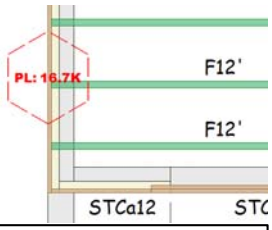
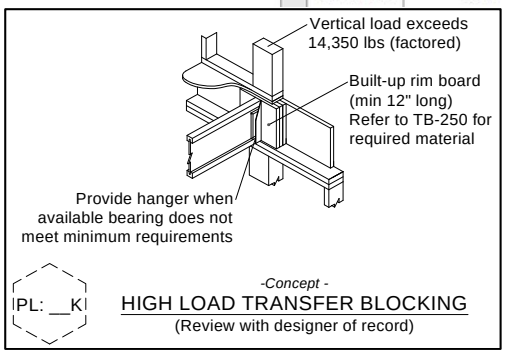
Large Concentrated Loads on Rim Board (14,350 lbs +)

To save time in Javelin version 5.2; we have added the ability to identify **Large Concentrated Loads on Rim Board**. This will not fail rim materials when the crushing strength is exceeded. A new red Hex Detail will display on the layout when the load exceeds **14,350 lbs (factored)** after the job has been designed.



To help builders understand how to manage the transfer of these high loads, two new tools have been created:

The first is a detail that can be placed on the Javelin layout or cover page (see last page for more information).



The second is a new Technical Bulletin (*TB-250*) created to provide a solution for these high loading conditions, this is available on our web site (*http://www.woodbywy.com/library/#technical-bulletins*).

As a minimum, it is recommended to supply the Technical Bulletin (*TB-250*) to the Designer of Record / Contractor / Framer for resolution on site.

You can also provide your customer with specific instructions and add the additional material to the Javelin Layout when this detail is generated. See the following section for instructions on how to do that.

Steps to adding material at identified locations:

1. Use the tables in *TB-250* to select an appropriate Rim Assembly:
2. Identify material of supporting column above.
3. The values in the table are the maximum load that can be supported.
4. Select the Rim Board in the Javelin model and right click in white space to display the context menu and click on Show the **Design Summary Information(Y)**.
5. Look at the WARNING message. This will tell you exactly what the load is and where the load is on the rim board.

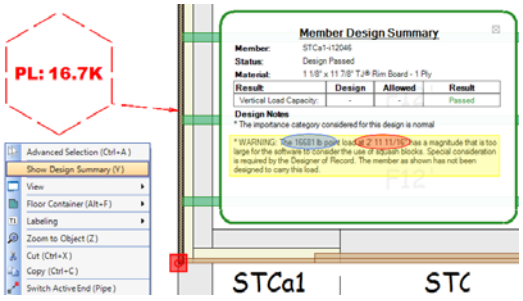
   * WARNING: The 16681 lb point load at 2' 11 11/16" has a magnitude that is too large for the software to consider the use of squash blocks. Special consideration is required by the Designer of Record. The member as shown has not been designed to carry this load.

6. Compare the Point Load to the tables to identify the Rim Assembly. 3 plies of 1 1/8" TJ® Rim Board will support 17970 lbs. the load in this example is 16681 lbs. below the limit (3 plies total are required).

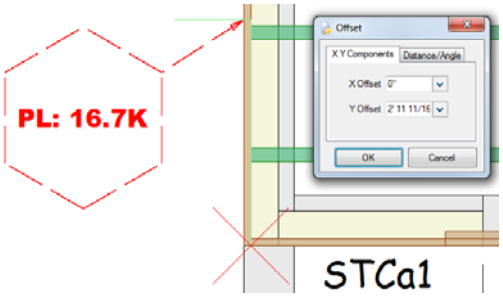
Table 1: Maximum Combined Concentrated and Uniform Load (lbs) – Factored - 2x6

9½" to 11⅞" Floor Depth

Rim Assembly (Rim + Reinforcement)	Plies	2x6 Wall Plate Species (su				
		SPF				
		Column Width				
		4.5"	5.25"	7"	9"	4
1⅛" TJ® Rim Board	3	-	15635	17970	17970	
	4	16490	18160	22600	23960	19
1¼" TimberStrand® LSL	3	15905	17375	19965	19965	15
	4	16490	18160	22600	26620	21
1½" TimberStrand® LSL	3	16490	18160	22600	23960	19
3½" TimberStrand® LSL	1	14845	16215	18635	18635	14
3½" Parallam® PSL	1	14845	16215	18635	18635	14
5¼" Parallam® PSL	1	16490	18160	22600	27955	21



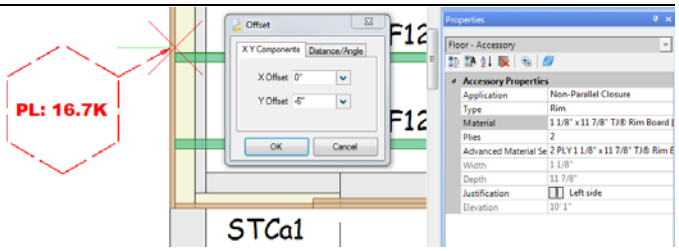
7. Insert a **Workline** at **2' 11 11/16"** to set a snap point. Use the inside face of the end of the Rim (X) and **Shift Key + Left click**. This will display an Offset dialog input **2' 11 11/16"** in the **Y Offset**. Make the Workline **12"** long to the outside of the structure.

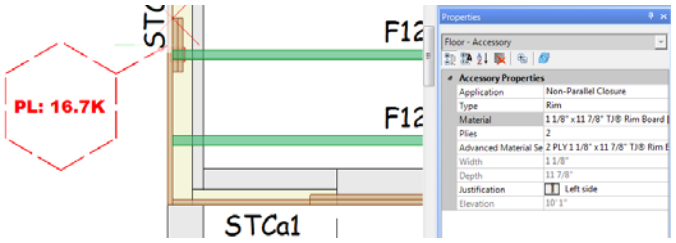


Efficiency Tip 14009

Option 1: Multi-Ply Rim Board

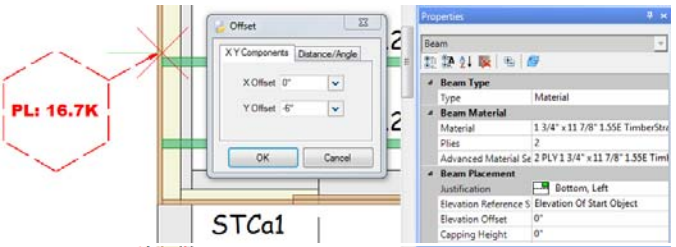
8. Select the **Manually Input Accessory** Command on the Floor Container tool bar, in the property grid:
   - set the Application to **Non Parallel Closure**
   - set the desired Rim Material
   - set the desired Plies (value in table is total plies)
   - set Justification: Left (drawing up in this case)
9. Hold down the **Shift Key + Left click** (X) on the inside face of the Rim and Workline. This will display an Offset dialog input **-6"** in the **Y Offset**, click OK. Up arrow **12"** to draw the Accessory.
10. Trim the Joist to inside face of Rim. A connector is not required in this case because there enough bearing for the joist on the 2x6 plate *(5½" – $3^{3}/_{8}$" = $2^{1}/_{8}$")*.

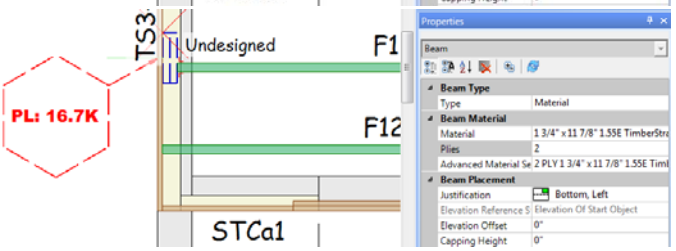




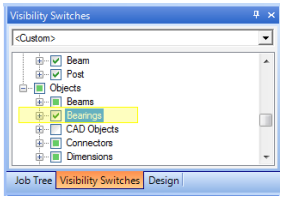
Option 2: Rim + Beam

8. Select the **Beam** Command, in the property grid:
   - set the desired Material
   - set desired number of Plies
   - set Justification: Bottom, Left.
9. Hold down the **Shift Key + Left click** (X) on the inside face of the Rim and Workline. This will display an Offset dialog input **-6"** in the **Y Offset**, click OK. Up arrow **12"** to draw the Beam.
10. Joist will automatically trim to the beam, creating the connector because there in not enough bearing for the joist on the 2x6 plate *(5½" – $4^{5}/_{8}$" = $^{7}/_{8}$")*.

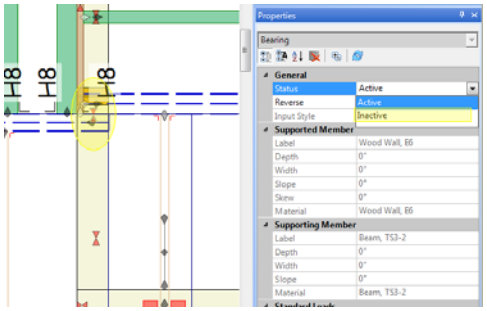




Note: 3½" TimberStrand® LSL can be replaced with 2 ply 1¾" TimberStrand® LSL and 2 ply 3½" TimberStrand® LSL can be replaced with 4 Ply 1¾" TimberStrand® LSL.



11. Change Levels to the level above and turn on the visibilities for Bearings.



12. Find the **Active Bearing** for the Wall to the 1' long Accessory or Beam below. Make the **Bearing Inactive** . This keeps the *PL:___K hex* detail on the plan, otherwise Javelin will change the detail to a *CS hex* when designed because the load would be split between the two objects.
13. Add PL:___K HIGH LOAD TRANSFER BLOCKING wmf detail to the appropriate **Layout Sheets** (*Download a copy PL:__K.wmf*). Save this file to the Javelin's default location with all other Floor details in:
    C:\ProgramFiles\Modus\Javelin{InstanceName}\Data\Details\iLevel(English)\Floor

Note: If you have upgraded older versions of Javelin the Modus path may not exist, it could be iLevel or Trus Joist.