TPI Interim Guideline
for
ANSI/TPI 1-2002 Section 8.9.2
(TPI Board Approved February 6, 2006)

“It is recognized by the metal plate connected wood truss industry that block shear (failing of the lumber beneath the connector plate teeth), is a failure mode that needs to be checked in truss design. The current design value of 1600 lbs/inch was established based on limited information and is considered conservative. Values of up to 3100 lbs/inch have been justified by some in the industry based on engineering experience, full and small scale truss testing and engineering analysis. There are many variables that affect this issue, including the species and grade of the material, and the length of the connector plate involved in the connection. Empirical evidence, field experience and engineering judgment may be used to consider design values significantly higher than the current design value stated in the standard.

Block shear for axial tension members has only been identified as a concern at the ends of a member. The provisions of section 8.9.2 do not apply to joints in the middle of a piece, such as chords that are continuous through a joint.”