TECHNICAL: Laundry facilities in residential buildings

This Advisory Notice provides information about installing clothes washing facilities in kitchen areas of Class 1, 2 and 4 buildings.

BACKGROUND

Recent trends in residential developments have lead to limited space being available for separate clothes washing facilities in many houses and apartments. As a result, facilities for clothes washing that do not meet legislative requirements are frequently being installed in kitchen or bathroom areas, rather than being provided in a separate laundry room or space.

This raises health concerns because often the required laundry washtub is not being provided and the relevant waterproofing and plumbing standards are not being adhered to.

DISCUSSION

The relevant performance requirements for health and amenity in the National Construction Code (NCC) require the following for Class 1, 2 and 4 buildings-

- laundry facilities or space for laundry facilities and the means for sanitary disposal of waste water from those facilities to be provided in a convenient location within or associated with the building to enable occupants to carry out laundering; and

- food preparation facilities that include a means for food rinsing, utensil washing and the sanitary disposal of associated waste water; a means of cooking food; and a space for food preparation; and

- protection for wet areas of bathrooms, laundries and kitchens to prevent-
  - water penetrating behind fittings and linings or into concealed spaces which could cause damage to building elements or create unhealthy conditions; and
  - accidental water overflow penetrating adjoining rooms or spaces; and
  - water accumulating on floors of laundries and bathrooms that could cause unhealthy or dangerous conditions.

Facilities that can be installed to meet the performance requirements are listed in Volumes One and Two of the NCC (the Building Code of Australia (BCA)) as follows, while the relevant plumbing installation requirements can be found in Volume Three (the Plumbing Code of Australia (PCA)).
BCA – Required clothes washing facilities

- Each Class 1 residence must be provided with at least one washtub and space in the same room for a washing machine.

- Each Class 2 residence, which includes a flat or apartment, must be provided with:
  - at least one washtub, space for a washing machine and space for a clothes dryer (or a 7.5m minimum length of clothes line) within each sole-occupancy unit, or
  - at least one washtub, space for a washing machine and space for a clothes dryer (or a 7.5m minimum length of clothes line) in a separate laundry for every 4 sole-occupancy units (or part thereof).

- Each Class 4 residence must include at least one washtub, space in the same room for a washing machine and space for a clothes dryer (or a 7.5m min length of clothes line).

Although laundry facilities for clothes washing purposes are permitted in a bathroom or kitchen, for hygienic purposes, a wash basin or a kitchen sink cannot be counted as a laundry washtub. Therefore, where space is provided in a kitchen or bathroom area for a washing machine, that area must also have a laundry tub installed (in addition to any basin or kitchen sink being provided) and space must be available for a clothes dryer if no provision is made otherwise for drying clothes on a clothes line.

From an assessment point of view, building surveyors should therefore not be approving any residential proposals that do not have a washtub provided for clothes washing purposes or have the necessary space available (marked on the plans) for a washing machine and a clothes dryer (where relevant).

BCA - Waterproofing of wet area requirements

Walls, floors, junctions, tap and spout penetrations in wet areas such as laundries and bathrooms must be water resistant or waterproof in accordance with -

- For Class 1 residences - clause SA 3.8.1.2 of NCC Volume Two, and Australian Standard AS 3740 Waterproofing of domestic wet areas; or

- For Class 2 and Class 4 residences - clause F1.7 (as varied by SA F1.7(a)) of NCC Volume One, and Australian Standard AS 3740 Waterproofing of domestic wet areas.

Although kitchens are excluded from these wet area requirements, if laundry facilities are installed within a kitchen area, the water resistant and waterproof requirements for a laundry will then apply to the kitchen area (including the need for a floor waste if the washtub does not have overflow provisions).

- Waterproof as defined in the BCA means the property of a material that does not allow moisture to penetrate through it.
• Water resistant as defined in the BCA means the property of a system or material that restricts moisture movement and will not degrade under conditions of moisture.

Where a floor is required by the BCA to be graded to a floor waste, the floor, wall to floor junctions and floor penetrations must be waterproof.

In South Australia, any wet area containing a bath, shower, basin, sink and/or washtub is required to be provided with a floor waste and have the floor graded to the floor waste. However, provided the bathroom or laundry is not in a Class 2 or 3 building or a Class 4 part of a building that is located at any level above a sole-occupancy unit or public space, the floor of bathroom or laundry need not be graded to a floor waste if all vessels (eg basins, baths and washtub) are provided with in-built overflow protection or have a permanent open trapped connection to the waste system and the floor waste is only being installed for plumbing purposes.

PCA – Plumbing requirements

Plumbing and drainage to clothes washing facilities must comply with Australian Standard AS/NZS 3500.2 Plumbing and drainage. This document specifies that the pumped discharge hose from a domestic clothes washing machine must be connected -

• Over the rim of a laundry washtub or into a washtub’s suds-saver pipe;

• Into a trapped waste pipe not smaller than DN 40; or

• Into a trapped or un-trapped waste pipe, not smaller than DN 40, connected to a floor waste gully.

However, where a domestic clothes washing machine is located within a kitchen area, it is acceptable practice that the means of discharge from the washing machine to a washtub can be made in a similar manner as that from a dishwasher to a sink waste pipe.

The outlet hose from a washing machine may therefore discharge -

• By means of a coupled connection to a DN 40 or larger trapped waste pipe and the outlet hose must be extended to at least the top of the washing machine before looping downwards to the trapped waste pipe (refer figure 1); or

• Above the water seal of a DN 50 trap fitted to the outlet of a washtub, and the hose must be looped as close as possible to the underside of the washtub rim or bench top before being extended downwards to the connection (refer figure 2).
ADVISORY NOTICE BUILDING

Figure 1 – A dishwasher connected to the kitchen sink waste pipe and a washing machine connected to the washtub (laundry trough) waste pipe

Figure 2 - Washing machine connected to a trapped waste pipe

This Advisory Notice is for general information only and should not be relied upon as legal advice or an accurate statement of the relevant legislation provisions. If you are uncertain as to your legal obligations you should obtain independent legal advice.

Further information

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