

Internal Specification

Project

Toilet upgrades and associated works at 3 Further Education & Training Centre locations:

(1) Tipperary FET College Roscrea, Old Dublin Road, Roscrea, Co. Tipperary. E53 P797

(2) Tipperary FET College Cappawhite, Cappawhite, Co. Tipperary. E34 A320

(3) Tipperary FET College Clonmel, The Mall, Clonmel, Co. Tipperary. E91K2E2

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Document Issue Log

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1.0	27.02.2026	JMcC	ToR	Issued for Tender

1.0 GENERAL

1.1 Scope of Document

Internal components and elements as follows; Fire Stopping, Plasterboard, Painting, Floor Finish, Ceiling, Joinery, Doors, and all associated fittings and fixings. To layout and configuration as shown. Refer to other Architectural Specifications for External Windows and glazing.

1.2 Specifications Reference

This specification to be read in conjunction with all relevant Architectural drawings and specifications, Mechanical and Electrical drawings and specifications

1.3 Drawing Reference

This specification to be read in conjunction with all relevant drawings.

1.4 Shop Drawings, Product / System Submittals

1. Submit to Architect for review Shop Drawings and Product Data.
2. Until submittal is reviewed, work involving relevant product may not proceed.
3. Submit one print and one reproducible sepia copy for review. If corrections are required, one marked up print will be returned until the drawing is approved or approved as noted. The last submission (one print and one sepia) shall incorporate all the required changes.
4. Shop drawings and Product Data Submittals to be forwarded to: Spentide Ltd, 80 Main Street, Midleton, Co. Cork and by email to john@spentide.ie

1.5 Maintenance Instructions

Written maintenance instructions on materials and systems to be given to client.

1.6 Samples

Non exhaustive list of samples required;

- ☐) 300mm x 300mm size physical samples of all flooring
- ☐) Paint Samples x 10 different RAL colours, provided in 3 coats

1.7 Codes and Standards Reference

Construction Products to be CE marked in accordance with Irish Building Regulations and EU requirements.

Internal components and elements shall be provided in compliance with latest building regulations and the follow non exhaustive list of standards, where later versions of the standards

referred to exist, the manufacturer / supplier / installer shall meet the latest version of the standard.

IS EN 1401-1:2019	Plastics piping systems for non-pressure underground drainage and sewerage – Unplasticized polyvinyl chloride (PVC-U) – Part 1: Specifications for pipes, fittings and the systems.
IS EN 1329-1:2020	Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure – Unplasticized polyvinyl chloride (PVC-U) – Part 1: Specifications for pipes, fittings and the system.
SR 21:2014	Guidance on the use of I.S. EN 13242:2007+A1:2007 – Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction.
BS 8102:2009	Code of practice for protection of below ground structures against water from the ground.
I.S. EN 15283-1:2008+A1:2009	Gypsum boards with fibrous reinforcement - Definitions, requirements and test methods - Part 1: Gypsum boards with mat reinforcement
I.S. EN 15283-2:2008+A1:2009	Gypsum boards with fibrous reinforcement - Definitions, requirements and test methods - Part 2: Gypsum fibre boards
I.S. EN 14353:2017	Metal Beads And Feature Profiles For Use With Gypsum Plasterboards - Definitions, Requirements And Test Methods
I.S. EN 14190:2014	Gypsum Board Products From Reprocessing - Definitions, Requirements And Test Methods
I.S. EN 14195:2014	Metal Framing Components For Gypsum Board Systems - Definitions, Requirements And Test Methods
I.S. EN 13963:2014	Jointing Materials For Gypsum Boards - Definitions, Requirements And Test Methods
I.S. EN 520:2004+A1:2009	Gypsum plasterboards. Definitions, requirements and test methods
BS 8000-8:2023	Workmanship on construction sites. Design and installation of dry lining systems – Code of practice
I.S. EN 1992-1-1:2004+AC:2010+A1:2014	Eurocode 2: Design of concrete structures - Part 1-1: General rules and rules for buildings
I.S. EN 1992-1-2:2004/A1:2019	Eurocode 2: Design of concrete structures - Part 1-2: General rules - Structural fire design
I.S. EN 14843:2007	Precast Concrete Products - Stairs
EN 1364-1:2015	Fire resistance tests for non-loadbearing elements - Part 1: Walls
EN 1364-2:2018	Fire resistance tests for non-loadbearing elements - Part 2: Ceilings
BS 5234-1:1992	Partitions (including matching linings) Code of practice for design and installation
BS 5234-2:1992	Partitions (including matching linings) Specification for performance requirements for strength and robustness including methods of test
BS EN 13914-2:2016	Design, preparation and application of external rendering and internal plastering Internal plastering
BS 476-22:1987	Fire tests on building materials and structures Method for determination of the fire resistance of non-loadbearing elements of construction

BS 6465-4:2010	Sanitary installations Code of practice for the provision of public toilets
BS 6465-3:2020	Sanitary installations Code of practice for the selection, installation and maintenance of sanitary and associated appliances
BS 6465-2:2017	Sanitary installations Space recommendations. Code of practice
BS 6465-1:2006+A1:2009	Sanitary installations Code of practice for the design of sanitary facilities and scales of provision of sanitary and associated appliances
I.S. EN 845-1:2013 + A1:2016	Specification for ancillary components for masonry – Part 1: Ties, tension straps, hangers and brackets
I.S. EN 845-2:2013+A1:2016	Specification for ancillary components for masonry – Part 2: Lintels
I.S. EN 845-3:2013+A1:2016	Specification for ancillary components for masonry – Part 3: Bed joint reinforcement of steel meshwork BS EN 998-2, Specification for mortar for masonry – Part 2: Masonry mortar
I.S. EN 1990:2002+A1:2005	Eurocode – Basis of structural design
I.S. EN 1996-1-1:2005+A1:2012	Eurocode 6 – Design of masonry structures – Part 1-1: General rules for reinforced and unreinforced masonry structures
I.S. EN 1996-1-2:2005	Eurocode 6. Design of masonry structures. General rules. Structural fire design
I.S. EN 1996-2:2006	Eurocode 6 – Design of masonry structures – Part 2: Design considerations, selection of materials and execution of masonry
I.S. EN 1996-3:2006	Eurocode 6. Design of masonry structures. Simplified calculation methods for unreinforced masonry structures
PD 6697:2010	Recommendations for the design of masonry structures to IS EN 1996-1-1 and BS EN 1996-2
BS 8000-3:2020	Workmanship on construction sites masonry – Part 3: Code of practice.
BS 4729:2005+A1:2016	Clay and calcium silicate bricks of special shapes and sizes – Recommendations
I.S. EN 998-2:2016	Specification for mortar for masonry – Part 2: Masonry mortar
I.S. EN 197-1: 2011	Cement. Composition, specification and conformity criteria for common cements.
I.S. EN 413-1: 2011	Masonry cement. Composition, specifications and conformity criteria.
I.S. EN 413-2: 2016	Masonry cement: Test methods
I.S. EN 459-1: 2015	Building lime. Definitions, specifications and conformity criteria
I.S. EN 459-2: 2021	Building lime. Test methods.
I.S. EN 459-3: 2015	Building lime. Conformity evaluation
I.S. EN 934-3: 2009+A1:2012	Admixtures for concrete, mortar and grout. Admixtures for masonry mortar. Definitions, requirements, conformity, marking and labelling.
I.S. EN 998-2:2016	Specification for mortar for masonry – Part 2: Masonry mortar
I.S. EN 12878: 2014	Pigments for the colouring of building materials based on cement and/or lime. Specifications and methods of test
I.S. EN 13139: 2002&AC:2004	Aggregates for mortar.
PD 6678: 2005 (2012)	Guide to the specification of masonry mortar.
BS 4551: 2005+A2:2013	Mortar. Methods of test for mortar. Chemical analysis and physical testing.
I.S. EN 1817:2020	Resilient floor coverings - Specification for homogeneous and heterogeneous smooth rubber floor coverings.

I.S. EN 14411:2016	Ceramic tiles. Definition, classification, characteristics, assessment and verification of constancy of performance and marking
I.S. EN 12004-2:2017	Adhesives for ceramic tiles. Test methods
I.S. EN 13888-1:2022	Grouts for tiles. Requirements, evaluation of conformity, classification and labelling
BS 5385-1:2018	Wall and floor tiling. Design and installation of ceramic, natural stone and mosaic wall tiling in normal internal conditions. Code of practice
BS 5385-4:2015	Wall and floor tiling Design and installation of ceramic and mosaic tiling in specific conditions. Code of practice
I.S. EN 1935:2002	Building hardware. Single-axis hinges. Requirements and test methods

All specific manufacturer's written instructions, directions and recommendation shall be adhered to.

NOTE:

Where later editions of the Publications listed above are published, latest editions should be used.

1.8 Guarantees

The internal metal lining partition system manufacturer and installer shall be responsible for ensuring that his/her work will not only meet the requirements of this specification of Material and Performance but that the entire completed installation will be structurally stable, robust, achieve the fire test certification.

The flooring, internal drainage, ceiling system, partition system, manufacturer representative shall inspect the installations and issue an inspection report during and at the end of the works.

1.9 Design Life Performance requirements

The performance life of the each element for its intended purpose shall meet or exceed the life spans indicated in the table below.

Element	Life Span required
All structural elements including system elements such as timber frame (where used)	60 years required
Floors, Balconies, Walls, Claddings and Roofs.	60 years required
Waterproofing Flat Roofs and Balconies	30 years required
External Completions; Windows and Doors	30 years required
Heating, Mechanical Systems and renewable systems	20 years required
Plumbing and Sanitary	40 years required
Electrical Services	40 years required

Kitchen frontage / Worktops / Sinks & accessories	20 years required
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2.0 MATERIALS

2.1 Plasterboard, Metal Studs, Metal lining systems, Acoustic Insulation

2.1.1 *Medium Impact Plasterboard* 15mm thick Gypsum Plasterboard

2.1.1.1 Performance

Reaction to Fire:	A2-s1, d0
Thermal conductivity:	0.25W/mK
Weight:	14.5kg/m ²
Water vapour resistance factor:	10
Longitudinal Flexural Strength:	≥ 650N
Transverse Flexural Strength:	≥ 250N

Performance Requirements in a complete Partition System:

Sound Insulation:	51 RwdB
Duty rating:	Severe

2.1.2 *Medium Impact and Moisture Resistant Plasterboard* 15mm thick Gypsum Plasterboard with water repellent additives in the core and a paper liner with moisture resistant properties.

2.1.2.1 Performance

Reaction to Fire:	A2-s1, d0
Thermal conductivity:	0.25W/mK
Weight:	14.5kg/m ²
Water vapour resistance factor:	10
Longitudinal Flexural Strength:	≥ 650N
Transverse Flexural Strength:	≥ 250N

Performance Requirements in a complete Partition System:

Sound Insulation:	51 RwdB
Duty rating:	Severe

2.1.3 *High Impact Resistant Plasterboard* 12.5mm thick gypsum fibreboard which combines gypsum, cellulose fibres from recycled paper and water to form a dense sheet material that has superior rigidity, durability and mechanical strength.

2.1.3.1 Performance

Reaction to Fire:	A2-s1, d0
Thermal conductivity:	0.20W/mK
Weight:	15kg/m ²
Water vapour resistance factor:	19
Shear Strength:	1143N

2.1.4 *Sound Reduction Plasterboard*

15mm thick Gypsum Plasterboard with higher density noise insulating characteristics

2.1.4.1 Performance

Reaction to Fire:	A2-s1, d0
Thermal conductivity:	0.25W/mK
Weight:	13kg/m ²
Water vapour resistance factor:	10
Longitudinal Flexural Strength:	≥ 650N
Transverse Flexural Strength:	≥ 250N

2.1.4 Gypsum Plasterboard Fixings

Zinc electroplated or black phosphate (or to the board manufacturer's recommendations)

2.1.5 *Metal Studwork System and components*

Metal studwork to meet EN 14195: 2014 and manufacturer's requirements.

Reaction to Fire:	A1
Yield Strength:	210N/mm ²

2.1.6 *Metal Lining System and components*

Metal studwork to meet EN 14195: 2014 and manufacturer's requirements.

Reaction to Fire:	A1
Yield Strength:	210N/mm ²

2.1.7 *Acoustic Insulation*

Glass mineral wool acoustic insulation, located between metal studs, installed in accordance with partition system manufacturer.

Reaction to Fire:	A1
Thickness:	75mm
Thermal conductivity:	0.036 W/mK.

2.1.8 *Insulated Plasterboard Lining to all external Walls fixed to metal lining system (refer to 2.1.6)*

Minimum 12.5mm thick moisture repellent gypsum plasterboard outer face, tape and jointed, prepared for paint finish, including;

PIR insulation pre bonded to plasterboard, overall thickness to achieve the following U-Values at various locations:

External Walls:

Stone walls to exterior and attic: 0.26 W/m²K

2.2 Sanitary Ware

2.2.1 General

Refer to Sanitary Ware Schedule

2.2.2 Performance

Products to be in accordance with BS 6465 all relevant parts.

2.3 Ceiling & Ceiling Suspension System to repairs / making good

2.3.1 Standard Plasterboard

12.5mm thick Gypsum Plasterboard. 3mm skim coat plaster finish to all plasterboard ceilings.

2.3.1.1 Performance

Reaction to Fire:	A2-s1, d0
Thermal conductivity:	0.25W/mK
Weight:	8.5kg/m ²
Water vapour resistance factor:	10
Longitudinal Flexural Strength:	≥ 550N
Transverse Flexural Strength:	≥ 210N

2.3.1.2 Access Hatch

Matching finish required to access hatch where located in plaster board ceiling, i.e plasterboard to be carried into the access hatch to hide the access hatch visually.

2.3.2 Moisture Resistant Ceiling Tile System

To layout and configuration shown on Architectural Drawings

19mm thick 600mm x 1200mm ceiling tiles.

19mm thick 600mm x 600mm ceiling tiles.

White appearance and excellent acoustics with Class A level, 0.95 as per EN ISO 11654

Sound reduction 14 dB

Humidity resistance 95% RH

2.3.3 *Metal Suspension*

To be compatible with plasterboard and perforated metal tiles

To be suspended from concrete soffit

To consist of non-corrosive metal components

To be installed in accordance with manufacturer's requirements

To deliver at least deflection Class 2 and exposure Class A in accordance with EN 13964:2014.

2.4 Floor Finish

2.4.1 *R11 Vinyl Floor Covering*

2.0mm thick vinyl floor covering with R11 slip resistance & PTV>36 (barefoot in wet areas like bathrooms etc).

2.4.1.1 Performance Requirements

Dimension stability: < 0.1%

Slip resistance: R11 tested to DIN 51130, PTV>36 (barefoot in wet areas like bathrooms etc).

Reaction to fire: B-S₁

Commercial Use Classification: Class 34

Residual Indentation: 0.05mm

Resistance to Chemicals: Very Good

Total weight: 2.75kg/m²

2.4.2 *R10 Sheet Floor Covering*

3.5mm thick vinyl floor covering with R10 slip resistance.

2.4.2.1 Performance Requirements

Dimension stability: +/- 0.2%

Slip resistance: R10 tested to DIN EN 16165

Reaction to fire (bonded on subfloor): B-S₁

Commercial Use Classification: Class 34

Residual Indentation: 0.12mm

Resistance to Chemicals: Very Good

2.4.3 *Levelling Compound & Plywood*

Levelling Compound to be laid under all floor finishes, in accordance with manufacturer's requirements.

Where existing timber floors are present; In lieu of Levelling Compound, lay minimum 6mm thick plywood over existing timber floors, prepare plywood for floor finish.

2.4.4 Carpet Tile Type 1

High resistance to wear Tufted multi-pile height loop carpet tile. 500mm x 500mm. In colour / pattern to be selected, full range to be made available to Architect for final selection. **We expect to use circa 4 different colours throughout the works.**

2.4.4.1 Performance Requirements

Thickness: 6.4mm minimum with 3mm pile height.

Primary Backing: Polyester

Secondary Backing: Modified bitumen and polyester fleece

Reaction to fire: Cfl-s1, G, NCS or better to EN 13501-1

Commercial Use Classification: Class 33 or better

Acoustic impact: 24dB or better to ISO 10140-3

Acoustic sound: $\alpha_w = 0.15$ (H) or better to ISO 354

Castor chair continuous use: $r \geq 2.4$ or better to ISO 4918

Colour fastness to light: ≥ 5 or better to EN ISO 105-B02

2.4.5 Carpet Tile Type 2

High resistance to wear Tufted multi-pile height loop carpet tile. 500mm x 500mm. In colour / pattern to be selected, full range to be made available to Architect for final selection. **We expect to use 1 colour only.**

2.4.5.1 Performance Requirements

Thickness: 9.5mm minimum with 3mm pile height.

Primary Backing: Polyester

Secondary Backing: soft back

Reaction to fire: Bfl-s1 or better to EN 13501-1

Commercial Use Classification: Class 33 or better

Acoustic impact: 31dB or better to ISO 10140-3

Acoustic sound: $\alpha_w = 0.3$ (H) or better to ISO 354

Castor chair continuous use: $r \geq 2.4$ or better to ISO 4918

Colour fastness to light: ≥ 5 or better to EN ISO 105-B02

2.5 Internal Fire Stopping

2.5.1 General

Service Penetrations through the following locations shall be 60min fire stopped;

- First floor level
- Into Plant rooms

Service Penetrations through the following locations shall be 30min fire stopped;

- Walls to corridors
- Walls to Store Room

2.5.2 *Performance*

Fire Stopping to meet the requirements of TGD Part B 2024, and all other relevant standards and manufacturer requirements.

2.6 Joinery

2.6.1 *Skirtings*

125mm high 18mm thick MDF

1 x rebate 5mm x 5mm deep

Painted MDF type H1 in compliance with EN 622 parts1 & 5.

NB. MDF skirtings to all areas except for bathrooms, store / plant rooms. Coved vinyl skirtings to bathrooms, store / plant rooms.

2.6.2 *Architrave*

Retain existing Architraves. Prepare for painting.

2.6.3 *Window Boards*

25mm thick MDF, to depth of window reveal + 30mm projection into room.

Bull nose edge to room

Painted MDF type H1 in compliance with EN 622 parts1 & 5.

2.8 Painting

2.8.1 *Prepare Backgrounds*

Plasterwork, Joinery, Metalwork to be prepared in accordance with paint manufacturers requirements.

Remove: Efflorescence Salts, Dirt, grease and Oil, surface irregularities, Dust, particles, and residues from preparation.

Joints, cracks, holes and other depressions: Fill flush with surface, to provide smooth finish.

Preparation of surfaces and application of materials to be carried out in accordance with the requirements of BS 6150, Code of practice for painting of buildings & BS 8000: Part 12 Code of practice Workmanship on building sites paint & wallcoverings.

All products should be applied in accordance with the Manufacturer's instructions. Please refer to the Product Data Sheets for complete information.

Uncoated concrete: Remove release agents.

Uncoated masonry / rendering: Remove loose and flaking materials.

Uncoated plaster: Scape off; nibs, trowel marks and plaster splashes. Key lightly over trowelled 'polished' areas.

Uncoated plasterboard: Fill with stoppers / fillers any depressions around fixings.

Organic Growths:

Scape off and remove from site; Dead and loose growths and infected coatings.

Apply appropriate solution to growth areas and surrounding surfaces.

Apply appropriate solution to inhibit re-establishment of growths.

2.8.2 Coating general

Thinning and intermixing of coatings is not permitted unless recommended by manufacturer.

Do not paint over intumescent strips, brushes, or silicone mastics.

Priming Coats

Thickness to suit surface porosity

Apply as soon as possible on same day as preparation is completed.

Finish

To be even, smooth and of uniform colour

To be free from brush marks, sags, runs and other defects

To be cut in neatly to all junctions, no exceptions.

At doors, opening windows and other moving parts be sure to Ease before coating and between coats.

2.8.3 Wall Paint

Scrubable Eggshell emulsion finish

1 Primer coat to all surfaces

1 base coat to all surfaces, eggshell thinned 40% with clean water

2 finished coats to all surfaces

Colour to be selected from RAL colour range.

2.8.4 Ceiling Paint

Matt cleanable emulsion, Class 1 ISO 11998 and Type C BS 7719 scrub rating.

1 Primer coat to all surfaces

1 base coat to all surfaces

2 finished coats to all surfaces

Colour to be selected from RAL colour range.

2.8.5 Joinery Paint

A Tough & durable satin finish required to provide excellent protection from scratches, stains and grease.

- 1 Primer coat to all surfaces
- 1 base coat to all surfaces
- 2 finished coats to all surfaces

Colour to be selected from RAL colour range.

2.8.6 Weather Conditions

Do not apply coatings when air or substrate temperatures are likely fall below 8°C or when the relative humidity is above 80% during application or drying periods. For specific information refer to the back of the pack or the Product Data Sheet.

2.8.7 Storage of Materials

Store products upright and secure. Protect from extremes of temperatures. Ensure products are stored in a dry place where the temperature does not drop below 5°C or rise above 30°C.

2.8.8 Application

When applying coatings, in order to ensure optimum protection and durability, it is essential to achieve the required coverage rate, particularly when using medium and high build finishes. If there is any doubt, the film build should be checked using a wet film thickness gauge. Particular attention should be paid to ensure end grains are thoroughly treated to saturation by applying the first coat "wet on wet" until no more product is absorbed. All coatings for wood should be laid off in the direction of the grain, with the minimum number of brush strokes required to give an even finish.

2.8.9 Equipment

Always ensure the correct application tools are used. Water based products should be applied using synthetic brushes. For specific details, refer to the back of the pack or the Product Data Sheet.

2.8.10 Inspection by coating manufacturers

Permit manufacturers to inspect work in progress and take samples of their materials from site if requested.

2.9 Airtightness

2.9.1 General

Overall Airtightness target is 3m³/(h.m²) at 50 pascals.

2.10 Internal Doors

2.10.1 *General*

FD30s door to store room

Non rated fire doors to all other doors

2.10.2 *Door Frames*

Timber frames with paint finish

Frame width to match wall thickness

2.10.3 *Door Leaf*

Hardwood edge with stain finish

Melamine Laminated finish

Solid core doors

Ral colour to melamine to be selected from full range of colours.

2.11 IPS Panels & Vanity Units

2.11.1 *Proprietary Support Framework*

IPS Panels and Vanity Units to be supported by compatible proprietary framing system.

2.11.2 *Panel system*

Formica® Compact or equivalent

High pressure structural laminate, built up from multiple layers of kraft paper.

Grade: HPL/EN 438-4 CGS: Compact, General Purpose, Standard high pressure decorative laminate

Thickness: 12mm

Weight: 16.4 kg/m²

Decorative surface to both sides.

Full range of colours, veneers and metal effect finish to be included for and made available to ER to select from.

2.11.3 *Vanity Worktops*

Formica® Laminate or equivalent

High pressure structural laminate, built up from multiple layers of kraft paper.

Grade: HPL/EN 438-3 HGP: Horizontal, General Purpose, Postforming high pressure decorative laminate

Thickness: 0.7mm adhered to board

Decorative surface to one side

Full range of colours, veneers and metal effect finish to be included for and made available to ER to select from.

3.0 WORKMANSHIP

3.1 General

The complete external wall system, fixings and accessories to achieve the follow minimum performance requirements:

3.1.1 Loadings

(a) Dead loads shall be calculated in accordance with I.S. EN 1991-1-1:2002 Eurocode 1

(b) Imposed loads shall be calculated in accordance with I.S. EN 1991-1-1:2002 Eurocode 1

(c) Subject to paragraph (e) wind loads shall be calculated in accordance with I.S. EN 1991-1-4:2005+A1:2010 & BS EN 1991-1-4 : 2005

(d) Where any actual imposed load will exceed or is likely to exceed the load calculated in accordance with paragraph (2) (b), that actual load shall be substituted for the load so calculated.

(e) In calculating wind loads in accordance with paragraph (2) (c) of this specification:-

(i) the basic wind speed V shall be taken to be the value appropriate to the location of the building obtained by interpolation between isopleths shown on the map in Schedule 3, evaluated to the nearest integral metre per second;

(ii) where a building falls outside the range of those for which the Code gives force and pressure coefficients, values shall be used which are appropriate in relation to that building, having regard to its construction, size, proportions, shape, profile and surface characteristics.

(f) Structural Engineers calculations for wind speed and dynamic pressure, are available in the project Documents.

(g) Interpretation "dead load" means the force due to the static mass of all walls, partitions, floors, roofs and finishes including all other permanent construction and services equipment affixed to the building; "imposed load" means the load assumed to be produced by the intended occupancy or use of the building including distributed, concentrated, impact, inertia and snow loads but excluding wind loads; and "wind loads" means all loads due to the effect of wind pressure or suction.

3.2 Installation

3.2.1 General

The components, fixings, accessories, airtightness, supports, brackets, flashings, shall be assembled by trained, skilled crafts persons in accordance with standards and product manufacturers requirements.

3.2.2 Dry Lining with Plasterboard

Dry lining should:

- i) not be started until the building is substantially weatherproofed
- ii) not be started until structural timber components are at a moisture content of 20% or less
- iii) be programmed so that finishes are applied as soon as possible after completion
- iv) provide performance in accordance with Building Regulations where it contributes to fire resistance
- v) ensure that sealing is installed where necessary to achieve airtightness and required decorative finish
- vi) be appropriate for the application, eg be moisture resistant to walls and ceilings in bathrooms and ensuite

When fixing boards:

- i) damaged boards should not be used
- ii) they should be fixed face side out, appropriate for plastering or directly applied finishes
- iii) cut edges should finish over a support or nogging (though are permitted, where necessary, at perimeters)
- iv) there should be adequate support for light points, socket outlets and other service installations
- v) openings for services and electrical outlets should be accurately cut (gaps in the air and vapour control layers should be taped and sealed)
- vi) Approved letter box details around services through fire rated walls
- vii) Services located so as not to compromise the fire test certification for the relevant wall / partition build up
- viii) ceiling boards should be staggered to minimise any risk of cracking
- ix) where metal resilient bars are installed to ceilings, additional resilient bar perimeter noggings should be installed in accordance with the manufacturer's installation instructions and/or supporting fire test evidence.

Joints between boards should be neatly formed, flush, and suitably finished:

- i) with scrim tape or paper tape, where boards are to be plastered
- ii) with tape, and filled, where boards are not to be plastered (tapered edge boards should be used for directly applied finishes), or
- iii) as recommended by the manufacturer.

Where double layers of plasterboard are used, they should:

- i) be positioned so joints are staggered between layers
- ii) have the first layer fully fixed and have all cut edges supported
- iii) have the second layer supported on all edges with noggings provided to suit.

Plasterboard should be fixed to:

- i) timber using dry wall screws

- ii) metal using dry wall screws, or
- iii) masonry using adhesive dabs.

Screws should not project above the board surface and should be:

- i) 10mm minimum from paper-bound edges
- ii) 13mm minimum from cut ends of boards
- iii) 6mm minimum from edges of timber members.

3.2.3 *Internal Plastering*

The background should be:

- i) given an appropriate treatment before plastering, in accordance with BS 8481 and BS EN 13914-2
- ii) suitably finished to provide an adequate key
- iii) checked to ensure adequate and even suction
- iv) sufficiently even to provide a reasonably flat plaster finish (excessive 'dubbing out' should be avoided).

Mixed background materials and associated differential movement can lead to cracks and should be avoided. Suitable precautions should be taken, eg using metal lathing.

Metal beads should be used to provide edge protection, and be fixed with zinc-plated fasteners, as recommended by the manufacturer.

3.2.4 *Preparing for Painting*

Plaster and plasterboard surfaces should be prepared in accordance with the manufacturer's recommendations and the design. Where plaster and skim coat is applied to plasterboard:

- i) surfaces should be visibly sound, without signs of powdering or crumbling
- ii) joints should be completed and cracks, nail holes and surface imperfections filled
- iii) the surface should be rubbed down with glasspaper and dusted, where necessary
- iv) dirt and loose surface deposits, especially dust from sanding of filled joints, should be removed
- v) surfaces should be stabilised, either with a coat of thinned paint or with a sealant as recommended by the manufacturer
- vi) a minimum of three coats of paint should be applied
- vii) plaster should have adequate time to dry before decorating begins.

Where building boards are used, coatings should be in accordance with the board manufacturer's recommendations.

3.2.5 *Joinery and Fittings Installation*

When fixing trim and components:

- i) they should be in accordance with the specification
- ii) fireplace surrounds, panelling and features should be complete and suitably joined to the adjacent surfaces
- iii) nails should be punched below the surface of timber, and holes filled
- iv) damage should be avoided (where damage does occur, it should be made good).

Trim and finishings should be:

- i) sufficiently wide to mask joints around built-in fittings, etc allowing for movement and shrinkage
- ii) fixed in accordance with building regulations (eg with minimum separation distances where near heat sources)
- iii) selected and installed to give a neat appearance
- iv) installed in accordance with the manufacturer's recommendations.

Architraves should be:

- i) parallel to frames and linings
- ii) accurately mitred, or scribed, to fit tightly and neatly
- iii) fixed with an equal margin to each frame member
- iv) securely fixed to prevent curling.

Skirting should:

- i) be mitred and scribed at external and internal angles, as appropriate
- ii) tightly abut architraves
- iii) run level and scribed to floors.

Proprietary trim, skirting and architraves should be fixed in accordance with the manufacturer's recommendations.

Cupboards, worktops and fittings should be:

- i) checked to ensure they are undamaged before they are installed
- ii) installed as shown in the design (worktops spanning between units may require additional support)
- iii) plumb, level and scribed to wall faces, where necessary.

Cupboards should be installed ensuring that:

- i) doors operate freely and fit openings closely and evenly
- ii) drawers run smoothly, and locks and catches properly engage.

Cupboards (including wall-hung units) should be securely fixed, using:

- i) fixings of an appropriate size, and in accordance with the manufacturer's instructions (generally, plugs and screws to masonry and screws to timber)
- ii) the predrilled holes in units and brackets provided by the manufacturer.

Where worktops or unit panels are cut, edges should be sealed using a metal or plastic strip glued to the edge with waterproof adhesive. Alternatively, an appropriate waterproof joint may be used. Sinks and hob units which are inset in worktops, and vanity units, should be sealed with a waterproof joint.

Where appropriate, gaps between fittings and wall tiling should be sealed with a waterproof joint and brought to a smooth finish.

3.2.6 *Painting*

Prepare all surfaces in accordance with paint manufacturers requirements.

Paint all wall surfaces, allow for 10 different wall colours.

Paint all ceiling surfaces including store rooms / plantrooms exposed concrete soffit (NB. There are no suspended plasterboard ceilings in the store rooms and plantrooms.

All for 3 different ceiling paint colours.

Paint all skirtings, architraves, window boards, door frames, internal timber framed screens, door edges.

Allow for 10 different colours to the joinery.

3.2.7 Floor Finishes

Prepare and install in accordance with manufacturer's instructions.

Subfloor preparation should be carried out in accordance with BS5325:2001 Code of practice for the installation of textile floor coverings. Areas to receive flooring should be clean, free from other trades, fully enclosed and weather tight. Subfloors should be clean and free of contaminants, smooth, sound and permanently dry.

Floor protection

Tiles should be protected from dirt and dust before, during and after installation. Failure to do so may affect the performance warranty. When using protective sheeting ensure that all edges are sealed to prevent building debris and dust settling on the carpet tiles. Ensure that any adhesive tape residues on the carpet tile pile surface are removed before use.

3.3 Unloading, Handling, Storage and Protection

3.3.1 General

- i) Do not deliver to site any components which cannot be immediately unloaded into suitable conditions of storage.
- ii) Unload, handle and store components in accordance with manufacturers recommendations.
- iii) Avoid distortion of components during transit handling and storage.
- iv) Prevent pre-finished surfaces from rubbing together.
- v) Prevent contact with mud, ashes, plaster and cement.
- vi) Retain protective coverings in position. Keep paper and cardboard wrappings on aluminium components dry.

3.3.2 Protection of Coatings

- i) Surface areas liable to damage during handling, fixing or by other building trades such as plasterers are to be protected by tape. The recommended tape is Sellotape Black Vinyl No. 1415 to be removed as soon as practicable after completion of all work in the area of installation. Panel constructions to be protected by polythene sheeting.
- ii) Install hardware in accordance with templates and manufacturers instructions.
- iii) Fix units securely to building to leave plumb, straight true and free from scratches, dents or other defects.
- iv) Conceal fixings except where approved by Architect.

- v) Take care to assemble units with adjacent finish surfaces and colours matching.
- vi) Make provisions for thermal movement and still maintain full weatherproof installation.
- vii) Where aluminium is to be placed in contact with concrete masonry or mortar, back paint aluminium with one coat of fine chromate or bituminous paint.
- viii) Avoid displacement of d.p.c.s. and ensure that they are positioned correctly in relation to frame.
- ix) Prepare and point sealant joints in accordance with sealant manufacturer's recommendations. Insert backing strips in all joints to be pointed with sealant. Tool sealant to form a smooth flat bead.
- x) Adjust operable parts for correct function.

END