

Using Floor Performance Options in Javelin

There are a number of Floor Performance Options in Javelin that can be used to help increase TJ-Pro™ Rating and pass Vibration Control checks in a floor system. These items are off by default and can be turned as needed to improve system performance. These rating can also display in Level Notes (see **JET13011** for details).

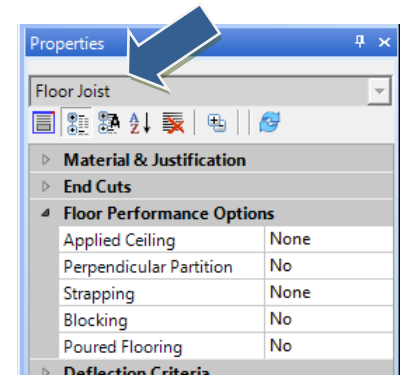
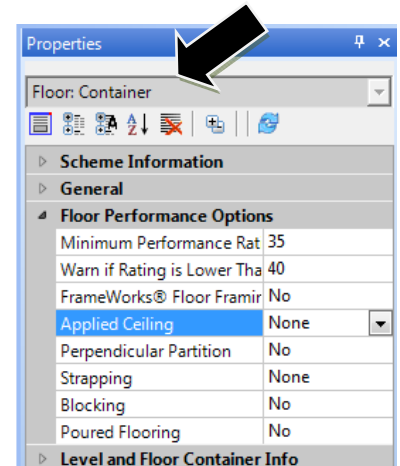
- Setup Schemes... to set your default Floor Performance Options.
- Apply Floor Performance Options in only the areas that they are needed.

Floor Performance Options properties are available for Floor Containers and Joist Members input objects.

Floor Container Properties are the framing defaults for any members being placed in the floor container setting the design preferences at the time of Floor Container input.

Floor Performance Options	Description
3 Additional Options in Floor Container Properties vs Joist members	
Minimum Performance Rating:	This will control design result and will fail members below the value entered (Example: Minimum Performance Rating is set 35 all joist members with a TJ-Pro™ Rating 34 and less will fail).
Warn if Rating is Lower Than:	This setting will trigger warnings in the Design tab when the value is below the specified value.
FrameWorks® Floor Framing Systems:	This should be always set to No ; this decking material is no longer manufactured.

Joist Members Properties are used by the design engine to design the member. Selecting the joist members rather than the Floor Container allows you to apply Floor Properties to only the members. This will override Floor Container settings.



Floor Performance Options	Selection Option	Description
Applied Ceiling	None / Gypsum ½" Gypsum 5/8" Suspended	Drywall/Gypsum thickness does two thing to the floor system, adds mass to the system and keeps the bottom flange from moving from side to side when load is applied from above. Note: that only Directly Applied Ceiling provides this benefit.
Perpendicular Partition	Yes / No	Full-height framed partitions that are perpendicular to the joist and away from supports have the effect of damping vibrations, which improves floor performance.
Strapping	None / Flat 1x4 Flat 2x4 / Strongback	If used, install at mid-span or 8'oc intervals maximum along the joist span (Example: Joist span of 18'6"> 2 rows at 1/3 points or 6'2"oc is required). See TB-104.PDF for framing details.
Blocking	Yes / No	Generally used as a field fix. This option is not recommended to avoid interferences with mechanicals. If used, install at mid-span or 8'oc intervals maximum along the joist span (Example: Joist span of 18'6"> 2 rows at 1/3 points or 6'2"o.c. is required). Blocking MUST also be drawn on the plan at these locations to be included on the material list and communicate to framer it's required. Blocking does not get added automatically to material list by clicking Yes in the properties grid.
Poured Flooring	Yes / No	Poured toppings typical add mass to the floor system, on short spans will help a system's TJ-Pro Rating, on longer spans over 15' will worsen performance because the added mass takes more time to stop moving. Floor Container Dead Load must be increased to account for the additional load of the topping.

For more information about Floor Performance see [Technical Bulletin \(TB-104.PDF\)](#) on our website.

Efficiency Tip 14004

Setup Schemes...

Steps:

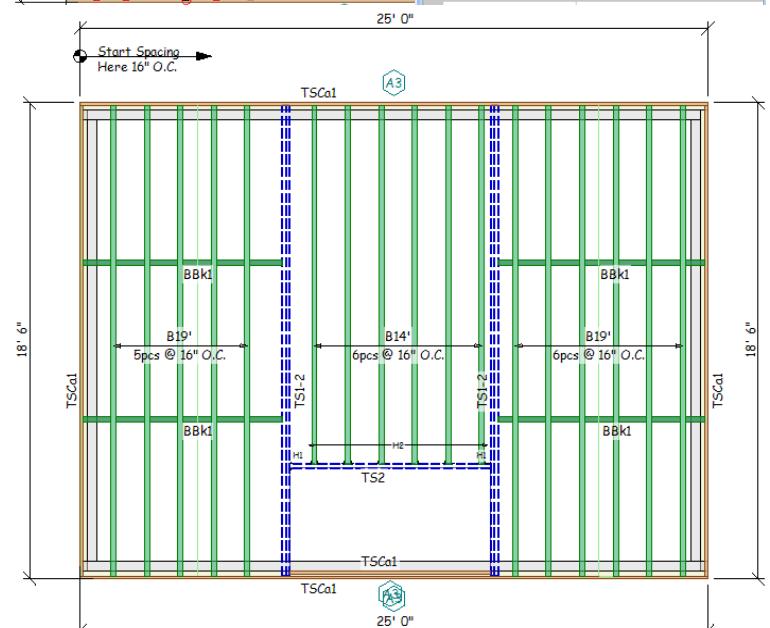
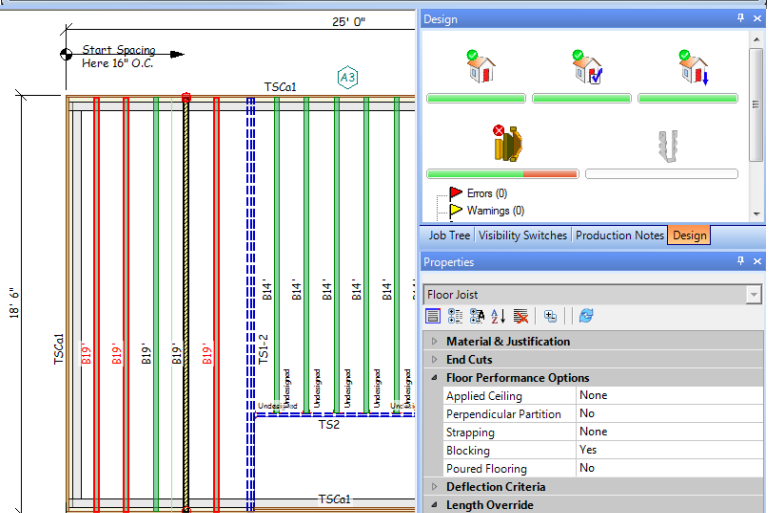
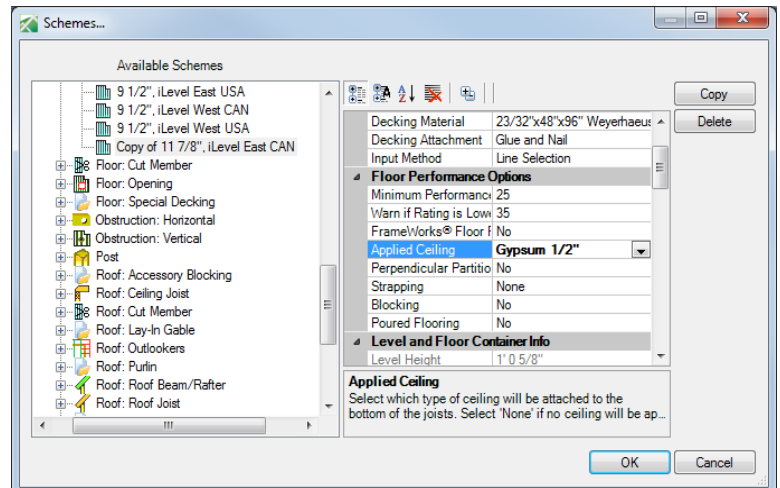
1. In Javelin go to **Setup** menu > **Schemes...**
2. Expand **Per Level Settings** > **Floor: Container**
3. Select the desired *Scheme name*
4. Copy to create a new scheme base off of the old and make the desired changes.

*Note: If you create a new scheme or rename an existing scheme make sure to update your Building Style for new Javelin files. Existing file: Open Job Properties > select **Job Settings** > select your scheme name (if the name has changed).*

Input / Design considerations for **Blocking** identifying areas where blocking maybe required.

1. Select the desired Joist member to evaluate.
2. In the properties grid, set **Blocking** to **Yes** under **Floor Performance Options**
3. Design the job to see if these areas **Pass** continue with **Step 4**; if these **Fail** change the product specification.
4. Insert a **Workline** alongside or between the joist spacing the same length as the Joist.
5. Select the work Line.
6. Use **Split Equally** command and split into **2** if the member is less than 16' or **3** if greater than 16'.
7. Select the **Floor Container** tool bar and **Manually Input Accessories**:
 - Application = Intermediate
 - Type = Match Joist Material
8. Set the start point of the accessory at the end point of the **Workline** that was just split.
9. Set the end points to where the blocking should start and end.
10. Design the file.

Note: When using blocking to increase floor performance it must also be drawn in on the plan to included in the material list and communicate to site that it must be installed.



Blocking				
PlotID	Length	Product	Plies	Net Qty
BBk1	2' 0"	11 7/8" TJI® s31	1	22
BBk1	1' 0"	11 7/8" TJI® s31	1	4