STRONGBACK DETAIL

Wendricks Truss, Inc.

Hermansville, MI   49847

1-800-858-2960
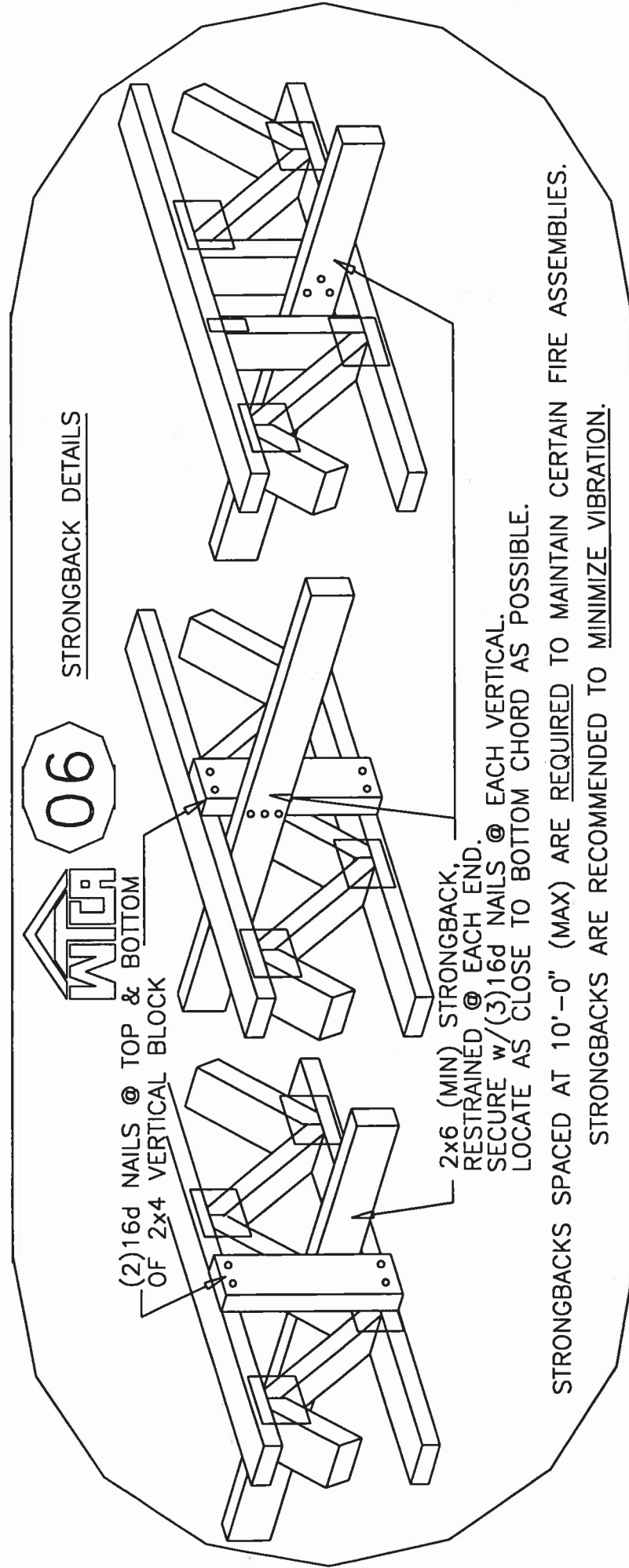
WTCA 06

STRONGBACK DETAILS

(2)16d NAILS @ TOP & BOTTOM OF 2x4 VERTICAL BLOCK

2x6 (MIN) STRONGBACK, RESTRAINED @ EACH END. SECURE w/(3)16d NAILS @ EACH VERTICAL. LOCATE AS CLOSE TO BOTTOM CHORD AS POSSIBLE.

STRONGBACKS SPACED AT 10'-0" (MAX) ARE REQUIRED TO MAINTAIN CERTAIN FIRE ASSEMBLIES.

STRONGBACKS ARE RECOMMENDED TO MINIMIZE VIBRATION.

May 26, 2009

RE: Bracing and Strongbacks in floor trusses

To Whom it may concern,

All framing floor systems experience some bounce or vibration. The extent of the vibration is dependent on many factors such as depth of floor system, quantity of members, partition location, and load distribution. Horizontal bridging in the form of 2x6 strongbacks (on edge), attached to each truss helps to alleviate bounce/vibration in the floor system by distributing unequal loads to adjacent trusses and making the floor system act more as a unit.

Another method of bridging that can also alleviate the bounce/vibration in the floor system when strongbacks are impractical is cross bridging between trusses with 1x3's and two 8d nails at each end.

These two methods of bridging between trusses should be provided at a spacing of approximately 8 to 10 feet for the floor system. For spans less than 10 feet in length, strongbacks are not required.

Although strongbacks and bridging may help in minimizing deflections and vibrations between adjacent trusses, their use is only <u>recommended</u> and <u>not required</u> since the floor trusses themselves are structurally capable of supporting the loads indicated on the design drawing without the addition of the cross bridging or strongbacks.

In some instances, very slender trusses will state that strongbacks are *required*. As stated in the previous paragraph, structurally, the trusses are adequate. However, the requirement to use strongbacks is due to the very high probability that the occupants of the structure will find the bounce and or vibration objectionable.

The use of 2x4 strongback instead of 2x6 is not acceptable.

If you have any additional questions, or need any additional information please contact MiTek.

Sincerely,

Juan Garcia, P.E.
Senior Design Engineer