

ACIMA

Submission to RIS for Residential Building Mandatory disclosure.

Background

ACIMA is the association of manufacturers of cellulose insulation we represent over 80% of cellulose insulation manufacturers in Australia.
Cellulose

Our members undertake the installation of many other types of insulation and are in many cases energy assessors. Our members have been involved in the housing industry for many years.

We are represented on standards committees in relation to insulation.

We have consulted with our members and advise that we support option 2 the simplified thermal assessment.

We believe that this simplified building assessment would be required to cover the following as a minimum.

Area of the residence

Floor area of the residence has considerable influence on the energy consumption with a direct relationship between area and energy usage.

Orientation of the residence.

Orientation is an essential component to the energy efficiency

Insulation in the ceiling

Inspectors should be trained to assess the existing insulation in the ceiling with simple formula and photographs that they can compare the types of insulation and the required levels to meet ABCA clause 13.1.

The assessors should also be trained to identify the quality of the insulation. as 5% of gaps can represent up to 50% of the assessed insulation value.

The assessment program to take into account the effect of downlights and fans on ceiling insulation. The effect to be measured on a thermal bridging path not on area not insulated. Adding additional insulation to compensate for missing insulation is not an option.

Insulation in the walls

Assessing insulation in the walls in existing houses is a difficult operation unless there is removal of electrical fittings or some external cladding.

It is proposed that this be measured by reference to the legislated requirement at the time that the house was built unless the owner can show that insulation has been added subsequently.

Insulation under the floor

This can be assessed visually by a trained assessor.

Where there is no reasonable access and no verified documentation that there is underfloor insulation it should be considered as no insulation.

The original first rate 4 is a basic data entry program which has the required information included. It has an easy data entry format and provides comparable results for all areas of the country with allowance for different climate zones.

The program could be easily updated to take into account the efficiency of the installed appliances that would be sold as part of the chattels of the home.

The report already has the ability to provide suggestions for improvement with an approximate “star” improvement from each action.

This should be mandatory in the report to the homeowner/purchaser. This will enable the owner to make informed decisions on the upgrades.

The assessor could update the report for a nominal charge on the presentation of evidence that the improvements had been implemented.

This could be photographic evidence if the homeowner had undertaken the improvement or invoice/certificate from a recognised installer.

Our comments on the other suggested options are

Option 3 Online self-assessment

Home owner’s knowledge of building materials, building structures and even orientation are limited.

Our experience would be that most home owners are not prepared to go into the ceiling to assess the level of insulation in fact is not advisable to encourage home owners to enter the ceiling space.

Once there they are not trained to make any judgement on the R value of the insulation or the way that it has be installed.

Home owners are unable to assess wall insulation, the efficiency of the heating and cooling appliances installed.

We believe an online self assessment would create false expectations in regard to the energy efficiency and would result in the system being misused and unreliable. The impression that all of the information had been recorded correctly would be misleading and counter productive.

Option 1

This is based on a full assessment utilizing the NABERS program or equivalent.

- **The program is complex and much of the information that is required for a full Analysis would not be available or would require difficult to access information . This will include Thickness of window glass, wall insulation.**
- **There is no allowance for the energy efficiency of the installed appliances such as heaters and hot water systems.**
- **The basis of the program is not open for scrutiny by peer groups it has been shown to provide contradictory results for the same house depending on how the data is entered.**
- **The source code is not available for review to see if it complies with the relevant available standards such as ASTM volume 04.06 Thermal insulation ; Building and environmental acoustics.**
- **The “Black Box” codes in the assessment tool does not help designers improve their design. Assessors are not provided with the advantages and disadvantages of the options they select in order to achieve a regulated star rating.**
- **The assessors would have to undergo significant additional training to undertake assessment of existing house stock.**
- **There is no allowance in the program for assessment of the “as built” features of the house including, air leakage, which would be found from “blower door” testing or poorly installed insulation which would be found from thermo-graphic testing. These tests would provide the required information on the true thermal efficiency performance of the residence. To provide an assessment that purports to provide an accurate assessment without undertaking these tests would be misleading.**

Option 4 Checklist Assessment

If the object of the program is to install efficient light globes, and water saving shower heads, then is an option. There are much more cost effective ways to make these changes to a household.

The real savings are made from changes to the building structure, and the installation of measures that reduce the uncontrolled movement of air.

These are beyond the ability of the untrained home owner to assess.

Implementing this option would be costly and have little effect on energy usage.

Option 5 Voluntary Uptake.

There is no way this will improve the efficiency of the existing housing stock.

The only way that the householder can be convinced to commit resources to energy saving is where they can achieve commercial return.

This commercial return comes from a well managed compulsory reporting of energy rating. The Canberra experience shows that potential home owners are prepared to pay for proven energy efficient homes.

If some houses have a rating and others do not it makes it difficult for potential buyers to compare properties.

Other voluntary schemes are ineffective even when they are well supported by good advertising programs and make exceptional economic sense.

Option 6 Mandatory reporting with an opt- out feature

Allowing any party to opt out of the mandatory reporting would result in a breakdown of the system.

There should be no option to opt out.

The rules for mandatory reporting should however be established to ensure that properties that will not benefit from energy improvement or where the costs of implementing the scheme would far outweigh any possible potential gain would not require mandatory reporting.

Whilst making exemptions is always fraught with danger as they will be used by the minority to avoid the scheme.

We believe that a 95% uptake with reasonable exemptions will be better than a scheme that is 100% compulsory with unreasonable burdens being placed on some members of the community.

Objection

Property is not used for habitation on a continual basis.

Only compulsory on buildings that are occupied more than 30% of the time.

Property is too small to benefit from energy improvement

Less than 80 square metres in area

Property is too remote to enable an assessor to attend

Greater than 50 km from a town larger than 2000 people does not require assessment.

Attached to a commercial business.

On a property larger than 100 acres

In both of these situations the decision to purchase is unlikely to be based on the energy efficiency of the premises. Updates to the property will be based on economic efficiency and other factors such as publicity.

Option 2 has the best economic payback, it is repeatable and reputable utilizing trained personnel to undertake the measurement.

It provides a measurable list of recommended improvements and has the capacity to be updated at minimal cost.

With reasonable exceptions so that it is not forced on properties that will not benefit from upgrades in efficiency or where the cost of assessing will be cost prohibitive relative to the potential gain, it is the preferred option.

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