ORCalc
User Instructions

ver. 1.5

Version History

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Key changes to previous version

Page	Comment
Section 3	Updated 'Software Security' section to reflect changes in Central Register security protocols

Version QA

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ORCalc User Instructions

1. Introduction

This document is intended to assist users of the Government's software in producing Display Energy Certificates (DEC) and Advisory Reports (AR) in accordance with the Government's intentions, and to aid consistency between energy assessors, their assessments and the services they provide to occupiers.

Approved Accreditation Schemes should consider the issues addressed in this document when training energy assessors seeking accreditation to produce DECs and ARs.

The software must be used in conjunction with the latest Government guidance available from www.communities.gov.uk. Before attempting to produce a DEC or AR, energy assessors must make sure they understand the guidance, in particular:

- The technical guidance titled *The Government methodology for the production of Operational Ratings, Display Energy Certificates and Advisory Reports*
- The non-technical guidance titled *Improving the energy efficiency of our buildings; A guide to display energy certificates and Advisory Reports for public buildings*

Energy assessors requiring clarifications or additional guidance should contact their respective Accreditation Schemes in the first instance.

2. Getting Started

On starting ORCalc the new project dialog will be displayed in front of the main application:
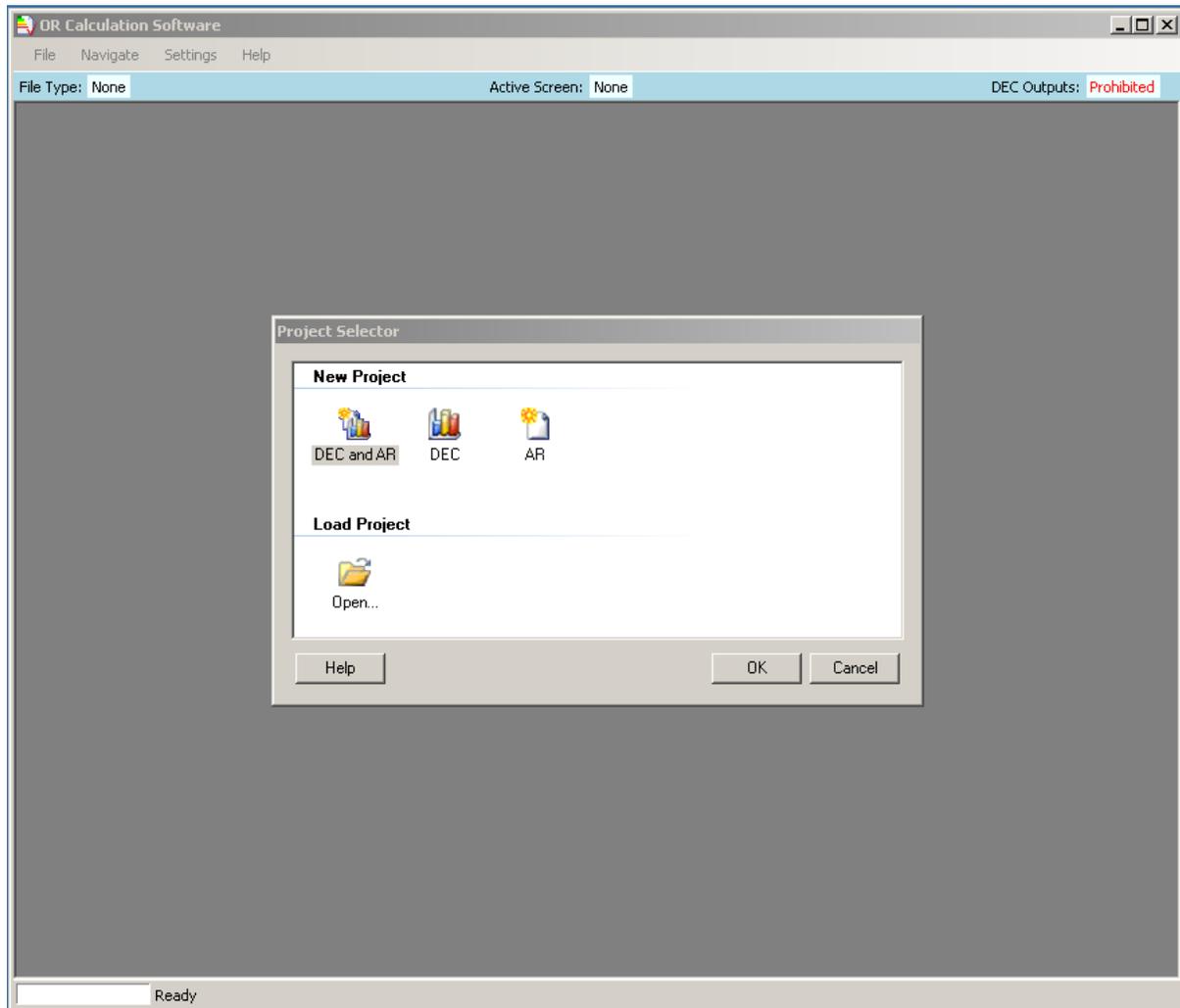
You may either load an existing project or start a new project:

- "DEC and AR" – A joint Display Energy Certificate and Advisory Report. One combined XML file will be produced for lodgement alongside a separate Certificate and Report.
- "DEC" – A single Display Energy Certificate and XML File.
- "AR" – A single Advisory Report and XML File.

Pressing Cancel will close the Project Selector and allow you to open a file from the 'Recent Files' list on the File menu.

3. Software Security

On the Initial Information page select the Country of registration and then enter your unique Assessor Number. This is issued by your Accreditation Scheme.
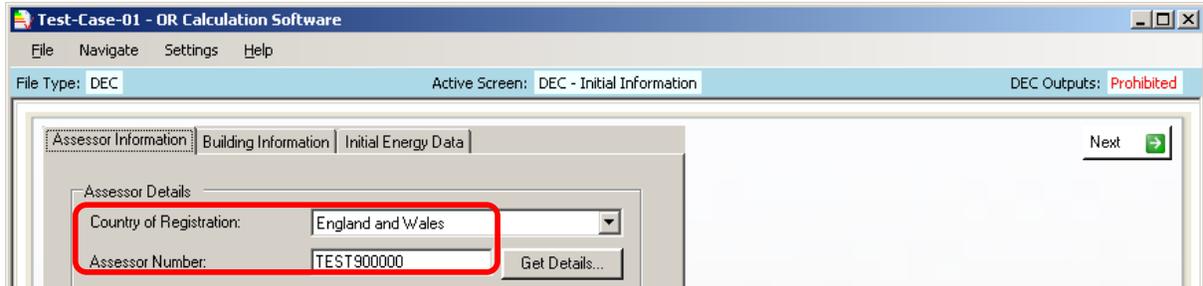
Next, press the "Get Details" button.
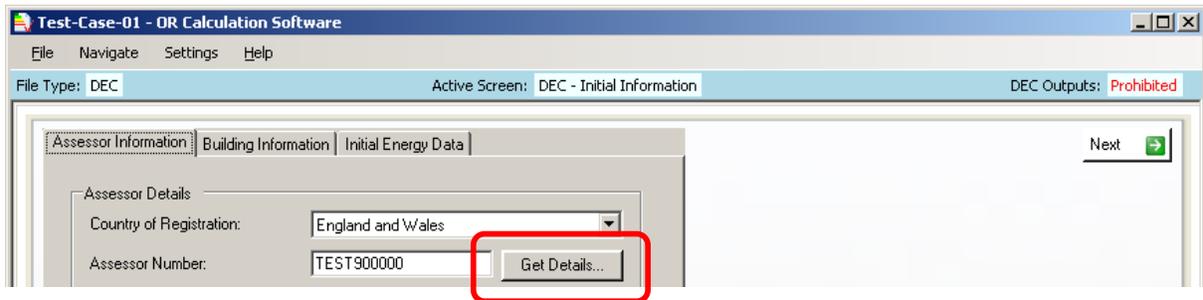
Once you have successfully retrieved your Assessor Details the following message is displayed.
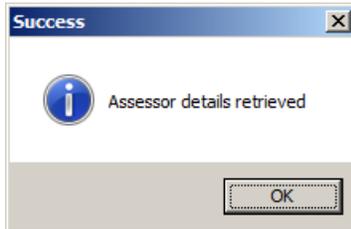
3.1 Assessor Details Retrieved

The retrieved Assessor details are displayed.

If your Assessor details are incorrect then please contact your Accreditation Scheme. In the short term it is possible to edit your Trading Name/Address by checking the Edit box.

Note: Your Assessor ID and other particulars are stored in your user settings to aid subsequent analysis.

You may press the "Get Details" button at anytime to update your details from the Central Register. Whilst in 'edit' mode the trading name and address may be overwritten by the user.

3.2 Activation Problems

Assessor Not Found

The following message is displayed for a number of reasons.
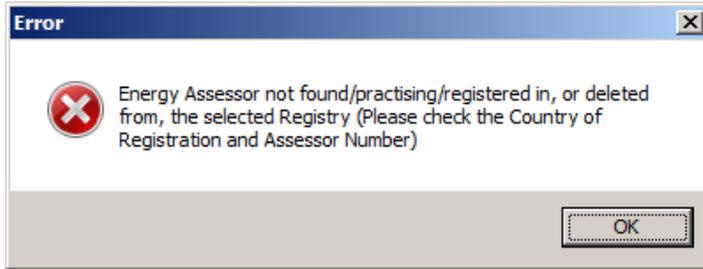
These are:

- You have mistyped the Assessor Number
- The Assessor Number is not found in the register because you have the wrong Country of Registration or the Assessor Number has been deleted from the Register.
- The Assessor Number provided is marked as not practising, i.e. struck-off or in-active.

Please check the details carefully and confirm your details with your Accreditation Scheme if necessary. Further information is available by checking the Assessor Number on the Non-Domestic register.

Connection Error

If you do not have a working Internet connection then you will receive the following message.
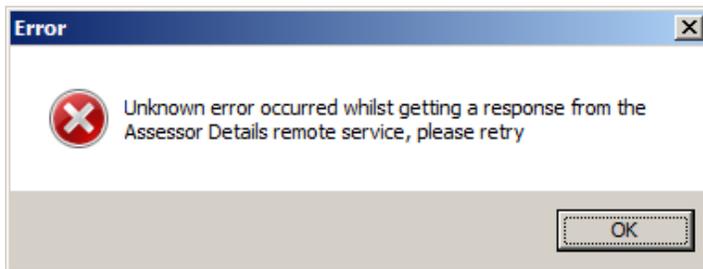
You will still be able to produce draft outputs but they will contain both a watermark and your details set to 'Unverified'.

The following sections present two techniques for resolving connection issues.

3.2.1 *Manual Connection Mode*

If you have a working Internet connection and the problem persists then please check with your IT Department since you may require Proxy Server settings. These can be set via the 'Settings' menu under 'Internet Connection'.
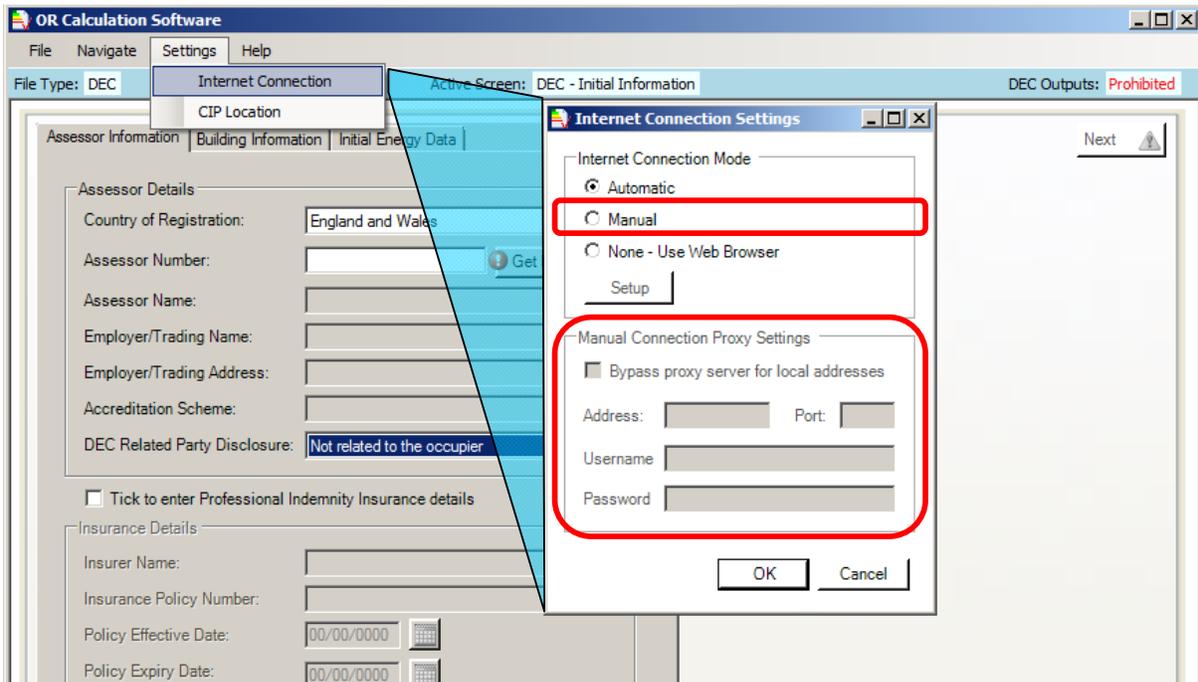
3.2.1 *Web Browser Connection Mode*

Should both Automatic and Manual connection modes fail a final failsafe mechanism is provided. This utilises your web browser to transmit the required information and receive a session password each time you produce an output. The 'Web Browser' connection mode is recommended only as a last resort.

Note: This mode allows the download of Assessor details for a single registry at a time, please select the appropriate Country of registration and enter your Assessor Number before starting the process.

Activate the one-time setup process by pressing the 'Setup' button and accept the warning:
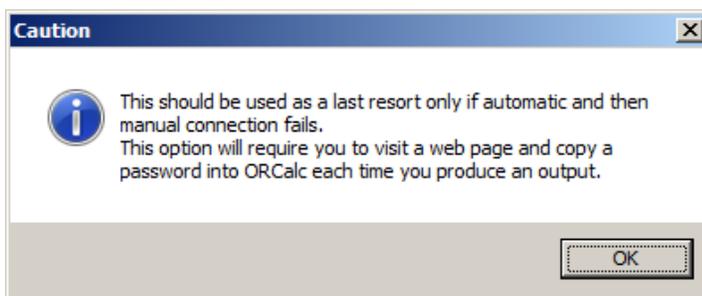
Next confirm your Assessor Number, if this is incorrect return to the 'Initial Information' page and update the Assessor Information tab:

OR Calculation Software

Do you want to continue with the following Assessor Number: BREC999989

Yes   No
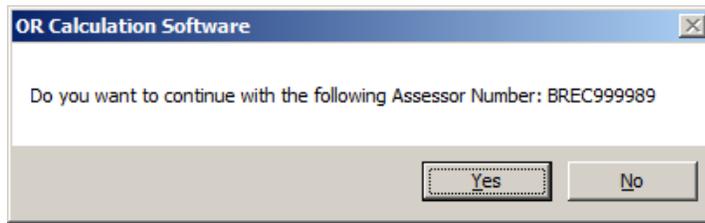
Selecting 'Yes' will display the following the 'Setup' window, work through the steps:

Setup Using Browser

As you are unable to connect to the internet using this application you must download your Assessor details in a special file by following the steps below.

STEP 1: Display web page to download the file

Click this link to display the Setup web page, then enter the text you see in the image to download the file

STEP 2: Locate the file

Once the file is downloaded, extracted and placed in a suitable folder click this button to locate the file and complete the process.

Select file

OK   Cancel

Step 1 will display the following page, enter the text in the image and press the retrieve button.

Non-Domestic Energy Performance Certificate Register - Microsoft Internet Explorer provided by AECOM

https://uat.ndepcregister.com/webActivationMode.html?| Bing

Non-Domestic Energy Performance Certificate Register

Landmark
Information Group

Home

A A A

Retrieve Details

Assessor ID   BREC999989
Software Tool DCLG, ORCalc, v3.6.2

Please enter the text that you see in the nearby image.
Send a different image

1234 5678

Retrieve Assessor Details

Accessibility | **Site Map** | **Information** | **Site Policy**

The Non-Domestic Energy Performance Certificate Register is operated by Landmark Information Group on behalf of the Government

Communities
and Local Government

Done   Internet | Protected Mode: Off   100%

If successful, a message will be displayed informing you that your assessor details can be downloaded. Clicking the link will display a download dialog box.
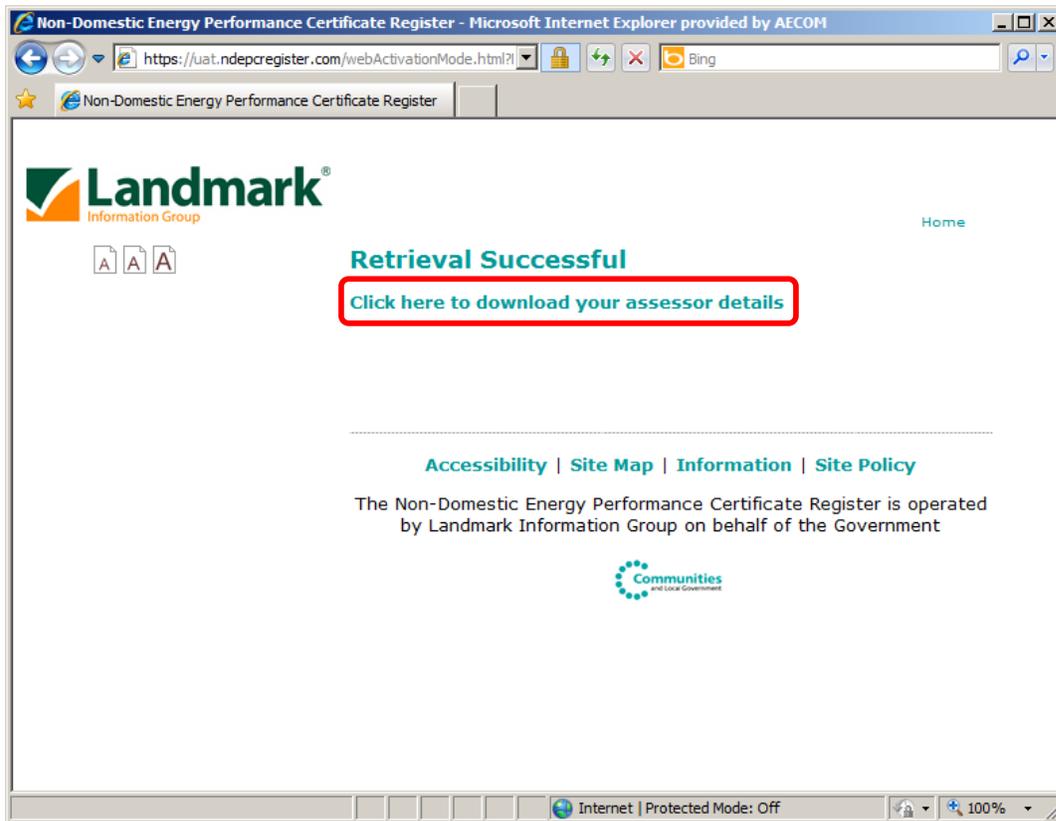
Click the Save button to download the file.
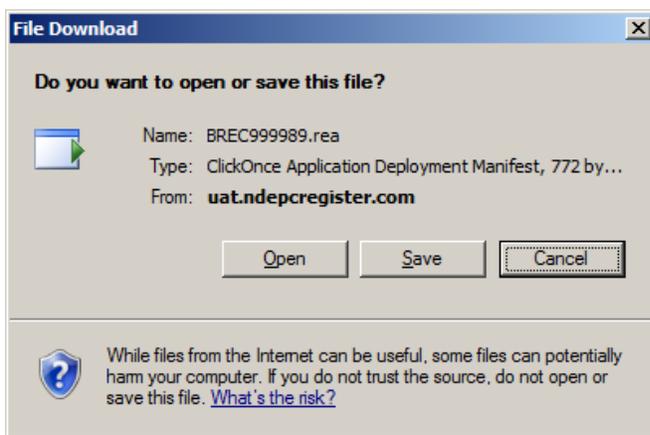
Return to the 'Setup' window to complete Step 2. Click the select file button and locate the assessor details file that has just been downloaded.

Clicking the ok button in the 'Setup' window will extract the assessor details from the downloaded file. The following confirmation message will be displayed:
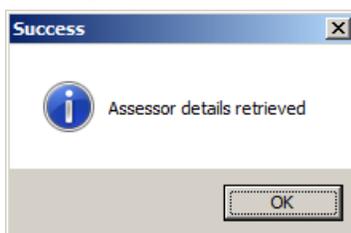
3.3 Creating Outputs

The outputs that are available depend on the type of file created/loaded and the file status as indicated in the information bar illustrated below.

Outputs will be disabled if:

- the user has not ticked the agreement found on the 'Initial Information' page under the 'Initial Energy Data' tab within then 'Certificate Type' region.
- the user has entered invalid 'Energy Consumption' data. The user should return to the 'Energy Consumption' page and address the highlighted issues. For more information, please see Section 5.2 'Fuel measurement periods and nominated date'.

**Note the Output status updates once changes to the active file have been confirmed by pressing the 'Next' button or selecting another screen via the 'Navigate' menu.**

Each of the **Draft** buttons will instantly create a draft document without the need to connect to the Internet.

Each of the **Verified** output buttons completes the following process:

- A fresh copy of your details will be fetched from the Central Register using your Assessor ID. These will be inserted into the Verified Outputs.

- Your assessor status will be checked.

- The software version will be checked.

If the 'Web Browser' connection mode is being used then you will be displayed a web page to retrieve the session password from (see the sub-section below for details).

If any of the checks fail then you will be notified and a Draft output produced. If all the checks are passed then the Verified Output (both the PDF and XML files) will be produced. Watermarked outputs will be displayed and may be saved as PDF files.

Note: From ORCalc v3.6.1 onwards the following verified outputs will contain these watermarks:

- Display Energy Certificates will be marked "Not for display"
- Advisory reports will be marked "Not for issue"

Non-watermarked outputs may only be retrieved following successful lodgement on the Central Register. The assessor may retrieve non-watermarked outputs from his/her Accreditation Scheme or from the Central Register. Implementation of either or both of these options is left to the Accreditation Schemes' discretion.

3.3.1 *Verified outputs in Web Browser Connection Mode*

In 'Web Browser' connection mode each set of verified outputs must be authorised with a session password. On attempting to produce an output you will be presented with the following web page, enter the text displayed in the image and press the 'Verify' button:

A password will be displayed; this should be copied to the dialog box:
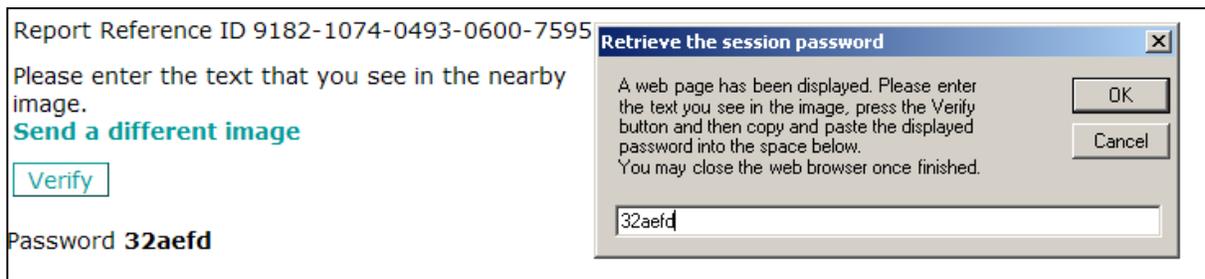
Verified watermarked outputs will then be produced as normal (see details above) by the software.

4. Using ORCalc

4.1 Downloading the software

It is intended that the software will be made available by the Register Operator to each Accreditation Scheme. Accreditation Scemes are responsible for disseminating the software to their energy assessors accredited to produce DECs and ARs.

The software has been released on a restricted access website here: https://www.ndepcregister.com/secure/softwareDownloads.html and https://www.epbniregisternd.com/secure/softwareDownloads.html. Access details (digital certificates) have been released to approved Accreditation Schemes only. Accreditation Schemes are responsible for the distribution of the relevant digital certificate to their assessor members.

Depending on their organisation's IT settings, energy assessors may need permission to download software packages from external sources. Energy assessors who encounter problems downloading the software should seek advice from their internal IT support department, or their Accreditation Scheme.

4.2 Installing the ORCalc software

Once the files have been downloaded, the software is installed by opening the file downloaded, which will require WINZIP or equivalent, and following the instructions in the Readme.txt file and the Installation Guide file.

Energy assessors will need full administrator's permission to their computer to successfully install the software. Energy assessors who encounter problems with the installation of the software should seek advice from their internal IT support, or their Accreditation Scheme.

4.3 Screen resolution

The software is best used with a screen resolution of 1024 by 768 pixels. Energy assessors using the software on lower screen resolutions should use the scroll bar to scroll down the screen and ensure they review the entire active screen before progressing to the next screen.

4.4 Software guidance

The software provides guidance comments at the bottom of most screens. Comments vary depending on which field is active within the screen. Energy assessors should ensure that they read and understand the comments before completing the active field and progressing.

4.5 Energy Assessor number

Each accredited energy assessor will be allocated a unique assessor number by their respective Accreditation Scheme. The format of this unique number is mandated by Government (i.e. four letters followed by six digits) and the software expects the format to be inputted correctly.

4.6   Related Party Disclosure

When producing a DEC the software requires the Assessor to select the most suitable Related Party Disclosure from the available list. A Related Party Disclosure is not required for an Advisory Report and the interface will disable the data entry control under these circumstances.

4.7   Obtaining the UPRN

For each occupied area that requires a DEC, a Unique Property Reference Number (UPRN) must be obtained from either the Government's Central Register or an approved Accreditation Scheme.

Accreditation Schemes issue digital certificates to their accredited energy assessors. Accredited energy assessors with a valid digital certificate can access the restricted area of the Central Register's website for England and Wales at www.ndepcregister.com and Northern Ireland at www.epbniregisternd.com.   The UPRN is obtained by providing details of the occupied area, e.g. full building address, floors occupied, etc.

Alternatively, some Accreditation Schemes may provide a UPRN search service direct to their accredited energy assessors.

In instances where a previously-lodged DEC is available, the previous DEC's UPRN may be valid and suitable for use on the current year's DEC. The energy assessor should note that changes in the sub-division of the building will trigger a change in UPRN, for example if the occupied area expands from two to four floors. Certain address changes will also trigger a change in UPRN, for example where an additional entrance, from a different street, is provided. If any doubts remain, the energy assessor must check the validity of the existing UPRN at www.ndepcregister.com or www.epbniregisternd.com

4.8   Entering dates in the software

Software users must use the calendar function provided to enter dates (e.g. when defining fuel measurement periods or selecting the nominated date). The software does not currently allow dates to be typed in.

4.9   Selecting a "main" benchmark

The software allows for a maximum of five building types, therefore five different benchmarks, to be specified where a building houses different activities.

The simplified degree day correction is based on the degree day data available in the Central Information Point (CIP) for the selected "main" benchmark / activity.

Guidance on how to select the "main" benchmark / activity is available in the Government's technical guidance document titled *The Government methodology for the production of Operational Ratings, Display Energy Certificates and Advisory Reports*.

4.10   Generating the Advisory Report

When producing the Advisory Report, some questions (e.g. Fabric section: question 2; HVAC section: question 4; Alternative energy section: question 1) offer a choice of actual improvement recommendations to choose from.

The proposed recommendations are optional. If the energy assessor deems that none of the proposed recommendations are applicable to the building under assessment, then no recommendation should be selected and, where available, the option "none" should be selected.

The Advisory Report generation process allows the energy assessor to insert additional bespoke recommendations that are specific to the circumstances of the building being assessed.

4.11   DEC & Advisory Report entries

There is some overlap between the data input required for the DEC and the Advisory Report software modules (e.g. in the Advisory Report generation the data required under the "Building Information" section overlaps with the data required for the DEC).

The software allows data input in the DEC module to be copied across in the Advisory Report module. This may be done by opening a DEC file that has been saved previously.

If the energy assessor does not use this functionality of the software, then the energy assessor must ensure that the overlapping data input is identical between the DEC and Advisory Report modules.

4.12 Producing DECs & Advisory Reports

By default the software produces DECs and Advisory Reports with a "draft" watermark. Accredited energy assessors wishing to produce a "verified" DEC or Advisory Report must enter their Assessor Number (see Section 3: Software Security). Note that "verified" outputs are watermarked. Non-watermarked outputs may only be retrieved from the Central Register.

4.13 Producing DECs in Welsh

For buildings located in Wales, the software includes an option to generate DECs in Welsh. On the final screen, where an image of the DEC is shown, the energy assessor should select the option "Welsh language DEC" to generate a DEC in Welsh. The Welsh language DEC is a 2-page PDF that includes both the Welsh and English versions of the certificate.

This option is not available in Advisory Report module of the software. The Advisory Report is always generated in English.

4.14 Producing DECs for Northern Ireland

Northern Ireland adopted the same Operational Rating approach as England and Wales to transpose the requirements of the Energy Performance of Building Directive to display Energy Performance Certificates.

The software may be used to generate DECs for buildings located in Northern Ireland. For buildings with a postcode starting "BT", the software generates DECs marked "Northern Ireland" instead of "HM Government". The Advisory Reports generated have the same format as those Advisory Reports generated for buildings in England and Wales.

4.15 Extended hours

Energy assessors wishing to use the extended hours functionality of the software should:

- Check the maximum allowed extended hours. This is displayed in the comments section at the bottom of the relevant screen.
- Ensure that they are in possession of the required supporting evidence to allow a claim for extended hours of use. Details of the evidence required are provided in the technical guidance document.

4.16 Assessment periods & degree days data

The Central Information Point (CIP) is updated monthly with additional degree day data for the previous month to ensure the relevant adjustments can be made for weather conditions.

This means that if the DEC is produced in month M, the assessment period for the DEC should end in month M − 1 (the previous month) to ensure sufficient degree day data is available, and adequate corrections can be made.

4.17 Updating the CIP

When calculating the Operational Rating (OR), the software checks that the Central Information Point (CIP) includes data (e.g. degree days) that are relevant to the specified DEC assessment period. Any mismatch between the CIP data (e.g. degree day data up to January 2008) and the DEC assessment period (e.g. March 2007 to March 2008) will generate an error message and prompt the user to download the latest CIP file available. ORCalc Version 3 onwards requires the CIP file to be in the XML format not MS Access (*.mdb).

The CIP is updated monthly with degree day data. CIP downloads are available from the restricted access website www.ndepcregister.com or www.epbniregisternd.com. Accredited energy assessors should log on

to the website regularly, download the latest CIP XML data file, and save it on their local drive. Once the CIP file has been saved locally, the software user needs to direct the software to the location of the latest CIP file via the software menu using "Settings" / "Set CIP", and then browsing to the CIP file location.

4.18 Importing a Report

Energy assessors wishing to combine a DEC and an Advisory Report ORCalc file may use the 'Import Report' function. The assessor should open a file (File Menu > Open) and then select the 'Import Report' menu item (File Menu > Import [merge in] Report). If the opened file is a DEC then the assessor will be able to import an Advisory Report, and vice versa. Having imported the file, ORCalc will perform some basic checks, although the assessor is responsible for checking through the imported data.

Note: DEC data will take precedence over Advisory Report data where data is duplicated (for example the Advisory Report total usable floor area will be replaced with the values from the DEC).

4.19 Exporting a Report

Energy assessor's wishing to extract either a DEC or an Advisory Report from a combined ORCalc file may use the 'Export Report' function. The assessor should open a combined ORCalc file (File Menu > Open) and then select the 'Export Report' menu item (File Menu > Export [split out] Report). The assessor may select either a DEC or an Advisory Report. Having exported the file, the assessor is responsible for checking through the exported data. Once the export is complete ORCalc will prompt 'Would you like to open the exported file now?', select yes to view the file. Note you may be prompted to save your current data first.

Notes:
- You may be prompted to save your current data first.
- The export report function is only available for combined ORCalc files.

5. Other issues

5.1 Disseminating the Full Technical Table

Energy assessors are to make the full technical table available to occupiers at the same time as a DEC is provided, i.e. after the DEC has been lodged successfully on the Central Register. As a minimum requirement, the full technical table should be provided as an electronic file (in PDF format). The occupier will decide whether / how the full technical table should be released to the public.

5.2 Fuel measurement periods & nominated date

While checks are built into the software, energy assessors must ensure they specify a fuel measurement periods, an assessment period, and a nominated date that are defined in accordance with the guidance provided.

Energy assessors must be mindful that the quality of the energy consumption data obtained from building occupiers may affect the DEC rating.

5.3 Previous years' DEC data

Where appropriate, the Operational Rating and the carbon dioxide (CO_2) emissions for the previous two years should be shown on the current year's DEC. The accredited energy assessor should make sure that the data shown for the previous two years is relevant and suitable i.e.:

(i)   The previous years' data refer to the same occupied space, the same occupier, and the same building use as the current year's DEC.
(ii)   The previous years' data are obtained from previously lodged DEC and associated XML files.

Where the previous year's DEC was a "default" DEC, the default data should be shown on the current year's DEC.

6. Energy Assessors' & Accreditation Schemes' duties

The Government's OR calculation software package automatically performs a number of minimum quality checks to ensure satisfactory data input by software users.

It is ultimately the accredited energy assessor's and the Accreditation Scheme's responsibilities (as producer, quality assuror and lodger of software outputs) to ensure that the information input into the software is in line with the Government-approved OR calculation methodology (see references in Section 1: Introduction above).