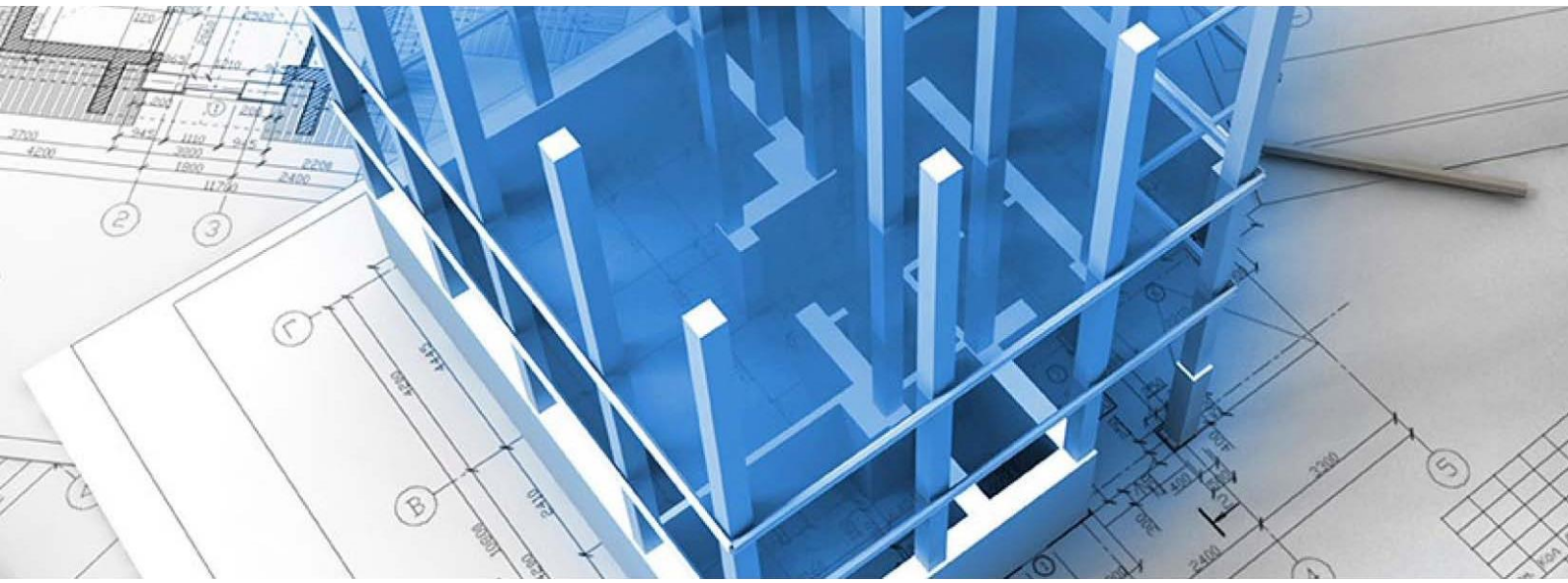
BRICSCAD

Basic Training



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Using fields in title blocks

Using drawing and sheet set properties in fields title blocks can be filled out nearly automatically.

Small projects, such as a family house, are usually drawn in a single drawing with multiple layouts. In large projects multiple drawings are used, each containing one or more layouts, which can then be grouped as sheets in a sheet set. Apart from the default drawing, sheet set and sheet properties, such as the project name and description, custom properties, such as name and address of the owner and the architect, can be defined.

The creation of a title block consists of the following steps:

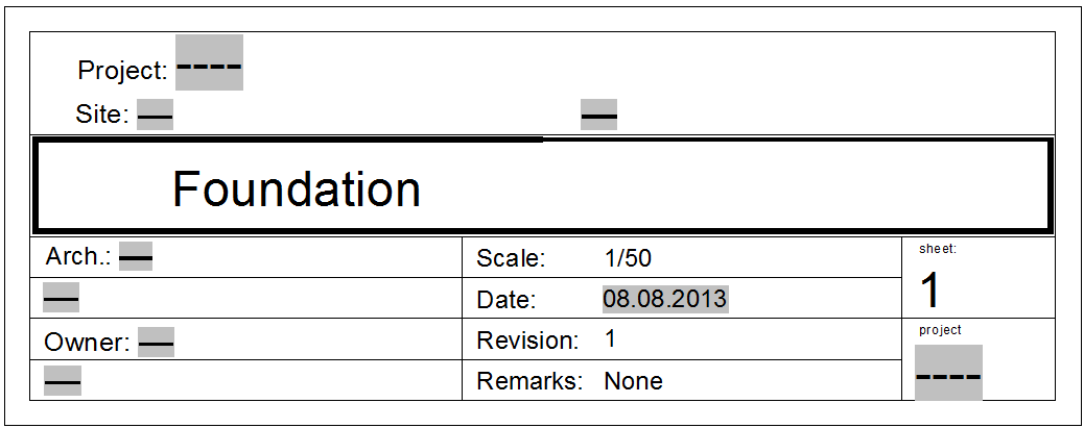
1. Drawing the layout of the title block: borders, logos, labels, …
2. Adding attributes with fields to define the variable content of the title block.

1.1 Title blocks in a small project

1.1.1 Defining custom drawing properties

1. Open the drawing **Template_SmallProject.dwg**.
2. Open the **Foundation** layout.

The title block looks like this:



If the **FIELDDISPLAY** system variable is **ON**, fields display on a gray background, which is not printed.

The **FIELDEVAL** system variable defines when fields are updated. The options are: commando's REGEN, SAVE, ETRANSMIT, PLOT / PRINT and/or when opening the drawing.

The **UPDATEFIELD** command prompts to select the fields to be updated.

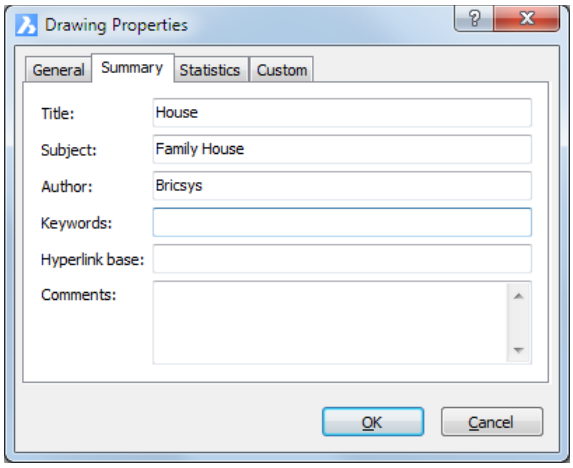
Hyphens (----) display in fields that refer to a property which is not specified yet.

3. In the **File** menu choose **Drawing Properties**…
   The **Drawing Properties** dialog box opens.
4. Click the **General** tab to see the default drawing information.
   Fields on the **General** tab cannot be edited.
5. Click the **Summary** tab to see the default editable drawing properties.

   Fill out the following fields:

   - **Title**: House
   - **Subject**: Family House
   - **Author**: Bricsys

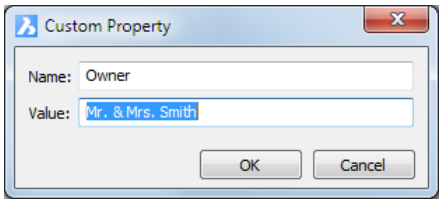
   Click the **OK** button to confirm.



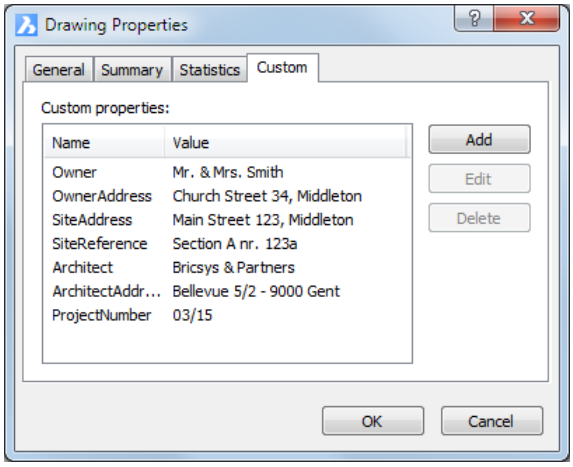
6. Click the **Regen** tool ( ) in the **Redraw/Regen** toolbar
   or
   Type **regen** in the command bar.

   The content of the title block is updated.
7. Reopen the **Drawing Properties** dialog box.
8. Click the **Custom** tab to see the custom properties.
9. Do one of the following to edit an existing custom property:
   - Select the property, then click the **Edit** button.
   - Double click the property.

   The **Custom Property** dialog box displays:



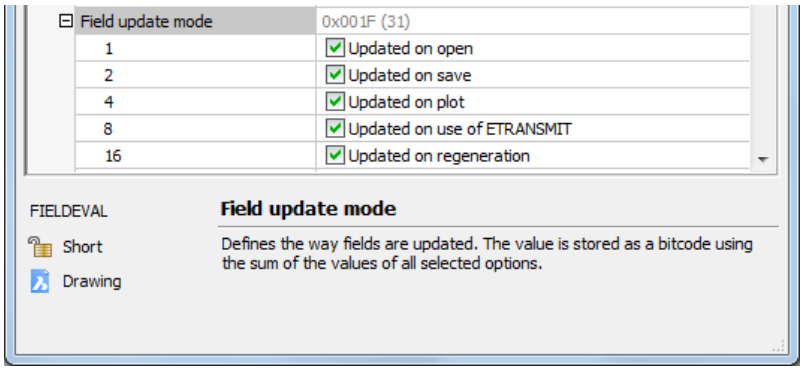
10. Type a new name in the **Value** field, then click the **OK** button.
11. Define the other custom properties as indicated in the image below.



12. Click the **OK** button on the **Drawing Properties** dialog box.
13. Choose **Settings** in the **Settings** menu, then lookup the **FIELDEVAL** system variable under **Program Options** / **User Preferences**.

    The FIELDEVAL system variable defines when the fields in a drawing are updated.

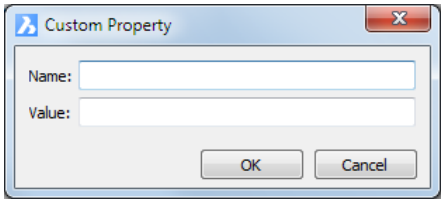
The value of the FIELDEVAL system variable is saved in the drawing and therefore might vary between drawings.



14. Do one of the following to update the custom drawing properties fields in the various title blocks:
    - **Save** the drawing.
    - Execute the **REGEN** command.

1.1.2 Create a custom property

1. Open the drawing **Template_SmallProject.dwg**.
2. Choose **Drawing Properties…** in the **File** menu.
   The **Drawing Properties** dialog box displays.
3. Click the **Custom** tab.
4. Click the **Add** button.



5. Type a name in the **Name** field.
6. Type the definition in the **Value** field.
7. Click the **OK** button.
   The new property is added and can now be used in a field.

1.1.3 Composing the title block

In a title block we will create three types of texts:

- Ordinary texts (texts)
- Attributes
- Fields

In the title block in the drawing **Template_SmallProject.dwg** exist:

1. Attributes:
   - Remark
   - Revision
   - Number
   - Scale
   - Title

2. Drawing property fields:
   - Summary/Subject
   - Custom/Architect
   - Custom/ArchitectAddress
   - Custom/Owner
   - Custom/OwnerAddress
   - Custom/SiteAddress
   - Custom/SiteReference
   - Custom/ProjectNumber
3. Fields:
   - Date/SaveDate

1.2 Title blocks in a large project

A large project consists of a large number of drawings in different folders. Based on this folder structure, we will create a sheet set with layouts of the project drawings.

1.2.1 Creating the sheet set

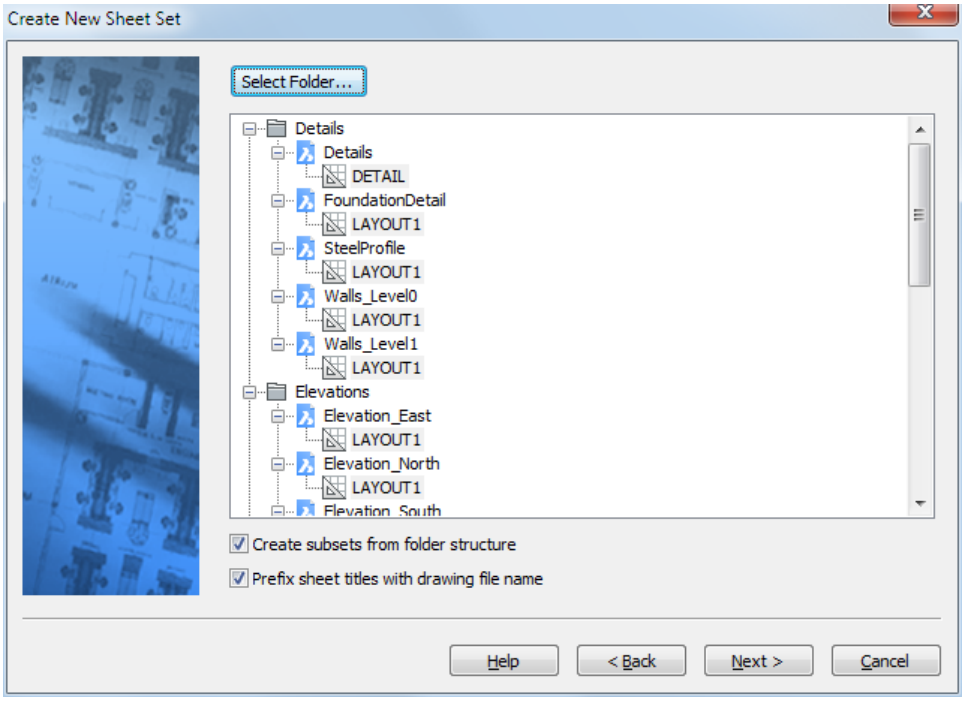
1. Click the **Sheet sets…** tool ( ) in the **Standard** toolbar.

   The **Drawing Explorer – Sheet Set** dialog box displays.

2. Click the **New Sheetset** icon ( ) in the **Drawings** panel.

   The **Create New Sheet Set** dialog box displays.

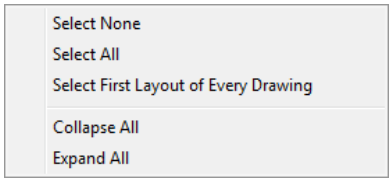
3. Choose **Use Existing Drawings** then click on the **Next** button.
4. Click on the **Select Folder…** button and select the folder **..\Exercises\House**.



5. Select the layouts you want to include in the sheet set.

   Do the following:

   - If you immediately click the **Next** button, all layouts are included in the sheet set.
   - Right click for a context menu:



   - Keep the Ctrl-key pressed to add or remove a layout.

6. Click the **Next** button.
7. Type **House** in the **Save sheet set file as** field and click the **Browse** button ( ) to select a folder.

   The **Save new sheet set as** dialog box displays.

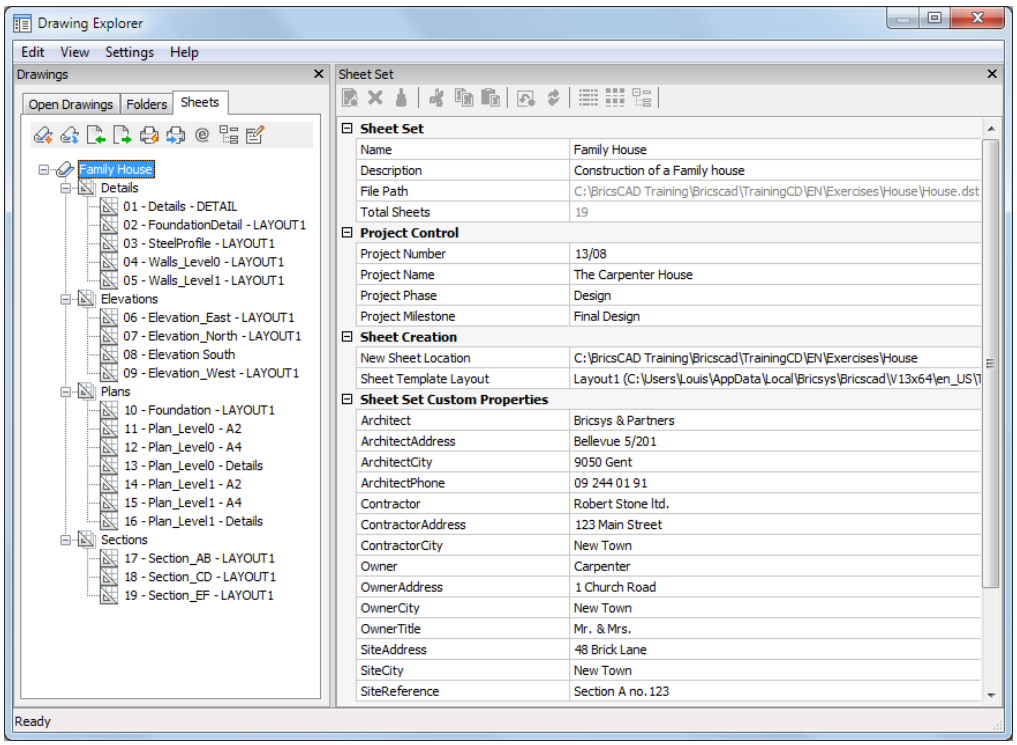
8. Select the **..\Exercises\House** folder and click the **Save** button.
9. (Option) Type a description in the **Description** field.
10. (Option) Click the **Browse** button ( ) to select a template drawing for new layouts.
11. Click the **Next** button.

    An overview of the structure of the new sheet set displays.

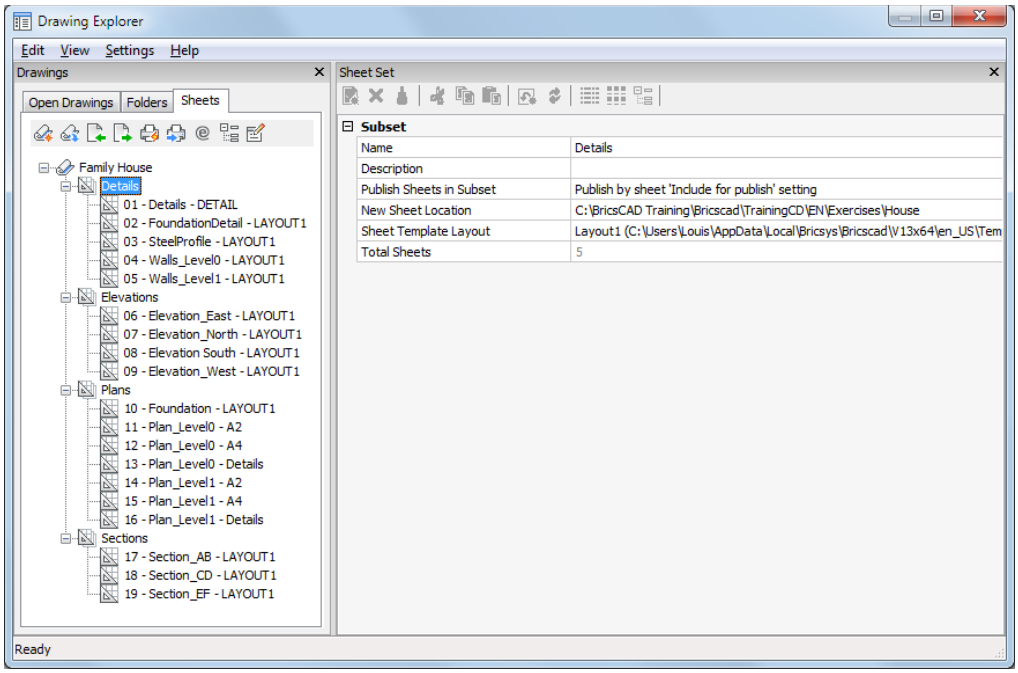
12. Do one of the following:

    - Click the **Back** button to make corrections in one of the previous screens.
    - Click the **Finish** button to create the sheet set.

The new sheet set opens in the **Drawing Explorer – Sheet Set** dialog box. Click the sheet set name to see the sheet set properties.

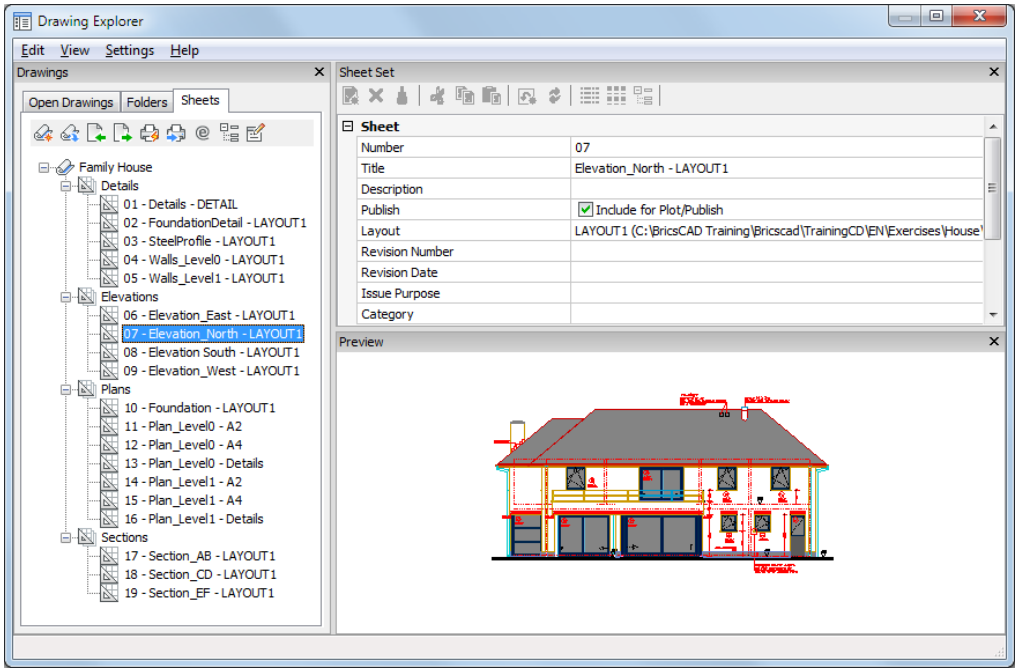


Click on the name of a subset to see the subset properties.



Click on the name of a sheet (layout) to see the sheet properties.

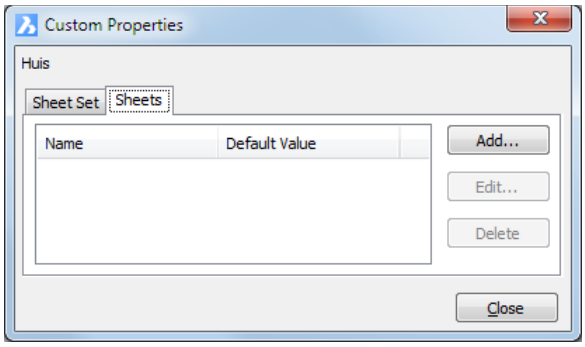
In the **Preview** panel a thumbnail image of the layout displays.



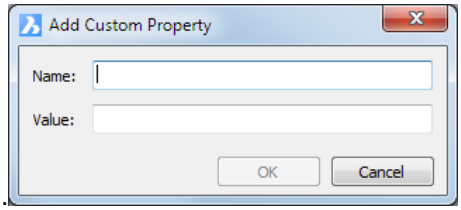
1.2.2 Defining custom sheet set and sheet properties

1. Open the sheet set **House.dst**.
2. Click the **Custom Properties…** icon ( ) in the **Sheets** toolbar in the **Drawing Explorer** dialog box..

   The **Custom Properties** dialog box displays.



3. Click the **Sheet Set** tab then click the **Add…** button.



   - Type a name for the new property in in the **Name** field. The **Value** field can be left empty. We will fill this out later in **Drawing Explorer** dialog box.
   - Add the following properties:
     - Contractor
     - ContractorAddress
     - ContractorCity
     - Architect
     - ArchitectAddress
     - ArchitectCity
     - ArchitectPhone
     - Owner
     - OwnerTitle
     - OwnerAddress
     - OwnerCity
     - SiteAddress
     - SiteCity
     - SiteReference
4. Click the **Sheet** tab then click the **Add…** button to add the following **Sheet** properties:
     - Date
     - Remark
     - PaperSize
     - Printer
     - Scale

1.2.3 Specifying sheet set and sheet properties

1. Click the sheet set name to specify the sheet set custom properties:

Sheet Set Custom Properties	
Architect	Bricsys & Partners
ArchitectAddress	Bellevue 5/201
ArchitectCity	9050 Gent
ArchitectPhone	09 244 01 91
Contractor	Robert Stone ltd.
ContractorAddress	123 Main Street
ContractorCity	New Town
Owner	Carpenter
OwnerAddress	1 Church Road
OwnerCity	New Town
OwnerTitle	Mr. & Mrs.
SiteAddress	48 Brick Lane
SiteCity	New Town
SiteReference	Section A no. 123

2. Click a sheet name to specify the sheet properties:

Sheet	
Number	17
Title	Section_AB - LAYOUT1
Description	
Publish	☑ Include for Plot/Publish
Layout	LAYOUT1 (C:\BricsCAD Trainir
Revision Number	1
Revision Date	12/08/2013
Issue Purpose	Final Design
Category	Sections
Sheet Custom Properties	
Date	09/08/2013
PaperSize	A1
Printer	PDF
Remark	None
Scale	1/50

1.2.4 Composing the title block

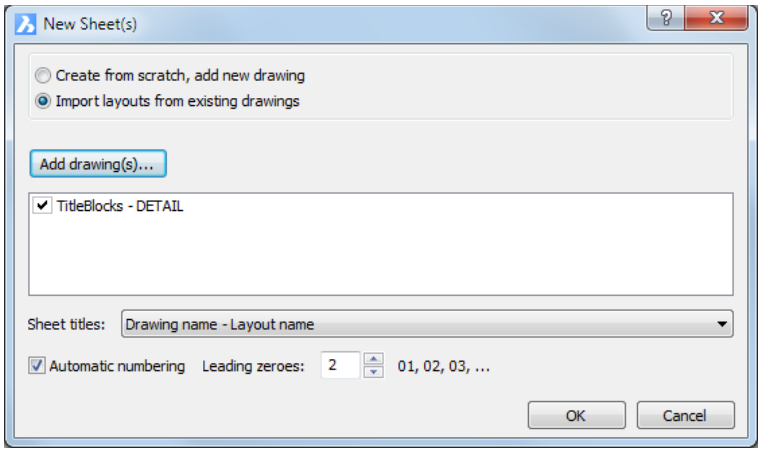
The title block we are composing must be useable in all drawings of different projects. Therefore we will use fields in attributes to add the sheet and sheet set properties.

In this title block we will add:

- Texts for the labels
- Attributes:
  - Text attributes
  - Fields

In the drawing **TitleBlocks.dwg** the overall layout of a title block is already prepared. To be able to add the sheet set and sheet properties, the layout of this drawing must be added to the **House.dst** sheet set first.

1. Open the **House.dst** sheet set.
2. Right click the sheet set name and choose **New Sheet(s)…** in the context menu.
3. Choose **Import layouts from existing drawings**.
4. Select **TitleBlocks.dwg** and click on the **OK** button.

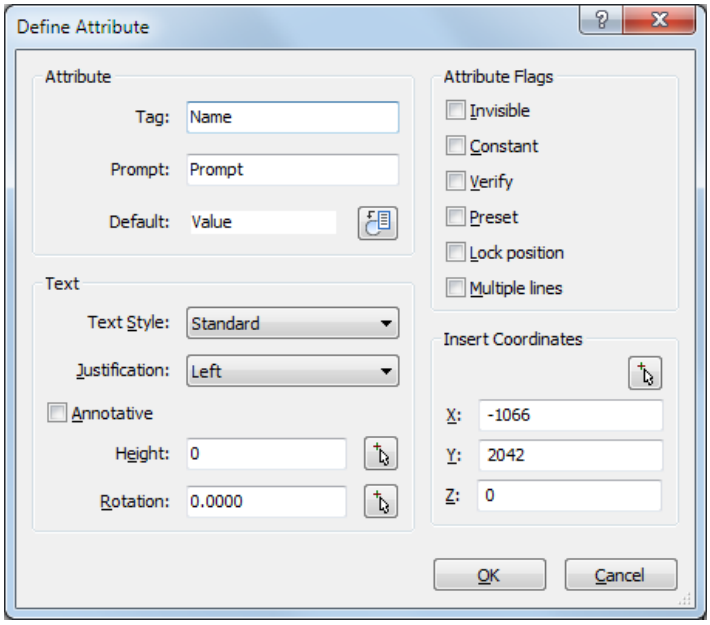


5. Double click the TitleBlocks – DETAIL sheet to open the drawing **TitleBlocks.dwg.**

We will now add the sheet set and sheet properties as fields in attributes.

6. Choose **Attributes > Define Attributes** in the **Tools** menu.

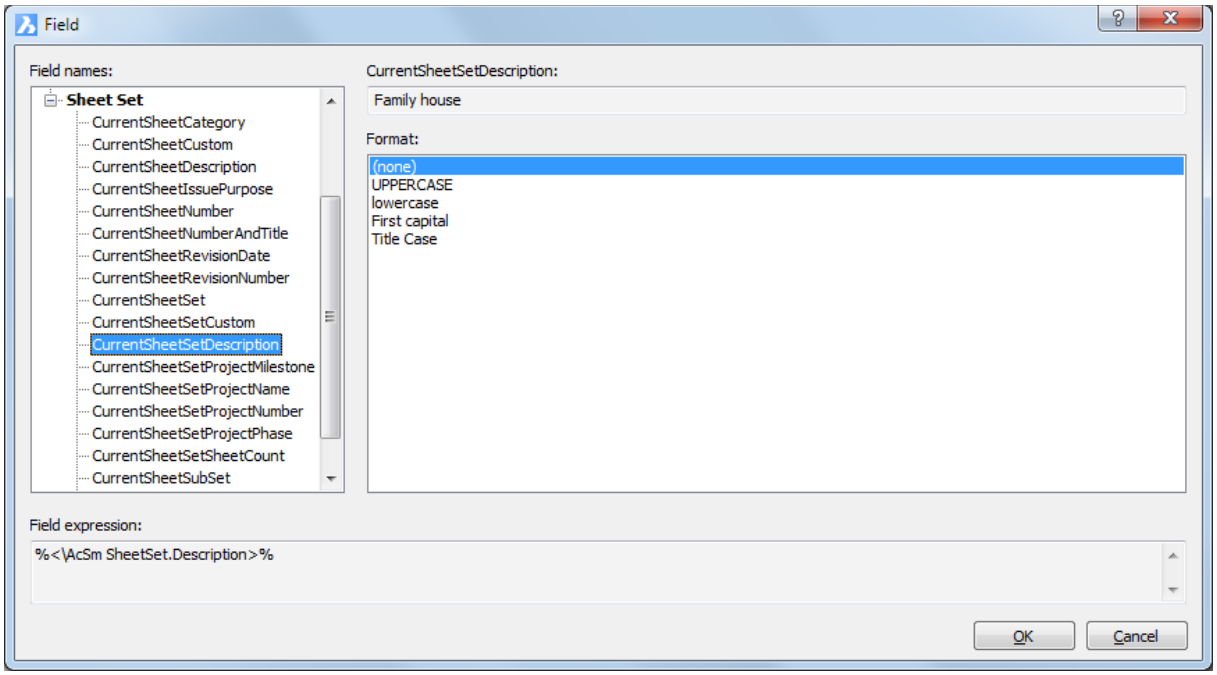
   The **Define Attribute** dialog box displays:



7. Type a name for the attribute in the **Tag** field then press the TAB-key to go to the next field.
8. (option) Type a prompt in the **Prompt** field then press the TAB-key to go to the next field.
9. Delete the default text **Value** in the **Default** field.
10. Click the **Insert Field** button ( ) next to the **Default** field.

    The **Define Attribute** dialog box closes.
    The **Field** dialog box displays.
11. Expand **Sheet Set** fields list.
12. To select a **Default Sheet Set** field:

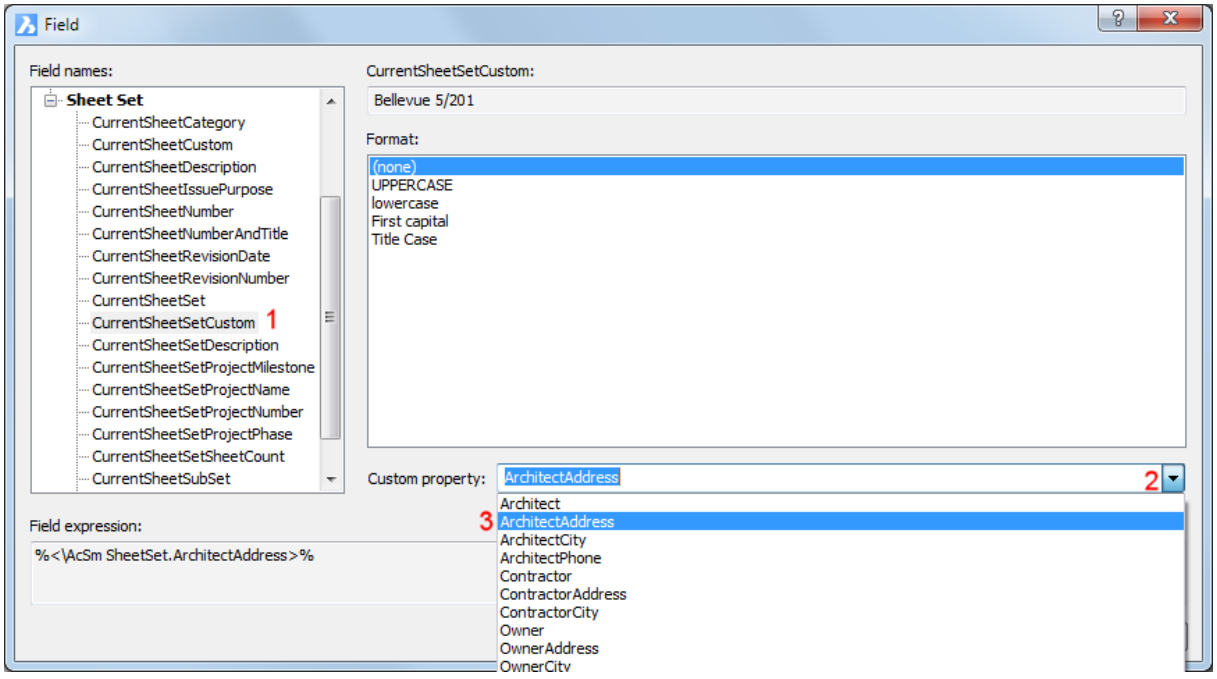
    - Select the field in the list.
      The current definition of the selected field displays in the **Value** field in the **Field** dialog box.
      If the field is not specified yet, dashes (---) display in the **Value** field.



- (option) Select a format for the field in the **Format** options list.

13. To select a **Custom Sheet Set** field:

- Select **CurrentSheetSetCustom** in the list (1).



- Open the **Custom property** list (2).
- Select a property in the list (3).
  The current definition of the selected field displays in the **Value** field in the **Field** dialog box.
  If the field is not specified yet, dashes (---) display in the **Value** field.

14. Click the **OK** button to confirm.

    The **Field** dialog box closes.
    The **Define Attribute** dialog box reopens.

15. Define the text properties:

    - Text Style
    - Justification
    - Height
    - Rotation

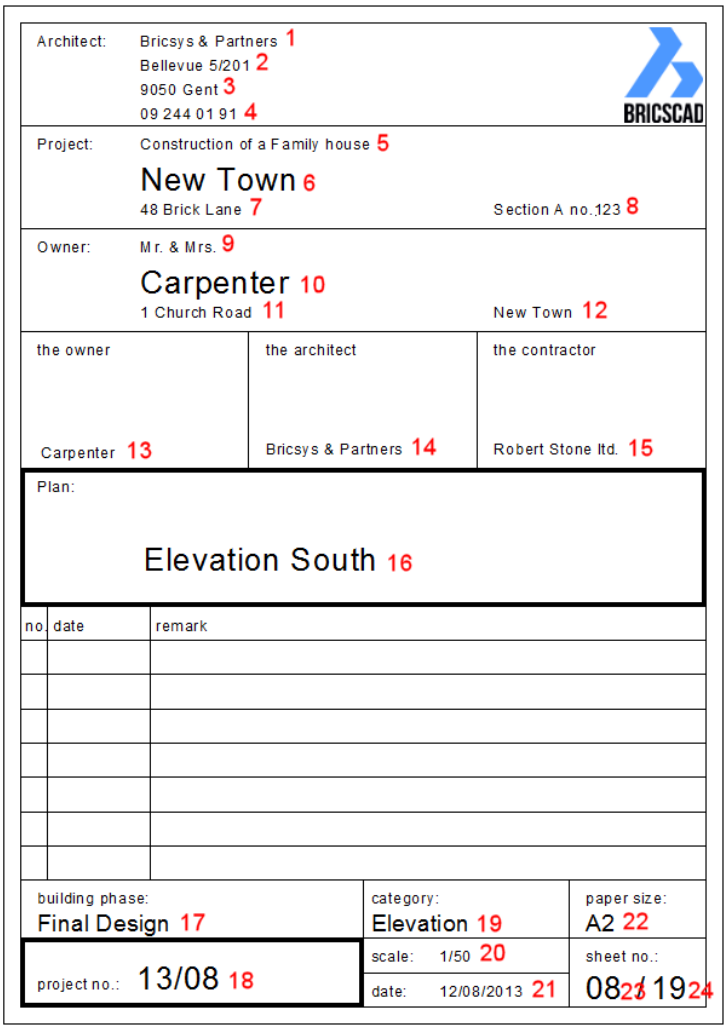
16. To specify the insertion point:

    - Click the **Pick Point** button ( ).
      The **Define Attribute** dialog box closes.
      The command bar reads: Select insertion point:
    - Specify the insertion point in the drawing.
      In **TitleBlocks.dwg** snap to the endpoint of the construction lines to define the insertion point of an attribute.
      The **Define Attribute** dialog box reopens.
      The coordinates of the insertion point display in the x-, y- and z-fields.

17. Click the **OK** button to create the attribute.

18. Press Enter to define the next attribute .

The complete title block:

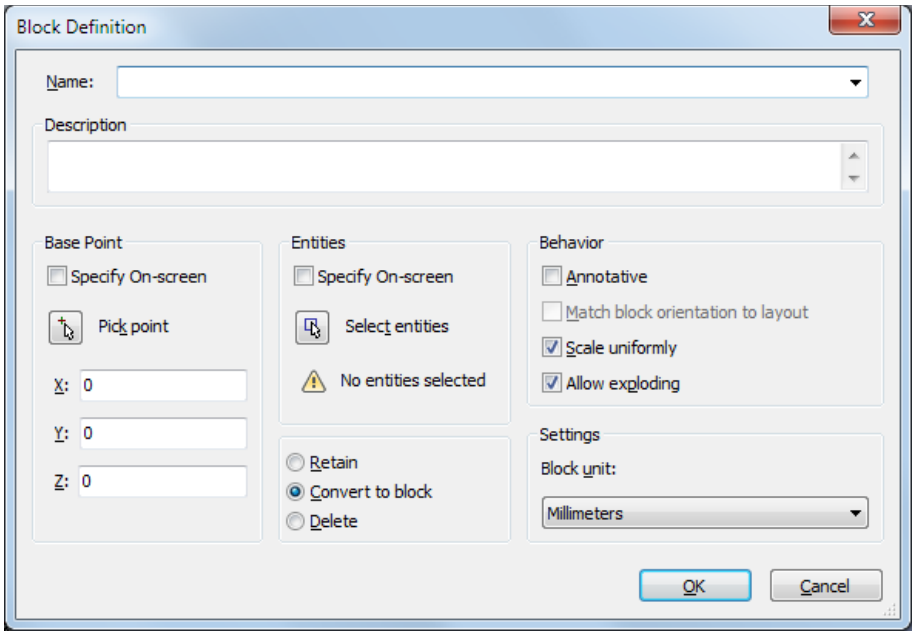


1. CurrentSheetSetCustom/Architect
2. CurrentSheetSetCustom/ArchitectAddress
3. CurrentSheetSetCustom/ArchitectCity
4. CurrentSheetSetCustom/ArchitectPhone
5. CurrentSheetSetDescription
6. CurrentSheetSetCustom/SiteCity
7. CurrentSheetSetCustom/SiteAddress
8. CurrentSheetSetCustom/SiteReference
9. CurrentSheetSetCustom/OwnerTitle
10. CurrentSheetSetCustom/Owner
11. CurrentSheetSetCustom/OwnerAddress
12. CurrentSheetSetCustom/OwnerCity
13. CurrentSheetSetCustom/Owner
14. CurrentSheetSetCustom/Architect
15. CurrentSheetSetCustom/Contractor
16. CurrentSheetTitle
17. CurrentSheetIssuePurpose
18. CurrentSheetSetProjectNumber
19. CurrentSheetCategory
20. CurrentSheetCustom/Scale
21. CurrentSheetCustom/Date
22. CurrentSheetCustom/PaperSize
23. CurrentSheetNumber
24. CurrentSheetSetSheetCount

1.2.5 Creating the title block as a dwg block

1. Continue working in the drawing **TitleBlocks.dwg**.
2. Switch off the display or freeze the **Construction Lines** layer.
3. Choose **Create Block** in the **Tools** menu.

   The **Block definition** dialog box displays:



4. Type **TitleBlock** in the **Name** field.
5. (option) Type a description in the **Description** field.
6. Click the **Select entities** button.

   The **Block definition** dialog box closes.
7. Select all visible entities, then right click to conclude the selection.

   The **Block definition** dialog box displays.

   The number of selected entities is indicated.
8. Click the **Pick point** button ( ) to specify the **Base Point** of the block in the drawing.
9. Snap to the bottom right corner of the outer border of the title block.
10. Choose **Retain** to keep the selected entities in the drawing.
11. Choose **Centimeters** in the **Block unit** list button.
12. Click the **OK** button to create the block.

1.2.6 Making the title block available in other sheet sets

1. Remove the drawing from the sheet set:
   - Select the layout of **TitleBlocks.dwg** in the **House.dst** sheet set.
   - Right click, then choose **Remove Sheet** in the context menu.
2. Save the **TitleBlocks.dwg** in a folder where you save the drawings with your default blocks (see 11.4.2 Inserting blocks from other drawings in Module 4).
3. You can now insert the title block in each of the layouts of a sheet set wherein the same custom sheet set and custom sheet properties exist.
   - All fields in the title block will be filled out automatically.
   - Fields that are not specified yet display with hyphens (----).

1.2.7 Using a Sheet set as a template

One of the options to create a new sheet set is **Use Template**, which makes a copy of an existing sheet set and saves it to a different location. In the process all custom properties (CurrentSheetSetCustom and CurrentSheetCustom) are copied along.

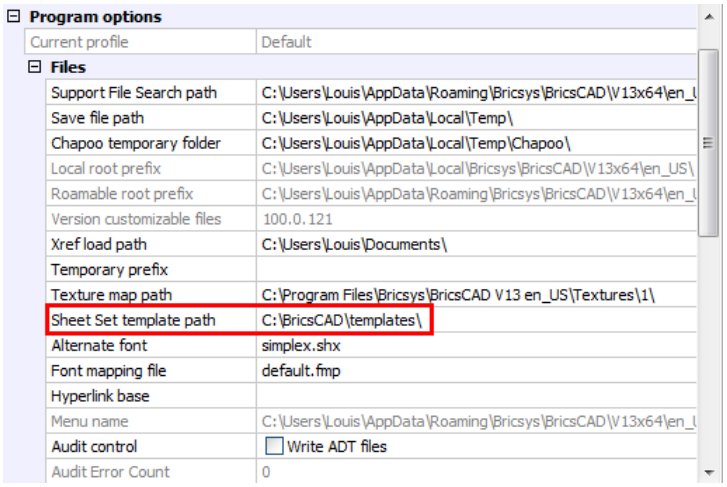
To save a sheet set as a template

1. Create a folder for your sheet set templates.
2. Copy **House.dst** to this folder.
3. Rename the sheet set, e.g.: **TemplateSheetSet.dst**.
4. Click the **Sheet Set** tool ( ) in the **Standard** toolbar.
5. Click the **Open Sheet Set** icon ( ) in the **Drawing Explorer** dialog box and open the template sheet set.
6. Remove all sheets from the sheet set and its subsets:
   - To select a series of sheets: select the first sheet, then press and hold the shift key and select the last sheet.
   - Right click and choose **Remove Sheets** in the context menu.

To define the Sheet Set Template Path

In BricsCAD the **SheetSetTemplatePath** user preference defines the sheet set template folder.

1. Choose **Settings** in the **Settings** menu.
2. Go to **Program options/Files** and select **Sheet Set template path**.



3. **Click** the **Browse** button ( ) and select your sheet set template folder.
4. Click the **OK** button.

To create a new sheet set from a template sheet set

1. Click the **Sheet Set** tool ( ) in the **Standard** toolbar.
2. Click the **New Sheet Set…** icon ( ) in the **Drawing Explorer** dialog box.
3. Choose **Use Template** in the **Create New Sheet Set** dialog box and choose a template sheet set.
4. Click the **Next** button.
5. Type a name for the new sheet set in the **Save sheet set file as:** field, then click the **Browse** button ( ).
6. Select the folder to save the new sheet set in, then click the **Save** button.
7. (option) Type a description in the **Description** field.
8. Click the **Next** button then click the **Finish** button.

   The new sheet set opens.

9. Click the name of the sheet set and define its default and custom properties.
10. To add sheets, right click to display a context menu.
    Choose:
    - **New Subset** to add a subset.
    - **New Sheet(s)…** to add sheets to the sheet set or the currently select subset.
11. Select each sheet and define the default and custom properties.
12. Open a sheet (double click or right click and choose **Open** in the context menu).
13. Click the **Folders** tab on the **Drawing Explorer** dialog box, then insert the title block from **TitleBlocks.dwg.**