Determination No. 2004/33

Laundering facilities in an apartment building

1 THE MATTER TO BE DETERMINED

- 1.1 The matter before the Authority is a disputed decision by a territorial authority to refuse to issue a building consent for a proposed apartment building on the grounds that the laundering facilities were inadequate.
- 1.2 The Authority was specifically asked to determine whether the proposed facilities complied with clause G2 of the building code (the First Schedule to the Building Regulations 1992).
- 1.3 In making its determination, the Authority has not considered any other aspects of the building code.

2 THE PARTIES

2.1 The applicant was the owner acting through an architect. The only other party was the territorial authority.

3 THE BUILDING

3.1 The applicant describes the building as "managed student accommodation". It has six stories and contains 105 unit-titled apartments, 83 of them having one bedroom ("studios") and 22 having two bedrooms. The manager's apartment has its own laundry facilities, but all other apartments share common facilities in the form of a room on the ground floor containing four commercial automatic washing machines and four commercial dryers.

4 THE BUILDING CODE AND THE APPROVED DOCUMENT

4.1 The relevant provisions of the building code are:

Clause G2—LAUNDERING

Provisions

Limits on application

OBJECTIVE

G2.1 The objective of this provision is to ensure:

Adequate amenities for people (a) to do laundering, and

(b) That people with disabilities are able to carry out normal activities and processes within buildings.

Objective G2.1(b) shall apply to those buildings to which section 47A of the Act applies.

FUNCTIONAL REQUIREMENT

G2.2 Buildings shall be provided with adequate space and facilities for Housing, old people's homes, early laundering.

Requirement G2.2 shall apply only to childhood centres, camping grounds and work camps.

PERFORMANCE

G2.3.1 Facilities shall have capacity for the intended use, and consist of fixtures, or space and services for appliances.

G2.3.2 Space shall be adequate in size to provide for the installation and use of fixtures or appliances.

G2.3.3 Space and facilities shall be provided within each accommodation unit or may be grouped elsewhere in a convenient location.

G2.3.4 Accessible facilities shall be Performance G2.3.4 shall apply only to provided for people with disabilities. camping grounds.

4.2 The relevant provisions of the acceptable solution G2/AS1 are:

1.0 Laundering Facilities

- 1.0.1 Laundering facilities shall be provided with:
- A laundry tub, or a)

- b) Space and service connections for a washing machine.
- 1.0.2 A laundry tub shall:
- a) Have a capacity to spill-level of no less than 35 litres, and
- b) Be capable of fully containing a solid cylinder of 400 mm diameter and 200 mm depth.

COMMENT:

This provision allows for the filling or washing of containers such as buckets.

1.1 Service connections

1.1.1 A tub shall be provided with a cold water supply.

1.1.2 Space provided for a washing machine shall have a cold water supply, a discharge pipe, a water trap, and an adjacent 10 amp socket outlet.

1.1.3 Plumbing and drainage for waste water from the tub and washing machine discharge pipe shall be provided as required by NZBC G13 "Foul Water".

COMMENT:

NZBC G9 "Electricity", G12 "Water Supply", and G13 "Foul Water" are also relevant to laundering facilities.

1.3 Number of facilities

1.3.1 Laundering facilities shall be provided according to the number of people being serviced. Acceptable provisions are shown in Table 1.

Table 1: Provision of Laundering Facilities

Paragraph 1.3.1

Defined use	Number required
Detached dwelling or separate household unit to	Nil
accommodate no more than 2 people	
Detached dwelling or separate household unit to	1
accommodate 3 or more people, and early childhood centres	
Group dwelling, old people's homes, and work camps	1 per 20 people
Multi-unit dwellings (common laundry space)	1 per 4 dwelling units
Camping grounds	1 per 70 people

5. THE SUBMISSIONS

5.1 The applicant's submissions

5.1.1 The applicant said that it:

Seeks approval for the provision of four commercial automatic washing machines to be accepted as an alternative solution to the laundering requirements for a new student apartment building as the building is 'specialized accommodation' and as such is not covered by the specific requirements of Table 1 G2/AS1.

5.1.2 The applicant pointed to what it called "serious anomalies" in Table 1 of G2/AS1, particularly as regards the fact that no laundering facilities are required for a "detached dwelling or separate household unit to accommodate no more than 2 people". That meant, said the applicant, that:

...a series of say, 100 buildings could be constructed on the same site which would require no laundering facilities, provided they were each designed for a maximum of two people. The same number of people in a 'multi-unit' dwelling would require 25 laundry facilities – based on a common laundry. In that same 'multi-unit' the individual household units could be designed for 6 people and still require only 25 laundry facilities. A further option is for Grouped dwellings which includes hostels. This section requires one laundering facility per 20 people.

Hence you could have per laundering facility:

	Laundry facilities	Number of people
Detached dwelling	0	200
Detached dwelling	25	200
Multi-unit – 6 bedroom	25	600
Grouped dwelling	10	200

This clearly makes no sense. It is logical, therefore, to suggest that an alternative solution could well be applied.

5.1.3 The applicant argued that the building should be regarded as being "specialised accommodation" as referred to in the definition of "household unit" in section 2 of the Act and clause A2 of the building code, but not mentioned in G2/AS1.

... the building type does not fall into any category contained in the Code. It is not a "Hostel" in the traditional sense nor is it a "multi-unit" building where the individual occupants manage their own lives. It is in fact a hybrid of the two.

Under the definitions, the Building Code defines a Multi-unit dwelling as a building which contains more than one "household".

It further defines "Household unit" and . . . specifically excludes ". . . a hostel or boarding house or **other specialized accommodation**." It does not clarify "specialized accommodation" but we believe it applies to this new type of building. Our reason for this is that when the Act and Code were written, this type of managed, student accommodation did not exist in New Zealand. It has only evolved over the last eight or so years and, therefore, has not been categorized in the Code. We know that Council had some difficulty in considering the building as anything but multi-unit because of the implications of Fire in the design. . . .

We believe this is too simple an approach and it is too limiting. By treating it as 'specialized accommodation' then the separate issues in the Code may be considered on their own merit and not because the type of building requires a particular answer.

5.1.4 The number of facilities to be provided in the building concerned was based on the following calculations:

The occupancy is calculated on an estimate that half the studios will be occupied by two people, so -

83 x 1.5= 124.5 22x2 = 44 Total = 168.5 – say 170 people

The average time for a washing cycle		20 minutes
Time available daily	7-9 am	2 hours per day
 students on campus during daytime 	4-10 pm	6 hours per day
Time available weekends	7 am-10 pm	13 hours per day
Total available time per week	Weekdays Weekends	40 hours <u>26</u> hours 66 hours

Allowing for 10 minutes between washes to empty and fill the machine:

Total washes per machine	132
Total washes for 4 machines	528

This total assumes no washes during the normal working day. It could realistically be increased substantially if this potential is included.

It can be seen, therefore, that each person could do their washing three times a week without inconvenience. Our experience shows that the average wash per student is about one a week.

- 5.1.5 The applicant had constructed and operated six similar projects in association with various educational institutions.
- 5.1.6 In respect of the building concerned, the applicant said:
 - (a) The apartments intended use is managed apartments for students. [The applicant] has an agreement with [a university] to develop the apartments for use by [students at that university]. [The university] will provide pastoral care to the students and manage the operation of the total complex. Each apartment is fully furnished with beds decks [*sic*], chairs, appliances and crockery to enable students to move in with minimal personal belongings.
 - (b) Each apartment is on its own Unit Title. The apartments are not available for individual occupation by the owners but are sold as investment apartments. [The university] has agreed to enter into an administration agreement with each owner from completion of the building.

5.2 The territorial authority's submissions

- 5.2.1 The territorial authority submitted that:
 - (a) Having considered clause A1 Classified uses of the building code, the territorial authority concluded that:

... this building is not a hostel or a boardinghouse as it is being constructed to contain 104 individually owned apartments. Nor does Council believe it is specialised accommodation for the same reason, individually owned apartments. The fact that apartments are being rented out to one organisation who will then re-rent the apartments to university students doesn't alter what the building is, 104 individually owned apartments....

Having considered the above, Council came to the conclusion that the building is a "Multi-unit Dwelling"....

(b) For that classified use:

As a benchmark, Council looked at Table 1 of the Acceptable Solutions for G2 Laundering, which calls for 1 washing facility per 4 units for a common laundry space for multi-unit developments. This would amount to needing 23 laundry facilities. Other than some unsubstantiated time cycles for usage, no other mitigating factors were offered for Council to consider against that benchmark. Council noted that even under Group Dwelling, a minimum of 10 laundry facilities would be required.

5.3 The Authority's consultant's report

- 5.3.1 The Authority commissioned an independent consultant to report on the proposal. The report, which was copied to the parties, discussed the proposal in some detail, and concluded:
 - I believe that there has not been enough evidence put forward to convince me that the proposed amenities are adequate and have a capacity for the intended use. I would not therefore advise a departure from the acceptable solution.
 - No detail of a broader understanding of the laundry and habits or needs of the user group has been presented and many unanswered questions come to mind. . . .
 - Information given is opinion with no authoritative support.
 - The case presented is largely around the technicality of the acceptable solution and that the proposed facilities are specialised because they are "managed".
 - There is no detail of the management or how that would be sustained in the life of the facility. A change of management could occur without the change of use condition triggering the necessary physical upgrade to the multi-unit requirements.
 - In favour of [the applicant], I believe that a case can be made on the basis of a "group dwelling". More information would need to be given, however, with respect to the sustained management of the facilities. The proposed amenities should also reflect the wider needs of washing and drying a variety of garments and linen by the particular user group.

5.4 The applicant's response

- 5.4.1 The applicant responded with a detailed rebuttal of the consultant's report. In particular, the applicant said:
 - (a) As to management:

In simple terms, the students have a large degree of autonomy but are permitted to be residents on the basis that they adhere to the "house rules". These rules control, amongst other things, aspects of behaviour and care of the building. . . .

There is no management control of the laundries. This is exactly the same as the **six** other facilities that have been working quite adequately for over four years. I emphasise this matter, as it is a key to our submissions and has been ignored in the report.

In the first project . . . [141 students, 4 washing machines] a timetable was considered and not implemented. The laundry operated successfully and no management systems have been needed. . . .

If the use does . . . change, then we see no problem for future tenants. It is reasonable to assume that the mix will still be mostly students because of the type of building and its location.

(b) As to the laundering needs of students:

The building we are constructing is for students. By their very nature they represent the younger section of our community who are not likely to have acquired personal domestic equipment. . . . Many of the students are also from overseas. Tenancies are for one year. The likelihood of many of the

students or young people providing washing machines is remote, but the provision of the connections would meet the requirements of G2.

(c) As to comparison with G2/AS1:

... we have commented on the weakness of the G2 approved solutions and believe that this solution would be far more appropriate to a future use by non-managed tenants. The basis for this statement is a comparison of the alternative solution to the approved solution ...

The application includes four commercial driers and four commercial washing machines. The Building Act concerns itself with laundering facilities but is silent on drying facilities.

In our previous facilities we have provided laundry tubs in the laundries. These have rarely been used [and] we are, with the full agreement of the universities, planning to remove the tubs.

We note the requirement is for "a laundry tub **or** washing machine connection".

In order to comply with the code to enable us to construct the building, we have obtained a building consent from [the territorial authority]. This includes "Butler sinks". These are large basins with the capacity required to meet the approved solution of G2.

If this application fails, we could, as of right, remove the commercial washing machines and driers. This would leave the students with no mechanical means of washing or drying clothes or of installing any washing machines. We consider this to be totally inappropriate, but – **This is the standard against which our application should be measured**.

- -- We could and do meet the requirements by providing Butlers sinks with no facilities for washing machines
- -- We could simply provide washing machine connections without providing the machines.
- -- We are proposing that we provide four washing machines and four dryers.
- (d) As to practical experience:

[The applicant] has extensive experience with this type of facility. We work closely with **three** universities [who] each employ a full team to manage these facilities. We work closely (on a daily basis if needed) with these teams and cross reference the experiences between the Universities.

This is the fourth facility we are building for [a particular university] with exactly the same facilities for laundering. Does it seem likely that they would continue to work with us unless we were producing the product they require?

... there are six facilities up and running which we are using as precedents. We have operated these facilities for four years and our "personal observations" are based on studying up to nearly one thousand students each year. These students cover every ethnic group imaginable and every part time job available. The facilities work.

6 **DISCUSSION**

6.1 General

- 6.1.1 *High density development*
- 6.1.1.1 The apartments can only be described as small, with the studios having floor areas of the order of 25 m^2 .
- 6.1.1.2 The Authority recognises that there has recently been public concern about what has been called "high density development", meaning that people are being accommodated in smaller apartments than has previously been the case. However, the Authority takes the view that those concerns cannot be taken into account in this determination, which must be confined to whether the proposed laundering facilities comply with the current building code. No doubt the concerns will be taken into account in the review of the building code that is a requirement of the Building Bill currently before Parliament.

6.1.2 The Authority's approach to proposed alternative solutions

6.1.2.1 There are many ways of assessing whether a proposal that does not comply with the relevant Approved Documents nevertheless complies with the building code itself as an alternative solution. As the Authority said in the *New Zealand Building Code Handbook*:

New Zealand Building Code compliance of an alternative solution may be verified by any of the following methods:

- a) Calculations using recognised analytical methods and mathematical models.
- b) Laboratory tests using tests (sometimes to destruction) on prototype components and systems.
- c) Tests in-situ which may involve examination of plans and verification by inspection, where compliance with specified numbers (e.g. fittings), dimensions or locations is required. Non-destructive tests (e.g. pipe pressure tests), are also included.
- 6.1.2.2 However, whatever other method is used, the relevant acceptable solution¹ must always be taken into account as a guideline or benchmark. The acceptable solution is in effect an example of how one may comply with the building code. More specifically, the acceptable solution is an example of the level of performance that the building concerned is required to achieve in performing the relevant functional requirement. As the Authority said in Determination 2003/3 about the level of fire safety represented by the acceptable solution C/AS1:

. that level has not been, and perhaps cannot be, precisely quantified. Comparing the level actually achieved by the building to the level represented by the acceptable solution therefore requires the exercise of informed judgment.

Using the acceptable solution as a guideline or benchmark does not detract from the fact that it is not the only solution, but it does mean that any alternative solution must achieve the same level of performance as the acceptable solution.

- 6.1.2.3 When a proposed alternative solution is directly comparable with the acceptable solution, then, as the Authority said in Determination 2003/3:
 - 5.4.8 ... In several previous determinations the Authority has made the following observations about acceptable solution and alternative solutions:
 - (a) Some acceptable solutions cover the worst case so that in less extreme cases they may be modified and the resulting alternative solution will still comply with the building code.
 - (b) Usually, however, when there is non-compliance with one provision of an acceptable solution it will be necessary to add some other provision to compensate for that in order to comply with the building code.

¹ Or the relevant verification method if there is one.

- 5.4.9 Of course, acceptable solutions are amended, or revised and replaced, from time to time, which may well result in a higher or lower level of health, safety, amenity, accessibility, or any of the other matters with which the building code is concerned. However, the process by which an acceptable solution is changed is set out in section 49 of the Building Act and involves giving affected individuals and organisations the opportunity to comment before the change is finalised. The process by which the Authority makes a determination is quite different. Using the current acceptable solution as a guideline or benchmark means that an alternative solution must achieve effectively the same level of safety, amenity, accessibility, and so on as the acceptable solution. Therefore, no matter how strong the arguments a party to a determination advances to justify a lower level of safety in the particular building concerned, those arguments cannot be accepted for the purposes of the determination. Of course, that is not to say that the same arguments might not find favour in the process of amending or revising the acceptable solution.
- 6.1.2.4 In this case, the relevant functional requirement is the provision of adequate space and facilities for laundering in accordance with clause G2.2 of the building code, and the relevant performance criteria are capacity and convenience in accordance with clauses G2.3.1 and G2.3.3. The proposal is directly comparable with the acceptable solution G2/AS1.

6.2 The acceptable solution, G2/AS1

- 6.2.1 The applicant was strongly critical of G2/AS1. That criticism may well be justified, but the Authority cannot take it into account for the purposes of this determination for the reasons mentioned in 5.4.9 of Determination 2003/3 set out in 6.1.2.3 above.
- 6.2.2 Currently, G2/AS1 specifies the required laundering facilities for buildings of each relevant classified use.

6.3 The classified use of the building

- 6.3.1 The applicant claims that the building is not a multi-unit dwelling and is not a hostel, but is "a hybrid of the two", which the applicant calls "managed apartments for students" and says should be regarded as "specialized accommodation".
- 6.3.2 However, the Authority takes the view that, as a matter of law, it cannot recognise a new classified use such as "specialised accommodation" or "managed accommodation", but must assign the building to one of the classified uses defined in clause A1 of the building code. That is because clause A1 provides:

1.0 Explanation

1.0.1 For the purposes of this building code *buildings* are classified according to type, under seven categories.

1.0.2 A building with a given classified use may have one or more *intended uses* as defined in the Act.

In other words, for the purposes of the building code, any building (which includes part of a building) must be assigned a particular classified use.

6.3.3 In practice, that means that the building must be treated as one of the following:

2.0.3 Multi-unit Dwelling

Applies to a building or use which contains more than one separate household or family. Examples: an attached dwelling, flat or multi-unit apartment.

2.0.4 Group Dwelling

Applies to a building or use where groups of people live as one large extended family. Examples: within a commune or marae.

3.0.2 Community Service

Applies to a residential building or use where limited assistance or care is extended to the principal users. Examples: a boarding house, hall of residence, holiday cabin, hostel, hotel, motel, nurse's home, retirement village, time-share accommodation, a work camp, or camping ground.

- 6.3.4 The building is clearly not a group dwelling, and the applicant denied that it was a hostel coming within the classified use "community service".
- 6.3.5 The Authority considers that the assistance or care to be extended to the principal users, the tenants of the building, is not comparable with any of the other examples of community service buildings listed in clause A1.3.0.2 of the building code.
- 6.3.6 The Authority therefore concludes that the building must be classified as a "multi-unit dwelling".
- 6.3.7 However, the interpretation of the building code is a question of law. Accordingly, in case the Authority is mistaken about the law, it is advisable to address the applicant's contention that, for the purposes of the building code's provisions for laundering facilities, the building is neither a multi-unit dwelling nor a hostel but "a hybrid of the two". The applicant's reasons for that contention are:
 - (a) The building is "managed".

The Authority rejects that reason because there is no management of the laundering facilities (see 5.4.1(a) above).

(b) The principal users are students.

The Authority does not accept that students comprise a particular class of people for whom it is appropriate to provide fewer laundering facilities than for people in general.

Furthermore, although the Act and the building code do provide for various particular classes of people (people with disabilities, old people, children under six, and so on), that is because they need additional provisions -

accessible facilities, minimum temperatures, un-climbable safety barriers, and so on. There is nothing in the Act or the building code to justify depriving any particular class of people of any provisions that are required for people in general.

- 6.3.8 The Authority accordingly concludes that as a matter of fact the building has not been shown to be anything other than a multi-unit dwelling.
- 6.3.9 Furthermore, the applicant recognised that the use of the building might change, and contended that the proposal "would be far more appropriate [than G2/AS1] to a future use by non-managed tenants".

6.4 Is the proposed solution justified?

- 6.4.1 The acceptable solution for a multi-unit dwelling provides that common laundering facilities may be provided for each 4 dwelling units. The proposal is for laundering facilities to be provided for each 27 units.
- 6.4.2 The applicant says that its experience with such buildings has established that the proposed number of facilities is appropriate.
- 6.4.3 The Authority does not doubt that similar provision have, in the applicant's words, "been working quite adequately for over four years". That does not necessarily establish that the provisions are "appropriate". What it does establish is that people are willing to put up with, and are able to adapt to, less than the usual number of common laundering facilities.
- 6.4.4 The applicant also said that its proposal was justified by a mathematical exercise that demonstrated that each tenant "could do their washing three times a week without inconvenience".
- 6.4.5 The Authority considers that amounts to saying that during the week each tenant has three specified opportunities to do their washing, but only if the available times have been agreed and allocated between tenants. With no management control of the laundries, it is difficult to see how the available times will be allocated amongst the tenants of the 105 apartments.
- 6.4.6 Even if there is such an allocation, sharing a washing machine with the tenants of approximately 25 other apartments represents a significantly lower level of amenity than sharing a machine with 3 other apartments.
- 6.4.7 The Authority therefore rejects the mathematical argument as justifying the provision of only 4 washing machines.

6.5 Convenience

6.5.1 The proposed laundering facilities are on the ground floor of a six-storey building with only one lift. However, the parties did not ask the Authority to determine whether those facilities were "in a convenient location" as required by clause G2.3.3 of the building code. In the absence of submissions from the parties, the Authority cannot formally determine that matter, but it observes that it is far from self-evident that the ground floor facilities are conveniently located for the tenants of the higher floors.

6.6 **Tubs instead of machines**

- 6.6.1 The applicant claimed that it could "as of right, remove the commercial washing machines and driers" because it was also providing "butler sinks" being large basins complying with the G2/AS1 requirements for laundry tubs. After the determination was issued, the applicant informed the Authority that those tubs "have been installed in the bathrooms and serve as both a hand basin and laundry tub". The Authority accordingly corrected the determination on that point."
- 6.6.2 The territorial authority has not disputed that claim, and the Authority has not been asked to determine it and has received no specific submission on the point.

6.7 Conclusion

- 6.7.1 The applicant's proposal is directly comparable with the acceptable solution G2/AS1. Applying the approach set out in 6.1.2.3 above:
 - (a) The use of the building does not justify anything less than is required by G2/AS1 for the "worst case".
 - (b) The proposal includes the provision of dryers that are not required under G2/AS1. However, the Authority does not consider that the dryers compensate for the fact that 4 washing machines are provided for 105 apartments instead of common laundering facilities being provided for each 4 units as required by G2/AS1.
- 6.7.2 The Authority concludes that the proposal achieves a lower level of amenity than is provided by G2/AS1, and accordingly does not comply with the building code.

6.8 What is to be done?

6.8.1 It is not for the Authority to decide how the building is to be brought to compliance with the building code (subject to any waivers or modifications granted by the territorial authority). That is a matter for the owner to propose and for the territorial

authority to accept or reject, with any of the parties entitled to submit doubts or disputes to the Authority for another determination.

7 THE AUTHORITY'S DECISION

- 7.1 In accordance with section 20 of the Act, the Authority hereby determines that the proposed laundering facilities do not comply with clause G2 of the building code.
- 7.2 The Authority accordingly confirms the territorial authority's decision to refuse to issue a building consent in respect of the proposed facilities.

Signed for and on behalf of the Building Industry Authority on 16 July 2004.

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Mike Stannard Acting Chief Executive

Correction to the Determination 2004/33

The Building Industry Authority, under section 20 of the Building Act 1991 and section 13 of the Interpretation Act 1998, hereby makes the following correction to Determination 2004/33:

- (a) Delete 6.6.1 and substitute the following:
 - "6.6.1 The applicant claimed that it could "as of right, remove the commercial washing machines and driers" because it was also providing "butler sinks" being large basins complying with the G2/AS1 requirements for laundry tubs. In the determination, the Authority took it that the butler sinks were the kitchen sinks. After the determination was issued, the applicant informed the Authority that those tubs "have been installed in the bathrooms and serve as both a hand basin and laundry tub". The Authority accordingly corrected the determination on that point."

(b) Delete 6.6.3 and 6.6.4.

Signed for and on behalf of the Building Industry Authority on 25 August 2004

John Ryan Chief Executive