MiTek® 20/20® V7.2.2 Release Notes

January 2010

We are pleased to provide you with a list of new features that are on this release of the MiTek 20/20 software, version 7.2.2.

New features have been added in the following areas of the software:

NEW FEATURES

Component Design

1. New Opening Condition for Wind Loading
2. Automatically Double or Triple Webs for Detail Trusses
3. Drawing Note for Uninhabited Attics
4. Accept Loads from TrussFramer for Structural Fascia
5. Pan Across a Zoomed View
6. Shift Heel Plate to Bolt Truss to Pole

MiTek Business Application (MBA)

1. Adjust Total Overhead

CyberSort

1. Field-installed Members in .tre Mode
2. Splice Blocks Added to Sort Keys
3. Attic Information in .tps

MiTek 20/20 Engineering

1. New Opening Condition for Wind Loading –

The Wind Loading tab now includes a new opening condition called Open Bldg - Cond III. This condition can only be applied to MWFRS (all heights) and Components/Cladding ASCE 7-05 wind design methods. This feature should be used for buildings that are totally open on all sides, such as picnic shelters and pavilions.

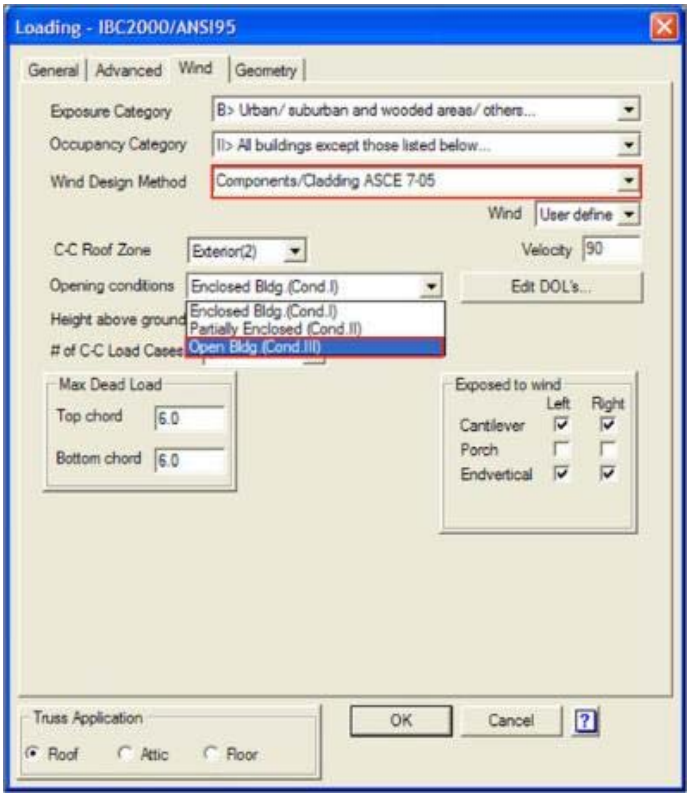
Currently, the Open wind loading opening condition will accommodate mono-sloped, pitched, and troughed roof shapes. All roof zones and pressure coefficients will be calculated using the pitched roof truss shape.

ASCE 7-05 has some limitations that prevent the calculation of loads for certain conditions. For example, users will not be able to run a truss using the Open condition with a top chord slope of greater than 45 degrees, or with a Mean Roof Height to Length ratio less than 0.25 or greater than 1.0. If these conditions exist, users should discuss options with an engineer.

To use the Open loading condition:

1. Go to *Setup>Job>Loading*.
2. Select the Wind tab. See the Open Condition Option graphic.
3. In the Wind Design Method drop-down list, either Components/Cladding ASCE 7-05 or MWFRS (all heights)/C-C hybrid Wind ASCE 5-07 MUST be selected.
4. Select Open Bldg (Cond. III) from the Opening Conditions drop-down list.
5. Click OK.

Figure 1: Open Condition Option



Back To Top

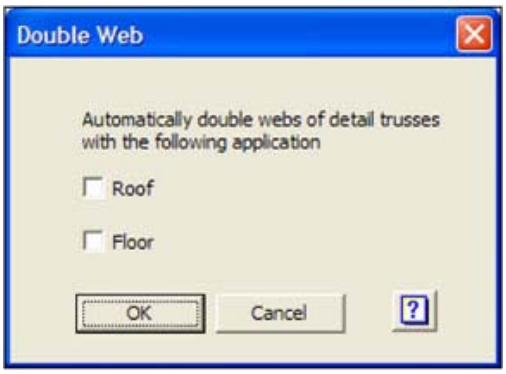
2. Automatically Double or Triple Webs for Detail Trusses –

Users have the option to automatically double or triple webs for detail trusses,instead of receiving a warning that a web requires doubling or tripling and completing the process manually.

By default, the option to automatically double webs will be turned off. To activate automatic web doubling:

1. Select *Setup>Manufacturer>Tools Defaults>Double Web*.
2. In the Double Web dialog, check the box next to Roof and/or Floor to indicate the type of trusses for which webs should be automatically doubled or tripled. See the Double Web Dialog graphic.
3. When finished, click OK.

Figure 2: Double Web Dialog



Back To Top

---

3. Drawing Note for Uninhabited Attics –

The drawing note for uninhabited attics has been modified. It now reads, "Attic space shown is designed as uninhabitable." The previous note said "Attic space shown is not designed for human occupancy or to be used as a floor."

Back To Top

---

4. Accept Loads from TrussFramer for Structural Fascia –

When structural fascia is imported from TrussFramer, Engineering will accept the structural fascia member as a truss member. Loading will transfer for truss-to-truss loading, including all loads applied to the member from the TrussFramer model, and loads related to bearing trusses.

Back To Top

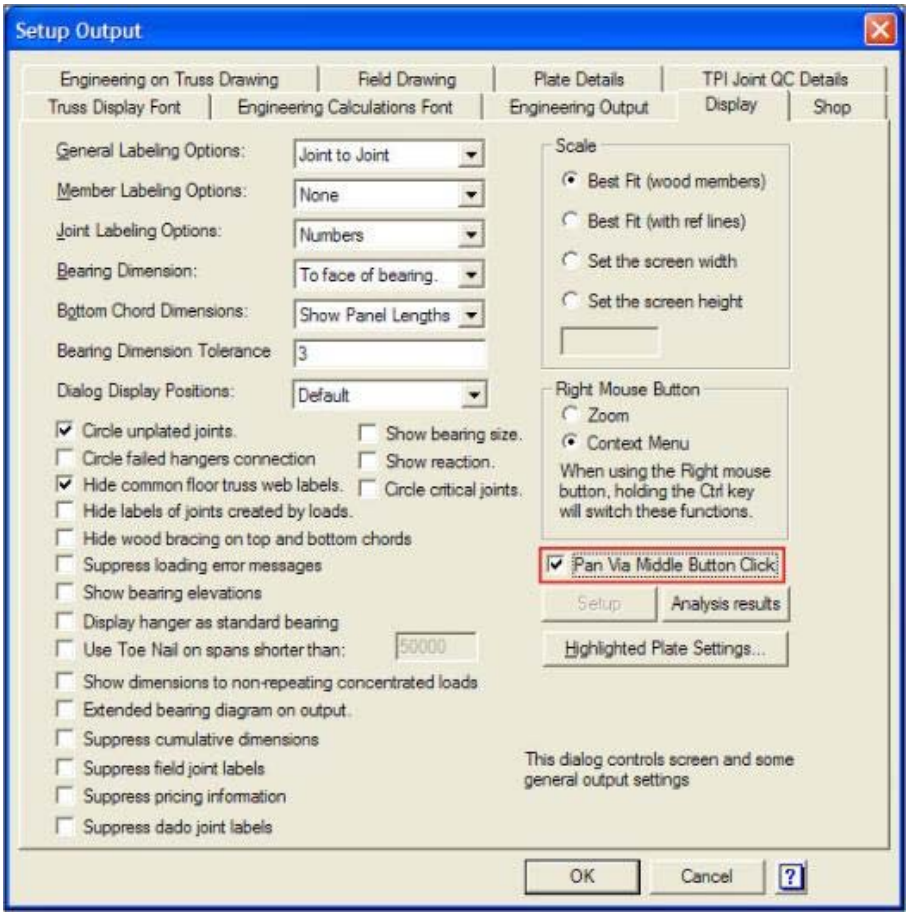
---

5. Pan Across a Zoomed View –

Currently, the pan function in Engineering uses the left mouse button. Users may choose to switch the pan function to the middle mouse button so Engineering will function like TrussFramer.

1. Go to *Setup>Output Setup*.
2. Select the Display tab.
3. Check the box next to Pan Via Middle Button Click. See the Pan Using Middle Mouse Button graphic.
4. Click OK when finished.

Figure 3: Pan Using Middle Mouse Button



Back To Top

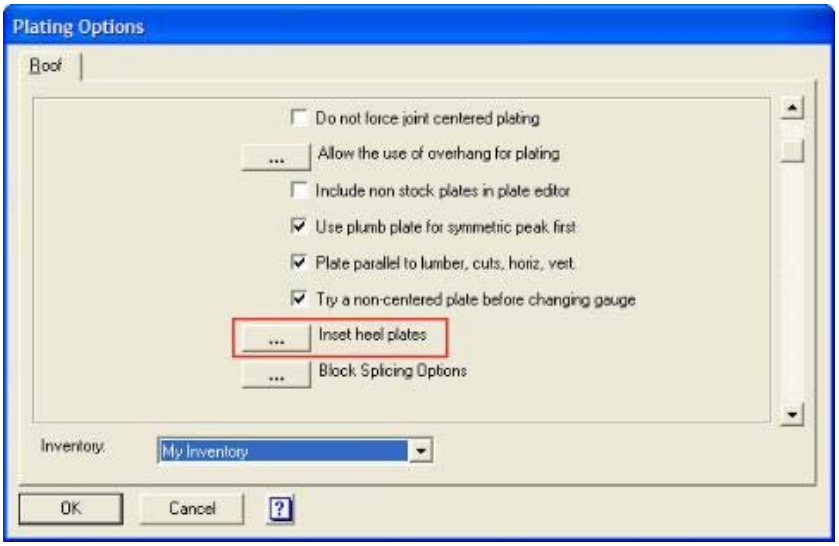
6. Shift Heel Plate to Bolt Truss to Pole–

To facilitate the use of trusses that are bolted to a pole (such as pole barn trusses), Engineering will automatically move heel plates in from the end of the truss by a user-defined distance. This will allow trusses to be bolted to a pole without the interference of the heel plate.

To define a heel plate inset distance:

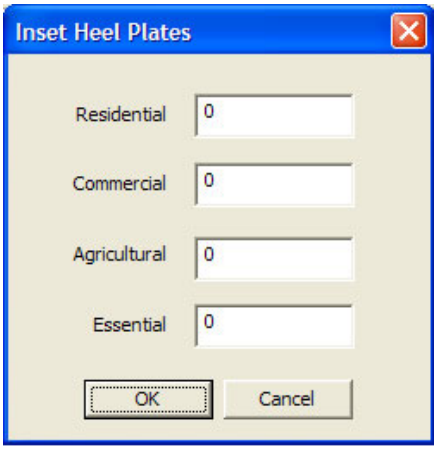
1. Select Edit>Plate Options.
2. Scroll down to the Inset Heel Plates option and click the ... button. See the Inset Heel Plates Option graphic.

Figure 4: Inset Heel Plates Option



3. In the Inset Heel Plates dialog, enter the desired inset distance next to the correct occupancy category. See the Inset Heel Plates Dialog graphic.

Figure 5: Inset Heel Plates Dialog



Please note, plates can only be inset on standard roof truss heels. **Plate insets will be ignored in any of the following situations:**

- The bearing has a vertical above it (as in a stub condition)
- The truss is top chord bearing
- The truss is a floor truss (detail truss)
- The heel plate is above an interior bearing or cantilever

Back To Top

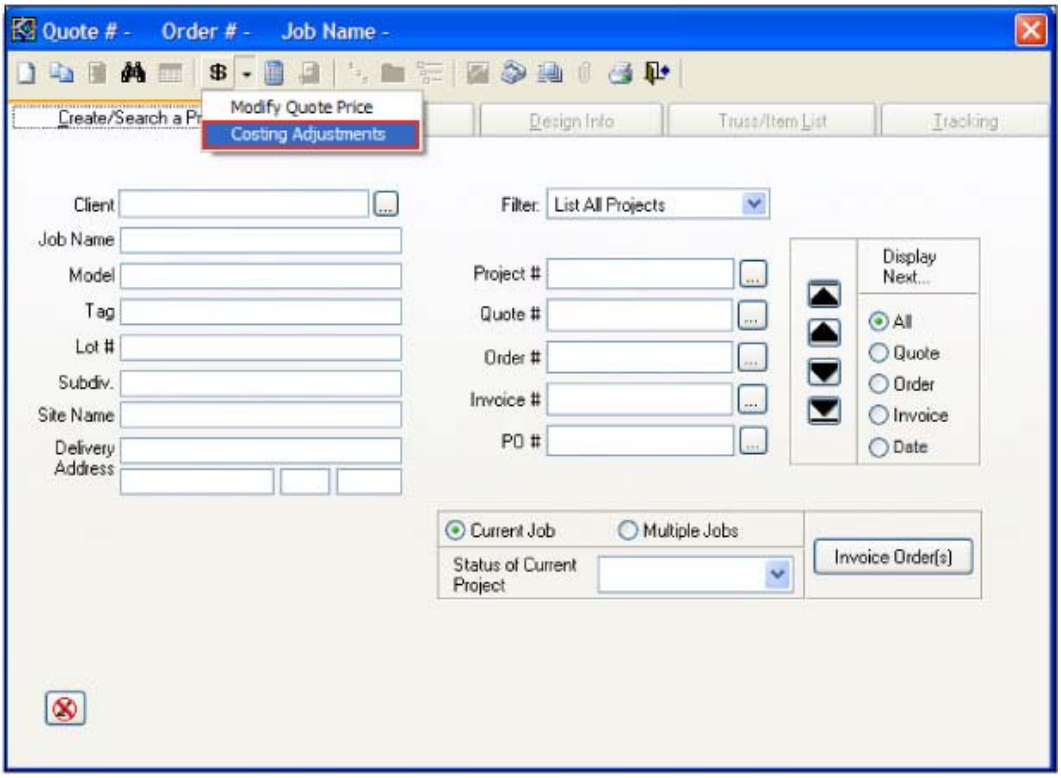
MiTek Business Application (MBA)

1. Adjust Total Overhead –

Users can modify the overhead for a project using Costing Adjustments.

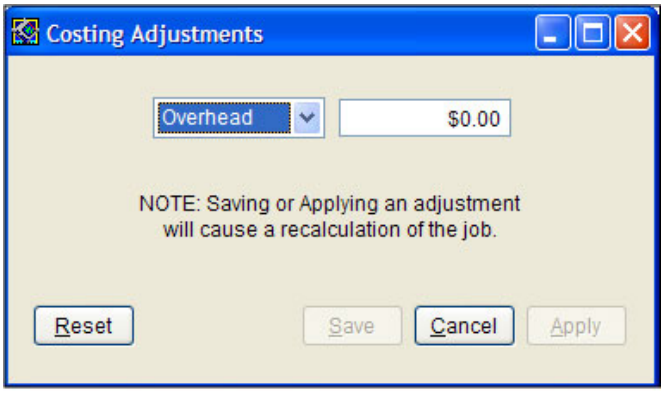
1. In an open job, select the drop-down menu next to the $ symbol. See the Select Costing Adjustments graphic.
2. Select *Costing Adjustments*.

Figure 6: Select Costing Adjustments



3. In the Costing Adjustments dialog, enter the overhead cost to be applied to the job. Click SAVE when finished. See the Costing Adjustments Dialog graphic.

Figure 7: Costing Adjustments Dialog



Back To Top

CyberSort

1. **Field-installed Members in .tre Mode –**

   If a member is marked "Field Installed," but is not also marked "Ship Loose," it will not be printed.

Back To Top

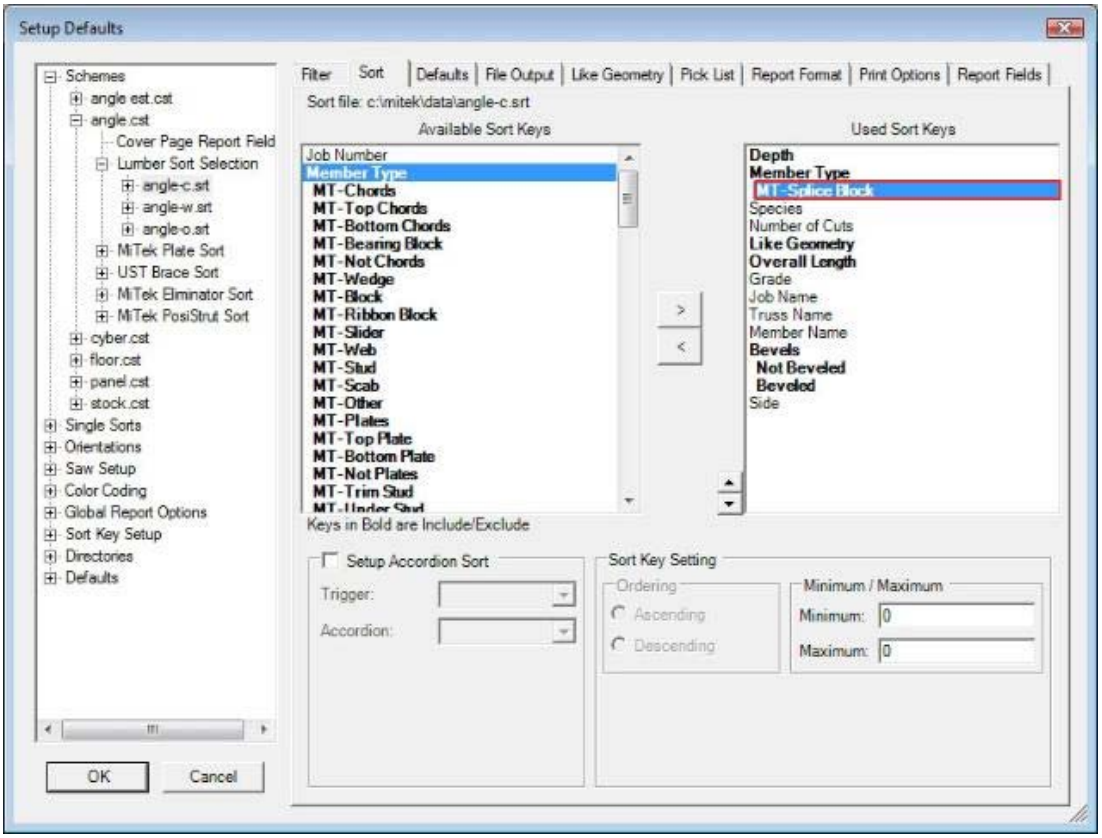
2. **Splice Blocks Added to Sort Keys –**

   Splice blocks can now be used as a sort key. The splice blocks sort key will default to inactive.

   To add splice blocks as a sort key:

   1. Go to *Setup>Defaults*.
   2. Select the scheme to which the sort key will be added.
   3. In the right side of the Setup Defaults dialog, click the Sort tab.
   4. Select MT-Splice Block in the Available Sort Keys menu.
   5. Click the right arrow to add MT-Splice Block as a sort key. See the Splice Blocks Added as a Sort Key graphic.
   6. Click OK.

Figure 8: Splice Blocks Added as a Sort Key



Back To Top

3. Attic Information in .tps –

The .tps file will now include additional information, such as the overall height of the truss in inches, and the left/right heel-to-peak dimensions.

In addition, if a truss includes one or more attics, the .tps file will include the following information:

- Inside attic width in inches
- Inside attic height from the top of the bottom chord to the bottom of the attic collar tie
- Height of left and right side walls

Back To Top