# **10.00 Internal Walls & Partitions**

## 10.01 Generally

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.

### 10.02 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.

## 10.03 Framed Partitions & Linings

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

All framing shall generally extend to underside of slab over, and adequate nogging shall be provided for the installation of wall mounted fittings and equipment. Deflection head tracks shall be used to accommodate slab deflection.

Framed partitions shall be sheeted with recessed edge plasterboard with flush set joints. The thickness and number of layers of plasterboard sheeting shall be to suit the application or to satisfy acoustic and fire separation requirements, but sheets shall not be less than 13mm thick.

Fibre cement sheet linings shall be used in wet and heavy use areas, and shall not be less than 6mm thick.

The lining shall extend from floor level to underside of slab above on at least one side of the partition between functional spaces and corridors, foyers and other public spaces for security, and between all spaces to achieve acoustic separation. Linings need only extend full height both sides if required to satisfy acoustic or other criteria.

Where the top floor of the building is covered by a steel framed roof, partition linings need not extend to underside of roof except for acoustic or fire separation reasons, but shall extend at least 300mm above ceiling level on both sides.

All partitions between Chemistry/Biochemistry laboratories and corridors, foyers, toilets and the like shall be lined full height both sides well screw fixed for maximum security, also stud framing and linings shall extend to the underside of roof framing if located on the top floor level unless an alternative security barrier is approved by the Deputy Director (PD&C) CLF.

All penetrations in partition linings shall be sealed to maintain the required acoustic rating of the partition.



# 10.04 Linings to Masonry Walls

Plasterboard linings to masonry walls shall generally be adhesive fixed in accordance with the manufactures printed instructions.

If the wall to receive the plasterboard lining requires power points, data outlets and the like, then the plasterboard should be fixed on metal furring channels. Chasing of masonry walls for cabling etc. is **not** acceptable.

All fibre cement linings to masonry walls shall be fixed on metal furring channels.

Fibre cement linings to receive ceramic wall tiling shall be fixed strictly in accordance with the manufacturer's printed instructions. Sheets shall be installed to allow expansion joints to be full depth of tiles and lining.

# 10.05 Wall Protection

Anodized aluminium angle protection shall be provided to external corners of all partitions. The angle shall be 38 x 38mm, adhesive fixed and filled and continuous from top of floor coverings to underside of ceiling. Exposed ends to all nib walls shall have full aluminium capping protection.

# 10.06 Acoustics

Particular attention shall be paid to acoustics and noise transmission. Refer to Section 2.00 Planning & Design Controls, for the acoustic requirements applying to internal spaces.

Insulation to partition cavities shall be 'Dacron' polyester fibre or natural wool batts of thickness and density necessary to achieve the necessary 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.

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.

#### 10.07 Projection Walls

The front wall of all Lecture Theatres is used for projection. The joints in the plasterboard wall lining shall be carefully set to ensure the projected image on the wall is clear of distortion.

All spaces nominated on the SDFs as requiring a video/data projector shall have one wall suitable as a projection wall. These spaces will include the following;

- Seminar rooms
- Computer Teaching rooms
- Meeting rooms

## 10.08 Operable Walls

Where there is a requirement to open up adjacent similar spaces into a larger space e.g. seminar rooms, this shall be achieved by the use of operable walls.

The acoustic performance of the operable wall and baffle wall over in ceiling space, shall be equal to that of a fixed partition between the spaces in accordance with the acoustic requirements outlined in Section 2.00.



# 10.09 Glazed Partitions & View Panels

Glazed view panels shall be provided in internal partitions to provide surveillance or transmission of natural light.

All academic and general offices shall have a 300mm wide glazed panel beside the door from floor to door head height.

All glazed panels shall be installed in an anodised aluminium frame to the full perimeter. Where panels abut door frames, provide stiffening to ensure that the door frame jamb does not twist and prevent the door lock from latching.

Full height glass to internal walls is to be safety glass to requirements of relevant Australian Code.

Where no mid-rail exists, install an adhesive tape 75mm wide similar to 3M 'Frosted Crystal Clear' on the inside of the glass at a height of 950mm to base of tape above floor level.

In particular situations where full vision through full height glazed screens or view panels on corridors is not desirable for privacy reasons, apply 3M 'Frosted Crystal Clear' film to the glass on the room side from 300mm above floor level to 300mm below the head height of the screen or panel.

Glazed panels to the front of a Projection Room/Bio Box in a Lecture Theatre or Auditorium shall be adequately angled to avoid reflections, and the glass shall be of a thickness to achieve the required acoustic separation.

Curtains or blinds *shall not* be installed to internal glass walls or panels except in exceptional circumstances approved by the Deputy Director (PD&C) CLF.

Glass to view panels in walls between Chemistry/Biochemistry laboratories and corridors, foyers and other public spaces shall have '3M Ultra 400 Series' security film applied to the full face of the glass panes before installation in accordance with the manufacturers printed instructions. Glass shall be installed in the perimeter frame with silicon sealant in lieu of removable PVC glazing beads.

## **10.10 Toilet Cubicle Partitions**

Toilet cubicle partitions shall be equal in all respects to the 'Laminex Innovations' self supporting compact laminate partitioning system with standard legs.

# 10.11 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.