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Planning & Building Unit

School Design Guide
TGD-026

Planning & Design Guidelines

Primary & Post Primary School Specialist Accommodation for Pupils with Special Educational Needs

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PLANNING AND BUILDING UNIT

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1. INTRODUCTION

1.1 Purpose of this Document

(a) This document provides information on space planning and design for School Authorities and designers on the provision of permanent accommodation for pupils with special educational needs.

(b) These guidelines reflect many of the recent changes in the educational system in Ireland, changes that have placed greater demands on schools for additional space to provide for a growing range of teaching and support services, or as advised in writing by the Department.

(c) The Department of Education and Skills is committed to developing inclusive accommodation provision and standards for pupils with special educational needs to compliment the mainstream school building environment.

1.2 Application of these Guidelines

(a) The guidelines are applicable to primary and post primary schools and will apply to the provision of permanent accommodation for pupils with special educational needs as part of mainstream schooling either as an extension to an existing building or as part of a new school.

(b) These guidelines will come into operation on the date of issue of this document. Projects already commenced prior to the introduction of these guidelines will continue to run in accordance with the brief issued for the specific project.

(c) This document relates only where there is a requirement for:

- specialist special educational needs provision in primary schools with two or more special classes or
- specialist special educational needs provision in post-primary schools

(d) These guidelines will be modified and updated on an ongoing basis, and as needs arise. They do not purport to be definitive or exhaustive, but rather are intended to assist in the planning of an appropriate response to the particular needs of individual schools. In all cases, the Department shall have the final say in the application of the guidelines on projects being funded by the Department.

(e) The guidelines shall apply to all teaching and ancillary spaces to which staff and pupils will generally have access. These spaces are set out in the Schedules of Accommodation.

(f) School Authorities and their Design Teams should ensure that the Department of Education and Skills' Design Team Guidelines and Procedures, particularly with regard to Mechanical, Electrical and ICT provision (TGD-030 and TGD-031), are applied in full to the project. Where a potential conflict arises between the application of the DTPs' and the specialist needs aspect of the project, clarification should be sought in writing from the Department. The DTP's should be applied in full unless otherwise directed by the Department.

1.3 Temporary Accommodation

(a) In some cases temporary accommodation may be necessary to meet an immediate need. Temporary accommodation is, by definition, temporary in nature. It is not the intention therefore to provide the full provision set out in this document as part of temporary accommodation. A cost-effective and pragmatic solution must be found for each project where temporary accommodation is to be provided.

(b) The School Authority and its Design Team will therefore be expected to undertake a risk assessment at the outset of the project and to prepare a list of those items where the risk cannot be managed to an acceptable degree, for inclusion in the project, and written agreement with the Department before architectural planning and design commences.

1.4 Key Objectives

(a) The EPSEN Act 2004 provides for the provision of education plans for students with special educational needs (SEN). Under the Act, children with SEN will be educated "in an inclusive environment with children who do not have SEN", unless this should be inconsistent either with the best interest of the child, or with the effective provision for the other children.

(b) In developing an approach to the design of facilities for pupils with special educational needs, it is important to have a shared understanding of what is meant by the term 'special educational needs' and what is endeavoured to be achieved in developing this particular approach. Pupils with special educational needs have many characteristics in common with each other and with those who do not have special educational needs. It is however also acknowledged that pupils with special educational needs form a heterogeneous group with each pupil having distinctive individual and specific strengths and needs. Please refer to Section 3.1 for further information on approaching design for pupils with special educational needs.

(c) There are two key objectives in meeting the challenges posed by providing for pupils with special educational needs. These are concerned with promoting the principles of

- **Inclusivity**
- - recognising and accepting diversity; valuing each pupil as an individual,
- **Flexibility**
- - ability to modify spaces to suit different user groups and ability to use spaces for different purposes

(d) Specialist accommodation for pupils with special educational needs may be used in a variety of ways depending on the pupils' particular requirements. For example there may be a group who use the space for all of the school day, some (or all) of whom may join the mainstream group for some subjects such as PE or religion. Alternatively pupils may attend the mainstream school and only spend an allocated number of hours per week in the specialist accommodation to assist in achieving an optimal educational outcome for their individual needs. From time to time 'reverse inclusion' may take place, i.e., where mainstream pupils are included with pupils with special educational needs for curricular activities. Flexibility to adapt the teaching space is therefore critical in order to facilitate 'reverse inclusion' taking place in the accommodation that has been designed for pupils with special educational needs.

1.5 Other Relevant Guidance Documents

(a) School Authorities and their Design Teams will be obliged to comply in full with the Department's Design Team Procedures and other Technical Guidance Documents which are published and updated from time to time by the Department. They should refer to the Department's website for further details and technical guidance information before commencing.

(b) Please also refer to TGD-030 and 031 for guidance on ICT Infrastructure.

1.6 Further Information

For further advice on these or any other matter, please contact:

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1.7 Comments & Suggestions

(a) The Department of Education & Skills welcomes comments and suggestions on how to improve these guidelines. Such comments and suggestion should be sent by email to technical_staff@education.gov.ie

(b) All comments and suggestions will be considered when revising this document.

2. PROJECT BRIEF

2.1 Brief Formulation

(a) The Planning & Building Unit will determine the brief on a project specific basis. Funding will only be provided once a decision to commence architectural planning has been confirmed in writing by the Planning & Building Unit of the Department. In all cases a schedule of accommodation will be issued to the School Authority, for their written acceptance. Detailed architectural planning should not commence until such time as the Department has agreed in writing the educational, architectural, building services engineering (mechanical & electrical) and funding parameters of the project.

(b) The accommodation suite for pupils with special educational needs will be provided as an extension to an existing school or an integral part of a new school.

(c) The specific design brief for each project will detail the nature of the special class(es) concerned as well as the prevailing pupil teacher ratio for such classes. However, broadly speaking, special educational provision in primary and post primary schools may be required to cater for pupils who have been assessed as having a moderate, severe or profound general learning disability; an autistic spectrum disorder; physical or sensory disabilities; emotional or behavioural disorders; or multiple disabilities.

(d) Specialist accommodation such as outlined in this brief may not be required for mainstream primary schools with special classes supporting pupils with a borderline or mild general learning disability, specific speech and language disorder or specific learning disability. In such situations, the provision of mainstream classrooms will enable a school to meet the needs of these pupils. As stated previously this brief does not apply to accommodation for pupils with severe to profound general learning disabilities.

(e) The Schedules of Accommodation for both Primary and Post Primary schools listed hereafter do not apply to pupils with severe to profound general learning disabilities. There are space and user requirements for this cohort of pupil which have additional accommodation requirements not covered by this document. Please refer to the Department for further guidance on this matter.

2.2 Schedule of Internal Accommodation – Primary School

(a) Please refer to Table 1 for a primary school accommodation suite for 12 pupils based on a pupil / teacher ratio of 6:1.

(b) Please note that the current pupil / teacher ratio for special classes for pupils with special educational needs ranges from 6:1 to 11:1.

(c) Please refer also to Section 6 for an Exemplar Plan for a Primary School

Table 1: Accommodation suite for a Primary School for 12 pupils with SEN based on a pupil/teacher ratio of 6:1

	Name	**Area m²**
1	Central Activities Space	80.00
2	Classroom - Safe Base 1 (excluding toilets and storage)	70.00
3	Classroom - Safe Base 2 (excluding toilets and storage)	70.00
4	*En-Suite Toilets & Shower Area	*30.00
5	Small Safe Space 1 associated with Classroom - Safe Base 1	12.00
6	Small Safe Space 2 associated with Classroom - Safe Base 2	12.00
7	Multi-Sensory Room	20.00
8	Para-Educational Room	15.00
9	Staff Toilets	10.00
10	Linen/Sluice Room	10.00
11	Storage	30.00
12	Office	20.00
13	**Sub-Total**	**379.00**
14	Internal Walls & Partitions @ 6%	22.74
15	Circulation @ 18%	68.22
16	**Total**	469.96
17	**Total (rounded up)**	**470.00**

* Read 4 above in conjunction with 4.4 of the Guidance document.

2.3 External Accommodation – Primary School

Table 2: External space requirements for suite for a Primary School for 12 pupils with SEN based on a pupil/teacher ratio of 6:1

	Name	**Area / Number**
1	Secure hard and soft play area	200.00m^2
2	Sensory garden (where school site area permits)	100.00m^2
3	Number of car parking spaces for staff of SNU	6

2.4 Schedule of Internal Accommodation – Post Primary School

(a) Please refer to Table 1 for a post primary school accommodation suite for 12 pupils based on a pupil / teacher ratio of 6:1.

(b) Please note that the current pupil / teacher ratio for special classes for pupils with special educational needs ranges from 6:1 to 11:1.

(c) Please refer also to Section 7 for an Exemplar Plan for a Post Primary School

Table 3: Accommodation suite for a Post Primary School for 12 pupils with SEN based on a pupil/teacher ratio of 6:1

	Name	Area m^2
1	Central Activities Space	80.00
2	Classroom - Safe Base 1 (excluding toilets and storage)	70.00
3	Classroom - Safe Base 2 (excluding toilets and storage)	70.00
4	*En-Suite Toilets & Shower Area	*30.00
5	Small Safe Space 1 associated with Classroom - Safe Base 1	12.00
6	Small Safe Space 2 associated with Classroom - Safe Base 2	12.00
7	Multi-Sensory Room	20.00
8	Para-Educational Room	15.00
9	Practical Activity Room	50.00
10	Daily Living Skills	16.50
11	Staff Toilets	10.00
12	Linen/Sluice Room	10.00
13	Storage	30.00
14	Office	20.00
15	Sub-Total	445.50
16	Internal Walls & Partitions @ 6%	26.73
17	Circulation @ 18%	80.19
18	Total	552.42
19	Total (rounded up)	552.00

* Read 4 above in conjunction with 5.4 of the Guidance document.

2.5 External Accommodation – Post Primary School

Table 2: External space requirements for suite for a Primary School for 12 pupils with SEN based on a pupil/teacher ratio of 6:1

	Name	Area / Number
1	Secure hard and soft play area	200.00m^2
2	Sensory garden (where school site area permits)	100.00m^2
3	Number of car parking spaces for staff of SNU	6

3. DESIGN

3.1 Design Approach

(a) Designing accommodation for pupils with different special educational needs will present many challenges in resolving spatial design. For example, the design of learning spaces in educational buildings should stimulate pupils. However consideration needs to be given to pupils with special educational needs who may also have sensory sensitivities. Some pupils with Autistic Spectrum Disorders (ASDs) may display extreme sensitivity to sensory stimulation, for example, sound, light, colour, smell and pattern. It is critical therefore that the school design for pupils with ASDs is aimed at reducing environmental stimuli through directing attention to the amount and type of visual, aural, tactile and olfactory stimulation. Attention should also be directed to providing visual structure and creating a predictable and structured school and classroom environment. Conversely pupils who have a visual impairment will have a greater dependency on auditory and tactile cues within the building and its design should reflect this need.

(b) Design Teams should adopt a pragmatic, cost effective approach to ensure the continuum of design solution flows seamlessly from accommodation for pupils with special educational needs out into the mainstream school, particularly in spaces where these pupils will require regular access, for example the General Purpose Room and circulation areas. Examples of a cost effective approach might include the use of any or all of the following:

- use of appropriate colour,
- suitable floor coverings
- control of natural light and shade
- avoidance of strong patterns and textures
- acoustic modification of the internal environment
- high frequency light fittings etc.

It is not intended that all accommodation within the mainstream school element will require this approach.

(c) While the emphasis will be on providing a pleasant educational environment certain factors must be taken into account in the selection of materials and the detailing and design of services etc. to ensure the safety of all. Some pupils may become quite distressed and occasionally exhibit challenging behaviour. The correct selection and appropriate detailing of materials, finishes and fittings should eliminate opportunities for self-injury. Above all, facilities must be sufficiently robust to cater for all eventualities.

(d) The following guidance enshrines the design principles to be incorporated in the accommodation for pupils with special educational needs. Some of these principles will naturally flow out into the mainstream accommodation without any additional cost, for example, the types of floor finishes, choice of colour etc. Where any doubt exists please refer to the Planning and Building Unit of the Department of Education and Skills for guidance.

(e) Existing school buildings will pose particular challenges in terms of effecting seamless visual and functional integration between new and existing structures or buildings. New schools will afford the Design Team greater scope for the integration of the accommodation for pupils with special educational needs, and to also treat the whole school environment as a cost effective, functional and flexible space for pupils with special educational needs.

3.2 Site Assessment

(a) Designers are advised to carry out a risk assessment of the general site conditions and landscaping around the school and plan for risk mitigation or elimination. A typical example would be a natural watercourse or stream flowing through or adjacent to the site, or a pond or open fire fighting reservoir. Such items might not pose specific risks for mainstream pupils but would for some pupils with special educational needs, and, as such, may create unacceptable risks which should be designed out.

3.3 Location of Accommodation

(a) General

Permanent accommodation for pupils with special educational needs should never be provided in a stand-alone building.

The accommodation for pupils with special educational needs should, where practicable, be located close to the main school entrance. This will permit all pupils, including pupils with special educational needs to use the main school entrance. Appropriate vehicular and pedestrian access will therefore be required.

Accommodation for pupils with special educational needs should normally be located at ground floor level. Where, due to site or other constraints, this is not possible, the school authority should immediately seek the written approval of the Department of Education and Skills, which should be obtained before proceeding with design work.

The location of the special educational needs accommodation off main circulation must not impact on the means of escape in case of an emergency strategy from the main school generally. The design of circulation must equally maintain the security requirements of the special educational needs accommodation at all times. For example, pupils with Autistic Spectrum Disorders, who have a tendency to run or exit the building, will require security control on the doors within the SEN accommodation. These controls must not impact on the means of escape from either the SEN accommodation or the main school building, and escape should be treated independently of each other.

(b) New Buildings

In all new school building projects the accommodation suite for pupils with special educational needs must be appropriately located within the design proposal in order to promote and develop inclusivity. It should not be located in a remote or isolated part of the building where contact and social development opportunities with the main school population would be impossible to promote

All pupils, regardless of ability, should be able to enter via the main entrance to the school building on a daily basis. The accommodation suite for pupils with special educational needs should ideally be located within easy reach of the main entrance.

(c) Extensions

For extensions to existing buildings, it is recognised that it may not be always possible to locate the proposed accommodation close to the entrance or in a location which allows opportunities to develop inclusivity, nevertheless every effort should be made to achieve this goal. In some cases it may not be possible to provide the full range of accommodation due to local factors such as restricted site conditions, etc. A pragmatic cost effective solution will be expected in each case and the accommodation brief and design criteria to be applied must be signed off by the Department before architectural planning can commence.

3.4 Main Entrance & Alternative Entrance Location & Design

(a) It will be necessary, to facilitate the safe set-down and pick-up of pupils with mobility problems close to the main entrance. Vehicular access with set down and pick up will also be required to this alternative entrance.

(b) It will also be a requirement to provide an alternative controlled, secure external entrance into the accommodation for pupils with special educational needs. The location can be discussed with the School Authority during the initial design development and presented as part of the initial stage submission.

(c) Wayfinding should be clearly visible from the main approach.

3.5 Layout of Accommodation

(a) It is important that the layout and quality of the design provides flexibility for the school and support staff in adequately supporting pupils. For example the classroom layout may change on a regular basis according to daily needs. Fixed partitions and immobile furniture are not recommended as they do not offer the required level of flexibility to adapt the space to meet the user needs. The environment needs to be sufficiently robust to create a responsive, safe and secure environment for staff and pupils in managing challenging behaviour.

(b) The layout of accommodation should ensure that staff is in a position to supervise all activities in an unobtrusive manner at all times. The provision of adequate visual connection between spaces is very important within and between classrooms and the immediately adjacent spaces, e.g. the Small Safe Space, toilet areas etc. Hidden areas should be eliminated at the design stage.

(c) The design of circulation must take account of means of escape in case of emergency and the while maintaining the security of pupils as mentioned above in section 3.3 above.

(d) The range of accommodation to be provided will typically include the following:

- Central Activities Space
- Classroom - Safe Base
- En-Suite Toilets and Shower Area
- Small Safe Space
- Multi-Sensory Room
- Para-Educational Room
- Practical Activity Room (post primary)
- Daily Living Skills (post primary)
- Staff toilets,
- Linen/Sluice Room
- Storage
- Office

(e) Internal connecting doors will be required between the main building and the specialist accommodation. These doors must have an electronic secure control system.

3.6 External Play Area

(a) Appropriate separate provision for external play will normally be provided and this is set out in the Schedules of Accommodation in Section 2. The amount of area for secure external play is additional to the standard hard play allowance provided for the mainstream school element.

(b) External play should be provided in a secure location which is close to, and ideally directly accessible from, the classrooms for pupils with special educational needs.

(c) External play areas can be divided into hard and soft play sections. Where specialist play equipment is provided, the design team shall consult with the school at the outset regarding the range and type of equipment to be provided. Adequate provision must be allowed for the fixing of equipment into the hard and soft surfacing, Where special climbing equipment is proposed, soft impact play surfacing appropriate for the intended use must be specified in the area where the equipment is located. External play area should be regular in shape and both hard and soft play should be adjacent to each other.

(d) Consideration should be given towards the creation of a shaded outdoor area for pupils with photophobia. The surface of a playground may contain particles that may, in strong sunlight, make it dazzling for pupils with photophobia, and there is a need to assign a quiet area as well as an active area to prevent more active pupils knocking into more vulnerable pupils whilst playing.

(e) The boundaries of dedicated play areas for pupils with special educational needs should be defined using suitable secure and visually attractive fencing at a height of 1.8m. The fence design should not encourage or facilitate climbing. Tamperproof gate latches should be used. Enclosed courtyards should also be considered for such activities.

(f) The design and layout of these secure external play areas should ensure that there are no hidden areas where the pupil is out of view of the supervising staff.

(g) Provision should be made for a water supply and electrical services to accommodate a water feature should this be required.

3.7 Sensory Garden

(a) A sensory garden should be incorporated into the secure play area, where the school site area permits. This should be prepared and left ready for planting. The Board of Management will be responsible for the selection, provision and installation of appropriate planting. The sensory garden must be fully wheelchair accessible.

(b) A sensory garden stimulates the senses. Hard and soft landscaping – fountains, raised wheelchair accessible planted beds, pergolas (climb-proof), wind chimes, foot chimes, bird tables, etc., can be used in a variety of ways to provide experiences involving seeing, smelling, hearing, and touching.. Pupils should be encouraged to interact with the plants, touching and smelling them. Space to sit down, picnic, watch wildlife, listen to sounds, etc should be considered within the layout.

(c) Provision should be made for a water supply and electrical services to accommodate a water feature should this be required.

3.8 Building Elements

(a) Walls

All internal block walls throughout the accommodation for pupils with special educational needs (except storage) should have a smooth plaster finish.

Surface mounted conduit must not be used in the specialist accommodation for pupils with special educational needs.

Where it is proposed to use dry-lining or plasterboard stud-partitioning, a high-impact board finish must be specified. The fixing positions for all wall mounted equipment must also be considered, agreed with the school and taken into account in the design of the wall structure.

Un-rendered blockwork has a repetitive geometric pattern which may provoke reaction in some pupils with special educational needs. This can be eliminated by plastering

walls or using high impact plasterboard wall linings. Plastered smooth surface walls will also assist in creating hygienic easily cleanable surfaces.

Design Teams should consider the inclusion of tactile trails or handrails as an aid for pupils with a visual impairment to assist mobility within the school environment. Walls along routes which are selected for tactile trails or handrails should be free from obstructions such as fire extinguishers, coat rails, radiators, display boards, cupboards, etc

(b) Flooring & Floor Coverings

Floor finishes generally should be multipurpose impact-absorbing vinyl., with a minimum slip rating of R8 Floors in wet areas should have a non slip vinyl finish with a minimum slip rating of R10,

Surfaces such as carpet can be more difficult to clean and maintain than hard-surface flooring; carpet can promote the growth of mould and other air contaminants and may not be suitable for pupils with certain medical needs. Carpet can also cause friction burns. Adequately cushioned vinyl flooring would appear to offer the best solution, and Design Teams should research choices carefully before specifying.

Carpet can be considered where pupils have a hearing impairment. It can assist in reducing environmental noise which would be helpful for these pupils who rely more on their hearing as a channel for information, and may assist in reducing background noise allowing meaningful sounds to be more audible. Where it is proposed to use carpet this must be agreed with the school at the outset of the design process.

Geometric or repeating patterns should be avoided in fabrics or floor coverings.

Many mainstream schools can have a range of geometric shapes and patterns in both wall and floor finishes. For some pupils with special educational needs, these design choices would be counterproductive as they introduce a level of visual complexity that pupils may have difficulty processing. Plain non-patterned finishes should therefore be specified.

The use of colour in floor coverings should be carefully considered.

Changes in colour in floor coverings to denote changes in areas, can assist pupils with low vision or visual impairment in locating places, steps or edges, that might otherwise visually merge into the rest of the floor.

Flooring in wet play and toilet areas should be non slip vinyl finish with a minimum of an R10 slip rating

.In the en-suite fully accessible WC./shower area the floor should be designed as part of a wet room design with coved skirtings, The defined shower area within this space should have an enhanced slip resistance of minimum R11.

(c) Joinery

Avoid sharp protruding edges.

Doors into stores and small spaces should be capable of opening outwards.

Inward opening doors into small or confined spaces could allow a pupil to ‘barricade’ him/herself in the space, making it very difficult for teachers & staff to access and remove the pupil quickly from that space.

(d) Glazing / Windows / Screens / Doors

Safety glass must be used throughout the accommodation suite in all double glazed windows, screens and doors. The use of Georgian wired glass, for example, is not recommended in doors and screens in any areas to which the pupils have access and where there is a risk of damage and breakage from pupil activity.

Design Teams must avoid large ‘panoramic’ areas of glass in windows and screens. The overall window frame within the wall should have adequately spaced glazing mullions & transoms, sufficient to break the structural opening into manageable glazed

sections. This will facilitate natural ventilation through opening sashes, add strength to the window frame in the event of an impact, and reduce the potential maintenance costs of replacing large areas of glass.

In order to meet the needs of some pupils with special educational needs it will be necessary to direct particular attention to creating a responsive, safe and secure environment in order to assist pupils and staff in the management of challenging behaviour. It is important that, in carrying out a risk assessment, critical areas are identified and the risks mitigated or eliminated. Broken can also cause serious injury. It is critical therefore that the design and specification of glass and frame is taken into account in the design.

Care is also required when designing the opening sashes of windows at head height level. Consideration should be given to the external environment immediately outside the windows. Design Teams must ensure open projecting sashes do not pose an unacceptable risk for pupils with visual impairment who might injure themselves passing by outside on the path or at play.

Doors generally onto circulation should have a vision panel.

All doors should have protective finger guards along the hinged edge of the door for safety reasons.

(e) Ironmongery

The use of door-closers needs to be carefully considered. Pupils with special educational needs may try to close the door behind them, as they might normally do at home. Door closers restrict them doing this which can in turn lead to breakage of the closer with resulting maintenance problems. Design Teams should carefully consider the use of door closers balanced with the fire safety requirements, with a view to eliminating them through other fire engineered strategies.

The use of panic-bolt operated emergency exit doors needs to be carefully considered. Certain pupils with special educational needs will, on occasions, attempt to seek access to outside areas and get away from the school during the school day. They will try to exit by whatever means possible. Therefore suitable means to control the opening of emergency exit doors must be considered, whilst equally addressing the fire safety requirements on means of escape.

Electronic door controls, which are linked back to the fire alarm system as part of the fire safety strategy, should be provided at the main internal and external entrance/exit points to the SEN accommodation where no other alternatives are acceptable to the Fire Officer.

Keypad controls on doors are not advisable. Some pupils with special educational needs can have strong visual learning modalities and learn repetitive actions quickly. Research has shown that where keypad control has been used on doors, these pupils were able to learn the codes fairly quickly rendering the door controls and containment useless.

Door furniture should be of similar design throughout the school building including the accommodation for pupils with special educational needs.

Domestic type ironmongery fittings must never be specified or used. All door furniture specified must be fit for the intended purpose.

Domestic type door furniture/ironmongery or fittings will not stand the level of wear and tear expected.

The location and height of lever furniture on the classroom door leaf requires careful consideration

Some pupils with special educational needs will have tendencies to exit the classroom and run. The appropriate design and location of the door handle or handles on all doors help prevent this. One option which can be considered is the use of twin lever handles on the door leaf – one at normal height, the other at a higher level. The action of both

handles is required to open the door. The upper latch can be disengaged if considered unnecessary. Please refer to section 3.8 (e) and 6.4 for suggested ironmongery arrangement.

(f) Colour Schemes, Wayfinding & Signage

Colour schemes chosen must not unduly impact on those with limited vision and must not over stimulate pupils with sensory sensitivities to environmental stimuli. It is recommended that the design solution accommodates the needs of all pupils with special educational needs.

Floor, wall and ceiling colours should be predominantly neutral in tone. A definite contrast between wall and floor colour is recommended.

Many mainstream schools employ a range of bright, diverse colours. It is generally agreed that, for the accommodation for pupils with special educational needs, a muted, subdued palette of colour — pastels, earth tones, neutral colours — and plain, non-patterned finishes are sensible choices. This allows the teaching staff to introduce bolder primary colours into the teaching environment according to the sensitivities of individual pupils. Primary or bolder colours may be used in a limited manner within the mainstream accommodation in consultation with the School Authority.

Colour choice, contrast, and texture finish should be considered in an imaginative way as a means of assisting mobility and wayfinding around the whole school.

Some pupils with special educational needs, for example, can find their way around the building using colour, texture, and coding. Contrast between wall and floor planes will greatly assist pupils with visual impairments. Decisions on this approach must always be taken in consultation with the School Authority.

Internal signage should be clearly legible using a clear font type (for example Arial or other suitable San Serif font), on a contrasting background. Signage should be placed at a height which will avoid hazards whilst taking ease of reading and viewpoint into consideration. Both tactile lettering and symbols and Braille should be used. Further information on accessible signage and building design for pupils with visual impairment can be obtained by reference to the NCBI at www.ncbi.ie and BS 8300. “Design of buildings and their approaches to meet the needs of disabled people”.

3.9 Furniture & Equipment

(a) The provision of loose furniture and equipment should be discussed with the Class Teacher and/or the Principal. The Visiting Teacher service should be consulted as appropriate.

(b) Chairs with arms are sometimes desirable as they define space for the pupil sitting in them.

(c) Where possible mobile furniture should be chosen to allow the teaching staff flexibility in rearranging the teaching space to suit the particular needs of pupils and for curriculum implementation. Wheels should have a brake attachment and be capable of being locked in place.

(d) The choice of pattern and finish on the pupils’ tabletops should be carefully considered.

(e) Venetian blinds should not be specified.

(f) Spaces between windows are inappropriate places to mount visual materials because of potential problems with glare.

(g) Design Teams on schools for pupils with special educational needs should be aware of furniture design and its appropriateness for each individual pupil. Details that might seem inconsequential in other educational environments, for example, the sharp corners of projecting whiteboard marker trays or of window boards can present unintended hazards. In such cases trays should be omitted and window boards made flush or projecting ends should be rounded. Woodgrain patterns on tabletops can

distract and cause anxiety for some pupils with Autistic Spectrum Disorders. Plain finishes are more appropriate. It may be appropriate for Design Teams to consult with an Occupational Therapist regarding specific furniture and equipment requirements.

(h) Pupils with visual impairment may require glare reduction and contrast properties on furniture. The location of furniture and equipment within a room for pupils with visual/hearing impairment also requires consideration. Spaces between windows for the display of materials are inappropriate in order to avoid the likelihood of photophobic pupils gazing into bright lights. It is also appropriate that the orientation of assigned teacher aids/areas such as whiteboards, demonstration areas, etc., needs to be carefully considered.

(i) The Department of Education & Skills provides a grant for loose furniture and equipment and a grant for multi-sensory equipment. This is a matter for a separate application and discussion between the school and the Department

3.10 Acoustic Environment

(a) A proper acoustic environment will be crucial for effective classroom listening. Noise can be generated from outside the school site, arise in the school building generally, or arise within the classroom itself. Noise which arises within the school building may come from human activity or from ventilation systems, fans, plumbing etc.

(b) A number of pupils with special educational needs, for example some pupils with Autistic Spectrum Disorders, have difficulty processing sound. The problem isn't just noise. For example, a pupil with Autistic Spectrum Disorders who cannot differentiate sounds that are important from those that aren't can become distracted all too easily by sound within the classroom, or sound coming from a fan or duct. Controlling the acoustical environment isn't just a matter of attenuating sound from the air system. Learning spaces must also be configured in ways that control sound transmission.

(c) All teaching spaces and corridors must be acoustically treated to facilitate clear communication of speech between teacher and student and prevent interference from student activity. Absorptive treatment can be added to room surfaces to prevent noise build-up and to reduce airborne noise transmission. The type of finishes chosen should take the degree of low and high frequency sound absorption into account to ensure intelligible speech frequencies are maintained at all times. All acoustic treatment must be calculated on the basis of an empty space i.e. a space without furniture and fittings. The Central Activities Area and Small Safe Spaces should be treated with an acoustic finish suitable for the room's intended purpose e.g. ball games, challenging behaviour etc. The Design Team is strongly advised to seek advice from an acoustic consultant in the design of these spaces at the earliest stage of the project and refer to TGD-021-5 Acoustic Performance in Schools.

3.11 Daylighting

(a) The control of natural daylight penetration needs to be carefully considered. The creation of strong contrast between light and shade can cause confusion and anxiety for certain pupils with special educational needs and in particular some pupils with Autistic Spectrum Disorders. Strong shadow lines may create fear and pupils will be unwilling to venture beyond the obstacle. Windows with exterior views may provide pupils with undesirable distractions. Clerestory windows and skylights may also be counterproductive because shifting patterns of daylight can complicate the visual environment. These drawbacks mean that Design Teams must carefully evaluate the locations of windows and skylights when and where they are used. Large expanses of glazing must be carefully designed and suitable provision made for the control of daylight entering the space should be provided.

(b) Blinds where provided shall be incompliance with the Department's guidelines for blinds and shall be light coloured basket weave sunscreen material with the following:

- Light transmission values in the 9% to 12% range
- Solar absorption in the 17% to 20% range
- Openness factor in the 3% to 5% range (3% may be more appropriate in South facing elevations, subject to mock-up on site)
- Optimum shading co efficient.

3.12 Mechanical Services

(a) This section shall be read in conjunction with the Departments M&E Building Services Guidelines for primary and post primary schools.

(b) Adequate natural ventilation should be achievable without draughts. All spaces should have the benefit of high and low level natural ventilation opening sections in the windows as outlined in the Department's guidelines TDG-030 & 031. Tilt and turn windows are not appropriate. The window design with respect to geometry and opening sections must ensure that resultant dry temperatures in all teaching spaces shall not exceed 25ºC for more than 5% of the school year and takes into account air tightness standards.

(c) Permanent ventilation openings to comply with the Building Regulations should be provided in addition to any sash openings or window perma-vents. They should be provided at high level in a draught fee manner.

(d) Under-floor heating is not considered suitable and should not be specified. It is not responsive enough and impinges on the school authority's freedom to use padded floor mats for pupil activity.

(e) Low surface temperature radiators are not required in the Special Educational Needs Accommodation. Ordinary steel panel radiators that are capable of accepting either a purpose built steel or wood cover, fitted by others in the future should the need arise, are acceptable and should be used. Where covers are provided they should not contain patterns which may cause distractions.

(f) Radiators in the Small Safe Space, Multi-Sensory, Para-Educational rooms and corridors should be recessed within the wall thickness to eliminate the risk of pupils injuring themselves

(g) It is acceptable and advisable to run pipe work to radiators in the concrete floors from centrally located manifolds with continuous pipe within a pipe with no joints to individual radiators. Extensions pieces from radiators to the upstand pipes are not acceptable and shall not be provided. It is imperative that pipes are installed at the correct dimensions for the radiators when the floors are being poured.

(h) Pipe work must be plastic pipe with oxygen barrier and be sleeved and insulated in such a manner that it can be fully withdrawn and reinstalled if need be post installation without disruption to the areas and finishes that it passes through.

(i) Each teaching space and staffrooms shall be controlled via two port motorised valves with electrically powered digital thermostats with a lockable range up to a maximum of 24℃. Care should be taken when locating these units to ensure they are not easily accessible by the pupils.

(j) Water services pipe work must be concealed.

(k) The principles outlined in (g) & (h) above may also be applied for short runs to serve hot and cold water services in certain cases.

(l) All thermostatic mixing valves must be connected to the hot water and cold water distribution services as detailed on the Thermostatic Mixing Valve installation drawing RT-TMV-001 in the appendices to TGD-03 & 031.

(m) Mains water is only required at the classroom sink.

(n) Water supply to all taps, and cisterns should be capable of independent isolation using cut-off valves.

(o) WC cisterns should be fitted with tamperproof lids

(p) The Design Team shall liaise with the school and ascertain if a gas hob or cooker is required in the Daily Living Skills space. Where a gas hob or gas oven is being provided the following guidelines in relation to the gas supply will apply:

(q) The provision of the gas storage system is a contract between the school and the gas supplier and shall not be included in the tender contract documents. Where a bulk tank is being provided the provision of a base and enclosure shall be part of the building contract.

(r) In schools which don't have an existing natural gas or LPG supply the provision of a minimum amount of gas e.g. local cylinders in accordance with the supplier's recommendations should be considered. These should be located externally on an external wall of the Daily Living Skills Room to feed the hob or cooker. Where considered necessary a cage surround shall be provided for these.

(s) In schools with an existing natural gas supply to the boiler house only, the gas distribution pipe work shall be routed from there to the Daily Living Skills Room (in compliance with ventilation requirements) within the building.

(t) In schools with an existing gas supply feeding specialist rooms the gas distribution system shall be extended to the Daily Living Skills Room.

(u) Gas distribution pipes shall be black mild steel and shall be finished in two coats of yellow paint and marked as 3m intervals as a gas distribution pipe.

(v) A gas pressure proving system shall be provided on the gas supply in this teaching space.

(w) Consideration may be given to fitting a seven-day time clock on the pressure proving system valve to isolate the gas supply (excluding supply to heat producing equipment) out of school hours. This valve shall also be connected to the fire alarm system for isolation of the gas supply on activation of the fire alarm system.

3.13 Electrical Services

(a) This section shall be read in conjunction with the Department's M&E Building Services Guidelines TGD-002, 003, 004, 005, 030 & 031.

(b) The electrical installation shall be wired in flush conduit. Surface mounted conduit is not acceptable.

(c) Lighting installations shall be as outlined in the Department's TGDs i.e. high frequency T5 light fittings with daylight sensing controls and also manual on / off switching arrangement.

(d) The Design Team shall liaise with the school authority at an early stage in the design development to see if these are suitable for use in the special educational needs accommodation in the particular school e.g. the use of lighting controls may cause a problem/distraction for some pupils etc. Where necessary these shall be modified to suit each individual school's needs.

(e) Lighting control in teaching spaces should be such that all lights in the space are linked to one sensor such that all lights dim in the same manner to the control signals.

(f) Lighting Controls in en suite toilets should be based on manual on/off switching with automatic absence detection only.

(g) The Design Team shall liaise with the teaching staff at an early stage in the design development and agree locations for light switches in spaces. It is important to locate these in locations where teachers can prevent pupils from tampering with them.

(h) Lighting in the Multi-Sensory room doesn't require daylight controls and should be dimmable via a manual dimming controller. In addition to normal lighting an ultraviolet twin fluorescent batten type fitting mounted on the ceiling or wall and controlled by a dedicated local light switch shall be provided in the room. This will be used by staff members as a teaching aid.

(i) Three network points are to be provided in each class base. Two un-switched twin sockets outlets shall be provided adjacent to each network point. The network points should be located in three different locations around the room. The network points and associated socket outlets shall be served via recessed vertical conduit drops from above. The Design Team shall liaise with the teaching staff at an early stage in the design process regarding the exact locations for the network points.

(j) The network points shall be wired in Cat 6a cable.

(k) The Design Team shall liaise with the school and teaching staff at an early stage in the design process regarding:

- Locations and numbers of socket outlets in teaching spaces
- Height adjustable sink units in classroom safe bases
- Height adjustable changing benches and mobile hoists being provided in the en suite toilets
- Specialist equipment being provided in the Multi-Sensory Room and it's location
- Kitchen equipment being provided in the Daily Living Skills space (primary schools)
- Equipment being provided in the Linen/Sluice Room
- Equipment being provided in the Practical Activity Room (post primary schools only)

(l) Where necessary suitably rated power points shall be provided in en suite toilet facilities to cater for any electrically operated equipment being provided.

(m) In the Multi-Sensory Room power points for specialist equipment shall be controlled from a secure wall panel provided beside the entrance door to the room. The panel shall facilitate independent control of each piece of equipment. This permits the carer/therapists to use one piece at a time and is essential for the effective assessment of users; their responses and preferences. As a guide a minimum of 10 twin socket outlets shall be provided at varying heights above floor level in various locations in the room.

(n) Suitably rated power points shall be provided in the Daily Living Skills space and the Practical Activity Room to cater for equipment being provided in these areas.

(o) Sockets outlets shall be the un-switched type (some pupils can become obsessed with turning on and off switches) and should be protected when not in use using conventional 3-pin cover inserts.

(p) At least one twin socket outlet should be provided at high level in each of the classrooms and central activity space to facilitate television etc. This is to eliminate trailing cables which can create problems for some pupils.

(q) The Design Team shall liaise with the school and teaching staff at an early stage in the design process regarding their requirements, if any, for a CCTV camera installation and the preferred type e.g. individual CCTV camera in each classroom wired back to the Para-educational Room. The cameras will be supplied and installed by others in the

future and will not form part of the electrical installation. As a guide only an infrastructure as outlined in Section 5.8 (b) below shall be provided.

(r) Telephone points shall be provided in each Classroom Safe Base and wired off the telephone system in the school.

(s) An Emergency Call/Panic Alarm System consisting of a central control station in the Administration Office and emergency assist panic pendants worn by staff shall be supplied and installed as part of the electrical installation. The system provided shall cover both the Special Educational Needs Accommodation as well as the outdoor spaces associated with this. Typically this will be an addressable system comprising mobile pendant/handheld panic button units and a panic button controller. The intention is that a unit will be assigned to a staff member and when it is triggered, an alarm will sound and the display unit will indicate a number assigned to the staff member who triggered the alarm. The system may have a two phase panic mode, Setting 1 will indicate that the person feels threatened; Setting 2 indicates that a more serious emergency situation has occurred.

(t) An electronic key fob type access system shall be provided in Special Educational Needs Accommodation to control rebated mortise electromagnetic type locks on the main entry/exit doors, fire exits and doors off the Central Activity Space into the main school building. The Design Team shall liaise with the school and teaching staff at an early stage during the design process regarding the preferred type of system and also the number of key fobs to be provided. It shall not be linked to the fire alarm installation in the school this may contribute to problems for staff where nuisance tripping of the fire alarm occurs. It shall incorporate a facility where staff members can switch off the controls on the doors between the Central Activities Area and the main school at various times during the day to allow pupils from the main school access this area and vice versa..

3.14 Other

(a) Food preparation smells must not be allowed to penetrate beyond the spaces in which the food is being prepared.

(b) Drainage systems should have large diameter outlets which are fully accessible and roddable.

(c) Frequent or deliberate blocking of drains can occur. It is important that drainage is designed and sized accordingly to permit easy access and cleaning.

(d)

4. ROOM DATA SHEETS - PRIMARY

4.1 Central Activities Space

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**80.00 m^2**	**3.15m**

(a) Design Considerations

This space is the shared central space between the two class bases. It should ideally be located in a prominent position with each class base leading off it. It can be used as a general purpose space linked with the mainstream school element to promote contact with mainstream students. It can also be used by teaching staff for group class work, drama etc. Whilst the space should be capable of being used for play, where pupils can run and express themselves, more formal structured games should take place in the General Purpose Room. In all cases the intended use of the space should be discussed with the teacher (where one is in place) at the design stage. Whilst it is not necessary to have this area on an external wall, the space must meet the minimum day lighting and natural ventilation standards set out in the Department's Technical Guidance Documents. The acoustic treatment of this space and the protection of adjoining spaces from sound leakage and interference will be critical to the success of the space.

Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided.

(b) Fitted Furniture, Loose Furniture, Fittings, Equipment

(c) Finishes - Finishes should be specified based on the above usages.

Floor: Multipurpose impact-absorbing vinyl floor finish

Walls: Smooth plaster finish, painted.

Ceiling: Acoustic plasterboard ceiling finish

4.2 Classroom Safe Base (excluding toilets and storage)

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**70.00 m^2**	**3.15m**

(a) Design Considerations

The classroom safe base should be located close to the central activities area and should direct access to a secure external play area.

Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided.

(b) The classroom should have access to a telephone.

(c) Details on computer networking are set out elsewhere in this document. Flexibility to locate PC's in different areas of the classroom will be required. Computers may sometimes be mounted on a trolley.

(d) Details on computer networking are set out elsewhere in this document. Flexibility to locate PCs in different areas of the classroom will be required. Computers may sometimes be mounted on a trolley.

(e) An outline of the ICT installation to be provided is included in Section 3.13 – Electrical Services.

(f) Fitted Furniture, Loose Furniture, Fittings, Equipment

(g) Defined storage space for each pupil which will contain his/her coat, bag, shoes, books etc.

(h) Single bowl, single drainer sink unit in the wet area. The unit should be fully wheelchair accessible, and be electronically height adjustable.

(i) Low level lockable storage units in the wet play area.

(j) Whiteboards and notice boards as follows:

- Two whiteboards (2400 x 1200mm non-interactive) fixed between 800 – 900mm above FFL
- One noticeboard (2400 x 1200mm) fixed between 800 – 900mm above FFL
- Care should be taken when locating these on walls so as to facilitate and not to interfere with the provision of future interactive whiteboards and/or data projectors by the School Authority.
- The provision of non-interactive whiteboards and noticeboards is part of loose furniture and equipment, and shall be fixed in place by the main contractor. The School Authority is responsible for the provision of data projectors and interactive whiteboards and this shall not form part of the building contract.
- Locations of all boards etc must be agreed with the school beforehand.

(k) Allow for the provision of a stand-alone television and video/DVD playback unit. These should be located either on a mobile trolley or in a lockable press. A satellite/cable connection is not required.

(l) The class should facilitate the setting up by staff of 6(maximum) individual workstation areas for pupils with Autistic Spectrum Disorders. Each individual spaces is defined using moveable freestanding partitions and mobile storage units that facilitate the pupil working from left to right. Fixed partitions or fitted furniture are not recommended. The provision of mobile storage units and freestanding partitions forms part of the loose furniture and equipment grant.

(m) A system for concealing the computer, e.g. a lockable cabinet or store room, should be made available. Some pupils with special educational needs exhibit a tendency to become obsessed with computers and they may then need to be concealed to avoid unnecessary distraction for the pupils.

(n) Computer trolleys may be required.

(o) Finishes

Floor: Multipurpose impact-absorbing vinyl floor finish

Walls: Smooth plaster finish, painted.

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid

4.3 En-Suite Toilets & Shower Area

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**30.00 m^2**	**3.15m**

(a) Design Considerations

Each classroom should have direct access to en-suite toilet facilities. Depending on the design solution, this accommodation can be placed either between classrooms with direct access from both class bases or as individual toileting suites off each class.

Each classroom should typically have the following dedicated provision:

- One unisex standard fully assisted and accessible en-suite facility at least 12m² in area. It should contain a WC, wash hand basin and a level entry shower facility. The space must be designed to accommodate an electric height adjustable changing bench and mobile lifting hoist should one be required. It should be fully wheelchair accessible. Grab and hand rails should also be provided.
- One standard size WC facility, 3m² in area, with a WC and wash hand basin. This should be ambulant accessible.

The fully assisted WC and shower area should be designed as a wet room using finishes as specified below, falling to a central drain outlet.

The above provision of one fully assisted en suite facility and one standard size WC facility per classroom will amount to 30m² in floor area. The Schedules of Accommodation are based on this. Where it is possible to locate the en-suite facilities between the classrooms and accessed via a link corridor, as shown on the exemplar plan, the provision outlined above can be reduced to one unisex standard fully assisted en-suite facility and 2 standard size WC's per two classrooms. The total floor area for this arrangement is 18m², and the balance of 12m² can be used by the Design Team at their discretion. The final layout shall be agreed with the Department of Education and Skills.

En-suite facilities should be located on external walls and provided with adequate natural and rapid ventilation of the spaces.

All waste outlets and drainage runs must be easily accessible and roddable.

Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13. above shall be provided.

Fully assisted and accessible en-suite facility must be designed to accommodate an electric height adjustable changing bench and mobile lifting hoist should one be required.

The Design Team should also refer to the Department's general design guidelines and ensure that adequate natural and rapid ventilation of these spaces is provided.

(b) Fitted Furniture, Loose Furniture, Fittings, Equipment

2 x 300mm x 1000 long fixed shelving should be provided at a suitable height within the assisted w.c. area for various items like personal hygiene supplies, incontinence pads, clothes etc.

(c) Finishes

Floor: sheet vinyl finish, minimum R10 slip rating , coved skirtings, The defined shower area within this space should have an enhanced slip resistance of minimum R11.

Wall: floor to ceiling non-porous ceramic high gloss wall tiles typically 150mm x 150mm on a plastered wall finish.

Ceiling: moisture resistant acoustic plasterboard ceiling, suitable for use in shower/WC areas

4.4 Small Safe Space associated with Classroom Safe Base

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**12.00 m²**	**3.15m**

(a) Design Considerations

This space should be located directly off or adjacent to the classroom and is intended as a safe area that a pupil, under the supervision of a staff member, can access for a short period of time. When necessary, and as part of a clearly documented staged approach to the management of pupils' behaviour, pupils displaying challenging behaviour may access this space for the protection of themselves, other pupils and staff. Where appropriate, a staff member will stay in the small safe space with the pupil. However at others times it may be more appropriate for the staff member to monitor the pupil from outside. The design of the space must allow staff to observe pupils unobtrusively from outside. On other occasions, pupils, who may feel under pressure or who need time to themselves in order to diffuse a potential behavioural outburst will be encouraged to withdraw to this space themselves, thus learning how to self-regulate and modify their behaviour.

Construction must be extremely robust and designed to meet the needs of pupils who exhibit the most challenging of behaviours. Walls should be of blockwork construction or of other suitably robust construction.

Where additional safe spaces are provided, a protocol for appropriate use will be drawn up in consultation with relevant professionals, and will form part of the school's policy for the management of pupils' behaviour. The procedure to be adopted in respect of pupils' access to an additional safe space should be documented in individualised planning for each pupil and should be regularly reviewed and adjusted as necessary to ensure that access to this space is impacting positively on the management of the pupil's behaviour.

(b) Mechanical & Electrical Building Services Engineering

Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided.
One twin socket outlet shall be provided.

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

(d) Finishes - The colour scheme should reflect the calming nature of the space – refer to Section 3.8(f) for further guidance on colour.

Floor: Multipurpose impact-absorbing vinyl floor finish

Wall: Hardwall/sand & cement plaster finish and painted

Ceiling: Acoustic plasterboard ceiling finish - an applied or integrated acoustic treatment may be used on the ceiling in order to meet the appropriate acoustic requirements of the room. The use of a suspended ceiling grid with acoustic tiles is inappropriate and should not be specified in this space. Please also refer to TGD-021-5 and Section 3.10 of this document for further guidance.

(e) Doors & Ironmongery

Door ironmongery should be carefully considered and the door should not be capable of being locked shut from within. The door should also be capable of being opened out from the additional safe space into the classroom to prevent a pupil blocking the door from within and thereby preventing entry from outside. Depending on the design proposal, a second door directly onto the link corridor (see exemplar sketch) may be provided. This will allow for the pupil to directly access the toilets without the need to pass through the classroom.

A vision panel must be provided to facilitate staff to monitor the pupil in the additional safe space and observe when to intervene in the event of the pupil becoming receptive to interaction or engaging in self injurious behaviours.

4.5 Multi-Sensory Room

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**20.00 m^2**	**3.15m**

(a) Design Considerations

The multi-sensory room is used to provide a variety of sensory stimuli associated with smell, taste, touch, sight and sound, which are designed to provide sensory stimulation for pupils. The space should encourage positive actions and responses for pupils with sensory impairment, and promote rest, relaxation and reduce tension for those pupils who are stressed or agitated. It can also be used to make demands on pupils using interactive equipment towards specific educational aims.

As a general guide, the space should be highly soundproofed from adjoining spaces. Sensory rooms are used with loud music in some instances and for quiet relaxation on others. The room must support both.

Wall construction should be robust and capable of supporting shelving for equipment and for directly fixing specialist equipment.

It is not necessary to have a window in the Multi-Sensory Room as natural lighting of the space is not a requirement, however adequate natural ventilation must be provided in all cases. Where a window is provided it must be capable of meeting full blackout requirements in order to meet the room's specific uses.

(b) Mechanical & Electrical Building Services Engineering

Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided.

The Design Team shall discuss with the school and teaching staff:

- The roles and responsibilities for the supply and installation of the specialist equipment need to be identified and adequately defined.

- The location of the central control panel to control specialist equipment.as well as the locations for the specialist equipment being provided.

The Design Team shall also liaise with the suppliers/installers of the equipment to ascertain their requirements.

It is imperative that these discussions take place at an early stage in the design process and decisions are taken to ensure the provision of the electrical services i.e. conduit runs and power points etc is properly coordinated before the walls are plastered.

Power points for specialist equipment should all be independently controllable from an accessible and secure wall panel within the room and beside the entrance door. Surface mounted conduit will not be acceptable.

The position of radiators needs careful consideration. They should be sensitively located at low level to maximise use of the floor space for mats etc. and away from children working or lying on the floor.

A 1.2m twin ultra violet fluorescent light fitting/s at ceiling level shall be provided in addition to normal lighting requirements. Refer also to Section 3.13 Electrical Services.

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

Furnishings and finishes must be safe and durable.

The range of sensory equipment used will vary from school to school and the individual needs of the child. In addition to the grant for loose furniture, a separate one-off grant will be provided by the Department for the purchase of this equipment. It will be a matter for the School Authority to prioritise the equipment for purchase, within the amount of the grant.

The range of typical equipment will normally include seating equipment (beanbags, foam filled mats, etc); wall/ceiling projector (250 degree); mirror ball, fibre optics, sound system, aromatherapy diffusers, switching systems, bubble tube, mirrors, etc.

It is recommended that, because of the specialist needs and user requirements of this space, consultation between the School Authority, special needs teacher, consulting architect, consulting mechanical & electrical engineer, and specialist supplier of multi-sensory equipment needs to be undertaken at the earliest opportunity in order to establish goals, identify what needs to be achieved, define the equipment needs and to identify and make provision for space and services requirements in the initial designs.

A minimum of two fixing points should be provided in the ceiling to allow for the fixing and support of suspension equipment, e.g. a swing, doughnut, etc. Loadings should be calculated based on typical user requirements. Their locations should be discussed and agreed with the school at the earliest opportunity during the design development.

(d) Finishes

Floor: Multipurpose impact-absorbing vinyl floor finish.

Wall: Smooth plaster finish, painted.

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid

Colour used should be calming – typically off-white, which will support most effects, particularly the projection of colour and image. Alternatively a 'dark' room, using dark blues, can be created with curtains, or by colouring a corner of the room in a dark blue colour to provide a different environment, particularly where U.V. light will be used, or to provide a different sensory experience. This is a matter for discussion and decision between the School Authority and the Design Team.

4.6 Para-Educational Room

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**15.00 m^2**	**3.15m**

(a) Design Considerations

The Para-Educational Room is, in many respects, a multi-purpose room. It can have a variety of uses:

- for medical inspections
- meetings with visiting health and support professionals
- meetings with parents
- withdrawal of pupils for additional teaching
- staff training
- observation of pupils with special educational needs in their class environment in certain cases may be appropriate as a training tool in the development of teaching skills, social skills, behavioural management, professional training etc.

School authorities, in conjunction with their Design Team may wish to consider the installation of a CCTV system between the classrooms and the Para-Educational Room

as a means to assist with pupil observation, the development of appropriate educational programmes and for staff training and development.

In all cases, and before funding will be considered for the provision of the installation of cameras and equipment, a written statement will have to be provided by the school authorities outlining why the system will be required, the educational and other benefits, the costs of the system and how it will be managed. In addition, a written agreement signed by both the staff and the parents of each of the children, consenting to the use of the equipment must be provided by the School Authorities on an annual basis. The cost of this will need to be identified separately.

A minimum of two fixing points should be provided in the ceiling to allow for the fixing and support of suspension equipment, e.g. a swing, doughnut, etc. Loadings should be calculated based on typical user requirements. Their locations should be discussed and agreed with the school at the earliest opportunity during the design stage.

(b) Mechanical & Electrical Building Services Engineering

Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13. above shall be provided.

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

(d) Finishes

Floor: Multipurpose impact-absorbing vinyl floor finish.

Walls: Smooth plaster finish, painted.

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid.

4.7 Daily Living Skills

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**16.50 m^2**	**3.15m**

(a) Design Considerations

Only associated with Post Primary Accommodation, this space is linked with the Central Activities and Practical Activity spaces. It is intended to provide pupils with a basic level of skill in daily living skills, e.g. preparing breakfast or lunch, making a bed, ironing, folding and storing clothes, applying make-up, etc.

The space should be laid out as a small flatlet or kitchenette with 600mm deep, 900mm high, x 3000mm long kitchen unit equipped with a oven, extract hood, hob, single bowl single drainer sink, fridge, dishwasher, integrated washing machine and dryer.

The Design Team shall liaise with the School Authorities at an early stage in the design process for guidance on whether height adjustable units, e.g. hob, sink unit etc should be incorporated into this design development. Design of kitchenette shall comply with the requirements of Part M of the Building Regulations.

(b) Mechanical & Electrical Building Services Engineering

Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided.

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

(d) Finishes

Floor: Multipurpose impact-absorbing vinyl floor finish. The floor in the immediate vicinity of the kitchenette should have a non-slip vinyl finish with a minimum of an R10 slip rating.

Walls: Smooth plaster finish, painted.

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid

4.8 Staff Toilets

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**10.00 m^2**	**3.15m**

(a) Design Considerations

A minimum of one male and one female staff toilet should be provided. In addition, a separate accessible and assisted unisex WC for mobility impaired should also be provided, or alternatively, each of the male and female toilets can be increased in size within the overall floor area allocation to provide this fully assisted facility. Floors should have a non slip vinyl finish with a minimum of an R10 slip rating, walls should be plastered and painted, and ceilings should have an acoustic ceiling tile.

(b) Mechanical & Electrical Building Services Engineering

Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided.

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

(d) Finishes

Floor: sheet vinyl finish, minimum R10 slip rating , coved skirtings

Walls: Smooth plaster finish, painted.

Ceiling: Plasterboard ceiling

4.9 Linen / Sluice Room

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**10.00 m^2**	**3.15m**

(a) Design Considerations

This room will provide suitable washing and drying facilities for pupils clothing, towels, etc. Clothes and linen storage facilities should also be provided.

The room should be equipped with:

- a domestic type washing machine
- a domestic type tumble dryer
- a sluice sink or Belfast sink with bucket grate mounted with the top of the sink basin 530mm above finished floor level
- a fixed counter unit 600mm deep, 900mm high, 1200mm long with a single bowl sink and drainer, including secure lockable under-sink storage to accommodate detergents and cleaning products

- an open shelf high level storage unit, 350mm deep, 900mm high 1200mm long to accommodate clothes and linens over the length of the fixed counter unit.

(b) Mechanical & Electrical Building Services Engineering

Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided.

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

(d) Finishes

Floor: sheet vinyl finish, minimum R10 slip rating , coved skirtings

Wall: Walls should be covered with non-porous ceramic high gloss wall tiles 150 x 150mm

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid

4.10 Storage

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**30.00 m^2**	**3.15m**

(a) Design Considerations

General storage should be provided in accordance with the schedule of accommodation. It should be provided in one block of accommodation rather than splitting it up into smaller units.

(b) Mechanical & Electrical Building Services Engineering

Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided.

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

30 linear metres of 300mm deep shelving to be provided

(d) Finishes

Floor: Sheet vinyl finish, minimum R10 slip rating

Wall: Painted fairfaced blockwork

Ceiling: Painted plasterboard

4.11 Office

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**20.00 m^2**	**3.15m**

(a) Design Considerations

The office should be located close to the main entrance into the suite of accommodation. It will be used primarily by the teachers associated with the special educational needs accommodation, and will also provide secure storage for pupil's education files, secure general storage, reception facilities, stationery etc.

(b) Mechanical & Electrical Building Services Engineering

Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided. Four twin socket outlets shall be provided.

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

(d) Finishes

Floor: Carpet finish

Wall: Plastered and painted

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid

4.12 Circulation & Observation

(a) Design Considerations

Corridors should be regular in shape without projections which could create an unacceptable risk. There should be a sufficient clear unobstructed corridor width to allow two adults to assist a pupil walking side by side.

Discreet observation into the classroom will sometimes be required by teaching staff and others for the purposes of training or for the development of individual teaching programmes for parents etc. An observation panel should therefore be provided from circulation into each classroom, using double glazing, one way mirrored glass, roller blinds etc. It is necessary to ensure that the incorporation of mirrored glass does not cause reflections which may distract pupils.

Design Teams should also consider the movement of pupils with visual impairment from the outside to the inside of the building. Pupils with some visual impairment conditions moving into a building from the outside can experience temporary blindness if the interior of the building has a contrasting light level to that outside. Consideration with regard to equalising daylight levels across threshold areas, through the judicious provision of rooflights should be considered.

(b) Finishes

Floor: Multipurpose impact-absorbing vinyl floor finish

Walls: Smooth plaster finish, painted.

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid

5. ROOM DATA SHEETS – POST PRIMARY

5.1 Central Activities Space

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**80.00 m^2**	**3.15m**

(a) Design Considerations

This space is the shared central space between the two class bases. It should ideally be located in a prominent position with each class base leading off it. It can be used as a general purpose space linked with the mainstream school element to promote contact with mainstream students. It can also be used by teaching staff for group class work, drama etc. Whilst the space should be capable of being used for play, where pupils can run and express themselves, more formal structured games should take place in the General Purpose Room. In all cases the intended use of the space should be discussed

with the teacher (where one is in place) at the design stage. Whilst it is not necessary to have this area on an external wall, the space must meet the minimum day lighting and natural ventilation standards set out in the Department's Technical Guidance Documents. The acoustic treatment of this space and the protection of adjoining spaces from sound leakage and interference will be critical to the success of the space.

(b) Mechanical & Electrical Building Services Engineering

(c) Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided.

(d) Fitted Furniture, Loose Furniture, Fittings, Equipment

(e) Finishes - Finishes should be specified based on the above usages.

Floor: Multipurpose impact-absorbing vinyl floor finish

Walls: Smooth plaster finish, painted.

Ceiling: Acoustic plasterboard ceiling finish

5.2 Classroom Safe Base (excluding toilets and storage)

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**70.00 m^2**	**3.15m**

(a) Design Considerations

The classroom safe base should be located close to the central activities area and should direct access to a secure external play area.

(b) Mechanical & Electrical Building Services Engineering

(c) Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided.

(d) Fitted Furniture, Loose Furniture, Fittings, Equipment

(e) Defined storage space for each pupil which will contain his/her coat, bag, shoes, books etc.

(f) Single bowl, single drainer sink unit in the wet area. The unit should be fully wheelchair accessible, and be electronically height adjustable.

(g) Low level lockable storage units in the wet play area.

(h) Whiteboards and notice boards as follows:

- Two whiteboards (2400 x 1200mm non-interactive) fixed between 800 – 900mm above FFL
- One noticeboard (2400 x 1200mm) fixed between 800 – 900mm above FFL
- Care should be taken when locating these on walls so as to facilitate and not to interfere with the provision of future interactive whiteboards and/or data projectors by the School Authority.
- The provision of non-interactive whiteboards and noticeboards is part of loose furniture and equipment, and shall be fixed in place by the main contractor. The School Authority is responsible for the provision of data projectors and interactive whiteboards and this shall not form part of the building contract.
- Locations of all boards etc must be agreed with the school beforehand.

(i) Allow for the provision of a stand-alone television and video/DVD playback unit. These should be located either on a mobile trolley or in a lockable press. A satellite/cable connection is not required.

(j) The class should facilitate the setting up by staff of 6(maximum) individual workstation areas for pupils with Autistic Spectrum Disorders. Each individual spaces is defined using moveable freestanding partitions and mobile storage units that facilitate the pupil working from left to right. Fixed partitions or fitted furniture are not recommended. The provision of mobile storage units and freestanding partitions forms part of the loose furniture and equipment grant.

(k) A system for concealing the computer, e.g. a lockable cabinet or store room, should be made available. Some pupils with special educational needs exhibit a tendency to become obsessed with computers and they may then need to be concealed to avoid unnecessary distraction for the pupils.

(l) Computer trolleys may be required.

(m) Finishes

Floor: Multipurpose impact-absorbing vinyl floor finish

Walls: Smooth plaster finish, painted.

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid

5.3 En-Suite Toilets & Shower Area

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**30.00 m^2**	**3.15m**

(a) Design Considerations

Each classroom should have direct access to en-suite toilet facilities. Depending on the design solution, this accommodation can be placed either between classrooms with direct access from both class bases or as individual toileting suites off each class.

Each classroom should typically have the following dedicated provision:

- One unisex standard fully assisted and accessible en-suite facility at least 12m² in area. It should contain a WC, wash hand basin and a level entry shower facility. The space must be designed to accommodate an electric height adjustable changing bench and mobile lifting hoist should one be required. It should be fully wheelchair accessible. Grab and hand rails should also be provided.
- One standard size WC facility, 3m² in area, with a WC and wash hand basin. This should be ambulant accessible.

The fully assisted WC and shower area should be designed as a wet room using finishes as specified below, falling to a central drain outlet.

The above provision of one fully assisted en suite facility and one standard size WC facility per classroom will amount to 30m² in floor area. The Schedules of Accommodation are based on this. Where it is possible to locate the en-suite facilities between the classrooms and accessed via a link corridor, as shown on the exemplar plan, the provision outlined above can be reduced to one unisex standard fully assisted en-suite facility and 2 standard size WC's per two classrooms. The total floor area for this arrangement is 18m², and the balance of 12m² can be used by the Design Team at their discretion. The final layout shall be agreed with the Department of Education and Skills.

En-suite facilities should be located on external walls and provided with adequate natural and rapid ventilation of the spaces.

All waste outlets and drainage runs must be easily accessible and roddable.

(b) Mechanical & Electrical Building Services Engineering

(c) Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided.

(d) Fitted Furniture, Loose Furniture, Fittings, Equipment

2 x 300mm x 1000 long fixed shelving should be provided at a suitable height within the assisted w.c. area for various items like nappies, clothes etc.

(e) Finishes

Floor: sheet vinyl finish, minimum R10 slip rating , coved skirtings, The defined shower area within this space should have an enhanced slip resistance of minimum R11.

Wall: floor to ceiling non-porous ceramic high gloss wall tiles typically 150mm x 150mm on a plastered wall finish.

Ceiling: moisture resistant acoustic plasterboard ceiling, suitable for use in shower/WC areas:

5.4 Small Safe Space associated with Classroom Safe Base

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**12.00 m²**	**3.15m**

(a) Design Considerations

This space should be located directly off or adjacent to the classroom and is intended as a safe area that a pupil, under the supervision of a staff member, can access for a short period of time. When necessary, and as part of a clearly documented staged approach to the management of pupils' behaviour, pupils displaying challenging behaviour may access this space for the protection of themselves, other pupils and staff. Where appropriate, a staff member will stay in the small safe space with the pupil. However at others times it may be more appropriate for the staff member to monitor the pupil from outside. The design of the space must allow staff to observe pupils unobtrusively from outside. On other occasions, pupils, who may feel under pressure or who need time to themselves in order to diffuse a potential behavioural outburst will be encouraged to withdraw to this space themselves, thus learning how to self-regulate and modify their behaviour.

Construction must be extremely robust and designed to meet the needs of pupils who exhibit the most challenging of behaviours. Walls should be of blockwork construction.

Where additional safe spaces are provided, a protocol for appropriate use will be drawn up in consultation with relevant professionals, and will form part of the school's policy for the management of pupils' behaviour. The procedure to be adopted in respect of pupils' access to an additional safe space should be documented in individualised planning for each pupil and should be regularly reviewed and adjusted as necessary to ensure that access to this space is impacting positively on the management of the pupil's behaviour.

(b) Mechanical & Electrical Building Services Engineering

(c) Mechanical & Electrical Building Services Engineering – see 4.5 above

(d) Fitted Furniture, Loose Furniture, Fittings, Equipment

(e) Finishes - The colour scheme should reflect the calming nature of the space – refer to Section 3.8(f) for further guidance on colour.

Floor: Multipurpose impact-absorbing vinyl floor finish

Wall: Hardwall/sand & cement plaster finish and painted

Ceiling: Acoustic plasterboard ceiling finish - an applied or integrated acoustic treatment may be used on the ceiling in order to meet the appropriate acoustic requirements of the room. The use of a suspended ceiling grid with acoustic tiles is inappropriate and should not be specified in this space. Please also refer to TGD-021-5 and Section 3.10 of this document for further guidance.

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(f) Doors & Ironmongery

Door ironmongery should be carefully considered and the door should not be capable of being locked shut from within. The door should also be capable of being opened out from the additional safe space into the classroom to prevent a pupil blocking the door from within and thereby preventing entry from outside. Depending on the design proposal, a second door directly onto the link corridor (see exemplar sketch) may be provided. This will allow for the pupil to directly access the toilets without the need to pass through the classroom.

A vision panel must be provided to facilitate staff to monitor the pupil in the additional safe space and observe when to intervene in the event of the pupil becoming receptive to interaction or engaging in self injurious behaviours.

5.5 Multi-Sensory Room

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**20.00 m^2**	**3.15m**

(a) Design Considerations

The multi-sensory room is used to provide a variety of sensory stimuli associated with smell, taste, touch, sight and sound, which are designed to provide sensory stimulation for pupils. The space should encourage positive actions and responses for pupils with sensory impairment, and promote rest, relaxation and reduce tension for those pupils who are stressed or agitated. It can also be used to make demands on pupils using interactive equipment towards specific educational aims.

As a general guide, the space should be highly soundproofed from adjoining spaces. Sensory rooms are used with loud music in some instances and for quiet relaxation on

others. The room must support both. It must have adequate natural ventilation (dependency on natural lighting of the space is not a requirement. Where windows are provided however, suitable blackout facilities must be provided), and have a calm and relaxing environment.

Wall construction should be robust and capable of supporting shelving for equipment and for directly fixing specialist equipment.

It is not necessary to have a window in the Multi-Sensory Room as natural lighting of the space is not a requirement, however adequate natural ventilation must be provided in all cases. Where a window is provided it must be capable of meeting full blackout requirements in order to meet the room's specific uses.

(b) Mechanical & Electrical Building Services Engineering

Mechanical & Electrical Building Services Engineering – see 4.7 above

The position of radiators needs careful consideration. They should be sensitively located at low level to maximise use of the floor space for mats etc. and away from children working or lying on the floor.

A 1.2m twin ultra violet fluorescent light fitting/s at ceiling level shall be provided in addition to normal lighting requirements. Refer also to Section 3.13 Electrical Services.

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

Furnishings and finishes must be safe and durable.

The range of sensory equipment used will vary from school to school and the individual needs of the child. In addition to the grant for loose furniture, a separate one-off grant will be provided by the Department for the purchase of this equipment. It will be a matter for the School Authority to prioritise the equipment for purchase, within the amount of the grant.

The range of typical equipment will normally include seating equipment (beanbags, foam filled mats, etc); wall/ceiling projector (250 degree); mirror ball, fibre optics, sound system, aromatherapy diffusers, switching systems, bubble tube, mirrors, etc.

It is recommended that, because of the specialist needs and user requirements of this space, consultation between the School Authority, special needs teacher, consulting architect, consulting mechanical & electrical engineer, and specialist supplier of multi-sensory equipment needs to be undertaken at the earliest opportunity in order to establish goals, identify what needs to be achieved, define the equipment needs and to identify and make provision for space and services requirements in the initial designs.

A minimum of two fixing points should be provided in the ceiling to allow for the fixing and support of suspension equipment, e.g. a swing, doughnut, etc. Loadings should be calculated based on typical user requirements. Their locations should be discussed and agreed with the school at the earliest opportunity during the design development.

(d) Finishes

Floor: Multipurpose impact-absorbing vinyl floor finish.

Wall: Smooth plaster finish, painted.

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid

Colour used should be calming – typically off-white, which will support most effects, particularly the projection of colour and image. Alternatively a 'dark' room, using dark blues, can be created with curtains, or by colouring a corner of the room in a dark blue colour to provide a different environment, particularly where U.V. light will be used, or to provide a different sensory experience. This is a matter for discussion and decision between the School Authority and the Design Team.

5.6 Para-Educational Room

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**15.00 m^2**	**3.15m**

(a) Design Considerations

The Para-Educational Room is, in many respects, a multi-purpose room. It can have a variety of uses:

- for medical inspections
- meetings with visiting health and support professionals
- meetings with parents
- withdrawal of pupils for additional teaching
- staff training
- observation of pupils with special educational needs in their class environment in certain cases may be appropriate as a training tool in the development of teaching skills, social skills, behavioural management, professional training etc.

School authorities, in conjunction with their Design Team may wish to consider the installation of a CCTV system between the classrooms and the Para-Educational Room as a means to assist with pupil observation, the development of appropriate educational programmes and for staff training and development.

In all cases, and before funding will be considered for the provision of the installation of cameras and equipment, a written statement will have to be provided by the school authorities outlining why the system will be required, the educational and other benefits, the costs of the system and how it will be managed. In addition, a written agreement signed by both the staff and the parents of each of the children, consenting to the use of the equipment must be provided by the School Authorities on an annual basis. The cost of this will need to be identified separately.

A minimum of two fixing points should be provided in the ceiling to allow for the fixing and support of suspension equipment, e.g. a swing, doughnut, etc. Loadings should be calculated based on typical user requirements. Their locations should be discussed and agreed with the school at the earliest opportunity during the design stage.

(b) Mechanical & Electrical Building Services Engineering

Mechanical & Electrical Building Services Engineering – see 4.7 above

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

Floors should have a non slip vinyl finish, walls should be plastered and painted, ceilings should have an acoustic ceiling tile.

(d) Finishes

Floor: Multipurpose impact-absorbing vinyl floor finish.

Walls: Smooth plaster finish, painted.

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid:

5.7 Practical Activity Room

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**50.00 m^2**	**3.15m**

(a) Design Considerations

Only associated with post primary school accommodation, this room can have a multiplicity of uses ranging from I.T. skills training to woodwork, home economics etc. The specific use for the room will need to be determined with the School Authority at the earliest stage in the design stage in order to determine the building services element including dust extraction requirements.

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Where it is intended to fit out the space with specialist equipment, eg lathes, the layout, location and operation must be in compliance with Health & Safety requirements. Full layout details must be included as part of a Stage 2a submission and must be available before the project proceeds to a planning application.

(b) Mechanical & Electrical Building Services Engineering

Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided

Fitted Furniture, Loose Furniture, Fittings, Equipment

(c) Finishes

Floor: Multipurpose impact-absorbing vinyl floor finish.

Walls: Smooth plaster finish, painted.

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid:

5.8 Daily Living Skills

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**16.50 m^2**	**3.15m**

(a) Design Considerations

Only associated with Post Primary Accommodation, this space is linked with the Central Activities and Practical Activity spaces. It is intended to provide pupils with a basic level of skill in daily living skills, e.g. preparing breakfast or lunch, making a bed, ironing, folding and storing clothes, applying make-up, etc.

The space should be laid out as a small flatlet or kitchenette with 600mm deep, 900mm high, x 3000mm long kitchen unit equipped with a oven, extract hood, hob, single bowl single drainer sink, fridge, dishwasher, integrated washing machine and dryer.

The Design Team shall liaise with the School Authorities at an early stage in the design process for guidance on whether height adjustable units, e.g. hob, sink unit etc should be incorporated into this design development. Design of kitchenette shall comply with the requirements of Part M of the Building Regulations.

(b) Mechanical & Electrical Building Services Engineering

Mechanical & Electrical Building Services Engineering – see 4.9 above

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

(d) Finishes

Floor: Multipurpose impact-absorbing vinyl floor finish. The floor in the immediate vicinity of the kitchenette should have a non-slip vinyl finish with a minimum of an R10 slip rating.

Walls: Smooth plaster finish, painted.

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid

5.9 Staff Toilets

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**10.00 m^2**	**3.15m**

(a) Design Considerations

A minimum of one male and one female staff toilet should be provided. In addition, a separate accessible and assisted unisex WC for mobility impaired should also be provided, or alternatively, each of the male and female toilets can be increased in size within the overall floor area allocation to provide this fully assisted facility. Floors should have a non slip vinyl finish with a minimum of an R10 slip rating, walls should be plastered and painted, and ceilings should have an acoustic ceiling tile.

(b) Mechanical & Electrical Building Services Engineering

Mechanical and Electrical Services as outlined in Sections 3.12 & 3.13 above shall be provided.

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

(d) Finishes

Floor: sheet vinyl finish, minimum R10 slip rating , coved skirtings

Walls: Smooth plaster finish, painted.

Ceiling: Plasterboard ceiling:

5.10 Linen / Sluice Room

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**10.00 m^2**	**3.15m**

(a) Design Considerations

This room will provide suitable washing and drying facilities for pupils clothing, towels, etc. Clothes and linen storage facilities should also be provided.

The room should be equipped with:

- a domestic type washing machine
- a domestic type tumble dryer
- a sluice sink or Belfast sink with bucket grate mounted with the top of the sink basin 530mm above finished floor level
- a fixed counter unit 600mm deep, 900mm high, 1200mm long with a single bowl sink and drainer, including secure lockable under-sink storage to accommodate detergents and cleaning products
- an open shelf high level storage unit, 350mm deep, 900mm high 1200mm long to accommodate clothes and linens over the length of the fixed counter unit.

(b) Mechanical & Electrical Building Services Engineering

Mechanical & Electrical Building Services Engineering – see 4.11 above

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

(d) Finishes

Floor: sheet vinyl finish, minimum R10 slip rating , coved skirtings

Wall: Walls should be covered with non-porous ceramic high gloss wall tiles 150 x 150mm

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid.

5.11 Storage

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**30.00 m^2**	**3.15m**

(a) Design Considerations

General storage should be provided in accordance with the schedule of accommodation. It should be provided in one block of accommodation rather than splitting it up into smaller units. Floors should have a non slip vinyl finish, walls should be fair-faced blockwork painted, and ceilings should be plasterboard, painted. 30 linear metres of 300mm deep shelving should be included in the design.

(b) Mechanical & Electrical Building Services Engineering

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

(d) Finishes

Floor: Sheet vinyl finish, minimum R10 slip rating

Wall: Painted fairfaced blockwork

Ceiling: Painted plasterboard,

5.12 Office

Room Layout No.	Depth x Width	Area	Min. clear height
Refer to floor plan	**varies**	**20.00 m^2**	**3.15m**

(a) Design Considerations

The office should be located close to the main entrance into the suite of accommodation. It will be used primarily by the teachers associated with the special educational needs accommodation, and will also provide secure storage for pupil's education files, secure general storage, reception facilities, stationery etc. Floors should have a carpet finish, walls should be plastered painted, ceilings should have an acoustic ceiling tile.

(b) Mechanical & Electrical Building Services Engineering

Mechanical & Electrical Building Services Engineering – see 4.12 above

(c) Fitted Furniture, Loose Furniture, Fittings, Equipment

(d) Finishes

Floor: Carpet finish

Wall: Plastered and painted

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid:

5.13 Circulation & Observation

(a) Design Considerations

Corridors should be regular in shape without projections which could create an unacceptable risk. There should be a sufficient clear unobstructed corridor width to allow two adults to assist a pupil walking side by side.

Discreet observation into the classroom will sometimes be required by teaching staff and others for the purposes of training or for the development of individual teaching programmes for parents etc. An observation panel should therefore be provided from circulation into each classroom, using double glazing, one way mirrored glass, roller blinds etc.

Design Teams should also consider the movement of pupils with visual impairment from the outside to the inside of the building. Pupils with some visual impairment conditions moving into a building from the outside can experience temporary blindness if the interior of the building has a contrasting light level to that outside. Consideration with regard to equalising daylight levels across threshold areas, through the judicious provision of rooflights should be considered.

(b) Finishes

Floor: Multipurpose impact-absorbing vinyl floor finish

Walls: Smooth plaster finish, painted.

Ceiling: Acoustic ceiling tiles (non-patterned), concealed grid

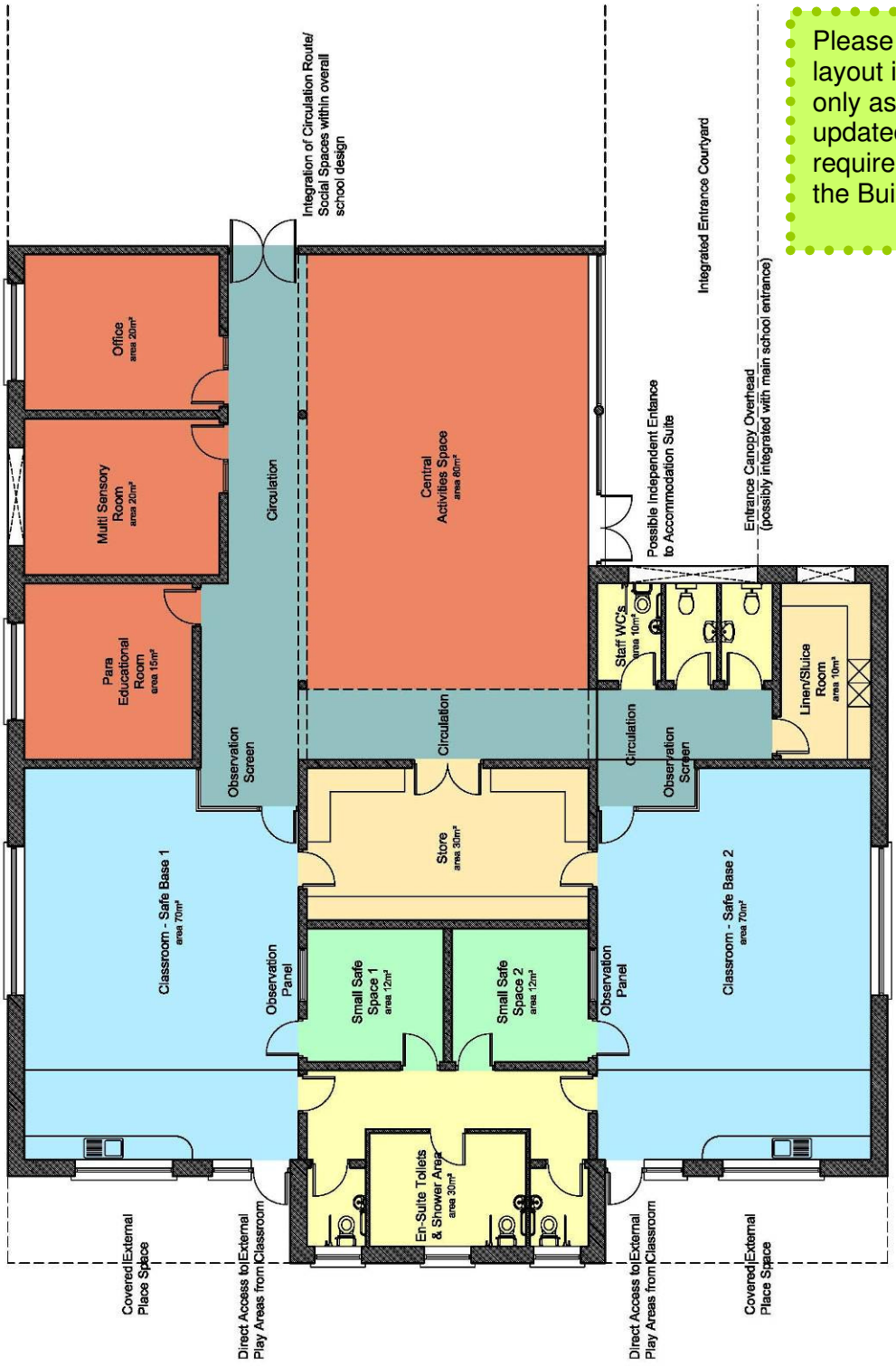
6. APPENDIX

6.1 Exemplar Plan – Primary School

(a) Accommodation suite for a Primary School for 12 pupils with SEN based on a pupil/teacher ratio of 6:1

(b) All areas indicated are net internal areas of rooms

(c) Alternative formats (AutoCAD and PDF) are available for download.



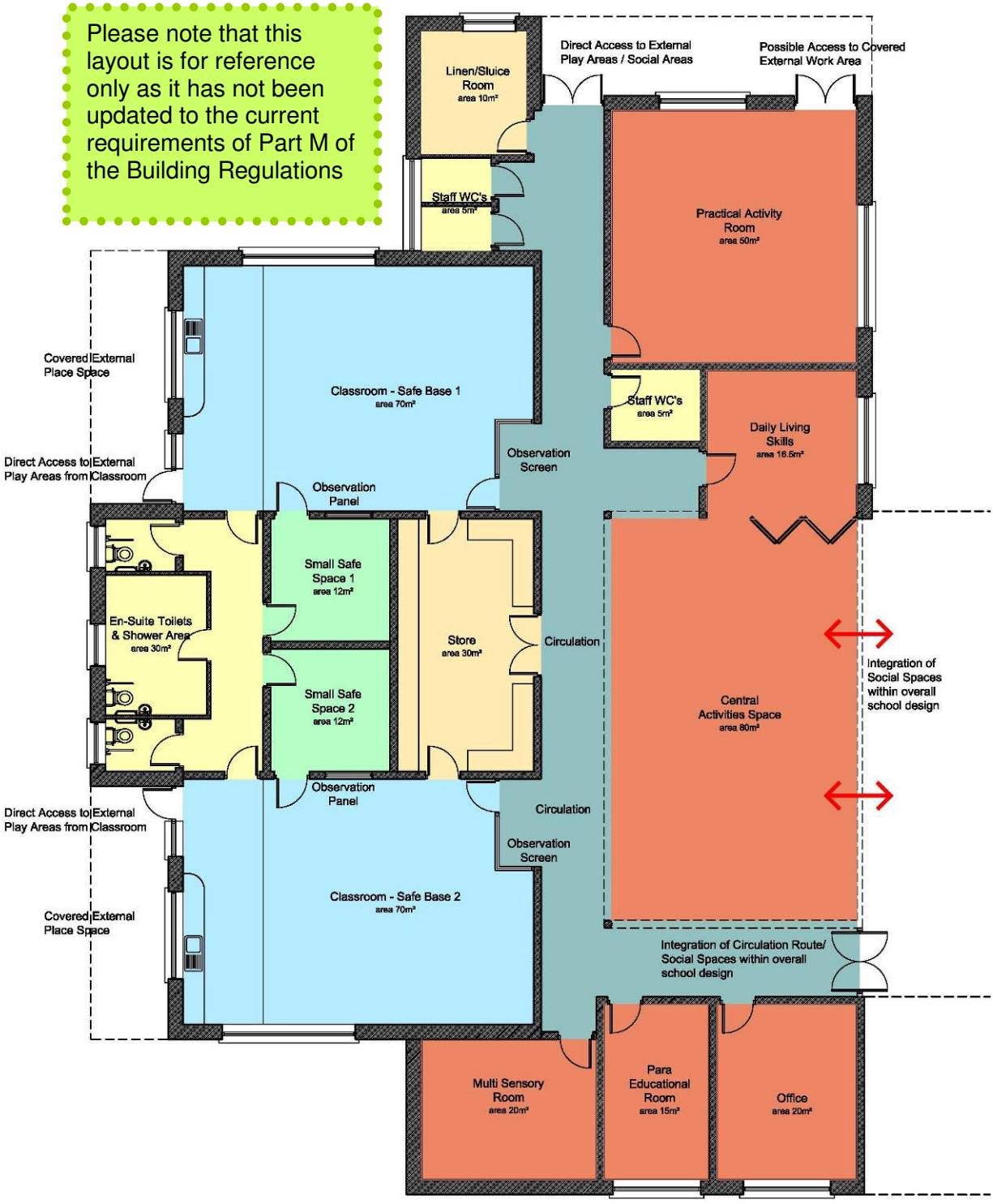
Please note that this layout is for reference only as it has not been updated to the current requirements of Part M of the Building Regulations

6.2 Exemplar Plan – Post Primary School

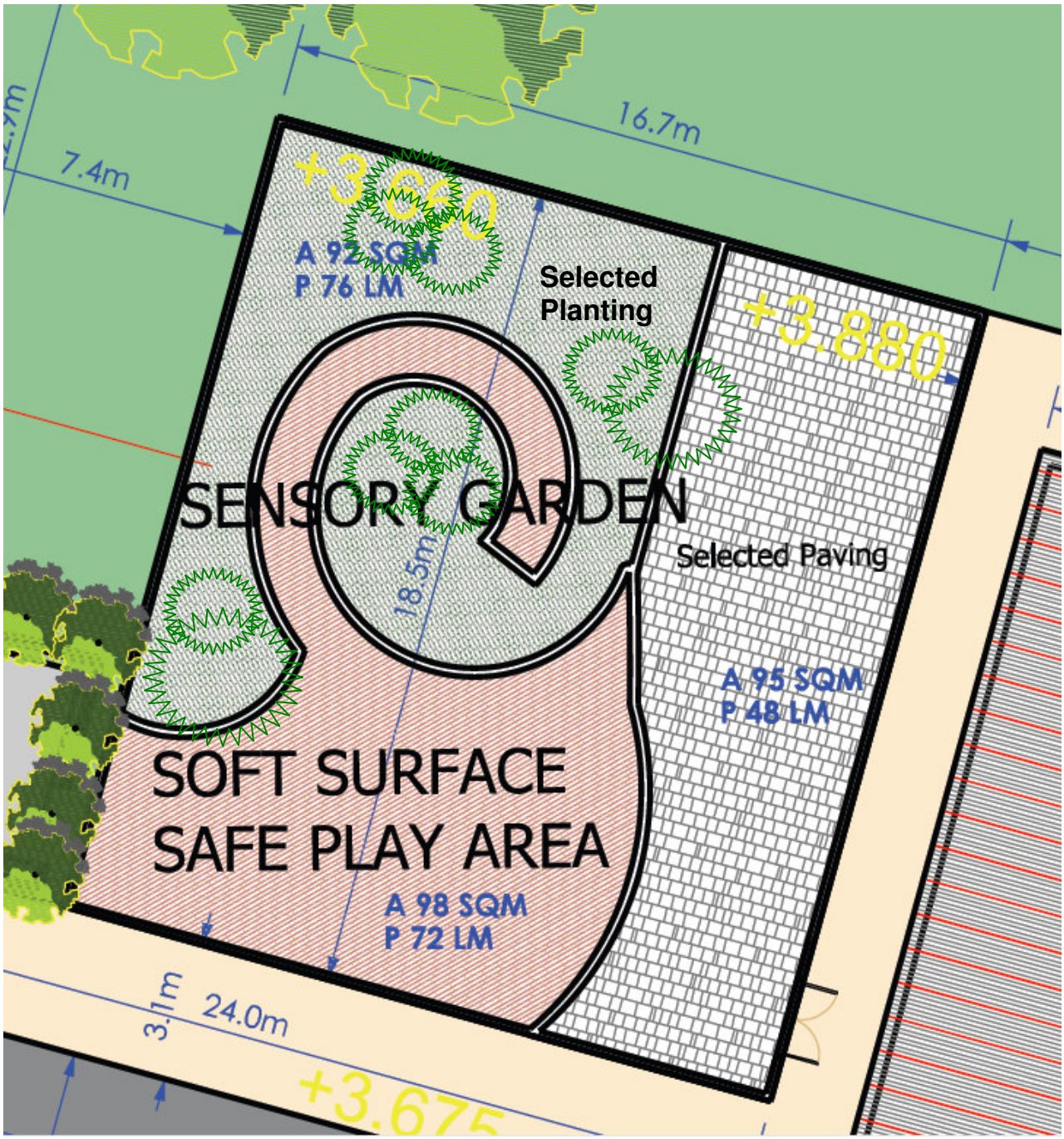
(a) Accommodation suite for a Post Primary School for 12 pupils with SEN based on a pupil/teacher ratio of 6:1

(b) All areas indicated are net internal areas of rooms

(c) Alternative formats (AutoCAD and PDF) are available for download.



6.3 Sensory Garden Example

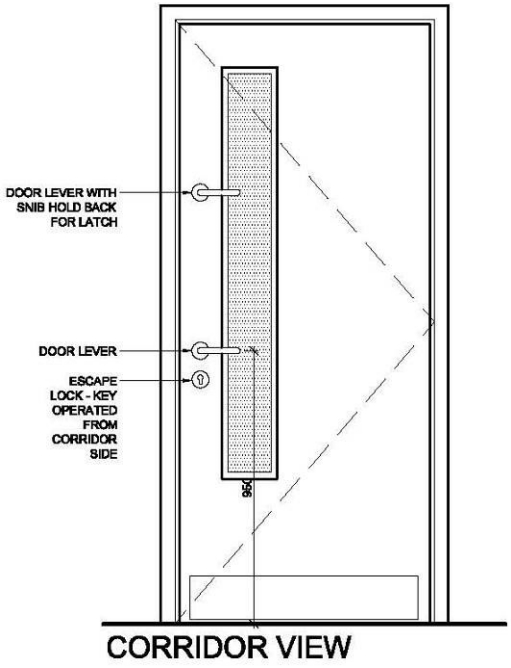


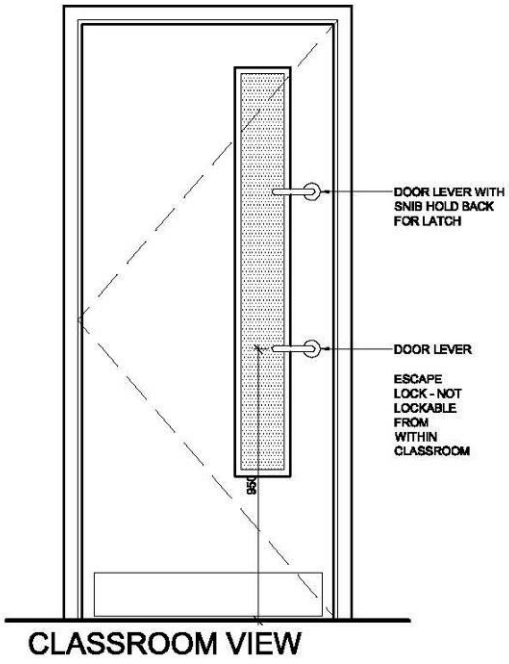
6.4 Doors to Class Room Safe Base – Typical Examples

(a) Class Room Safe Base Corridor Door – Corridor View

(b) Door can be locked by key at lower level

(c) If top latch is not in 'held back' position, both handles will need to be operated to open door from corridor.





(d) Class Room Safe Base Corridor Door – Classroom View

(e) If top latch is not in 'held back' position, both handles will need to be operated to open door from classroom.

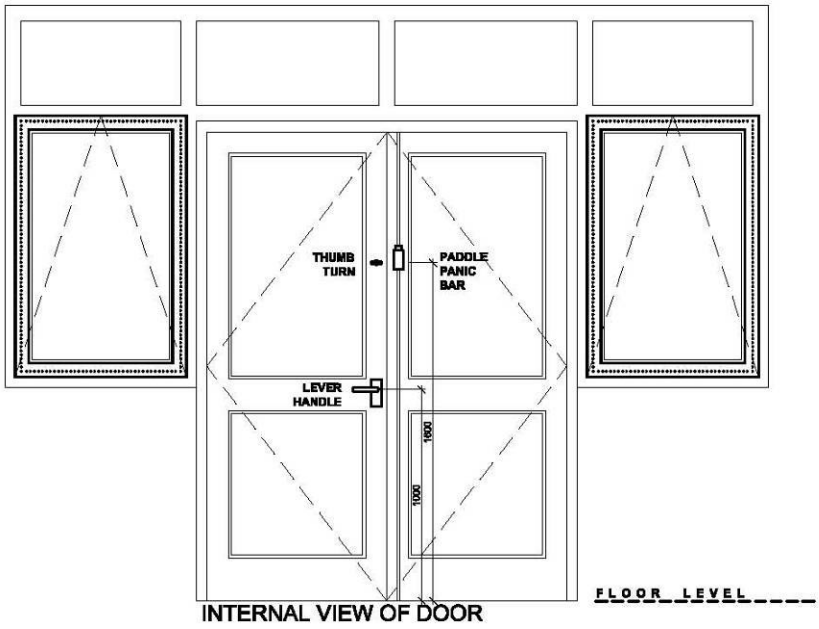
(f) If top latch is in 'held back' position door can be opened by use of the lower handle only.

(g) Class Room Safe Base External Double Doors to Play Area – Internal View

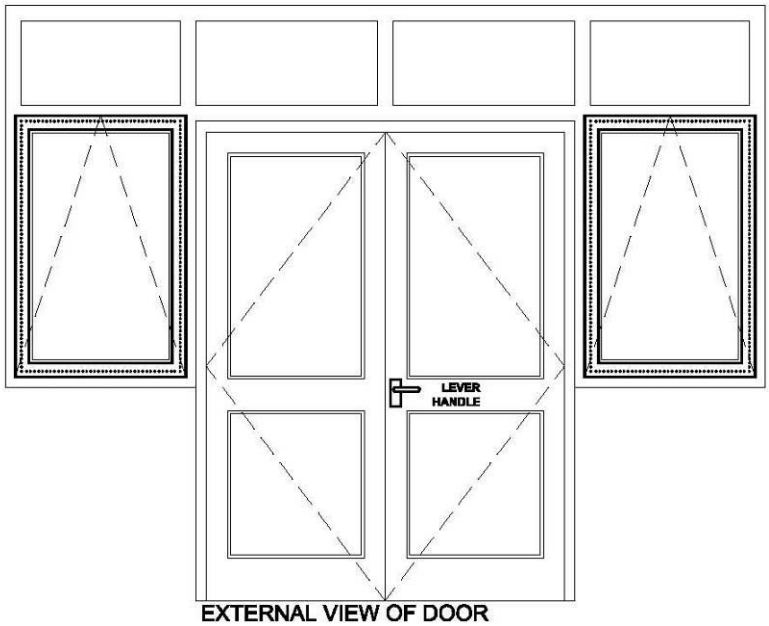
(h) To access play area lever handle is operated.

(i) Should it be required, the thumb turn at high level can be used to lock door.

(j) High level panic paddle to right hand door will override all ironmongery even when thumb turn is engaged – once pushed both doors will open for escape.



INTERNAL VIEW OF DOOR



EXTERNAL VIEW OF DOOR

(k) Class Room Safe Base External Double Doors to Play Area – External View

(l) Access back into classroom is by operating lever handle – one leaf only will open.

END