



Flying Truss

Flying Truss System



Crane handling of large Flying Truss tables from Symons Corporation improves deck forming productivity over conventional hand set operations.

The simple, one-time Flying Truss table assembly eliminates many repetitive and costly forming operations. It is ideal for repetitive high-rise concrete slab construction projects.

Design

Flying Truss tables are designed to meet specific dimensions, maximizing system capacities and minimizing the number of pieces needed.

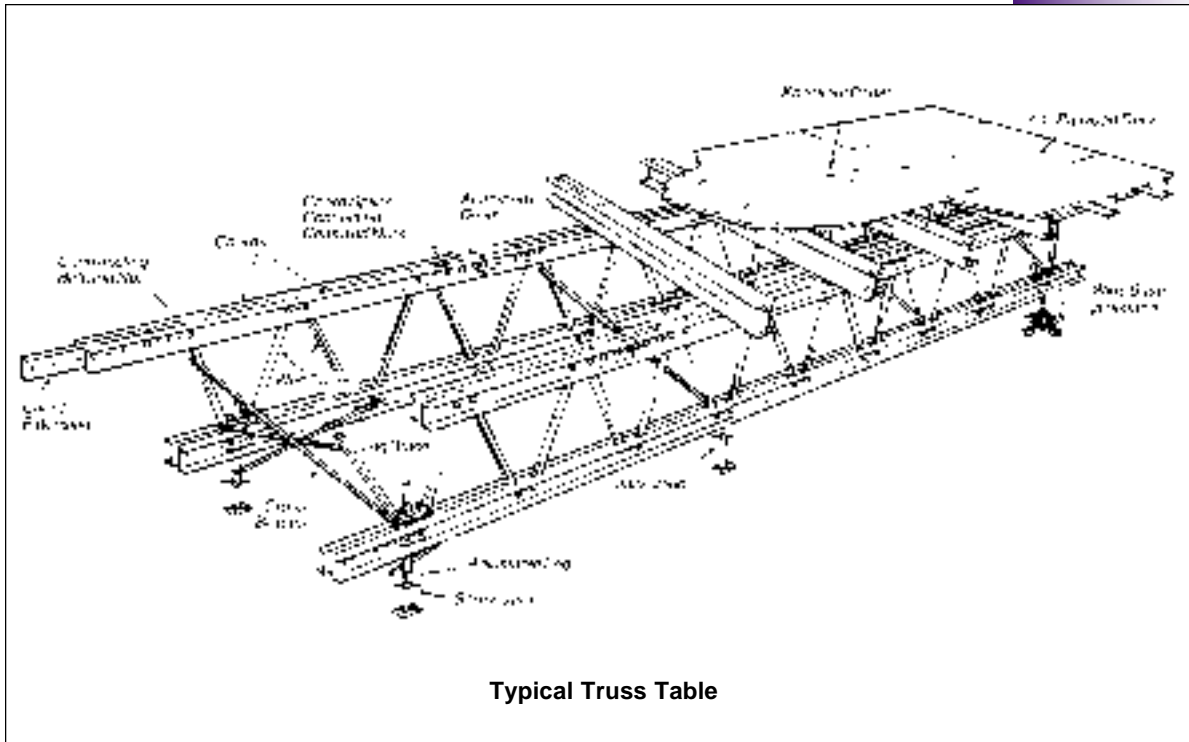


A single channel chord design is available for narrow bay construction and double channel chord design is available for wide bay, maximum load construction. A crane can fly 30' bays as a single table built with only two trusses.

Flying Truss table heights of 4', 5' and 6' provide project necessary clearance. Variable jack spacing up to 20' improves system flexibility and speeds stripping and setting.



Lightweight aluminum components maximize table size compared to steel trusses or other deck panel designs.



Typical Truss Table

Typical cycle for Flying Truss Table

Initial Stripping

Screw jack or leg adjustment provides initial table and deck release.

Lower Tables

Tables are lowered to the floor-mounted rollers or truss-mounted casters with hydraulic jacks.

Roll from Structure

Tables normally can be rolled clear of structure by four workers without difficulty.

Hook to Crane

Nylon slings pass through knockout panels and hook the truss chords to the crane.

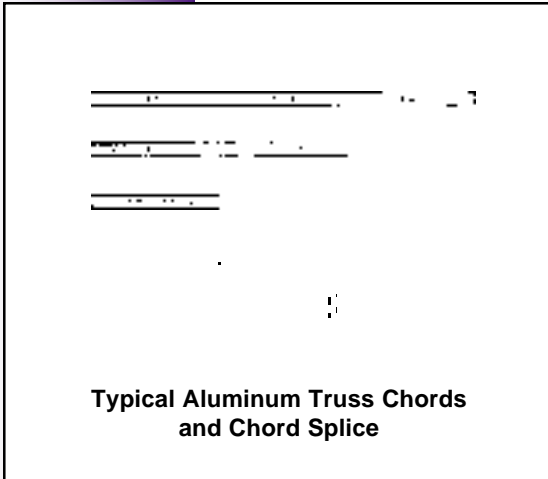
Fly to Position

The table, with all components, moves together to minimize cycle time.

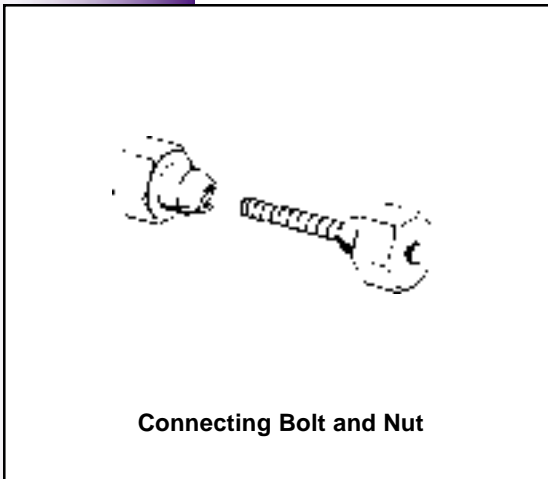
Set and Pour

Tables are set for final positioning, jacks or legs are reset for the next pour.

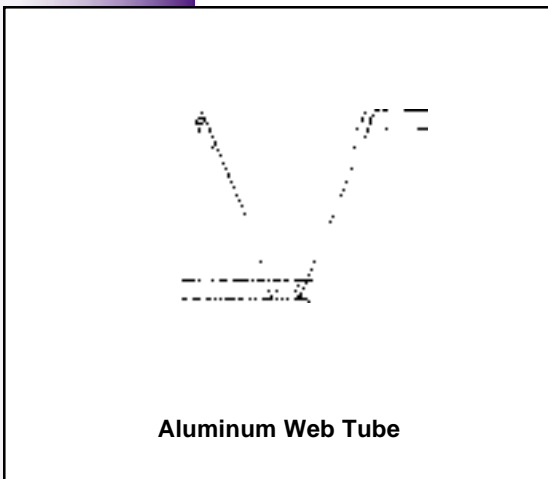
Truss Components



Typical Aluminum Truss Chords
and Chord Splice



Connecting Bolt and Nut



Aluminum Web Tube

Aluminum Truss Chords

Identical top and bottom Truss Chords are available in 5' increments from 5' to 35' to provide maximum flexibility. Aluminum Truss Chords have no top or bottom, left or right.

Chord Splice

A factory-built Chord Splice connects trusses for lengths greater than 35'. Only six connecting bolts are required for each splice joint, with no torquing required.

Web Tube

High-strength Web Tubes provide standard 5' spacing and allow greater flexibility for jack placement.

Bracing

Telescoping, perforated square tubing is adjustable in 1" increments and bolts directly to holes in the Web Tubes. Sizes permit truss-to-truss spacing from 6'8" to 19'6".

Self-Aligning Connecting Bolt

This single size, contour thread bolt and nut is used at all chord connections. The tapered shoulder on both the nut and bolt eliminate alignment problems.

Aluminum Joists

Aluminum joists allow for strong, yet light-weight deck assemblies. The 2" x 2" lumber nailer strip facilitates rapid, easy attachment of plywood. A unique Beam Clamp design secures the beam connection.

Adjustable Legs

The Adjustable Leg and Truss Screw Jack are located at each Leg Guide and allow 14" to 64" maximum range of adjustment in table elevation.

Tilt Roller

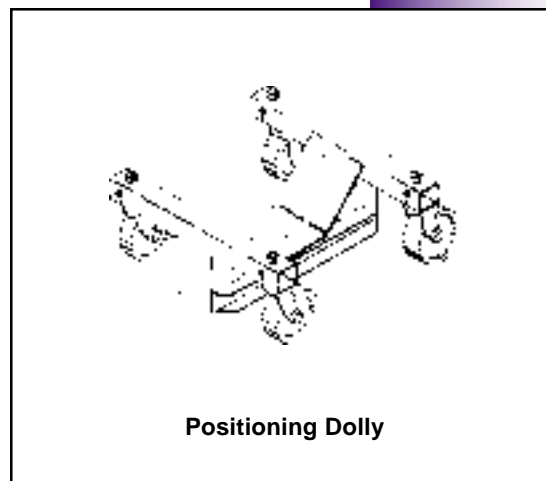
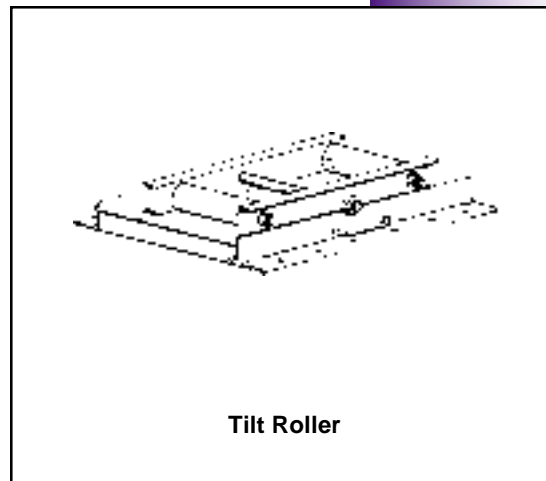
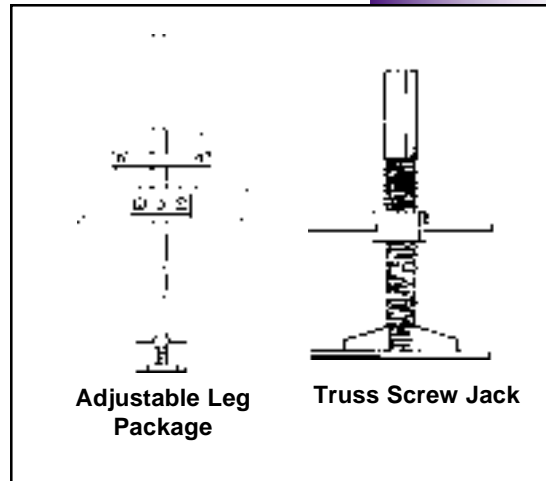
Rollers facilitate easy movement of Flying Truss Table in and out of bays.

Positioning Dolly

Large 8" diameter swivel casters permit positioning of Flying Truss Table in tight forming situations.

Truss Casters

10" diameter Truss Casters connect directly to the bottom of the truss or adjustable leg.



Aluminum Beams



Aluminum Joists combine light weight, high strength, and a variety of cost-saving design features for decking applications.

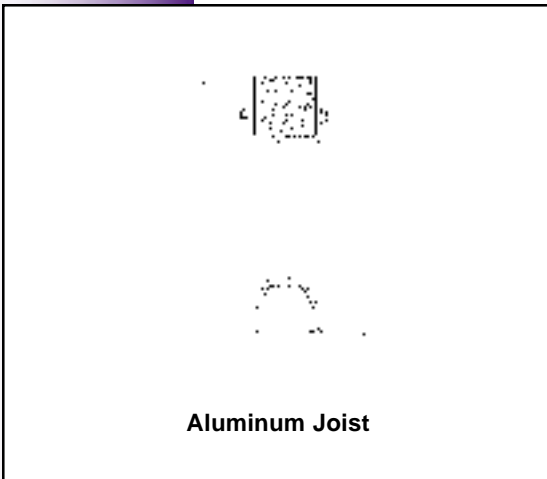
Aluminum Joists are available in a wide range of lengths with a section height of 6 $\frac{1}{2}$ ". They are extruded from high-performance aluminum alloy and incorporate wide flanges for maximum stability.

Aluminum Joists are stronger than many competitive products, so fewer are needed to support a deck forming load. With fewer components to handle, the labor savings can be substantial.

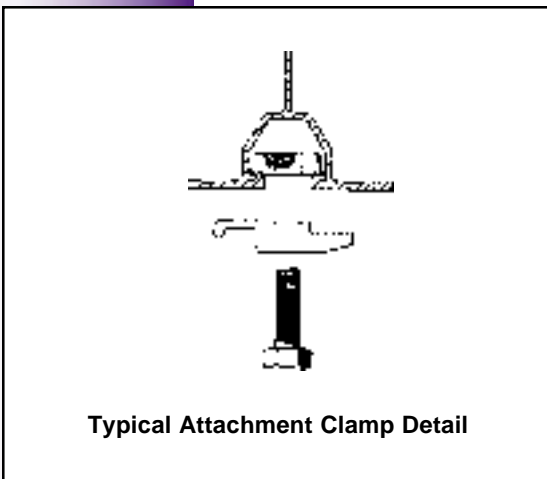
Aluminum Joists are light weight and can be handled by one worker. A 6 $\frac{1}{2}$ " aluminum joist 10' in length weighs 53 lbs. compared to 134 lbs. for a wood 4" x 10" of similar load capacity.

The 4" wide bottom flange furnishes a solid base. This wide bottom flange is less likely to "roll over" while workers are installing the decking.

The Aluminum Beam Attachment Clamp secures Aluminum Joists to the truss chords. This specially designed clamp can be inserted at any point along the channel of the Aluminum Joist.



Aluminum Joist



Typical Attachment Clamp Detail

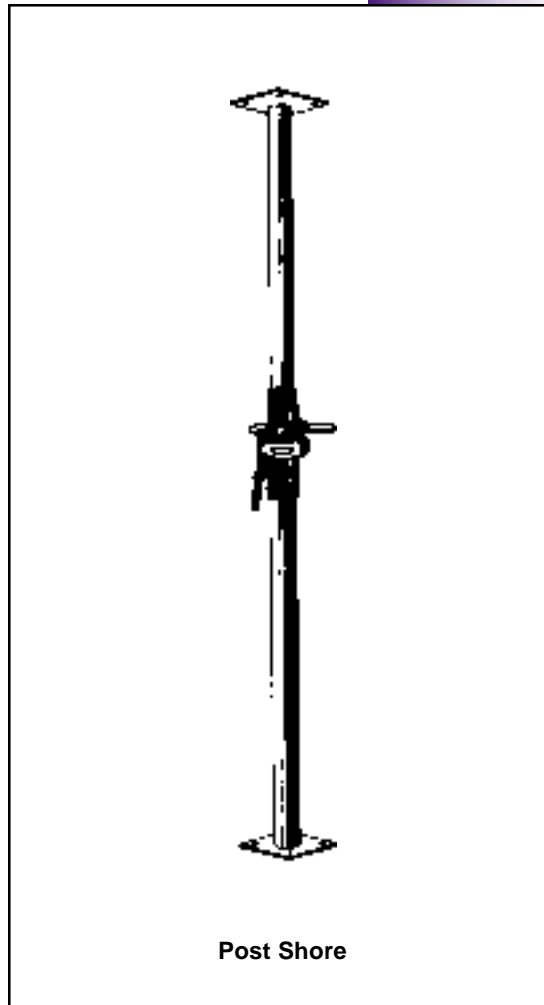
Post Shores

Heavy duty Post Shores are available for deck support with adjustable shoring heights from 5'7" to 16'. These Post Shores each have load ratings up to 10,000 lbs. (3 to 1 safety factor).

With this higher load rating, Post Shores can often be spaced further apart, producing equipment and labor savings for the contractor.

Post Shores are quickly and safely set in place. They have a unique locking pin for approximate height adjustment. This pin is inserted into one of the holes spaced at 4" intervals along the length of the post. A safety pin then secures the locking pin and eliminates any accidental slippage. After the Post Shore has been set in position, a threaded collar with handle permits a 6" fine adjustment.

To strip the shore, a Quick Release Collar is struck with a hammer, which lowers the staff approximately $\frac{3}{4}$ " to release the pressure. The threaded collar is then easily turned down to remove the shore.



Adjustable Column Form — Form square or rectangular columns efficiently with a minimum number of steel panels.

Alisply™ — Clamp-type metric dimension system is quickly assembled and reconfigured for fast-paced gangforming.

Aluminum Beams and Joists — Lightweight beams/ joists from 4' to 30' (122cm to 914cm) for deck or gangform applications.

Box Culvert Traveler — Rolling steel framework is compatible with Steel-Ply, Versiform and Max-A-Form systems.

Chemicals — Liquid, cement and epoxy products for concrete construction and repair.

Flex-Form® — Specially designed steel-faced system for forming curved walls and round tanks with no surface "chording".

Form Liner — More than 30 standard patterns, in four different materials, create unique concrete textures.

FrameFast™ — Provide 24,000 lb. (106kN) load capacity per shore frame with spacings from 3' to 15' (91.4cm to 457.2cm).

Garage Beam System — A complete system provides an economical, poured-in-place concrete parking garage.

Max-A-Form® — A durable, all-steel forming system that requires no walers. Ideal for pier caps and self-spanning applications.

Resi-Ply™ — A low cost, 1 1/8" (2.9cm) plywood forming system for residential construction. Available in 4-bar, 5-bar and 6-bar.

Roller Deck — Column mounted deck support system replaces conventional shoring, providing access for other trades.

ShorFast™ — Aluminum leg and jack shoring system can support up to 30kips (133kN) per leg.

Steel-Ply® — The most popular modular system with more than 80 panel and filler sizes for handset or gangforming.

Symons Soldier™ — The "next generation" construction beam that can be used as a brace, strongback, waler or shore.

Street Smart™ — Reusable steel forms for residential curb and gutters, industrial slabs and highway paving applications.

Symons Silver™ — A lightweight aluminum system that makes residential forming operations very efficient and productive.

Versiform® — Steel frame/plywood face gangforming system that provides a smooth concrete finish.



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