

INVENTOR 11 FRAME GENERATOR CUSTOMIZATION

This documentation details the customization of Frame Generator for Autodesk Inventor 11. This is not applicable for versions lower than Autodesk Inventor 11.

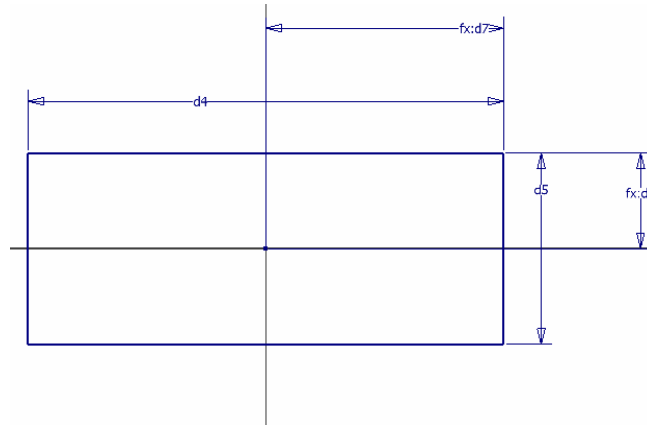
Disclaimer: The author of this document is not responsible to the problems that a user might encounter.

I. CUSTOM PROFILE

1. Create a new part in Inventor
2. Create a 2D sketch of the detailed profile
3. Rename it to `AFG_Detailed`
4. Upon finishing the profile sketch, rename the parameters to `USR_B` (total width of the profile) and `USR_H` (total height of the profile)
5. Add user parameters as shown below. This is necessary so that you can be able to control the position of the profile when inserting a frame

User Parameters		
AFG_Origin_X	mm	$USR_B - USR_B$
AFG_Origin_Y	mm	$USR_H - USR_H$
AFG_IP_X1	mm	$USR_B / 2$ ul
AFG_IP_Y1	mm	$-USR_H / 2$ ul
AFG_IP_X2	mm	$USR_B - USR_B$
AFG_IP_Y2	mm	$-USR_H / 2$ ul
AFG_IP_X3	mm	$-USR_B / 2$ ul
AFG_IP_Y3	mm	$-USR_H / 2$ ul
AFG_IP_X4	mm	$-USR_B / 2$ ul
AFG_IP_Y4	mm	$USR_H - USR_H$
AFG_IP_X5	mm	$-USR_B / 2$ ul
AFG_IP_Y5	mm	$USR_H / 2$ ul
AFG_IP_X6	mm	$USR_B - USR_B$
AFG_IP_Y6	mm	$USR_H / 2$ ul
AFG_IP_X7	mm	$USR_B / 2$ ul
AFG_IP_Y7	mm	$USR_H / 2$ ul
AFG_IP_X8	mm	$USR_B / 2$ ul
AFG_IP_Y8	mm	$USR_H - USR_H$

6. Create a new sketch and rename it to `AFG_Medium`.
7. Draw a rectangle and apply geometric constraints and dimensions as shown below

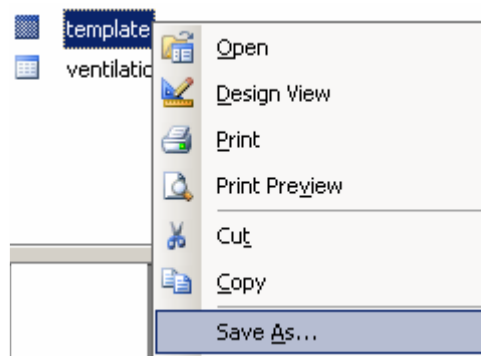


8. Create another sketch and rename it to AFG_Simplified
9. Repeat step number 7
10. Save a copy of this file to C:\Program Files\Autodesk\Inventor 11\Frame Generator\SHARED\Profilesystems\Custom\Templates

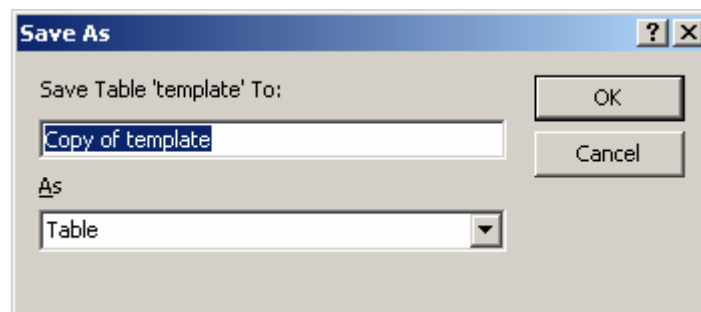
II. ADDING IT TO THE DATABASE

NOTE: Before editing this file, make sure you have a backup copy of it.

1. Open C:\Program Files\Autodesk\Inventor 11\Frame Generator\SHARED\Profilesystems\Custom\Custom.mdb using MS Access
2. Make sure that its read only attribute is not checked.
3. Right click on the table template and click Save As



4. Rename it to your desired profile name and press OK



- Fill out the table. Code is associated with the Profile type. Designation is associated with the Size. USR_B and USR_H are associated with your profile template. You may leave the Article and Description columns blank.

template : Table						
	CODE	DESIGNATION	USR_B	USR_H	ARTICLE	DESCRIPTION
▶						
*						

The 'Insert' dialog box shows the following settings:

- Frame Member Selection: Standard
- Standard: ANSI
- Type: ANSI AISC FLAT
- Size: 1/16 x 1/16

- Then, open the Profiles table. Add a new row. Under the TemplateFilename column, insert the filename of the template you created. Under the DisplayName column, input the desired display name (this is what you will see in the Type dropdown box in the Insert dialog box in the Frame Generator environment. ProfileTable column is where you will input the name of the table you have just created. Input Custom under the ProfileType column and 0 (zero) for the UseAsWebAngle column.

Profiles : Table					
	TemplateFilename	DisplayName	ProfileTable	ProfileType	UseAsWebAngle
	cable_channel.ipt	Example: Cable Channel	cable_channel	Custom	0

- Finally, save the database

III. EDITING THE XML FILE

NOTE: Before editing this file, make sure you have a backup copy of it.

- Open the file C:\Program Files\Autodesk\Inventor 11\Frame Generator\SHARED\Profilesystems\LocalizationXML.xml and edit it using an XML editor.
- Add the code below just right before </ProfileNames>.

```
<ProfileStandard InternalName = "Custom" DisplayName = "Custom">
  <ProfileType InternalName = "ProfileTable" DisplayName =
  "DisplayName">
    <Designation InternalName = "Code" CommaVersion =
  "Designation" PeriodVersion = "Designation"/>
  </ProfileType>
</ProfileStandard>
```

The `ProfileStandard` tag will appear on the Standard dropdown box in the Insert dialog box in the Frame generator environment. `InternalName` is the name of the database. `DisplayName` is how you want to display it in the Standard dropdown box.

The `ProfileType` tag will appear on the Type dropdown box in the Insert dialog box in the Frame generator environment. `InternalName` is the name of the table of the profile that you are referring to. `DisplayName` is how you want to display it in the Type dropdown box.

The `Designation` tag will appear on the Size dropdown box in the Insert dialog box in the Frame generator environment. `InternalName` refers to the Code column of the profile table. `CommaVersion` and `PeriodVersion` refer to the Designation column of the profile table.

3. After making the necessary changes, save the file and run Autodesk Inventor.