



Checksheet - Alternative Solutions

Compare with Compliance documents (eg Acceptable Solution / Verification Method)

Review the Application:

- Verify the Acceptable Solution used in comparison
- Verify part, section or figure of the Acceptable Solution
- Evaluate and compare the proposal with the Acceptable Solution
- Is the basis of the Alternative solution appropriate
- Is information provided adequate to base assessment on?

Departures for Acceptable Solution

- Is the acceptable solution referenced current? Check the date of compliance document used
- In what areas does the proposal depart from the current Acceptable solution
- Are the departures justified/legitimate
- Are the mitigating explanations for departure and compensating factors for approval convincing?

Compensating Factors for Departure

- Is there a need to compensate for the departure from the Acceptable Solution
- Has the need to compensate been considered and are arguments substantiated
- If departures have not been considered, or arguments substantiated does the applicant explain why
- Have detrimental effects on other Building Code clauses been identified and assessed completely?

Compliance with the Building Code

- Has the applicant demonstrated that the proposed Alternative Solution satisfies the provisions of the applicable New Zealand Building Code clauses
- Confirm B2 "Durability" compliance
- Confirm F2 "Hazardous Building Materials" compliance
- Check for non-compliance with other Building Code clauses
- Check the intended life of the building and compare with the intended life of the solution, product or system.

Compliance Schedule

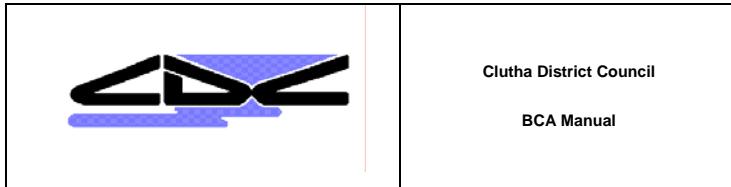
- Does the feature or system require a Compliance Schedule
- Do any testing, maintenance or inspection procedures need to be identified and/or included in the Compliance Schedule?

Additional or Special Maintenance

- Are there any special maintenance requirements necessary
- Are there any special inspection requirements necessary
- Is any special maintenance necessary to meet B2 "Durability requirements
- Are any specialists or additional inspections/reports necessary during construction?

Peer Review

- Consider whether a Peer Review is necessary



Doc
Ref TS-34 Alternative Solution checksheet

Date 29/05/2008

Comparison to Other Documents

Examples of Comparison Documents

- Determinations relating to another building
- Certification of a similar product/system
- Verification Method
- Technical publications
- Test results
- Information from the manufacturer
- Product literature
- Overseas approvals

Review the Application:

- The age of the comparison document
- Is the documentation current
- Is it relevant to the Alternative Solution proposal
- Is the system the same
- Determine the independence of the source documentation
- If relates to a product or system should it be certified
- Verify the part, section or figure of the relevant comparison document
- Are quoted publications fully identified and the documents attached
- If in doubt verify authenticity of documents
- Evaluate the proposal and compare to the quoted documents
- Is the basis of the Alternative Solution appropriate
- Is information provided adequate to base assessment on
- If computer software was used for modelling what are the limitations of the software
- Is the intended use of the software applicable to the situation
- Is the user considered competent at using the software?

Departures for Acceptable Solution

- In what areas does the proposal compare with current certification of a similar product or system, product or Determination
- Are the departures justified/legitimate
- Are the mitigating explanations for departure and compensating factors for approval convincing

Compensating Factors for Departure

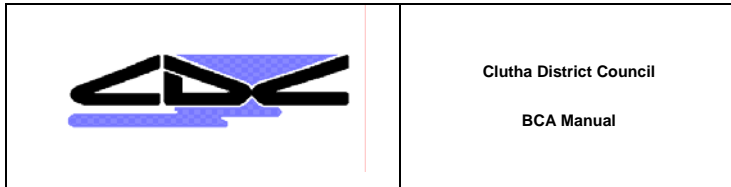
- Is there a need to compensate for the departure from the document
- Has the need to compensate been considered and are arguments substantiated
- If departures have not been considered, or arguments substantiated does the applicant explain why
- Have detrimental effects on other Building Code clauses been identified and assessed completely.

Applicant's Judgement in Reaching Conclusions

- Where the applicant has exercised judgement do arguments and/or evidence put forward support the judgement call
- Has the applicant given sufficient grounds for reaching conclusions
- Does the applicant have the skills/expertise to make judgement?

Compliance with the Building Code

- Has the applicant demonstrated that the proposed Alternative Solution satisfies the provisions of the applicable New Zealand Building Code clauses
- Confirm B2 "Durability" compliance
- Confirm F2 "Hazardous Building Materials" compliance
- Check for non-compliance with other Building Code clauses
- Check the intended life of the building and compare with the intended life of the solution, product or system.



Doc
Ref TS-34 Alternative Solution checksheet

Date 29/05/2008

Compliance Schedule

- Does the feature or system require a Compliance Schedule
- Do any testing, maintenance or inspection procedures need to be identified and/or included in the Compliance Schedule.

Additional or Special Maintenance

- Are there any special maintenance requirements necessary
- Are there any special inspection requirements necessary
- Is any special maintenance necessary to meet B2 "Durability" requirements
- Are any specialists or additional inspections/reports necessary during construction?

Peer Review

- To consider whether a Peer Review is necessary

Demonstrate or Comparison with In-Service History

Review the Application

- Verify the product or system for evaluation
- Evaluate and compare the proposal with the accepted solution
- Is information provided adequate to base assessment on
- Is the historical use information supported by interpretation by someone with recognised expertise
- Is there a verifying statement of expertise included from the provider
- Is the education, work history and ethics of the provider known
- If the historical record does not directly relate to the Building code compliance of the actual building proposed are satisfactory interpretations or extrapolations provided
- Has the historical record satisfactorily been applied to the Alternative Solution proposal
- Is the historical record relevant to New Zealand or local situations
- Does the proposed building work align completely with the historical uses that are claimed to have performed satisfactorily
- If not are the differences adequately accounted for
- Is the historical record sufficiently long enough to demonstrate the validity of the claims.

Expert Opinion

Review the Application

- Evaluate the expert opinion or Producer Statement
- Is there a verifying statement of expertise included from the provider
- Is the education, work history and ethics of the provider known
- If not known has knowledge and expertise in the field in question been sufficiently documented
- Does the provider have a proven track record in the particular field
- Can other professional in the field verify the providers expertise
- Is the statement provider considered impartial or compromised by interests from other sectors if there are interests have these been declared and adequately discounted.