WA APARTMENT ADVOCACY

APPENDIX 1

Apartment repairs and maintenance

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CONTENTS

WHY DO 2.5 MILLION PEOPLE CHOOSE APARTMENTS IN AUSTRALIA?

Recent research conducted by the Australian Apartment Advocacy with 3300 people nationally found:

70% of WA owners were professionals and managers

23% are retirees

86% were satisfied with their apartment

70% of WA apartment owners would recommend it to friends and family

86% of investors believe their apartment will increase in value in the next 10 years

70% like that their apartment is close to public transport, shops (64%) and cafes (63%)

63 per cent Chose an apartment over another type of property because they were looking for less maintenance (it's all about lifestyle and convenience!)

46 per cent Would buy by the beach next time and 42% in the city (it's all about filling that free time with fun things to do!)

COMMON APARTMENT DEFECTS

Definition

There is no doubt that every new build has a degree of defects – whether that is a stand alone home, renovations or an apartment. What is important however is knowing what is and what isn't a defect, because that helps you feel more comfortable when settling into your new home.

Defects are defined as follows:

1. typical (a.k.a. patent) defects comprise defective materials or works provided by the Contractor which is not in accordance with the Contract, but are typical of the construction process, and are usually remedied under the construction contract process; and
2. A latent defect is a defect in workmanship or materials which reasonable inspection or examination could not have disclosed at an earlier time and which does not become apparent until after a passage of time following execution of the work (Standen, 2000, *Construction Industry Terminology*). Typically these are structural and water ingress in nature, and impede continuous use of the building by the occupant e.g. structural cracking, concrete cancer.

For a full overview for WA please refer to **Guide to standards and tolerances 2019**.

Who can identify a latent and patent defect?

A building professional, such as an architect, building surveyor, builder, engineer (structural, electrical, hydraulic, mechanical) can identify latent or patent defects. Other experienced persons may provide an observation evaluation and suggest the appropriate professional to make a final determination. Ideally this would be your building manager.

Note: All rectification works should be long term and relatively maintenance free to reduce ongoing costs. A well maintained building will cost less in the long term than a building that rectifies repairs on advanced deteriorated defects.

EXAMPLES OF LATENT DEFECTS

WATERPROOF MEMBRANE PROTECTION

Your apartment has a number of areas which are protected from water ingress. Included in this are your bathroom, kitchen and laundry (behind the tiling) as well as your balcony.

Waterproofing is basically hidden and you can't check to see if it has been installed properly and you generally only become aware of the problem when you start to see tell-tale signs of paint blistering, mould and the like.

Waterproofing is **essential** to the health of the building overall, as over time, water seepage can also degrade a building's components, compromising their structure and necessitating expensive repairs.

As such it is something that needs to be closely monitored.

There are ways that you can check the effectiveness of your apartment's waterproof membrane.

Wet areas

When inspecting the bathroom look at the base of the wall around any wet areas – especially in the shower area (rising damp is in fact often leaking showers).

Also inspect the condition of the grout in the shower and bathroom. This is even more so for apartments that have been pre-lived in. Check that the grout is in good quality, as over time it will erode further and then ultimately the waterproof membrane could be affected. It is essential therefore that all grout in wet areas is maintained to minimise health risks associated with mould growth within the exposed joint that can't be cleaned. If you don't maintain the grout, there is a strong likelihood that your insurance company will not cover any repair claims.

Balconies and concourses

When examining balconies you want to check that there is a proper set down, i.e. when you walk out of the apartment you want to step down onto the balcony. If there is no step down then ensure a flush threshold system (drainage) has been installed, or raised balcony floor is installed where drainage takes place under the tiles. If this is not the case, then there is a strong likelihood there will be water penetration issues as wind driven rain, floods back towards the apartment entry. Some balcony door frames are set below the external floor level and will create problems if no drainage is provided.

Also take a look as to where the drains on the balcony are located. It is recommended that you request a flood test of the balcony prior to purchase so that you can view if the water is ponding (or preferably not) and that the water is flowing away quickly enough. If this request is denied, you can do a simple check, by placing the marble in the middle of the balcony and seeing which way it rolls. Ideally the marble should roll towards the drains.

You also need to check the balcony's grout, because of UV it does have a high level of degradation. Look at the underside of your balcony, as well as the apartment below, as you can see tell tale signs of leaks i.e. white residue in a running pattern (refer below image). If you see this then it is best to contact an independent building inspector to investigate further.

It is also recommended you get a broomstick and tap the tiles on the balcony, especially in joints and perimeters. If the tiles sound hollow this is also an indication of a tile that is lacking adherence (called a drummy tile).

Rectification

The use of unlicensed contractors for the installation of the water membrane will greatly reduce the ability to enforce a claim further down the track if the rectification works fail.

The waterproof membrane supplier / manufacturer may inspect the works carried out by the contractor and approve the warranty under its terms. Waterproof membrane applications are generally expensive and it is important to select the right contractor. Best practice for larger works, is to have an independent scope of works written up by a consultant. There are Australian Standards that can be used as a guide, but most jobs require specific details.

Concrete roof waterproofing

Australian conditions are particularly harsh and very few membranes can last the 10+ warranted years without regular maintenance. A failing membrane will exhibit blistering, cracking or peeling away from the substrate. The most common areas of failure are around perimeters, drains and joints.

Applying waterproof membrane

Planter boxes

Whilst having planter boxes within an apartment complex adds to the character of the building, they can be very problematic. Careful consideration should be made to the types of plants placed into planters. Some plants have more invasive root systems which can damage membrane barriers and clog up drainage systems.

Planter boxes must be provided with adequate drainage that can be easily maintained (cleaned) to ensure water can freely drain from the inside of the planter box. Drainage water should not cause hazards on paths of travel.

Where external membrane systems are used as part of the weatherproofing system these installations are defective if they are not installed in accordance with *AS 4654 – Waterproofing Membranes for External Above-ground Use*.

Water ingress

Your walls, roof or ceiling and openings (doors and windows) should resist the entry of water into the interior of your apartment. Water that enters your apartment and causes undue dampness or deterioration of the building elements and; unhealthy or dangerous conditions or loss of amenity to the occupants, may be the result of the works not complying with the National Construction Code. Water ingress due to non-compliant construction is considered a defect.

Condensation

The National Construction Code requires residential buildings to be constructed to have air tight seals around windows and doors. A consequence of this is that air movement is restricted and moisture produced inside the apartment is not removed and condenses on cold surfaces such as windows and walls.

Occupants need to be aware of the requirement to ventilate their apartments to minimise the build-up of moisture, especially when showering and using clothes driers. This can be achieved by opening windows, ensuring exhaust fans are left running whilst showering and when using clothes driers.

Condensation can also occur due to poor building design, or faulty construction where the building has not been constructed in accordance with the National Construction Code. Condensation is a defect where it can be shown to be due to non-compliant construction.

Condensation that occurs over a sustained time can lead to mould growth, which can in turn cause serious health problems for the occupants. It is the role of the occupant to reduce the occurrence of condensation where possible i.e. opening windows to allow for air flow.

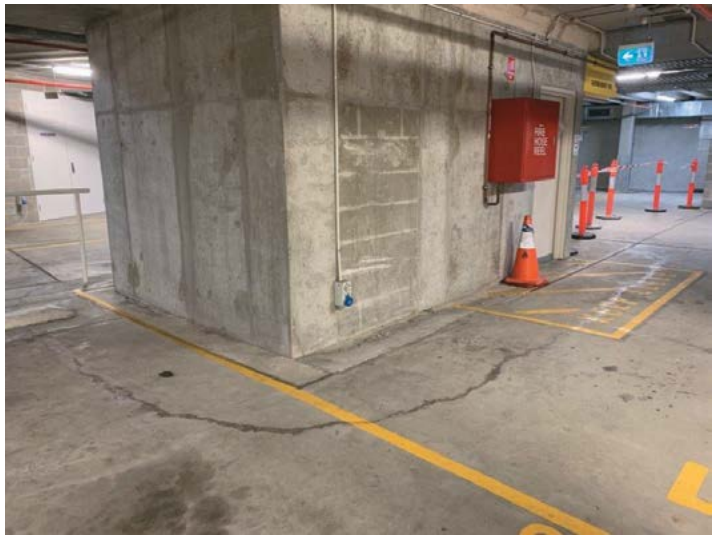
STRUCTURAL

Often any observed cracking to the brittle building elements is perceived as structural. The majority of the cracking to these elements will be due to a combination of differential settlement and or thermal movements. There are guides published in several Australian Standards that help to define the severity of the cracking observed. These include

- AS3700 Masonry Structures
- AS 2870-2011 Residential slabs and footings
- AS 3610.1-2018 Formwork for concrete

It is important that if you see cracking that is greater than a hairline crack that you appoint an independent building inspector to conduct a review and provide recommended management strategy. This will be essential if you are still covered by the 6 year Statutory Warranty and wish to take action against the builder.

Thermal Cracking



Thermal Cracking Settlement cracking at the base of a lift core

Water seeping through the basement wall

Water leaking through a crack in concrete or brickwork can be of significant concern. If you're worried about cracking in your building it may be worth checking with your Strata Company to see if a report on the cracking has been completed by a suitably qualified person.

FIRE PROTECTION

In most instances when apartments are constructed, they are compartmentalised with fire barriers in the walls, ceilings and doors.

Each apartment building would typically be inspected by a building surveyor prior to practical completion to ensure that all works completed and associated documentation are compliant to the National Construction Code, a site specific Fire Safety Engineer Report where applicable and the associated Australian Standards for each component.

It is a requirement for buildings that have service penetrations (pipes, wires etc) through a fire rated element of construction (fire walls, ceilings etc) are sealed in accordance to Australian Standard AS 4072.1.

This includes the requirement for each of these seals to have the correct documentation including a compliance label next to the penetration seal and a competent installers statement.

These service penetration seals should be captured in a site register and handed over to the site owner on practical completion (and then the Strata Manager).

The resident would typically not be required to undertake maintenance work on fire systems that are in their apartment and connected back to the base building fire system. For example, a sounder or smoke detector installed into the ceiling of an apartment would be inspected by the appointed fire service contractor for the building on an annual basis.

Where a sounder, smoke detector or sprinkler head that is part of the base building fire system is damaged, this would need to be reported immediately to the Owner (for tenants) or Strata Manager (for owners).

It is recommended that residents do not insert any hooks or nails into walls within their apartment which are deemed a fire barrier as this may compromise the integrity of the fire barrier.

Typically, the original Developer would appoint a fire service contractor at the first AGM to manage the routine inspection and testing of all fire systems within the building in accordance with AS 1851.

The first 12 months following the build would see this conducted by the base build contractors for each of the fire services installed in the building. Any works carried out to these systems within the first 12 months by someone other than the base contractor would see any warranties voided.

The appointed fire service contractor will conduct the routine inspection and testing of all fire systems within the building which would include an annual inspection of all apartment entry fire doors and would require access to these doors which would usually be facilitated through the Strata Manager.

Following the completion of a routine inspection by the appointed fire service contractor, a condition report should be forwarded to the Strata Manager and in turn, to the Council of Owners. A copy of the results of routine inspections of certain base building fire

systems should also be left in the onsite logbooks. This report will highlight any defects to the base building fire systems and advise on the appropriate actions required to be taken to rectify.

EXAMPLES OF TYPICAL DEFECTS

PAINTED WALLS

Most painted surfaces may require repainting within the first 5-10 years of a building's life. Repainting a building can be a complicated and expensive exercise due to building size, access, preparation, type of paint and rectification of deteriorated surfaces required before painting. It is advisable a painting consultant is engaged for large projects to prepare an independent specification. The qualified painting consultant can also evaluate tenders, oversee work stages and examine the finished quality before the owners sign off on the works. Some paint manufacturer endorsed paint systems can carry a joint contractor / paint supplier warranty for up to 10 years.

AS/NZS 2311 Guide to the painting of buildings

When conducting the final inspection of the paintwork, it should ensure the following where appropriate:

(a) The painted surface shows—

(i) uniformity of gloss, colour and opacity;

(ii) correct range of dry film thickness of paint;

(iii) freedom from painting defects such as—

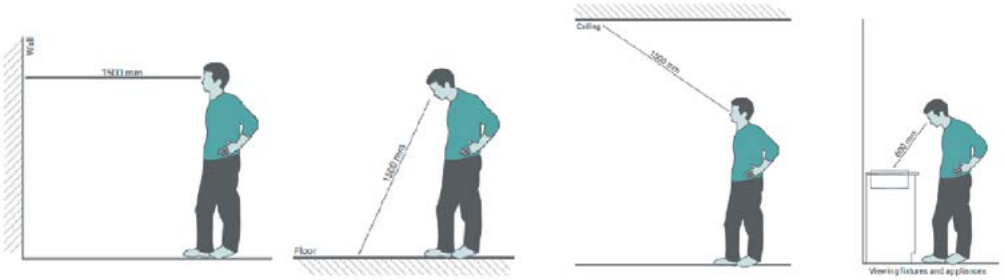
(A) tackiness and paint application defects; and brush marks, roller coater marks, spray application defects and those irregularities in texture, which are inconsistent with good trade practice.

Note: Differences in appearance will occur; however, where such differences are not clearly discernible from a distance of typically 1.5 to 2m the finish is usually considered acceptable. Joinery should also be inspected for the presence of light surface grit or coarse particles which may only be identified by touching the surface.

(iv) General cleanliness and absence of disfigurement related to paint application.

Note: Surfaces, fixtures and fittings should be checked to ensure that they have been masked or removed, and that all paint spills or stains have been removed as set out in the specifications.

(b) The surrounding area is clean, tidy and undamaged, and all of the paint contractor's materials, equipment and debris related to the work performed, are removed from the premises or site.



Normal viewing positions

Painted plasterboard walls and ceilings

Lighting plays a significant part in identifying what is and isn't a paint defect. AS/NZS 2589 Gypsum Linnings – Application and finishing gives a definition of non-critical lighting. This is especially so in apartments that have floor to ceiling windows and doors.

It is assumed that this critical light is only apparent for a short period of the day.

Other paint finish defects you may see in your apartment include:

Blistering

Formation of bubble like shapes on the painted surface is known as blistering. The primary cause of this defect is water vapour. When water vapour is trapped under the paint layer, it creates bubbles under the film of paint. This could occur from rising damp, a leaking window or leaking pipe.

Paint Runs

This type of defect is more prominent when a thick layer of paint is applied on a vertical or inclined surface without it being laid off fully.

Lack of Opacity (Coverage)

This type of defect occurs when additional coats of paint have not been applied.

Plaster cracking below cornices

This defect can occur when buildings settle (finish moving) or when the cornice is glued to the white-set plaster rather than the cement render coat. This is repairable. Refer to the **Western Australian Guide to standards and tolerances 2019 Section 10.16** for more details.

Irregular texture

This defect can occur when patching is done over an already painted wall that has a texture from a roller.

Gypsum Lining Boards

A tolerance of up to 2mm is allowed at gypsum lining board joints when assessed in accordance with AS/NZS2589 Gypsum Linnings – Application and Finishing Section 4.7.2. Joints may be noticeable in critical light but should not be noticeable in normal light when viewed front on at 1.5 – 2m.

FLOORBOARDS

Purchasers need to be aware that timber is a natural product susceptible to varying climatic and light conditions.

Most problems with wood floors are caused by too much moisture – especially while being installed.

The most common issues are as follows:

Cracks and Separations between Boards

With changes in the climate, boards can shrink, and spaces appear between the boards as the wood loses moisture content (MC). Some of these variations are seasonal problems and will close up on their own when the weather changes and the MC of the air increases. Monitoring the room's temperature, then taking corrective action, can also minimize seasonal shifts in the wood floor.

Cupping

Cupping is when the edges of a board are higher than its centre due to moisture, which causes the wood to expand. This can occur after water spills onto the floor and is absorbed by the wood. As the wood expands, compression can result as the boards are crushed together, deforming the boards at the edges. Cupping is caused by a moisture imbalance through the thickness of the wood. The wood is wetter on the bottom of the board than on the top surface, which dries quicker than the bottom. Cupping most often appears after the floor has been installed and in some cases, the floor will cup even if it was installed correctly.

SKIRTING BOARDS

Joints in boards can be misaligned or open up after a period of time. These joints can be assessed as defective if not aligned flush when visible from a normal viewing position. (refer clause 11.02 of the **Western Australian Guide to standards and tolerances**).

CRACKING IN PLASTERBOARD

Within the first 24 months after completion of the work, cracking in walls, ceilings and bulkheads is a defect if it is visible from a normal viewing position.

Within the first 24 months after completion of the work, cracking in recessed and butt joints is a defect if it is visible from a normal viewing position.

Cracking after the initial 24 month period will be assessed in accordance with section 10.15 of **Western Australian Guide to standards and tolerances 2019**.

WALL CLADDING

Section 5.02 of the **Western Australian Guide to standards and tolerances 2019** deals with staining, folds, splits, dents, open joints between panels, cracking and other distortions in wall cladding. If the cladding is of a wood material then there is a strong likelihood that this will be affected by weather conditions on par with floorboards.

Within 6 years from practical completion of the work, the wall cladding is defective if it compromises the structural adequacy of the wall or building, allows water penetration into the building or compromises the health and safety of those who use the building. In particular this pertains to the combustible nature of the cladding. **Note:** Some banks will view an apartment with cladding as higher risk than a building without this material. In addition it has been known that insurance policies have increased cost wise with the presence of cladding on the apartment building, even if it is decorative.

WINDOWS/DOORS

Window and door frame installations are defective if they allow water to penetrate rooms in weather conditions anticipated by the National Construction Codes (NCC).

Windows and doors are defective if, when closed, they allow the entry of water into rooms in weather conditions anticipated by the NCC.

Water entry through doors is not a defect if they are not intended to prevent water entry. For example, vehicle access doors.

Door handles, locks and latches

Within the first 12 months (or Defect Liability Period) of completion of the work, handles, locks and latches are defective if they do not operate as intended by the manufacturer.

It is also worth checking if the keys are registered and need to be cut by a licensed locksmith.

Internal door clearances

With the exception of fire doors and unless documented otherwise, the installation of doors is defective, if within the first 12 months of completion of the work, clearances between door leaves and frames and between adjacent door leaves are not uniform and within 1mm of the documented dimension. Refer to section 9 of **Western Australian Guide to standards and tolerances 2019**.

Within the first 12 months after completion and if not otherwise documented:

- A clearance between door leaves or between a door leaf and the frame is defective if it is less than 2mm or greater than 5mm in width.
- Unless additional clearance is required for removable toilet doors or air ventilation, a clearance between the door and the floor finish is defective if it is greater than 20mm after installation of the floor covering.

Note: Clearances under doors will generally be determined by the nominated floor coverings.

Distortion of doors

Door leaves are defective if, within the first 12 months of completion of the work, they twist or bend to the extent that the door will not properly close, latch or lock. Door leaves are defective if they allow water penetration into the building under weather conditions anticipated by the NCC.

For further information refer to Table 9.05 of the **Guide to standards and tolerances 2019**.

Painting of door edges

The door leaves are defective if they do not have all sides, top and bottom edges sealed in accordance with manufacturer's recommendations.

Operation of windows and doors

Within the first 12 months from completion of the work, doors and windows are defective if they bind or jam as a result of the contractor's poor workmanship.

CERAMIC TILING

Uneven tiling

Except where tiles have distortions inherent in the manufacture, tiling is defective if it has joints that are not uniform, of even width, aligned or in the same plane. Large tiles could present problems when required to fall and drain to a floor outlet and may need to be cut to achieve required falls.

Tiling is defective if, when measured with a straight edge, the finished surface is not flat or true within a tolerance of plus or minus 4mm from the required plane.

Lippage between two adjacent tiles is defective if it exceeds 2mm and for tiles where the surface has been ground flat, e.g. polished tiles; tiles are defective if the lippage exceeds 1.5mm, and for joint widths of 3mm or less, 1mm.

Refer to section 12 of **Western Australian Guide to standards and tolerances 2019**.

Grout

- Grout is defective if it is not installed to the requirements of *AS 3958.1 Ceramic Tiles – Guide to the Installation of Ceramic Tiles.*
- Grout lines are defective if they are not, as far as practicable, of consistent width.
- Finished grout is defective if it is not uniform in colour and is not smooth, without voids, pinholes or low spots and finished to the cushion on cushion edged tiles and flush with square edge tiles, except for tooling in accordance with A*S 3958.1 - Ceramic Tiles – Guide to the Installation of Ceramic Tiles.*
- Grout is defective if it becomes loose or dislodged within 24 months.

Refer to section 12.06 of **Western Australian Guide to standards and tolerances 2019**.

RESOURCES

Complaints process:
https://www.commerce.wa.gov.au/building-and-energy/building-service-and-home-building-work-contract-complaints

Buying off the plan:
https://www.commerce.wa.gov.au/consumer-protection/buying-property-plan

Off the plan contracts:
https://www.commerce.wa.gov.au/consumer-protection/plan-property-contracts

Home indemnity insurance:
https://www.commerce.wa.gov.au/publications/home-indemnity-insurance

Western Australian Guide to standards and tolerances:
https://www.commerce.wa.gov.au/sites/default/files/atoms/files/guide_to_standards_and_tolerances_2019_wa_0.pdf

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