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. If the concrete is untreated, then colour control of the concrete shall apply as previously outlined in **Section 8.00 Clause 8.03**.

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. For spaces where the SDF nominates a significant number of fittings or equipment items mounted on or supported by the partition, consideration should be given to substituting individual framing noggings with a structural plywood lining to the full extent of the partition/s faced with 10mm thick plasterboard.

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.

In the interests of future flexibility, consideration shall be given to using partitions which extend only from floor level to the underside of the suspended ceiling. If this approach is adopted, particular attention must be given to limiting the transmission of noise between spaces such as the use of seals between the partition capping and the ceiling tiles, insulation batts laid on top of the ceiling tiles over the top of the partition, or the use of baffles in the ceiling spaces. Given the requirement for greater use of single glass in corridor walls for the penetration of natural light, and doors which are not fully acoustically sealed and are often left open, the acoustic integrity of spaces is compromised and therefore the acoustic requirements outlined in Section 2.00 Clause 2.28 are not achievable.

It is also important that these partitions are stabilised to prevent distortion resulting from the weight of wall mounted fixtures and fittings. This may be achieved through extending a proportion of the framing studs to the underside of the slab or roof framing over or other top plate bracing methods. These extended studs or bracing <u>shall not</u> be attached to any ductwork or cable trays.

The use of ceiling height partitions shall be assessed on a case by case basis with CLF, but shall not apply to spaces where a high level of privacy or security is required e.g. interview, consulting and meeting rooms, and laboratories.

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

One wall of all teaching spaces, except laboratories, is to be used for projection. In Lecture Theatres and Auditoriums this shall be the front wall.

Projection walls shall be uniformly flat and perpendicular to the projector and audience. All projection walls shall be lined with plasterboard and the joints shall be carefully set to ensure that the projected image is clear of distortion.

Meeting and video conferencing rooms may also require projection walls which will be nominated in the SDFs.

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.

The corridor wall to all academic and general staff offices shall be fully glazed from floor to ceiling including a glass highlight panel above the door. In instances where this is not possible or practical, the glazing shall at least comprise a 300mm minimum wide sidelight panel and/or a highlight panel over the door. In refurbishment projects where the existing corridor wall is stud framed and plasterboard lined, an opening is to be cut in the wall to accommodate a glazed panel adjacent to the door to allow the transmission of natural light into the corridor. This panel should extend from 150mm above floor level to door head height but does not need to abut the door frame, and the width should be to suit the wall stud centres.

All glazed walls and panels shall be installed in an anodised aluminium frame to the full perimeter. Door frames shall also be aluminium but reinforced if required to ensure that the frame jambs do not twist and prevent the door from sagging or the lock from latching. Glazed panels fitted into cut openings in stud partition walls in refurbishment projects may have timber frames.

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

Where no mid-rail exists in full height glazed partitions, each glass panel shall be clearly marked full width with a solid and non-transparent contrasting line not less than 75mm wide as previously outlined in **Section 9.00 Clause 9.05**.

Where the Superintendent and the Users determine that there are particular privacy requirements, frosted film shall be applied to the glass on the room side from 300mm above the floor level to 300mm below the head of the screen or panel. Solid frosting is discouraged and consideration shall be given to the use of a patterned film which allows a percentage of the filmed glass area to remain clear while preventing direct vision into the room from outside the room. The use of such frosting as 'artwork' and to create themes appropriate to the building function is encouraged.

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 special circumstances agreed to between the Users and the Superintendent.



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 FAOB' self supporting partitioning system. Panels shall be Laminex 13mm multipurpose compact Laminate with privacy strips to doors.

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.