

Determination 2006/108

Can NZS/AS 3500.2:2003 be used as a means of establishing compliance with the New Zealand Building Code?

The owner:	The Docks Ltd, 3-29 Pitt Street, Auckland (“the owner”)
The applicant	Mr Peter Downey, Hydraulic Services Consultants Ltd, Auckland, acting as the agent for the owner (“the applicant”)
Territorial Authority:	Auckland City Council (“the territorial authority”)
Site Address:	The Docks Apartments, 66 Quay Street, Auckland

1. The matter to be determined

1.1 The territorial authority has declined to issue building consents because the proposed method of venting foul water pipes in a proposed apartment building is an alternative solution to that described in the Acceptable Solution to Building Code Clause G13 “Foul water”.

1.2 The proposed building is a 220 apartment development containing 7 levels of apartment accommodation in four towers with 2 levels of carparking at basement and ground level.

1.3 Building consents are being sought for the various stages of the building’s construction. The plumbing to the building is subject to the following consents:

Building Consents No: BL D20052760809 — BLD20052760813
Description: Stages 8 - 12 plumbing for apartment buildings

1.4 In a letter to Multiplex Constructions (NZ) Limited (“the builder”) dated 5 October 2006, the territorial authority advised that it had put the applications for consent “on hold” because:

Air admittance valves are to be replaced with open vents in all cases except where used as an individual fixture vent.

No further submission was received from the territorial authority.

1.5 In its application to the Department the applicant submitted that:

The matter of doubt and dispute relates to the means of venting the group vented branch pipes on the sanitary plumbing system.....

[The territorial authority] demand the use of the earlier 1996 version of AS 3500.2. . . .

[The territorial authority] consider[s] that the use [of the Acceptable Solution is] the only way Building Code Compliance can be achieved and have rejected the plumbing design submitted on that basis.

The plumbing design . . . considers the use of Australian Standard/New Zealand Standard 35002:2003 to be an Alternative Solution. In line with the general thrust of the performance based building code . . . we believe that this later 2003 version document, incorporating all previous amendments and developed after long and involved discussion with numerous parties, to be a more than appropriate design solution.

. . . AS/NZS 3500.2.2:1996 [is] currently cited [in the Acceptable solution]. The result is that the use of AAV's (air admittance valves) as a means of venting any Group Vented Branch pipes are prohibited.

The later document, AS/NZS 3500.2:2003, permits the use of AAV's as Group Vents.

2. The draft determination

2.1 A copy of the draft determination was forwarded to the parties for comment on 24 October 2006. The applicant accepted the draft.

2.2 In a fax to the Department dated 31 August 2006, the territorial authority made a submission in the form of its wider submission on the proposal to reference AS/NZS 3500.2:2003 in the Acceptable Solution for G13 (refer paragraph 3.4) and also noted that:

. . . some drainage authorities may be intermittently pressurising the foul water sewers with air in a effort to prevent the pump stations emitting foul . . . odours. [The] ability of Air Admittance Valves to function correctly would be compromised.

2.3 I note that the building in question has open vents at the top of each soil stack and that any positive pressure will escape through these as they provide the line of least resistance. There have been no reports received by the Department about loss of water seals and hence foul air and gases entering buildings via untrapped drains. I also note that by their very nature, air admittance vents do not allow the ingress of foul air and gases into buildings.

3. Discussion

3.1 The Acceptable Solution for Building Code Clause G13 "Foul Water" currently references AS/NZS 3500.2.2:1996 as a means of establishing compliance with the

Building Code. The revision to this Standard, AS/NZS 3500.2:2003, was published on 15 December 2003.

- 3.2 AS/NZS 3500.2:2003 is a Standard produced by two nationally and internationally recognised Standards organisations involving the input of technical experts and industry comment from both New Zealand and Australia.
- 3.3 I concur with the applicant's submission that the building code is a performance-based document and note that any Acceptable Solution provides only one means, but not the only means, of achieving compliance with the Building Code. It is a reasonable expectation that if an application for consent is not supported by an Acceptable Solution, then it should be assessed by the territorial authority as an alternative solution against the performance requirements of the Building Code. A territorial authority is not entitled to require that a particular Acceptable Solution is used as the only means of achieving code compliance.
- 3.4 The Department has sought and received public comment on a proposal to reference AS/NZS 3500.2:2003 in the Compliance Documents for G13 in place of AS/NZS 3500.2.2:1996. Of the comments received, one did not agree with the proposal. However, I am advised that after consideration of all comments by the Department it is unlikely the one negative response will lead to AS/NZS 3500.2:2003 not being referenced.
- 3.5 I acknowledge that not all Standards are referenced in the Acceptable Solutions either in full or in part. However, in this instance an enquiry to the Department would have clarified the status of AS/NZS 3500.2:2003 with respect to its future referencing in G13, or its possible use now as an Alternative Solution.
- 3.6 I conclude that AS/NZS 3500.2:2003 provides sufficient grounds on which to establish compliance with the Building Code.

4. The decision

- 4.1 In accordance with section 188 of the Act, I hereby determine that the territorial authority must accept AS/NZS 3500.2:2003 as a means of establishing compliance with Building Code Clause G13 "Foul Water" and must assess the consent applications, as described in paragraph 1.3 above, on that basis.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 13 November 2006.

John Gardiner
Determinations Manager