

WARNING! BCSI-B1 SUMMARY SHEET - GUIDE FOR HANDLING, INSTALLING, RESTRAINING AND BRACING OF TRUSSES

Spans over 60' may require complex permanent bracing. Please always consult a Professional Engineer.

GENERAL NOTES

Trusses are not marked in any way to identify the frequency or location of temporary lateral restraint and diagonal bracing. Follow the recommendations for handling, installing and temporary restraining and bracing of trusses. Refer to BCSI Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses*** for more detailed information.

Truss Design Drawings may specify locations of permanent lateral restraint or reinforcement for individual truss members. Refer to the BCSI-B3 Summary Sheet - Permanent Restraint/Bracing of Chords & Web Members*** for more information. All other permanent bracing design is the responsibility of the Building Designer.

Warning! The consequences of improper handling, erecting, installing, restraining and bracing can result in a collapse of the structure, or worse, serious personal injury or death.

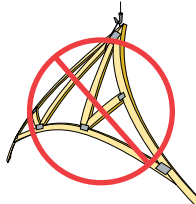
El resultado de un manejo, levantamiento, instalación, restricción y arriostre incorrecto puede ser la caída de la estructura o aún peor, heridos o muertos.

Warning! Banding and truss plates have sharp edges. Wear gloves when handling and safety glasses when cutting banding.

Empaques y placas de metal tienen bordes afilados. Lleve guantes y lentes protectores cuando corte los empaques.

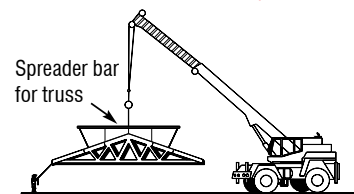
HANDLING — MANEJO

Warning! Avoid lateral bending. — Evite la flexión lateral.



Warning! Use special care in windy weather or near power lines and airports.

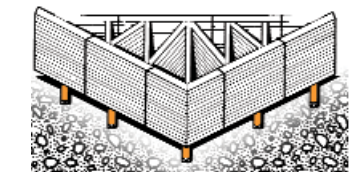
Utilice cuidado especial en días ventosos o cerca de cables eléctricos o de aeropuertos.



Warning! Use proper rigging and hoisting equipment. Use equipo apropiado para levantar e improvisar.

Warning! The contractor is responsible for properly receiving, unloading and storing the trusses at the jobsite.

El contratista tiene la responsabilidad de recibir, descargar y almacenar adecuadamente los trusses en la obra.



Warning! If trusses are to be stored horizontally, place blocking of sufficient height beneath the stack of trusses at 8' to 10' on center.

For trusses stored for more than one week, cover bundles to prevent moisture gain but allow for ventilation.

Refer to BCSI Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses*** for more detailed information pertaining to handling and jobsite storage of trusses.

Si los trusses estarán guardados horizontalmente, ponga bloqueando de altura suficiente detrás de la pila de los trusses a 8 hasta 10 pies en el centro.

Para trusses guardados por más de una semana, cubra los paquetes para prevenir aumento de humedad pero permita ventilación.

Refer to BCSI Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses*** for more detailed information pertaining to handling and jobsite storage of trusses.

Warning! Do not store unbraced bundles upright. No almacene verticalmente los trusses sueltos.



Warning! Do not store on uneven ground. No almacene en tierra desigual.

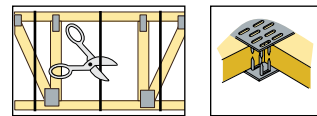


Refer to BCSI Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses*** for more detailed information pertaining to handling and jobsite storage of trusses.

NOTAS GENERALES

Los trusses no están marcados de ningún modo que identifique la frecuencia o localización de restricción lateral y arriostre diagonal temporales. Use las recomendaciones de manejo, instalación, restricción y arriostre temporal de los trusses. Vea el folleto BCSI Guía de Buena Práctica para el Manejo, Instalación, Restricción y Arriostre de los Trusses de Madera Conectados con Placas de Metal*** para información más detallada.

Los dibujos de diseño de los trusses pueden especificar las localizaciones de restricción lateral permanente o refuerzo en los miembros individuales del truss. Vea la hoja resumen BCSI-B3 - Restricción/Arriostre Permanente de Cuerdas y Miembros Secundarios*** para más información. El resto de los diseños de arriostres permanentes son la responsabilidad del Diseñador del Edificio.



HOISTING RECOMMENDATIONS FOR TRUSS BUNDLES

RECOMENDACIONES PARA LEVANTAR PAQUETES DE TRUSSES.

Warning! Don't overload the crane. ¡Advertencia! ¡No sobrecargue la grúa!

Warning! Never use banding alone to lift a bundle. Do not lift a group of individually banded bundles. Nunca use sólo los empaques para levantar un paquete. No levante un grupo de paquetes empaqueando individualmente.



Warning! A single lift point may be used for bundles with trusses up to 45'. Two lift points may be used for bundles with trusses up to 60'. Use at least 3 lift points for bundles with trusses greater than 60'.

Puede usar un solo lugar de levantar para paquetes de trusses hasta 45 pies. Puede usar dos puntos de levantar para paquetes hasta 60 pies. Use por lo menos tres puntos de levantar para paquetes más de 60 pies.

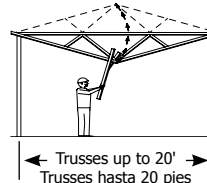
Warning! Do not over load supporting structure with truss bundle. ¡Advertencia! No sobrecargue la estructura apoyada con el paquete de trusses.

Warning! Place truss bundles in stable position. Puse paquetes de trusses en una posición estable.

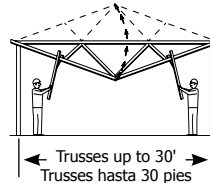
INSTALLATION OF SINGLE TRUSSES BY HAND

INSTALACIÓN DE TRUSSES INDIVIDUALES POR LA MANO

Warning! Trusses 20' or less, support at peak. Soporte del pico los trusses de 20 pies o menos.



Warning! Trusses 30' or less, support at quarter points. Soporte de los cuartos de tramo los trusses de 30 pies o menos.

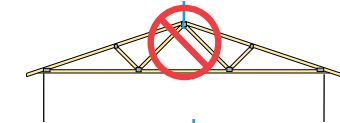


HOISTING OF SINGLE TRUSSES — LEVANTAMIENTO DE TRUSSES INDIVIDUALES

Warning! Hold each truss in position with the erection equipment until top chord temporary lateral restraint is installed and the truss is fastened to the bearing points.

Sostenga cada truss en posición con equipo de grúa hasta que la restricción lateral temporal de la cuerda superior esté instalado y el truss está asegurado en los soportes.

Warning! Using a single pick-point at the peak can damage the truss. ¡Advertencia! El uso de un solo lugar en el pico para levantar puede hacer daño al truss.



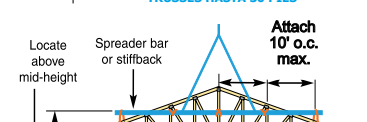
HOISTING RECOMMENDATIONS FOR SINGLE TRUSSES

RECOMENDACIONES PARA LEVANTAR TRUSSES INDIVIDUALES

Warning! Use proper rigging and hoisting equipment. Use equipo apropiado para levantar e improvisar.



Warning! Trusses up to 30' truss length. TRUSSES UP TO 30' TRUSSES HASTA 30 PIES



Warning! Trusses up to and over 60' truss length. TRUSSES UP TO AND OVER 60' TRUSSES HASTA Y SOBRE 60 PIES

TEMPORARY RESTRAINT & BRACING

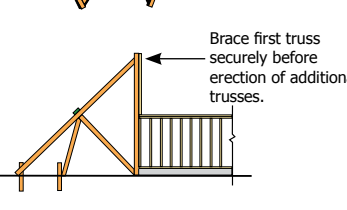
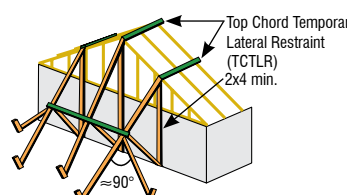
RESTRICCIÓN Y ARRIOSTRE TEMPORAL

Warning! Refer to BCSI-B2 Summary Sheet - Truss Installation & Temporary Restraint/Bracing*** for more information. Vea el resumen BCSI-B2 - Instalación de Trusses y Restricción/Arriostre Temporal*** para más información.

Warning! Locate ground braces for first truss directly in line with all rows of top chord temporary lateral restraint (see table in the next column).

Coloque los arriostres de tierra para el primer truss directamente en línea con cada una de las filas de restricción lateral temporal de la cuerda superior (vea la tabla en la próxima columna).

Warning! Do not walk on unbraced trusses. No camine en trusses sueltos.



STEPS TO SETTING TRUSSES

LAS MEDIDAS DE LA INSTALACIÓN DE LOS TRUSSES

Warning! 1) Install ground bracing. 2) Set first truss and attach securely to ground bracing. 3) Set next 4 trusses with short member temporary lateral restraint (see below). 4) Install top chord diagonal bracing (see below). 5) Install web member plane diagonal bracing to stabilize the first five trusses (see below). 6) Install bottom chord temporary lateral restraint and diagonal bracing (see below). 7) Repeat process on groups of four trusses until all trusses are set.

1) Instale los arriostres de tierra. 2) Instale el primero truss y ate seguramente al arriostre de tierra. 3) Instale los próximos 4 trusses con restricción lateral temporal de miembro corto (vea abajo). 4) Instale el arriostre diagonal de la cuerda superior (vea abajo). 5) Instale arriostre diagonal para los planos de los miembros secundarios para establezca los primeros cinco trusses (vea abajo). 6) Instale la restricción lateral temporal y arriostre diagonal para la cuerda inferior (vea abajo). 7) Repita éste procedimiento en grupos de cuatro trusses hasta que todos los trusses estén instalados.

Warning! Refer to BCSI-B2 Summary Sheet - Truss Installation & Temporary Restraint/Bracing*** for more information.

Vea el resumen BCSI-B2 - Instalación de Trusses y Restricción/Arriostre Temporal*** para más información.

RESTRAINT/BRACING FOR ALL PLANES OF TRUSSES

RESTRICCIÓN/ARRIOSTRE PARA TODOS PLANOS DE TRUSSES

Warning! This restraint & bracing method is for all trusses except 3x2 and 4x2 parallel chord trusses. Este método de restricción y arriostre es para todos trusses excepto trusses de cuerdas paralelas 3x2 y 4x2.

1) TOP CHORD — CUERDA SUPERIOR

Truss Span Longitud de Tramo	Top Chord Temporary Lateral Restraint (TCLR) Spacing Espaciamiento del Arriostre Temporal de la Cuerda Superior
Up to 30'	10' o.c. max.
Hasta 30 pies	10 pies máximo
30' to 45'	8' o.c. max.
30 a 45 pies	8 pies máximo
45' to 60'	6' o.c. max.
45 a 60 pies	6 pies máximo
60' to 80'*	4' o.c. max.
60 a 80 pies*	4 pies máximo

*Consult a Professional Engineer for trusses longer than 60'. *Consulte a un Ingeniero Profesional para trusses más de 60 pies.

Warning! See BCSI-B2*** for TCLR options. Vea el BCSI-B2*** para las opciones de TCLR.

Warning! Refer to BCSI-B3 Summary Sheet - Permanent Restraint/Bracing of Chords & Web Members*** for Gable End Frame restraint/bracing/reinforcement information.

Para información sobre restricción/arriostre/refuerzo para Armazones Hastiales vea el resumen BCSI-B3 - Restricción/Arriostre Permanente de Cuerdas y Miembros Secundarios***

2) WEB MEMBER PLANE — PLANO DE LOS MIEMBROS SECUNDARIOS

Warning! LATERAL RESTRAINT & DIAGONAL BRACING ARE VERY IMPORTANT ¡LA RESTRICCIÓN LATERAL Y EL ARRIOSTRE DIAGONAL SON MUY IMPORTANTES!

Warning! 10'-15' max. Same spacing as bottom chord Lateral Restraint

3) BOTTOM CHORD — CUERDA INFERIOR

Warning! Lateral Restraints - 2x4x12' or greater lapped over two trusses.

Warning! 10'-15' max.

Warning! Diagonal Braces every 10 truss spaces (20' max.)

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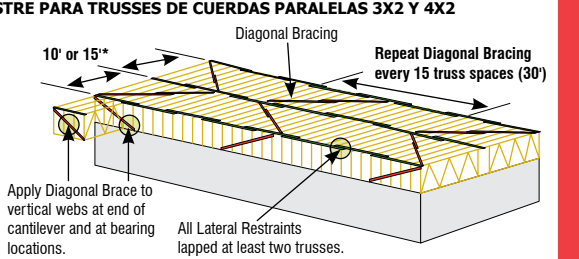
Warning! Diagonal Braces every 10 truss spaces (20' max.)

RESTRAINT & BRACING FOR 3x2 AND 4x2 PARALLEL CHORD TRUSSES

RESTRICCIÓN Y ARRIOSTRE PARA TRUSSES DE CUERDAS PARALELAS 3X2 Y 4X2

Warning! Refer to BCSI-B2 Summary Sheet - Temporary & Permanent Restraint/Bracing for Parallel Chord Trusses*** for more information.

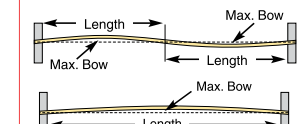
Vea el resumen BCSI-B2 - Restricción/Arriostre Temporal y Permanente para Trusses de Cuerdas Paralelas*** para más información.



Warning! Top chord Temporary Lateral Restraint spacing shall be 10' o.c. max. for 3x2 chords and 15' o.c. for 4x2 chords.

INSTALLING — INSTALACIÓN

Warning! Tolerances for Out-of-Plane. Tolerancias para Fuera-de-Plano.



Warning! Tolerances for Out-of-Plumb. Tolerancias para Fuera-de-Plomada.



CONSTRUCTION LOADING — CARGA DE CONSTRUCCIÓN

Warning! Do not proceed with construction until all lateral restraint and bracing is securely and properly in place.

No proceda con la construcción hasta que todas las restricciones laterales y los arriostres estén colocados en forma apropiada y segura.

Warning! Do not exceed maximum stack heights. Refer to BCSI-B4 Summary Sheet - Construction Loading*** for more information.

No exceda las alturas máximas de montón. Vea el resumen BCSI-B4 Carga de Construcción*** para más información.

Warning! Do not overload small groups or single trusses. No sobrecargue pequeños grupos o trusses individuales.

Warning! Never stack materials near a peak. Nunca amontone los materiales cerca de un pico.

Warning! Place loads over as many trusses as possible. Coloque las cargas sobre tantos trusses como sea posible.

Warning! Position loads over load bearing walls. Coloque las cargas sobre las paredes soportantes.

Warning! Trusses that have been overloaded during construction or altered without the Truss Manufacturer's prior approval may render the Truss Manufacturer's limited warranty null and void.

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¡ADVERTENCIA! HOJA RESUMEN DE LA GUÍA DE BUENA PRÁCTICA PARA EL MANEJO, INSTALACIÓN, RESTRICCIÓN Y ARRIOSTRE DE LOS TRUSSES

Vanos más de 60 pies pueden requerir arriostre permanente complejo. Por favor, siempre consulte a un Ingeniero Profesional.

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