# PERFORM WITH PRECISION<sup>TM</sup>

SPACE-LIFT<sup>™</sup> JUMP FORMING SYSTEM

> CONCRETE CONSTRUCTION SOLUTIONS

> > BROCHURE





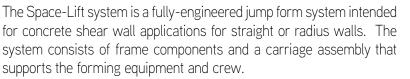
# System Design





## **Features**

- Standard Space-Lift frame heights of up to 16' for higher walls in lobby and atrium areas
- Space-Lift frame spacing up to 10' o.c. adapts to structure and gang form requirements
- Rollback form access ranges from 35" with Steel-Ply to 29" with Aluminum Beam Gangs
- Trailing platform makes operations such as removing Jump Shoes, patching and welding easy and safe
- The unique Curved Wall Bracket provides angled adjustment for Space-Lift frames on applications with a minimum 11' radius.
- Work platform provides ample room for crews to set, strip and clean forms
- The assembly is handled as one unit and landed into Jump Shoes, so workers do not need to be on the unit during lifts
- When properly anchored with Dayton Superior 1" F56 inserts, the system is designed for winds up to 120 mph (193 kph). Tiebacks are required to reduce the effect of wind loads.



The Space-Lift system supports any Symons gang form system that can utilize Versiform<sup>®</sup> walers, including:

- Aluminum Beam Gang
- Flex-Form®
- Steel-Ply®
- Versiform®

The Space-Lift assembly is suspended from Jump shoes that are bolted to inserts in the concrete wall. The entire assembly remains anchored to the wall during the forming operation. Work platforms provide safe access during setting, placing, stripping and finishing activities. Rollback carriages allow the gang form to be retracted from the wall without being removed. All these activities, of course, proceed without using valuable crane time.

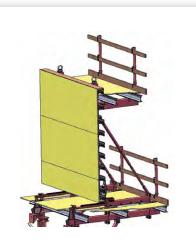
When the gang form is retracted from a completed section of concrete wall, another set of Jump Shoes can be bolted to the inserts in anticipation of the next lift.



**Trailing Platform for Finishing** 



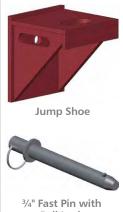
**Rollback Access Configuration** 



Unique Curved Wall Capability



# Components



<sup>3</sup>⁄4" Fast Pin with Ball Lock

#### **Gang Shear Bracket**

#### Jump Shoe

Jump Shoes, bolted to inserts anchored in the concrete of the previous pour, support the Space-Lift system. The Jump Shoe is designed with a slot for a setting pin from the Carriage Assembly.

#### 34" Diameter Fast Pin

A <sup>3</sup>/4" diameter Fast Pin (P/C 51396) is used throughout Space-Lift assembly to connect most of the major components. This pin reduces the need for bolted connections, saving time during assembly and construction. The pin has a ball lock which eliminates the need for hair pin clips and the time needed to secure them.

Reduces the amount of hardware and assembly time for all of the forming systems used with Space-Lift. Attaching formwork to the Space-Lift frames with fewer pieces means lower material costs, less labor and more production.

## **Rollback Ratchet Lock**

The Ratchet Lock allows the Track Frame to be locked any place along its allowable travel. This provides easy adjustment for locating and positioning the center of gravity when flying the units.

## **Carriage/Waler Bracket**



The work platform is built by connecting aluminum or wood beams to the Access Walkway Bracket and then decking with <sup>3</sup>/<sub>4</sub>" plywood (by others).

## **Platform Beams**

The work platform is built by connecting aluminum or wood beams to the

Access Walkway Bracket and then decking with <sup>3</sup>/<sub>4</sub>" plywood (by others).

## Work Platform

Final gang form adjustments, plumbing, and Jump Shoe attachment can all be done from the Work Platform. The Work Platform can be used to safely clean the gangs. This operation saves time compared to the conventional method of lowering the gangs to the ground by crane to clean them.

## **Trailing Platform**

Trailing Platforms provide a 30" wide work access to the previously poured concrete wall. This allows a safe platform to patch tie holes, remove Jump Shoes and complete any other necessary finishing work. The Trailing Platform is constructed with aluminum beams or joists and <sup>3</sup>/<sub>4</sub>" plywood (by others) for the platform decking.



## Frame Leg

Frames Legs are 6" steel channels with end plates and gussets. The bottom of the legs have connection studs that bolt to the Carriage Assembly or another Frame Leg.

# **Carriage Assembly**

The Carriage Assembly is an innovative component that allows for as much as 35" of rollback. It includes a tape measure for reference and assembly.



# Swivel Lift Bracket

The Heavy Duty Swivel Lift Bracket (4,000 lb capacity with a 5:1 safety factor) maximizes bracket spacing. The swivel mount of the bracket rotates 360° and the loop can rotate 180° horizontally.

# **Uplift Lock**

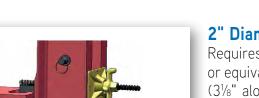


The Uplift Lock helps prevent Space-Lift units from disengaging from the Jump Shoe. The Uplift Lock is accessible from the work platform. It is designed to be easy to check and safely release from this position.

Perform with Precision |

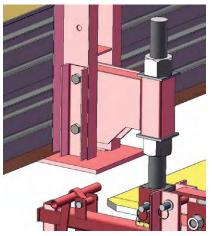








Jump Shoe and Tie Back



Carriage Waler and Form Shear Plate

# Assembly Tools and Instructions

#### 2" Diameter Gang Form Adjusting Screw

Requires 3<sup>1</sup>/<sub>8</sub>" open end Carriage/Waler wrench (P/C 51367) or equivalent. A steel wrench made for adjusting screw nuts (3<sup>1</sup>/<sub>8</sub>" along flats) stored between channels of any 5" waler or Space-Lift leg.

#### 1" Diameter Carriage Adjustment Nut

Ratchet wrench with at least a 24" long handle and a  $1\frac{1}{2}$ " socket or  $1\frac{1}{2}$ " box wrench, open end wrench or an equivalent adjustable wrench. Two are required to simultaneously move a gang form along the Track Frame. (A ratchet wrench is recommended.)

#### 1" Diameter Anchor Bolt

1<sup>5</sup>/<sub>8</sub>" socket or 1<sup>5</sup>/<sub>8</sub>" box wrench or open end wrench

#### 3/4" Diameter Bolt and Nut

Ratchet wrench with  $1\frac{1}{8}$ " socket or  $1\frac{1}{8}$ " box wrench or open end wrench or equivalent adjustable wrench.

# 1/2" Swivel Tube Clamp Nut

Ratchet wrench with  $\frac{7}{8}$ " socket or  $\frac{7}{8}$ " box wrench, open end wrench or an equivalent adjustable wrench.

## 5/8" Contour Threaded Bolt and Nut

Ratchet wrench with  $^{15}\!\!/_{16}\!\!''$  socket or  $^{15}\!\!/_{16}\!\!''$  box wrench, open end wrench or equivalent adjustable wrench.



**Note:** The above job site preparation is a suggestion only. The Space Lift may be assembled at a different location and moved to the jump form assembly location when needed. If so, the width can be reduced to 12'-0" for easy transport.

#### Space-Lift Assembly Instructions

At the job site, prepare a flat and level area about eighteen feet wider than the center-to-center measurement of the Space Lift assembly to be built, and three feet longer than the tallest gang form to be utilized.

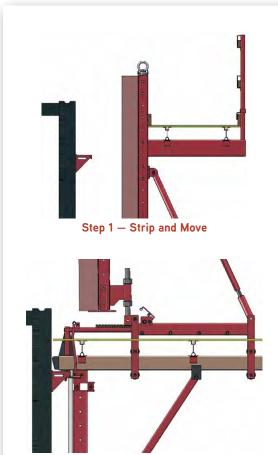
Establish a base line with squared off side lines spaced to the center-to-center distance of the Space Lift assemblies.

The Space-Lift assembly procedure can take place in the work area such that the Space Lift Kick Tube lays along one of the center lines with the assembly facing outward of the centerline. The first assembled frame can than be tipped up and temporarily braced while the second unit is built. (See Space-Lift Application Guide for additional information.)

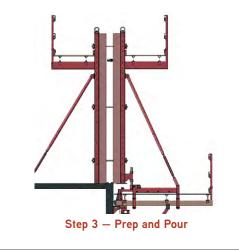
# WWW. FORMTECHINC.COM



# **Lifting Sequence**



Step 2 — Land and Lock



#### Step 1 — Strip and Move

Inserts are positioned on the face of the gang form for the Jump Shoes and Space-Lift Frame connections. After the concrete walls are poured and the gang forms retracted, the Jump Shoes are bolted into the inserts for the next lift.

#### Step 2 – Land and Lock

The Space-Lift Frame assembly is lifted into position, lowered onto the Jump Shoe, and quickly secured with the Uplift Lock. The crane can be safely released and the gang form moved by turning the gear assembly with a wrench.

#### Step 3 – Prep and Pour

Inserts are again placed and the forming sequence repeats. Clean the gang forms and apply form release. Move gang form into pour position. Place ties, and pour concrete.





# PERFORM WITH PRECISION<sup>TH</sup>

DAYTON



48575 Downing Street Wixom, MI 48393 800.876.4857 I info@formtechinc.com formtechinc.com

Copyright @

06/16 2016 Dayton Superior Corporation, All Rights Reserved.

Ir

Give us a call at any of our branch locations, email us at info@formtechinc.com, or click on <u>formtechinc.com/quote</u> to get a quote. Our experienced Form Tech representatives will answer your questions, and help you get your project started with some of the best concrete forming, shoring, and accessory products in the industry, backed by a professional and detail-oriented staff.



Charleston, SC 7377 Peppermill Lane North Charleston, SC 29418 843.628.3434



#### Detroit, MI

Corporate Headquarters 975 Ladd Road Walled Lake, MI 48390 Branch: 248.344.8260 Corporate: 248.344.8265



Charleston, WV 161 Industrial Road St. Albans, WV 25177 304.722.6804



**Pittsburgh, PA** 2850-A Kramer Road Gibsonia, PA 15044 412.331.4500



Charlotte, NC 1000 Thomasboro Road Charlotte, NC 28208 704.395.9910



Raleigh, NC 115 Petfinder Lane

Raleigh, NC 27603 919.833.0911



Cleveland, OH 20801 Miles Road North Randall, OH 44128 216.692.0497



TRUSTED FORMWORK & ACCESSORY SPECIALISTS 800-876-4857 | info@formtechinc.com | formtechinc.com