

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

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*** for more information. All other permanent bracing design is the responsibility of the building designer.

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.

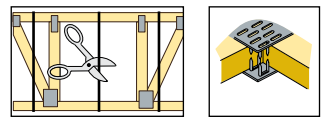
Los dibujos de diseño de los trusses pueden especificar las localizaciones de restricción lateral permanente o refuerzo en los miembros individuales del truss. Vea la hoja resumen BCSI-B3*** para más información. El resto de los diseños de arriostres permanentes son la responsabilidad del diseñador del edificio.

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.

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

CAUTION Exercise care when removing banding and handling trusses to avoid damaging trusses and prevent injury. Wear personal protective equipment for the eyes, feet, hands and head when working with trusses.

CAUTELA! Utilice cautela al quitar las ataduras o los pedazos de metal de sujetar para evitar daño a los trusses y prevenir la herida personal. Lleve el equipo protector personal para ojos, pies, manos y cabeza cuando trabaja con trusses.



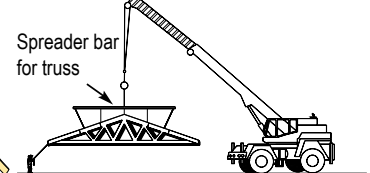
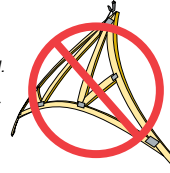
CAUTION Use special care in windy weather or near power lines and airports. CAUTELA! Utilice cuidado especial en días ventosos o de cables eléctricos o de

Handling - Manejo

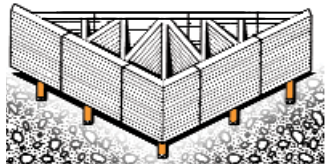
NOTICE Avoid lateral bending. Evite la flexión lateral.

NOTICE The contractor is responsible for properly receiving, unloading and storing the trusses at the jobsite. Unload trusses to smooth surface to prevent damage.

El contratista tiene la responsabilidad de recibir, descargar y almacenar adecuadamente los trusses en la obra. Descargue los trusses en la tierra lisa para prevenir el daño.



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



Trusses may be unloaded directly on the ground at the time of delivery or stored temporarily in contact with the ground after delivery. If trusses are to be stored for more than one week, place blocking of sufficient height beneath the stack of trusses at 8' (2.4 m) to 10' (3 m) on-center (o.c.).

DO NOT store unbraced bundles upright. NO almacene verticalmente los trusses sueltos.



For trusses stored for more than one week, cover bundles to protect from the environment.

Para trusses guardados por más de una semana, cubra los paquetes para protegerlos del ambiente.

Refer to BCSI*** for more detailed information pertaining to handling and jobsite storage of trusses.

Vea el folleto BCSI*** para información más detallada sobre el manejo y almacenamiento de los trusses en área de trabajo.

DO NOT store on uneven ground. NO almacene en tierra desigual.



Hoisting and Placement of Truss Bundles Recomendaciones Para Levantar Paquetes de Trusses

- DON'T overload the crane. NO sobrecargue la grúa. NEVER use banding to lift a bundle. NUNCA use las ataduras para levantar un paquete.



WARNING Do not overload supporting structure with truss bundle. ADVERTENCIA! No sobrecargue la estructura apoyada con el paquete de trusses.

A single lift point may be used for bundles of top chord pitch trusses up to 45' (13.7 m) and parallel chord trusses up to 30' (9.1 m). Use at least two lift points for bundles of top chord pitch trusses up to 60' (18.3 m) and parallel chord trusses up to 45' (13.7 m). Use at least three lift points for bundles of top chord pitch trusses >60' (18.3m) and parallel chord trusses >45' (13.7 m).

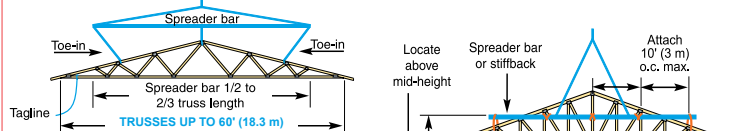
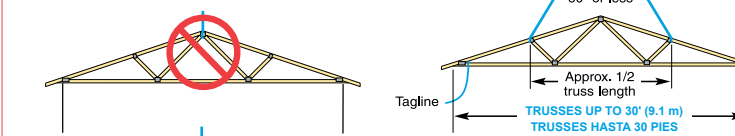
Place truss bundles in stable position. Puse paquetes de trusses en una posición estable.

Puede usar un solo lugar de levantar para paquetes de trusses de la cuerda superior hasta 45' y trusses de cuerdas paralelas de 30' o menos. Use por lo menos dos puntos de levantar con grupos de trusses de cuerda superior inclinada hasta 60' y trusses de cuerdas paralelas hasta 45'. Use por lo menos dos puntos de levantar con grupos de trusses de cuerda superior inclinada mas de 60' y trusses de cuerdas paralelas mas de 45'.

Mechanical Hoisting Recommendations for Single Trusses Recomendaciones Para Levantar Trusses Individuales

NOTICE Using a single pick-point at the peak can damage the truss.

El uso de un solo lugar en el pico para levantar puede hacer daño al truss.



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.

Installation of Single Trusses by Hand Recomendaciones de Levantamiento de Trusses Individuales Por La Mano

Trusses 20' (6.1 m) or less, support near peak. Soporte cerca al pico los trusses de 20 pies o menos.

Trusses 30' (9.1 m) or less, support at quarter points. Soporte de los cuartos de tramo los trusses de 30 pies o menos.



Temporary Restraint & Bracing Restricción y Arriostre Temporal

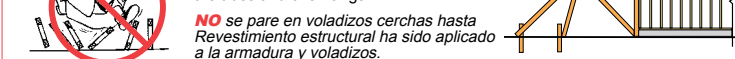
NOTICE Refer to BCSI-B2*** for more information.

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).

DO NOT walk on unbraced trusses. NO camine en trusses sueltos.

DO NOT stand on truss overhangs until Structural Sheathing has been applied to the truss and overhangs. NO se pare en voladizos cerchas hasta Revestimiento estructural ha sido aplicado a la armadura y voladizos.



Steps to Setting Trusses Las Medidas de la Instalación de los Trusses

- 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 with 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 estabilice 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.

NOTICE Refer to BCSI-B2*** for more information. Vea el resumen BCSI-B2*** para más información.

Restraining/Bracing for All Planes of Trusses Restricción/Arriostre Para Todos Planos de Trusses

Minimum lumber used for lateral restraint and diagonal bracing is 2x4 stress-graded lumber. Attach to each truss with at least 2-10d (0.128x3"), 2-12d (0.128x3.25") or 2-16d (0.131x3.5") nails.

La madera 2x4 clasificada por estrés es la madera mínima utilizada para restricción lateral y arriostre diagonal. Atáñala a cada braguero con al mínimo 2 clavos 10d (0.128x3"), 12d (0.128x3.25") o 16d (0.131x3.5").

This restraint and bracing method is for all trusses except 3x2 and 4x2 parallel chord trusses (PCTs). See top of next column for temporary restraint and bracing of PCTs.

Este método de restricción y arriostre es para todo trusses excepto trusses de cuerdas paralelas (PCTs) 3x2 y 4x2. Vea la parte superior de la columna para la restricción y arriostre temporal de PCTs.

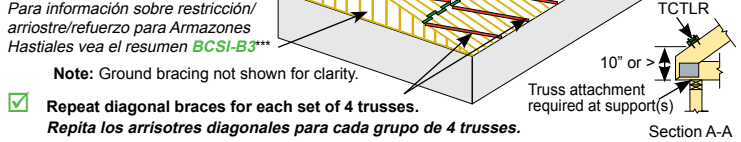
1) TOP CHORD - CUERDA SUPERIOR

Table with 2 columns: Truss Span Longitud de Tramo and Top Chord Temporary Lateral Restraint (TCTLR) Spacing Espaciamiento del Arriostre Temporal de la Cuerda Superior. Rows include spans up to 30', 30' to 45', 45' to 60', 60' to 80'.

*Consult a Registered Design Professional for trusses longer than 60' (18.3 m). *Consulte a un Profesional Registrado de Diseño para trusses más de 60 pies.

See BCSI-B2*** for TCTLR options. Vea el BCSI-B2*** para las opciones de TCTLR.

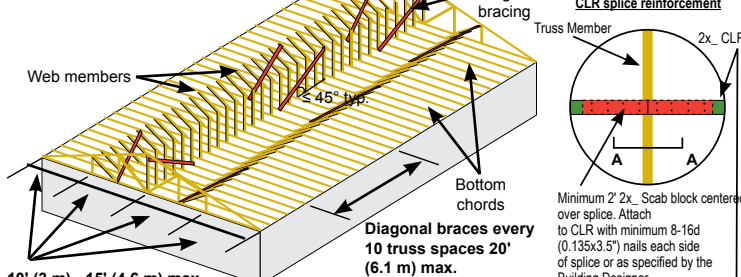
NOTICE Refer to BCSI-B3*** for Gable End Frame restraint/bracing/reinforcement information. Para información sobre restricción/arriostre/refuerzo para Armazones Hastiales vea el resumen BCSI-B3***



2) WEB MEMBER PLANE - PLANO DE LOS MIEMBROS SECUNDARIOS

NOTICE LATERAL RESTRAINT & DIAGONAL BRACING ARE VERY IMPORTANT

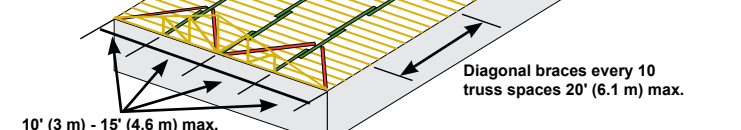
LA RESTRICCIÓN LATERAL Y EL ARRIOSTRE DIAGONAL SON MUY IMPORTANTES!



10' (3 m) - 15' (4.6 m) max. Same spacing as bottom chord lateral restraint

3) BOTTOM CHORD - CUERDA INFERIOR

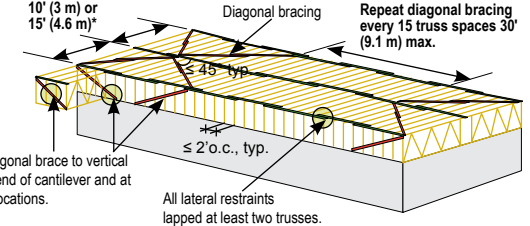
Lateral Restraints - 2x4x12' or greater lapped over two trusses or CLR splice reinforcement. Bottom chords Diagonal braces every 10 truss spaces 20' (6.1 m) max.



Restraint & Bracing for 3x2 and 4x2 Parallel Chord Trusses Restricción y Arriostre Para Trusses de Cuerdas Paralelas 3x2 y 4x2

NOTICE Refer to BCSI-B7*** for more information.

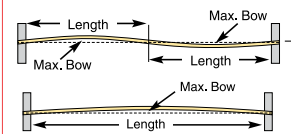
Vea el resumen BCSI-B7*** para más información.



*Top chord temporary lateral restraint spacing shall be 10' (3 m) o.c. max. for 3x2 chords and 15' (4.6 m) o.c. for 4x2 chords.

Installing - Instalación

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



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

Table with 3 columns: Out-of-Plumb, Out-of-Plane, and Out-of-Plane. Rows include dimensions for D/50, D (ft.), Max. Bow, and Truss Length.

Construction Loading Carga De Construcción

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.

DO NOT exceed maximum stack heights. Refer to BCSI-B4*** for more information.

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

Table with 2 columns: Material and Height. Rows include Gypsum Board, Plywood or OSB, Asphalt Shingles, Concrete Block, Clay Tile.



NEVER stack materials near a peak, at mid-span, on cantilevers or overhangs. NUNCA apile los materiales cerca de un pica, a centro de la luz, en cantilevers o aleros.

DO NOT overload small groups or single trusses. NO sobrecargue pequeños grupos o trusses individuales.

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

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

Alterations - Alteraciones

NOTICE Refer to BCSI-B5***

Vea el resumen BCSI-B5***

DO NOT cut, alter, or drill any structural member of a truss unless specifically permitted by the truss design drawing.

NO corte, altere o perfore ningún miembro estructural de un truss, a menos que esté específicamente permitido en el dibujo del diseño del truss.

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.

Trusses que se han sobrecargado durante la construcción o han sido alterados sin la autorización previa del Fabricante de Trusses, pueden hacer nulo y sin efecto la garantía limitada del Fabricante de Trusses.

Contact the Component Manufacturer for more information or consult a Registered Design Professional for assistance. To view a non-printing PDF of this document, visit sbciindustry.com/b1.

NOTE: The truss manufacturer and truss designer rely on the presumption that the contractor and crane operator (if applicable) are professionals with the capability to undertake the work they have agreed to do on any given project. If the contractor believes it needs assistance in some aspect of the construction project, it should seek assistance from a competent party. The methods and procedures outlined in this document are intended to ensure that the overall construction techniques employed will put the trusses into place SAFELY. These recommendations for handling, installing, restraining and bracing trusses are based upon the collective experience of leading personnel involved with truss design, manufacture and installation, but must, due to the nature of responsibilities involved, be presented only as a GUIDE for use by a qualified building designer or contractor. It is not intended that these recommendations be interpreted as superior to the building designer's design specification for handling, installing, restraining and bracing trusses and it does not preclude the use of other equivalent methods for restraining/bracing and providing stability for the walls, columns, floors, roofs and all the interrelated structural building components as determined by the contractor. Thus, SBICA and TPI expressly disclaim any responsibility for damages arising from the use, application, or reliance on the recommendations and information contained herein.

