Guide to Lodging EPCs in Scotland

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Contents

1   Introduction

This manual explains how to prepare and lodge on-construction Energy Performance Certificates (EPCs) for new dwellings in Scotland using JPA Designer.

The manual describes how to:

- prepare JPA Designer for lodging EPCs;

- lodge EPCs for dwellings using SAP 2009 (SAP 9.90);

- lodge EPCs for dwellings where the original SAP calculation was carried out using SAP 2005 (SAP 9.81).

- identify and resolve common causes of lodgement failure.

This manual is not a guide to carrying out SAP calculations using JPA Designer: for that, you should consult the JPA Designer manual[1], the SAP 2009 document[2] and the SAP conventions document[3].

Lodging EPCs is, by and large, a straightforward process; however, setting up the software for the first time and making your first lodgement can take some time. We therefore recommend that you familiarise yourself with the process in good time, and don't set out to lodge your first EPC at 4:00 pm on a Friday afternoon.

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[1] http://www.techlit.co.uk/downloads/manual501.pdf
[2] http://www.bre.co.uk/filelibrary/SAP/2009/SAP-2009_9-90.pdf
[3] http://www.bre.co.uk/filelibrary/SAP/2009/SAP_Conventions.pdf

2   Setting up JPA Designer

2.1   Initial requirements

Before you can issue an EPC for a dwelling you must:

- have installed JPA Designer 6.01a1 or later and have a valid licence for the software.

- make sure your computer has an active internet connection so it can upload the EPC submission to the register.

- be registered with an accreditation scheme and enter your accreditation details into JPA Designer (section 2.2.

2.2   Entering your accreditation details

Before you can issue an EPC you must enter your accreditation scheme details into JPA Designer using the **Energy Assessor Accreditation Details** dialogue (Figure 2.1).
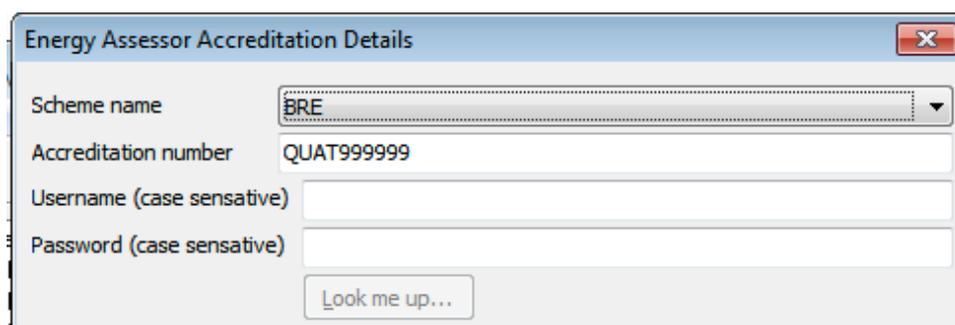

Figure 2.1: Energy Assessor Accreditation Details BRE scheme

The **Energy Assessor Accreditation Details** dialogue holds the following details:

- **Scheme name**: The name of the On Construction EPC accreditation scheme of which you are a member.

- **Accreditation number**: Your unique accreditation number within the scheme.

- **Contact details**: Your contact details, which must match those held on the register.

- **Default related party disclosure**: The regulations regarding EPCs require an assessor to declare any financial or family relationship with the party who is building or selling the dwelling. You would have to make a disclosure if, for example, you are issuing EPCs for houses built and sold by your employer, or for a house built by a member of your immediate family.

  *You can change the default related party disclosure for individual calculations using the **Project Information** dialogue within the SAP calculation.*

- Insurance details: The details of your public indemnity insurance policy.

To update your accreditation details:

1. On the EPC menu select **Energy Assessor accreditation details**. The **Energy Assessor Accreditation Details** dialogue opens.

2. From the **Scheme name** list select the one with which you are registered.

3. Enter the **Accreditation number**.

4. Leave the username and password fields blank.

5. Enter the contact details (*Company* down to *web address*).

   These details must match those held on the register.

6. Select a related party disclosure from the **Default related party disclosure** drop-down.

7. Enter the Insurance details (*Insurance company name*, *policy number*, *effective* and *expiry* dates and *PI limit*).

8. Click **OK** to close the dialogue and save the data.

3 Lodging an EPC

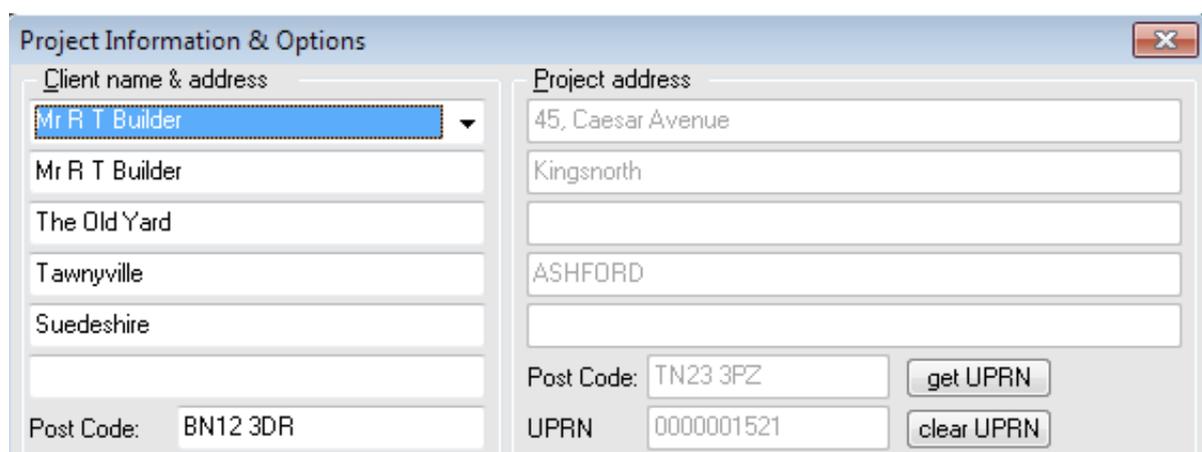## 3.1 An overview of the lodgement process

The main steps for lodging an EPC are:

1. Revise the *as designed* SAP calculation to take account of any changes made during construction and to include the assessed air permeability.

2. Obtain the *UPRN* (*Unique Property Reference Number) for the dwelling.

3. Upload the EPC data to the register.

4. Retrieve the lodged EPC from the register and issue it to your client.

3.2 Obtaining the UPRN for the dwelling

The UPRN is the unique reference number which identifies each dwelling on the Landmark database. The UPRN has to be included in every EPC lodgement. In JPA Designer the UPRN is obtained through the **Project Information** dialogue (Figure 3.1).

Figure 3.1: Project address

To look up a dwelling's UPRN:

1. Open the SAP calculation for the dwelling.

2. Open the **Project Information** dialogue from the menu bar or tool bar.

3. Make sure the post code for the dwelling has been entered in the **Post Code** box of the **Project address** section.

4. Click the **get UPRN** button. The **UPRN Address** dialogue opens, with the post code from the **Project Information** dialogue in the **Postcode** box (Figure 3.2).

5. Click the **Look-up** button. The software displays the addresses which match that post code.

6. Click on the address of the dwelling for which you intend to produce an EPC, then click the **Look-up UPRN** button. The software requests the UPRN from the register and displays it.

   If there is no matching address it may well be that the dwelling does not yet have a UPRN. In that case you should contact the register and request a UPRN for the dwelling.

7. If the address is correct click **Use this UPRN & address**. The **UPRN Address** dialogue closes, leaving the **Project Information** dialogue with the address and UPRN.

Once you have selected the UPRN the address details will be greyed out and you will not be able to edit them. If you need to change the address you must first click **Clear UPRN**.
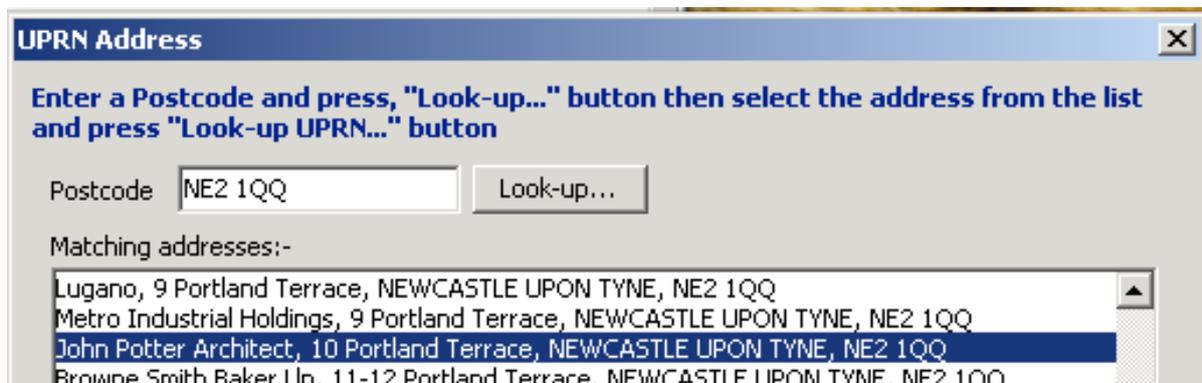

Figure 3.2: Looking up the UPRN

3.3   The lodgement process

An EPC for a dwelling must be lodged to the register. You should only lodge an EPC once the final *as-built* SAP calculation has been carried out. The following instructions presume you have finalised the calculation and have obtained the UPRN for the dwelling. To lodge an EPC with Landmark:

1. Save the project file.

2. From the **Project Manager** menu bar select **EPC**>**Request V17 EPC for this dwelling**.

3. The software displays an information dialogue: *Submitting a request for an EPC will cause your account to be charged. Are you sure you want to continue?* To continue in order to issue an EPC click **Yes**.

4. JPA Designer now collates the data required by the register It informs you how much data there is to upload. Click **OK** to start the upload.

5. JPA Designer notifies you when the submission is complete and whether or not it has been successful.

If the lodgement was successful you can now obtain the final EPC for distribution (section 3.4). If it failed you need to identify the problem in order to attempt the lodgement again (chapter 5).
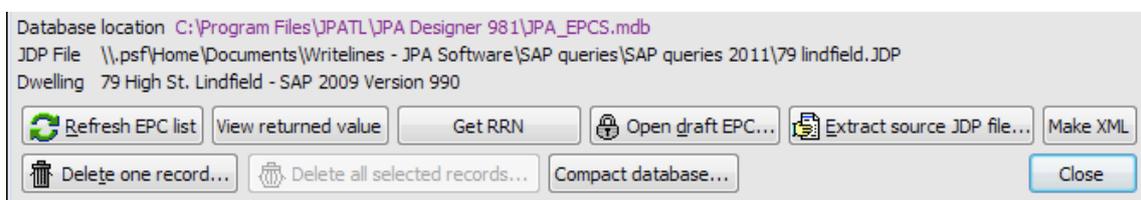
3.4   Issuing EPCs

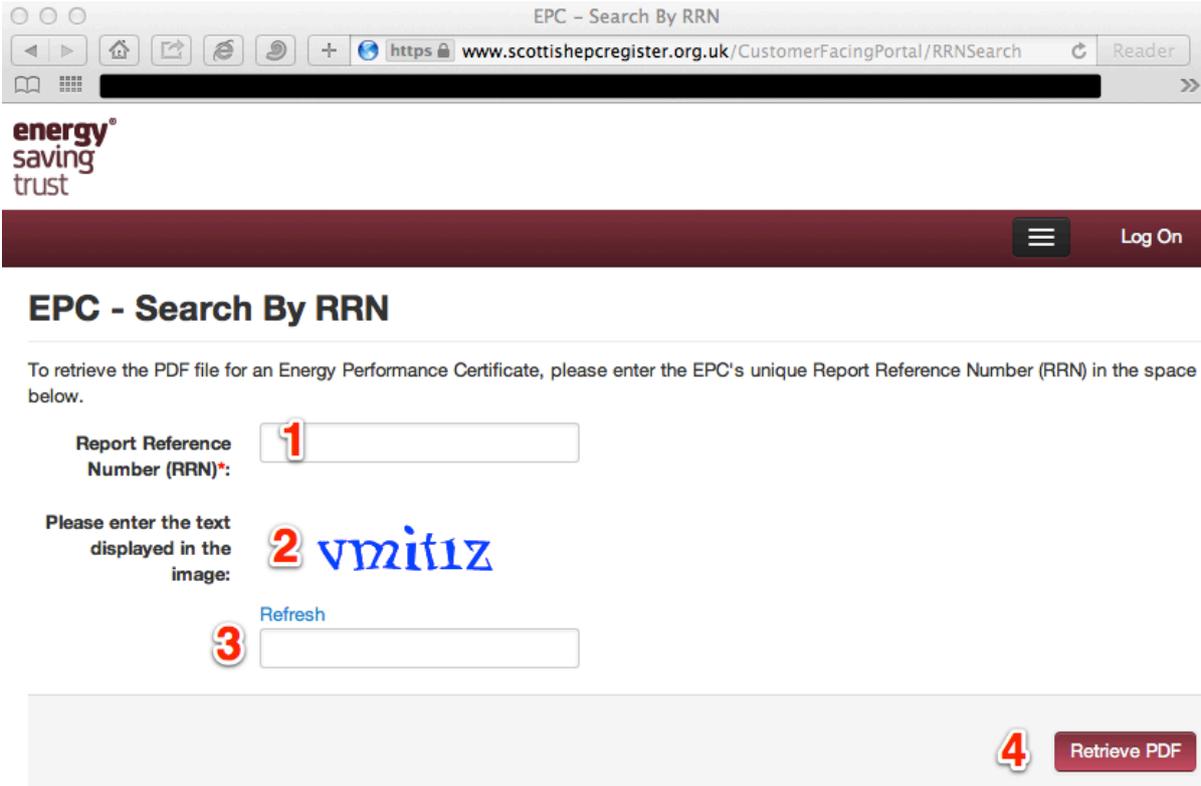Figure 3.3: The Get RRN button at the bottom of the EPC Request Management dialogue

Once the EPC has been lodged it can be retrieved from the register as a PDF for issue to the client and to building control. In order to download the EPC you will need to get the *RRN* (Report Reference Number – the unique reference number for the lodgement) from JPA Designer.

To retrive an EPC:

1. In the JPA Designer **Project Manager** window select **EPC**>**EPC Request Management** from the menu bar.

2. In the **EPC Request Management** dialogue select the lodgement by clicking on the row in the **EPC Submissions** table.

   This makes the first row of buttons active.

3. Click the **Get RRN** button (Figure 3.3). JPA Designer copies the RRN to the Windows clipboard.

4. In your web browser go to the register web site[1]

5. Paste the RRN from the clipboard into the box labelled **Report reference number** (item 1 in Figure 3.4).

6. Now type the distorted numbers shown in the image (item 2 in Figure 3.4) into the box immediately below (item 3).

   This is a security check to prevent computer programs logging into the system.

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[1]https://www.scottishepcregister.org.uk/CustomerFacingPortal/RRNSearch

Figure 3.4: Retrieving an EPC from the register

7. Click **Retrieve report** (item 4 in Figure 3.4). You will now be able to download the EPC in PDF format.

   To open and the EPC you will need Adobe Reader or a similar program.

4   EPCs for dwellings assessed with SAP 9.81

EPCs for all new dwellings have to be lodged using SAP 2009 (SAP 9.90), even if the original building warrant calculations were carried out using SAP 2005 (SAP 9.81). This means that the final submission for compliance and the EPC have to be produced separately:

- The TER/DER outputs and the Regulations checklist must be produced from the SAP 9.81 calculation (revised, if necessary to take account of any changes since the design stage). Regulations compliance will be based on these results.

- The EPC must be lodged from a SAP 9.90 calculation for the dwelling.

The simplest way of producing a SAP 9.90 calculation for the dwelling in JPA Designer is to create a SAP 9.90 copy of the original calculation (see section 4.1 for instructions). Of course, the SAP 9.90 TER and DER figures will show considerably worse performance than the comparable SAP 9.81 figures, and may even show a fail. However, the SAP 9.90 TER/DER are **not** used for compliance: the SAP 9.90 calculation is used **only** for producing the EPC.

4.1   Converting SAP 9.81 to SAP 9.90

To convert a SAP 9.81 calculation to SAP 9.90 in order to lodge an EPC:

1. Select the SAP 9.81 calculation in the **Project Manager** window by clicking on it *once*.

2. From the **Edit** menu select **Copy SAP 9.8x (SAP 2005) dwelling to SAP 9.90 (SAP 2009) dwelling**. This creates a SAP 9.90 version of the dwelling, but leaves the original calculation intact.

3. Open the new SAP 2009 calculation and check the data items listed in section 4.2.

4. Return to **Project Manager** and save the project.

You can now obtain the UPRN for the dwelling (section 3.2) and then lodge the EPC (section 3.3).

4.2   Data to check

You must check the following items for all converted calculations

- *Thermal bridging*: if the thermal bridging in the SAP 2005 calculation is set to *accredited construction details* it should become a user-defined y-value of 0.08 with the calculation reference *ACD, 2006 regulations* (Figure 4.1). There is no need to change settings if thermal bridging is set to *Not accredited construction details* or a manually calculated Htb value.

- *Thermal mass*: where thermal mass was not defined in the SAP calculation it should be set to $250\,kJ/m^2K$ (medium). To do that in JPA Designer:

  1. In the **Walls, roofs & floors** tab tick **User defined Thermal Mass Parameter** (Figure 4.1.
  2. Set the **Thermal mass** drop-down to **250**.

- *Air pressure test*: a design value for a SAP 2005 dwelling which is not pressure tested should remain a design value for SAP 2009, even though this is not a standard condition.

- *Appendix Q*: any new technologies entered using the Appendix Q procedure should be left as they are.

- *Community heating:* where there are two boilers feeding one community heating scheme, or a boiler and a CHP unit the systems must be re-entered as two heat sources with the relevant characteristics: see section 22.3.6 of the JPA Designer manual.

- *Other items*: other items of data which are not set in the SAP 2005 calculation can be ignored in the SAP 2009 calculation.

Figure 4.1: Setting the thermal bridging and thermal mass

There have been other changes in the EPC lodgement data set which affect mid floor and top floor flats (but not ground floor flats): you must now indicate if a flat has another occupancy beneath it and the floor is therefore a *party floor*. As this was not a requirement under SAP 2006 you must add a party floor element to the SAP 2009 calculation:

1. In the **Dimensions** tab tick the **party** box next to the storey which has the area assigned (e.g. first floor).

2. In the **Walls roofs & floors** tab create a new element:

- Set the **Element** type to Party floor;
- Pick a construction to set a heat capacity;
- Set the **Storey** to the appropriate number;
- Assign a **U-value** of zero;
- Set the **Area** to the same size as the storey area in the **Dimensions** tab;
- Click **OK**.

Note that this makes it important to enter the floor area of the flat against the correct row in the **Dimensions** tab.

5 Lodgement problems

This section describes how to identify and resolve data problems which result in EPC lodgements failing.

5.1 Identifying the cause of a failed lodgement

Sometimes an EPC submission is unsuccessful and the EPC fails to lodge with the register. This usually happens because of inconsistencies in the data, which are caught by Landmark's checking systems. If a lodgement fails you can view the failure report from Landmark in JPA Designer and correct the problem before trying the lodgement again.
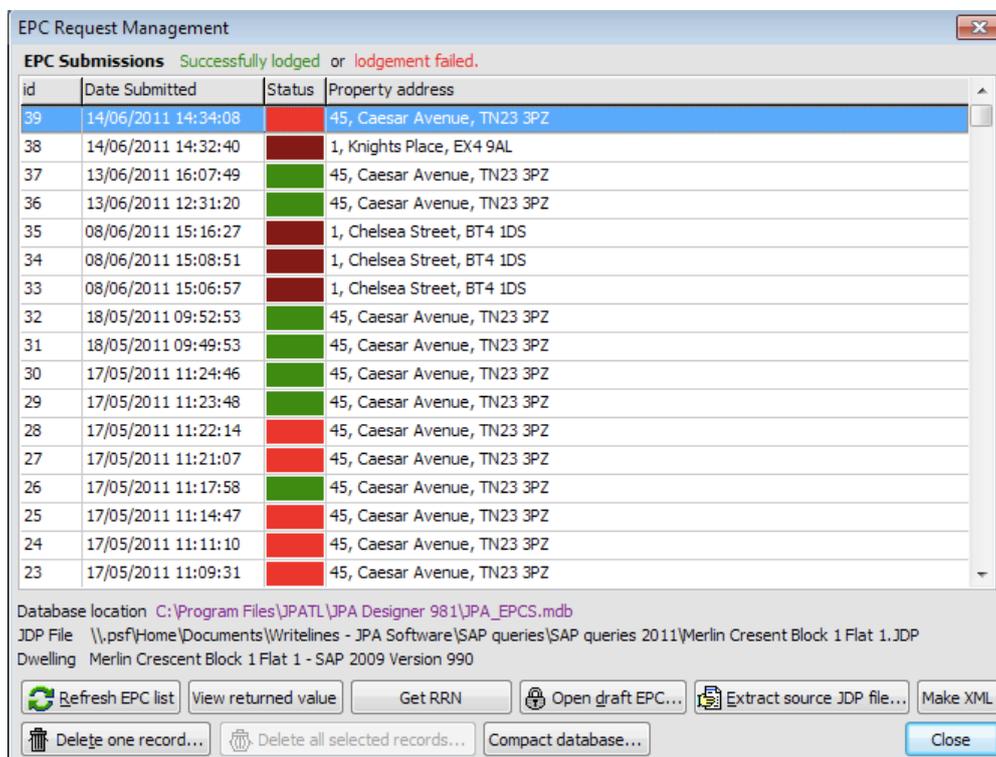

Figure 5.1: The EPC Request Management dialogue

To view the report from a failed lodgement:

1. Open the **EPC Request Management** dialogue (Figure 5.1).

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2. Click once on the failed lodgement, so it is highlighted.

3. Click **View returned value**. The **Lodgement Return Values** dialogue opens (Figure 5.2).

4. Scroll down the **Return XML** area to the *Exception List* section. The cause of the failure will be given here.

5. If the cause of failure is not clear (and the codes are not always helpful), use the **Copy to clipboard** button to copy the report. You can then paste it directly into an email and send it to your accreditation scheme or JPA TL for advice.
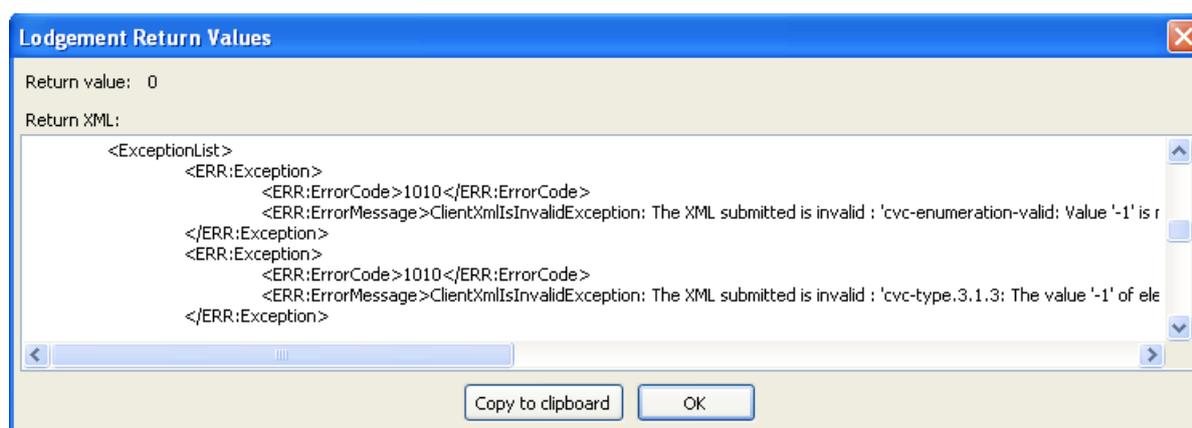

Figure 5.2: Viewing the exception list for a failed lodgement

5.2   Common causes of failure

Lodgements generally fail because of mismatches between different items of data. The commonest ones are:

- *Dates*: the application date is found at the bottom of the **Dimensions** tab. This must not be:

  - in the future;
  - more than two years in the past (this is more likely to be an issue with calculations converted from SAP 2005 to SAP 2009 than with calculations starting in SAP 2009);
  - earlier than the date on which you were registered as an assessor.

- *Dwelling type and dwelling dimensions:* if the dwelling type has been set as a mid-floor or top-floor flat or maisonette, the dwelling floor area in the **Dimensions** tab must be set to an appropriate story. Setting a mid-floor flat, but entering the floor area against *Ground floor* will result in a failure.

- *Dwelling type and elements:* a house must have a *ground floor* element in the **Walls, roofs & floors** tab. Defining that floor element as a *floor* rather than *ground floor* will result in a failure.

- *Flats and party floors*: Mid-floor and top-floor flats must now be marked as *party floors* in the **Dimensions** tab. They must then have a party floor element defined in the **Walls, roofs & floors** tab (for instructions see section 4.2).

5.3   Getting help

If you are unable to identify the cause of a failed lodgement you can ask the advice of your accreditation scheme, or contact us at JPA TL (email enquiries only to: support@techlit.co.uk).

When you are making an enquiry please ensure:

1. You are using the latest version of the program. You can get your version number by going to **About** on the **Help** menu, and can then compare that with the version number shown on the home page of our web site[1]. You can find more information on this in section 2.5 of the JPA Designer User Manual[2].

2. You have followed the recommendations for resolving problems in this manual, and have reviewed the common causes of failure (section 5.2).

3. In your email:

4. tell us which accreditation scheme you are with;

5. paste the **Lodgement Return Values** into the *body* of the email (there is no need to put it in a separate document).

6. attach the JPA Designer project file for the calculation. That will have the extension **JDP**.

5.4   Further information

Information about JPA Designer may be found at http://www.techlit.co.uk.

Technical support by email only to support@techlit.co.uk.

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[1]http://www.techlit.co.uk
[2]http://www.techlit.co.uk/downloads/manual501.pdf