Preliminary Check Truss Inspection Form - TPI Inspector

Company Name:_____ Plant #:_____ Date:_____
Address:_____ City:_____ State:_____ Zip:_____
Phone #:_____ QC Contact:_____

...Connecting the Truss Industry

Frequency: 3 Trusses Per Design For Plating, Lumber, & Assembly

Reviewed by TPI Director of Inspection Services:_____

Inspection: **PPM** ☐ **TCM** ☐ **Time In:** _____ **Job/Drawing Number:** _____
Truss Inspection Number: 1 2 3 **Time Out:** _____ **Truss Design/Truss ID:** _____
(Circle #)

A.) Does plant maintain a QC Manual per ANSI/TPI 1-2002 Section 3.2.1? Yes No
B.) Does plant inspect 3 trusses per set up location per week per shift? Yes No
C.) QC data maintained? (*if yes check one box below*) Yes No
☐ maintained in WTCA QC database
☐ maintained in hard or PDF file
D.) Date of last inspection by licensee personnel. _____ Were non-conformances found? Yes No

If licensee non-conformances (NC) are found, TPI Inspector will focus it's random truss design selection along the lines of the NCs found

**pick a number to identify the specific truss*
**physically mark the truss per the QC manual*

Preliminary Check	OK?	*if no…*
1) Does all lumber conform to design (top chords, bottom chords, and webs)?	yes no	

Lumber Information

	Actual			Specified			Truss
Member Type	Grade	Species	Size	Grade	Species	Size	Inspection #
TC BC W							
TC BC W							
TC BC W							

2) Do truss dimensions conform to design (span within 3/4" and height within 1/2")? yes no

Truss Dimensions (ft-in-16th)

Component	Specified	Actual
Span		
Overall Height		

	OK?	*if no…* Joint Number	Side	Comments (list specific cause for failure and decided remedy)
3) Do all plate sizes conform to design (both dimensions must be equal to or greater than specified)?	yes no		Back	
			Back	
			Back	
4) Are all plates properly embedded (less than 1/32" gap)?	yes no		Back	
			Back	
			Back	
5) Do all plates clearly have an acceptable rotation (within ± 10°)?	yes no		Back	
			Back	
			Back	
6) Do all joints clearly have an acceptable member to member gap (within 1/8" or within 1/16" for floor truss splices)?	yes no		Back	
			Back	
			Back	

**If no, mark that the truss is to be fixed*

Initials verifying that errors on form have been corrected: _____

QC Contact Signature:_____ TPI Inspector Signature:_____

(Draft revised 09/14/06)

Plate Placement Method (PPM) Inspection Form - TPI Inspector

Completed Time: ________________ **Job/Drawing Number:** ____________________
Truss Design/Truss ID: ____________________

Minimum Frequency: 1 Truss Per Design - Inspect All Critical Joints On Each Side Of Truss, Top Truss of Bundle

Joint

Required Full Scale Joint QC Detail *(Attach Shop Drawings & QC Details & Paginate)*

Inspection Number	Side	Joint		Plate				Plate Placement (midpoint)		Plate Rotation		Tooth Embedment		Gap (mbr-to-mbr)	
				Actual		Specified									
	(F/B)	Number	Type*	Size	Gage	Size	Gage	(1) & (4) Inside polygon?	Distance from specified	(2) Angle within ± Deg. Spec.?	Degree of rotation	(1) Plate edge gap ≤ 1/32"?	Measure height if >1/32"	(2) Is gap ≤ 1/8"?	Measure gap if >1/8"
	F B							yes no		yes no		yes no		yes no	
	F B							yes no		yes no		yes no		yes no	
	F B							yes no		yes no		yes no		yes no	
	F B							yes no		yes no		yes no		yes no	
	F B							yes no		yes no		yes no		yes no	
	F B							yes no		yes no		yes no		yes no	
	F B							yes no		yes no		yes no		yes no	
	F B							yes no		yes no		yes no		yes no	
	F B							yes no		yes no		yes no		yes no	
	F B							yes no		yes no		yes no		yes no	
	F B							yes no		yes no		yes no		yes no	
	F B							yes no		yes no		yes no		yes no	

**E=Exterior H=Heel I=Interior IS=Interior Splice P=Peak S=Splice* ***Found = All teeth including rolled, defective, and gaps.*

Member

****don't do if joint fails* *****count teeth if defect circle is > filled in, or if joint fails*

				Defects		Number of Teeth				Number of Teeth with Gaps (G)						
										A		B		C		
Inspection Number	Side (F/B)	Joint Number	Member (i.e., 3-5)	(1) Defect circle > filled in?	% of circle filled in	Required	Found**	Defective	Rolled	1/32"< G ≤ 1/16"		1/16"< G ≤ 3/32"		G > 3/32"		Σ Effective Teeth[1,2]
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		
	F B			yes no						0.4		0.6		1.0		

Comments:

Additional Notes:
(1) If midpoint is outside polygon determine if inside TCM polygon or plate gap is >1/32", skip the Defects column and count teeth for affected members. If the defect circle is more than filled, count teeth for that member.
(2) If a member gap is >1/8" or rotation is >Deg. Spec. you will not need to count teeth for any reason because the truss joint needs to be repaired.
(3) Attach shop drawings & full scale joint QC details and paginate (x of y).
(4) A full scale joint QC detail using a Cq=1.25 is required before proceeding with a TCM evaluation.

Plant Management initials verifying that errors on form will be corrected:__________

If G = 0 for member contact area, teeth are 119% effective.
Effective Teeth[1] = 1.19 (Number of Teeth Found - Teeth Over Defects - Rolled Teeth)
Effective Teeth[2] = (Number of Teeth Found-Teeth Over Defects-Rolled Teeth-[0.4A + 0.6B + 1.0C])

(Draft Revised 09/14/06)

Tooth Count Method (TCM) Inspection Form - TPI Inspector

Completed Time: ______________ **Job/Drawing Number:** ____________________
Truss Design/Truss ID: ____________________

Minimum Frequency: 1 Truss Per Design - Inspect All Critical Joints On Each Side Of Truss, Top Truss of Bundle

Joint

Required Full Scale Joint QC Detail *(Attach Shop Drawings & QC Details & Paginate)*

Inspection Number	Side	Joint		Plate				Plate Placement (midpoint)		Plate Rotation		Gap (mbr-to-mbr)	
				Actual		Specified							
	(F/B)	Number	Type*	Size	Gage	Size	Gage	Inside polygon?	Distance from specified	(1) Angle within ± Deg. Spec.?	Degree of rotation	Is gap ≤ 1/8"?	Measure gap if >1/8"
	F B							yes no		yes no		yes no	
	F B							yes no		yes no		yes no	
	F B							yes no		yes no		yes no	
	F B							yes no		yes no		yes no	
	F B							yes no		yes no		yes no	
	F B							yes no		yes no		yes no	
	F B							yes no		yes no		yes no	
	F B							yes no		yes no		yes no	
	F B							yes no		yes no		yes no	
	F B							yes no		yes no		yes no	
	F B							yes no		yes no		yes no	
	F B							yes no		yes no		yes no	

**E=Exterior H=Heel I=Interior IS=Interior Splice P=Peak S=Splice* ***Found = All teeth including rolled, defective, and gaps.*

Member

Inspection Number	Side (F/B)	Joint Number	Member (i.e., 3-5)	Number of Teeth				Number of Teeth with Gaps (G)						
								A		B		C		
				Required	Found**	Defective	Rolled	1/32"< G ≤ 1/16"		1/16"< G ≤ 3/32"		G > 3/32"		Σ Effective Teeth[1 2]
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		
	F B							0.4		0.6		1.0		

Comments:

Additional Notes:
(1) If a member gap is >1/8" or rotation is >Deg. Spec. you will not need to count teeth for any reason because the truss joint needs to be repaired.
(2) Attach shop drawings & full scale joint QC details and paginate (x of y).

Plant Management initials verifying that errors on form will be corrected:__________

If G = 0 for member contact area, teeth are 119% effective.

Effective Teeth[1] = 1.19(Number of Teeth Found-Teeth Over Defects-Rolled Teeth)

Effective Teeth[2] = (Number of Teeth Found-Teeth Over Defects-Rolled Teeth-[0.4A + 0.6B + 1.0C])

(Draft Revised 10/12/06)