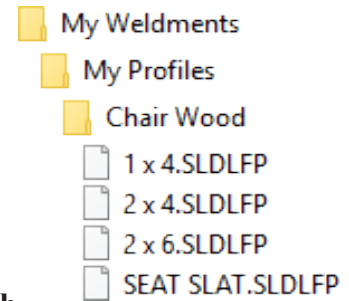




Chapter 1

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 context toolbar, **Fig. 1**.

Step 3. Click **Corner Rectangle**  in the **Rectangle flyout**  on the Sketch toolbar.

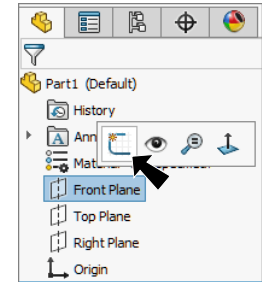



Fig. 1

Step 4. Sketch 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.

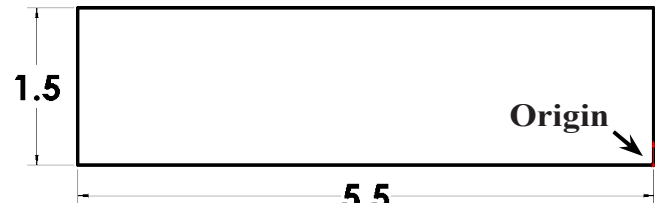


Fig. 2


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

Step 6. Add dimensions, **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. Sketch 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.

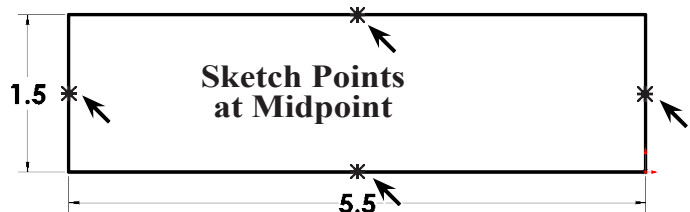


Fig. 3

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**.

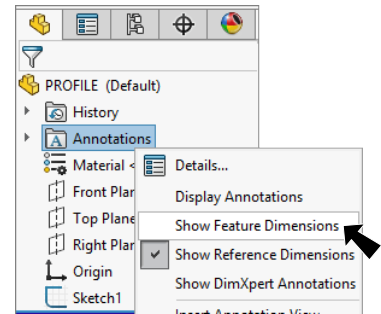


Fig. 4

Step 2. Click File Menu > Properties.

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

under Property Name, **Fig. 5**

select **StockSize**

under Type

select **Text**

under Value/Text

Expression

click in box to

select the field

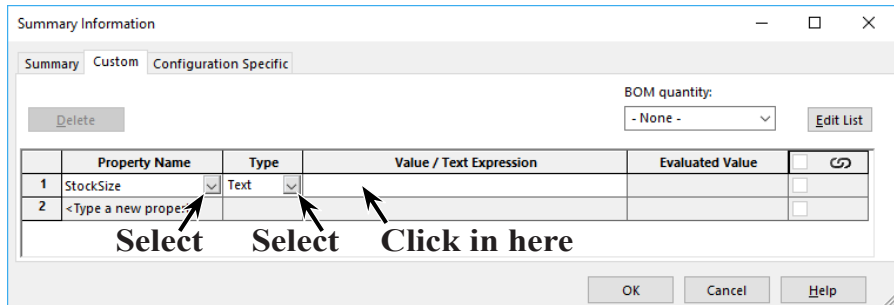


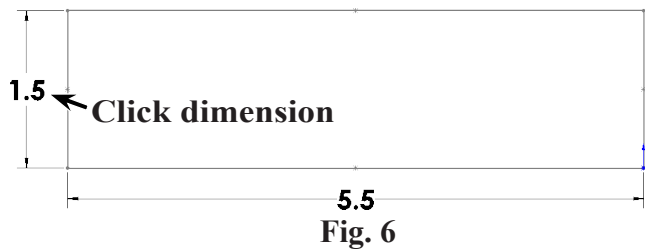
Fig. 5

click **1.5 dimension**

in sketch, Fig. 6. You might have to move Summary Information dialog.

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

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



under Property Name (below StockSize),

Fig. 9

select

Description

under Type

select **Text**

under Value/Text

Expression

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

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

1.5 x 5.5

2" x 6"

click **OK**.

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

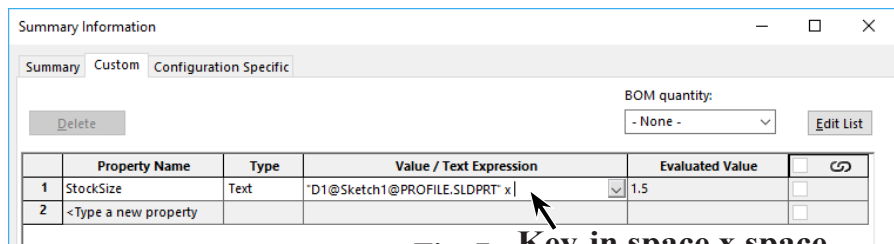


Fig. 7 Key-in space x space

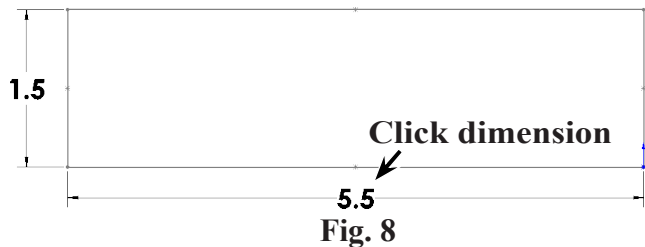


Fig. 8

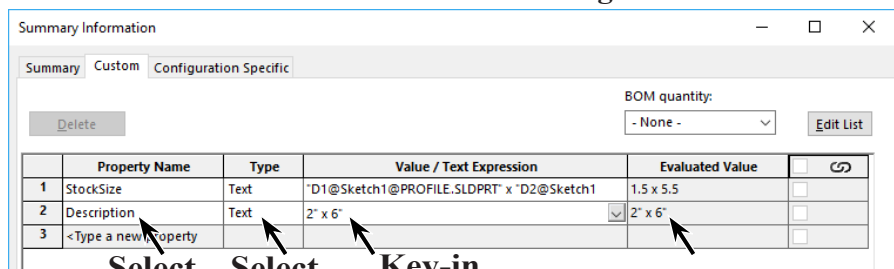


Fig. 9

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.

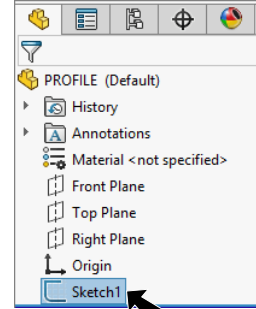


Fig. 10

Step 2. Click File Menu > Save As.

Step 3. In the Save As dialog box, **Fig. 11**
key-in **2 x 6** for file name
set **Save as Type** to **Lib Feat Part**
navigate to **My Documents/Tech Ed 17-18**

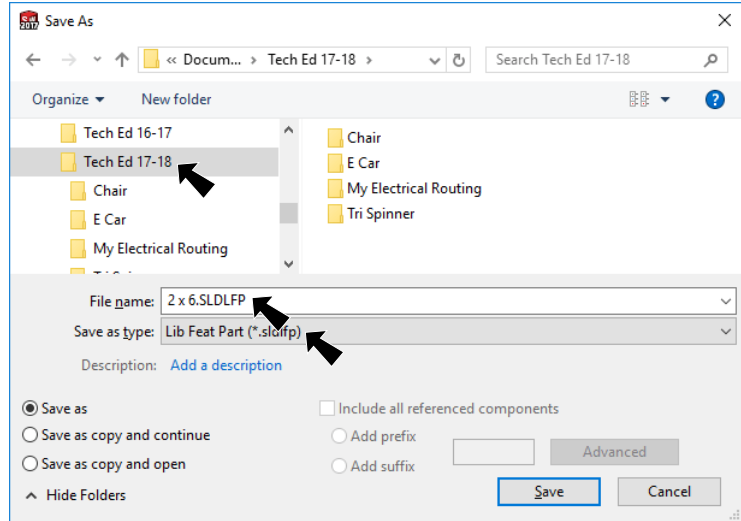


Fig. 11

Step 4. Click **New Folder** button,
Fig. 12
key-in **My Weldments** for
folder name
double click My Weldments

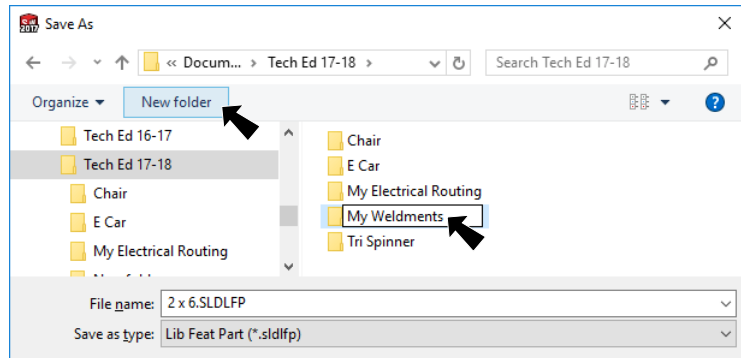


Fig. 12

Step 5. Click **New Folder** button,
Fig. 13
key-in **My Profiles** for
folder name
double click My Profiles

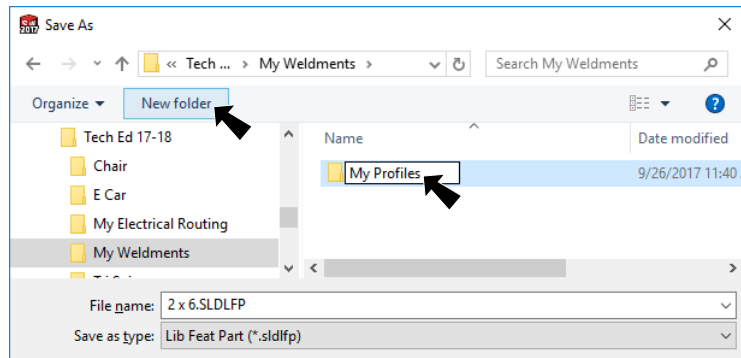


Fig. 13

Step 6. Click **New Folder** button,
Fig. 14
key-in **Chair Wood** for
folder name
double click Chair Wood
click **Save**.

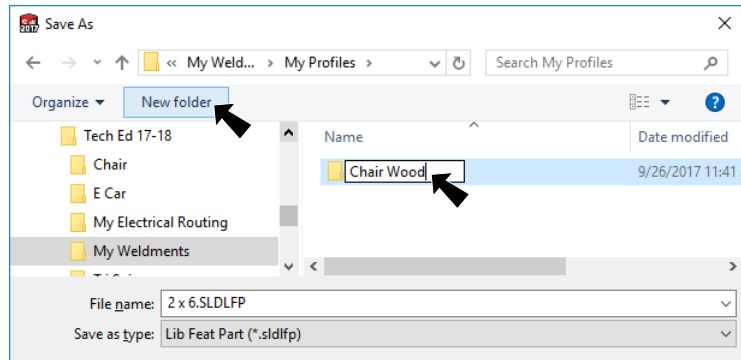


Fig. 14

Step 7. Confirm folders. We just created
3 subfolders in the Tech Ed 17-
18 folder, **Fig. 15**:
My Weldments
My Profiles
Chair Wood
and saved 2 x 6.SLDLFP into
Chair Wood folder.

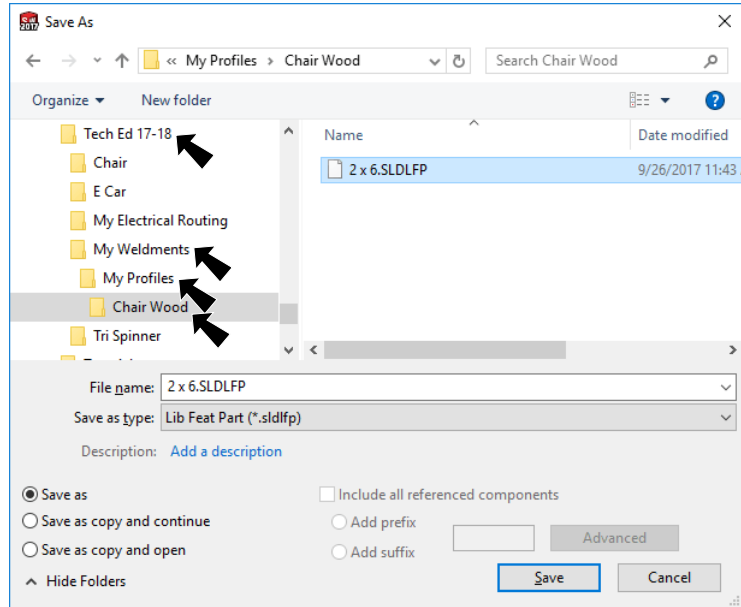



Fig. 15

F. 2 by 4.

Step 1. Change **width dimension to 3.5**, Fig. 16. 1.5 x 3.5

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 Custom tab set:
change **Description Value/Text Expression** from 2" x 6" to 2" x 4" Fig. 17
press Tab key and **Evaluated Value** updates to:

1.5 x 3.5

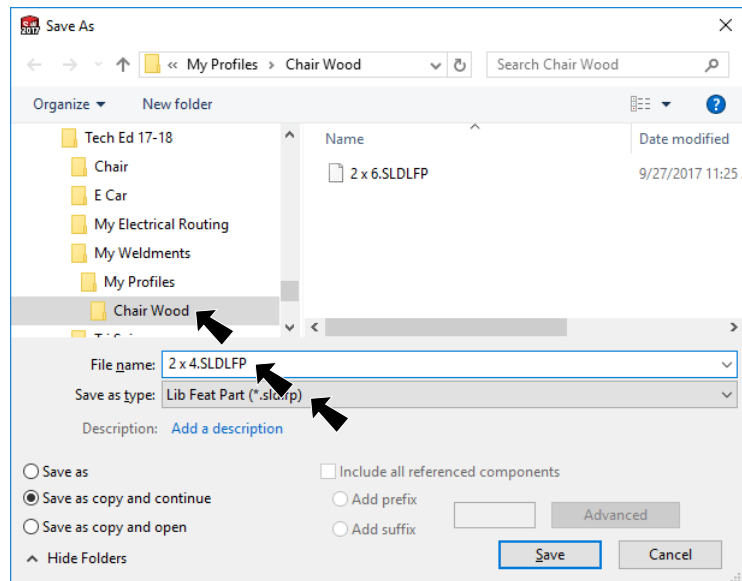
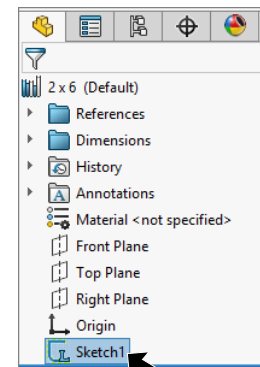
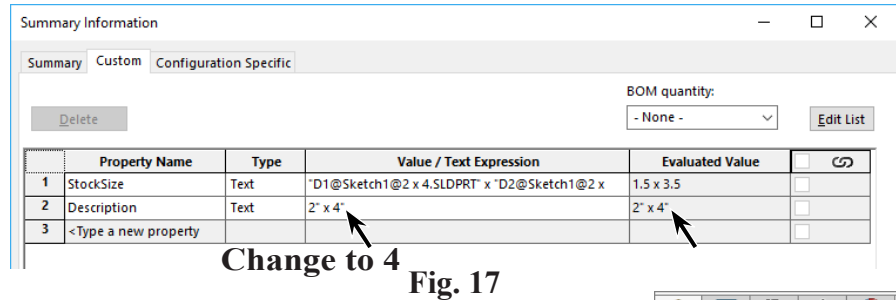
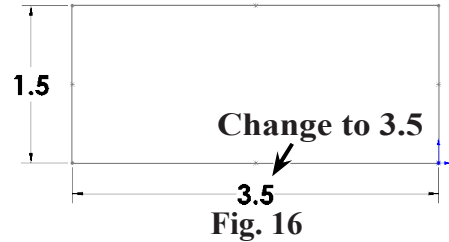
2" x 4"

click OK.

Step 5. Click **Sketch1** in the Feature Manager to select the sketch, Fig. 18. The Sketch must be selected when you save as Lib Feat.

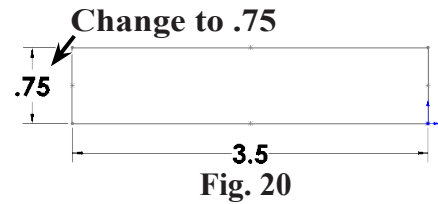
Step 6. Click File Menu > Save As.


Step 7. In the Save As dialog box, Fig. 19
key-in **2 x 4** for file name
set **Save as Type** to **Lib Feat Part**
click Save.



G. 1 by 4.

Step 1. Change **height dimension to .75**, Fig. 20 .75 x 3.5



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

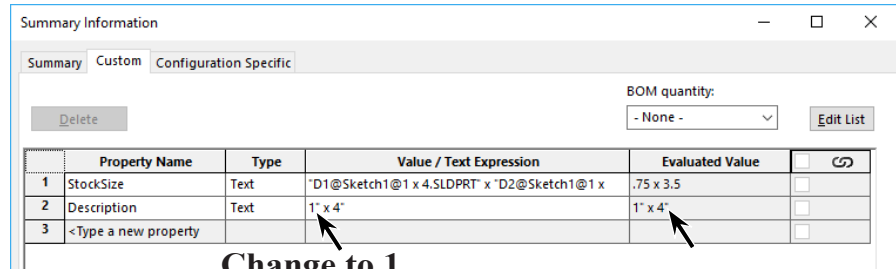
Step 3. Click File Menu > Properties.

Step 4. In the Summary Information dialog box on Custom tab set:
change **Description Value/Text Expression to 1" x 4"**, Fig. 21
press Tab key and **Evaluated Value updates to:**

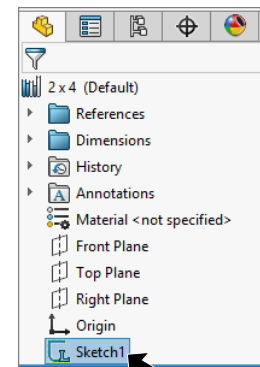
.75 x 3.5

1" x 4"

click OK.

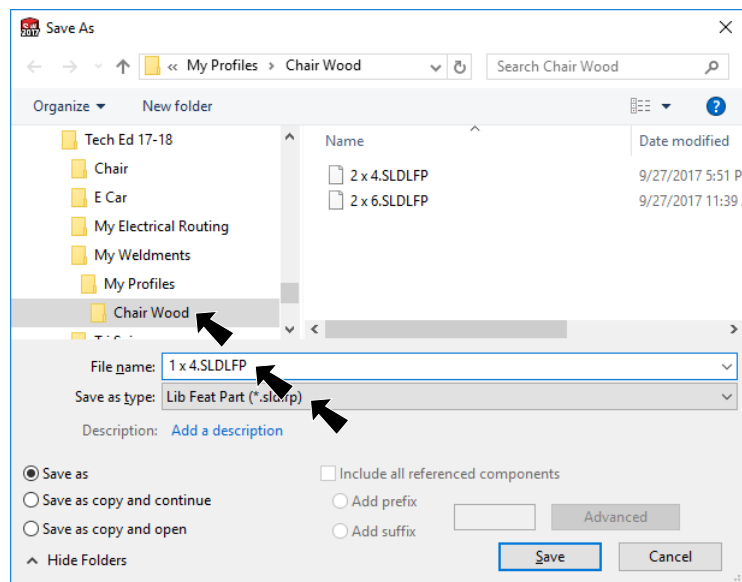


Step 5. Click **Sketch1** in the Feature Manager to select the sketch, Fig. 22. The Sketch must be selected when you save as Lib Feat.




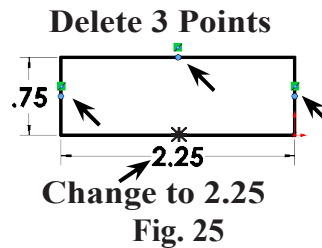
Step 6. Click File Menu > Save As.

Step 7. In the Save As dialog box, Fig. 23
key-in **1 x 4** for file name
set **Save as Type to Lib Feat Part**
click Save.



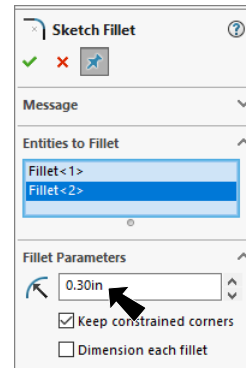
H. Seat Slats.

Step 1. Click **Sketch1** in the Feature Manager and click **Edit Sketch**  on the context toolbar, **Fig. 24**.





Step 2. Change **width dimension to 2.25**, **Fig. 25**.

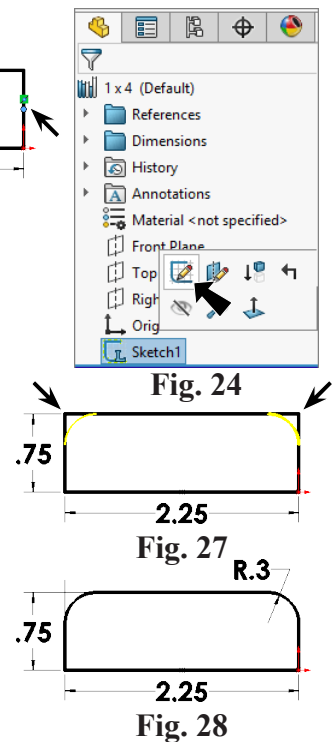
Step 3. **Delete Points** at midpoint of line top and side lines, **Fig. 26**.
Do not delete Point on bottom line.




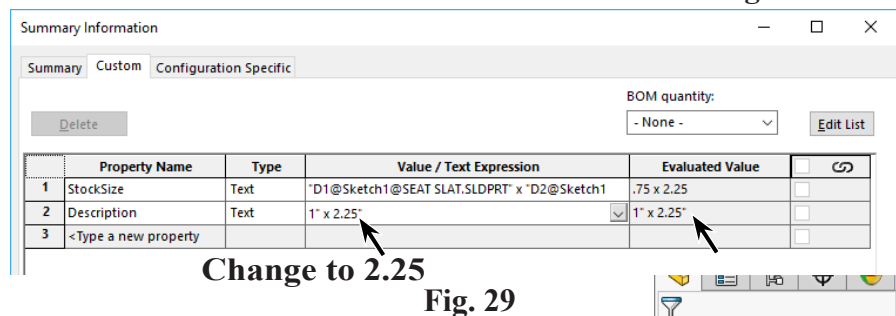
Step 4. Click **Sketch Fillet**  (S) on the Sketch toolbar.

Step 5. In the Sketch Fillet Property Manager set:

Radius  **.3**, **Fig. 27**
click **top two corners**, **Fig. 28**
click **OK**  **twice**.



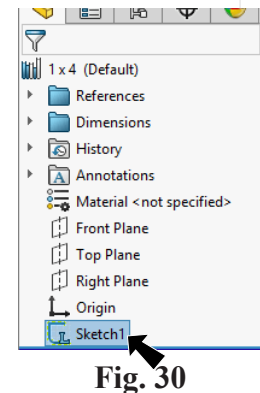
Step 6. Click **Exit Sketch**  on the Sketch toolbar.



Step 7. Click **File Menu > Properties**.

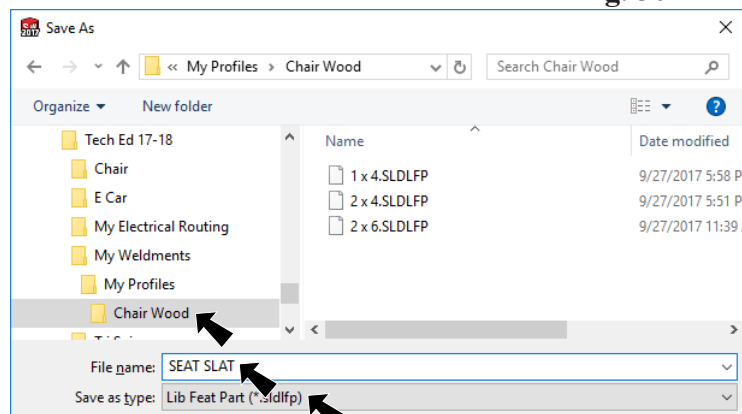
Step 8. In the Summary Information dialog box set, **Fig. 29**
change **Description Value/Text Expression** to **1" x 2.25"**
press **Tab** key and **Evaluated Value** updates to:
.75 x 2.25
1" x 2.25"
click **OK**.

Step 9. Click **Sketch1** in the Feature Manager to select sketch, **Fig. 30**.



Step 10. Click **File Menu > Save As**.

Step 11. In the **Save As** dialog box,
Fig. 31
key-in **SEAT SLAT** for file name
Save as Type to
Lib Feat Part
click **Save**.



I. Custom Profile Files Location.

Step 1. Click **Options**  on the Standard toolbar.

Step 2. In the System Options dialog box, **Fig. 32** select **File Location** on left under **Show folders for:** select **Weldment Profiles**.

Step 3. If you **DO NOT** have permissions/rights to your SOLIDWORKS install folder continue here:

Click Add button, **Fig. 32**.

Navigate to your **My Weldments** folder, **Fig. 33**.

Click Select Folder.

Click OK.

Click OK.

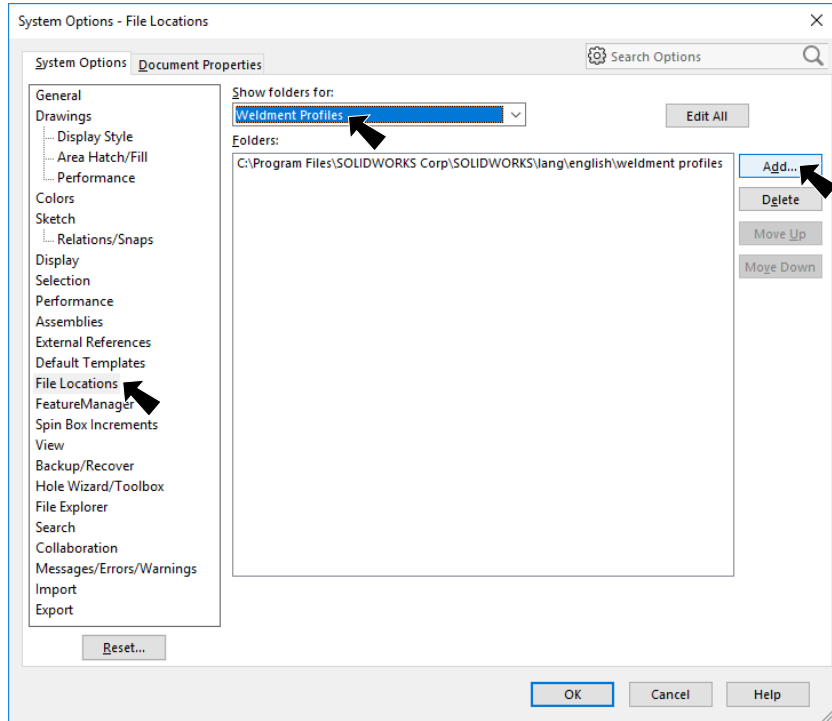


Fig. 32

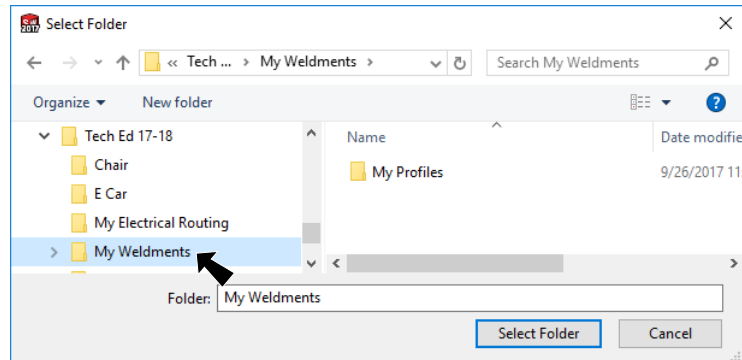


Fig. 33

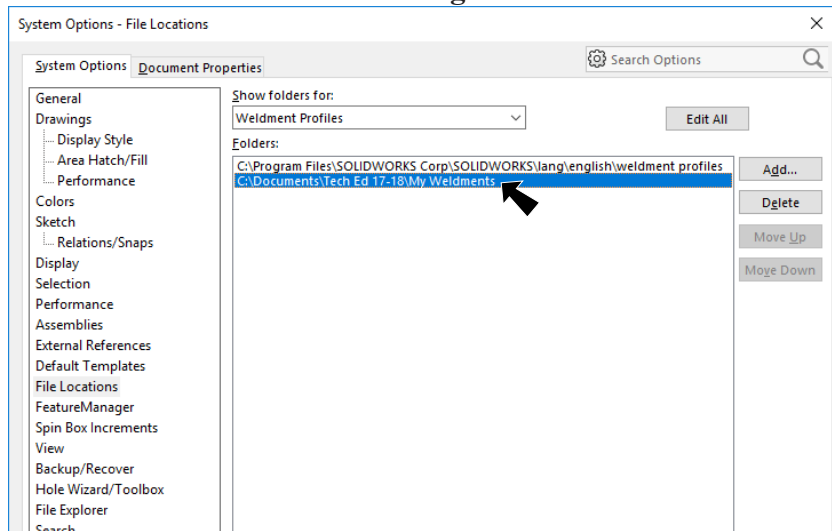


Fig. 34

