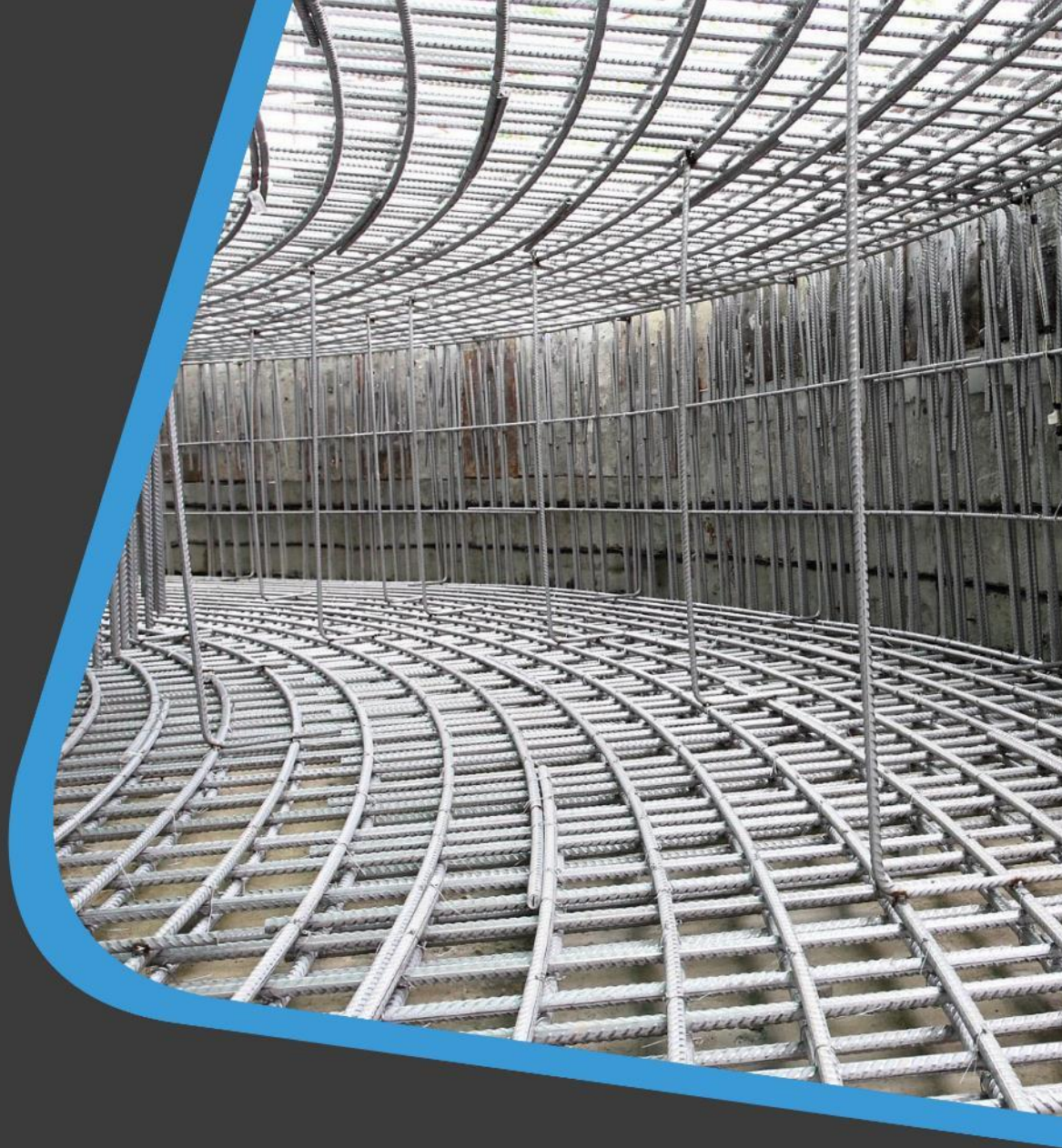




CADS RC

Getting Started



GLOBAL CONSTRUCTION
SOFTWARE AND SERVICES



Microsoft
Partner

Introduction	3
Compatibility	4
Drawing Sheets.....	5
Members	15
Navigating around the Schedule	18
Formatting the Schedule	22
Printing Schedules & Reports.....	25
Free-form Reports.....	28
Exporting Data	31
Issuing & Revision.....	32

Introduction

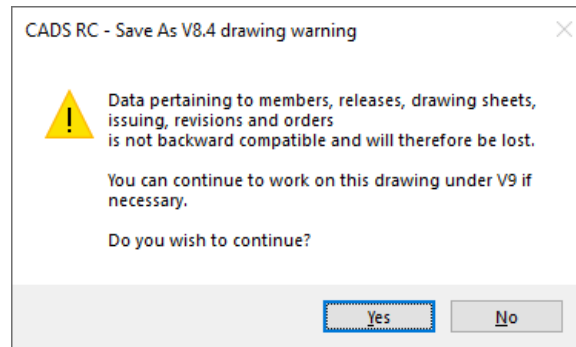
This guide aims to help users to familiarise themselves with some of the new functionality in CADS RC. It attempts to highlight significant new aspects of this product that may not be immediately apparent on running the software. The guide communicates the location of new commands and explains their purpose. Reading this guide will equip you with the knowledge needed to explore the new features in more detail.

Compatibility

This section confirms some details about drawing compatibility.

You can open drawings produced under any previous version of CADS RC.

CADS RC includes a **Save As V8.4 Drawing** command that allows you to save a drawing to be compatible with any CADS RC V8.4 based release. On running this command, the following confirmation message will appear:



Saving back to v8.4 comes with the loss of some specific data as listed in the dialog.

You cannot open CADS RC drawings directly in an older version of CADS RC unless you have previously used this **Save As V8.4 Drawing** command.



Key Points

- You can open any existing CADS RC drawing under CADS RC
- Data pertaining to issues and revisions will not be ported to CADS RC
- You can save a drawing produced using CADS RC to be compatible with CADS RC v8.4 by using the **Save As V8.4 Drawing** command. Some specific data will be lost as part of this process.
- You can not open CADS RC drawings under an older version of CADS RC unless you have used the **Save As V8.4 Drawing** command



Commands

Action	Menu	Toolbar
Save drawing compatible with V8.4	CADS-RC > Utilities > Save As V8.4 Drawing	None

Drawing Sheets

This section explains the new concept of drawing sheets, introduced in v9.0.

Drawing sheets allow you to produce several drawings and their associated schedules from within a single AutoCAD DWG file. Whole structures can be detailed in one AutoCAD DWG file and split between several drawing sheets. Each drawing sheet and associated schedule can be issued and tracked independently.

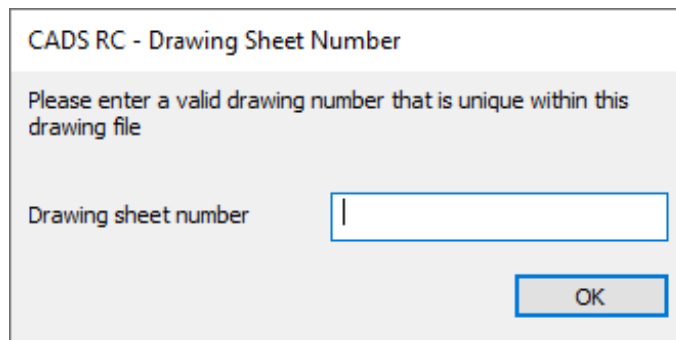
A drawing sheet can either be an AutoCAD layout or a specific area of model space. Reinforcement can be assigned to specific drawing sheets as you detail or at a later time.

You can only produce a formatted report or create an electronic schedule file when you have created at least one drawing sheet.

Creating drawing sheets

There are a number of ways to create a drawing sheet. Users of CADS-VPM and CADS Scale can configure drawing sheets to be created automatically as part of the process of setting up a drawing. Other users can also ensure drawing sheets are created as part of their own drawing setup procedure. Instructions on configuring your own title blocks to both trigger drawing sheet creation and to map to the schedule headers and footers can be found later in this chapter.

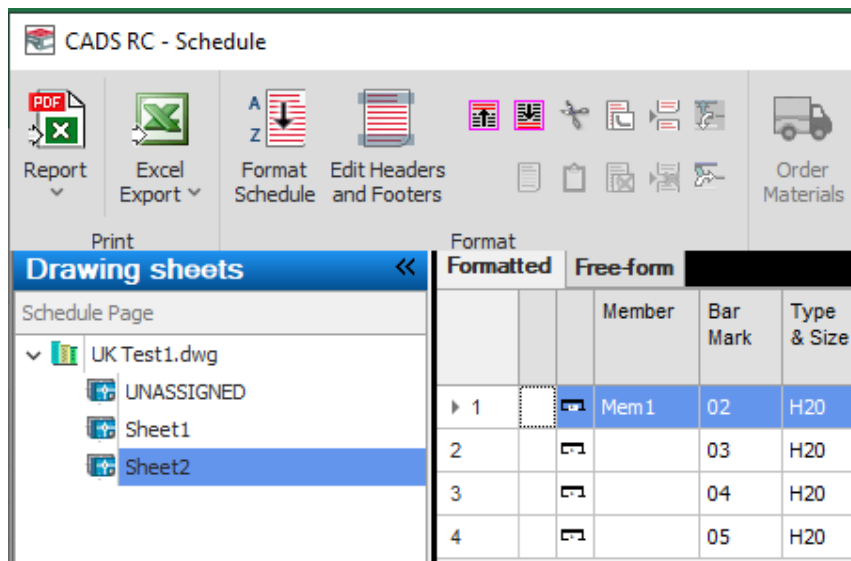
The creation of drawing sheets is triggered by the insertion of a title block that contains an appropriate attribute that describes the drawing number. If a value is entered for this attribute then a corresponding drawing sheet will be created inside CADS RC. If no value is specified for this attribute then CADS RC will present the following dialog to ask for the drawing sheet number.



The dialog box is titled "CADS RC - Drawing Sheet Number". It contains a message: "Please enter a valid drawing number that is unique within this drawing file". Below the message is a text input field labeled "Drawing sheet number". To the right of the input field is an "OK" button.

The drawing sheet number can be changed by editing the associated drawing number attribute with the title block. Drawing sheets can be deleted by erasing the corresponding title block. So essentially, you can think of a drawing sheet as an instance of a title block within the drawing. If you decide not to insert a title block then bars will be assigned to an UNASSIGNED drawing sheet. You can assign them to a valid drawing sheet later by using the **Assign Bar to Drawing Sheet**  command, as described later.

The drawing sheets are listed in the schedule as follows;



If you select one of these drawing sheets then only bars that belong to that specific drawing sheet will be shown in the formatted and free-form views.

Configuring your title blocks

You can configure your own title blocks to work with CADS RC by selecting the **Configure Title Block** command. This feature will be shown when you first run CADS RC following installation and when the program detects that a title block may have been inserted.

This **Configure Title Block** feature allows you to select your own title block and then map its attributes to CADS RC's data fields. In order to create drawing sheets and therefore formatted reports you will need to ensure that the drawing number field is mapped to an appropriate attribute within your title block. Mapping the remaining CADS RC data fields to title block attributes will result in the schedule headers and footers being automatically populated from the title block.

If your title block has no attributes then the **Configure Title Block** command will offer you the chance to automatically add a single attribute to represent the drawing number.

The Configure Title Block dialog is shown below:

CADS RC - Configure Title Block

Configure Title Block

Please ensure that you configure your drawing title block with this screen before using CADS RC. This configuration is necessary to allow drawing sheets created within CADS RC to be intelligently linked with the schedule.

First select your title block, which will display its attributes in the list below. Then choose the field name that corresponds with each attribute.

Select your title block:  Block name:

Title Block Field	AutoCAD Attribute Name
Drawing Number	DRAWINGNO
Drawing Title	DWGTITLE1
Scale	SCALE
Drawn By	DRAWN
Checked By	CHKD
Issue Date	DATE
Drawing Revision Mark	DRAWINGSHEETREVISIONMARK
Client	CLIENT
Architect Name	ARCHITECT
Job Number	JOBTITLE1
Project Name	JOBTITLE2
Site Reference1	SITEREFERENCE1
Site Reference2	SITEREFERENCE2
MaterialFor	
Location	

Remove this block Apply Cancel Help

Please consult the **CADS RC Customisation & Configuration Guide** for more information on saving the title block settings for future drawing sessions.

You can configure CADS RC to work with any number of title blocks regardless of whether they use consistent attribute naming. You can use the same method to migrate any title blocks that are imbedded in an AutoCAD DWT file.

Assigning bars to drawing sheets

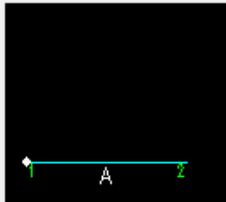
When you attempt to draw a bar then you will see that a new field that controls the drawing sheet assignment of the bar is present on the Bar Drawing dialogue, as shown below.

CADS RC - Bar Drawing

Sketch Bar Shape Code : Not Used

Other
☐ Un-Scheduled Bar

Shape Code

 00
01
11
12
13
14
15
21

00
Std.
99

☐ Suppress c/c display
☐ Suppress Label Multiply

View Alignment Bar Style
Side Outer Centre

Bar Label Data

Multi	No. Bars	Grade	Size	Prfx	Mark	c/c	Notes...
1	0	H	20		06	0.0	

Assign Bar to....

Member	Release	Drawing Sheet	Revision Mark
Mem1	UNASSIGNED	Sheet2	--

Bid Item Billing Code Bid Structure

UNASSIGNED Defai	UNASSIGNED	UNASSIGNED	
------------------	------------	------------	--

Dimension Data

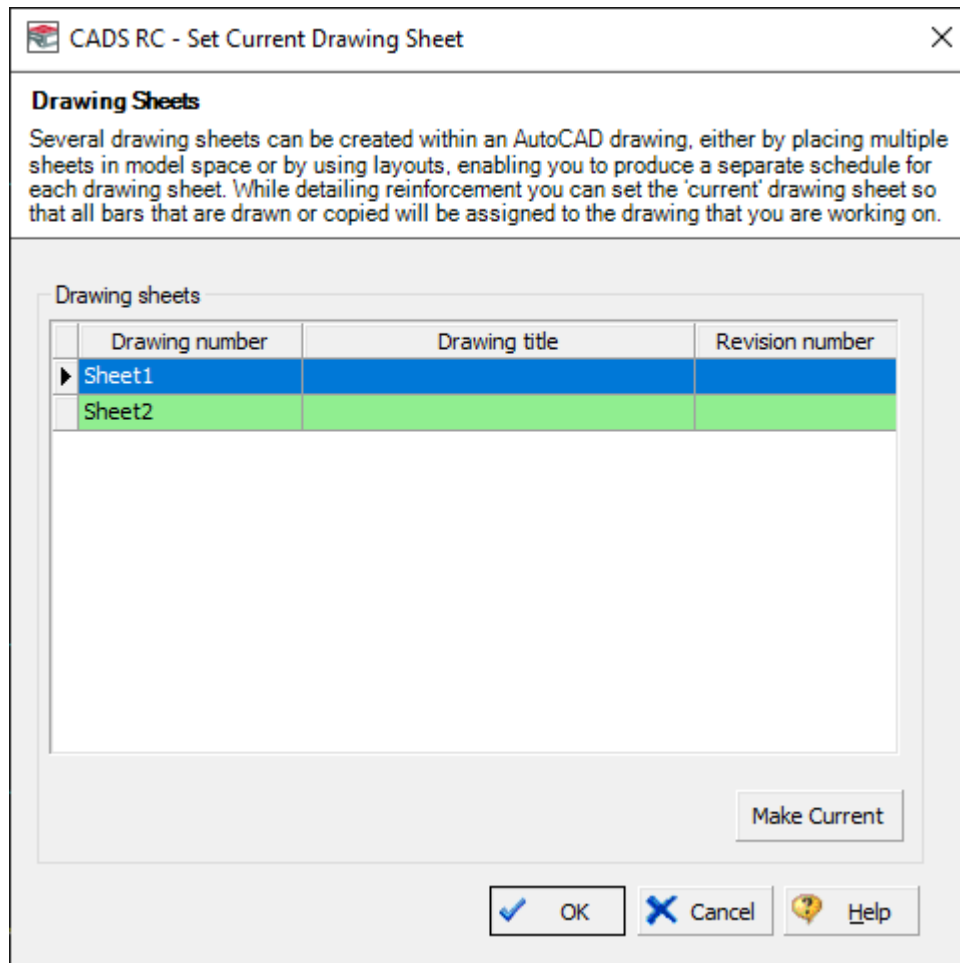
Edit Dimensions

Bar Lengths 0 0

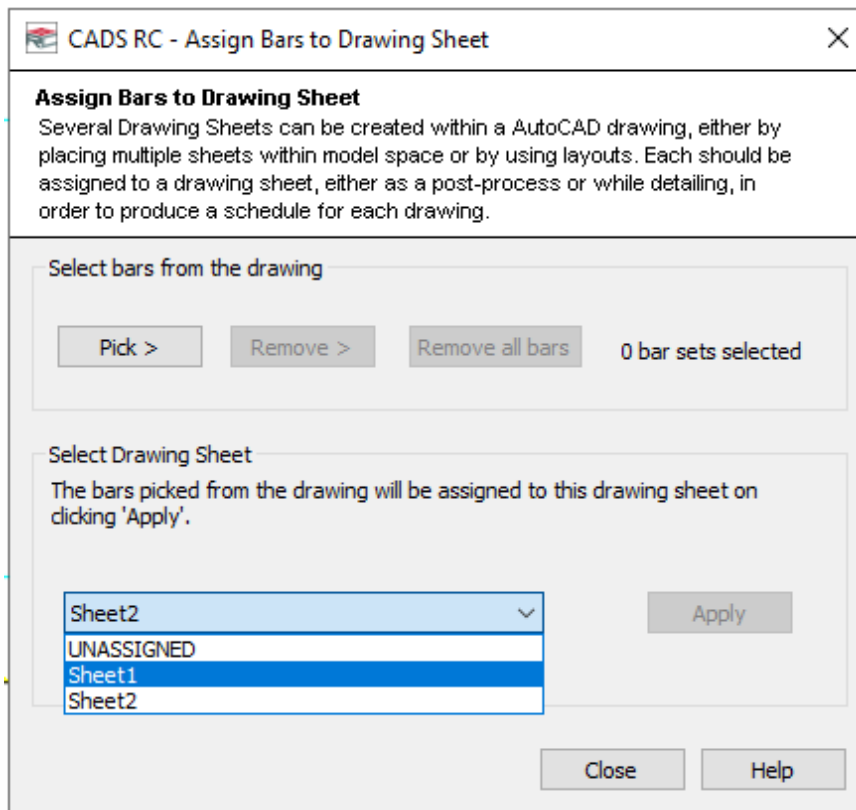
Set No.:

Current Def File: BS8666-2005.def | Current Bdf File: BS8666-2005.BDF

The program will default to the last drawing sheet created. You can change this default setting by using the **Set Current Drawing Sheet**  command, as shown below:



You can use the standard CADS RC bar/label editing commands to change a bar's drawing sheet assignment or alternatively use the new **Assign Bar to Drawing Sheet**  command that's available from the CADS-RC->Editing menu. This command allows for the rapid assignment of multiple bars, as shown below.



The following tutorials help explain some of the basic operations related to drawing sheets.



Try it: **Create a drawing sheet using CADS-VPM**

- 1 Launch CADS RC
- 2 Click CADS-VPM->**Create Layout**  command
- 3 Accept the default layout name and sheet. Click create
- 4 Immediately click OK on the Edit Attribute dialogue
- 5 Specify a drawing sheet number of "Sheet 1" in the CADS RC Drawing Sheet Number dialogue <Note: this dialogue will not appear if you specify a value for Drawing Number, in the edit attributes dialog>
- 6 Click CADS-RC->**View Schedule**  command
- 7 You should see that a drawing sheet called "Sheet1" has been created. If you now attempt to draw a bar using CADS-RC->Draw Bar->New Mark then you will see that this now defaults to this new drawing sheet. If you draw a bar then this bar will be assigned to this new drawing sheet.



Try it: **Create a paper space drawing sheet using CADS Scale**

- 1 Launch CADS RC
- 2 Click CADS Scale->**Drawing Setup**  command
- 3 Ensure "Apply setup to" is set to "Layout1". Select "Standard A0 setup". Click OK
- 4 Click Modify on the "Page Setup Manage" dialogue and select A0 paper size. Click close
- 5 Select a scale of 1:50 in the "Setup Scale" dialogue. Click OK
- 6 Immediately click OK on the Edit Attribute dialogue
- 7 Specify a drawing sheet number of "Sheet 1" in the CADS RC Drawing Sheet Number dialogue. <Note: this dialogue will not appear if you specify a value for Drawing Number, in the edit attributes dialog >
- 8 Click CADS-RC->**View Schedule**  command
- 9 You should see that a drawing sheet called "Sheet1" has been created. If you now attempt to draw a bar using CADS-RC->Draw Bar->New Mark then you will see that this now defaults to this new drawing sheet. If you draw a bar then this bar will be assigned to the drawing sheet titled "Sheet 1"



Try it: **Create a model space drawing sheet using CADS Scale**

- 1 Launch CADS RC
- 2 Click CADS Scale->**Drawing Setup**  command
- 3 Ensure "Apply setup to" is set to "Model". Select "Standard A0 setup". Click OK
- 4 Select a scale of 1:50 in the "Setup Scale" dialogue. Click OK
- 5 Immediately click OK on the Edit Attribute dialogue
- 6 Specify a drawing sheet number of "Sheet 1" in the CADS RC Drawing Sheet Number dialogue. <Note: this dialogue will not appear if you specify a value for Drawing Number, in the edit attributes dialog >
- 7 Click CADS-RC->**View Schedule**  command
- 8 You should see that a drawing sheet called "Sheet1" has been created. If you now attempt to draw a bar using CADS-RC->Draw Bar->New Mark then you will see that this now defaults to this new drawing sheet. If you draw a bar then this bar will be assigned to the drawing sheet titled "Sheet 1"



Try it: **Create a paper space drawing sheet using AutoCAD**

- 1 Launch CADS RC
- 2 Make "Layout1" active by selecting the tab
- 3 Right click on the Layout1 and select "Page Setup Manager...", Select Modify, Select a A0 paper size, Click Ok and Close
- 4 Select Insert->Block or type "Insert"
- 5 Browse to the "\\cads\AutoCAD 20**\CADS Viewport Manager\blocks folder" and select A0CADS.dwg. Click Ok and place the title block
- 6 Double click on the title block
- 7 Specify a drawing sheet number of "Sheet 1" in the CADS RC Drawing Sheet Number dialog
- 8 Click Ok on the attribute edit dialog
- 9 Click CADS-RC->**View Schedule**  command
- 10 You should see that a drawing sheet called "Sheet1" has been created. If you now attempt to draw a bar using CADS-RC->Draw Bar->New Mark then you will see that this now defaults to this new drawing sheet. If you draw a bar then this bar will be assigned to the drawing sheet titled "Sheet 1"



Try it: **Configuring your title block to work with CADS RC**

- 1 Launch CADS RC
- 2 Insert an instance of your title block using AutoCAD
- 3 Click CADS-RC>Configuration>**Configure Title Block** command (if this has not been automatically activated)
- 4 Use the pick button to select your title block
- 5 Specify which attributes relate to which CADS RC data fields. Ensure you map an attribute to the first drawing number field.
- 6 Click Apply
- 7 You will now be prompted to specify the drawing sheet number for the previously inserted title block. All subsequent inserts of this title block will result in the creation of a CADS RC drawing sheet. You can confirm the drawing sheet creation by viewing the schedule.



Key Points

- Drawing sheets are created when suitable title blocks are inserted
- You can configure your title blocks to work with CADS RC by using the **Configure Title Block** command.
- You can use the **Configure Title Block** command to automatically add a drawing number attribute to title blocks that have no attributes
- Drawing sheets can be edited or deleted via the associated title block
- You can only produce a formatted view or electronic output when you have at least one drawing sheet
- You can set the default drawing sheet by using the **Set Current Drawing Sheet**  command
- You can assign bars to a drawing sheet as you draw bars or at a later time
- Use the new **Assign bars to Drawing Sheet**  command when doing multiple assignments
- The program may sometimes mistakenly guess that an inserted block is a title block and show the Configure Title Block dialog. In these inappropriate situation simply select the cancel button



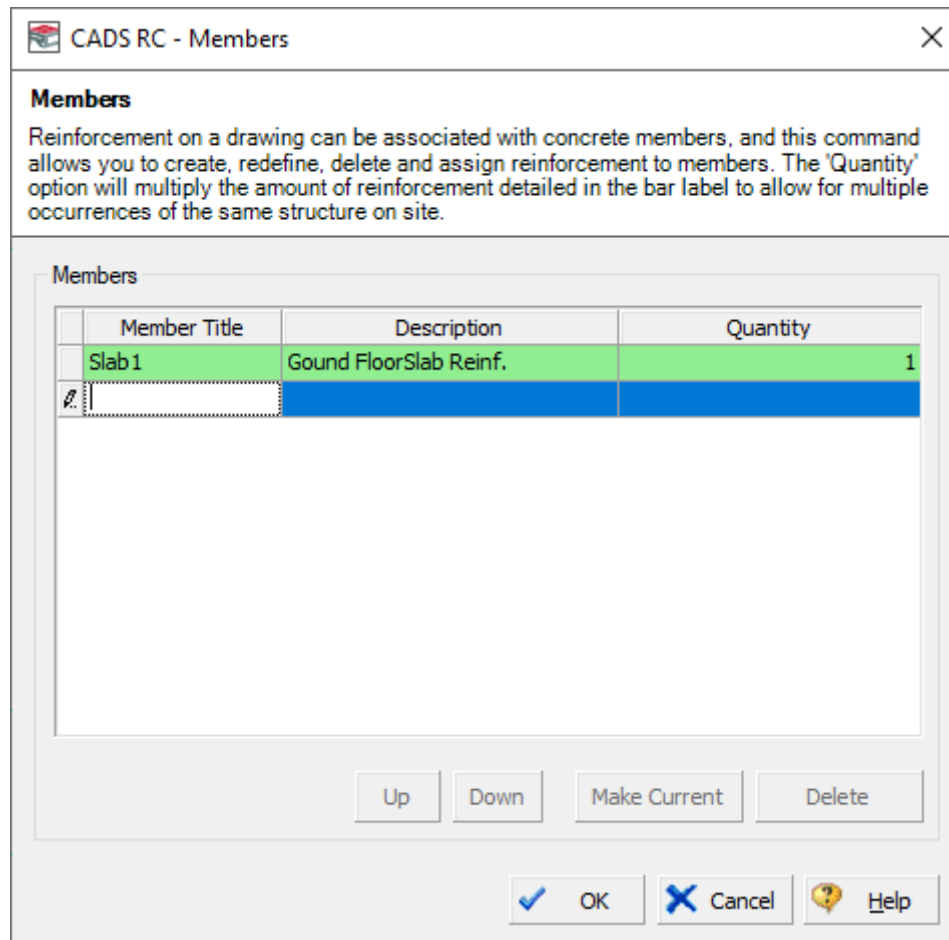
Commands

Action	Menu	Toolbar
View schedule 	CADS-RC > View Schedule...	CADS-RC
Create layout 	CADS-VPM > Create Layout	CADS-VPM
Drawing setup 	CADS Scale > Drawing Setup...	CADS-Scale
Assign bars to drawing sheet 	CADS-RC > Editing > Assign bars to Drawing Sheet... Editing	
Set Current drawing sheet 	CADS-RC > Draw Bar > Set Current Drawing Sheet... Draw Bar	
Configure title block 	CADS-RC > Configuration > Configure Title Block	Configuration

Members

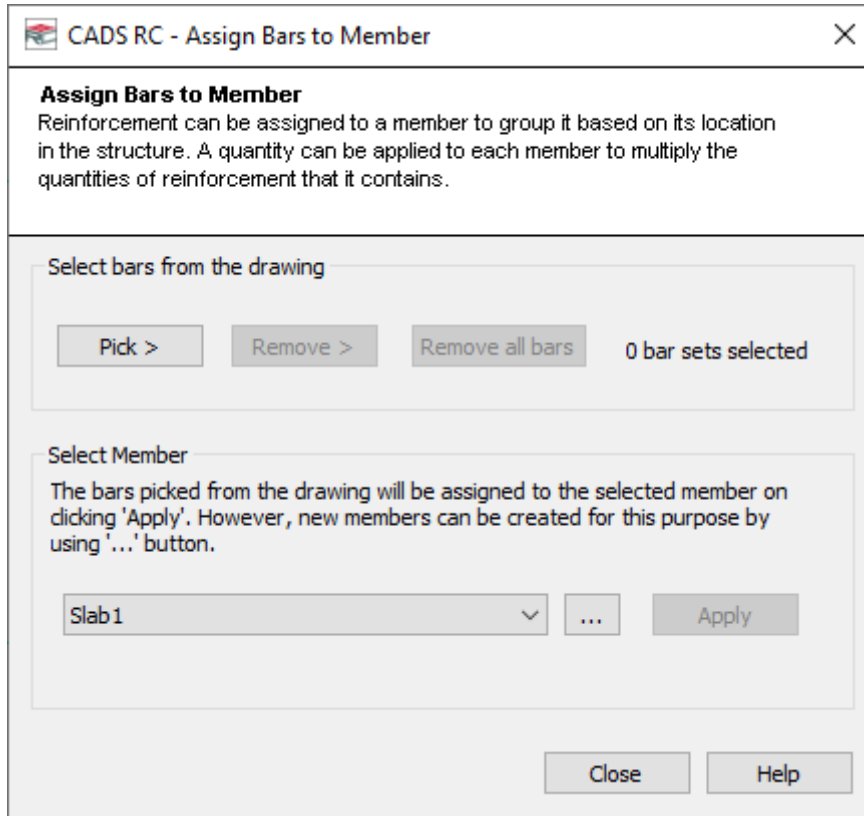
The appearance and usability of the dialogs relating to members have been improved.

The new **Members**  dialog is shown below.



To make the draw bar dialogue default to a specific member you can simply highlight the required member within the list and click the “Make Current” button.

The way of assigning existing bars to a member has been similarly improved. The new **Assign Bars to Member**  dialog is shown below.



CADS RC - Assign Bars to Member [X]

Assign Bars to Member
 Reinforcement can be assigned to a member to group it based on its location in the structure. A quantity can be applied to each member to multiply the quantities of reinforcement that it contains.

Select bars from the drawing

Pick > Remove > Remove all bars 0 bar sets selected

Select Member

The bars picked from the drawing will be assigned to the selected member on clicking 'Apply'. However, new members can be created for this purpose by using '...' button.

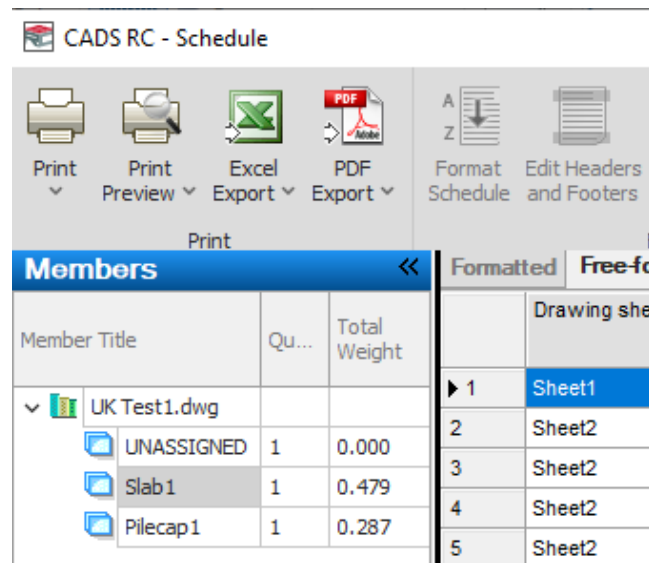
Slab 1 [v] ... Apply

Close Help

Use the selection buttons to build up a list of bars to be assigned to a member, select the required member from the list, then click apply.

The bars are assigned to the member on selecting apply and the number of selected bars is reset to 0 which allows you to make additional assignments. You can select the “...” button to access the Members dialog in order to create new members.

You can see a list of members together with their weight information from inside the schedule by selecting the Members Mode, as shown below. A fuller description of this can be found in the “Navigating around the Schedule” chapter.



Key Points

- The Members dialog will be offered on drawing the first bar
- To make the bar draw dialog default to a specific member set it as current
- Use the **Assign Bars to Members**  command to assign existing bars to a member
- You can view information about specific members from inside the schedule



Commands

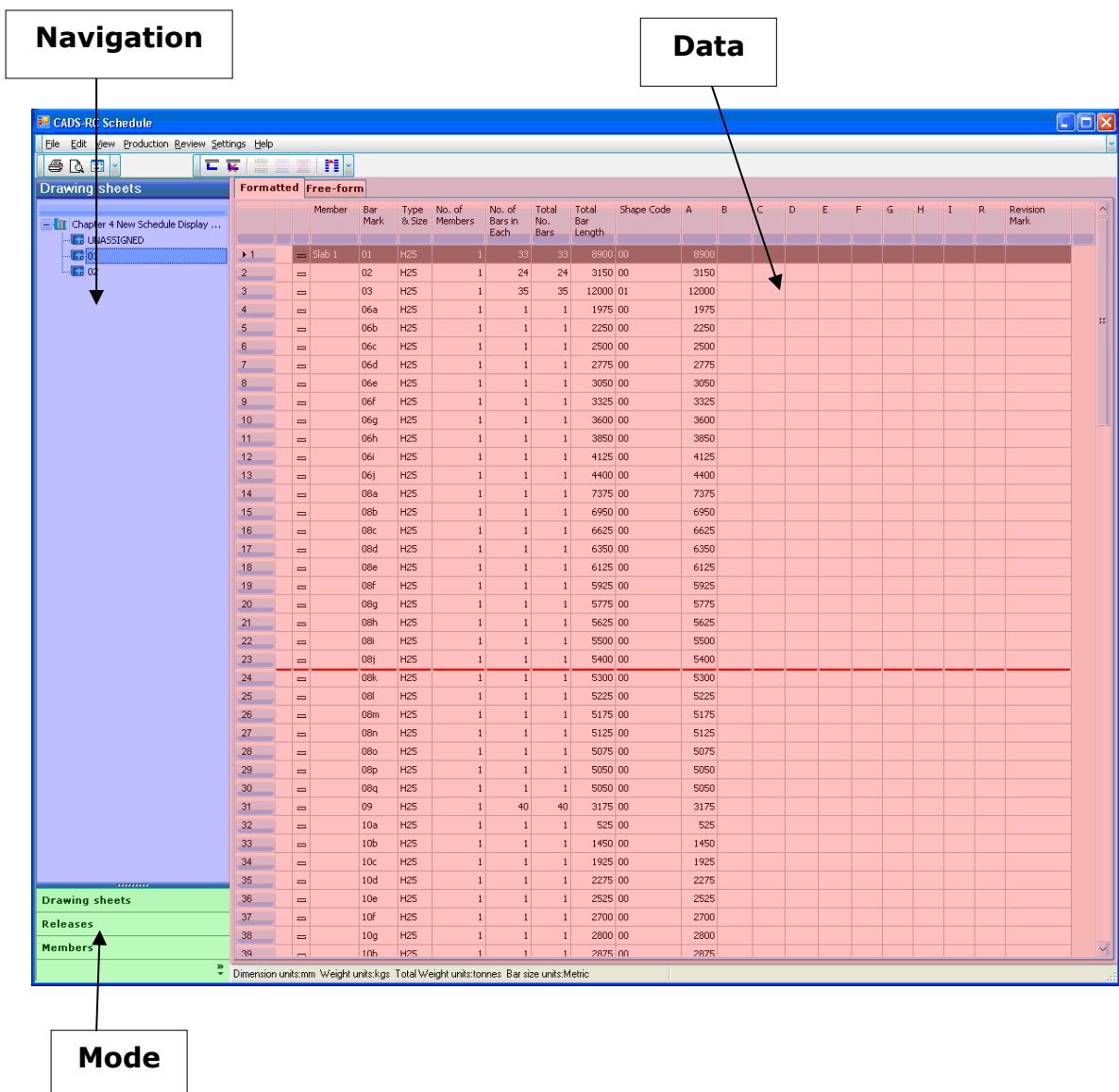
Action	Menu	Toolbar
Define Members	CADS-RC > Draw Bar > Set Members	Draw Bar 
Assign bars to member	CADS-RC > Editing > Assign Bars to Members	Editing 
View schedule 	CADS-RC > View Schedule...	CADS-RC

Navigating around the Schedule

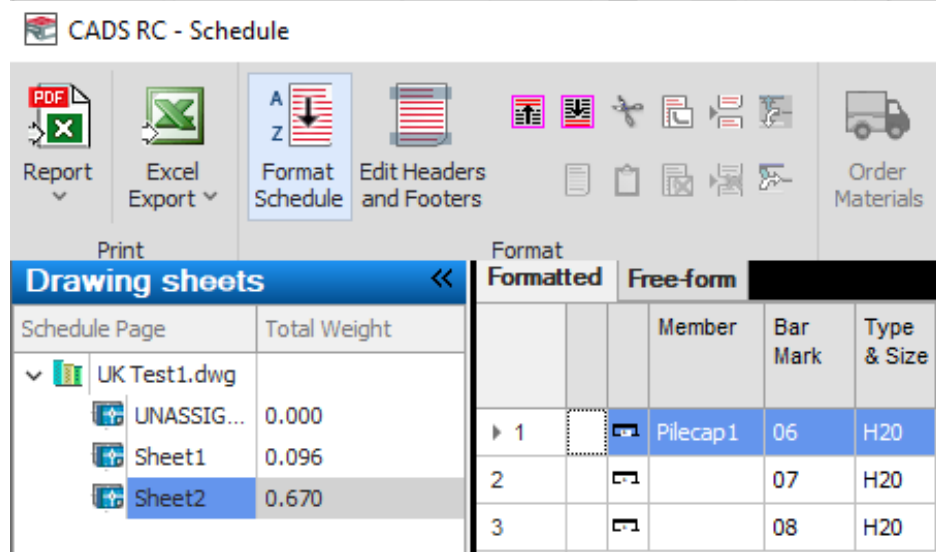
The schedule dialog and scheduling related functionality has been completely redesigned to offer improved usability, clarity and configurability. This section explains how to navigate around the new schedule dialog.

There are three main areas to the schedule dialog as highlighted below.

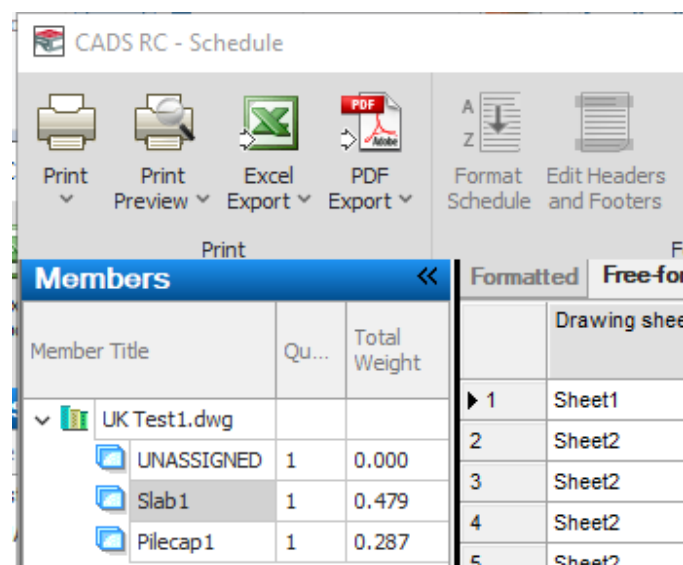
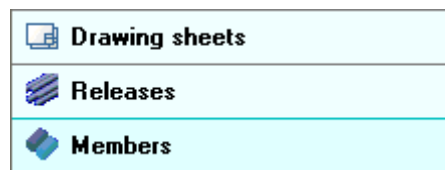
- The **Navigation** area: This area contains a tree view of either the drawing sheets, members or releases.
- The **Data** area: This displays the bar bending data depending on the selection chosen in the navigation area. This area has two tabs, formatted and free-form. These tabs will be described later.
- The **Mode** area: This area contains three buttons that alter whether the navigation area, and therefore the data area, displays data pertaining to drawing sheets, members or releases.



By default, the **Navigation** area will show a list of all the currently created drawing sheets. Selecting a drawing sheet will filter the **Data** area to show just bars that are assigned to that drawing sheet.



Selecting the **Members** button from the **Mode Area**, shown below, will toggle the **Navigation** area to show information about members. Selecting a member will filter the **Data** area to show just bars belonging to the selected member.



Selecting the **Release** button from the **Mode Area** will toggle the **Navigation** area to show information about releases. Further information on releases can be found later in this guide.

Formatted versus Free-form

For a given drawing sheet you can choose to view the bar bending data in the **Data** area in either a formatted or free-form style. You can toggle between these styles by selecting the corresponding tab above the **Data** area, as shown below.

You can only view the data in free-form mode for the unassigned drawing sheet.



When the **Mode** area is set to Member or Release you will notice that the formatted tab is unavailable, this is because you can only view formatted data from the drawing sheet mode.

The **formatted** style will display the bar bending data as it will appear on the printed report. In the formatted mode you can sort, combine and segregate the bars bending data, as well as attach diagrams. You can manually insert text lines, page breaks and even move lines about to produce the required formatted schedule.

The **free-form** style will display the 'raw' unformatted bar bending data so you can produce reports beyond the constraints of any company or industry standard. You can filter, group and order the bar bending data as required. A full description of this feature can be found in the section titled "Free Form Reports".



Try it: **Navigating around the schedule**

- 1 Launch CADS RC
- 2 Create three drawing sheets called "Sheet 1", "Sheet 2" & "Sheet 3"
- 3 Create three members called "Member 1", "Member 2" & "Member 3"
- 4 Draw numerous bars and assign them to the various drawing sheets and members
- 5 Click **View Schedule**  command
- 6 By default the formatted view of the first drawing sheet ("Sheet 1") should be displayed
- 7 Select each drawing sheet in turn to filter the Data view to show just bars belonging to that drawing sheet
- 8 Select the Member button from the Mode Area to change the mode of the Navigation area. The Navigation area should now show the list of members
- 9 Select each member in turn to filter the Data view to show just bars belonging to that drawing sheet
- 10 Select the Drawing Sheet button from the Mode Area to change the mode of the Navigation area. The Navigation areas should now show the list of drawing sheets
- 11 Select the formatted tab to toggle the style of the Data area



Key Points

- The Navigation area can be toggled to show drawing sheets, members or release by using mode selector
- You can only view a formatted view from the drawing sheet mode
- You can only view the data in free-form mode for the unassigned drawing sheet
- The data area is filtered depending on the selected drawing sheet, member or release
- The free-form style can be used to produce quick queries and reports

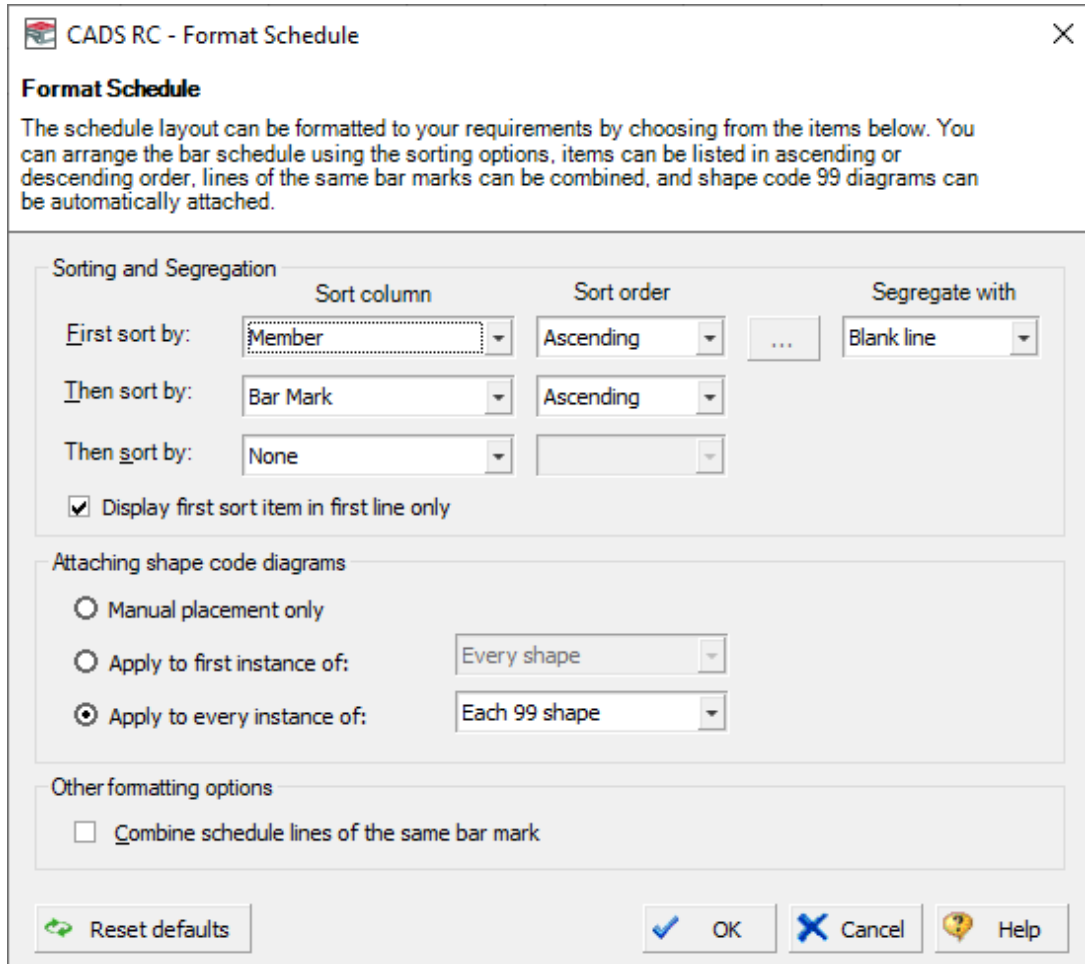


Commands

Action	Menu	Toolbar
View schedule 	CADS-RC > View Schedule...	CADS-RC

Formatting the Schedule

It is now much easier to format the schedule to achieve your required layout. The following **Format Schedule**  dialog is available from the Schedule->Edit menu.



CADS RC - Format Schedule

Format Schedule

The schedule layout can be formatted to your requirements by choosing from the items below. You can arrange the bar schedule using the sorting options, items can be listed in ascending or descending order, lines of the same bar marks can be combined, and shape code 99 diagrams can be automatically attached.

Sorting and Segregation

	Sort column	Sort order	Segregate with
First sort by:	Member	Ascending	...
Then sort by:	Bar Mark	Ascending	
Then sort by:	None		

☒ Display first sort item in first line only

Attaching shape code diagrams

☐ Manual placement only
☐ Apply to first instance of: Every shape
☒ Apply to every instance of: Each 99 shape

Other formatting options

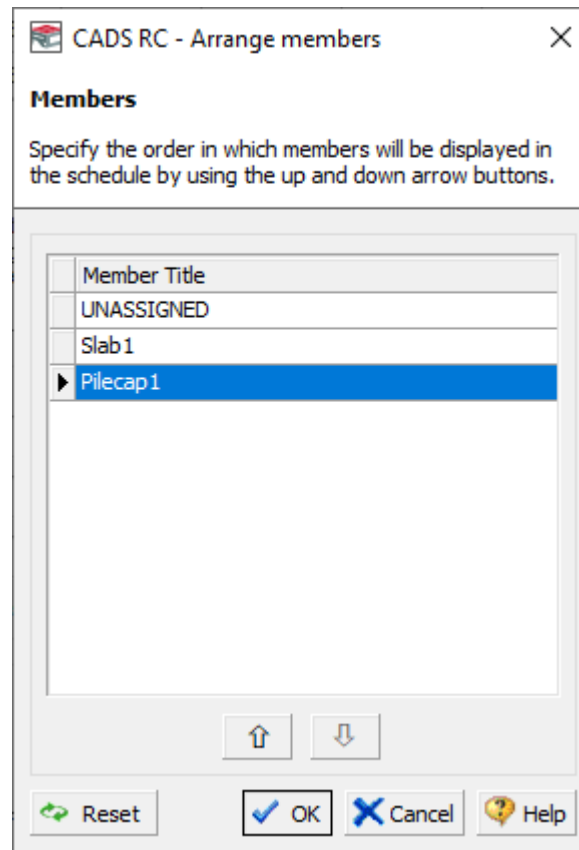
☐ Combine schedule lines of the same bar mark

You can apply three levels of sorting, the first having an additional segregated options.

Additionally, you can specify whether and how you'd like diagrams attached. The entire schedule can also be combined as part of the formatting operation.

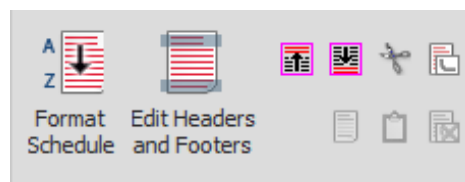
The "Reset defaults" button can be used to restore the default settings from the currently configured schedule configuration file

If you wish to define the exact sequence of members within the schedule then you can set the sort order to "custom". This enables the "..." button, which provides access to the following dialog:

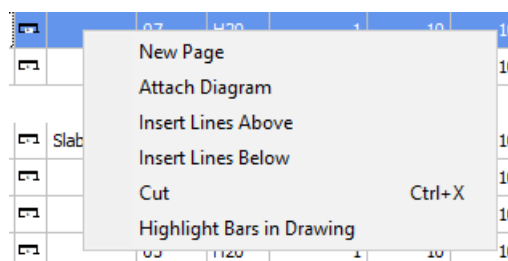


This dialog allows you to specify the exact order in which members should appear in the schedule, by allow you to move members up and down to achieve the required sequence.

Beyond this automatic formatting you are also free to manipulate the schedule manually using a range of commands.



Or by directly selecting a line within the schedule and using a right mouse click to show available options.



By default the schedule will be automatically combined on events such as placing a schedule on drawing. You can configure the schedule to combined either always, only during specific actions, or wholly via the manual commands. More details on these configuration options can be found in the **CADS RC Customization & Configuration Guide**



Key Points

- The formatting options can only be applied to the formatted view and not to the free-form view
- Select a schedule line and use a right mouse click to find available options
- Some manual manipulation of the schedule may result in a conflict with the automatic formatting options. This will result in the automatic formatting options being reset.
- You can configure exactly when the program should combine bars

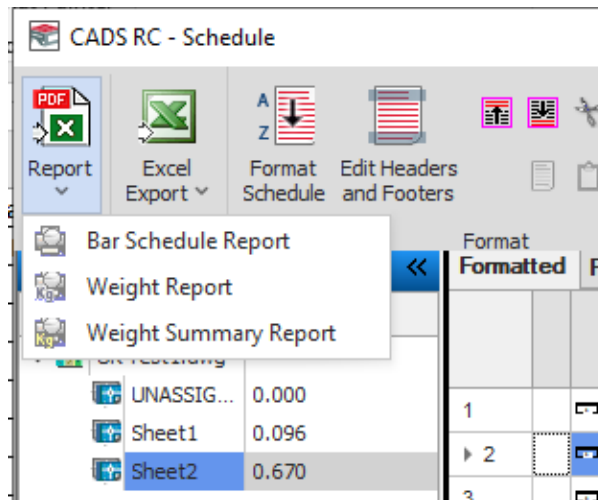


Commands

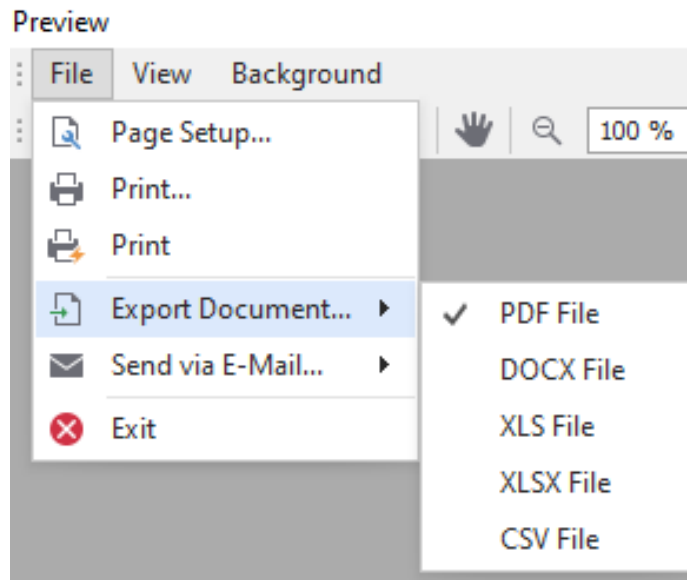
Action	Menu	Toolbar
View schedule 	CADS-RC > View Schedule...	CADS-RC

Printing Schedules & Reports

A schedule can be printed using the typical **Print** and **Print Preview** options from the Schedule->File menu. You will first need to ensure that the correct drawing sheet is selected from the Navigation area and that the schedule has been formatted as required.



The **Print Preview** option offers some additional export options. To access these select either the "Export/Save To" options from the File menu or the following toolbar icons.



The style of the printed reports is controlled by the report templates which can be configured from the **Configure Settings** command from the Schedule->Settings command. A detailed description of how to customize your reports can be found in the **CADS RC Customization & Configuration Guide**.

Alternatively, you can place a schedule on the drawing. This can be done from AutoCAD by selecting the **Place Schedule on Drawing**  command from the CADS-RC->Place Schedule menu. The command will ask you to select the required drawing sheet.

If changes are made to bars following the placement of the schedule on drawing then an “INVALID” message will appear over the schedule on drawing, as shown below.

[illegible]

This is to signify that the schedule is now out-of-date. The schedule on drawing can be updated at any time by selecting the **Refresh Schedule on Drawing**  command.



Try it: Printing a schedule

- 1 Launch CADS RC
- 2 Create a drawing sheet using one of the methods described in the Drawing Sheet section above
- 3 Draw some bars on this new drawing sheet
- 4 Click **View Schedule**  command
- 5 Click **Print Preview** from the File menu



Try it: **Place and updating a schedule on drawing**

- 1 Launch CADS RC
- 2 Create a drawing sheet using one of the methods described in the Drawing Sheet section above
- 3 Draw some bars on this new drawing sheet
- 4 Click **Place Schedule on Drawing**  command
- 5 Tick the drawing sheet and click Ok
- 6 Place the schedule on drawing
- 7 Edit the bar size of one of the bars
- 8 The schedule on drawing should now be shown as “INVALID”
- 9 Click **Refresh Schedule on Drawing**  command
- 10 The schedule on drawing should now be up-to-date



Key Points

- Ensure you have the correct drawing sheet selected before doing a print
- The preview dialog includes some additional export options. (e.g. PDF, Excel)
- The schedule on drawing will display an “INVALID” message if subsequent edits are made to the bars being shown. The schedule can be refreshed by using the **Refresh Schedule on Drawing**  command.

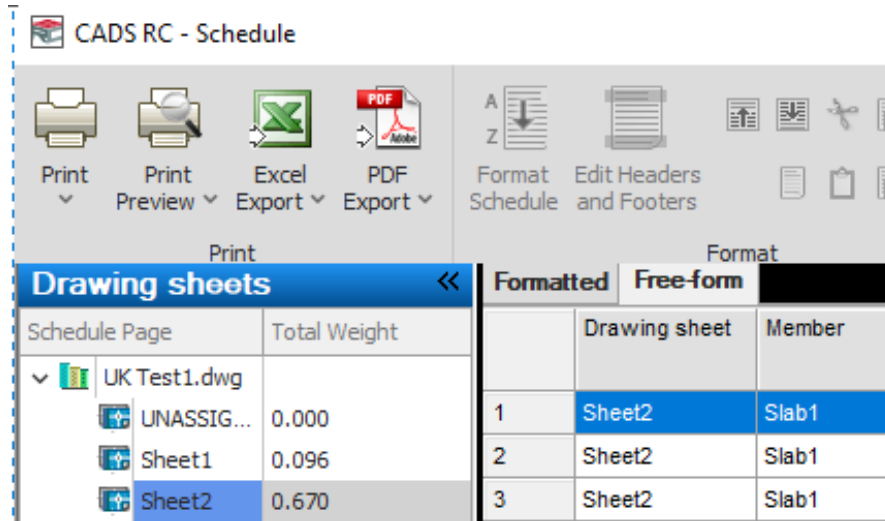


Commands

Action	Menu	Toolbar
View schedule 	CADS-RC > View Schedule...	CADS-RC
Place schedule on drawing 	Place Schedule > Place Schedule on Drawing	Place Schedule
Refresh schedule on drawing 	Place Schedule > Refresh Schedule on Drawing	Place Schedule

Free-form Reports

A custom report can be produced from the bar bending data using the free-form view. To access this open the schedule and select the free-form tab as shown below.



The bar bending data will initially be displayed in the order in which the bars were created. You can change the order of the bar bending data by selecting the required column header. The order can be changed from ascending to descending by repeatedly clicking on the column header.

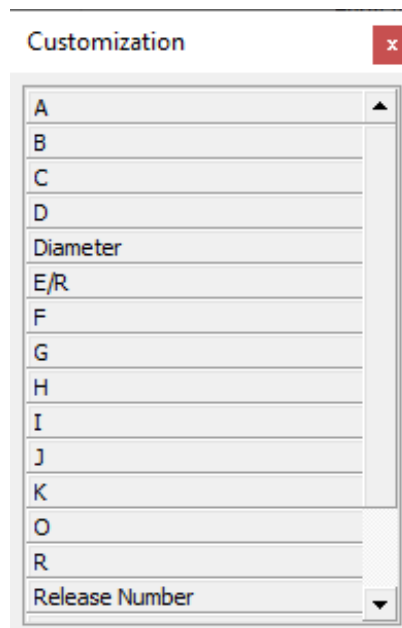
Formatted		Free-form				
	Drawing sheet	Member	Bar Mark	Type	Bar Size	No. of Members
1	Sheet2	Slab1	01	H	12	1
2	Sheet2	Slab1	02	H	12	1
3	Sheet2	Slab1	03	H	12	1
4	Sheet2	Slab1	04	H	12	1
5	Sheet2	Slab1	05	H	12	1
6	Sheet2	Pilecap1	06	H	12	1
7	Sheet2	Pilecap1	07	H	12	1

You can group bars with the same property by right clicking on the column header and selecting the **Group by This Column** option, as shown below. You can group several columns if required. These can be ungrouped by selecting the **Ungroup** option.

Formatted		Free-form							
	Drawing sheet	Member	Bar Mark	△	Type	Bar Size	No. of Members	No. of Bars in Each	Total N Bars
1	Sheet2	Slab1	02		H	20			
2	Sheet2	Slab1	03		H	20			
3	Sheet2	Slab1	04		H	20			
4	Sheet2	Slab1	05		H	20			
5	Sheet2	Pilecap1	06		H	20			
▶ 6	Sheet2	Pilecap1	07		H	20			
7	Sheet2	Pilecap1	08		H	20			

Sort Ascending
Sort Descending
Clear All Sorting
Group By This Column
Show Group By Box
Hide This Column
Column/Band Chooser
Best Fit
Best Fit (all columns)
Reset Default View

You can add/remove columns by right clicking on a column header and selecting the **Column Chooser** option. This will display a list of available columns. These can be dragged to the column header area as required. You can also drag unwanted headers from the column header area into this dialog.



Once you have the required report you can select the **Print** or **Print Preview** command from the Schedule->File menu.

The example report below shows a report of just the type H, size 12 bars.

Formatted		Free-form											
	Drawing sheet	Member	Bar Mark	Type	Bar Size	No. of Members	No. of Bars in Each	Total No. Bars	Bar Length (mm)	Shape Code	Shape Category		
Bar Size: 12 Total Weight : 0.241'													
1	Sheet2	Slab1	02	H	12	1	10	10	3875	00	Straight		
2	Sheet2	Slab1	03	H	12	1	10	10	3875	00	Straight		
3	Sheet2	Slab1	04	H	12	1	10	10	3875	00	Straight		
4	Sheet2	Slab1	05	H	12	1	10	10	3875	00	Straight		
5	Sheet2	Pilecap1	06	H	12	1	10	10	3875	00	Straight		
6	Sheet2	Pilecap1	07	H	12	1	10	10	3875	00	Straight		
7	Sheet2	Pilecap1	08	H	12	1	10	10	3875	00	Straight		



Try it: **Creating a free form report**

- 1 Launch CADS RC
- 2 Draw numerous bars of a variety of sizes and types
- 3 Click **View Schedule**  command
- 4 As we have no drawing sheets then it will be in free-form mode
- 5 Right click on the Type column header and select **Group by this Column**
- 6 Right click on the Bar Size column header and select **Group by this Column**
- 7 Expand some of the groupings by selecting the  symbol
- 8 Click **Print Preview** 



Key Points

- Select the Free-form tab to switch to free-form mode
- Right click on the column headers to see available options

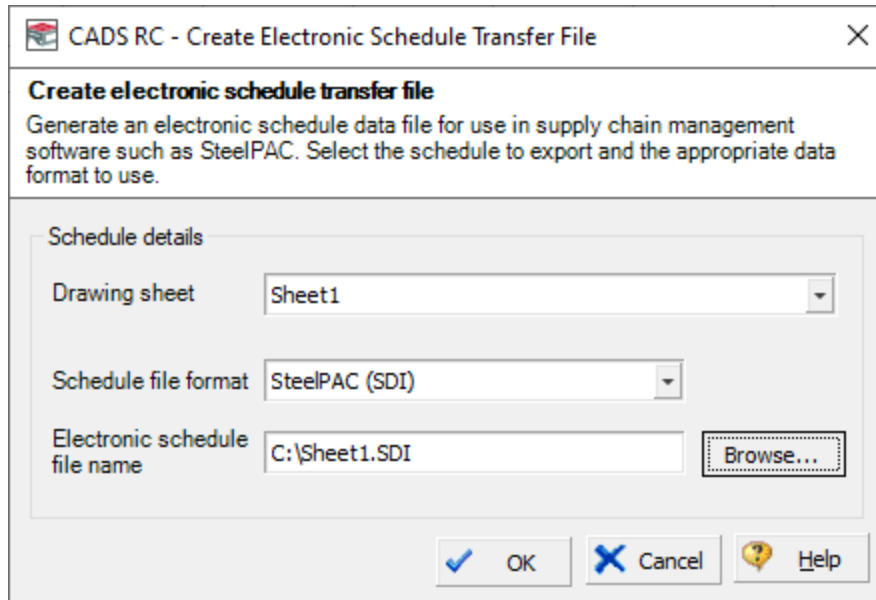


Commands

Action	Menu	Toolbar
View schedule 	CADS-RC > View Schedule...	CADS-RC

Exporting Data

Use the **Create Electronic Schedule File** command from the Schedule->Review menu to export your drawing sheet bar bending data to formats such as Steelpac & CSF.



Try it: **Export to Steelpac**

- 1 Launch CADS RC
- 2 Create a drawing sheet using one of the methods described in the Drawing Sheet section above
- 3 Draw some bars on this new drawing sheet
- 4 Click **View Schedule**  command
- 5 Click **Create Electronic Schedule File** from the Review menu
- 6 Specify a folder and file name, then Click Ok



Key Points

- Exports are done on a drawing sheet basis. You can only export bars that are assigned to a drawing sheet



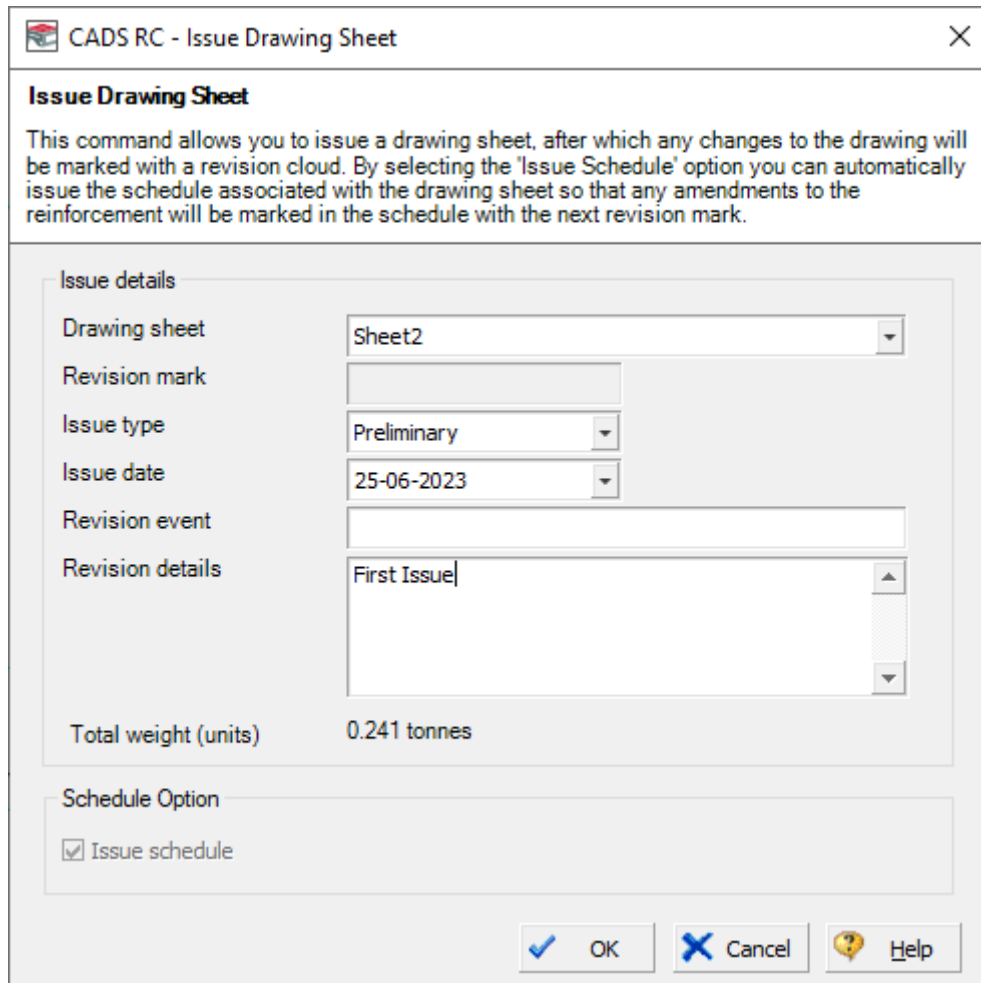
Commands

Action	Menu	Toolbar
View schedule 	CADS-RC > View Schedule...	CADS-RC

Issuing & Revision

Once the drawing and schedule have been completed and checked it is normal to issue them together. However, CADS RC does include functionality to only issue the schedule. Before issuing the schedule formatting should be checked, any diagrams required added and the schedule header and footer information added. Once the schedule is issued it becomes locked and its presentation can not be altered.

To issue a drawing sheet together with the schedule select the **Issue Drawing Sheet**  command from the CADS-RC->Review menu.



CADS RC - Issue Drawing Sheet

Issue Drawing Sheet

This command allows you to issue a drawing sheet, after which any changes to the drawing will be marked with a revision cloud. By selecting the 'Issue Schedule' option you can automatically issue the schedule associated with the drawing sheet so that any amendments to the reinforcement will be marked in the schedule with the next revision mark.

Issue details

Drawing sheet	Sheet2
Revision mark	
Issue type	Preliminary
Issue date	25-06-2023
Revision event	
Revision details	First Issue

Total weight (units) 0.241 tonnes

Schedule Option

☒ Issue schedule

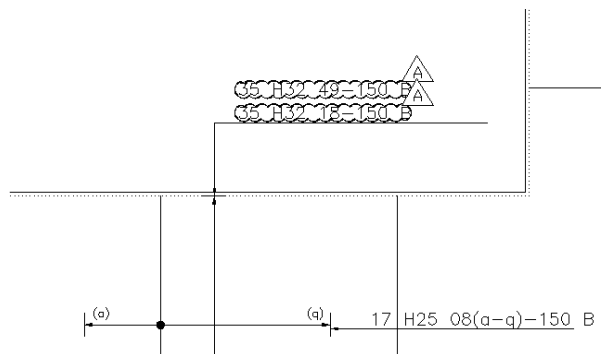
OK Cancel Help

Typically no revision mark is required on the first issue hence the field will be unavailable. As shown above. Note: this dialog is confirming the revision mark related to this issue and not asking you to specify the revision mark to be used for subsequent revisions.

Following the issues a revision table will be automatically generated. If the title block does not contain this table then you will be asked to place the table manually.

	Tender Issue to Contractors	05/07/2006
REVISION MARK	REVISION DETAILS	DATE
Client		
Architect		

If you now edit any of the bars within the issued drawing sheet then they will automatically be marked with a revision cloud and symbol, as shown below.



A track changes layer is also created automatically as part of the revision. This can be used to identify and control revision change. The layer name is prefixed with the drawing sheet number and includes the corresponding revision letter. (e.g. **Sheet1RevisionAChanges**)

You could alternatively issue just the schedule independent of the drawing sheet using the **Issue Schedule**  command from inside schedule dialogue (Schedule->Review menu). To enable this option, you will first need to un-tick the Always Issue Schedule with Drawing option within the Issue and Revision section of Schedule Configuration Settings, as shown below.

Custom schedule revision system settings

Show revision marks ☐ Show first issue revision mark

Show revision history

Schedule header revision mark

Lock issued pages ☐ Always issue schedule with drawing

Once issued the schedule background colour will change as shown below.

Formatted		Free-form									
			Member	Bar Mark	Type & Size	No. of Members	No. of Bars in Each	Total No. Bars	Bar Length (mm)	Shape Code	A
▶ 1			Pilecap1	06	H12	1	10	10	3875	00	3875
2				07	H12	1	10	10	3875	00	3875
3				08	H12	1	10	10	3875	00	3875
4											
5			Slab1	02	H12	1	10	10	3875	00	3875
6				03	H12	1	10	10	3875	00	3875
7				04	H12	1	10	10	3875	00	3875
8				05	H12	1	10	10	3875	00	3875



Try it: **How to issue, revision and re-issue a drawing sheet together with schedule**

- 1 Launch CADS RC
- 2 Create a drawing sheet
- 3 Draw some bars on this new drawing sheet
- 4 Click the **Issue Drawing Sheet**  command
- 5 Accept all the defaults in the Issue Drawing Sheet dialog by pressing Ok. (Ensure Issue Schedule is ticked)
- 6 Click Ok in the Issue Schedule dialog.
- 7 If the drawing sheet was created in paper space then you should now be in the associated layout. Depending on which title block you inserted you will either see a revision table automatically appended to the title block or be asked to place one manually.
- 8 Click **View Schedule**  command to see all issued bars highlighted in an alternative colour. You will notice that you can not manipulate these lines.
- 9 Edit the size of one of the issued bars. Click Ok when the CADS RC revision warning appears
- 10 A revision cloud should now appear around the edited bar label
- 11 Click **View Schedule**  command to see that a revision A letter has been applied to the edited bar
- 12 Using AutoCAD locate the AutoCAD layer that is suffixed with drawing sheet name. (e.g. Sheet1RevisionAChanges) Toggle this layer on/off to show/hide the revision clouds and annotation
- 13 We have now completed our revisions so need to re-issue the drawing using the **Issue Drawing Sheet**  command
- 14 Accept all the defaults in the Issue Drawing Sheet dialog by pressing Ok. Note that the Revision Mark field now shows A
- 15 Accept all the defaults in the Issue Schedule dialog by pressing Ok. Note that the Revision Mark field now shows A
- 16 The revision table will now have a Revision A entry
- 17 Click **View Schedule**  command and then click **Print Preview**  Note the Revision letter A in the header and next to the bar



Key Points

- You can issue a schedule with or without its associated drawing sheet
- You have to un-tick the “Always Issue Schedule with Drawing” configuration setting in order to issue schedule independently of the drawing
- You can un-issue a drawing sheet or schedule by using the appropriate un-issue command. You can only do an un-issue if you have made no changes since the last issue
- You can delete a drawings entire revision history by using the CADS-RC->Review->**Delete Revision History**  command
- Revision clouds, annotation and track change layers are generated automatically following the edit of a bar that belongs to an issued drawing sheet



Commands

Action	Menu	Toolbar
View schedule 	CADS-RC > View Schedule...	CADS-RC
Issue drawing sheet	CADS-RC > Review > Issue Drawing Sheet...	Review 
Delete Revision History	CADS-RC > Review > Delete Revision History	Review 