterns or striking designs are too busy and not conducive to rest and relaxation.

Play Areas

The play areas receive the most attention because they are the focal points and most used areas. The colour scheme here should reflect the atmosphere. The extent of the colour scheme depends on the space and the various activities taking place in one large area. These activities will be dependant on the furniture, dividers and built-in fittings as this area has to incorporate play and study.


Another direction in this area would be to create a neutral colour scheme and rely on the children's art work to set the mood. In this case it is important that most of the wall surfaces have a framed independent area for children's art, photographs and holiday post cards. These can be removed periodically to reflect the seasons. Remember it's the children's work that create the ambiance.

Here again the choice of colour scheme should take account the type of light entering the room by day, if a north facing aspect, a touch of warmth should be added and a south aspect, the cool will suffice.

Do's and Don'ts

When it comes to choosing a colour scheme for your childcare centre:

Do remember that you have three clients needs: parents, children and staff, and all will want to have their needs met.

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- Do** follow through with your colour scheme throughout the centre, both indoors and out.
 - Do** exercise great care with primary colours.
 - Do** avoid large patterns in small areas.
 - Do** make good use of colour to create direction, identify objects, brighten areas, and advance or recede.
 - Don't** overdo it with the cartoon murals.
 - Don't** use cold colours where you have cold textures.
 - Don't** be afraid to practice your colours and textures on a mood board: you will soon see what looks right or wrong.

the world is not flat

The world is not flat, therefore, if possible, within the playrooms and playground, spaces need to be divided vertically and horizontally into a series of sub-areas and little worlds. In order to create effective space, the available space must be carefully organised at planning stages. Take into consideration the allocation of facilities, internal layout of the building, and allocation of different activity areas.



These areas should take various forms and suggest different moods and usages, in order to enable the children to think of the world as their stage. Areas required will be:

- Areas where children can observe or quietly share with one another
- Both small and large areas in order to encourage different group sizes
- Areas of distance to suggest running
- Nooks and crannies in which to hide, rest or observe
- Because security and safety are of utmost importance, all these areas must be easily visible to support staff in their supervision of the children
- Open space not sub-divided generally provides

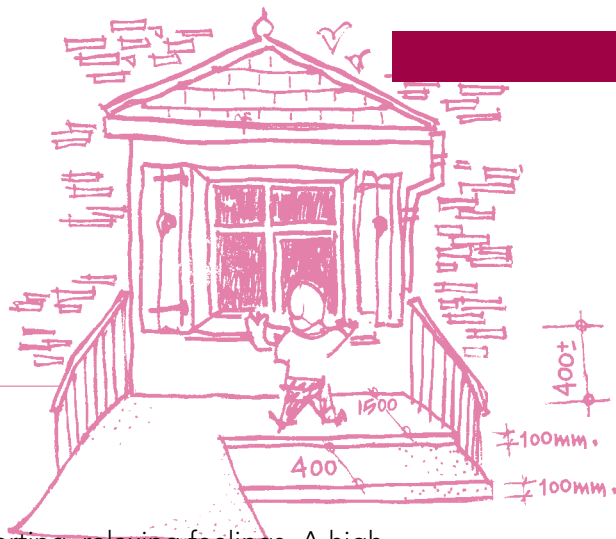
children with aimless running space, causing accidents and higher noise levels. Poor allocation of space restricts the staff from supervising and enjoying playtime with the children.

The Scale

Elements in the play areas need to be scaled to the size and ability of the child. This will contribute to his/her safety and help to support his/her independence by encouraging the child to use them. A well-scaled ladder and platforms will encourage a child to enjoy standing up high and seeing the world from an adult level. Platforms at 900mm bring the child to adult eye level, platforms at 1500mm allows the underside to be used by the children as private space while the upper level is still within adult accessibility.

Scale can be incorporated in many areas of the nursery, such as in the provision of grip surfaces, steps, sloping ramps, and railing heights. Windows and screens should take children's visual perspective into account and enable them to see out when they are lying, sitting or standing. Designers should remember that children see scale from the floor and the visual amenities at this level need special consideration in order to enhance sensory arousal.

The introduction of different ceilings creates different moods. For the



children, the low ceiling creates more comforting, relaxing feelings. A high ceiling induces a feeling of the outdoors and is most suitable for sports, etc.

However, children live in an adult world and incorporating soft, low, carpeted platforms on which children can crawl up and down or adult steps with hand grasps at child height, children may practice mastering their stability. When children use these items of furniture, it is imperative that staff supervise their activities with safety but should require minimum interference.

Sensory Stimulation

The child's first contact with the environment is sensory. Sensory or tactile finishes will create and arouse their curiosity and encourage further investigation.

The final design needs to provide sufficient sensory stimulation to accommodate the needs of very young children, while ensuring further tactility in order to sustain the ongoing interest of older children. This sensory stimulation should be incorporated in the architecture using as many natural materials as possible. Wood is a rich natural source in that it has the added dimension of smell.

Sensory stimulation may be subtly incorporated into the areas of play throughout the building. The playground should have many changing textured surfaces, carefully designed in order to prevent tripping accidents. When applying colour at focal points, ensure that the area is small because large colour focal points create monotony after a time.

It would also be strongly recommended that the interiors and exteriors include facilities and activities which would allow the children to feel the texture of running water, taste herbs and fruits in the garden, enjoy the changing patterns of the sun, listen to the birds or soft music, or observe the changes in nature.

Accessibility

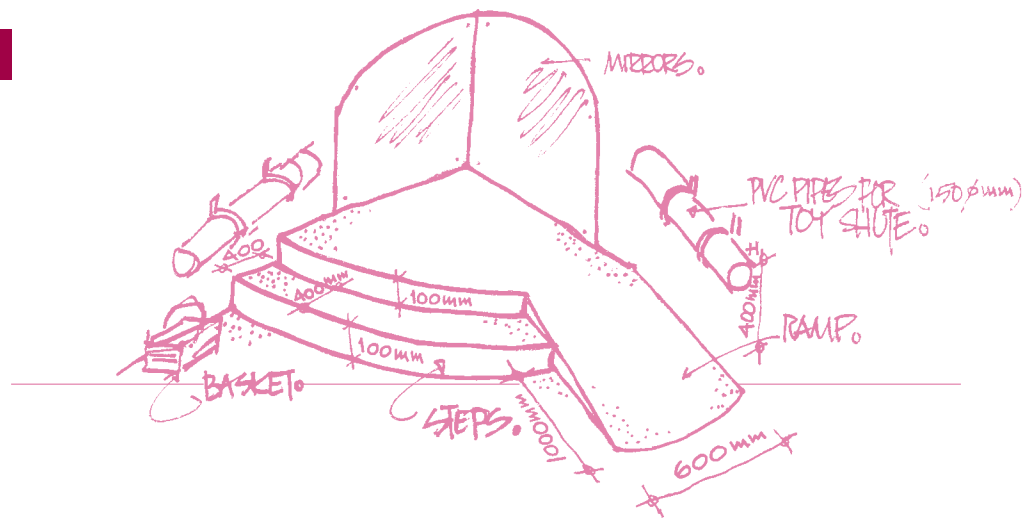
Ease of access to age appropriate equipment within the play area promotes the children's independence and safety. It will also generate a feeling of confidence.

Careful considerations must be given to children, staff and parents with special needs. Factors that need to be noted are:

- Wheelchair access from street to building and into the classrooms and play areas
- Access to toilets
- The provision of ramps, grip rails and circulation space

Mapping the potential floor use of indoor and outdoor play areas will facilitate ease of movement and safety. This is an important exercise for all areas in the nursery, and time well spent at the drawing board in the initial

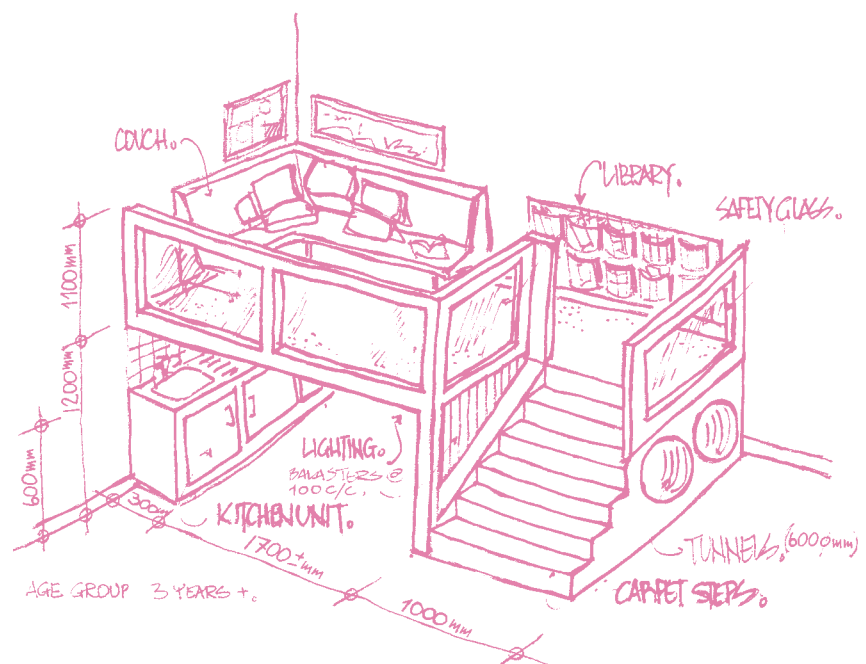




phase should prove a worthwhile and cost effective exercise. The way children use space can be predicted during the design stage, so play areas and levels should always allow for flexibility.

Tips on Creating Moods

- Layout must encourage investigation
- House type structures
- Hand rails, stair gates, adequate lighting at stairs/lofts
- Quiet area
- Steps
- Sunken areas
- Natural materials (eg. Hedge tunnels)
- Ramps and handrails for special needs
- Low level notice boards
- Clearly-defined areas of play
- Low level storage units
- Adequate space between areas and equipment
- Adequate space in each area for equipment and toys to sustain play and a number of children
- Partitions and dividers if large hall/room to create a cosy environment
- Storage units on castors
- Low level sink units, include potable water



fixtures and fittings

Infants and toddlers in a childcare centre setting can be quite vulnerable and great care must be taken to ensure their health and safety by minimizing their exposure to illness and injury.

Doors and Windows

Doors and windows offer a promise of adventure beyond, and are vehicles by which the children may explore and extend their life experiences.

A childcare centre without windows and doors would be very dreary and uninteresting, offering little in the way of exploration and adventure.

All doors and windows must open in a way that will not cause injury, using safety covers on doors to prevent little fingers getting caught in a closing door. Providing vision panels in doors allows a person entering a room to see if a child is within range of the opening door. Fire doors must never be locked and must be fitted with an overhead door closer. The use of half doors can be of value where ventilation or supervision, combined with a degree of containment, is required.

Windows ideally should offer views to the outside for all children, and therefore some of the windows should extend from floor to ceiling in height. Windows with a sill height at 300mm may be used as a seat by a one year old. Consideration will need to be given to security from intrusion. Opening sections must be of safe height to prevent children falling or climbing out. However, in case of fire, the Fire Officer's Requirement is that the clear opening section of a window is of a minimum of 850mm high x 500mm wide with a sill height of no greater than 1100mm.

In all areas where glazing is used, great care must be taken to ensure that safety glass either toughened or laminated is used. Toughened glass is difficult to break but when it does it shatters like a car windscreen into little pieces, this type may be used on the ground floor. Laminated glass is not as difficult to break but the glass stays in place following impact which creates a continuous barrier and may therefore be used on first floor locations. All curtain material and wall hanging fabric must be fire resistant, and effective in reducing harmful solar rays.

Floor Surfaces

Young children spend most of their normal activity on the floor area. The use of natural materials here is preferable for both atmosphere and comfort. Surfaces need to be easily cleaned and maintained. The floor space will generally be subdivided into areas of designated activity. Use

note low level window and window seating



note optimum use of natural light

logical and appropriate surfaces such as waterproof anti-slip material in the water play/messy, toilet and bathroom areas. Rugs and carpet are appropriate in the rest area.

The use of natural material in carpets is not practical in a childcare setting. Fibres such as nylon and olefin (polypropylene) are the most stain resistant materials. They also resist mildew, moisture and are anti-static. Care must be taken to serge the edge of carpeting to prevent fraying. Rugs are a trip hazard if not secured properly. It must be ensured that a rubber backing is attached to the back of rugs for safety.

Heating

Ideal indoor temperature should be kept at 18-20°C (except sleep room which should be 16-18°C) for childcare facilities. Ideally under floor heating is the preferred choice of heating system. Good natural ventilation is essential with this type of heating system as it takes time to respond to any alterations made to the temperature control system. Designers must exercise care when specifying air-conditioning, as there is an implication that windows are not to be opened. We (including children) all like the feel of fresh air flowing as it keeps us in tune with the outside environment.

Radiator heating must be protected by a guard or be thermostatically controlled, with the surface temperature not exceeding 50°C. Portable heaters, open fires or heating systems which give off fumes or gases, are not suitable⁶.

Ceilings

The ceiling heights are no longer governed by any statutory requirement. However a 2.4mtr minimum floor to ceiling height is recommended for habitable rooms. It is essential when entering a room that it has a sense of space. Ceilings that are too low or through their colour scheme appear to be low, will give staff a feeling of claustrophobia.

The material used in the ceiling will need to be easily maintained. Ideally, the ceiling should accommodate the hanging of mobiles, children's crafts, etc. Provision can be made for such material as beading strips to take hooks, or removable acoustic ceiling tiles which can be decorated and are durable enough to take the weight of mobiles, etc. There are various makes of acoustic tile on the market and all are fire resistant.

Walls

Great consideration needs to be given to the wall surface, as it is exposed to a lot of activity. Designate a pin-up area, otherwise the wall will very

note use of mirror as interest area for babies



quickly look dirty and tatty. Display areas need to be at an appropriate level for the child. Avoid, where possible, the use of a skirting board. Ideally the floor covering should be brought up to skirting level to maintain a smooth seam. This will also help to give the illusion of space. Where possible, all internal wall corners should be constructed with curved edges. Where any part of the childcare facility shares walls or ceilings with premises of other uses (e.g. private homes, etc.), the shared walls and doors must have a one-hour fire rating. Wall surfaces need to be durable, washable and of a non-toxic material.

Tables and Chairs

While we have already stated that children spend most of their time engaged in floor activities, they will spend a certain amount of time sitting at the table. It is vital for the child that both the table and chair are ergonomically suited. Many reputable firms manufacture and supply suitable child size furniture. It should ideally be of a hardwood, washable, not toxic and have safety brackets to prevent tipping and any upholstery must be fire resistant and comply with British and European Standards. The furniture should preferably have a safety certificate or recommendation.

Children's Toilets

Children's toilets must be of suitable size for the age group catered for. Ideally toilet bowls should be raised off the floor and suspended from the wall. This will facilitate cleaning under and behind the toilet. Cubicles need to allow sufficient space for staff to assist a child if necessary, and should facilitate staff supervision while affording the child a degree of privacy.

Wash hand basins, soap dispensers and hand drying facilities must be at a level which is easily accessible to the children. In cases of building conversion, consider the need for hop-up step to facilitate the child in accessing the toilet or wash hand basin⁷. Mirrors must have a safety feature to prevent breakage and splintering.

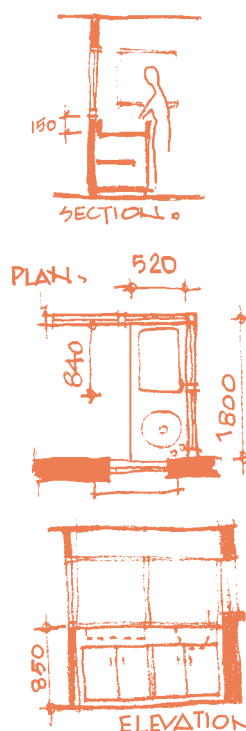
Nappy Changing

Requirements for nappy changing area include:

- a wash hand basin with a constant and instantaneous supply of hot and cold water
- it should be located in an area which is provided with adequate ventilation to the outside air either mechanically or naturally (6-8 air changes per hour). Air movement should not be noticeable or create draughts
- Unit should be positioned at a comfortable height for staff (usually 90cm) and have a smooth, easily cleanable surface with raised edges
- Natural ventilation, such as windows, is the preferred system. Mechanical extraction and ventilation can be used to support air flows and changes



NAPPY CHANGING AREA



note use of natural light to create interesting shadows



Lighting

There is a general consensus that natural light is best. However, consideration needs to be given to the aspect and orientation of the different areas of a childcare service. The movement of the sun during the day can create either warm sunny areas, or cold lifeless ones. Variations in light can create moods and suggest either rest or activity (e.g. a small area or corner that is softly lit can invite relaxation). Use both lateral and downward lighting to create greater ambience in areas of rest. Good lighting suitable for active play areas can be achieved using high frequency, low energy, compact enclosed fluorescent fittings. Strong harsh lighting should be avoided at all times.

The use of artificial light in a day care setting will be needed, especially when winter light is poor. Fluorescent lighting, which has an inherent flicker, should be avoided. Lighting which is as close to the usual domestic lighting will create a calmer atmosphere. However, as a large percentage of the children's work/activity takes place on the floor, it is important to ensure that there is effective lighting at this height.

Light switches must be positioned at a minimum height of 1.5m. External lighting for the winter months is also an important issue. The use of timer switches for playgrounds and entrance doors is of value, as is the use of sensor lighting in 'blind spots', bin areas and entrance gates. Dimmer switches should be provided in sleep rooms and rest areas.

Laundry/Utility Area

The use of contract laundry service will eliminate the need for laundry facilities on site. In the absence of this, it will be necessary to have a washing machine and dryer. The size of these units will depend on the number of children catered for. The bigger the service, the greater the need for industrial type machinery for efficiency and durability. On site laundry will also require an airing press and separate storage for soiled and clean laundry.

The utility area needs to accommodate cleaning equipment such as brushes, mops and vacuum cleaners. Provide a large sluice sink with draining board and hot and cold running water. Ventilation by means of a window is necessary to ensure natural airflow, minimizes the risk of chemical build-up and helps maintain a sense of freshness and cleanliness. Locked storage will be required in which to store cleaning fluids and disinfectants. Storage is also necessary for sanitary items such as toilet rolls, hand towels and tissues. Please note: Laundry/Utility area must not be part of the kitchen.

Electrical Power Points

All electrical power points must be rendered safe for use in childcare centres. Ideally, they should be at a high level, out of reach of the child.



note use of original fireplace to provide a feature for toddlers

When not in use, sockets must be fitted with blank covers.

Hot Water Taps

All child accessible hot water taps must be fitted with a temperature control system of not more than 43°C. Plunge taps prevent water wastage and guard against flooding.

Additional Fixtures

There should be sink units in each play room to include drinking water and at least one telephone within easy access of staff members. Stairs should be fitted with handrails and stair gates.

At the wiring stage it is important to consider services including telephone wiring, computer cabling and electrical to take into consideration CCTV, webcam, computer technology and internal security. Services to be in readily accessible circulation areas for maintenance and upgrade purposes.



⁶ See 'Guidelines on Interpretation of the Child Care (Pre-School services) Regulations 1996', Jan. 2001, p2

⁷ See 'Guidelines on Interpretation of the Child Care (Pre-School services) Regulations 1996', Jan. 2001, p3

outdoor space



For a child the outdoor play area is a place for physical and often emotional release. It forms such an important part of a child's life that it warrants the same degree of thought and design process as the indoor play areas. A well thought out playground will ensure that children's physical and social needs are supported, and that they have an opportunity to experience fresh air and explore different forms of play.

'The way children play when allowed to interact with the outside world provides pointers to what we should provide for them in a childcare facility:

- They run jump and climb
- They excavate, play with water and mud
- They collect objects, such as pebbles, shells
- They like to hide and make camps in secret places
- They roll down slopes, step on stones or lines
- They push and pull vehicles
- They grow things and harvest them
- They look at prevailing flora and fauna'*

Location

Ideally, the outdoor play area should be located on the south side of the full building length, to maximize the benefits of our limited sunshine hours. Provide access from the playrooms and covered areas, with consideration for babies and toddlers, to use the outdoor area safely. The perimeter should be secured with a 2-metre high light fence with security entry lock system. The challenge is to achieve a balance between access and protection. The stability and condition of existing walls and fences should be checked as a priority.

Size

At present no legislation is required but consideration should be given for a minimum of 9m² of uninterrupted outdoor space per child, based on the specific number of children for which the space is intended to be used at any one time.

Shape

The shape and size depend completely on what is available. Small play areas can be designed in a variety of spaces that are easily supervised. It is vitally important that even the most interesting spaces allow for carers to visually supervise children.

Areas

All playgrounds should endeavour to incorporate three kinds of designed areas, which can generally be categorized as open, quiet and active. Mounds, paths, etc can connect each of these areas. The open area requires freedom for activities such as running and football and should be

in the centre of all outside activities. Space and equipment for very young children should be separated from those for older children, either spatially or through the time of use.

Sandpit

The sandpit is generally considered an important part of outside activity. Its size should be adequate for the number of children who will be using it at any one time. Some sandpits should be at a height to accommodate wheelchair users. Sandpits require exposure to the sun and good drainage to keep them in good condition. However we must take care to protect the children from the harmful affects of direct sunlight. Ensure that the sandpit is covered when not in use so as to avoid prowling cats and dogs at night. Some commercial sand play items have covers that can be raised to form a sunshade.

The sand should be to a suitable depth, not less than 30cm, and should be of clean, washed, non-staining sand, not builder's sand. Play sand is now widely available commercially. Sand tables may be used in combination with water tables and water play items. The combination of sand and water play, where the children are allowed to get 'mucky' is the best possible play feature. Sand play items should preferably be surrounded by a hard surface so that any spread sand can be swept up.

Shade

Shade can be achieved with pergolas, sails and dividers creating wonderful imaginary ideas for fun and games while at the same time offering protection from the glare of the sun.

Protection from the rain is often a more common problem in Irish childcare centres. Creating a covered outdoor play area is an invaluable asset to any playground. Flexibility is the key here, with open-ended play items such as the sandpit, water play, painting and construction and mould games such as Playdoh, clay and Lego.

Levels

The landscaping should be designed on various levels to create raised gardens with hard ground walks between the play areas and, if possible, a shaded amphitheatre space for group activities. In designing pathways, account should be taken for children with special needs. An area should be provided for staff members to sit with the various groups of children.

Surface Materials

The following safety requirements relate to surfacing in outdoor play areas:





- Surfacing should not have any sharp protrusions or edges
- It should have no entrapments
- Impact absorbing surfaces should be used where falls over 60cm are possible
- Hard surfaces should only be used outside the impact area
- Topsoil or turf may be used up to 1m².



All materials and finishes used for outdoor surfacing must in accordance with the Standard for their uses. Safety requirements for timber, metal and synthetics are available in the booklet 'A Guide to the European Playground Equipment and Surfacing Standards - ISEN 1176 and ISEN 1177,' 3rd Edition, RoSPA.

All surface materials should be laid to prevent pools of water from gathering. Small grated drains may have to be fitted. Hard surfaces should be used where there is constant play and paths, but never where climbing takes place.

Areas where there is shade and plant growth is limited, should be provided with artificial material such as artificial grass, outdoor carpeting or rubber paving slabs. All artificial surfaces have specifications with regard to the height from which a child could safely fall onto them from climbing frames.

Guidelines on the depth and area of impact absorbing surfacing are available in the RoSPA booklet. The minimum thickness of impact absorbing tiles is 2.5cm. Where there is a fall height, the depth of the tiles should meet the specifications in the approved standards. Safety tiles must be laid on a firm and secure surface, such as concrete or over existing tarmac and must have a firm and secure edge to prevent them spreading apart with use. The edging and the joints between the tiles themselves should not form a trip hazard and ideally should be at the same level as the surrounding hard surfacing.

Loose fill impact absorbing surfacing includes sand and bark chips which should be installed to a minimum depth of 30cm, preferably over a geotextile membrane to prevent mixing with the underlying soil. While cheaper than tiles, they require daily raking.

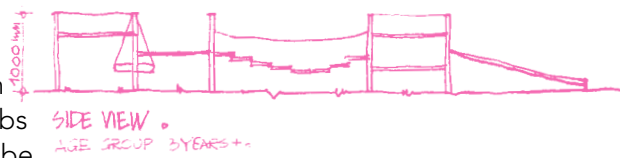
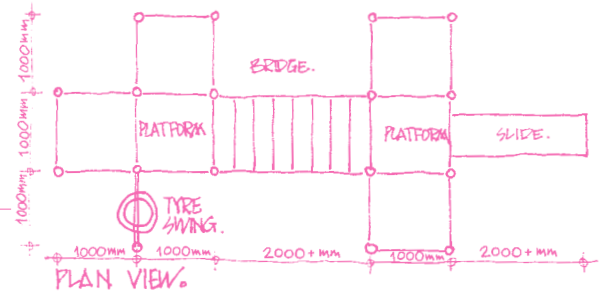
Surface Requirements

There are no special extra requirements for surface areas, but the surfaces should be continuous underneath. If steps or ramps are required, they should comply with Safe Practice Regulations, part M and K of the Building Regulations.

Planting

Plants have a variety of uses in the playground. They provide shade, colour, and stimulation, and can be a season indicator. Great care must be taken to ensure that all plants are safe and non toxic. Plants need to be robust





and preferably edible and it is advisable to seek the advise of a horticulturist/landscape architect before selecting any planting. Even the smallest play space can include some planting in raised beds, tubs and containers, window boxes and hanging baskets. Plants can also be trained on walls and trellises. Wherever possible, opportunities should be available for the children to actively participate in gardening.

Try to introduce as many natural materials as possible. Perhaps take advantage of some existing features, such as trees, rocks, or lawns. It is a matter of assessing the merits of these features against their hazards. For instance the tree could offer good shade in the summer but its roots could interfere with the foundations of the building.

Use the services of a horticulturalist to guide you with your final selection of safe and appropriate plants. Design your garden to encourage birds, butterflies and other native animals. A bird feeding table should be sited where it can be seen by children from a window. In larger play areas nest boxes can be fixed to walls and trees. Plant trees that the children can eat, smell, collect and enjoy. Select plants that are seasonal with a wide variety of leaves, sizes and shapes. Place hardy plants where children play. Create a children's garden. Take care not to plant poisonous, noxious or allergy-related plants. Have fun!

Domes and tunnels can be made from living willow and can be a feature of a natural play area.

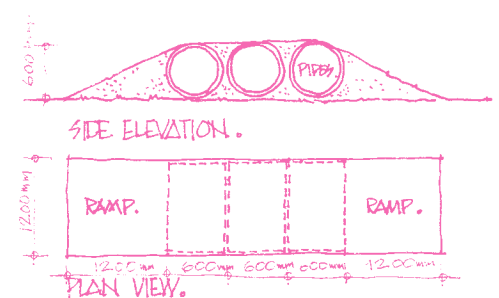
Running Water

Water has many uses for play, cleaning and plant maintenance, and any outdoor play area should have a minimum of two outdoor taps. The best ways to include water in a play area are by means of a water play table with a 'parish pump' or a spring loaded tap, with a system of plastic pipes and tubes by which means the water can be lead around and played with. The other is to include a 'bubble fountain' as a water feature, which the children can touch. The water is pumped up from a basin below the feature and bubbles out from the top of the stone and flows as a film of water over the surface of the stone before disappearing back into the basin through a layer of cobbles. This means that there is no depth of water that may cause a hazard.

Fences and Gates

Fences of 2 metres in height should be considered for the perimeter in order to secure the premises. Avoid the use of horizontal bars on which children can climb. Neighbouring properties should be taken into account. A locking system is important with regard to safety and CCTV or an intercom system is valuable, either at the entrance or exit to the centre.

Take care when having spring-loaded gates fitted as they can catch fingers. Gateways should be at a width to accommodate wheelchair access. There





should be a 12mm gap between the gate and any striking plate and bolts and catches should not be at eye level. All fencing and gates should have gaps of less than 100mm between vertical or horizontal sections. All latches should be at 1.2 metre minimum height so as to prevent small children opening the gates.

Baby and Toddler Outdoor Areas

This area is often ignored and not catered for in the planning of outdoor areas. The needs of younger children are as important as those of older ones and outdoor areas provide an opportunity for babies and toddlers to explore sensory-motor activities and observe and interact with older children. Two essential elements of outdoor environments for babies are soft level surfaces and good maintenance in order to avoid items dangerous to the mouth.

Dividers between babies, toddlers and older children are important and will ensure that younger children do not have to physically compete with the older children, while still permitting visual contact and communication.

Rooftop Play Areas

The inclusion of a play space at roof level is something that should be encouraged, particularly in areas of high density. It will be necessary to apply for Planning Permission.

Roof gardens and playgrounds need additional protection from the elements because of their high position. Security fencing is of paramount importance both for the children's safety and in protecting against intrusion. The structural elements of the fencing and roof structure should be designed by a structural engineer.

Note: The guarding specifications is included in the Building Regulations Part C and K. The most suitable material is steel framing with PVC-coated mesh wire stretched and secured to manufacturer's instructions.

External fire escape stairs may be required. Fire exits from any rooftop areas should be clearly laid out and marked.

The Quiet Area


The quiet area is a retreat area and gives children a sense of security. This area can be a shaded area, a place to make temporary tents, caves, or a space designed to support a group of children playing parallel with one another.

Equipment for Under 3's

Barriers with a minimum height of 70cm and impact absorbing surfaces are required for platforms over 60cm.

Equipment for Over 3's

Platforms up to 100cm: no barriers or guard-rails required, just impact-



absorbing surface for anything higher than 60cm;
Platforms 100-200cm: require 60-85cm high guard rail and impact-absorbing surface;
Platforms 200-300cm: require high barrier and impact-absorbing surface¹⁰.

Minimum Space Around Equipment

Falls from equipment, even from a short distance can prove fatal if the equipment is installed on unsuitable surfaces.

BS5696 recommends the use of impact absorbing surfaces where the fall height from equipment is greater than 60cm. It also recommends that this surface extends 1.75m beyond the extremities of stationary equipment and 1.75m beyond the maximum travel distance of, for example see-saws. Concrete should be avoided around equipment other than for bedding as it is very hard and abrasive. (Ref. Guidelines on outdoor play facilities for pre-school services p.7)

Materials

Materials and finish treatments should meet standard safety requirements and be designed to be suitable for its purposes. Timber or metal material or fasteners should not be corroded and should be protected by the use of safety caps.

The design of equipment fixed by bolts should conform to safety standards and use recessed or cap covers. These should not come loose by themselves and should resist removal. No timber connections should rely solely on screws or nails.

Storage

Play with bikes, tricycles etc take place on a hard surface and storage is needed close to the area of use. The buggy area often requires its own large storage area near the entrance or exit. Storage should be provided for teaching, play or art materials and should be designed to be adult accessible while still allowing use by children under supervision. Any childcare service requires several storage areas strategically placed around activity areas.

Outdoor Design Considerations

Provide wind and sun shelter. Between 1/3 and 1/2 of the outdoor area should be clear space for group activities and physical movement. A paved path for wheeled toys should wind around activity areas.

Children should be able to move freely from indoor to outdoor activities. The outdoor space should be acoustically buffered from traffic and parking noises, fumes and odours. Sunlight should penetrate into the outdoor play area for a minimum of three hours per day in the winter solstice, two hours of which should occur during typical playtime. This is especially important for toddler and infant programmes.

Maintenance of Play Equipment

All outdoor play equipment should be regularly inspected and maintained. A log should be kept in the record of inspections¹¹.

Getting Mucky

A permissible activity, but one that can be best facilitated and supported if a cloakroom/wet room with facilities to clean up the children, store mucky boots etc. and outdoor clothing is directly accessible from the outdoor play area. Clothes drying cabinets for wet gear will allow the children to get back outdoors again after a sleep period or lunch etc.

Animals

Children love animals. Facilities to keep animals in a nursery have to be planned to ensure the welfare of the animals. Pets can and do provide endless fascination and interest but consideration needs to be given to the small number of children who may be allergic to some animals. Secure storage for the animals' food and bedding materials needs to be provided.

Outdoor Checklists

Outdoor Activities Checklist	Outdoor Safety Checklist
Excavating	CCTV
Playing with water	Minimum space around equipment
Playing with mud	Boundary fencing
Collecting objects (stones, leaves, etc.)	Surfaces accord with general safety requirements
Hiding	Protection from cats and dogs
Growing and harvesting plants	Safe hinges
Looking at surrounding flora and fauna	Impact absorbent surfaces under slides, swings, climbing frames
Pushing and pulling vehicles	Non-toxic plants and flowers
Climbing	Shelter when raining
Picnicking	Ramps, handrails for high areas
Sandpit	Refuse facilities and boilers to be protected
Constructing private or camp spaces ¹²	

⁹ A Guide to the New European Playground Equipment and Surfacing Standards, RoSPA, p.6

¹⁰ A Guide to the New European Playground Equipment and Surfacing Standards, RoSPA, p.15

¹¹ See 'Regular Inspection of Children's Playgrounds, RoSPA.

¹² See 'Setting Standards,'Nursery world, Ruth Andreski and Sarah Nicholls, p.26

* Setting Standards, Ruth Andreski & Sarah Nicholls

building conversion

Material Alterations

Any material changes to your premises must comply with the Planning Authorities, Building Control Authority and Fire Safety Authority. Material changes constitute the altering of the size, shape, function, and structure and the intensification in use of existing premises.

Before embarking on any material changes, consult with a solicitor and architect with regard to any legal matters which may affect the purchase/lease of the development of the existing building. The architect will advise on the economics of the proposed changes. Sometimes it might be more prudent to demolish and replace than to try to make alterations, in which case what has been purchased/leased is a site and location only.

The architect will also be able to advise if the building is a protected structure or has a conservation order. This will have major implications on what changes you will be allowed to make.

Where a premises is leased, care must be taken with regard to any schedules of dilapidation, which means that the owner of the property may request that any changes or alterations be made good. In other words, the property has to be returned at the end of the lease period in its original state.

Converting a Residence

Converting a garage or domestic rooms into a sessional service or full day care may require planning, Fire Safety Certification and the approval of the relevant health board. See Guideline 2.

Careful consideration must be given to the local area development plan. In some circumstances, where the residence is being converted to a full day care facility, the planning authorities may require that some residential content be maintained on the premises.

When converting an existing residence to childcare facility there are many items of construction to be taken into consideration. The original structure of the building may not be designed for the new use or loads. It will be important to engage the services of a structural engineer to check and perhaps design new columns, beams and lintels. Domestic and childcare facility structural loading are not significantly different. Depending on the size of the rooms internal structures may need to be altered to accommodate space requirements.

The architect will have the task of retaining as much of the existing structures and features as possible, while carrying out the clients brief and at the same time complying with all relevant regulations. Where the residence is in a conservation area or is a protected structure all the pertinent issues will need to be adhered to.

The services such as heating, electrics, plumbing and toilet facilities will



possibly need to be expanded or renewed to meet new standards.

Where only part of the residence is being converted to a sessional childcare facility such as the garage, structural changes will not be so extensive. The room layout for play activities may remain the same or vary according to number of children or philosophy.

Community Centres

Converting all or part of a community centre into a childcare facility will require approval from the local community council and a clear plan of area changes, in addition to planning approval, Fire Safety Certificate and approval of the relevant health board.

Community centres are generally multi purpose areas of activity catering to the local community, such as youth club, senior citizens and social events. The provision of a childcare service ideally should operate independently of all other activities.

Where this is not possible or the need in the community is different, great care and attention to detail is required in the flexibility of the layout, the use of portable/locking shelving units and storage for large equipment. Consideration will also be needed in the selection of the floor surface, to maintain hygiene and accommodate play activities.

note this protected structure utilises all areas for childcare facility



office

Protected Structures

It is the policy of county councils and local authorities to preserve and protect buildings, features, and sites of historical, architectural, artistic, archaeological, cultural, scientific, technical, or social merit. This is to ensure that anything which contributes to the character of the area is not altered or demolished without prior consent.

Detailed design guidelines, including advice leaflets regarding material and construction methods, have been prepared for protected structures. They are available from the Department of the Environment and Local Government, An Taisce, The Georgian Society and others. They set out the parameters and illustrate acceptable designs for extensions,

alterations and site curtilage treatments. They must be consulted prior to lodging any applications for Planning Permission (Guideline 2).

Planning Permission is required for the removal or alteration of the interiors of some protected structures and, in some cases, it may be a requirement to retain or restore the interior. In certain circumstances a

photographic survey and historical data may be required to accompany an application for alteration. Minor works may also require planning permission and a determination is required from the Planning Authority, this service is free.

Any inappropriate subdivision of the original proportions of well-designed, historically important interiors will not be permitted on ground and first floors. The authorities will seek to retain the traditional proportionate relationship in scale between buildings, gardens, and mews structures, and will seek to retain gardens as soft landscape.

Conservation Areas

Conservation areas are where groups of buildings have a high quality of architectural design and scale. It is now policy that special care is exercised in dealing not only with development proposals, but with environmental works by the public and private sector. Any internal alterations and extensions must harmonize with the existing building structures in terms of form, external finishes, colour, texture, windows, doors, roof, chimney and any other detail.

note retained architectural features



TWO-STOREY – TWO BEDROOM
RESIDENTIAL COMBINED WITH SESSIONAL
SERVICE AND SCHOOL-AGE
12 + 12 children



this is for the children

While safety must be of paramount importance in the design of childcare centres, the following guidelines will ensure that the physical environment will have a very positive affect on both children and staff. Children engaged in self-directed exploration allow staff time to observe and facilitate individual and group needs.

We are all affected by our physical environment and especially the impact it has on young children. It is vital therefore that careful consideration is given to the size of the rooms, their uses and layout, the colour scheme, type of furniture used, the amount of natural and artificial light, the size and number of windows and the size and layout of the outdoor play area.

The design of the childcare centre must be appropriate to the age and needs of the children. What is suitable for a preschool child will be inappropriate for a baby and toddler. Therefore it is necessary to have an understanding of the developmental stages of the child.

Babies (0-1 year)

Babies develop from lying flat to acquiring great mobility. By the time the child is one year old, the following will have been achieved: sat up unsupported, started to crawl, observed the activities of others and shown interest in books, objects and games. Many children are fully ambulant by 11 months.

Requirements for the Baby Room

The Statutory Guidelines at present are:

- Allow 3.72m² of clear activity floor space per child under one year, with a separate area for sleep. See Guideline 4 for further detail
- It will require a separate milk kitchen to facilitate baby feeding, i.e. sink with hot water and fresh cold running water from the rising main, a sterilizer and thermostatically controlled fridge to store baby's feeding bottles
- It will also need a mini cooker and/or microwave and bottle warmer
- Kitchen units for storage, wall or floor units
- A separate sink for hand washing only must also be installed
- The milk kitchen may be included in the main kitchen. For practical purposes a sink, fridge and sterilizing unit should be in the baby room
- The nappy changing area will need to be adjacent but separate from the general area

The baby play area will require:

- Natural and soft colours to promote feelings of security and nurturing
- Easy chairs for staff, to facilitate relaxed baby feeding
- Sound absorbing materials such as curtains and carpets. Carpets need



note facilitating mixed age grouping



to be non-allergic, stain and moisture resistant, and anti-static

- Free space for babies to crawl to aid gross motor skills
- Child level shelving unit for storage/retrieval of toys. This not only promotes freedom of choice for the child but will also support a child's efforts to pull him/herself to standing
- Mirrors and low level windows to support visual development
- Low level partitioning or glazing to assist supervision
- Sufficient storage space will ensure staff do not have to leave the room and will allow them to maintain the recommended child/adult ratio
- A small covered outdoor play area, protected from the main playground, will ensure that babies get fresh air and a change of scenery. They should also be able to see the older children at play

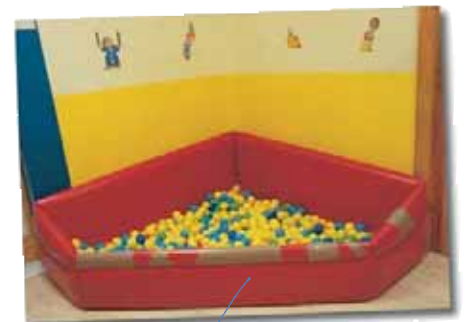
Toddlers (1-2 years)

At this age children will go through the stages of walking with poor balance to crawling up stairs, pushing, pulling, carrying and building. They spend most of their time on the floor, crawling, squatting, sitting, kneeling or mastering their walking skills. Their balance is uncoordinated, up to about 18 months and they tend to fall heavily. They will also have mastered self-feeding and be able to identify some simple familiar items. At 18 months many children are capable of running.

Requirements for the Toddler Room

Because there is so much spillage and falling with this age group, it is imperative that the floor surface and room layout is such as to enable the child to experience and master these skills in a safe and stimulating manner.

- By creating shapes and age-appropriate levels we further develop the child's gross motor skills
- Encourage room layout flexibility by utilizing moveable elements such as press units to define spaces
- Ensure there is sufficient space for more than one child in any designated area
- Child level shelving unit for storage/retrieval of toys not only promotes freedom of choice for the child but will also support child's efforts to stand;
- Mirrors and low windows will support visual and sensory perception
- Low level partitioning or glazing will assist staff supervision without being intrusive
- Sufficient storage space will ensure staff do not have to leave the room and will allow them to maintain the recommended child/adult ratio
- Provide easy access to outdoor play area



*note fun area
for toddlers.*



- Having the children's cloaks and storage area at a level that is accessible to them encourages their independence and helps them recognise their own items
- Ensure ease of supervision at all times
- Access to level changes, small ramps, steps, etc
- Private spaces (they love sitting under things)
- Spaces within the toddler room should allow clear running areas
- The nappy changing area will need to be adjacent but separate from the general area

Pre-School (2-3 years)

Between the age of 2 and 3 years, children have mastered most of the challenges they have been exposed to. They can now run with confidence, climb, build large towers, and recognise details in pictures. They talk a lot and demand a lot of attention. To support the child and staff it is essential that the layout include a mixture of open space and smaller nooks to accommodate the unit's activity programmes. This is also the potty training stage of development, so great consideration must be given to this important milestone. The location of and attitude to toilet training can have a profound effect on the child. It must be seen as a natural event, and children should have free access to the child-size toilets or potties and wash hand basins. Good hygiene facilities and practices will be very important at this stage.



Requirements for the Children's Room (2-3 years)

- The plan should guide children from one activity to the next
- It should support staff in their role as facilitators of the child's learning and self directed activity
- Layout and separate quiet/noisy, tidy/messy, and active and calm activities
- Keep messy activity close to a sink area;
- Provide good natural light and easy access to outdoor activities
- Ensure ease of supervision at all times
- Floor surfaces should reflect the nature of the activity, i.e. water-proof for wet play, cosy for quiet area, and easy to clean for art activities
- Ensure the toilet/potty training and nappy changing area is within easy access for the child and is easily monitored, while affording the child some privacy

Pre-School (3-5 years)

At this age the child has competent locomotive skills and can jump, pedal and hop. Their fine motor skills have greater control, they can cut with a scissors and thread beads. Socially and emotionally they are seeking

independence and are keen to please. They should have a large vocabulary and extensive comprehension and enjoy imaginative play.

Requirements for the Children's Room (3-5 years)

All pre-schools will follow the care and education programme to meet the children's needs. The room will have a specific layout to accommodate the method adopted. The layout of the room will need greater flexibility to accommodate the day's activity.

- The plan guide children from one activity to the next
- The plan should support staff in their role as facilitators of the child's learning and self directed activity
- Layout and separate quiet/noisy, tidy/messy, active and calm activities
- Keep messy activity close to sink area
- Provide good natural light and easy access to outdoor activities
- Provide child-level storage for easy access to play materials
- Ensure ease of supervision without intrusion at all times
- Toilet area should be within easy access and be easily monitored
- Make good use of alcoves, nooks and irregular shapes. Children love these areas and it stimulates their imagination

Summary

- All rooms must be designed specifically to support children's stage of development
- Ensure layouts add to the unit's developmental program
- Construction of low walls or partitions helps to create different environments, and allows staff to easily monitor the children, without being intrusive
- Provide areas of challenge through seeing, touching, feeling and moving
- A separate arts/messy play area may be provided for communal use

school age services

School age services can also be referred to as afterschool or out of school care. Given that the provision of childcare services can include children aged 4-14 years, special consideration needs to be given to designing a



physical environment that supports the varying rates of development and growing needs of this older age group. Creating the right environment will support emerging independence, and in developing young people to their full potential. It will also provide security and opportunities for relaxation, along with activities, interactions and on going development in an appropriately designed care environment.

The positioning of the school-age service within a building is important. In certain circumstances an upper floor of the building will be considered suitable.

Design and Structure

A secure and separate entrance to the school age service whether stand alone or part of an

integrated service clearly marks the area as separate in the psyche of the older child. This takes on more significance as children reach the upper age range of 8-14 years.

Where services are integrated a specifically allocated entrance route is advisable. Where possible, routes through areas designated for younger children are not advisable and should be avoided.

Design a route that can be clearly designated for older children and decorated appropriately through use of colour (see Guideline 5) with adult size fixtures such as a supervised reception area where children can sign themselves into the service.

Creative use of colour and fixed furnishings are especially relevant where children are being cared for in the same premises where they attend school. Differentiating the education from the care environment is as important as differentiating the pre-school service from the school age service. Fixtures should include personal lockers for the storage of change of clothes, school bags and personal items. The location of these is paramount, as they are a central congregation point for older children. Lockers are an addition, not a replacement to suitable children's storage areas (see Guideline 7).

Consider the positioning and usage of areas for older children. In designing areas it is not advisable to have a quiet area adjacent to the sports area. Large open areas, such as halls, may not necessarily be a suitable environment for school age children. Where provision occurs in such an environment, areas designated for quiet time, gross motor play



note school age childcare
'chill out' space

- either individual or team, and homework completion or project work, for example, must be clearly separated and provision made for partitions which afford a degree of sound proofing. The creative use of viewing panels, textile hangings and semi-permanent partitions affords the illusion of privacy and allows for the development of independence.

Supervised access to the kitchen is appropriate for school age children, and should be taken into consideration in design and layout. The inclusion of one area with lower level counter space will facilitate cookery and clean up. Where provision of service caters for 10-14 year olds, the provision of a drinks station is a valuable addition where children can make quick snacks and hot drinks as desired.

Sanitary Accommodation

Separate toilet facilities for boys and girls are a necessity with this older age group.

Girls' toilets should include the provision of sanitary dispensers and disposal units in at least one cubicle.

Outdoor Space

The competency of older children should be reflected in the design and layout of the outdoor area. The challenge in designing a suitable outdoor play environment for an integrated service is to reconcile safety for younger children with opportunity to take acceptable 'risk' in play for older children¹³.

Older children climb higher, kick ball harder, run faster and further than pre-school children. Give consideration to separating the play area (by use of a temporary or permanent dividers) away from that of the younger children.

Look at incorporating naturally occurring elements into the play environment. If building on a green field site for example, consider retaining older trees (Guideline 8) as climbing trees or the creation of den like structures through the use of willow or wood.

Ensure that the outdoor space as a whole is consistent with allowing for play equipment such as skateboards, bicycles, scooters and so forth in addition to the opportunities created in Guideline 8.



note separate toilet facilities

¹³ Afterschool - The Way Forward, p.10 NCNA

hazards and happenings

As in any industry there are always hazards and happenings, and childcare is no exception. When you think you have put all safeguards in place, continually check and re-check their efficiency. The following will help you assess some health and safety issues which may arise.

Precautions when Renovating

One of the greatest hazards is when building work is in progress. If work must be carried out during opening hours, ensure the following:

- Adopt a sign-in facility for all trades people and visitors
- It might be necessary to issue ID to people working on the premises, especially where the development is a large one and there is much activity
- Secure and cordon off the area where work is being done including dust screens if necessary
- Good signage, utilising pictures also will indicate that work is in progress
- Ensure that the builder displays a Health & Safety Statement, which will include, where necessary, that hard hats, and steel capped boots and visi-jackets are worn
- Ensure that children never wander near a work area and that trades people do not have access to the child's play area
- Inform insurance company of proposed works
- Obtain from the builder a schedule of activity so children can be moved to avoid exposure to excessive noise



note accessible fire equipment

Where work is carried out, outside of opening hours ensure:

- That dust is kept to the minimum
- That the premises is in a suitable condition for the children
- That there are no nails, screws or tools left lying around
- Builder's insurance is in order and inform childcare premises insurers

Health and Safety on the Premises

The following checklist must be in place:

- Appointing a Health & Safety Officer from within the staff core will ensure that regular checks are carried out on all areas of the nursery. Issues must be reported and followed up on for outcome
- All doors should be fitted with cover slips to protect children's fingers
- Press units must be fitted with childproof locks
- Decoration material must be lead free and non-flaking

Employee Safety

It must be ensured that the office/childcare facility environment is also safe for employees. An employer must prepare a Safety Statement in writing,

which outlines the programme for managing health and safety in the work area. All employees should be given a copy.

Employers must ensure:

- A safe workplace
- Safe means of access and escape
- Safe work systems
- Safe equipment
- Information and training on safety to the employees
- That employees have personal protection equipment should the type of work require it (e.g. gloves for cleaners handling cleansing agents).

Employee duties include:

- Co-operating with employers and other employees to ensure optimum health and safety
- Report any possible health or safety hazards
- Use equipment, tools, machines or chemicals safely
- Use personal protection equipment as required, in the proper and safe manner¹⁴

Security system

A delicate balance exists between providing a safe and secure place for children without restricting the child's curiosity and learning.

The use of intruder protection at main entrance gates would be of great importance. This can be achieved by adopting any of the many electronic intercom, coded key pads or closed circuit TV systems available.

In the interest of child and staff safety, panic buttons should be placed in strategic points around the premises.

Colour coding specific hazardous areas alerts everyone to the potential danger. Using sensor lighting can be of value in areas that are out of bounds to the children or general public.

All exit doors must be clearly marked and illuminated. Ensure that service pipes, electrical wiring, back inlet gully traps and rainwater pipes are properly sealed and comply with all appropriate regulations. Emergency lighting and fire detectors must be professionally installed and checked monthly.

Car Parking

The provision of car parking space for staff, parents, disabled drivers, visitors and service vehicles will require good design and careful consideration at the planning process stage. This will include the marking of parking bays, and smooth access from car park to the child care facility, with any potential hazards highlighted using either colour codes or tactile indicators.



note position of electrical sockets

Industrial Estates

Siting a childcare centre in an industrial estate needs careful protection at entry and exit points. The centre should be away from areas of heavy traffic, air pollution, machinery and noise. While this may not always be the case, potential hazards need to be addressed.

Providing a minimum of 2.0m high boundary fencing will safeguard against children running out on the path of traffic.

Careful planting of trees and shrubbery can reduce noise and traffic pollution. The more 'industrial' the appearance of the site, the greater the need to provide a green area within the nursery grounds.

Position of Front Door

Children have a great tendency to run immediately if the front door is opened. It is very important, therefore, that there is not a direct line between the front door and the exit gate. Creating distractions, such as seating or play equipment might well be an annoying delaying mechanism on the part of a busy parent, but the few minutes delay could well prove to be a life saving exercise.

Outdoor area: (See Guideline 8).

- Outside areas should drain easily to avoid build up of ice in freezing weather
- Be aware if surfaces become slippery in certain conditions, that is, when wet or sandy
- Special precautions taken in winter months if slippery conditions arise
- Check outdoors - any hazardous or undesirable litter e.g. plastic bags, syringes, drink cans
- Check outdoors regularly for animal fouling
- Outside walls in good condition
- Clean sand pits regularly and keep covered when not in use
- Pipe and drain covers are safe and child proof
- Check areas where plants are growing to ensure no poisonous plants are in or overhanging your play areas
- Inspect outdoor play equipment weekly for safety and condition - check bolts are adequately tight
- Check children's clothing when using climbing equipment, that is, scarves, belts, flapping coats
- When using climbing frames in wet weather, caution should be exercised
- Adequate safety surfaces beneath equipment to absorb shock or impact
- Bark should be topped up to sufficient depth
- Ponds must be covered with rigid mesh grille

-
- Ensure opening window sections do not cause a hazard to paths or play areas
 - Paddling pools drained after use and stored so as not to collect rain water
 - Sheds or stores in outside play areas kept secure to prevent unsupervised access by children
 - Slides, climbing apparatus and swings must be securely fixed
 - Swings for young children have appropriate restraints
 - Restricted access to swing area advisable

Electrical:

- All electrical equipment should comply with CE standards and be checked regularly
- Fit short curly flexes to electrical devices
- Regularly check flexes for fraying
- Avoid extensions or other trailing cables
- Lights should simulate day light
- Turn electrical equipment off after use
- Guard heaters where necessary
- Individual switched socket outlet for each electrical appliance
- Electrical sockets covered with safety inserts

Fire & Safety:

- Eliminate children's access to heat controls
- Be aware of too much paper on walls in corridors and stairways because greater spread of fire
- Flame retardant upholstery and fabrics
- Fire fighting equipment serviced annually
- Emergency lighting
- All rooms need two means of escape, a window may be accessible
- All doors serving as fire exits must be free from obstruction, clearly marked and easily opened
- Carry out regular fire drills

General:

- Surfaces to be non slip inside and out
- External/front doors - spy hole/viewing panels
- System of double doors - inner door handle above child's height - but within reach of adults in wheelchairs
- Safety glass in doors where appropriate
- Internal doors with slow closing mechanisms to prevent injured fingers



note the protective strips
in front of window

- Child's toilet doors not lockable from inside
- Low windows fitted with safety glass
- Rugs and mats not recommended - if used should be firmly secured
- Floor coverings to be close fitting
- Vinyl coverings non slip and easy to clean
- Stair gates at top and bottom of stairs, dependent on children's ages
- Banisters/guard rails in good condition - gaps less than 10cms and not climbable
- Stair rail at appropriate height on both sides - approx height 60cms
- Stair carpets checked regularly
- Child proof locks on drawers and cupboards where appropriate
- Safe storage for medicines and all toxic substances
- Doors should include vision panels at adult and child heights - if doors need to be fire resistant, vision panels must be of fire resistant
- Glazing in both windows and doors must be safe for its location and must comply with BS6262: 1982

modular buildings

Much discussion will take place between childcare providers and designers in an effort to try to produce the perfect building. Managers will want it to look cosy and will also require it to be functional, and easily managed and supervised. Designers will often look to make an architectural statement, but will essentially aim to suit everyone's needs.

There are basically two building types available. One is the conventional 'bricks and mortar.' This is the building type with which we are most familiar. The other is the modular building that was commonly known as pre-fabricated.

With this type of construction there are many choices of design, material, and finishes. Buildings can be as elaborate or simple as finance and imagination will allow.

It might come as a surprise to learn that today most domestic and commercial developments have some degree of modular system in their structure. It can be anything from windows, to internal partitions to external brick cladding or roof trusses.

Modular Systems

Irish custom built or modular system housing and commercial developments are dominated by a few large manufactures of timber or metal-framed structures. They generally employ in-house designers and have a range of standard or special units to satisfy many clients' requirements.

This type of construction is widely and successfully used in the USA, Canada and the Scandinavian countries. The timber framed structures became popular in England and Ireland in the late '60s and now metal framed structures are making a name for themselves. These units are designed to exact specifications with a light gauge structural steel frame with composite roof and end wall panels. The modules are used to construct single, two-three or four storey buildings. The life-span of the steel structure is deemed to have a minimum of 60 years, with the design life of the external envelope and internal finish between 25 and 60 years.

Choosing a modular building over a conventional one will still require the same site considerations and application for Planning Permission, Building Bye-laws and Fire Safety Certificate.

Basic ground works will need to be carried out, such as location of services, i.e. water and sewage. Foundations and concrete ground floor form part of the initial site works required.

All other structures are manufactured off site to a standard of quality that is consistent. The structure, such as walls, floors, internal partitions, are then delivered on site, and with the help of a few trades persons and a crane, the building can be erected and ready for use in approximately three weeks. Once the structure has been bolted and fixed in place the external cladding is applied. The choice here will often be dictated by the local





architecture, and the Planning Authorities may well determine that it have a brick, timber, concrete & plaster rendered, or stone wall facing. The roof profile will again be required to blend in with existing structures. The choice will be the standard flat roof, or pitched concrete, tile, slate or metal.

Modular systems can include completed bathrooms, toilets, play rooms, kitchen etc. On site work will include plumbing and electrics.

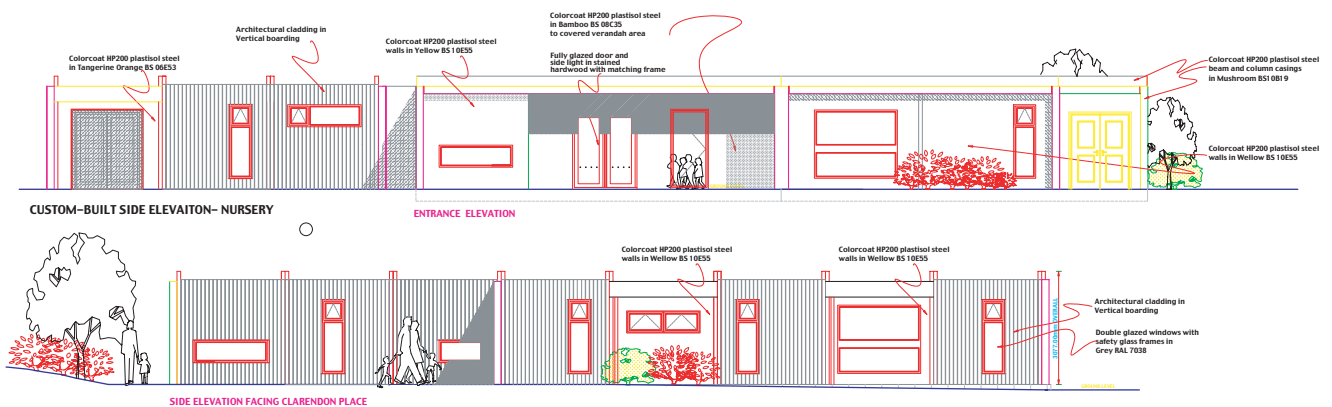
The quality of design and finish of the modular system of today is far removed from our image of the prefabricated units we have all experienced in the past. These new systems can be built and designed to look like any other building externally, while providing the many of the advantages of the more conventional structure.

Advantages of Modular Systems

- The time frame from planning stage to the service up and running is greatly reduced
- Onsite labour saving
- Build-in factory finish ensures quality control
- Construction of the composite module is generally not affected by weather conditions
- Corporate image will be consistent

Disadvantage

- The main disadvantage would appear to be public perception
- The cost of construction may be comparable to conventional building costs, depending on the quality and specification



the kitchen

Children attending full day care are required to have at least one balanced and nutritious meal during the day.

Where full meals are provided for the children attending the service, all areas where food is stored, prepared and served must comply with the E.C. (Hygiene of Foodstuffs) Regulations 1998. Each premises will be assessed according to:

- the risk involved
- the number of children to be catered for
- the age range of the children
- nature and extent of food storage, preparation and service

When planning a pre-school premises, care should be taken to ensure that the kitchen and food rooms are sited in the most appropriate locations. The size of the kitchen should be adequate to cater for food storage, preparation and food service for the number of children involved.

It is recommended that food for children be prepared on the premises. However, in circumstances it may be the policy of the centre to have food provided by the parent or an outside agency. Where parents provide the children's food the following is required:

- Refrigerated storage
- Limited food storage
- Heating/re-heating equipment
- Washing-up facilities
- Separate hand washing facilities

Where food is provided by an outside agency, the following is required:

- The agency should be registered by the relevant health board
- Hot holding facilities
- Refrigerated storage
- Limited storage
- Washing-up facilities
- Separate hand washing facilities

Depending on the scale of food preparation, storage and cooking all or part of the following criteria will apply.

A general guide to the size of food rooms (including kitchen and storage) is provided:



NUMBER OF CHILDREN

<10

11 - 20

21 - 30

31 - 40

FLOOR SPACE

9.5 m² minimum

9.5 - 14 m²

14 - 18 m²

18 - 21.5 m²

For facilities catering for more than 40 children, contact the Local Environmental Health Officer.

Structural Finishes

All walls, ceilings, and floors should be constructed and finished with surfaces which are smooth, durable, impervious and readily cleanable.

Wall surfaces behind sinks, wash hand basins and work surfaces should be provided with an impact resistant finish to a minimum height of 45cm (18 inches).

In other areas, walls should be smooth plastered and finished with gloss paint or eggshell emulsion.

Wall surfaces surrounding cooking equipment must be provided with a heat resistant finish.

Food Storage Facilities

Suitable and sufficient refrigerator and freezer storage must be provided and must be capable of holding food at the following recommended temperatures:

Refrigerators should be at a temperature less than 5°C;

Deep freeze should be less than -18°C.

If large numbers are catered for there should be a separate milk fridge, as the frequent opening and closing of the fridge will interfere with the stability of the temperature control.

Suitable shelving or cupboard should be provided for the storage of dry goods within a well-ventilated area. They should be constructed of smooth, durable, impervious and readily cleanable materials.

The shelving or racking provided should be at least 22.5cm (9 inches) above floor level.

A separate locked cupboard should be provided for the storage of cleaning agents.

Food Preparation & Work Surfaces

Zoning within the food preparation area is important. Separate areas must be designated for carrying out various activities so as to prevent the risk of cross contamination. The clear labelling of these areas will reduce the margin for error where more than one person uses the area.

Bottle and baby food preparation and sterilising must be carried out in an allocated area of the kitchen and must include sterilising facilities.

There should be adequate and separate worktop space to facilitate the hygienic preparation of food. Where cooked and raw meats, dairy products and vegetables are prepared, separate cutting boards or work surfaces will be required to prevent cross contamination. The colour coding of cutting boards is a useful and recommended exercise.

All work surfaces should be provided with a smooth, durable, impervious and readily cleanable finish.

The kitchen should be inaccessible to children.

Vegetable Storage Preparation

Adequate provision must be made for the storage and preparation of vegetables. The area must be separate from the main food preparation area. Permanent ventilation to the outer air must be provided in the vegetable store.

Cooking Equipment

An oven or cooker suitable to cater for the maximum number of children attending the pre-school must be provided.

Washing Facility

An adequate number of suitably serviced sinks must be provided in the kitchen for food preparation and washing up.

A double-bowled sink unit or a single sink with a dishwasher is required for washing.

At least one sink unit must be provided for food preparation.

The provision of a dishwasher is strongly recommended.

A wash hand basin serviced with a constant and instantaneous supply of hot and cold water must be installed within the food preparation area.

A safe drinking water supply must be provided. The cold tap in the kitchen must be connected to the rising main and not fed via a storage tank.

Children centres that are not connected to a treated public water supply must ensure that the water supply serving the premises is in compliance with E.C. standards.

Washing machines should not be sited in the kitchen.

Ventilation

A minimum of 15-20 air changes per hour should be available within a kitchen area.

Where necessary mechanical extraction should be present over steam and heat emitting equipment. Canopies located over cooking equipment must be fitted with grease filters.

All sanitary accommodation should be separated from any food room by an intervening ventilated lobby.

Lighting

Adequate lighting must be provided for cleaning and the provision of a safe working environment. All light fittings should be of the safety type.

Where fluorescent lighting is used, the tube shall be enclosed in shatterproof diffusers.

Refuse Storage

Internal: Suitable lidded bins must be provided for the storage of waste.

External: A suitable external area must be provided for the temporary storage of refuse. This area should be suitably finished and readily cleanable. Adequate number of pest proofed and insect proofed containers must be provided for the temporary accumulation of waste.

Pest Control

The entire premises must be rodent proofed.

All opening windows present in the food preparation and storage areas must be provided with insect proofed mesh (size 16).

External doors, opening directly into food preparation or storage areas, must be provided with insect proof screens.

The Milk Area

This is solely an area for food and bottle heating for babies and toddlers. It is not designed for cooking and facilities within the milk area must include a sink with drainer and hot and cold running water, a fridge, microwave oven and bottle warmer, a sterilizer, storage facilities, and handwashing facilities.

legislation

This is a simple guideline to understand the Legislation and is not a definitive legal interpretation. For more information on specific issues you should consult the Department of the Environment and Local Government, Department of Health and Children and Department of Enterprise, Trade and Employment.

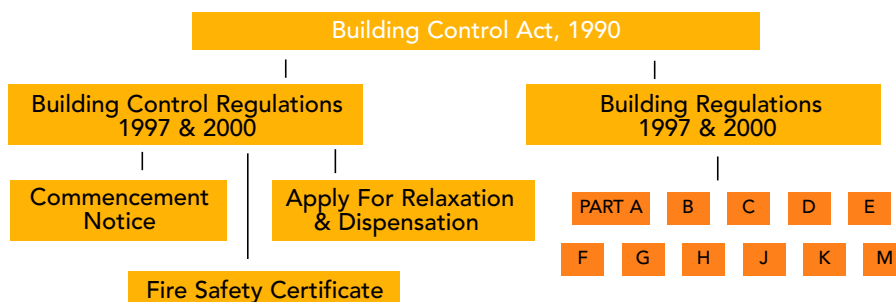
All new buildings, material changes of use, and material alterations and extensions to existing buildings must comply with the building regulations to varying degrees. Some will also require a Fire Safety Certificate, which is applied through the Building Control Authority.

Legislation 1.



- Childminding now exempt. Limit of 6 children including the children of the minder
- 40 sq mtr residential exemption with conditions. (see Guideline 2)

Legislation 2.



- In general building regulations apply to the construction of new buildings and to extensions and material alterations to buildings. In addition, certain parts of the regulations apply to existing buildings where a material change of use takes place. Otherwise building regulations do not apply to buildings constructed prior to 1992.
- The building regulations are constantly being revised.
- Where a building is converted into a childcare facility very few of the building regulations will apply. Compliance with Parts B (Fire), G (Hygiene) and M (Access for the Disabled) are mandatory.
- Application for Relaxation of or Dispensation from a requirement of the Building Regulations can be made under Schedule 4 of the Building Regulations 1997 & 2000.

The Building Control Act, 1990 is the primary legislation for the preparation and enforcement of regulations for the health and safety of people in and about buildings.

The Building Regulations, 1997 & 2000 and **the Building (Control) Regulations, 1997 & 2000** are the basic technical and administrative pieces of legislation. They are there for the proper guidance and interaction between designers, contractors and the State/Local Authorities.

The Building Control Regulations, 1997 & 2000 provides for the Serving of Notice at the commencement of works, to inform the Building Control Authority that work is about to commence and to indicate the relevant details as to the nature and location of the work.

In addition the Building Control Regulations provide for the designer to submit a detailed application for a **Fire Safety Certificate**, which is then examined and approved by the Building Control Authority before work commences.

What is a Fire Safety Certificate?

This is a certificate issued by the Building Control Authority and states 'the works or building to which the application relates will, if constructed in accordance with the plans, calculations, specifications and particulars submitted, comply with the requirements of Building Regulations, 1997 & 2000'.

Is it necessary to have a Fire Safety Certificate?

Yes, with the exception of certain works described in the Building Control Regulations 1997 & 2000 (which include domestic houses and certain agricultural buildings), a Fire Safety Certificate is required for all new buildings (including apartments and flats) and material changes of use. It must be obtained before work commences on site.

Where do I get a Fire Safety Certificate?

A Fire Safety Certificate is applied for through the Local Building Control Authority. Application forms are submitted with the following information:

- Plans, calculations and specifications for the work being carried out
- Details of the nature and extent of the proposed use
- Where appropriate, details of the prior or existing use of the building
- The appropriate application fee

How Long Does It Take?

The Building Control Authority has two months to process the application or where additional information is requested, such extended period of time as agreed between the applicant and the Building Control Authority. A certificate may be granted with or without conditions or it may be refused.

Can I Appeal?

Yes, an applicant can appeal against a refusal, to An Bord Pleanála within one month of the decision.

The Building Regulations 1997 & 2000

Building regulations are made to provide for the health, safety and welfare of people in and about buildings, to make provision for the special needs of the disabled and to provide for the conservation of fuel and energy in relation to buildings.

There are twelve Technical Guidance Documents to accompany the Building Regulations, 1997 & 2000 which act as a guide for designers, in choosing materials, methods of construction, standards and other specifications, including technical specifications, which are deemed to comply with the regulations. It is in these Technical Guidance Documents that the principle provisions for safe and healthy buildings are found. It is important to note that the Technical Guidance Documents are recommendations and are not part of the legislation. Other means of compliance may be used providing the relevant requirements of the regulations are complied with.

The following is a brief description of each of these documents:

A - Structural Strength and Stability (1997)

This relates to the fabric of the building and its general stability.

B - Fire Safety (1997)

Covers the Fire Resistance of the construction materials, the reaction to fire of the lining materials, the means of escape provisions in the building and access for fire fighters and their equipment.

C - Site Preparation (1997)

Covers the problems of moisture from the ground, contaminated sites, radon gas and the construction of ground floors.

D - Materials and Workmanship (2002)

This part concentrates on the proper use of materials used in construction and the means of ensuring the materials comply with an accepted standard or technical approval.

E - Sound Insulation (1997)

Does not apply to childcare facilities.

F - Ventilation (1997)

Describes the requirements for ventilation in buildings.

G - Hygiene (1997)

Describes the requirements for sanitary accommodation in buildings.

H - Drainage and Waste Water Disposal (1997)

Requirements for drainage and septic tanks are contained in this part.

J - Heat Producing Appliances (1997)

The positioning of, and the air supply to heating appliances and open fires is included in this part. The position of protection of oil storage tanks is also included.

K - Stairways, Ladders, Ramps and Guards (1997)

Ramps and stairways are important means of circulation on a building. The proper construction and guarding of stairs and openings where people could suffer injury is therefore included in this part.

L - Conservation of Fuel and Energy (1997)

Savings must be made in the use of energy and this part includes the minimum requirements for this purpose. Three different methods of calculating heat losses are provided for and their means of calculation given.

M - Access for People with Disability (2000)

Provides guidance for design of buildings for disabled persons, including approach to the building, access, internal circulation, lifts, toilet accommodation and other installations such as lifts and induction loops (electronic hearing devices).

Legislation 3.

Fire Services Act 1981

In addition to Part B- Fire Safety, persons operating a childcare service have a statutory responsibility under the Fire Services Act, 1981; The Child Care (Pre-School Services) Regulations 1996 and the Child Care (Pre-School Services) (Amendment) Regulations 1997. They are required:

- to take 'all reasonable measures' to guard against the outbreak of fire on the premises and
- in the event of fire occurring, to ensure 'as far as reasonably practicable' the safety of the children and staff on the premises.

'A Guide to Fire Safety in Premises used for Pre-School Services' is published by the Department of the Environment and Local Government to assist persons in control of premises used for pre-school services in discharging their statutory responsibilities under the Act.

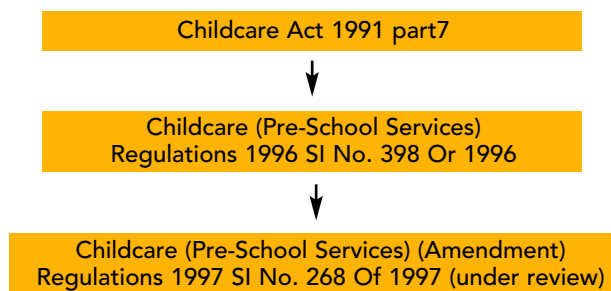
Other important matters are also referred to but are contained in other documents, which must be interpreted.

- External Fire Spread: Building separation and boundary distances
- Guidelines for the construction of fire resisting elements
- BS 5499: Part 1: 1990 Specifications for fire safety signs
- I.S. 3217: 1989 Code of Practice for Emergency Lighting
- I.S. 3218: 1989 Code of Practice for Fire Detection and Alarm Systems for Buildings

Additional matters within the Building Regulations

- Heat Energy Rating
- Radon in Buildings : New Works Remedial Actions
- Fire extinguishing installations
- Code of Practice for Fire Safety of Furnishings and Fittings in Places of Assembly
- Code of Practice for the Management of Fire Safety in Places of Assembly

Legislation 4.

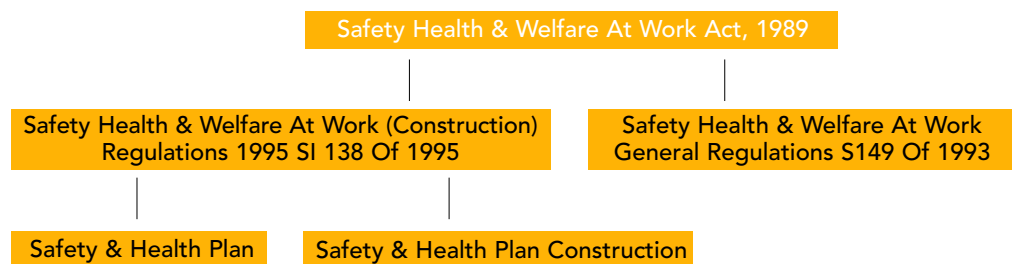


- Under the Childcare (Pre-school Services) Regulations, 1996, the childcare premises must be notified with the local health board within 28 days of opening the premises
- Pre-school officers and Environmental Health officers are authorised to review the childcare facility
- An explanatory guide accompanies the 1996 Childcare Regulations. This does not form part of the statutory instructions and does not purport to be a legal interpretation

The following special legislation and support documentation in relation to Pre-School Services are:

- Child Care (Pre-School Services) Regulations, 1996, and Childcare (Pre-school) (Amendment) Regulations 1997
- Fire Safety in Pre-Schools
- Fire Safety Management, including emergency and evacuation procedures
- Fire Safety Programmes, including fire drills
- Staff Training
- Maintenance of Fire Protection Equipment
- Maintenance of Fire Building Services
- Fire Safety Records
- Fire Safety Register

Legislation 5.



The need for a Safety & Health Plan is determined by

- The construction period over 30 days
- Volume of work exceed 500 person days
- If the work involves a particular problem to the health and safety of persons at work

Additional Information

Department of Health

- The 1988 European Union Regulation on Quality of Water Intended for Human Consumption
- European Union Regulation 1998 on Hygiene of Foodstuffs

Department of Finance

- Finance Act (in relations to grants and taxation)

Department of Enterprise, Trade and Employment

- Terms of Employment (Information) Act 1994
- The Organisation of Working Time Act 1997
- Protection of Young Persons (Employment) Act 1996
- Worker Protection (Regular Part-time Employees) Act 1991
- Payment of Wages Act 1991
- Data Protection Act 1998
- Freedom of Information Act 1997
- Carer's Leave Act 2001

National Rules for Electrical Installations (ET1010 (2nd Edition 1991));
I.S.813 Code of Practice for Gas Installations.

Bibliography and help section

See legislation section.

The following list recommends books for additional reading.

Authors listed in alphabetical order

Setting Standards. (A guide to the Nursery Professional). Ruth Andreski and Sarah Nicholls, Nursery World.

Planning And Designing Spaces For Children - Conference report (2001)
Border, Midlands and Western Region.
The White House, Ballinlough, Co Roscommon.

A Guide To Setting Up Environments
California Dept of Education
ISBN no: 0-8011-0879-9

Creative Curriculum
Dianne Trister Dodge
ISBN no: 0-942702-25-5

Building For Young Children
Mark Dudek. (2001)
Published by: The National Early Years Network.
ISBN no: 1-870985-56-7

Colour - With Confidence, Dulux, ICI.

Designing For Play, by Barbara Hendricks. Ashgate Publishing Ltd.

Prime Times
Jim Greenman and Anne Stonehouse. (1997)
Pearson Education Australia Pty Limited,
ISBN no: 0- 582-87649-4

Places For Childhoods - Making Quality Happen in the Real World
Jim Greenman (1998)
Child Care Information Exchange
ISBN no: 0-942702-25-5

Caring Space, Learning Places
Jim Greenman
ISBN no: 0-942702-04-2

Great Places For Children
Jim Greenman
ISBN no: 0-88076-434-4

Go Wild At School, Patrick Madden

Children's Playgrounds
A Guide to the New European Playground Equipment and Surfacing



Standards

Peter Heseltine (1998)
Royal Society for the Prevention of Accidents
ISBN no: 0-952-4370-3-1

Practical Guide to Child Observation

Hobart and Frankel
ISBN no: 0-7487-1742-0

Infant/Toddler Caregiving : A Guide to setting up Environments

Bill Honig (1990)
California Dept of Education
721 Capitol Mall
Sacramento, California
USA

The Case for Mixed-Age Grouping in Early Education

Lillian G. Katz, Demetra Evangelou and Jeanette Allison Hartman (1990)
National Association for the Education of Young Children
ISBN no:0-93598931-5

Planning Environments for Young Children - Physical Space

Sybil Kritchevsky and Elizabeth Prescott with Lee Walling
National Association for the Education of Young Children
ISBN no: 0-912674-28-8

Children's Experiences - Developmentally Appropriate Experiences for 0-6 year olds

Carolyn Lunt, Diane Williamson (1999)
ISBN no: 0-86444-726-4

Exercising muscles and minds - outdoor play and the early years curriculum

Marjorie Ouvry (2000)
Published by: The National Early Years Network.
ISBN no: 1-879985-51-6

Developing the Children's Playground - A Basic Management Guide

RoSPA, ISBN no: 0-9524370-1-5

Growing Spaces for Play - a basic guide to planting on playgrounds,

RoSPA, ISBN no: 0-9524370-7-4

Children's Playgrounds - An information Pack for Community Groups

SUGRADH
Springfields,
Hollybrook, Bray, Co Wicklow,
Ireland

Places and Spaces for Preschool and Primary (Outdoors)

Jeanne Vergeront (1985)

National Association for the Education of Young Children
ISBN no: 0-935989-25-0

Places and Spaces for Preschool and Primary (Indoors)

Jeanne Vergeront (1985)
National Association for the Education of Young Children
ISBN no: 0-935989-07-2

Space for Children, Edited by Carol Simon Weinstein, Thomas G. David.
1987

Help Section

FUNDING

Equal Opportunities Childcare Programme

1.1 Capital Grant Scheme for Self-employed Childcare Providers

Applies to self-employed providers. Funding may be applied for support towards the building, renovation or upgrading of childcare facilities.

1.2 Capital Grant Scheme for Community based/not for profit organisations

Applies to community based/not for profit groups and organisations or a community based/not for profit consortium of private and community groups. Funding may be applied for support towards the building, renovation or upgrading of community based childcare facilities.

1.3 Staffing Grant Scheme for Community based/not for profit organisations

Applies to community based/not for profit groups and organisations or a community based/not for profit consortium of private and community groups. Funding may be applied for support towards staffing costs for community based childcare facilities.

1.4 School age Childcare Support

Capital grants are available to self-employed childcare providers and community based/non profit organisations as listed above.

Enquiries and information available from:

Childcare Directorate,

The Department of Justice, Equality and Law Reform, 72 - 76 St Stephens Green, Dublin 2.

Lo-call: 1890 20 90 30

E-mail: Childcare_Mail@justice.ie

www.irlgov.ie/justice

2. Údarás na Gaeltacht

Údarás na Gaeltacht supports and funds naíonraí (Irish-speaking sessional

services) in the Gaeltacht area by offering support to Irish speakers and the initial education of children who are acquiring the Irish language for the first time.

Further information may be obtained from:

Cultural and Linguistic Development Section

Údarás na Gaeltacht

Furbo, Co Galway

Phone: 091 503100

E-mail: eolas@udaras.ie

3. Enterprise Board Funding

Local Enterprise Boards also offer funding towards the development of childcare services.

TAX RELIEF

1. Capital allowances: Premises used for childcare

The cost of constructing, refurbishing or extending premises for use as a childcare facility may be written off for tax purposes on childcare facilities which meet the required standards specified in the Child Care Act, 1991.

Further information available from:

Central Telephone Information Office: Revenue Information Services.

Tel: 01 8736100

THE NATIONAL VOLUNTARY CHILDCARE ORGANISATIONS

National Children's Nurseries Association

Unit 12c

Bluebell Business Park

Old Naas Road

Bluebell

Dublin 12

Phone: 01 4601138

E-mail: info@ncna.ie

www.ncna.net

An Comhchoiste Reamhscolaíochta Teo

7 Merrion Square

Dublin 2

Phone: 01 6763222

E-mail: comhchoiste@eircom.net



Barnardos

Christchurch Square
Dublin 8
Phone: 01 4530355
www.barnardos.com
E mail: info@barnardos.ie

Childminding Ireland

49 Applewood Heights
Greystones, Co Wicklow
Phone: 01 2871111
www.childminding-iol.com
E-mail: childm@indigo.ie

Children in Hospital Ireland

Carmichael House
North Brunswick Street
Dublin 7
Phone: 01 8780448
E-mail: info@childreninhospital.ie

Irish Pre-school Playgroups Association

Unit 4
Broomhill Business Complex
Greenhills Road
Dublin 24
Phone: 01 4630017
E-mail: info@ippa.ie
www.ippa.ie

Irish Steiner Waldorf Early Childhood Organisation

Tuamgraney
Co Clare
Phone: 061 927257
E mail: isweca@eircom.net

St Nicholas Montessori Society of Ireland

1-3 Callaghan's Lane
Georges Place
Dun Laoghaire
Co Dublin
Phone: 01 2805705
E mail: snmta@eircom.net

COUNTY CHILDCARE COMMITTEES

County Childcare Committees have been established to advance childcare service provision at local level.

For information regarding regional County Childcare Committees contact:

Area Development Management (ADM) Ltd.,

Holbrook House

Holles Street

Dublin 2

Phone: 01 2400700

www.adm.ie

E mail: enquiries@adm.ie

Pre-school Officers and Environmental Health Officers

Contact local area health boards

Department of Health and Children

Hawkins House

Dublin 2

Phone: 01 6354000

Lo call: 1890 200 311

E-mail: customer_services@health.irlgov.ie

www.doh.ie