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BCIS Tutorial

Using BCIS online

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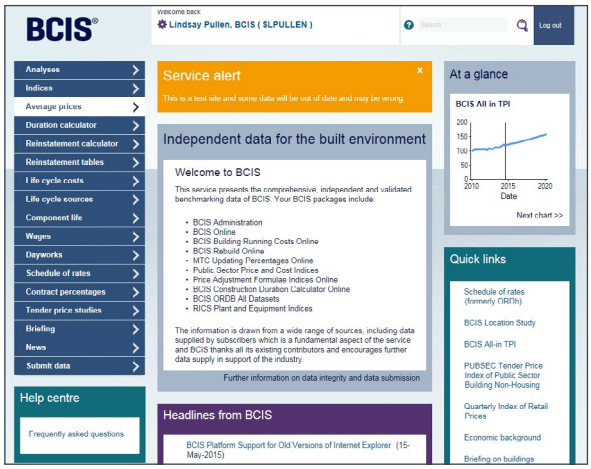
Using BCIS Online

A Quick Tutorial



BCIS Online is a huge resource of Cost Analyses, Indices, Studies and Forecasts.

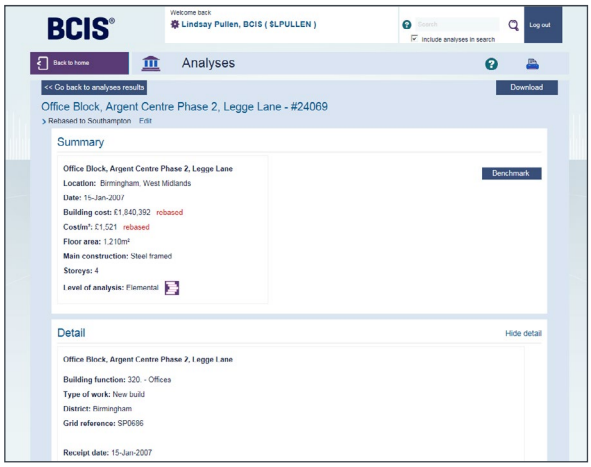
A typical subscription to BCIS Online, BCIS Rebuild Online, Building Running Costs Online and Schedules of Rates will open with the page below. The following tutorial will walk you through how to make the best use of the service.

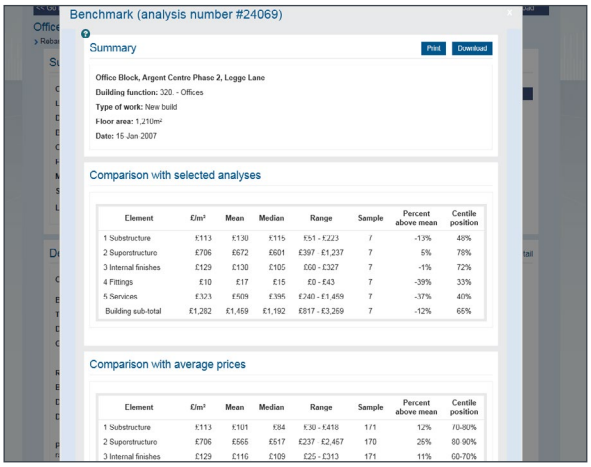
NB All examples were correct at time of writing – but data is always being added to the service so the results you will see will differ.

Example 1	Analyses.
Example 2	Indices.
Example 3	Average Prices.
Example 4	Reinstatement Calculator (for house insurance).
Example 5	Life Cycle Costs and Component Life.
Example 6	Duration Calculator.
Example 7	Tender Price Studies.
Example 8	Schedule of Rates.

Example 1

Analyses – BCIS Online worked example

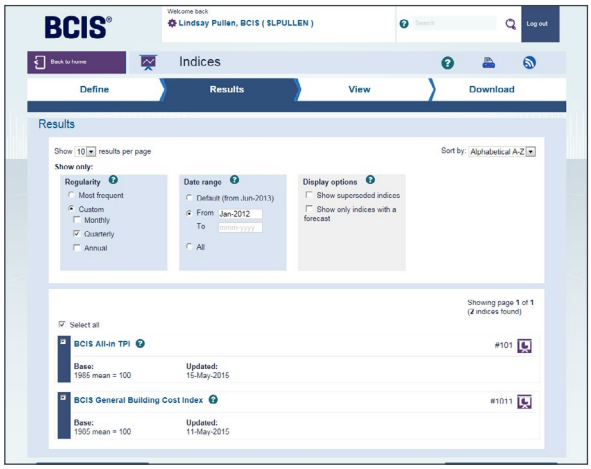


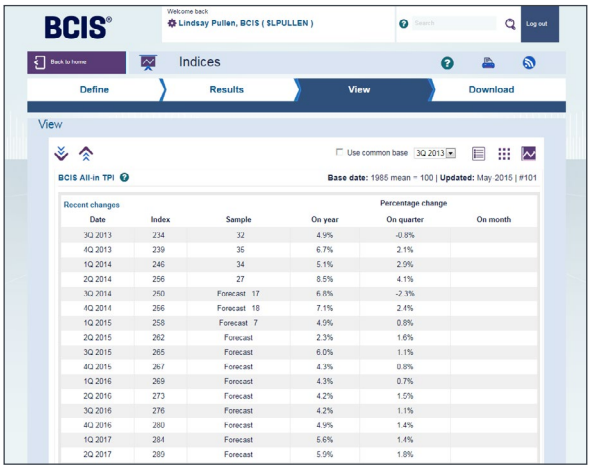


Objective	**To find a detailed analysis from the BCIS database that has a close fit with the requirements of the future owner of the building and to adjust it for time and location.** **Let's suppose the future owner intends to have a 4 storey 1250 m² office block built in Southampton, Hampshire.**
Method	Log into the BCIS home page and click on 'Analyses' from the menu.
	Click on '300 Administrative, commercial, protective facilities'.
	From the Select Function menu, tick box 320.
	Click on 'Close and Apply'.
	Under 'Age of Analyses' leave at the 2007 default
	Go to Define and select 'Building Specification' or select 'Next' at the bottom of the page.
	Under Type of Work deselect all then select New Build.
	Under Floor Area set default to 1250m².
	Set floor area to 3 to 5.
	Under number of storeys set default to range based on 4.
	It can then be seen from the bottom of the screen that there are less than 20 Elemental analyses selected. Click on the link for Elemental to show the selected analyses.
	You can adjust the selected analyses to the current date and selected location of Southampton by clicking on 'Rebase' at the top of the screen. Adjust the date for the current quarter and 'close' then adjust location to Southampton by expanding the menu. Click 'Close'. Click on 'Results' from the top bar or click 'Next' at the bottom of the page.
	An example from the brief description of chosen projects might be Analysis # 24069 – Office Block, Argent Phase 2, Legge Lane, which shows a cost of £1608 (at time of writing). Click on job title to get the full analysis.
	There is the possibility of downloading this in CSV and XML formats.
	You also have the option to click on 'Benchmark' to get comparative data to see how a chosen cost analysis compares with averages for similar schemes.

Example 2

Indices





The two key BCIS indices are the All-in Tender Price Index (TPI) and the General Building Cost Index (GBCI). Both indices are forecast five years ahead.

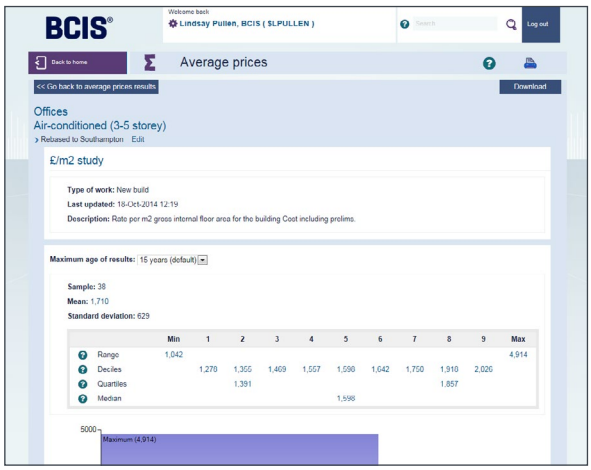
TPI measures the change in the cost to the client of 'procuring' his built asset inclusive of contractor's margins. It is calculated by comparing prices in accepted tenders against a base schedule.

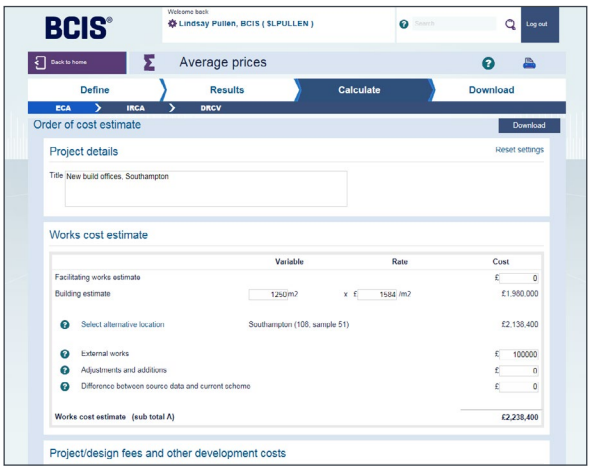
GBCI measures the change in the cost to the building contractor of obtaining his input costs of labour and materials before adding his profit.

Objective	**To download the two key indices TPI and GBCI with forecasts.**
Method	From the BCIS opening page click on 'Indices'.
	Select 'BCIS Tender Price Indices'.
	Select 'BCIS All-In TPI'.
	Select 'Close and Apply'.
	Select 'BCIS Cost Indices'.
	Select 'BCIS General Building Cost Index'.
	Select 'Close and Apply'.
	Click 'Next – Results'.
	Under 'Regularity' select quarterly.
	Set date say, Jan 2012, from date range menu.
	Click 'Next View'.
	Click 'Table View', from the icons top right of page.
	The two key BCIS indices will be displayed side-by-side for direct comparison. **Note:** Index methodologies are available using the '?' icon. **Note:** Graphs can be seen by clicking on the graph view icon. **Note:** You can also see date of last change to the indices – click 'Recent changes'. Other key indices include the Price Adjustment Formulae Indices (PAFI), Maintenance Cost Indices, House Rebuilding Cost Index, Measured Term Contract updating percentages, etc.

Example 3

Average Prices – £/m²





Objective	**To calculate the projected cost for a 1250m² 4 storey air conditioned office block to be built in Southampton and tendered in six months' time.**
Method	Open BCIS Online and select 'Average Prices'.
	Expand 'Building Function Category 300 Administrative, Commercial, Protective Facilities'.
	Select CI/Sfb 320, 'Close and apply'.
	From the menu bar select 'Rebase'.
	Adjust for Date and Location.
	Click on Date Factor.
	Adjust to 2Q15 and Close.
	Click on Location Factor.
	Expand South East – Hampshire – select Southampton then Close. (Note: the postcode can be used instead).
	Click 'Next – Results' and average prices for Air Conditioned Offices and Non Air Conditioned Offices will be shown. (Note: It is worth setting the maximum age of results so that only newer analyses are included, say 10 years if the sample size is adequate.)
	From the table click on 3-5 storey Air conditioned offices to reveal the mean, deciles and other statistics with accompanying graphs (see screenshot).
	Click on the mean £/m² for 'Offices, 3-5 storey' for three options: ▪ 'Early Cost Advice' ▪ 'Insurance Reinstatement Cost Advice' ▪ 'Depreciated Replacement Cost Valuation'.
	Click on 'Early Cost Advice' to reveal a template for estimating the desired cost.
	Enter 1250m in the m² box as the floor area of the proposed office.
	Add say 13 % for fees and £100,000 for external works or other parameters. For further help, click on the large ? icon at the top right of the page.
	This estimate can be downloaded as a PDF using the download button at the bottom of the page.

Example 4

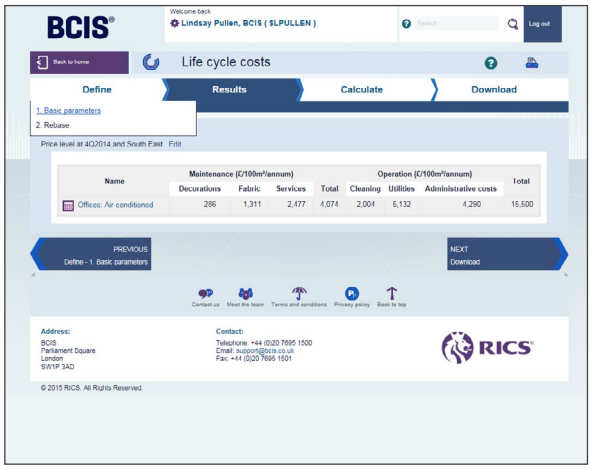
Reinstatement Calculator

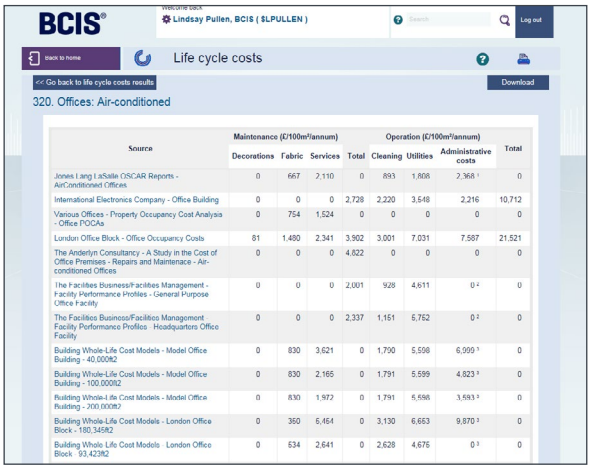
The Reinstatement Calculator is a specialist service developed in conjunction with the Association of British Insurers, enabling a swift insurance calculation for a range of domestic houses and flats.

Objective	**To calculate the reinstatement cost for a good condition detached 95m² 3 bedroom 2 storey house built in the 1930s in Southampton.**
Method	Open BCIS Online and select Reinstatement Calculator.
	From 'Define' select the type of property – 'House'.
	Click 'Next – Property Details'.
	Click on Location Factor – South East – Hampshire – select Southampton. 'Close'.
	Complete address details as necessary and any relevant notes.
	In 'Property details' select from drop down menus – Detached + 2 Storey + No of Bedrooms + Age of Property + Quality.
	Fill in Floor area of 95m², externally.
	Go to 'Define – 3 Features and adjustments' at bottom of page.
	Here you can put in additional relevant information ▪ Click on 'Design/shape' ▪ E.g. drop down menu for roof type or ▪ Click on 'Specification' ▪ E.g. 'Facing brick' ▪ E.g. 'Security alarm installed'.
	Click 'Next – Results'.
	Click 'Next – Download' for a printed PDF report.

Example 5

Life Cycle Costs

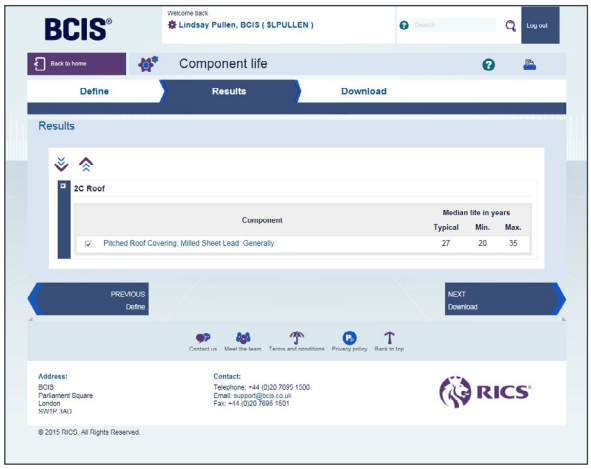


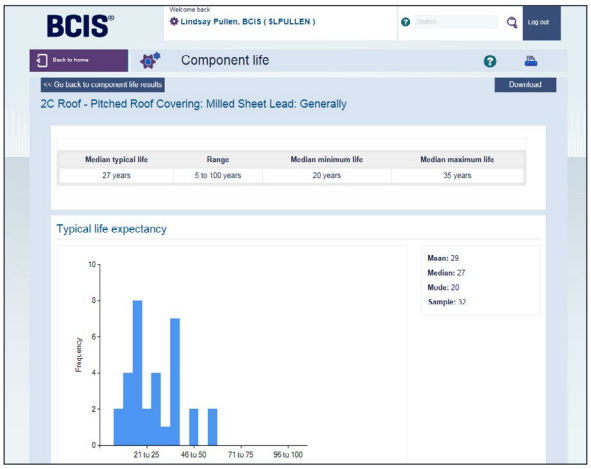


Objective	**To ascertain the annual expenditure on air conditioned offices somewhere in the South East of England.**
Method	Click on 'Life Cycle Costs' from the BCIS main menu.
	Expand 300: Administrative, Commercial' Protective Facilities by clicking on the arrow.
	Select CI/Sfb 320 Air conditioned offices'.
	Click on 'Rebase' at bottom right of page.
	Adjust for 4th Quarter 2014 and South East Location.
	Click 'Next – Results'.
	Click on 'Offices Air conditioned for sources, a BCIS estimate and a pie chart of average costs per 100m^2.
	Go back to 'Life Cycle Cost results' and click on 'Calculate', for example, to get a time projection for a 30 year life cycle cost expenditure.

Example 5

Component Life

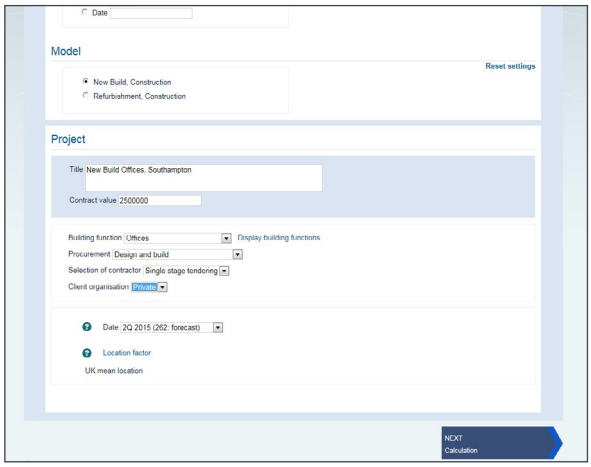


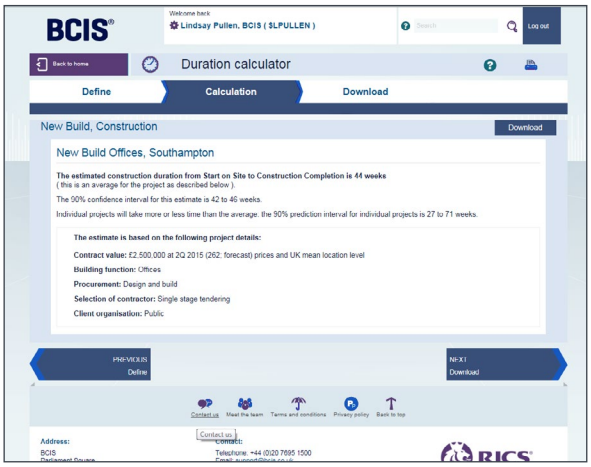


Objective	**To calculate the life span of a building component. In this case a lead covered, pitched roof.**
Method	Click on 'Component Life' from main menu.
	From 'Define' click on '2C Roof'.
	Tick 'Pitched Roof Covering Milled Lead Sheet Generally'.
	Click 'Close and Apply' from bottom right of screen.
	Click 'Next – Results'.
	Click on 'Pitched Roof Covering Milled Lead Generally' to reveal bar charts.

Example 6

Duration Calculator

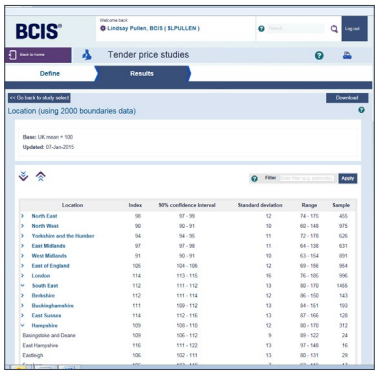


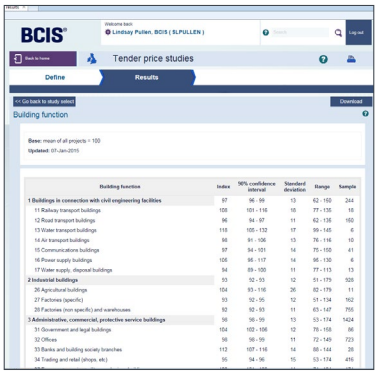


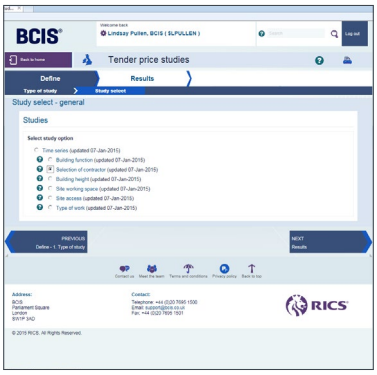
Purpose	**To give an indication of the likely construction time for a proposed project. In this case, how long will it take to construct a design and build office block in Southampton, estimated to cost £2,990,000 for a private client?**
Method	Open the Duration Calculator from the BCIS Online menu.
	Set to 'Current Date' and 'New Build' for this example.
	Fill in job title and contract value, then from the drop down menus select offices, design and build, single stage tender, private.
	Adjust for location. Click on Location Factor – South East – Hampshire, select Southampton.
	Click 'Next – Calculation'.
End result	For our example, a design and build office block of £2,990,000 in Southampton, the expected construction period is 41 weeks but depending on circumstances, could be between 25 and 67 weeks.

Example 7

Tender Price Studies



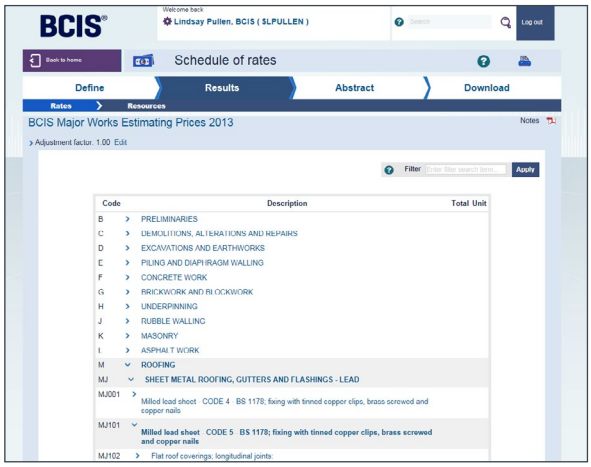




Background	**Over the years, BCIS has indexed thousands of projects from Abattoirs to Warehouses. Statistical analysis of these projects has allowed BCIS to calculate various variables including Location, Building Function, Height, Site Working Space and Access, and the difference made by New Build or Conversion.**
Objective	**To utilise the BCIS data to make adjustments to building cost data.**
Method	From the BCIS Online menu select 'Tender Price Studies'.
	Select Location then click on Results in the top navigation bar.
	Click on 'expand all'.
	Each region has a drop down menu that expands through Counties to Local Authority boundaries, e.g. Click on South East and expand through to county and borough level. The result for, say, Southampton is 111 which compares to a UK Mean of 100. If we do the same exercise for Newcastle upon Tyne in the North East, we get an answer of 93. This suggests it is 111/93 or 19.4% more expensive to construct a building in Southampton than it is in Newcastle. (Note: these studies are updated regularly).
	Return to the Tender Price Studies page for further studies.
	Choose, for example, 'General' and tick box.
	Click on 'Next and Define – 2 Study Select' at the bottom right of the page.
	Choose, for example, 'Building Function' and tick box.
	Click 'Next – Results' at the bottom right.
	It can be seen that certain types of project are more expensive to procure than others. Churches, with an index of 110, compare with Factories with an index of 94. This shows that Churches attract a premium due to complexity among other factors.
	Return to the Tender Price Studies page by clicking on define in the top navigation bar then 'Type of study' for further studies including 'Type of work', 'Building height', 'Site working space', 'Site access', 'Selection of contractor' (procurement route) and 'Contract sum'.

Example 8

Schedule of Rates

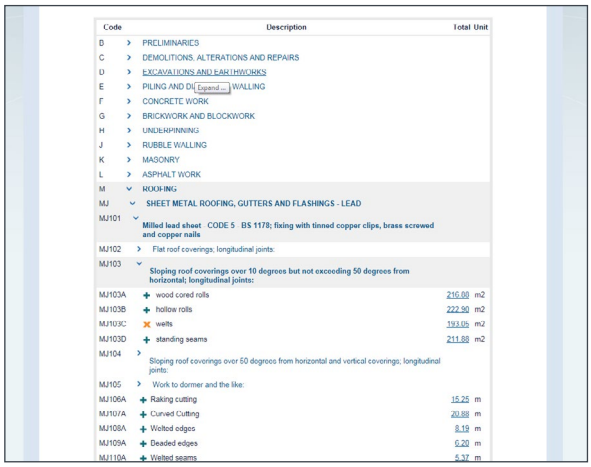


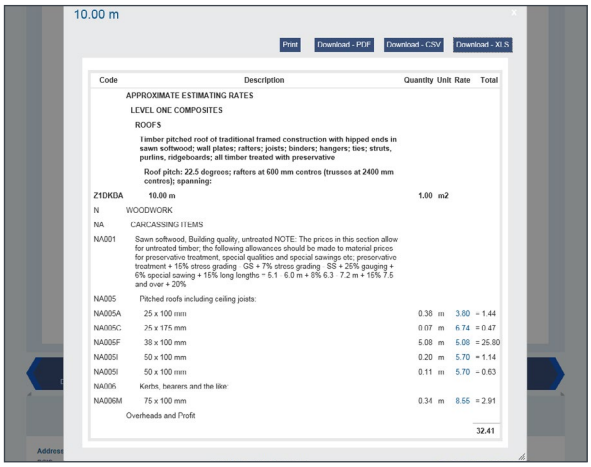
Objective	**To derive a price for building work at, say, 4Q2015 levels, in the Southampton area.** **In this particular case for a shallow pitched roof with code 5 lead covering with welted joints.**
Method	Select 'BCIS Major Works Estimating' for example.
	Tick 'BCIS Major Works Estimating Prices 2015'.
	Click 'Next – Define 2 Adjustments' and select 'Adjustment Selection'.
	Set parameters to All-In TPI, 2015 using the pull down list, click on location factors and expand South East Region Hampshire and select Southampton from drop down menus. Click 'Close'. This returns you to the Adjustment page.
	Assume, say, 13% for Preliminaries (latest % is available from the Contract Percentages section of BCIS if required) and say 5% for Overheads and Profit.
	Click 'Next – Results' from the bottom of the page.
	Select in order **M** 'Roofing' **MJ** 'Sheet Metal Roofing Gutters and Flashings – LEAD' **MJ101** 'Milled lead sheet CODE 5' BS EN 12588, fixing with tinned copper clips, brass screwed and copper nails **MJ103** 'Sloping roof coverings over 10 degrees but not exceeding 50 degrees from horizontal; longitudinal joints' **MJ103C** Welts. Clicking on '+' to add to abstract.
	Resultant price at time of writing is £163.53/m^2.
	Clicking on the rate will tell you this is a Specialist price. Other rates in the schedule will give you a breakdown of the labour and materials making up the rate.

CONTINUED

Example 8

Schedule of Rates (continued)





Method (continued)	Now go back to 'Results' to look at Approximate Estimating Rates to get a composite rate for timber pitched roof construction and expand as follows: **Z** Approximate Estimate Rates **Z1** Level One Composite **Z1D** Roofs **Z1DK** Timber pitched roofs with hipped ends... **Z1DKB** Roof Pitch 22.5 degrees, rafters at 600mm centres... **Z1DKBA** + 10.00m 71.96/m^2 Note: Clicking on the rate of £71.96 gives a complete breakdown of the build up for the rate calculation.
	Click 'Next – Abstract to use'.
	This will give you the facility to input quantities to give a bill total. This could be done to build up a complete approximate estimated cost for a whole building.

These examples are designed to give you a flavour of what BCIS Online offers, and how to navigate around it. You should now have the knowledge to discover other data and tools available on BCIS Online.

Confidence through professional standards

RICS promotes and enforces the highest professional qualifications and standards in the development and management of land, real estate, construction and infrastructure. Our name promises the consistent delivery of standards – bringing confidence to the markets we serve.

We accredit 118,000 professionals and any individual or firm registered with RICS is subject to our quality assurance. Their expertise covers property, asset valuation and real estate management; the costing and leadership of construction projects; the development of infrastructure; and the management of natural resources, such as mining, farms and woodland. From environmental assessments and building controls to negotiating land rights in an emerging economy; if our members are involved the same professional standards and ethics apply.

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