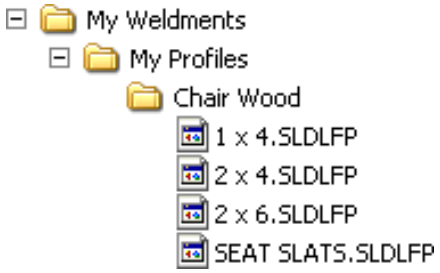
Chapter 1

Chair Profiles



A. Sketch 2 by 6 Rectangle.

Step 1. Click File Menu > New, click **Part** and OK.

Step 2. Click **Front Plane** in the Feature Manager and click **Sketch** from the Content toolbar, **Fig. 1**.

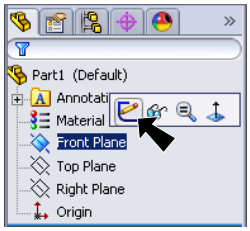


Fig. 1

Step 3. Click **Rectangle** (**S**) on the Sketch toolbar.

Step 4. Draw a rectangle starting at the Origin , **Fig. 2**. The Origin should be in the bottom right corner of rectangle. This will make adding structural members a little easier.

Fig. 2

Step 5. Click **Smart Dimension** (**S**) on the Sketch toolbar.

Step 6. Set dimensions as shown in **Fig. 2**. 1.5 x 5.5

Step 7. Click **Zoom to Fit** (**F**) on the View toolbar.

B. Points.

Step 1. Click **Point** on the Sketch toolbar.

Step 2. Draw Point at midpoint of each line of rectangle, **Fig. 3**. To find midpoint, move cursor across line and as cursor approaches midpoint highlights you click.

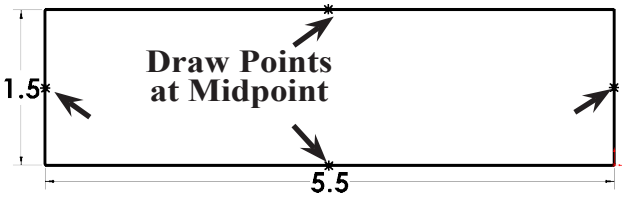


Fig. 3

Step 3. Click **Exit Sketch** on the Sketch toolbar.

C. Save as "PROFILE".

Step 1. Click File Menu > Save As.

Step 2. Key-in **PROFILE** for the filename and press ENTER.

D. Properties 2 by 6.

Step 1. **Right click Annotation** in the Feature Manager and click **Show Feature Dimensions** from menu, **Fig. 4**.

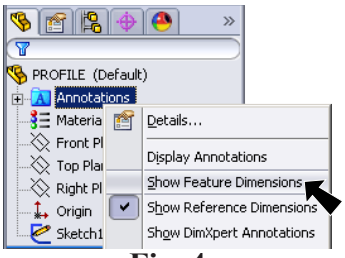


Fig. 4

Step 2. Click File Menu > Properties.

Step 3. In the Summary Information dialog box on the Custom tab set:

under Property Name, **Fig. 5**

key-in **StockSize**

under Type

select **Text**

under Value/Text Expression

click in box to select the field

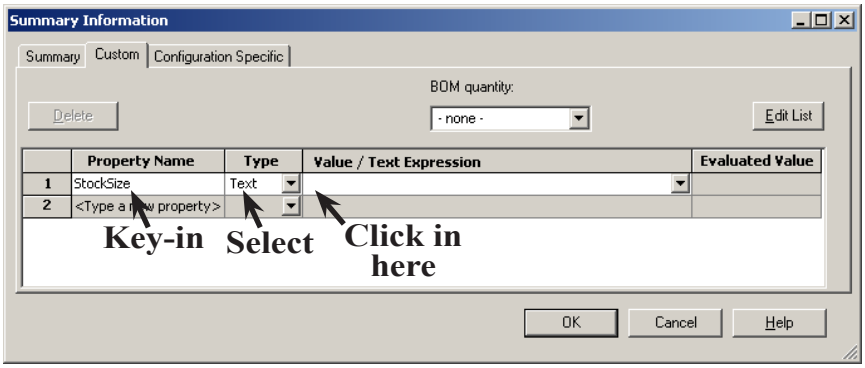


Fig. 5

click **1.5 dimension in sketch**, **Fig. 6**. You might have to move Summary Information dialog out of the way.

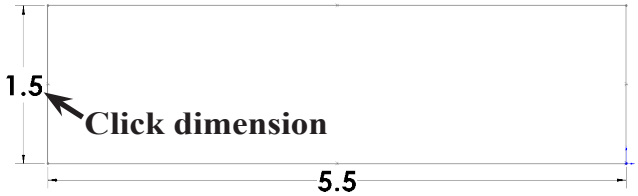


Fig. 6

key-in space (spacebar) X space (spacebar), **Fig. 7**

click **5.5 dimension in sketch**, **Fig. 8**

under Property Name (below StockSize), **Fig. 9**

key-in **Description**

under Type

select **Text**

under Value/Text Expression

key-in **2" x 6"**

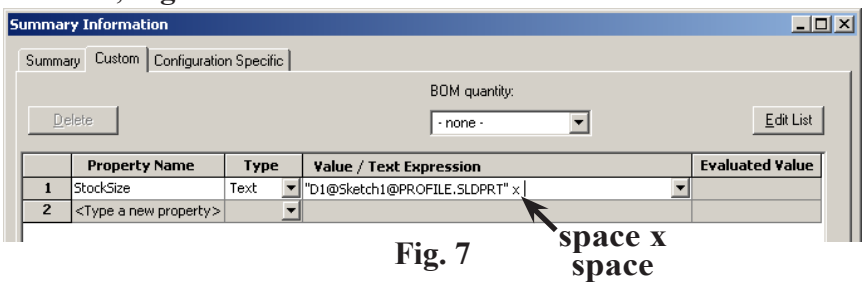


Fig. 7

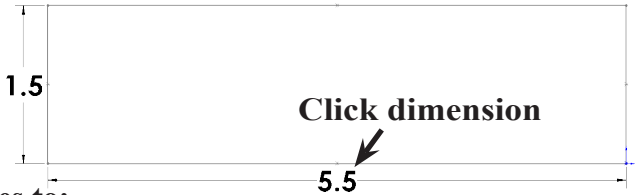


Fig. 8

press Tab key and **Evaluated Value updates to:**

1.5 x 5.5

2" x 6"

click OK.

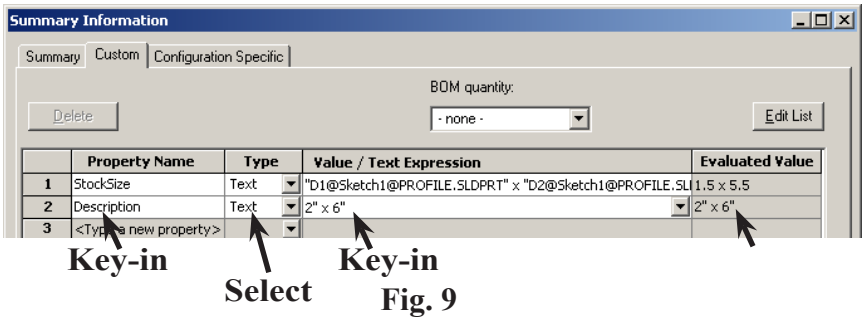


Fig. 9

Step 4. Save. Use **Ctrl-S**.

E. Save as "2 X 6" Library Feature Part in Sub-folders.

Step 1. **Click Sketch1** in the Feature Manager to select the sketch, **Fig. 10**. The Sketch must be selected when you save as Lib Feat.

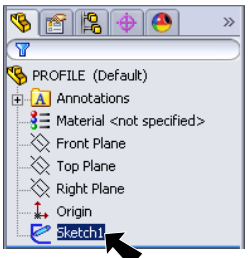


Fig. 10

Step 2. Click File Menu > Save As.

Step 3. In the Save As dialog box:

key-in **2 x 6** for file name, **Fig. 11**
set **Save as Type** to **Lib Feat Part**

click **Create New Folder** 
key-in **My Weldments** for folder name, **Fig. 12**
double click My Weldments

click **Create New Folder** 
key-in **My Profiles** for folder name, **Fig. 13**
double click My Profiles

click **Create New Folder** 
key-in **Chair Wood** for folder name, **Fig. 14**
double click Chair Wood
click Save, **Fig. 15**.

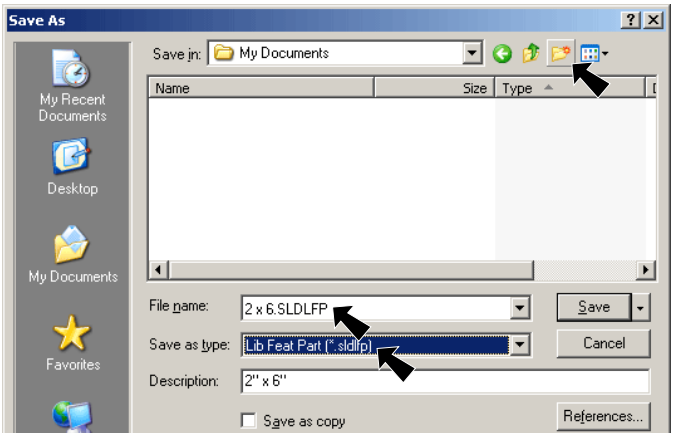


Fig. 11

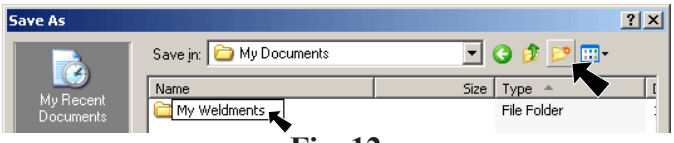


Fig. 12

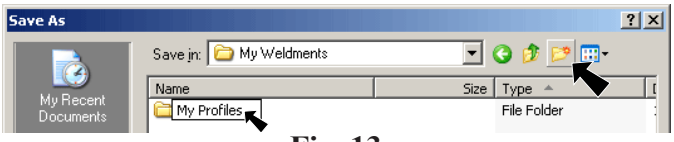


Fig. 13

Fig. 14

Step 4. Check folders: We just created 3 sub-folders,

My Weldments
My Profiles
Chair Wood

and saved 2 x 6.SLDFP into Chair Wood folder, **Fig. 16**!

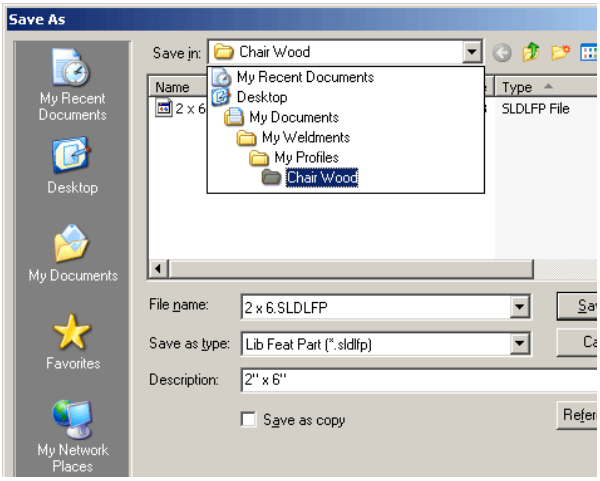


Fig. 16

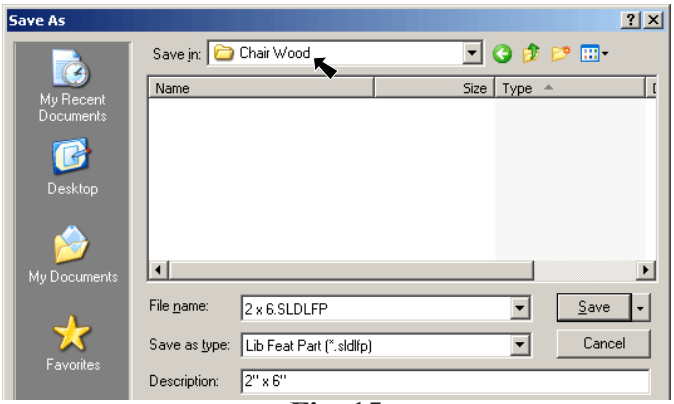


Fig. 15

F. 2 by 4.

Step 1. Change **width dimension to 3.5**, **Fig. 17**. 1.5 x 3.5

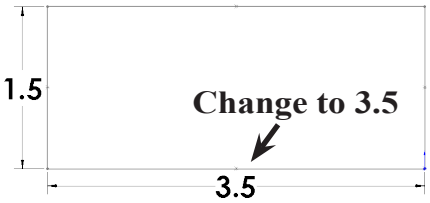
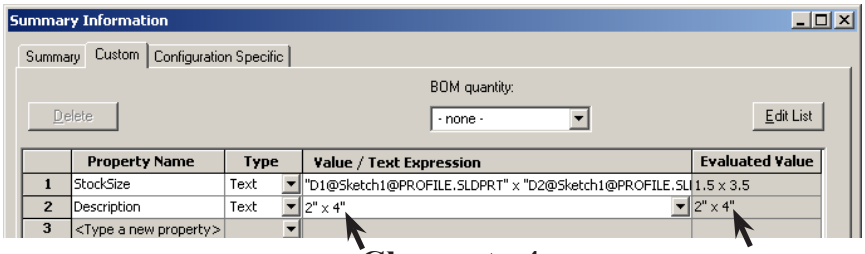


Fig. 17

Step 2. Click **Rebuild**  in the Standard toolbar. (**Ctrl-B**)

Step 3. Click File Menu > Properties.

Step 4. In the Summary Information dialog box on the Custom tab set:
change **Description Value/Text Expression** from 2" x 6" to 2" x **4" Fig. 18**
press Tab key and **Evaluated Value updates to:**
1.5 x 3.5
2" x 4"
click OK.



Change to 4
Fig. 18

Step 5. **Click Sketch1** in the Feature Manager to select the sketch, **Fig. 19**. The Sketch must be selected when you save as Lib Feat.

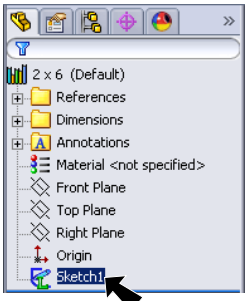


Fig. 19

Step 6. Click File Menu > Save As.

Step 7. In the Save As dialog box:
key-in **2 x 4** for file name
set **Save as Type** to **Lib Feat Part**, **Fig. 20**
click Save.

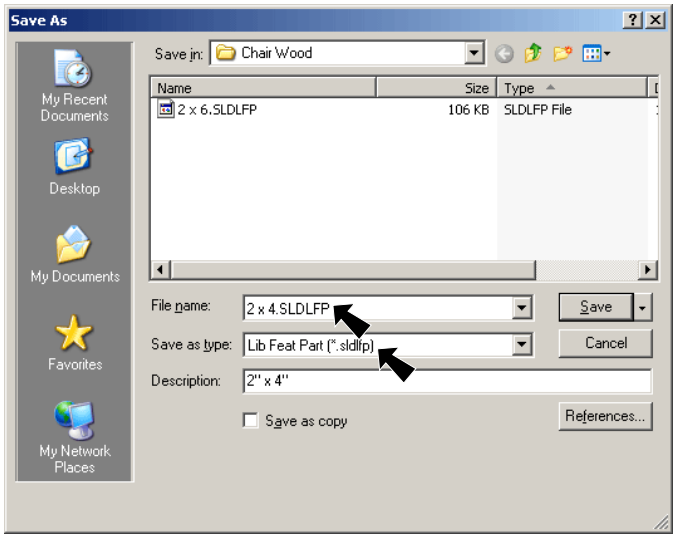


Fig. 20

G. 1 by 4.

Step 1. Change **height dimension to .75**, **Fig. 21** .75 x 3.5

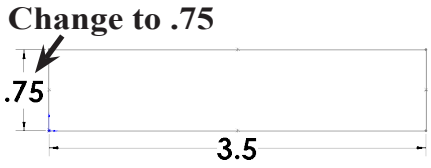
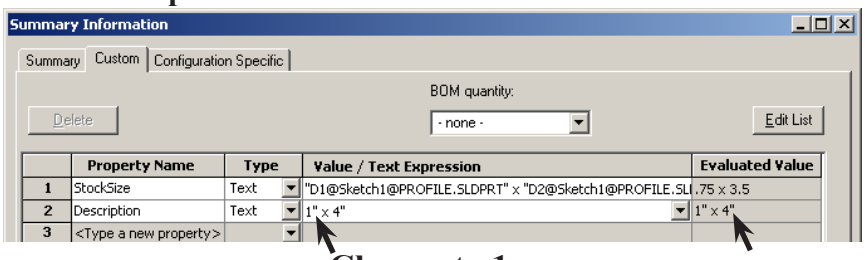


Fig. 21

Step 2. Click **Rebuild**  in the Standard toolbar. (**Ctrl-B**)

Step 3. Click File Menu > Properties.

Step 4. In the Summary Information dialog box on the Custom tab set:
change **Description Value/Text Expression** to **1" x 4"**, **Fig. 22**
press Tab key and **Evaluated Value updates to:**
.75 x 3.5
1" x 4"
click OK.



Change to 1
Fig. 22

Step 5. **Click Sketch1** in the Feature Manager to select the sketch, **Fig. 23**. The Sketch must be selected when you save as Lib Feat.

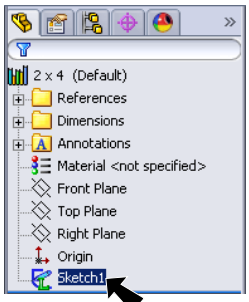


Fig. 23

Step 6. Click File Menu > Save As.

Step 7. In the Save As dialog box:
key-in **1 x 4** for file name
set **Save as Type** to **Lib Feat Part**, **Fig. 24**
click Save.

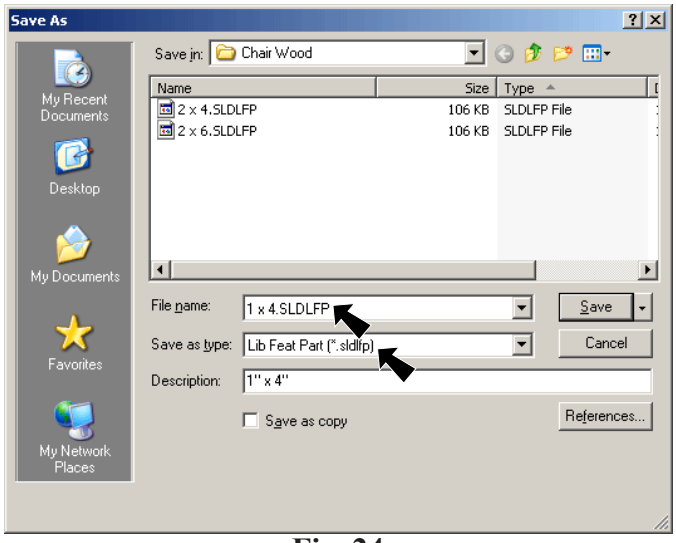


Fig. 24

H. Seat Slats.

Step 1. Click **Sketch1** in the Feature Manager and click **Edit Sketch** on the Content menu,**Fig. 25**.

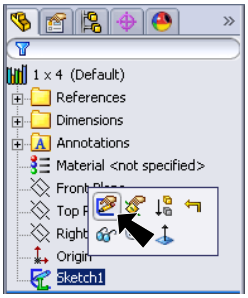


Fig. 25

Step 2. Change **width dimension to 2.25**, **Fig. 26**.

Step 3. **Delete 3 Points** at midpoint of lines, **Fig. 26**. **Do not** delete Point on bottom line To delete Points, Ctrl click each Point and press Delete key.

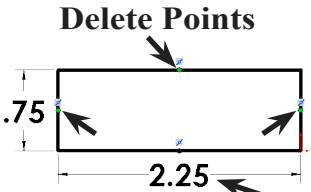


Fig. 26 Change to 2.25

Step 4. Click **Sketch Fillet** **(S)** on the Sketch toolbar.

Step 5. In the Property Manager set:

Radius to **.3**, **Fig. 27**
click the **top two corners**, **Fig. 28**
click OK **twice** and **Fig. 29**.

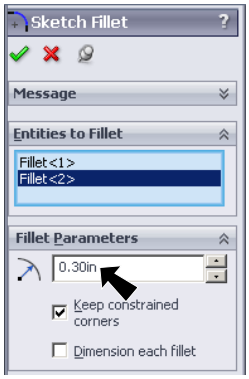


Fig. 27

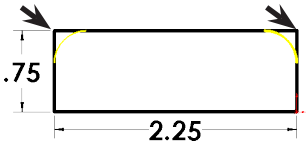


Fig. 28

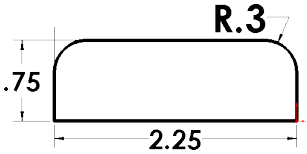
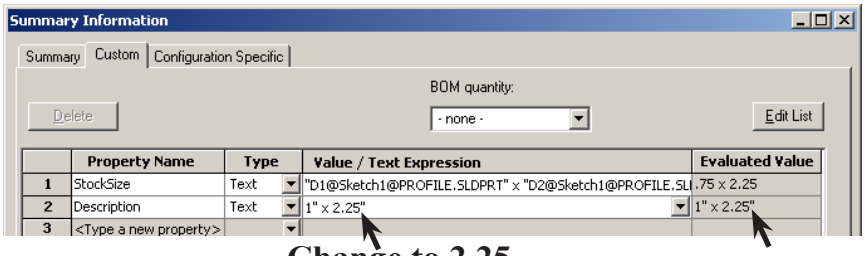


Fig. 29

Step 6. Click **Exit Sketch** on the Sketch toolbar.

Step 7. Click File Menu > Properties.



Change to 2.25
Fig. 30

Step 8. In the Summary Information dialog box on the Custom tab set:
change **Description Value/Text Expression** to **1" x 2.25"**, **Fig. 30**
press Tab key and **Evaluated Value updates to:**
.75 x 2.25
1" x 2.25"
click OK.

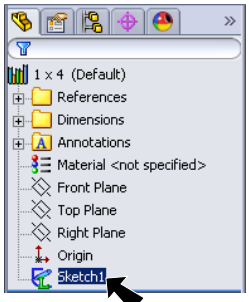


Fig. 31

Step 9. **Click Sketch1** in the Feature Manager to select sketch, **Fig. 31**.

Step 10. Click File Menu > Save As.

Step 11. In the Save As dialog box:
key-in **SEAT SLAT** for file name
set **Save as Type** to **Lib Feat Part**, **Fig. 32**
click Save.

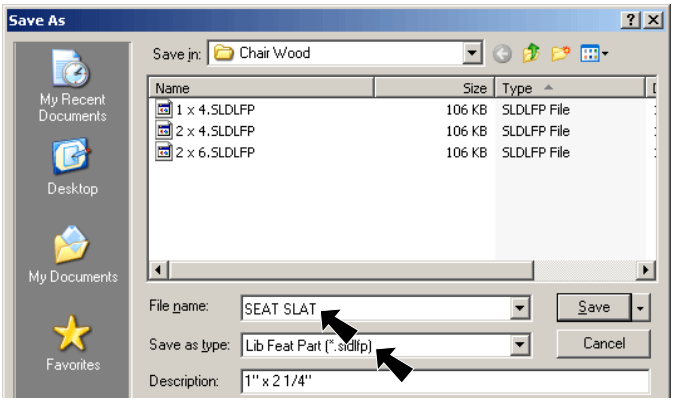


Fig. 32

I. Custom Profile Files Location.

Step 1. Click Tools Menu > Options.

Step 2. In the System Options dialog box,
select **File Location** on left, **Fig. 33**
under **Show folders for:**
select **Weldment Profiles**.

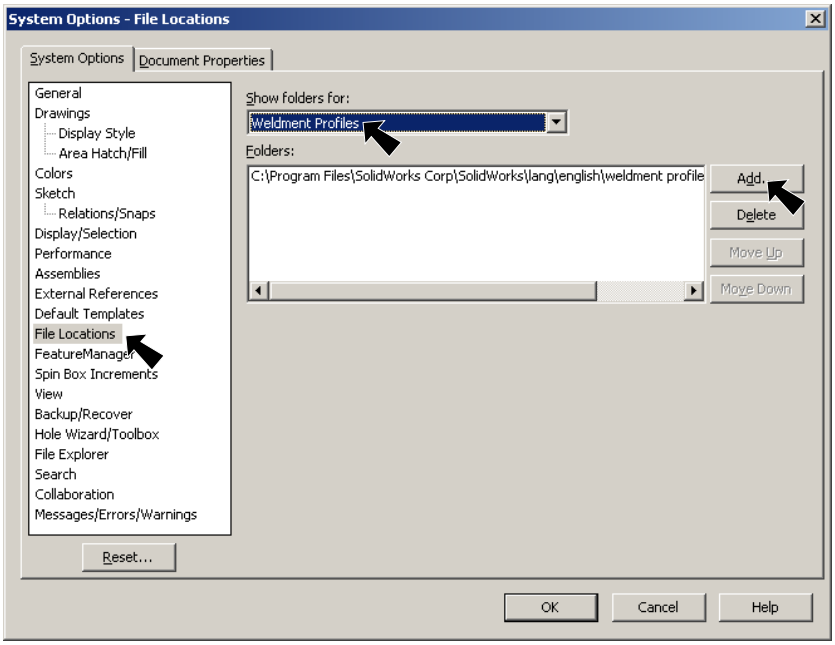


Fig. 33

If you **have** permissions/rights to your SolidWorks install folder continue here:
Note the path to Weldment Profiles.
Click Cancel button.
Copy **My Profiles** subfolder you created earlier into the Weldment Profiles folder in SW install directory, **Fig. 34**.
C:\Program Files\SolidWorks Corp\SolidWorks\lang\english\weldment profiles

If you **DO NOT** have permissions/rights to your SolidWorks install folder continue here:
Click Add button, **Fig. 33**.
Find and select your **My Weldments** folder, **Fig. 35** and click OK. Click No to search paths, **Fig. 36**. Click OK.

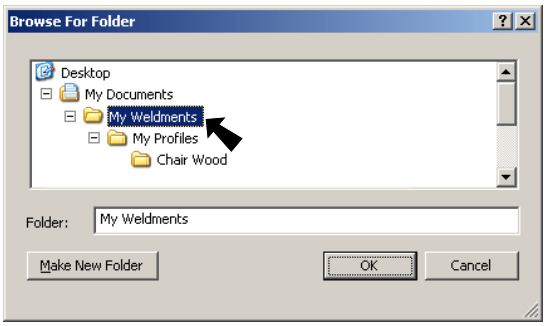


Fig. 35

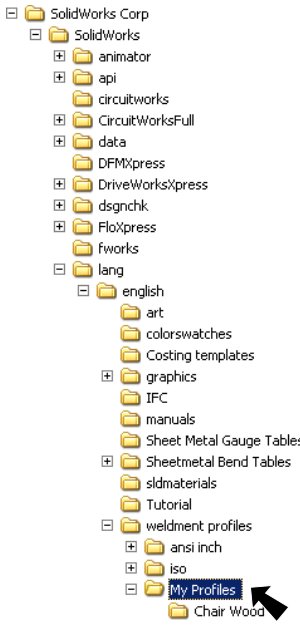


Fig. 34

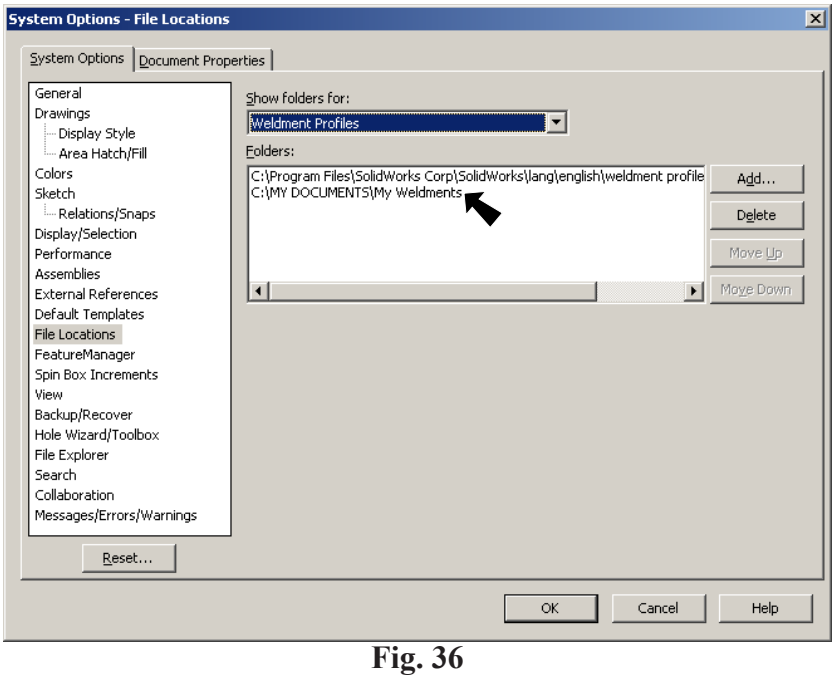


Fig. 36