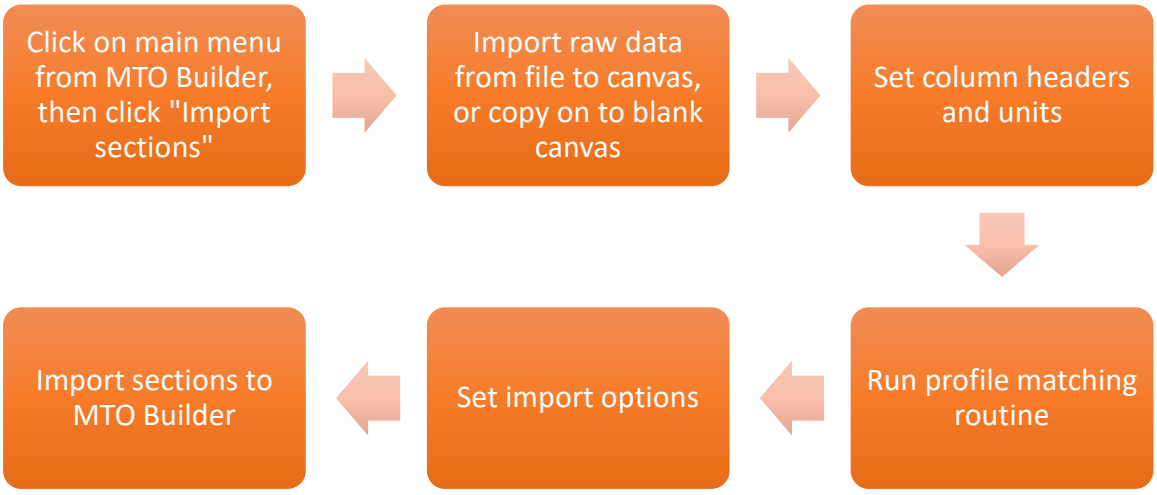
QUICK START GUIDE 2: THE IMPORT CANVAS

This note guide users on how to import sections quickly from a raw data file provided by a client.

1. OVERVIEW

The process followed when importing data is as follows:

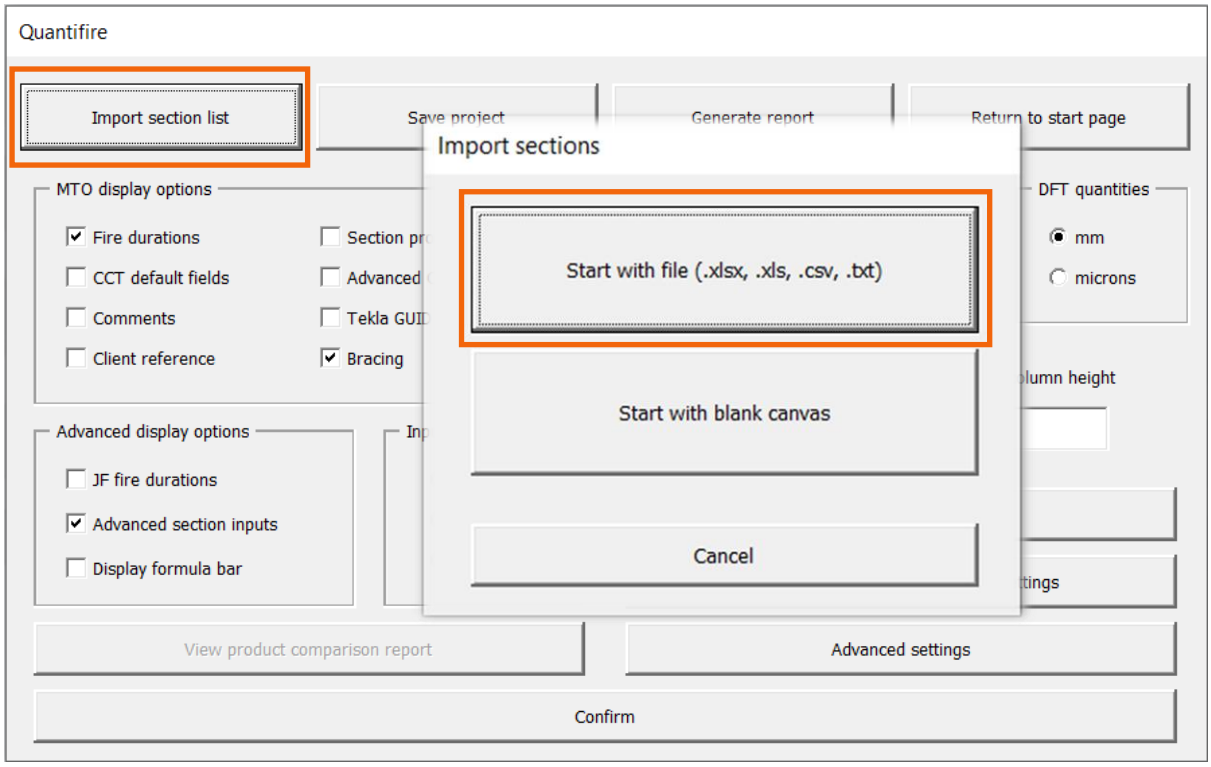


2. ACCESSING THE IMPORT FEATURE

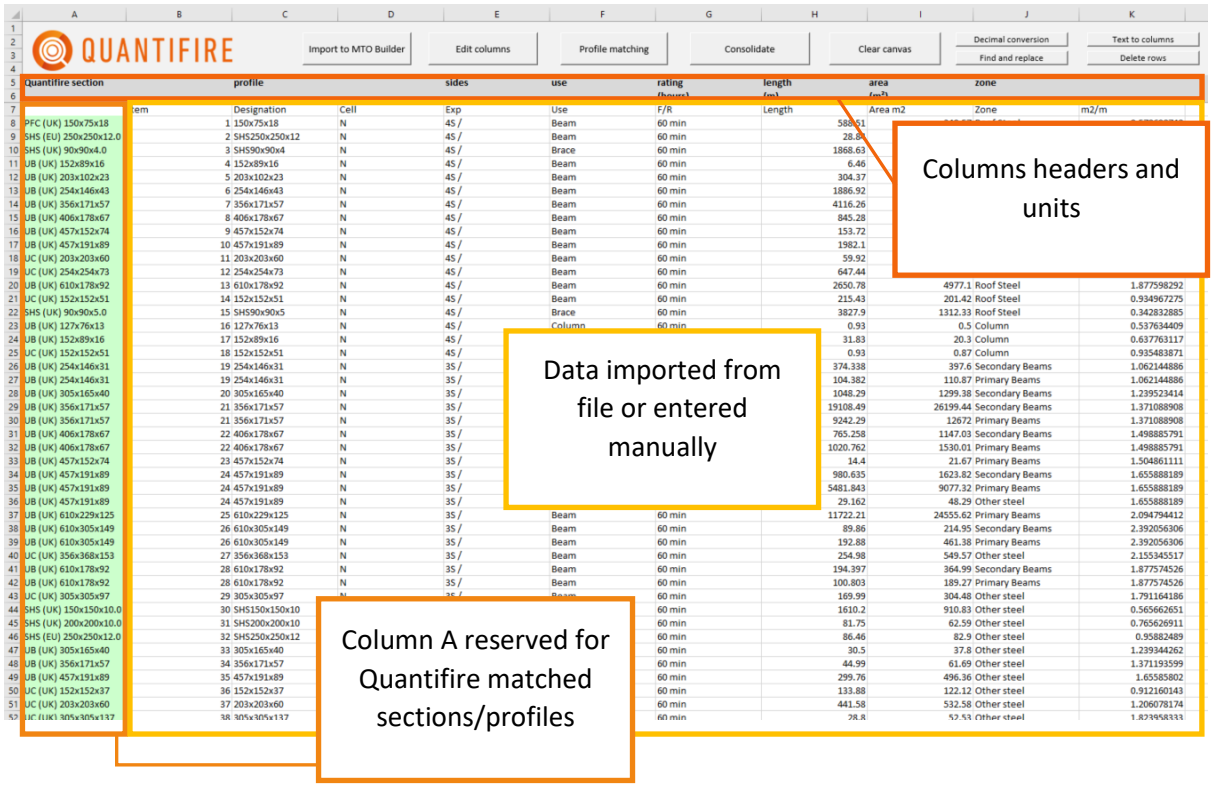
From the MTO Builder page click the Quantifire logo to open the main menu. The import feature is accessed via the top-left button. The user then has the choice of selecting a raw-data file to import, or they can start with a blank canvas. Compatible raw-data file types include .xlsx, .xls, .xlsm, .csv, and .txt files.

Use a blank canvas if the raw data is in a format not compatible with Quantifire's built-in recognition routines. When writing or pasting sections note that column A is reserved for the Quantifire matched section. Do not enter information into this column manually.

Note: the import routine is compatible with cellular beams, but only for a single design of hole shape, size and spacing.



The canvas consists of three main parts as shown below. Note: Quantifire must match each section on the canvas with a corresponding built-in section before it can be imported into MTO Builder. This is explained further below.

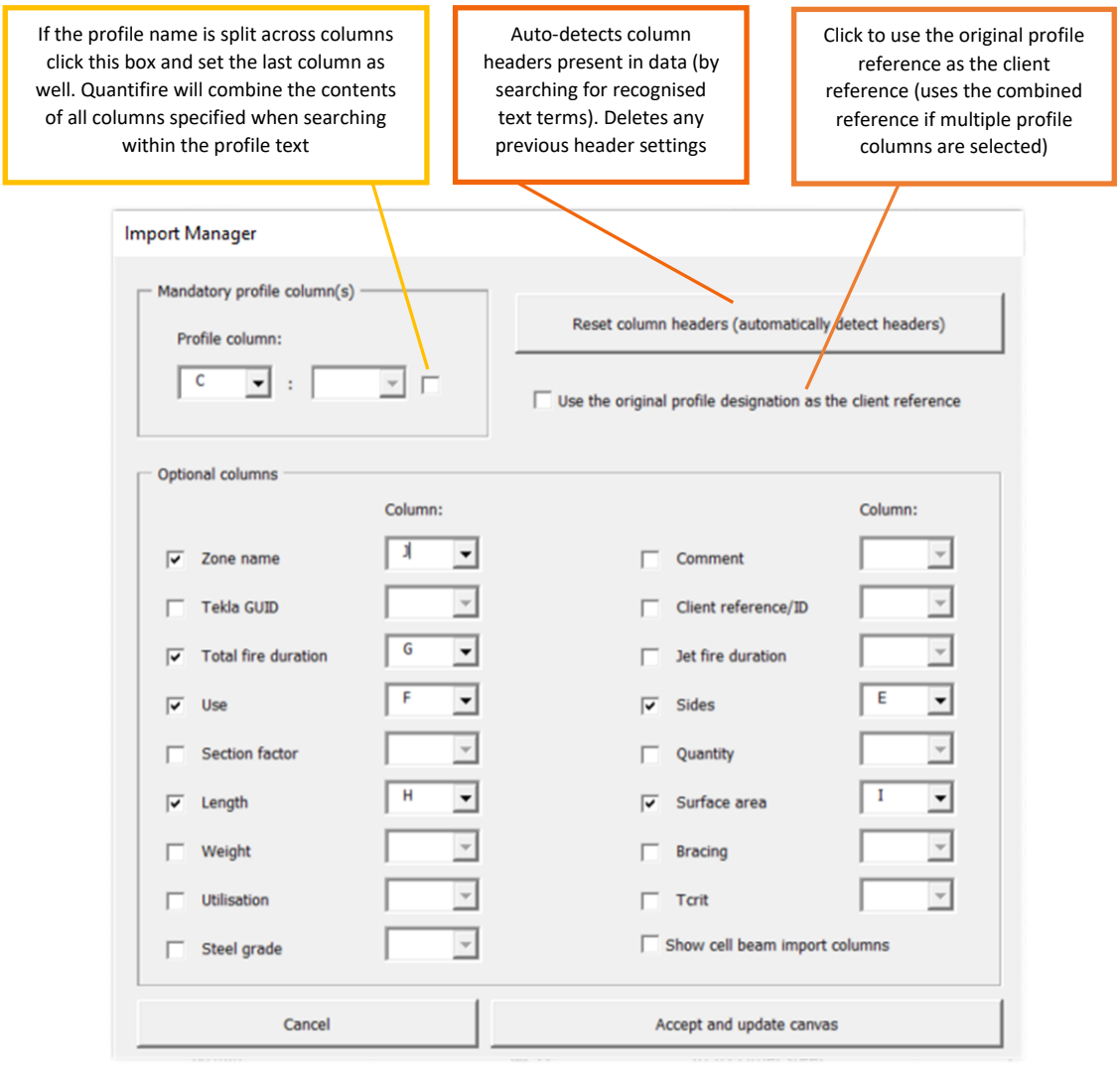


3. SETTING COLUMN HEADERS AND UNITS

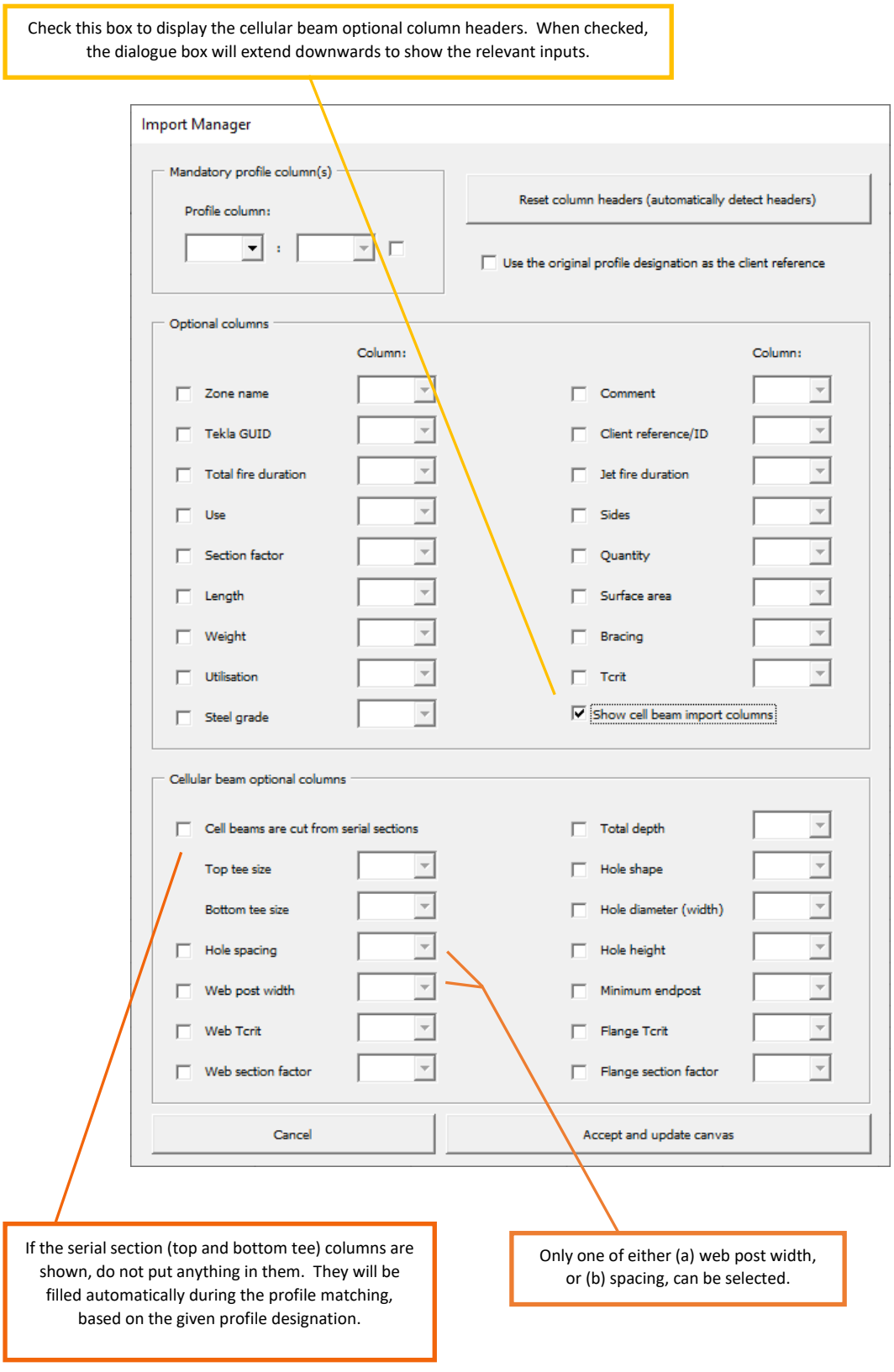
Correct setting of the column headers is critical for the import function to work. After importing a raw data file or manually entering the section list, the column headers are set by clicking *Edit columns*. A menu will open where the user can select the columns that are present and set the corresponding canvas column.

Note that Quantifire will automatically attempt to detect the columns present when a raw data file is imported. This process can be manually initiated via the *Edit columns* button.

Click *Accept* and the import canvas will update, showing the headers in rows 5 to 7. Up to three headers can be assigned to the same column.



Cellular beam column headers can be defined. The designation text for the cellular beam must still be entered in the *Profile* column. Attributes associated with the beam's geometry and failure criteria can be set by the user in their respective columns. Where these are not provided by the user, the conservative defaults in the settings will be adopted.

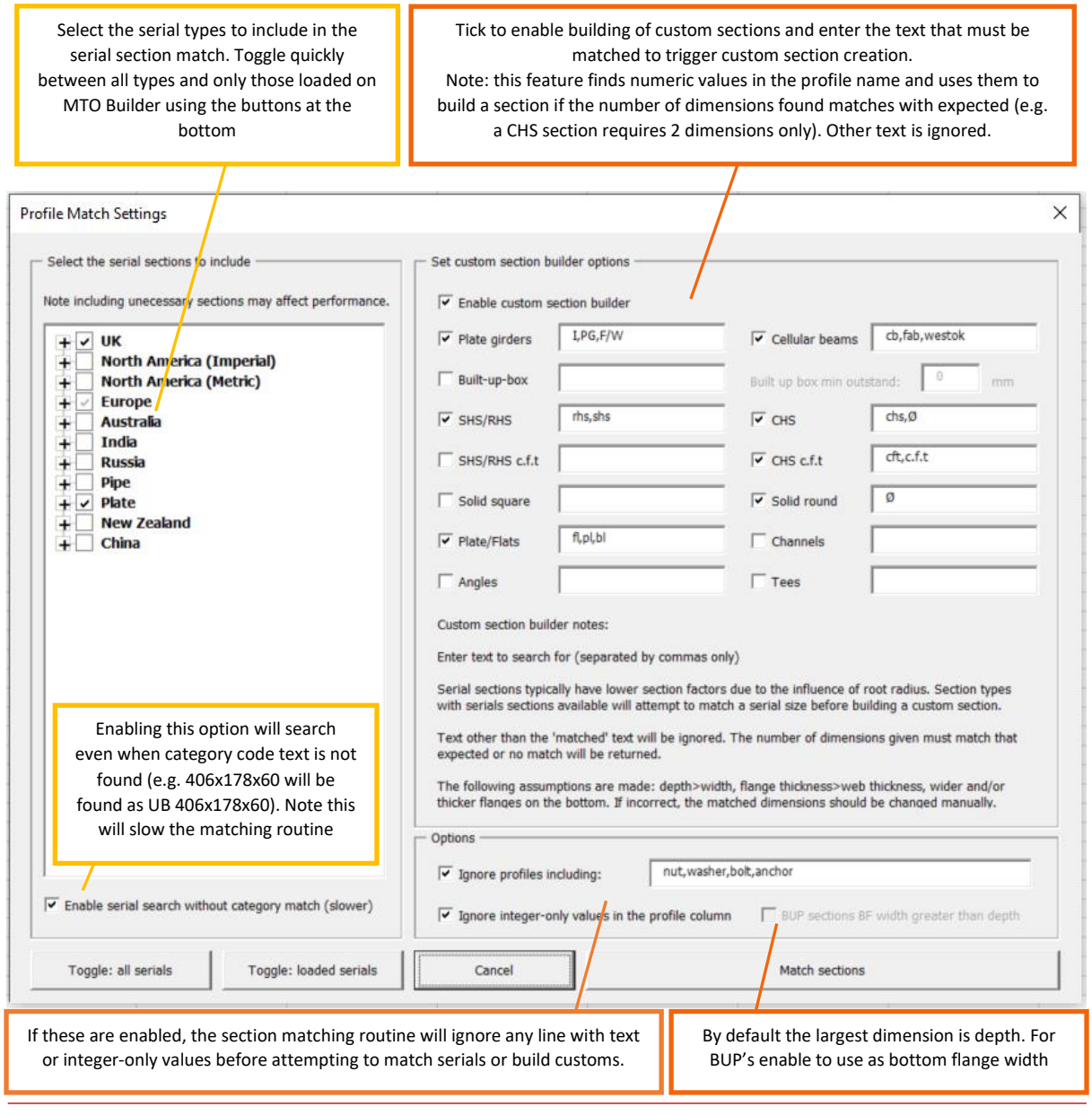


4. QUANTIFIRE SECTION MATCHING

Before sections/profiles can be imported into Quantifire, they must be matched with the equivalent section in the Quantifire database, or entered as Quantifire custom sections. Quantifire will attempt to match the sections automatically when a raw data file is imported. If working from a blank canvas this must be initiated manually via the *Profile matching* button. This opens the options as shown below.

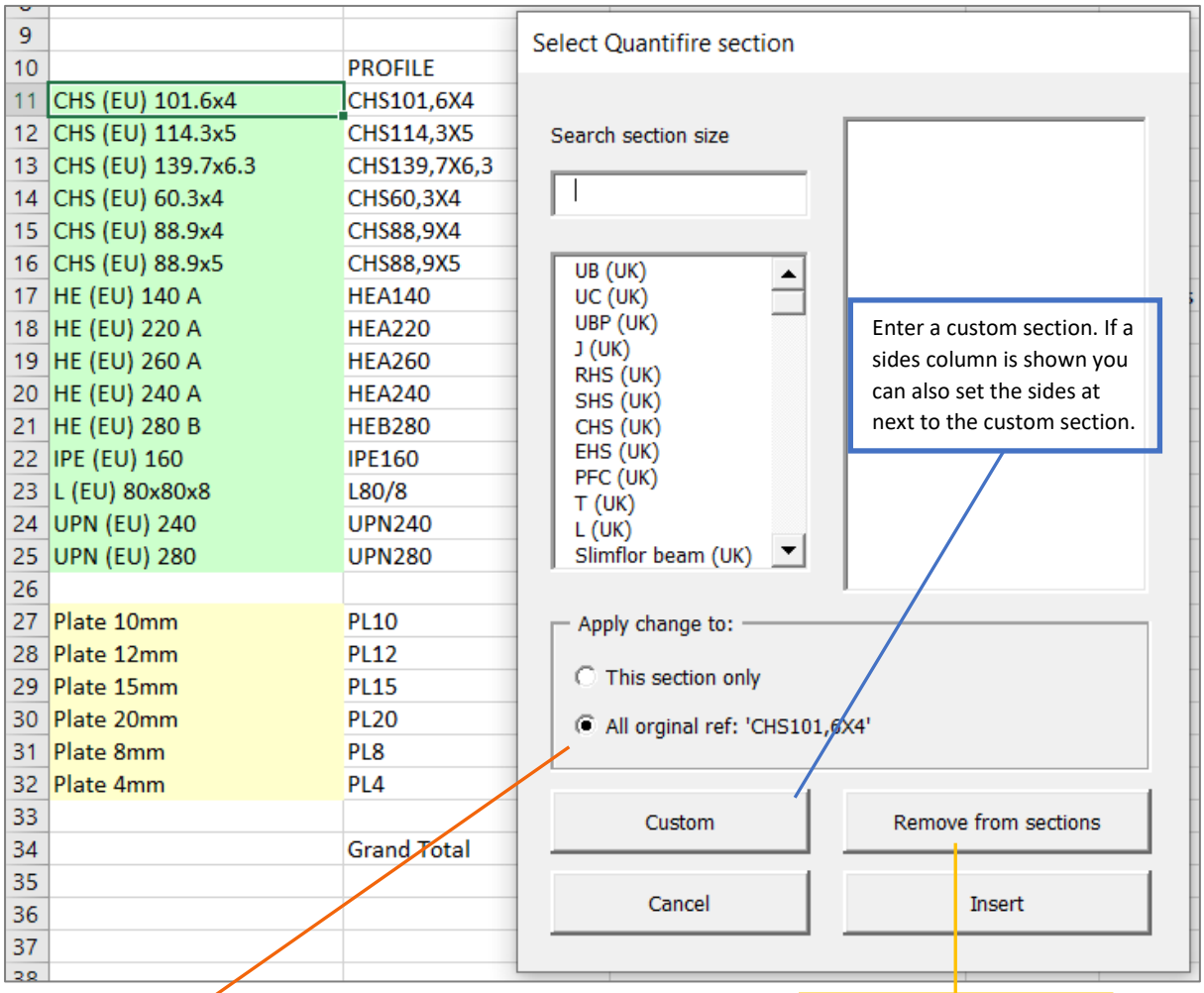
The section matching routine will attempt to match or build sections in the following order:

1) Custom section builder for non-serial types (plate girders, cell beams, concrete filled tubes, built up boxes)
2) Serial section match for the types selected
3) Serial section match without a category code text match, if enabled
4) Custom section builder for serial types when an ideal match is not found (CHS, SHS, RHS, T, L, Channel and Flat sections). Note: serials sections typically have better properties and so are prioritised.



5. MANUALLY MATCHING SECTIONS

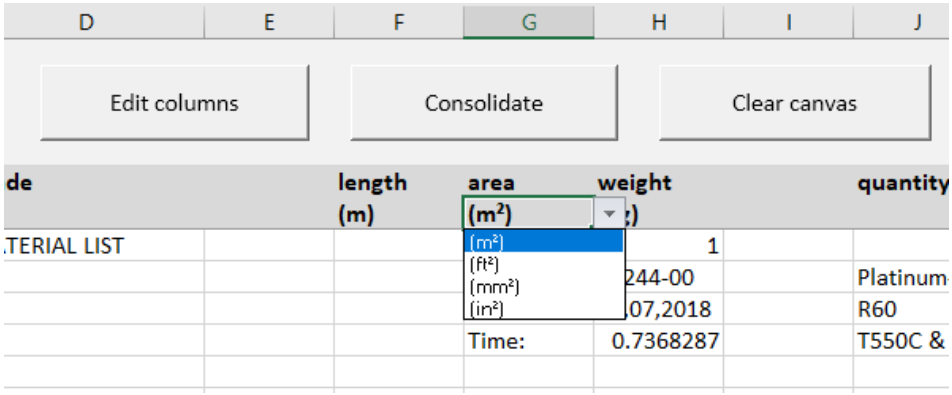
The automatic matching routines may give an incorrect result or no result. To correct or remove a matched section, click on any row in column A. In the window that pops-up the user can select an alternative section, enter a custom section, or remove the section entirely.



9		
10		PROFILE
11	CHS (EU) 101.6x4	CHS101,6X4
12	CHS (EU) 114.3x5	CHS114,3X5
13	CHS (EU) 139.7x6.3	CHS139,7X6,3
14	CHS (EU) 60.3x4	CHS60,3X4
15	CHS (EU) 88.9x4	CHS88,9X4
16	CHS (EU) 88.9x5	CHS88,9X5
17	HE (EU) 140 A	HEA140
18	HE (EU) 220 A	HEA220
19	HE (EU) 260 A	HEA260
20	HE (EU) 240 A	HEA240
21	HE (EU) 280 B	HEB280
22	IPE (EU) 160	IPE160
23	L (EU) 80x80x8	L80/8
24	UPN (EU) 240	UPN240
25	UPN (EU) 280	UPN280
26		
27	Plate 10mm	PL10
28	Plate 12mm	PL12
29	Plate 15mm	PL15
30	Plate 20mm	PL20
31	Plate 8mm	PL8
32	Plate 4mm	PL4
33		
34		Grand Total
35		
36		
37		

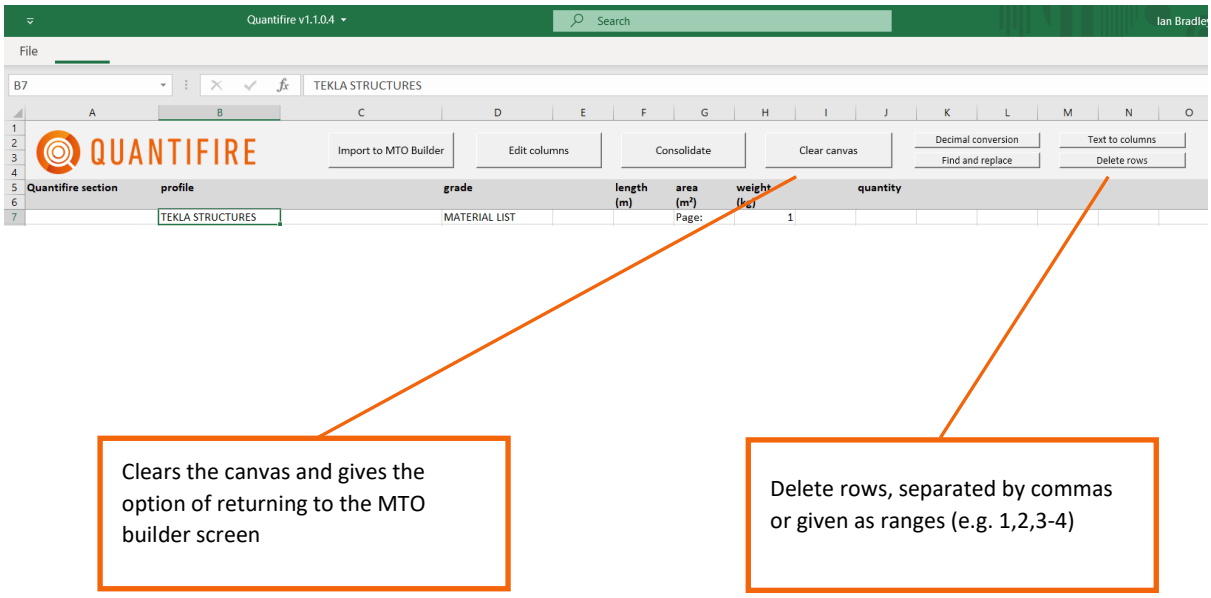
6. CANVAS FEATURES

Length, area and weight columns have units displayed underneath. Click on the units directly to change them as appropriate.



There are further features to help the user manipulate data they load or copy/paste onto the canvas:

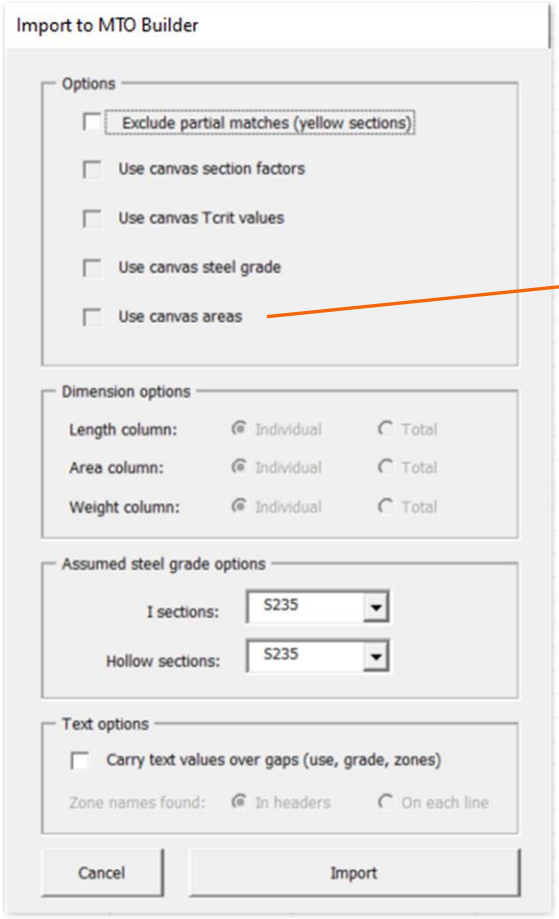
- Text to columns allows users to break text across columns
- Find and replace allows the user to swap unrecognised text for text understood by Quantifire (e.g. "Compression member" for "Column")
- Decimal conversion will swap all points for commas and vice-versa (note that regional setting may automatically alter what is displayed on-screen, however this does not matter if the number is correct).



7. IMPORTING TO MTO BUILDER

Once the canvas is complete, click Import to MTO Builder. Only rows with a profile in column A are considered, regardless of whether there is text present in other columns.

The main import options are shown below. The length, area and weight columns must be set to either total or individual. Note that when multiple dimensioning columns are present (e.g. length and area) Quantifire considers length dominant, and calculates the surface area and weight per metre of the sections based on the imported length from in-built section dimensions. When multiple quantity columns are present (e.g. weight and area) this can lead to small discrepancies between the import and the original data. To force Quantifire to use the values on the canvas click the appropriate boxes.



If both length and area are given, the Quantifire heated perimeter may not match that used by the client.

By default length is dominant in Quantifire and the areas will be re-calculated.

To enforce use of client - given areas click this option.

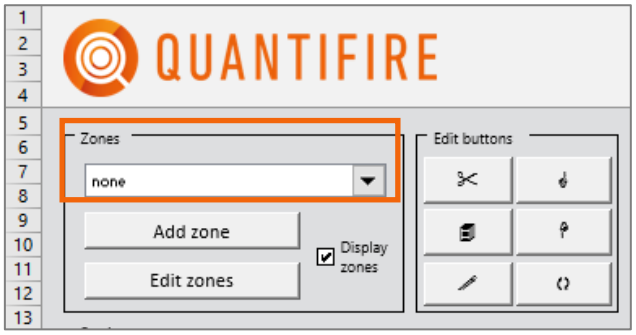
It is common for areas to be reported as total surface areas, ignoring the reduction in fireproofed areas for beams due to the concrete slab. To convert areas of beams to account for a reduction from 4 sides to 3 sides click to use the canvas area values and then click the additional box that appears.

Some text columns (use, bracing) may be present as headers, not as entries for every section. Clicking *Text columns contain gaps* will retain the last detected value during import until an alternative value is found. Leaving this unchecked will cause Quantifire to revert to the default for that section type unless a specific value is found on every row. Note that the values must be in the same row as Quantifire profiles in column A, otherwise they will be ignored.

If not using Tcrit values from the canvas the user will be prompted which method to use, and then Quantifire will copy the sections to the MTO Builder.

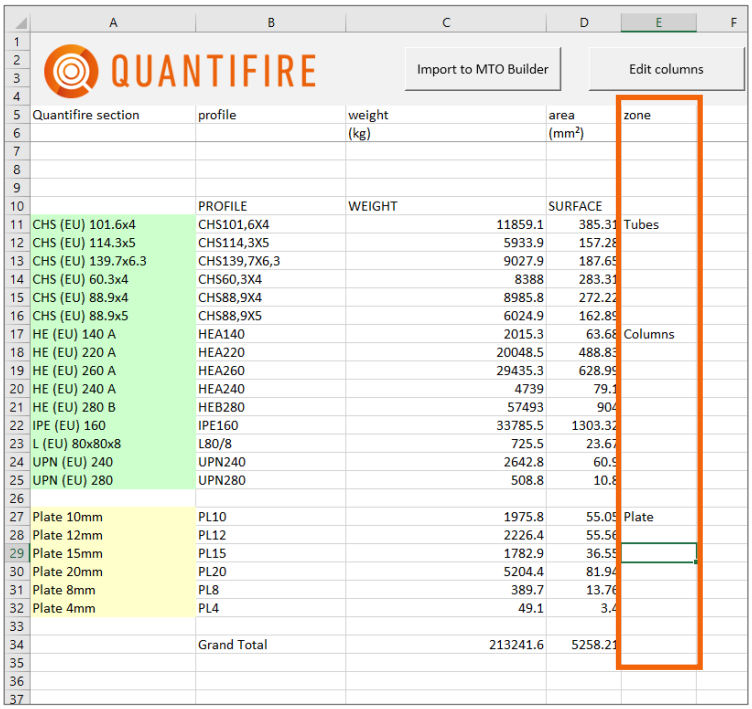
8. ZONES

By default, all sections are entered into whatever zone was selected on the MTO Builder page when the import feature was initialised.



Sections can be imported directly into zones by enabling a zones column on the *Edit columns* form. This process will create the necessary zones if they do not exist.

Zone names should be entered in the zones column. Ensure they are either in the same row as a Quantifire matched section in column A (see below) or are above the zone (as headers) and select the appropriate option when importing. Note that zone names are always retained until an alternative name is detected, hence there is no need to copy zone names across all sections as shown below.



	Quantifire section	profile	weight (kg)	area (mm^2)	zone
		PROFILE	WEIGHT	SURFACE	
	CHS (EU) 101.6x4	CHS101,6X4	11859.1	385.31	Tubes
	CHS (EU) 114.3x5	CHS114,3X5	5933.9	157.28	
	CHS (EU) 139.7x6.3	CHS139,7X6,3	9027.9	187.65	
	CHS (EU) 60.3x4	CHS60,3X4	8388	283.31	
	CHS (EU) 88.9x4	CHS88,9X4	8985.8	272.22	
	CHS (EU) 88.9x5	CHS88,9X5	6024.9	162.89	
	HE (EU) 140 A	HEA140	2015.3	63.68	Columns
	HE (EU) 220 A	HEA220	20048.5	488.83	
	HE (EU) 260 A	HEA260	29435.3	628.99	
	HE (EU) 240 A	HEA240	4739	79.1	
	HE (EU) 280 B	HEB280	57493	904	
	IPE (EU) 160	IPE160	33785.5	1303.32	
	L (EU) 80x80x8	L80/8	725.5	23.67	
	UPN (EU) 240	UPN240	2642.8	60.9	
	UPN (EU) 280	UPN280	508.8	10.8	
	Plate 10mm	PL10	1975.8	55.05	Plate
	Plate 12mm	PL12	2226.4	55.56	
	Plate 15mm	PL15	1782.9	36.55	
	Plate 20mm	PL20	5204.4	81.94	
	Plate 8mm	PL8	389.7	13.76	
	Plate 4mm	PL4	49.1	3.4	
		Grand Total	213241.6	5258.21	

Questions? Please refer to the main user guide or contact us at *quantifire@pfpspecialists.co.uk*