

## SECTION 9

### EXTERNAL WALLS, PARTITIONS AND FINISHES

#### Table of Contents

9.0	INTERNAL WALLS, PARTITIONS AND FINISHES .....	2
9.1	Wall & Partition Types.....	2
9.2	Partition Accessories .....	3
9.3	Acoustics.....	3
9.4	Fire-Rated Partitions .....	3
9.5	Skirtings .....	3
9.6	Chair Rails .....	3
9.7	Staircases, Ramps & Ladders Section.....	<b>Error! Bookmark not defined.</b>
9.8	Toilet and Shower Areas.....	3
9.9	Tiled Splashbacks .....	4
9.10	Toilet Partitioning .....	4
9.11	Finishes.....	4
9.12	Services.....	4
9.13	Sealants .....	5

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## 9.0 INTERNAL WALLS, PARTITIONS AND FINISHES

### 9.1 Wall & Partition Types

Building interiors shall be designed to provide maximum flexibility for future modifications or change in use. Load bearing walls shall be minimised and restricted to areas such as the building core for stairwells, lift shafts and toilets. All other internal walls and partitions shall be non-load bearing and able to be readily removed and altered at minimum cost.

Internal partitions shall be constructed using not less than 76 x 0.55mm BMT steel stud and track framing components installed to manufacturer's recommendations. Size and thickness of framing components will be dictated by height and load imposed by wall mounted fittings and equipment.

Plasterboard level of finish to AS/NZS 2589 shall be a minimum of Level 4. In specialised high quality areas, Level 5 may be required.

Proprietary glazed walling systems may be used in areas where acoustic requirements permit and shall comply with AS1288 and AS/NZS 2208 as applicable. Use appropriate safety decals to ensure adequate visibility to users.

Partitions to the perimeters of plant rooms, service areas, risers, cleaner's rooms and the like may be concrete masonry or fibre cement sheeting as required by the application.

Plasterboard fixed to masonry walls to be installed using proprietary metal furring channel systems. For security purposes, all primary corridor partitions shall extend to the underside of slab, and be sheeted on at least one side above the ceiling line.

#### **Masonry Walls**

Load bearing walls shall be concrete or concrete masonry as determined by application and economy.

Non load bearing masonry walls shall be restricted to plant rooms, service ducts and the like, or where required to achieve fire ratings or acoustic requirements not achievable by other wall systems.

Any exposed concrete walls shall have a minimum Class 2 'off-form' finish.

All face blockwork shall have half round radius ironed joints.

Adequate control and expansion joints shall be provided to prevent cracking due to building structure settlement.

Finish, trim, floor and wall construction in dietary and food preparation areas shall be free of spaces that can harbour rodents and insects. Details to comply with the relevant Public Health regulations.

Wet areas partitions are described in Section 9.8

## 9.2 Partition Accessories

Full height anodised aluminium or 304 stainless steel angle (40 x 40) protections shall be provided to all external corners of partitions in main corridors.

## 9.3 Acoustics

Particular attention shall be paid to acoustics and noise transmission - Refer Section 14 Acoustic. Partitions requiring to be insulated shall only utilise 'Dacron' polyester fibre or natural wool batts of thickness and density, and/or double sheeted on one or both sides as necessary to achieve the sound transmission loss between spaces.

Details of intersection of partitions and external windows shall ensure sound insulation is maintained at that intersection equivalent to that of the remainder of the partition. Partitions may extend from floor slab to underside of slab above if necessary and all penetrations shall be appropriately sealed to maintain the required sound rating.

Partition walls between toilet/shower areas and academic offices or teaching spaces shall be constructed to eliminate the transmission of noise from voices and closing of cubicle doors.

## 9.4 Fire-Rated Partitions

Particular attention shall be paid to fire-rated partitions to ensure that any penetrations comply with manufacturer's recommendations for tested systems.

## 9.5 Skirtings

Skirtings shall be black vinyl feather-edge or aluminium type of 150 mm height and be provided to all internal partitions irrespective of type, except where metal skirting duct is used, where walls are tiled, or where other floor finishes are covered up.

Aluminium skirtings (either anodised or powder-coat finished) may be approved for example, as part of proprietary glazed partitioning systems or ducted skirting systems.

## 9.6 Chair Rails

Provide a chair rail of ex 200mm x 12mm in select grade and selected species (hard to scratch e.g. spotted gum), (nominally 750mm above the floor to top but height should match the backs of chairs and tablet arms in the room) finished in clear polyurethane, laminate finish, or proprietary vinyl-coated chair railing to all plasterboard walls of seminar rooms, tutorial rooms, video conferencing rooms, computer rooms, open learning areas, meeting rooms and lunch rooms, screw fixed to wall studs with recessed screw heads and matching plugs. Exceptions may be requested on a case by case basis.

## 9.7 Toilet and Shower Areas

Walls in toilet and shower areas shall be tiled from floor to ceiling. Wall lining shall be commercial grade 9mm James Hardie Villaboard Fibre Cement Wall Sheeting installed by mechanical fixings (not adhesive) to metal studwork in accordance with the current James Hardie Commercial Technical Manual (Fire & Acoustically rated Walls).

Provide control (expansion) joints to the substrate and carried through the tile work at all changes of direction and 3.0m maximum centres over double metal studs. Install tiles using flexible thin-bed adhesives suited to the applications. Tiles to be installed in accordance with AS 3958.1.

Wall tiles shall be glazed or semi-glazed with grouting in a non-white colour. Provide noggings etc. in walls for installation of wall mounted items, refer Furniture and Fittings.

Install approved waterproofing membranes in accordance with AS3740. All wall frames to these areas shall be mounted on a concrete hob or similar up stand to ensure that the stud frame bottom track is not located between portions of screeded toppings to set down areas - refer also Floors and Floor Finishes section.

### **9.8 Tiled Splashbacks**

Where sink units, cleaners' sinks or hand basins exist in isolated locations, provide a tile or laminate splashback not less than 1m<sup>2</sup> in area. The splashback shall extend to the bottom edge of the fixture, at least 200mm wide each side and at least 450mm above the fixture.

### **9.9 Toilet Partitioning**

#### **Toilet Partitions**

Toilet cubicle partitioning systems comprising free-standing fronts without headrail, complete with doors and hardware, comprising compact laminate pre-finished partition panels. (Do not use HMR board carcass systems in areas exposed to water [showers and the like]. Toilet Partitioning systems shall comprise 13mm Compact Laminate boards partition panels. Toilet Partitioning shall be equal to KYISSA K3 model Floor Mounted, Free Standing with frontals firmly bracketed to the floor and concealed at the floor line with a 316 grade satin stainless steel 100mm flashing washroom partitioning systems.

Where number of cubicles exceeds three in one continuous line, refer to manufacturer for details for lateral stiffening of front gable wall.

#### **Toilet & Shower Partition Hardware**

Standard KYISSA hat/coat hook, turnbolt and indicator, escape staple and bumper in satin chrome finish. KYISSA "level line" safety lift off gravity hinges, clear anodised, set in hold closed position unless required otherwise. Shower floor fixing - Standard Hufcor/ Kyissa extrusion fixed to ground for full height compact laminate 13mm shower partitions.

Special provisions are required for PWD applications.

### **9.10 Finishes**

All internal paint systems are to be in accordance with Painting section. Generally, all internal walls, including plant room walls, are to be painted. Face block walls in selected locations may be unpainted where approved.

### **9.11 Services**

No piped services shall be chased into walls. General infrastructure services reticulations are to be located in service ducts, accessible through lockable doors, or access panels.

## **9.12 Sealants**

Sealants shall be selected to be appropriate for their application and shall be low VOC to meet or exceed Greenstar requirements. Sealants shall be colour matched to the finished surface, and installed in accordance with manufacturer's recommendations including the use of primers and suitably-sized backing rods where required. All control and expansion joints are to be caulked with approved sealant.

### **Sealing Penetrations**

Fire rated sealing of penetrations through walls and partitions shall be done in accordance with the requirements of the BCA and AS3000. Fire rated walls and partitions must have their firestopping capabilities restored after the installation of cabling, conduits, cable trays, ducting or pipework which pass through any penetrations. 'Hilti Firestop' foam, blocks, logs, plugs and mastic, or tested equal, are the preferred materials for the sealing of penetrations through fire rated floors and walls, installed strictly in accordance with the manufacturers printed instructions.