



Building for the 21st century: review of the Building Code submissions questionnaire

We would like to receive your views on the proposals in this discussion document. Your comments will help us to formulate our report to the Minister.

You can choose to answer one or some of the questions, or to respond to them all. The questions are not exhaustive and are intended as a starter for your thinking. We welcome your views about anything to do with the Building Code even if we have not specifically asked a question about it. We are particularly interested in your views on:

- whether we have correctly identified the problems with the Code, how great you think these problems are and whether there are other problems we have not addressed
- whether there are other options for addressing the problems we have identified with the Code and what these are
- what you see as being the costs and risks of the changes that we are considering in this document
- what you see as being the benefits of the changes that we are considering in this document
- whether, in your opinion, the benefits of the changes that we are considering outweigh the costs.

There are several ways for you to send us your submissions:

- online:** an electronic version of this document is available at <http://www.dbh.govt.nz/bcr-2007-consultation>
- email:** buildingcodereview@dbh.govt.nz
- fax:** (04) 494 0290
- post, courier or by hand:** Building Code Review
Department of Building and Housing
Level 6, 86 Customhouse Quay
PO Box 10-729
Wellington

Please return the submission form with your comments by **28 September 2007**.

Please note that all responses will be public information and may be the subject of requests for information under the Official Information Act 1982 (OIA). Submitters may wish to indicate grounds for withholding specific information contained in their submission, for example, that the information is commercially sensitive or that they wish personal information to be withheld. Any decision to withhold information requested under the OIA may be reviewed by the Ombudsman.

For more information:

- go to www.dbh.govt.nz or
- call 0800 242 243



Contact details

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Please tick if you are happy for us to contact you about your submission.

Code structure

Question 1: What comments do you have about the way we are considering structuring the Code?

Comments

It gives no practical advantages at all over the current (1992) Code. You have not identified that familiarity and continuity with that Code structure is vital for the training of LBPs and Building officials for the next 5 years. Changing the Code structure in the way you are proposing will be a serious setback to achieving the necessary and timely upgrading of our building workforce and our building controls administration workforce.

However, it would be far more practical and useful for everyone in the building industry to modify the structure of the existing Code to more strictly follow the normal sequence of Design Considerations, starting with the proposed uses, then the site constraints, then proceeding through its structure and external envelope, to all the internal requirements. For a basic proposal, see Appendix 1 to Part 1 of my Submission.

Doing that helps to more precisely identify where specific requirements for people with disabilities need to be made. It also helps to identify precisely where all various performance requirements need to be applied.

On Performance vs Prescriptive basis: You have not understood that use of a prescriptive specification is, quite legitimately, one of the possible "means of compliance" with any performance requirement. More importantly, you have not grasped that some 80% to 90% of all building consent applications are for small simple buildings, up to 2 storeys, and that the overwhelming majority of these can and should be routinely handled by reference to a comprehensive set of prescriptive specifications. (This point was made strongly to SANZ Building bylaw staff in 1984, by Peter Scoular one of the two Reviewers of Building Controls, but was missed by the later Building Industry Commission) Taking that tack would require a "3604" (or, preferably, much simpler) type of prescriptive standard for the fire safety requirements of all such small simple low-rise, single use buildings - and so on right through the whole range of requirements. That leaves everything else to be tackled by way of performance-based design criteria, by the designers who are most competent in and comfortable with those methods.

On 'adequate' and 'reasonable' requirements: Please read Part 3 of the Building Industry Commission's 1990 Report; especially 3.31 and 3.32. The exercise of good judgement, based on well-informed experience is an essential part of all building design, and that is what the use of these two terms actually refers to. I.e., in many circumstances, the most pragmatic solution is to use good judgement rather than to try to establish quantifiable requirements. Quantified requirements usually involve laboratory test methods, which always involve arbitrary limitations in order to make them repeatable: but those limitations mean that the test methods cannot reflect actual realities of circumstance. The solution to the problem you think you see is to select recognised "acceptable solutions" and to derive specific "performance criteria" from these. That is being pragmatic and sensible.

There is no advantage at all in the "performance framework" you are proposing. The key points are that some building uses (eg post-disaster uses) are more critical to society than others, while some building users (eg, the very young, the very old, and the ill) are more vulnerable than others. These need additional requirements, but nothing else does. Finally: you are quite wrong in assuming (p 14) that the current Code does not "set out the impact that society is likely to tolerate (etc)": Please read the BIC's 1990 Report, Parts 2 and 3, which discusses all that very carefully. You have not advanced any good reasons for changing the BIC's conclusions.



Type 1 changes

Structural performance

Question 2: What comments do you have about the requirements we are considering for structural performance?

Comments

Not correctly identified : they confuse and muddy the very clear requirements already set out in AS/NZS 1170 and its preceding standards. These are that -

1. the structure, including its dead loads, will bear the live loads rationally expected to be imposed on it by its particular use.
2. it will withstand the loads imposed by those natural climatic forces (wind, snow, ice) rationally expected in its particular location.
3. it will withstand, without collapsing and causing loss of life, or major structural damage to adjoining buildings, the maximum seismic forces rationally expected in its particular location, but within the limits of reasonably economic social expectations.
- 4 the structures of specified post-disaster uses of buildings (e.g. hospitals, emergency mangament centres, and cultural heritage museums, etc), must be designed with safety factors that are reasonably judged to ensure that building will remain safe and operational in the event of any major earthquake; and last -
- 5 any structure will withstand all the site-specific hazards of flooding, ground instability (including erosion, landslip, etc); inadequate bearing, etc.

Given those, everything else being considered is not relevant as a regulatory requirement. You are confusing various insurable and/or owner-specific cost hazards with the very specific and very limited public and social roles of regulatory requirements.

Question 3: What comments do you have about the performance requirements we are considering for variability and uncertainty in the design and construction process?

Comments

Not correctly identified. Our existing structural engineering standards already incorporate all the various safety factors needed to cope with all these variabilities and uncertainties. These factors are soundly based on on long experience with the nature of various materials and of construction processes, including variabilities in building craftsmanship, etc .

The role of the Code is merely to recognise that all these safety factors are soundly-based and are safely used in the hands of experienced and professionally-trained designers. (Legal equivocations about not being able to approve compliance documents that rely on "judgements" are a totally unrealistic nonsense: lawyers need to understand that all good building is based on the consistent use of sound judgements, and so should adapt their view of building law to that reality.)

I.e in theory the Code requirements only need to specify that in structural design, safety factors be employed that are judged to be adequate in all the circumstances of the any specific design: and that that judgement is to be exercised only by a chartered professional engineer . However to write that in is largely superfluous, as it is "teaching engineers how to suck eggs" (Note that in NZS 3604, those judgements by qualified engineers are already built in : which is why that Standard can be safely employed by non-engineers.)

Safety in use

Question 4: What comments do you have about the performance requirements we are considering for barriers?

Comments

You are proposing the wrong option by trying to be prescriptive. The four performance criteria needed are -
(a) sufficient strength and rigidity against the horizontal force of the greatest -expected number of people leaning against a barrier (which is already specified in AS/NZS 1170)



- (b) provide a sufficient barrier to prevent people (including, where appropriate, small children) falling through openings in the barrier
- (c) of sufficient height to prevent people who are relying on the barrier from toppling over it.
- (d) provision of an easily graspable handrail which people can rely on to keep themselves safe and steady while ascending or descending stairs, ramps, escalators, ladders, etc

Question 5: What comments do you have about the performance requirements we are considering for slip resistance?

Comments

There are already Standards for this. Why not simply refer to the criteria they set out ?

Question 6: What comments do you have about the performance requirements we are considering for lighting?

Comments

There are already Standards for this. Why not simply refer to the criteria they set out ?

Indoor climate

Question 7: What comments do you have about the performance requirements we are considering for indoor air quality?

Comments

These are much worse than those already specified in G4 of the existing Code. Don't change what does not need to be changed.

Question 8: What comments do you have about the performance requirements we are considering for internal moisture control?

Comments

These are not as clear, or as adequate, or as robust as those already set out in Clauses E2, E3, and G4. Don't change what does not need to be changed.

Sanitation

Question 9: What comments do you have about the performance requirements we are considering for wastewater disposal?

Comments

Incorrect identification: Wastewater is NOT the same as foul water. Read the definition in A2. The current Code makes no regulatory requirements for wastewater disposal from dishwashing or laundering, showers, etc, (presumably because that wastewater does no demonstrable harm to anyone) but does for water containing human excrement. Unless you can show good reason why G13 needs to be changed, don't change it. You have not given any good reasons

Question 10: What comments do you have about the performance requirements we are considering for solid waste disposal?

Comments

You have given no good reason for changing G 15, so don't change it. Recycling facilities are provided for G.15.3.1 and do NOT need to be made a specific regulatory requirement in building design



Question 11: What comments do you have about the performance requirements we are considering for industrial liquid waste disposal?

Comments

Your proposals do not seem to be any improvement on G14. If G14 is already adequately worded, why change it? However, G14 does not cover the industrial storage of potentially hazardous materials, such as petrol, and various chemicals etc.: and the possible need for bunds, etc to contain materials that have escaped from such storage. The question is whether such hazards adequately covered by the provisions of the RMA and District Plans (as was apparently assumed by the writers of the 1992 Code) But you have not examined that question here, although you do later, under Q 34.

Question 12: What comments do you have about the performance requirements we are considering for personal hygiene facilities?

Comments

Poor identification of the two key problems:

- 1 The Code (in G1) has requirements only for "sanitary fixtures" (= toilet bowls, and urinals) and is not clear whether that includes hand-washing facilities. In effect, it makes no specific requirement that hand-washing facilities must be provided wherever toilet fixtures are provided. It simply relies on the Acceptable Solution to address that. However, hand-washing is both a public and personal health issue, and also a cultural issue.
- 2 Neither G1 nor G3 recognise the Maori cultural stricture against having toilet facilities next to food preparation facilities. As this has a practical public health component, it would seem advisable to ensure that there is some spatial separation criteria, in conjunction with a requirement for hand-washing facilities
3. The proposed queuing time criterion is no practical improvement on "in sufficient numbers" already in G1. To get any more specific, you would need to identify the Crowd uses from the Workplace uses and the Residential and Accommodation uses. Is that really necessary?

The only major cultural change needing to be addressed is the contemporary need to require Equal Numbers of toilet fixtures for both sexes, plus an adequate number of unisex / accessible fixtures for parents with small children and for people in wheelchair. Those requirements could be made more explicit, so that the AS can be updated

Question 13: What comments do you have about the performance requirements we are considering for laundering facilities?

Comments

Why are you singling out laundering facilities for people with disabilities in camping grounds? This only repeats the silly exception to G2.3.4. This is a personal hygiene matter and it should not be seen as an onerous requirement to require accessible laundering facilities in all accommodation uses, without any exceptions. Reliance on every traveller having easy access to the nearest laundromat is not a soundly-justified option.

Question 14: What comments do you have about the performance requirements we are considering for food preparation facilities?

Comments

[The are the same requirements as already made in G3. The only difference is that you are expressing them positive, rather than negatively. It is not clear hat this actually makes the Code any more certain.

Question 15: What comments do you have about the performance requirements we are considering for protection of water quality?

Comments



He proposals are no significant improvement over those already in G12. So why change them ?

Question 16: What comments do you have about the performance requirements we are considering for distinguishing between drinking and non-drinking water systems?

Comments

G.12.3.2 and G.12.3.4 already provide for what you propose

Question 17: What comments do you have about the performance requirements we are considering for preventing the growth of harmful organisms in stored heated water?

Comments

G.12.3.9 already provides for this . The only improvement is the new performance criterion of 60 degrees

Features for wellbeing and physical independence

Question 18: What comments do you have about the performance requirements we are considering for wayfinding provisions in the Building Code?

Comments

Your proposal is not as clear, sound or as adequate as the existing provisions of F8. " People of all abilities" is not any improvement over F.8.3.4 it is simply more confusing. What you need is a quite specific set of "performance criteria" , rather than such a vague generality.

Type 2 changes

General

Question 19: What comments do you have about other factors that affect the performance of buildings?

Comments

You have not correctly identified any problems with the Code.

Most of the issues posed in Table 7 are already adequately covered by clauses B1 and B2 of the Code - although B1 does not clearly set out the hierarchy of hazards that are (and have been for many years) publicly understood and provided for in AS/NZS 1170. The other issues posed in Table 7 are covered by other clauses of the Code or else by the provisions of the RMA.

What you are proposing makes NOTHING any Clearer for any Designer, or more Easily Enforced by any Building Official. So: What justifies this attempt to re-invent the wheels of the existing Code ?

Question 20: What comments do you have about the approach we are considering for addressing tsunami risk?

Comments

What is your data for assuming that tsunami risk is at least as significant to New Zealand BUILDINGS as seismic risk ? Seismic risk to NZ buildings is based on clear geological evidence, records of major earthquakes post 1840, and expert studies of major overseas earthquakes. Where is your equivalent data on tsunami risk : not to the NZ shoreline in general, but to actual buildings, and then also, solely in terms of loss of life of people in those buildings ? You have cited none at all. Until you can, and this data is accepted by the peer review of expert structural engineers, your proposal on p 33 is not just credible as a new regulatory requirement.

Question 21: What comments do you have about the performance requirements we are considering for flooding?

Comments

Given climate change, it may well be prudent to now provide for higher levels of floodwater than we have previously



provided against. However, the basic policy question here is whether flooding of buildings in NZ has been shown to cause any significant and unavoidable harm to life and limb. As far as can be seen, the only harm has been to private property: and that is not and should not be any concern of building regulations.

What we need is a clarification that E1 is concerned solely with injury to people and to "other" property.

Question 22: What comments do you have about tolerable impacts?

Comments

This is all absolute nonsense. The entire public policy basis of the current Code is about which specific hazards have what tolerable or intolerable degrees of impact on which users of buildings. Some users are more vulnerable than others, and this is already recognised in the classification of building uses in our structural standards, our fire safety standards, and our disability access standards. The way you are now trying to analyse and re-organise all this is, quite simply Not Useful.

Admittedly, the current hazard and vulnerability classifications are neither clearly defined explained or defined, They need to be set out in a matrix of uses that clearly indicates when any change of use must involve a greater degree of protection (and from what) than the previous use. Please just do that, instead of what you are proposing

Question 23: What comments do you have about the assignment of buildings into the Performance Groups in Table 9?

Comments

See comments on Q1 and Q 22

Question 24: What comments do you have about the performance framework that we are considering?

Comments

See comments on Q1 and Q 22

Question 25: What comments do you have about the requirement we are considering for buildings to meet the performance requirements for their intended life?

Comments

You have not correctly identified the problem. (You are not alone ! - the BIA Board got just as confused over this issue and so went down quite the wrong track...)

The issue of Durability in the current Code is nothing whatsoever to do with Consumer expectations and values. It is entirely and solely to do with User safety, and is mostly restricted to Structural safety, and to Health safety. It is also about whether the Owner/ Occupier (user) of any building can actually see that some element or component is becoming unsafe, and is also actually able to have it fixed or replaced.

There is a fundamental Public Policy issue here: Is it the proper task of building regulations to require building owners to maintain their own property in good order ? From the Building Industry Commission's Report, it is clear that it saw such a requirement as only needed in respect of public safety in the use of public buildings. If you are intending to change that public policy, then it is submitted that you MUST get specific Parliamentary sanction for that change, as it is not apparent that it is justified by anything in the Act.

Question 26: What comments do you have about the performance requirements we are considering for durability?

Comments

As for Q.25, these are NEW public policy requirements that are not (yet) set out in the Act. If you proceed with these, you are likely to cause a complaint to the Regulations Review Committee, under S.O 378(2) (a) or 9f) seeking disallowance of this regulatory requirement.

(i) Durability: See Q.25

(ii) Intended life: It is not acceptable to go beyond the current requirements of B2.

(iii) Factors affecting performance: It is not acceptable to go beyond the current requirements of B2.

(iv) Maintenance: It is not acceptable to go beyond the Act's requirements for a Compliance Schedule and an



annual WOF. NB: 99% of buildings in NZ have performed very satisfactorily for over 100 years without any such regulatory requirements ever being imposed before. You have not justified these proposals in any way.

Question 27: What comments do you have about the requirement we are considering for designers to nominate an intended life for a building?

Comments

[That is entirely the owners prerogative. It is not acceptable to go beyond the current requirements of B2

Question 28: What comments do you have about the requirement that an 'intended life' of at least 100 years must be used where the building or building work has 'permanent' effects on other property?

Comments

It is not acceptable to go beyond the current requirements of B2

Question 29: What comments do you have about the performance requirements we are considering for building maintenance?

Comments

It is not acceptable to go beyond the current requirements for WOFs in the Act

Structural performance

Question 30: What comments do you have about the requirements we are considering for structural performance?

Comments

There is no need to go beyond the current AS/NZS 1170 requirements for its two limit state design objectives. However, it is agreed that B1 in the Code should be re-written to make those two objectives absolutely clear and to cite AS/NZS 1170 as setting the only acceptable specific performance criteria. You have not given any evidence of any need for any further regulation than that. Any "alteration to the structural capacity" is already covered by s.112 of the Act, so this regulation cannot make requirements greater than that.

Question 31: What comments do you have about the measure we are proposing for concurrent demands?

Comments

The ONLY concurrent demand issue that has ever been seen as in anyway significant is the concurrency of a major earthquake and fire. The last time this was considered the conclusion was that while fires may follow earthquakes, the reverse was so highly unlikely that it could be ignored. Hence nonfireproofed steel framing can be used to make older building seismically stronger. If this is accepted, then it could be specifically added to either B1 or C4, or both. There is no evident need to consider any other kind of concurrent demands: so it is unacceptable to impose probabilistic requirements where professionally-skilled commonsense is already quite enough to rely on.

Question 32: What comments do you have about the requirements we are considering for the performance framework for structural performance?

Comments

This is superfluous. B1.3 already covers more than enough. Professional engineers do not need to be instructed on how to suck eggs, and you have provided no evidence that what you propose is needed.



Safety in use

Question 33: What comments do you have about the performance requirements we are considering for restricting access to hot surfaces for buildings with vulnerable populations?

Comments

The 50 degree limit is reasonable for hot water used for personal hygiene in the building uses proposed (It is not advisable for sterilisation in hospitals, or for making tea !) As it is not clear what "hot surfaces" you have in mind, it is impossible to comment on the need for any additional regulation of such aspects. .

Question 34: What comments do you have about the change we are considering to align the Building Code requirements for hazardous substances with the Hazardous Substances and New Organisms Act 1996?

Comments

All Building regulatory matters should be under the Building Act alone. It would be far better to have the HSNO Act amended so that it is clear that all the relevant building requirements are dealt with under the Building Act See comments on Q.11 which suggest that this issue may be best handled by extending the scope of G 14 to cover storage of hazardous substances as well as the handling of industrial waste (given that the kinds of requirements involved are very similar.)

Note that there is also an external spread of fire + toxic fumes issue here, as well as the need to contain contaminated fire-fighting water by appropriate siteworks measures

Question 35: What comments do you have about the performance requirements we are considering for a maximum sound level for fire alarms and other alarms used for evacuation?

Comments

This is probably a non-issue. The Standard has been amended to address this problem, but there may be older buildings where the alarm noise level still remains too high for people with disabilities who are awaiting rescue. With sensible maintenance, the problem should disappear .

Indoor climate

Question 36: What comments do you have about the performance requirements we are considering for indoor air quality?

Comments

You have not provided a case that the current G4.3.1 requirement should be changed. All that you are proposing is providing some new performance criteria fo air purity, which is acceptable. Please do not confuse functional requirements wih performance criteria.

Question 37: What comments do you have about the performance requirements we are considering for thermal control?

Comments

This 85% proposal seems unworkable unless you have data to back it up. Why not simply require that, in any building, it should be possible for all users to be provided with a minimum air temperature of 18 degrees, but a minimum of 20 degrees for the two building uses specified in G.5.3.1 ?

Question 38: What comments do you have about the performance requirements we are considering for internal moisture control?

Comments

Wrong move. It may be more practical to require that the ventilation system for any internal space to be adjustable



by any user so that he/she can reduce any unhealthy levels of humidity as and when needed. As we already have that provision as a matter of common sense in all our housing, you need to identify where any regulation is required

Sanitation

Question 39: What comments do you have about the performance requirements we are considering for recycling facilities for solid waste disposal?

Comments

Not well drafted, but acceptable for public use buildings and multi-unit dwellings. The case for making this a regulation for detached dwellings is not established

Question 40: What comments do you have about the performance requirements we are considering for water temperature for personal hygiene?

Comments

[See Q 33.

Question 41: What comments do you have about the performance requirements we are considering for accessibility for laundering facilities?

Comments

See Q 13

Question 42: What comments do you have about the performance requirement we are considering for storage space for cleaning equipment?

Comments

Acceptable, on grounds of personal hygiene

Question 43: What comments do you have about the performance requirements we are considering for capacity of water supply systems?

Comments

Is this a Building Code matter, or a Public Health Act matter, governing water supply services? Do not make requirements for designers and builders that they cannot be responsible for meeting.

Question 44: What comments do you have about the performance requirements we are considering for drinking water?

Comments

The change is reasonable and acceptable

Question 45: What comments do you have about the performance requirements we are considering for raw water?

Comments

Acceptable

Question 46: What comments do you have about the performance requirements we are considering for continuous identification between drinking and non-drinking water systems?

Comments



[Acceptable

Question 47: What comments do you have about the performance requirements we are considering for water re-use?

Comments

Acceptable, but the potential for safe user-controlled management of grey water systems in domestic buildings should not be prevented. Also, to prevent it denies the potential for technology to provide a safe automatic management system for dwellings. This is a performance-based code that should not prevent such innovations

Features for wellbeing and physical independence

Question 48: What comments do you have about adding multi-unit dwellings to the list of buildings that must provide an accessible route with features for people with disabilities?

Comments

Not good enough. There is absolutely no point in having an accessible route to a multi-unit dwelling unless one can enter so as to be able to "visit or work and carry out normal activities" in any such dwelling as required by s. 118 of the Act. It is high time NZ caught up with at least the American federal law requirements for accessible multi-unit housing. As mandated by at least provision (z) in Schedule 2 to the Act any multi-unit dwelling can be taken to be seen as a building to which the public are admitted.

While it would be better if we could make a decisive step towards equalling the current UK requirements., that would require an amendment to Schedule 2. However, doing so would be a much easier, more practical and far more fruitful way of achieving minimum space requirements than the clumsy idea being proposed in Table 21.

So such an amendment should be recommended to the Minister in the Report to be made on this Code Review as that would allow a serious public debate through the Select Committee process..

Type 3 changes

Resource efficiency

Question 49: What comments do you have about using CO₂ emissions to measure the resource efficiency of buildings?

Comments

(1) This appears to go well beyond the mandate provided by s.3(d) of the Act. As a major policy shift, it would appear to require a specific amendment to the Act. It is also, clearly, going to take some time to develop a sound and practicable measure, that is actually economically fruitful in NZ. (It could effectively prohibit the use of many imports of sophisticated building materials that cannot be economically made in NZ.)

(2) Given that, it is very surprising that you have not also proposed a simpler (if cruder and more limited) interim set of energy conservation measures that could be introduced and employed far more rapidly and probably more easily. E.g: (a) compulsory solar water heating on all buildings (not just housing) or (b) much higher levels of thermal performance in the exterior envelopes of all buildings, relative to their annual space heating needs. etc. etc

(3) It is strongly recommended that you set out this whole matter as a rolling programme, to be achieved step by step over, say, a 10 year timeframe. If you think about it, you should be able to adapt Clause H1 of the Code to set out an ultimate target, but also devise a set of performance criteria targets to be achieved by certain steps or stages.

Question 50: What comments do you have about limiting the maximum heating or cooling for maintaining the indoor temperature within the comfort range?

Comments

Probably worth trying as one step, but this needs far more information to be able to make any sound comment.



Question 51: What other comments do you have about resource efficiency?

Comments

See Q 49 above

Fire safety

Question 52: What comments do you have about the matters under consideration to specify fire design scenarios and performance requirements?

Comments

The fire safety objectives and requirements in C2, C3 and C4 are not as precisely identified and expressed as they should have been. They also need the addition of the specific performance criteria which were clearly intended by their parent document: the draft Standard DZ 4226: 1984 (of which this Submitter was the technical editor) which was based on 4 years of intensive consideration, by an expert committee, of the specific fire safety policies required in NZ.

What you are proposing is : (a) principally a way of defining some of the aspects of the performance criteria that should be incorporated in C2, C3 and C4; (b) another but "specific design" means of compliance with those objectives and requirements - but also (c) an unjustifiable extension of the specific provisions that need to be made for fire fighters beyond what was considered as justified in 1984.

The latter concern is to do with the deliberate public policy basis (see 54 below) that it is NOT the role of the Act, or the Code to require protection of property from fire (other than, to a limited degree, for household units).

Reasonable provisions for firefighting were regarded as being implicitly required by the Fire Service Act 1975, but were judged as being sufficiently provided for by an additional safety factor in the required FRR of exitways.

No evidence has been offered that this provision is inadequate or unsafe in the NZ experience since 1992

Question 53: What comments do you have about the fire design process being considered?

Comments

This process MUST be considered as only ONE of the three possible means of compliance, as follows-

1. The current prescriptive solution (C/AS1) is based on a 4 year long and very careful consideration of all the matters raised on pp 62 to 64, and so should stay in place as the basic specification based on the draft Standard DZ 4226: 1984

2. The most urgent need is for a simpler & shorter & more conservative specification for the range of small , single-use detached and semi-detached buildings up to 2 storeys, apart from those in the SD & SC categories. This need was identified in 1983 by the Reviewers of Building Controls, but not identified in their Reports, nor identified by the BIC.

3, There is also clearly a need for an approved specific design method, along the lines of AS/NZS 1170. But it is not clear why this cannot be achieved by explicitly approving Buchanan's existing manual as the best-and-already-available technical basis. It is not acceptable to try re-inventing this wheel.

It is submitted that the best course of action would be to convert Buchanan's manual, with his permission, into a NZ Standard, with whatever additional specific requirements are agreed as justified for its intended role as one designated means of compliance with the Code requirements

Question 54: What other comments do you have about fire and emergency safety?

Comments

It is totally unacceptable to designate any one means of compliance as the only required method, as suggested on p 61. That makes a nonsense of the whole idea of a performance-based Code. Nothing in the problem with the uncertain bases of specific fire safety designs, as identified on p 62, justifies any such a move.

The public policy basis of the current fire safety requirements are set out in #PC3.1.1 on p PC-5 of DZ 4226. They should be identified in both the Act and the Code: and strictly adhered to.



Features for wellbeing and physical independence

Question 55: What comments do you have about the requirements under consideration for a 'design furniture' standard?

Comments

Unacceptable. This is not an essential requirement for public health & safety and so is not specifically authorised by the Act. This sort of consumer choice issue would be much better handled by a separate Act providing a range of voluntary (consumer choice) standards for housing and accommodation.

However, a human-rights-based requirement for the universally-accessible design of housing, wherever practicable, along the lines of the UK regulations, would have exactly the same practical effect as your proposal. However, that would require a specific amendment to the Act.

Question 56: What comments do you have about the requirements being considered for connection to the outdoors?

Comments

Unacceptable. You give no evidence of any health, safety or well-being (mental health) need to extend the current requirements. Also, you fail to grasp that any extension beyond the current requirements must merge inextricably with the housing amenity provisions of most District Plans. That is to be strictly avoided.

See the point made in 55 above about a separate Act providing for a range of consumer choice standards for housing.

Introducing changes to the Code and Compliance Documents

Question 57: What comments do you have about the factors that could influence the change process?

Comments

You are confusing 3 entirely separate issues -

- (1) The Code's Objectives could be usefully reviewed at no less than 10 year intervals, and preferably by a Parliamentary Select Committee. There is no good evidence that basic regulatory objectives need any more frequent review,
- (2) The technical specifications of regulatory requirements could be usefully reviewed every 5 years, just to ensure that they are precisely specified in terms of current technological knowledge.
- (3) Means of compliance should change, or be amended, only with significant developments in building technology. Previous experience with NZS 1900 demonstrated that an annual additions and amendments cycle, preferably on 1 January, was as much as the NZ building industry could easily cope with. Any greater frequency is simply confusing and difficult to cope with/

Question 58: What comments do you have about the support required for successful implementation?

Comments

The most critical issue always has been to give sufficient advance notice of when any significant change will come into force. At least 12 months notice has always been the most preferable, but it may be possible to reduce this to 6 months for minor and simple matters that can be handled by easy amendments to current contracts and/or building consents. In fact, if any Code requirement needs amendment any more quickly has been far too badly written in the first place (and so, most often, without sufficient consultation.)

DBH should closely examine the very careful consultative procedures employed by the ICC in America. While these are designed to suit progressive changes to a whole range of highly-prescriptive Code requirements, they are clearly robust, highly democratic, and very well respected.



Question 59: What comments do you have about staging changes to the Code and Compliance Documents?

Comments

What is being proposed here really should be abandoned and started again - on the basis of the BIC's 1990 report, and the existing (1992) Code. Taking that route would enable this Whole exercise to be completed in under 12 months, and possibly within 6 months. No actual or political harm could possibly come from admitting that this exercise was on the wrong path from Square One. We all make mistakes when we get enthused about reforming something that seems to need redesigning.

However, in this case, all you have done is establish that the 1992 Code does NOT need re-designing. In your enthusiasm you have only obscured the point that -

- (a) It DOES need the addition of "performance criteria" and that
- (b) It needs some editorial improvements to make it easier to understand and use.

Question 60: What comments do you have about introducing a regular review cycle for the Code?

Comments

See 58 above

Question 61: What comments do you have about how the building sector and other key interests could feed into a review cycle?

Comments

See the comment in 58 above about the American ICC procedure

Thank you for making a submission.