



Calculator instructions and guidance notes Humidifier Selector

Notes on use of Humidifier selector

Enter your data in the white squares and the calculator will produce the results from the air system model. The results show calculated values for the outside air humidity ratio, the required room humidity ratio, cooling across the humidifier, humidifier load and other key values.

Normally, the worst case outside air condition is used – lowest winter temperature and its associated humidity value. It would be normal, under these conditions, for the minimum amount of fresh air to be used as defined by the minimum fresh air setting.

If input data or the calculated values are out of the normal expected range, the cell will turn red to highlight a potential problem.

Full fresh air systems (Total loss)

Where there is no re-circulated air component, the minimum fresh air setting should be set to 100%. In this situation, the return air temperature is not used and its value does not matter.

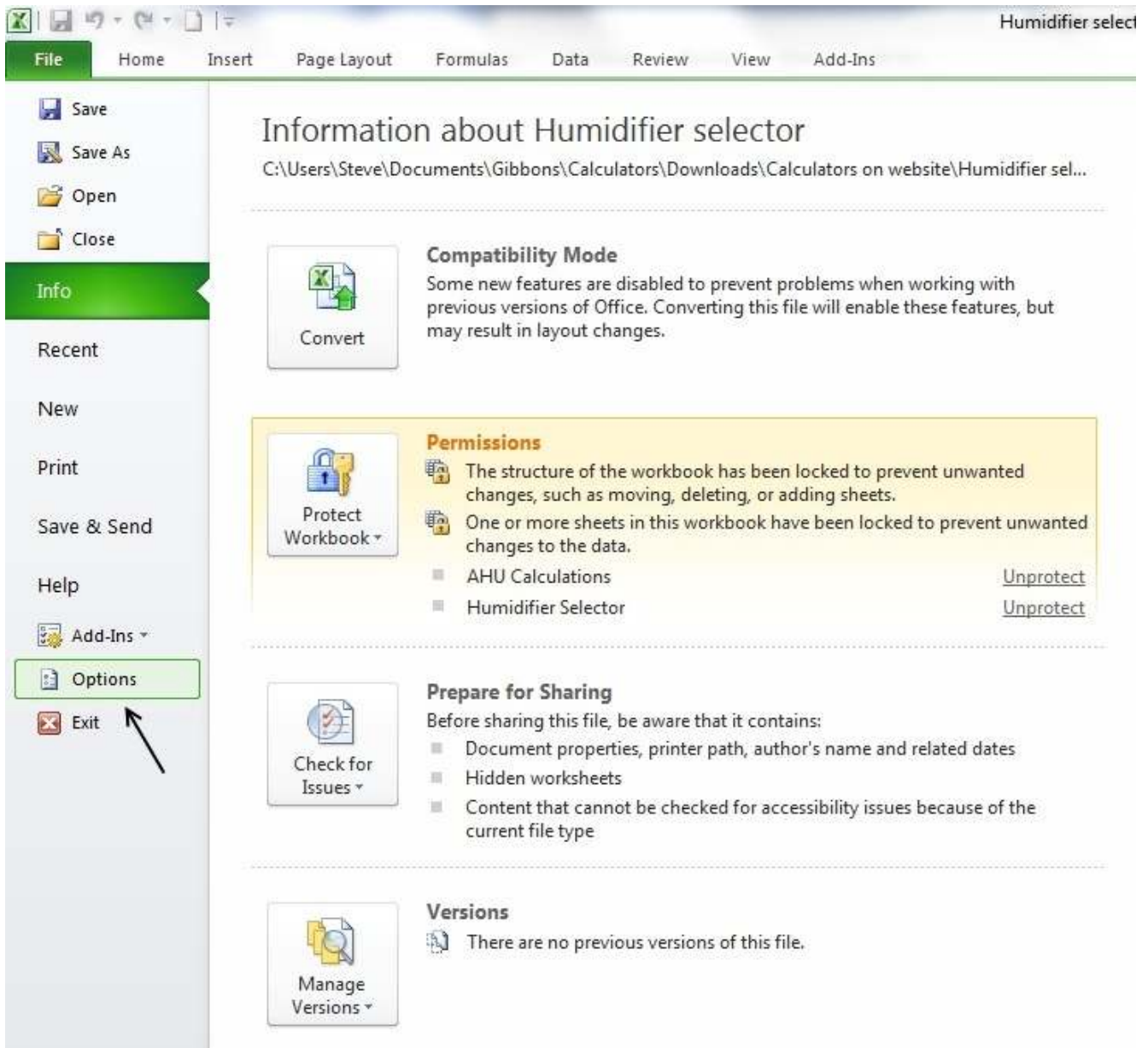
Please feel free to contact Steve Rix (07966 423165) or steve.rix@gibbonsgroup.co.uk if you should have any questions or queries.

Circular references warning – See next page

Circular references

If a circular reference warning is displayed it is because the iteration function in Excel is not enabled. To cure the problem, enable iteration and set the maximum iterations to 1000 and the minimum change to 0.0001. We recommend that the workbook calculation is set to Automatic.

Go to File, Excel options and formulas to make these adjustments.



The screenshot shows the Microsoft Excel interface. The 'File' tab is selected in the ribbon, and the 'Options' button in the left-hand menu is highlighted with a green box and an arrow. The main area of the window displays the 'Information about Humidifier selector' page. The file path is shown as 'C:\Users\Steve\Documents\Gibbons\Calculators\Downloads\Calculators on website\Humidifier sel...'. The page is divided into several sections:

- Compatibility Mode:** A 'Convert' button is present. The text states: 'Some new features are disabled to prevent problems when working with previous versions of Office. Converting this file will enable these features, but may result in layout changes.'
- Permissions:** A 'Protect Workbook' button is present. The text states: 'The structure of the workbook has been locked to prevent unwanted changes, such as moving, deleting, or adding sheets.' and 'One or more sheets in this workbook have been locked to prevent unwanted changes to the data.' Below this, two sheets are listed: 'AHU Calculations' and 'Humidifier Selector', each with an 'Unprotect' link.
- Prepare for Sharing:** A 'Check for Issues' button is present. The text states: 'Before sharing this file, be aware that it contains:' followed by a list: 'Document properties, printer path, author's name and related dates', 'Hidden worksheets', and 'Content that cannot be checked for accessibility issues because of the current file type'.
- Versions:** A 'Manage Versions' button is present. The text states: 'There are no previous versions of this file.'

