

# Energy Company Obligation (ECO) U-Value Consultation Questionnaire – Feb 16



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## **Background**

The questions below relate to the consultation on requirements for over-writing U-values for cavity wall insulation measures which can be found on our website :

<https://www.ofgem.gov.uk/publications-and-updates/eco2-consultation-requirements-overwriting-u-values-cavity-wall-insulation-measures>

Our proposals consist of three main parts:

- a. introducing an upper limit for overwritten U-values,**
- b. stipulating the evidence that we expect to be in place when a U-value is overwritten and how we expect inputs to be collected, and**
- c. a regime to monitor these measures; we suggest three approaches for implementing monitoring.**

## **Notes For Completion**

Please complete all relevant sections of the document by selecting an answer for the question and then providing reasons/evidence for your response in the box provided. If you do not wish to answer a question please select 'N/A'. The questionnaire should be completed in typeface and returned via email to [eco.consultation@ofgem.gov.uk](mailto:eco.consultation@ofgem.gov.uk) by close of play **7 March 2016**.

## **Respondent Details**

Organisation Name:	National Blown Bead Association (NBBA) part of The British Plastics Association (BPF)
Completed By:	David Thompsett Technical Adviser to the EPS Group of BPF
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## 1. U-value Limit

**1.1** Do you agree that it is unreasonable for the U-value of a cavity wall measure to exceed 1.6 W/m<sup>2</sup>K in premises in the age bands B-K?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide details and supporting evidence for your response below.

The use of arbitrary U values based by construction year is a crude method. There will be a range of construction methods used and consequently a range of U values above and below those tabulated. There should be an intent to assess U values more accurately in an economic way

It is well known that changes to Part L in recent times do not result in changes to U values in the year of their introduction and can take 2 years or more to become effective.

**1.2** Do you agree that we should implement a limit of 1.6 W/m<sup>2</sup>K for overwritten U-values for cavity wall measures in premises in age bands B-K?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Dont Know
- N/A

Please provide details and supporting evidence for your response below.

The reasoning is a continuation of the answer to question 1.1 above. A detailed example submitted by one of our members is reproduced below.

One scenario would be for a property built between 1950-1975, where a brick & dense blockwork

pattern is used which would usually give off a U-Value between 1.6 - 1.83 W/m<sup>2</sup>K; therefore the cap of 1.6 would not benefit this type of construction.

Another scenario would be where a property is built from stone (which is far less thermally efficient than brick/block). Here the overall cavity can have a U-Value in excess of 2.00 W/m<sup>2</sup>K.

So to summarise; for these two construction types, having a U-Value cap of 1.6 W/m<sup>2</sup>K would lead to inaccurate carbon scores, as they would have a far more inefficient wall than is being reported.

## 2. Evidence Requirements

**2.1** Do you agree that relevant inputs should be collected for the U-value calculation via an intrusive inspection, using a borescope for example?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

A hole needs to be drilled to determine the width of the cavity so that the opportunity to further investigate the condition of the cavity should be taken; for example the condition of the cavity, whether clean or potentially blocked with debris. Such a visual inspection would also determine whether a partial fill product has been used during construction and to assess the condition of its fixing. Ideally a photo could be taken as an accurate record of the inspection.

However we understand that there are different types of borescope, some of which could provide this evidence being able to take clear photos but others which cannot produce worthwhile photographic evidence.

In theory the use of a borescope is a good idea but the quality of such equipment in use raises doubts as to its practicality.

**2.2** What types of evidence do you suggest would support the inputs used for a new U-value calculation?

Please provide reasons for your response below.

The type of evidence which one of our members requires is listed below:

1. Whilst on-site the surveyor will complete a 'U-Value Calculation data collection form'
2. They will document the construction type of the wall, along with taking the required photographs as supporting evidence in order to allow the qualified SAP Assessor to compile an accurate Pre and Post U-Value Calculation. The evidence requested on the form is as follows:
  - a. External Wall Leaf Material
    - i. A photo of the external wall is required
    - ii. A photo of the width of the external wall material is required
    - iii. If render is present, then a photo to show the depth
  - b. Cavity
    - i. A measuring device inserted into the cavity to show the cavity width
    - ii. If partial fill is present, then photographic evidence of this is required
  - c. Internal Wall Leaf Material
    - i. A photo of the internal wall is required, usually taken from the loft or via a meter box
    - ii. Photo of the plasterboard/plaster
  - d. Total Wall Thickness
    - i. A photo of a window or door reveal to show the total thickness of the wall

All of the above is documented on the U-Value Calculation data collection form, and all photos must be date stamped.

**2.3** Do you agree that the types of evidence listed in paragraph 2.5 are practical to provide?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Yes we agree that these will be practical to provide. The definition of "suitable" evidence should be outlined by Ofgem for the sake of clarity.

We believe that the evidence outlined in our answer to question 2.2. would suffice and has been followed since 2014 by one of our members. The only reservation might be that when taking evidence of the internal material, as it may not be possible to get in the loft to take a picture, hard to see within a meter box, or it is not possible to take a photo down the drill hole. In this instance the qualified OCDEA/SAP Assessor will decide based on all the known facts from the survey.

**2.4** Do you agree that the evidence listed in paragraph 2.5 is sufficient to support an overwritten U-value?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Yes we believe that this amount of evidence is sufficient to support an overwritten U-Value. It is clear that if a U-Value cannot be calculated due to insufficient evidence then the original assessor must collect more information

**2.5** Do you agree that the inputs for a U-value calculation should be collected by an independent person to increase confidence in the accuracy of overwritten U-values for CWI measures?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Yes we believe that an independent person should collect the data required for overwriting a U-Value, however they should only be independent from the qualified OCDEA, not necessarily independent to the company completing the U-Values.

So the company collecting the data for input, who is also looking to install the work, can also have a qualified OCDEA working for the company, just as long as the OCDEA doesn't collect the information themselves.

In order to boost confidence, the OCDEA will perform a number of site audits on the data provided to them to ensure that the evidence was correct. To do this they will randomly select a number of jobs every month which have had an overwritten U-Value, personally attend site and assess the property,

checking that the information provided to them in the first instance was correct.

**2.6** Do you agree that an independent person collecting the inputs for a U-value calculation would be practical to implement taking into consideration cost, time and customer journey implications?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Yes this would definitely be practical, because (so long as the independent person is not the OCDEA) it saves on the cost and time that it would take for the qualified OCDEA to personally visit each property requiring an overwritten U-Value. It also would not be feasible to send the OCDEA out to each job as not all jobs require it, and like usual these will be dotted around the country making journey times impossible.

The independent person collecting the data would attend a property in order to complete a technical survey and EPC in regards to cavity wall insulation for ECO. If when they are there, they assess the property to have been built Post 1983; they will then complete a U-Value Data Collection form and take the relevant evidence required. They would then send the U-Value request to the OCDEA who is office based, who would complete the U-Value Calculations based on the evidence provided and send the U-Value Calculations back to the independent person who collected the data. This process has been highly successful, and still continues to be.

In order to boost confidence, the OCDEA will perform a number of site audits on the data provided to them to ensure that the evidence was correct. To do this they will randomly select a number of jobs every month which have had an overwritten U-Value, personally attend site and assess the property, checking that the information provided to them in the first instance was correct.

### 3. Option 1 – Additional Monitoring Questions

**3.1** Do you agree that option 1 would increase confidence in the accuracy of overwritten U-values for CWI measures?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Thermabead do agree that additional monitoring questions are required, these should be set questions which will be implemented across the board, meaning every overwritten U-Value has been done so by an agreed process set out by Ofgem.

By having this it will allow the utilities to have the confidence in knowing that if an overwritten U-Value

has been completed, then this has been done so correctly, following a standardised template.

Thermabead do feel however that along with these additional monitoring questions, there should also be a set requirement for the evidence which is collated and given to a qualified OCDEA in order to complete a U-Value Calculation. In doing this, it would prevent any 'incorrect' overwritten U-Values being completed in the first place.

**3.2** Do you agree that option 1 would be practical to implement, taking into consideration cost and time implications?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Yes this would be practical, most companies should have all of the requirements in place already. The time and cost implications to incorporate a new process should not be excessive.

**3.3** Do you agree that a score monitoring agent is suitably qualified to answer the proposed questions relating to the U-value inputs?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

As the question doesn't state what Ofgem believe the qualification required to be for a 'score



monitoring agent', we have no opinion. However we believe that a score monitoring agent should be qualified to OCDEA/Sap assessor level.

**3.4** Do you agree that the proposed additional score monitoring questions are appropriate for identifying where overwritten U-values are incorrect?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Yes we agree that the questions proposed are appropriate, but again we reiterate that the evidence taken in the first instance is crucial. So as stated in question 3.1 Ofgem must implement a set process of evidence required to be taken by the independent person who is on site collecting the data. If the initial evidence is incorrect then the whole justification for overwriting is flawed.

**3.5** Are there any additional questions that you think would help to identify inaccuracies in overwritten U-value calculations?

Please provide reasons for your response below.

Yes; Ofgem must implement a set requirement of evidence required to be taken by the independent person who is on site collecting the data, which in turn is given to a qualified OCDEA in order to complete a U-Value Calculation. In doing this, it would prevent any 'incorrect' overwritten U-Values being completed in the first place.

**3.6** Can you please estimate how long you think it will take for these new questions to be implemented into your systems?

Please provide reasons for your response below.

Once Ofgem has provided a set of new questions, it could be a relatively short period to update procedures.

**3.7** Do you foresee any issues if the questions were implemented during a monitoring quarter?

- Yes
- No
- Don't Know
- N/A

Please provide reasons for your response below.

As always changes in procedures will require some type of co-existence period. We suggest that work already surveyed prior to the implementation should not require a new survey to have the new questions incorporated. There would need to be a period of grace for jobs installed under the old system, say 4 or 6 weeks to be excluded from a new monitoring process.

Alternatively projects surveyed prior to the implementation date could be excluded from a monitoring quarter completely.

## 4. Option 2 – Ongoing Monitoring

**4.1** Do you agree that option 2 would increase confidence in the accuracy of overwritten U-values for CWI measures?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Random reviews of 5% of work installed by a supplier would increase the confidence in overwritten U-Values but the proposal sounds as if the selection is made by the supplier and would not therefore be random.

**4.2** Do you agree that option 2 would be practical to implement, taking into consideration cost and time implications?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

See our reservation in question 4.1. The whole proposal needs to be random and reconsidered.

**4.3** If we were to implement a new monitoring regime in order to verify the accuracy of overwritten U-values for CWI measures, do you agree with the sample size and reporting timeframes outlined in paragraph 2.12?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

Members have different viewpoints on this question. One view finds it acceptable whilst another questions whether a 5% sample is sufficient

## 5. Option 3 – Audit Regime

**5.1** Do you agree that option 3 would increase confidence in the accuracy of overwritten U-values for CWI measures?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

It is felt that one off audits could be beneficial but they would necessarily incur a large cost and the audits would cover a significant time period. The aim of an audit must surely be to ensure that any errors in the process are eradicated whether they be random or systemic. In the latter case system faults could continue for longer than necessary: it is not indicated what the time period between audits might be.

**5.2** Do you agree that option 3 would be practical to implement taking into consideration cost and time implications?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree
- Don't Know
- N/A

Please provide reasons for your response below.

It is felt that there would be a significant burden on suppliers and be disruptive at the time of audit especially for smaller companies.

## 6. Additional Questions

**6.1** Do you have concerns with U-values being overwritten for other ECO measure types?

Please provide details and supporting evidence for your response below.

In principal no. The measures and monitoring should be proportional to the relevant measure.

**6.2** If you do not agree with any of proposals outlined, could you please suggest an alternative approach which you consider would provide assurance that U-values are being accurately overwritten for CWI measures?

Please provide details and supporting evidence for your response below.

We support option 1 which has been outlined above, however as previously stated additional monitoring questions are required, these should be set questions which will be implemented across the board, meaning every overwritten U-Value has been done so by an agreed process set out by Ofgem.

This it will allow the utilities to have the confidence in knowing that if an overwritten U-Value has been completed, then this has been done so correctly, following a standardised template.

We do feel that there should be set requirements for the evidence which is collated and given to a qualified OCDEA in order to complete a U-Value Calculation. This, it would prevent any 'incorrect' overwritten U-Values being completed in the first place.

**6.3** Do you agree that the proposals outlined above will enable U-values to continue to be overwritten for CWI measures where this is appropriate?

Please provide reasons for your response below.

We believe that the proposals outlined will improve the quality and consistency of all overwritten U-Values, along with strengthening the accountability of the qualified assessors; however we do feel that more needs to be implemented at the front end as opposed to post installation.