



Entering and Moving about the Early Learning and Care Setting

Entering and moving around an ELC setting should be easy and enjoyable. Circulation spaces should be accessible, understood and easily used. It should provide stimulating social spaces for discovery, play, engaging with others, and interacting with the environment.





Snapshots

A selection of images taken by the children from across the case study settings.











Entering and Moving About the Early Learning and Care setting: Overall design issues

Making it easy and comfortable to enter and move around inside a setting is critical to a Universal Design approach. Considering the range of users in a typical setting, it is essential that circulation areas are accessible, easily understood and usable. The overall layout of the building should be coherent, logical, easily navigated, and composed of distinct routes. In more open plan settings or where there are flexible space arrangements, legibility can be improved using distinct colour, landmarks and focal points, or other visual cues such as planting or artwork. Circulation areas should act as stimulating, exciting social spaces for children to play, develop skills, engage with others and interact with their environment.

When designing or retrofitting the circulation spaces of an ELC setting, consider the Key Design Issues as framed by the selected **Síolta Standards** (See **Introduction page 16**):

	Rights of the Child	Circulation areas where children can move around freely and associate with their peers and with older or younger children in mixed age settings.
	Parents and Families	Provide welcoming settings for parents and families that are easy and comfortable to enter and move around in, particularly at peak times.
	Interactions	Design circulation areas that support and promote interactions between children, and between children and practitioners.
	Play	Consider how all parts of the circulation route, from the outside areas at the entrance to the corridors or stairs can support play, adventure and discovery for all children.
	Professional Practice	Design circulation to provide flexible space that supports practitioners as environmental planners and evaluators. Consider how the layout provides reflective spaces for study and peer-to-peer learning.
	Community Involvement	Consider how the layout, especially more public aspects such as entrance areas or reception areas, can connect and integrate the setting with the community in a safe and appropriate manner.

2.1 Entering the Early Learning and Care setting



01 Benbulbin Crèche, Sligo Town, County Sligo.

Design features

- Entrance area is obvious and clearly visible on approach.
- Projecting roof forms an entrance canopy over the main door to give shelter as users enter and leave.
- This setting is located adjacent to a government building and shares a carpark. In this context, the boundary treatment and the building façade create a good relationship with the overall carpark.

Design tip

- The main access door (see arrow) would be easier to see and locate if a contrasting colour or tone was used to make it stand out from the background.
- The addition of planting would soften the approach and provide wayfinding cues.



Entrance Area

Design considerations and awareness

The building entrance should be in a logical place that is consistent with a person's expectations as they approach the setting. The entrance should be legible, visible and recognisable from a distance, creating a sense of welcome that is accessible for all users. An aesthetically pleasing entrance will encourage a child to enter and will help create a sense of belonging.

Depending on the site layout or building location, the entrance area may directly adjoin the public realm or may be set back from the boundary. Either way, the entrance area should be designed to create a strong sense of place and identity helping to integrate and connect the setting with the community.

The entrance area should be treated as a social space and part of the children's extended environment that supports play, adventure and multi-sensory experiences.



➤ 02 Tigers Childcare, Blanchardstown, Dublin.

Design features

- The entrance is sheltered and spacious.
- The seating ensures that people who need to sit can do so while they wait to be admitted.



Design features

- A canopy extending from the entrance gate to the main door provides shelter on approach.
- Using the uprights of the canopy to fly flags gives children a sense of identity and belonging.

Design tip

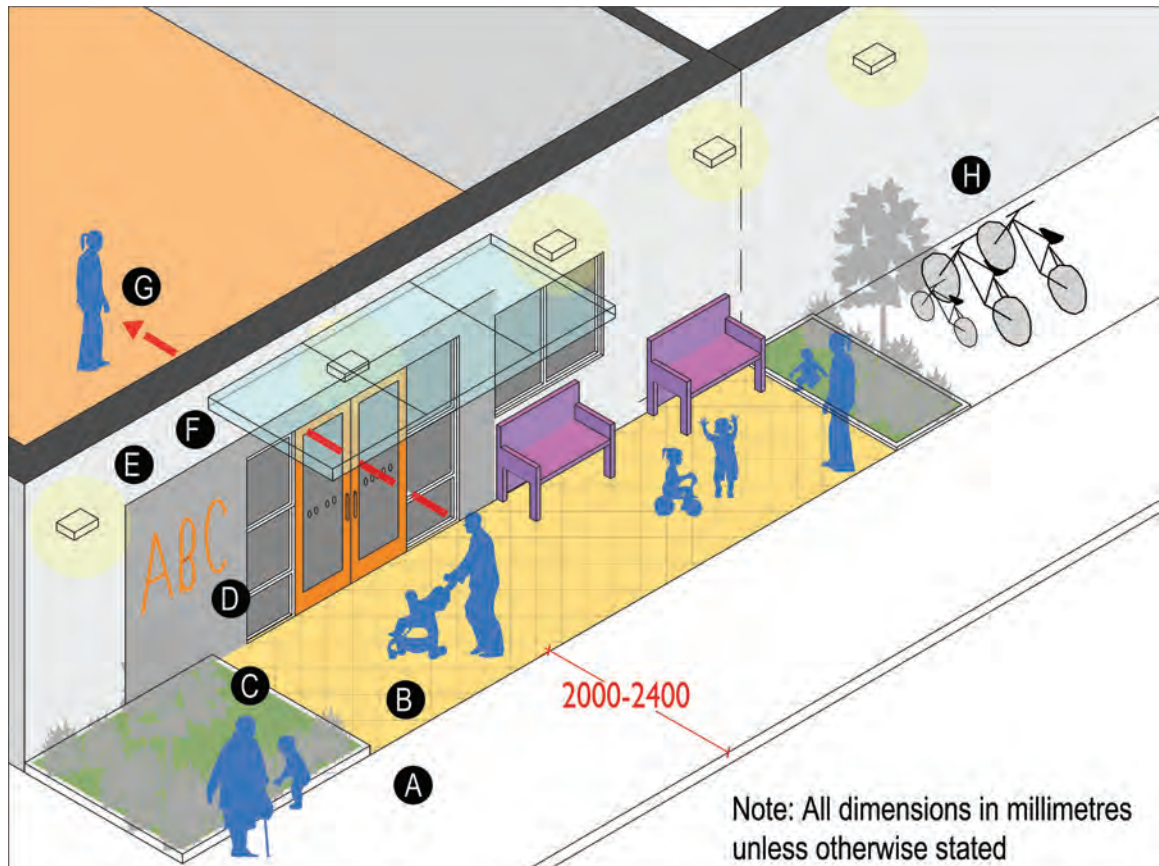
- The entrance door (see arrow) could be painted a different colour to aid visibility.
- Seating and more planting would improve the entrance area.

A covered entrance area provides shelter to users as they enter and leave the building. Consideration should be given to an outdoor covered area at the entrance as a waiting area for users. Entrance canopies and covered areas adjacent to the entrance will also make the entrance more visible and easier to identify.

All pedestrian paths leading to the entrance should be flat, even, well drained and sufficiently wide to account for people pushing buggies, walking with small children, or using a wheelchair. Wayfinding signage should identify the entrance area on approach and clearly indicate the entrance door location. Good levels of evenly distributed artificial lighting should be provided at the entrance area, while consideration should be given to seating within this space (as part of or separate from the covered waiting area).



Technical sketch 1: Indicative 3-D sketch showing entrance forecourt.



- A Footpaths with a minimum width of 2000mm but preferably up to 2400mm.
- B A welcoming entrance area that creates a strong relationship with the community.
- C A space for discovery and play for children.
- D Clearly visible signage identifying the setting.
- E Good levels of artificial lighting.
- F A covered entrance area giving shelter and making the entrance more visible.
- G Good views into the reception area so that a person knows where they are going.
- H Secure bicycle locking.



ELC Practitioner, Northside Family Resource Centre:

“Very welcoming, cosy for children, parents feel welcomed.”



➤ O4 Busy Kids Childcare, Lucan, Dublin.

Design features

- The location of the entrance is clearly visible from the community and helps to integrate the setting into the locality.
- Covered area clearly identifies the entrance and provides a degree of shelter and shade.

Design tip

- Wayfinding signage would help users to find entrance.
- Use of planting or colour would make the entrance easier to find on approach.

Universal Design Guidance

- The entrance is one of the most important areas in the setting and should be designed to create a welcoming space that helps create a strong relationship and connection with the community.
- Place the main entrance in a logical location that is clearly visible on arrival.
- Where possible, treat the entrance area as a social space where children and parents can meet and interact at the beginning and end of the day.
- Provide clear wayfinding signage to locate the entrance area and the main door.
- Provide good levels of evenly distributed artificial lighting to ensure the space is comfortable to use, and accessible in low light conditions.
- Provide seating with back and arm rests somewhere that is visible and easily reached.
- Install sufficient bicycle stands close to the entrance.



Entrance Doors, Access Controls and Thresholds

Design considerations and awareness

The main entrance door marks the threshold to the setting and is used every day by all users as they enter and leave the building. The clear opening must be wide enough to accommodate a double buggy or a large motorized wheelchair. The door itself must be accessible and easily operated by a person with sensory, physical or cognitive difficulties. Given the potential challenges involved when trying to open a door while pushing a buggy or operating a wheelchair, consideration should be given to automatically operated doors that are linked to the intercom or security system.



➤ 05 Mallow Community Childcare, Mallow, County Cork.

Design features

- Covered entrance area provides shelter and shade. Bright painted walls create a colourful and easily identified building access.
- Glazed doors provide good visibility and supervision between inside and outside.
- Wide door opening with two opening sections to allow easy access for double buggies or large objects.

Design tip

- Height of intercom and door controls may be out of reach for some users.
- Signage at or near the main door aids wayfinding.

The door should be highlighted using colour or tonal contrast to ensure it stands out from the background or from adjacent properties. All door furniture such as door handles, or locks should be intuitive and easy to use. Push button access controls or intercoms should be easily located, within reach, and easily operated by all users.

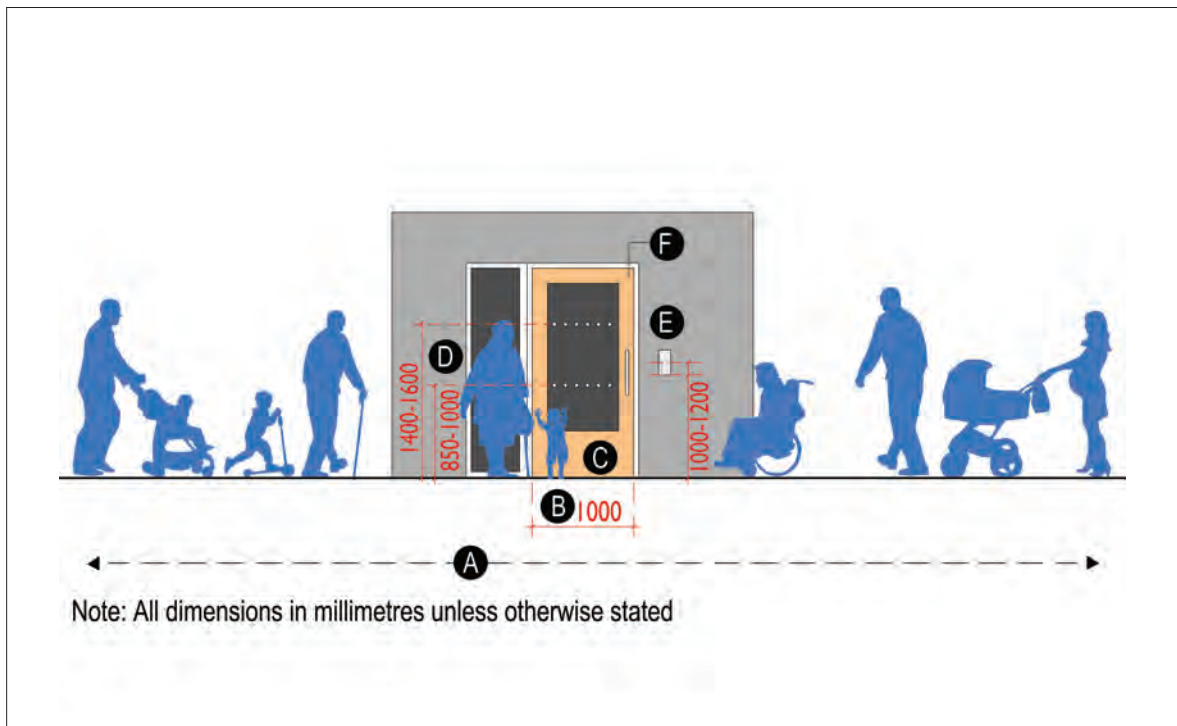
Glazed door panels provide visibility and a good visual link between inside and outside and help with supervision. Where CCTV cameras are used they should be discreet and not reduce accessibility.

The main entrance threshold should be level with a maximum upstand of 10mm. All threshold edges should be chamfered or pencil-rounded to ensure they do not catch on wheels or provide a trip hazard.

 **Note:** Refer to the **Universal Design Guidelines for Homes in Ireland - Section 1** (2015) and **Building for Everyone – Booklet 1** (2014) for more information regarding Entrance Doors.

Universal Design Guidance

- Provide a door with a clear opening width of at least 1000mm to accommodate a double buggy or large motorised wheelchair. In some cases, double door or cat-and-kitten door (door-and-a-half) will be beneficial. In these situations the primary opening leaf should achieve a clear minimum opening width of 1000mm.
- The door must be accessible and easily operated by a person with sensory, physical or cognitive difficulties.
- Consider the use of automatically operated doors. In these situations, make sure the control button is in a logical position, visible, accessible, understood and easily used.
- Provide glazing panels within the door to facilitate a visual link between inside and outside.
- Use colour or tonal contrast (to the surrounding walls) on the door leaf to make it more visible and easily identified on arrival.
- Intercoms, keypad or card swipe controls should be easily located, within reach, and easily operated by all users.
- Provide a level threshold with a maximum upstand of 10mm. All threshold edges should be chamfered or pencil-rounded to ensure they do not catch on wheels or provide a trip hazard.
- Ensure there is not a significant colour or tonal contrast at the door threshold between the exterior and the interior as this may cause visual or spatial difficulties for some people who may have sensory, physical or cognitive difficulties.

Technical sketch 2: Indicative elevation to main front door.

- A** Remember the diverse range of people who will use the door on a daily basis.
- B** 1000mm clear opening width to main front door.
- C** Ensure the threshold is level.
- D** Fully glazed doors should have marking/manifestations between 850mm and 1000mm and 1400mm and 1600mm above floor level. This will make the glass visible from a range of eye levels and prevent people accidentally walking into the door.
- E** Intercom and access panels within easy reach. Intercom buttons to be located between 1000-1200mm above ground level.
- F** Good colour contrast to make door more visible upon approach.



ELC Practitioner, Northside Family Resource Centre:

**“I find it very soothing,
which is hard to believe
with so many children.
It’s a happy place.”**

Entrance Lobbies, Reception and Waiting Areas

Design considerations and awareness

The entrance lobby and reception area must provide a welcoming environment for all users. It should provide adequate space for people as they gather inside the building for drop-off and pick-up. These spaces must avoid congestion and create a calm, safe environment during peak times as this transition can be particularly stressful for some children.



➤ 06 Ballindereen Community Childcare and Education Centre, Ballindereen, County Galway.

Design features

- Spacious entrance lobby providing welcoming space for children.
- Wide entrance providing good access.

Design tip

- Strong shadows cast on the floor may cause visual and spatial difficulties for users with sensory, physical or cognitive challenges. While shadows are a part of everyday life and a learning experience for children, blinds could be useful.
- Fully glazed doors should have marking/manifestations between 850mm and 1000mm and 1400mm and 1600mm above floor level. This will make the glass visible from a range of eye levels and prevent people accidentally walking into the door.

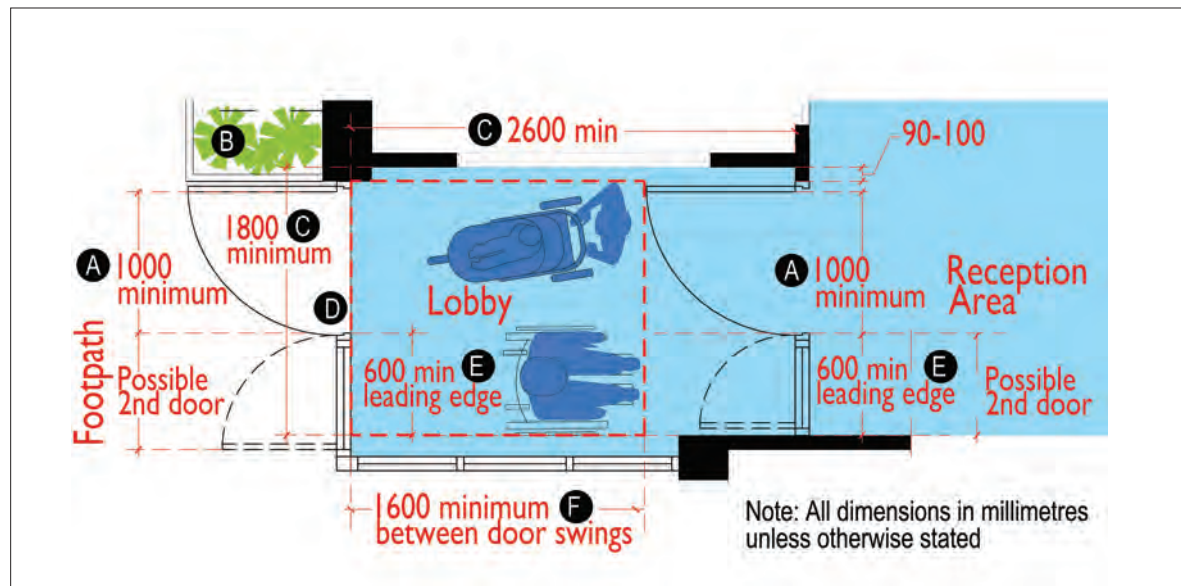


Many settings will provide an outer draught lobby to provide additional shelter and security. Such lobbies can be difficult to use due to the presence of two sets of doors, a difficulty that can be exacerbated when a person is pushing a buggy or using a wheelchair. To alleviate this the draught lobby should be large enough to handle double buggies and wheelchairs and be well lit to ensure safe and comfortable use.

Within the lobby and reception area flooring with strong patterns or abrupt colour or tonal changes should be avoided as this can cause issues for people with sensory, physical or cognitive difficulties. Provide non-slip, plain coloured, matt floor finishes to reduce glare or shine in brightly lit conditions.

Glazed doors and side panels to the lobby provide visibility and a good visual link between inside and outside and help with supervision.

Technical sketch 3: Indicative entrance lobby.



- A** Main front door with a minimum of 1000mm clear opening width. Double door or cat-and-kitten door (door-and-a-half) arrangement would improve access during peak operating times or for the movement of large objects or furniture.
- B** Ensure doors opening outwards are recessed from the public path or are provided with some form of a guard so that they do not collide with pedestrians. This example shows the door opening out against a planter.
- C** Ensure lobby is large enough to allow comfortable movement for buggies, wheelchairs, and people with children, especially during peak times (The minimum internal dimensions for the lobby in Technical Sketch 3 are 1800-2600mm).
- D** Provide a level threshold.
- E** Allow 600mm minimum leading edge to doors in the lobby so people can pass each other comfortably.
- F** Allow a 1600mm clear zone between door swings.



07 Northside Family Resource Centre, Ballynanty, Limerick City.

Design features

- **Spacious reception area directly inside the main entrance.**
- **Split level reception desk ensures access for all users.**
- **Double entrance doors providing good access.**
- **Glazed doors at entrance and to the rest of the centre providing good visibility and supervision.**
- **Information notice board clearly visible.**

An easily identifiable reception counter, facing the lobby or entrance area will make it clearly visible upon entry, while a lower section and knee recess will provide accessibility for wheelchair users or people of smaller stature. Avoid situating the reception desk near a window as that could cause glare and make lip-reading difficult. A hearing loop at the reception will benefit people with hearing difficulties. The reception should avoid downlighting that casts shadows on the face of the receptionist or visitor, or uplighting that can cause glare and resulting visual discomfort for many people.

Through careful lighting control, the entrance lobby and reception area should provide a transitional lighting zone to allow people with sensory, physical or cognitive difficulties to adjust between what might be a bright exterior and lower light levels inside.

The reception area is an important information point for all users and potential clients visiting the setting. Notice boards and information leaflet stands should be provided in a visible and easily accessible location within the reception area.



➤ O8 Cahir Bears Childcare Centre, Cahir, County Tipperary.

Design features

- Spacious reception area directly inside the main entrance.
- Wide entrance providing good access.
- The free flow of space between the reception area and the managers office means that one person can cover both areas if needed.

Design tip

- The height of the reception desk will make it hard to see the person sitting behind the desk and will also cause difficulties for people of lower stature, those in wheelchairs and children. A lower level section to the reception desk, at a maximum of 760mm above floor level, would alleviate these issues and facilitate use by people at a range of heights and in either a seated or standing position.
- If a lower section to the reception desk is provided, ensure there is recessed knee space, with a leg clearance of 700mm between floor and underside of desk, for wheelchair users and people who are seated.

If space allows, the reception area should provide for people who are waiting. Waiting areas should provide ample comfortable seating with back and arm rests, while also allowing sufficient room for wheelchair users. An accessible toilet should be located close to the waiting area and should be clearly visible and identifiable for all users. Provide wayfinding signage where required.



09 Waiting Area, Tigers Childcare, Balgriffin, Dublin.

Design features

- Comfortable seating provided within a welcoming space.
- Soft lighting creates a home-like environment.



10 Tigers Childcare, Blanchardstown, Dublin.

Design features

- Bright welcoming space provides a comfortable space for people who are waiting.
- There is ample space for circulation for buggies and mobility aids.

Design tip

- If a door is at the bottom of the stairs, ensure it opens inwards to avoid the risk of hitting someone on the stairs.
- Provide some firm seating for people who may find rising from a soft chair challenging.



Universal Design Guidance

- Where a lobby is essential for security or internal environment reasons (i.e. to prevent draughts or heat loss), then ensure it is sufficiently large for buggies and wheelchairs.
- Provide a spacious reception area to handle multiple users at peak times, bearing in mind buggies, wheelchairs and other mobility aids.
- Place the reception desk in a logical, visible, and easily accessible location.
- Provide a lower section to the reception desk with knee recess for wheelchair users.
- If the reception area is large enough provide seating with back and arm rests.
- Locate an accessible toilet within easy reach of the waiting area.
- Provide good levels of evenly distributed artificial lighting with the provision of task lighting to highlight certain areas such as the reception or toilet door.
- Use non-slip, non-glare materials that avoid strong patterns or sharp tonal or colour contrast.



2.2 Internal Circulation



11 Asilo Nido La Chiocciola, San Miniato, Italy.

Design features

- Circulation area creates bright and free-flowing spaces.
- Coloured sliding doors (i.e. yellow and dark grey) provide the flexibility to open-up and close off spaces. The use of colour on these doors also acts as a landmark in terms of navigation.



Parent, Ben Bulben Creche:

“It is very well laid out with easy access and plenty of storage for coats and outdoor clothing.”



Horizontal Circulation: Corridors or Internal Routes

Design considerations and awareness

The internal circulation layout in an ELC setting is crucial. Well-designed internal circulation creates a coherent and unifying layout while also successfully connecting the various internal spaces. Circulation space is much more than getting from A to B, it is a critical part of the child's everyday experience and provides a range of relational and developmental opportunities. Good internal layout makes it easier for staff to move around the building. Some settings avoid corridors or isolated walkways and instead opt for a more open plan approach or circulation space that is integrated into a central space or other common area.



➤ 12 Cheeky Cherubs Early Years School, Ballincollig, Cork.

Design features

- Bright circulation corridor connecting all rooms and providing strong central spine to setting.
- The glazed area provides views to outside.
- Circulation used for multiple purposes, such as displays of documentation and parents gathering that results in a lively space.

Design tip

- Better colour contrast between the children's seating and the floor would make this seating more visible.
- Placing the emergency exit push bar above the children's height could be problematic if a member of staff is of smaller stature or a wheelchair user. (see **Appendix 8** for more information about door fastenings for emergency exits in ELC settings)
- Setting the radiator into the wall would provide clearer space.

Whether circulation routes are open or enclosed, they should minimise travel distances and be wide enough to allow good circulation for people using buggies or wheelchairs to pass each other. A minimum clear width of 2400mm is preferable. In terms of width, and in line with the value placed on circulation space as a key part of the setting, circulation routes should provide sufficient space for activities, the display of children's work, and other materials.

Circulation routes should have small seating areas, window seats, or dedicated floor space where children can stop to look out a window, play, or interact with their peers, staff or family members. Circulation spaces can often be very busy, active spaces with lots of movement. Providing spacious routes with small seating areas helps to create a calm environment that will benefit all children and staff.



13 Asilo Nido La Chiocciola, San Miniato, Italy.

Design features

- Low level viewing panel along a corridor, allows for children and adults to interact throughout the day.

Design tip

- Ensure safety glass is used for low level panels.
- Having a safety compliant blind or curtains means these panels can be closed, for example at sleep times.



To help with orientation and navigation within a building, the layout should be coherent, legible, logical, easily understood, and composed of distinct routes. In open-plan spaces or where there is fluid and flexible arrangement of spaces, navigation and orientation can be improved using distinct colour, landmarks and focal points, or other visual cues such as planting or artworks, and wayfinding signage. Wayfinding should start the moment a person arrives onto the site and should continue in a consistent manner throughout the setting. Wayfinding signage such as directional signs and locational or identification signs help people find their way into and around the setting.

Wayfinding supports first time users, people accessing extended services provided by the setting, or people with sensory, physical or cognitive difficulties who may experience confusion or disorientation.

➞ For more information refer to **Section 04** of these guidelines and **Building for Everyone Booklet 4**.

Technical Sketch 4: Indicative sketch showing wayfinding supported by text, symbols, colour graphics.



- A** The use of text and arrows or other directional symbols will provide clear wayfinding for many people.
- B** The use of distinct colour can be used as a visual cue to identify key locations, junctions, or access points.
- C** Wayfinding can be supplemented with familiar images or graphics that illustrate the function or nature of a space.

Note: colour and graphics as described in B and C above will be important for young children who may not be able to read, those with literacy difficulties and for those for whom English is not their first language.



14 Pinocchio infant-toddler centre, San Miniato, Italy.

Design features

- While this setting has an open plan format there is still a good structure to the layout with activity areas and circulation routes clearly defined.
- The contrasting colours used on the door and internal window frames form a visual landmark within the space.

Design tip

- Ensure rugs are fitted properly, so they do not pose a trip hazard.

Providing good visual access to key areas such as the reception area, lift or stairway, or communal rooms such as family or community rooms, helps people orientate themselves within the setting and find their way around.

Strong floor patterns or abrupt colour or tonal changes on the floor should be avoided as this can cause issues for people with sensory, physical or cognitive difficulties. Provide plain coloured, matt finishes to reduce glare or shine in brightly lit conditions.

Solar heat gain and excessive sunlight should be controlled within circulation routes to avoid overheating and glare as this can be problematic for all users. This can be done by having blinds and effective ventilation systems.



➤ 15 Tigers Childcare, Blanchardstown, Dublin.

Design features

- Glazed panels on door create visibility.
- Glazed panel to side also helps with visibility while the adjacent bench provides an interesting place for a child to sit and look out into the next space.

Design tip

- Fewer pages and objects on the glazing would help maintain visibility and reduce visual clutter.

Provide extra wide internal doors or double door or cat-and-kitten door (door-and-a-half) from the circulation areas to key rooms to enable easier circulation and the passage of buggies or wheelchairs. Highlight entrance doors to key spaces through a distinct colour or tonal contrast on the door and surrounding architrave and skirting. Ensure doors are easy to operate and all door furniture such as handles, or locks are accessible and easily used. Doors should open in against the side wall of a room to give an immediate view of the room and its contents. This enables good observation for staff, while providing visual cues for children as to the room's function. Electromagnetic hold-open devices linked to the fire alarm system, which enable doors to be held open in a fixed position allow unobstructed or easier access through a building, while also giving direct visual access to a room.



➤ 16 Cat-and-Kitten door. Le Cheile Family Resource Centre, Mallow, County Cork.

Design features

- The use of a double door or cat-and-kitten door (door-and-a-half) means that when needed the doorway can be wider than needed for everyday use.



➤ 17 Northside Family Resource Centre, Ballynanty, Limerick City.

Design features

- Light boxes with child friendly images create a visually striking surround to the children's room and provides a strong landmark and identification for this room.

Design tip

- A wider door, a door-and-a-half, or a double door would make the room more accessible for buggies, wheelchairs, or mobility devices.



Finally, where users of a setting have sensory, physical or cognitive difficulties, handrails or grab bars can support safe mobility around the building. Handrails, at heights to suit both children and adults, provide physical support, reassurance and navigational guidance for all users. Handrails should contrast in colour to the background walls, so they are clearly visible and easily identified. Grab bars and hand rails can be retrofitted as required. In this case, structural wall with double stud or blockwork will be required.



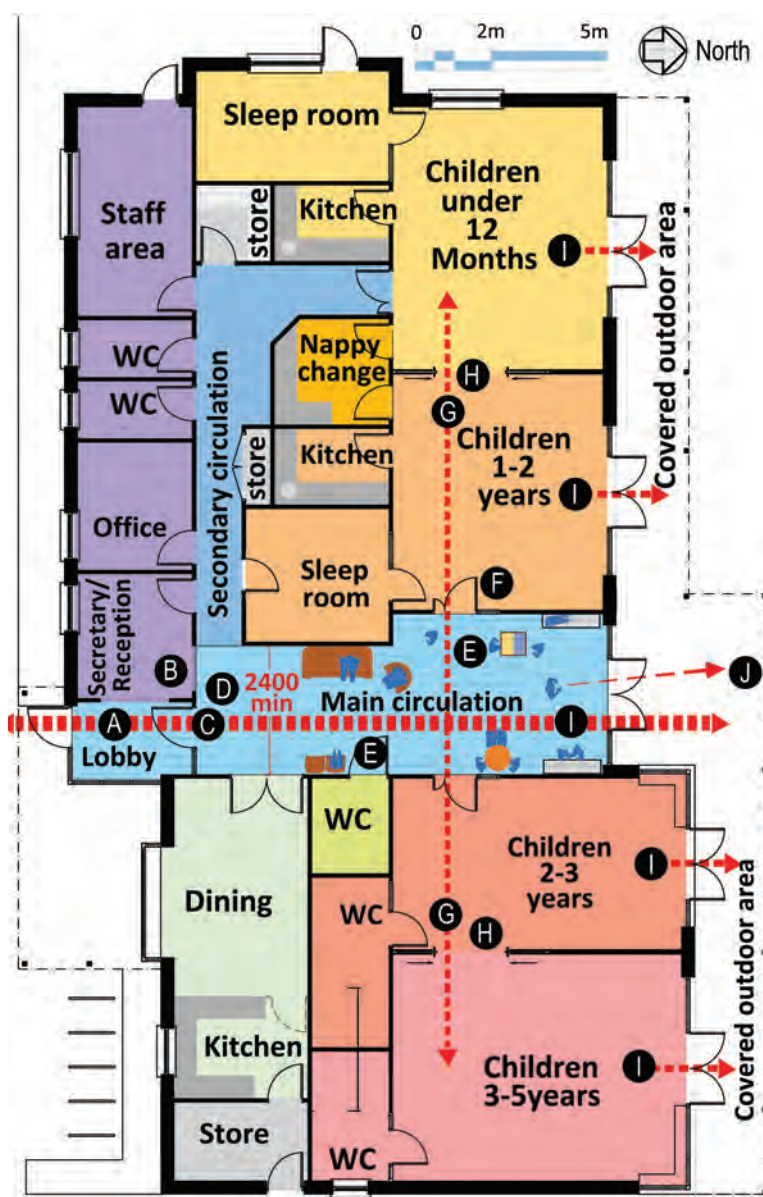
For more detail, please refer to **Section 04**.

Universal Design Guidance

- Treat circulation areas as key spaces for children within the ELC setting.
- Provide a cohesive, legible and logical circulation layout to help with navigation and orientation.
- For the main circulation routes, minimise travel distances and avoid double-loaded corridors (doors on each side) and dead-end corridors as these can be disorientating and unpleasant spaces.
- Routes should be wide enough for two buggies to pass. If possible, a minimum clear width of 2400mm is preferable.
- Within the circulation area provide small seating areas, window seats, or dedicated floor space with options for single, one-to-one, or small group activities.
- Use distinct colour, landmarks and focal points, and other visual cues such as planting or artworks, to help with wayfinding. Wayfinding signage can reinforce navigation and orientation where required.
- Provide extra wide internal doors or double door or cat-and-kitten door (door-and-a-half) to enable easier circulation and the passage of buggies or wheelchairs.
- Highlight entrance doors to key spaces through distinct colours or tonal contrast, building features, artwork, planting, or other visual cues and landmarks.
- Avoid flooring with strong patterns or abrupt colour or tonal changes. Provide plain coloured, matt finishes to reduce glare or shine in brightly lit conditions.
- Provide handrails or grab bars in certain strategic locations.

Technical sketch 5: Indicative plan of Early Learning and Care Setting.

- A Main circulation route clearly visible upon entry.
- B Reception /manager's office close to entrance and in a visible location.
- C A legible and easily understood circulation layout so people can orientate themselves within the building and comfortably find their way around.
- D Main circulation route is a minimum of 2400mm wide.
- E Circulation area creates interesting social spaces for children including small seating and play areas.
- F Double door or cat-and-kitten door (door-and-a-half) to children's rooms. Primary opening leaf with a minimum clear width of 850mm.
- G Direct connections between children's rooms allows free-flowing movement and mixture of ages as required. Alternatively, the sliding doors as described in H allows these rooms to be separated.
- H Sliding doors providing flexible divisions between children's spaces to allow movement and integration of spaces if required.
- I Direct access to outside from main circulation area and from each of the children's rooms.
- J Views to external spaces and local landmarks to help create a sense of place, draw the outside in, and help with orientation.





Vertical Circulation: Stairs

Design considerations and awareness

The safety of all users is paramount when designing stairs in any setting. However, the daily use of stairs and the climbing or physical coordination required, can play a positive role in the development of gross motor skills of young children. This is particularly important for children with sensory, physical or cognitive difficulties, who may use the stairs, with and without the assistance of an adult.

The clear width of a stairs, which is measured between handrails, will depend on the location of the setting and the number of users. The clear width should be a minimum of 1200mm. The total rise of a single flight should be no more than 1800mm and contain no more than 12 steps. Winders such as those in a spiral staircase or tapered steps are not suitable in an ELC setting as they can create a sense of insecurity and confusion for some users.

Contrasting colours between the steps of the staircase and the staircase frame and walls can help a person with sensory, physical or cognitive challenges to identify steps and changes in level or gradient, thereby simplifying the visual environment, which is beneficial for people with vision difficulties. Lighting is very important on internal stairs so that they can be used safely.



➤ 18 Tigers Childcare, Blanchardstown, Dublin.

Design features

- Lower level handrail provides support for children and people of lower stature.
- Open and clearly visible stairs provides a positive space within the setting.

Design tip

- Greater colour contrast between steps and floor would help with visibility.
- Handrails should extend 300mm beyond the bottom of the stairs.
- Ensure a door located at the bottom of a staircase opens in to avoid risk of injury.
- Using a different contrast nosings on the first and last step of the stairs would help to identify the top and bottom of the stairs.

It should be noted that certain hazard-warning surfaces that provide high visual and tactile contrast, may be disorientating for a person with sensory, physical or cognitive difficulties and should therefore be given careful consideration. For example, a sharp contrast in flooring colour can be perceived as a step or hole by people who may have perceptual problems. This may place the person at greater risk of a fall.

The provision of an additional handrail between 600 – 750mm above the pitch line is essential for children. This will also provide support for people of smaller stature. Both handrails should contrast in colour to the background walls so that they are clearly visible and easily identified.



➤ 19 Ballindereen Community Childcare and Education Centre, Ballindereen, County Galway.

Design features

- Stairs to a mezzanine level, designed and used as a natural part of the setting helps children develop gross motor skills and competencies.

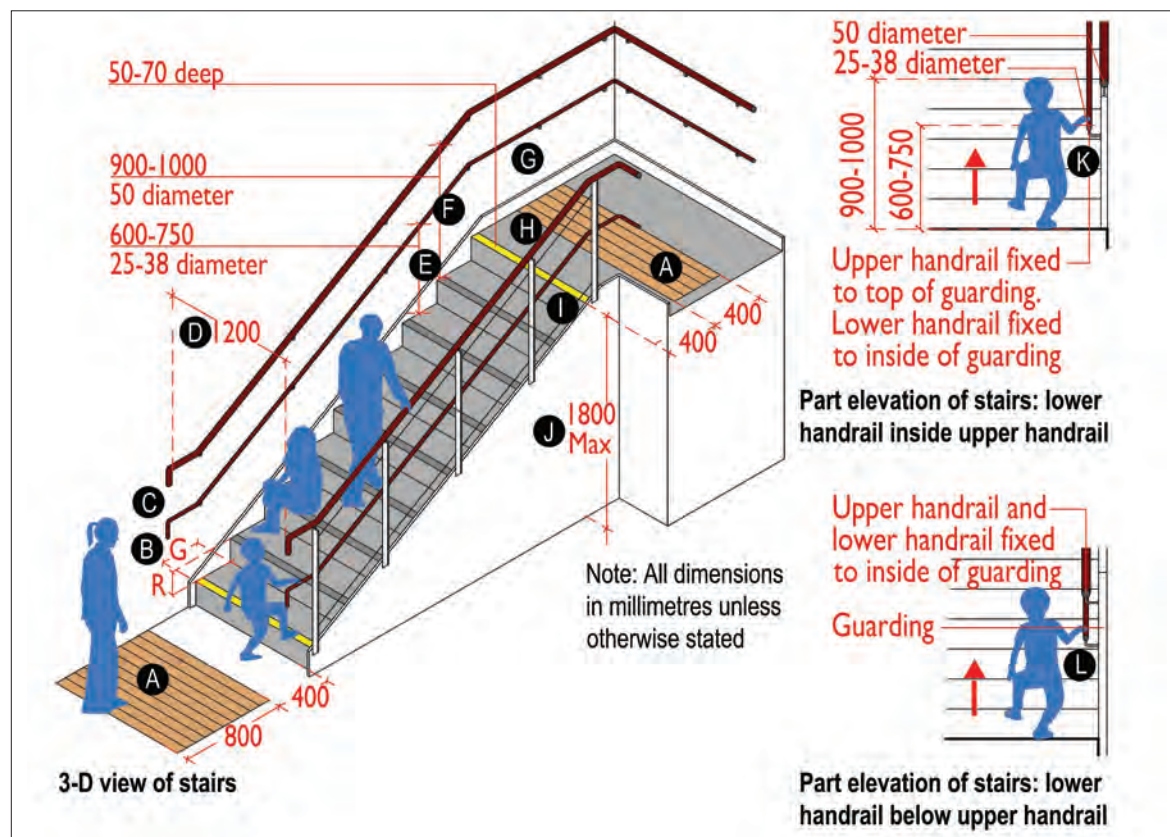
Design tip

- Lower level additional handrail may help some smaller children.
- Handrails must extend 300mm beyond the end of the stairs.



Note: Refer to the **Universal Design Guidelines for Homes in Ireland - Section 2** (2015) and **Building for Everyone – Booklet 3** (2014) for more information regarding stairs.

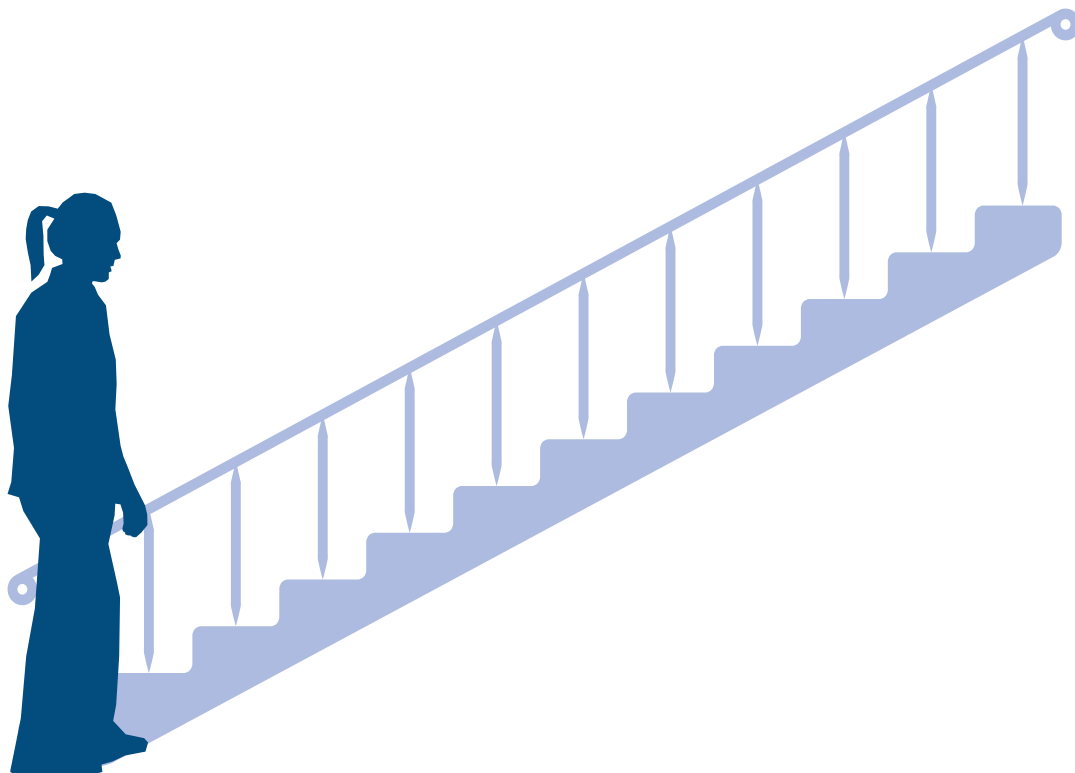
Technical sketch 6: Indicative internal stairs.



- A Optional 800mm deep corduroy tactile warning surface indicator (TWSI) at the top and bottom of stairs. The TWSI can be reduced to 400mm (as shown on the top landing) when a conscious turn is needed to reach the step.
- B Steps with 150-180mm rise (height) and 300-450mm going (depth).
- C Handrails provided on both sides of the stairs. Handrails extend 300mm into top and bottom landing and turn down by 150mm or turned into wall.
- D 1200mm minimum clear width between upper handrails.
- E Lower handrail fixed 600-750mm above pitch line. Handrail diameter 25-38mm.
- F Upper handrail fixed 900-1100mm above landing and 900-1000mm above pitch line. Handrail diameter to be between 40-50mm.
- G Handrails should be continuous on landings on both sides of the stairs.
- H Steps with 50-70mm deep contrast nosings extending across the width of the steps.
- I Guarding should not provide footholds or be climbable by children (e.g. avoid horizontal rails). Guarding should be designed so that a 100mm sphere would not pass through any part of the guarding.
- J The total rise between landings in any flight should not exceed 1800mm or 12 steps.
- K Where the upper handrail sits on top of the guarding the lower handrail will need to be fixed inside the guarding. This may reduce the clear width of the stairs.
- L Where the upper handrail is fixed inside the guarding the lower handrail can also be fixed inside the guarding in line with upper handrail above.

Universal Design Guidance

- Locate and design stairs so they can play a positive role in the development of gross motor skills and the competencies of small children.
- For centre based settings, the clear width of the stairs, which is measured between handrails should be a minimum of 1200mm.
- For centre based settings, the total rise of a single flight should be no more than 1800mm and contain no more than 12 steps.
- Use colour contrast between the steps and the walls to highlight stairs.
- Be aware that certain hazard-warning surfaces may be disorientating for people with sensory, physical or cognitive difficulties and should therefore be given careful consideration.
- Install an additional handrail between 600 – 750mm above the pitch line for children and people of smaller stature.
- Handrails should contrast in colour or tone to the background walls so that they are clearly visible and easily identified.
- Handrails must extend 300mm beyond the end of the stairs.





Vertical Circulation: Lifts

Design considerations and awareness

The provision of lifts in multi-storey settings is vital for all users of a building, including parents with buggies, staff with heavy loads, people delivering equipment and perhaps transferring food from one floor to another, as well as people with reduced mobility. While young children in a setting will not be travelling in a lift without an adult, school-age children should be able to do so independently. It is important that any access control system can be used by everybody.

With regards to safety and security surrounding lifts, various access control systems such as restricted access to a lift through contactless smart cards, should be examined.



Design features

- Lift located in central position and within easy access of the main entrance.

Design tip

- Provide wayfinding information and signage to aid navigation as people enter and leave the lift.

Careful consideration should be given to the size of the lift so it is large enough to facilitate wheelchairs, buggies, and the bulky equipment that is sometimes required by children with sensory, physical or cognitive difficulties. Larger lifts will also be beneficial for staff carrying heavy loads, outside contractors bringing in equipment such as food, kitchen equipment or play equipment. Floor finishes within lifts should be non-slip and avoid strong patterns and abrupt colour or tonal changes, while the lift carriage interior wall finish should avoid excessive mirrors or highly polished surfaces as these can prove challenging for some people with sensory, physical or cognitive difficulties.



Note: Refer to the **Universal Design Guidelines for Homes in Ireland - Section 2** (2015) and **Building for Everyone – Booklet 3** (2014) for more information regarding lifts.

Universal Design Guidance

- Lifts should be positioned in a logical and visible location close to the main entrance.
- The lift carriage should be sized to facilitate wheelchairs, buggies, and the bulky equipment that is needed in an ELC setting along with equipment sometimes required by children with sensory, physical or cognitive difficulties. Larger lifts will be beneficial for staff carrying heavy loads, outside contractors bringing in equipment such as food, kitchen equipment or play equipment.
- Lift controls should be in a logical location and visible upon approach, easily reached and easily used.
- The carriage interior should avoid excessive mirrors or highly polished surfaces.
- Floor finishes should be non-slip and avoid strong patterns or abrupt colour or tonal changes, particularly at the threshold to the lift.





➤ Súgradh Childcare and Afterschool, Nenagh, County Tipperary.

Learning Stories

Maria Gaynor, Súgradh Childcare:

Súgradh Childcare has provided a mixed age early years service for sixteen years. It was not a brave move in a new direction... In fact, it wasn't a conscious decision at all!





Planning restrictions meant that our building was going to be smaller than I had hoped, and it never occurred to me to break the area down further into smaller 'age designated rooms'. Two Preschool Inspectors helped me plan the internal layout of my setting and it didn't occur to them either! As a result, we have two bright, spacious and flexible rooms that are populated with a mix of ages from birth to twelve years. This layout has proven to support the practitioners, appeal to parents, adapt easily to changing age profiles and consistently comply with all regulations. However, the real magic of such a configuration can be seen in the interactions between the children.

We see natural caring tendencies emerge and flourish in this environment. In the light caring touches, the enquiring glances and the helpful actions between mixed age children here I see the very definition of spirituality. In the studied concentration, the patient explanations, the enthralled faces and the quiet spectators, I see competent, confident craftsmen and women passing on valuable learning to eager apprentices within the most natural zone of proximal development. When I see children trying to facilitate a younger child's participation in their games I see problem-solving. I also see the development of executive function skills as children wait that bit longer and accept that sometimes other children don't do things the way they might prefer. Within this larger space there are often three practitioners working together; a supportive environment which adds to the relaxed atmosphere in the room. Job satisfaction and retention has been high as a result.

Moving to this type of provision is easy, just work out ratios according to the age profile on a given day. Ensure one space has no choking hazards; you will be surprised at how much can still be stocked in this area. Currently you do still need a separate space for the three hours of preschool but this is a small window in a long day. Finally, just trust the children to be safe with each other, they won't let you down.



