

## **SELF-SPANNING SYSTEM**

**PRODUCT BROCHURE**



# SELF-SPANNING SYSTEM



SH288 Managed Toll Lanes (Houston, TX)

## ► Panels configuration



The Self-Spanning System has 16 panels sizes with heights up to 10' and lengths up to 12'.

## ► Versatile



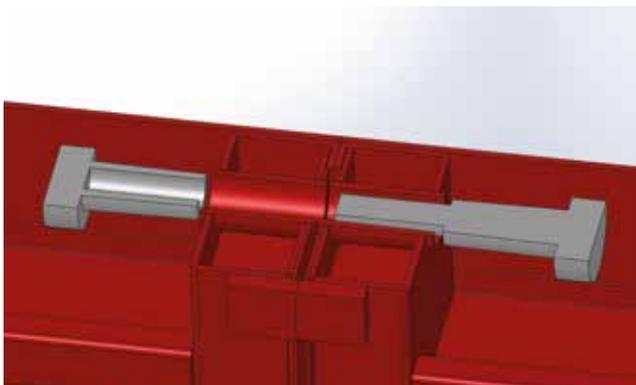
The Self Spanning System has a Multi-hole double channels that allows for one single panel size to fit in different cap widths (soffit and bulkhead).

## Modular formwork system for concrete Piers and Pier Caps.

Modular self-spanning formwork system for piers and pier caps. Designed to give the greatest versatility using standard items. Able to solve most situations in bridge and road projects.

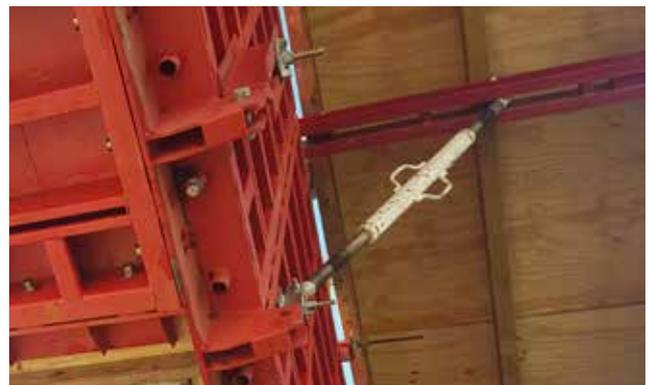
- Universal steel panels to fit in any geometry, from 4'x4' to 12'x8'.
- 1/4" teel face plate.
- Allowable pour pressure up to 2500 psf.
- Multi-hole double channel allows connecting as many accesories as needed.
- Easy connecting system between panels. Heavy duty and self-aligning conical bolts allow using fewer items and faster assembly.
- No need for ties.
- Possibility of hinged corners and soffit for easy stripping.
- Nuts attached to panels allowing 90° connection between panels with no corners needed.

### ► Quick assembly



Heavy duty conical bolts allow using fewer items than other systems in the market and self-align panels while tightening them.

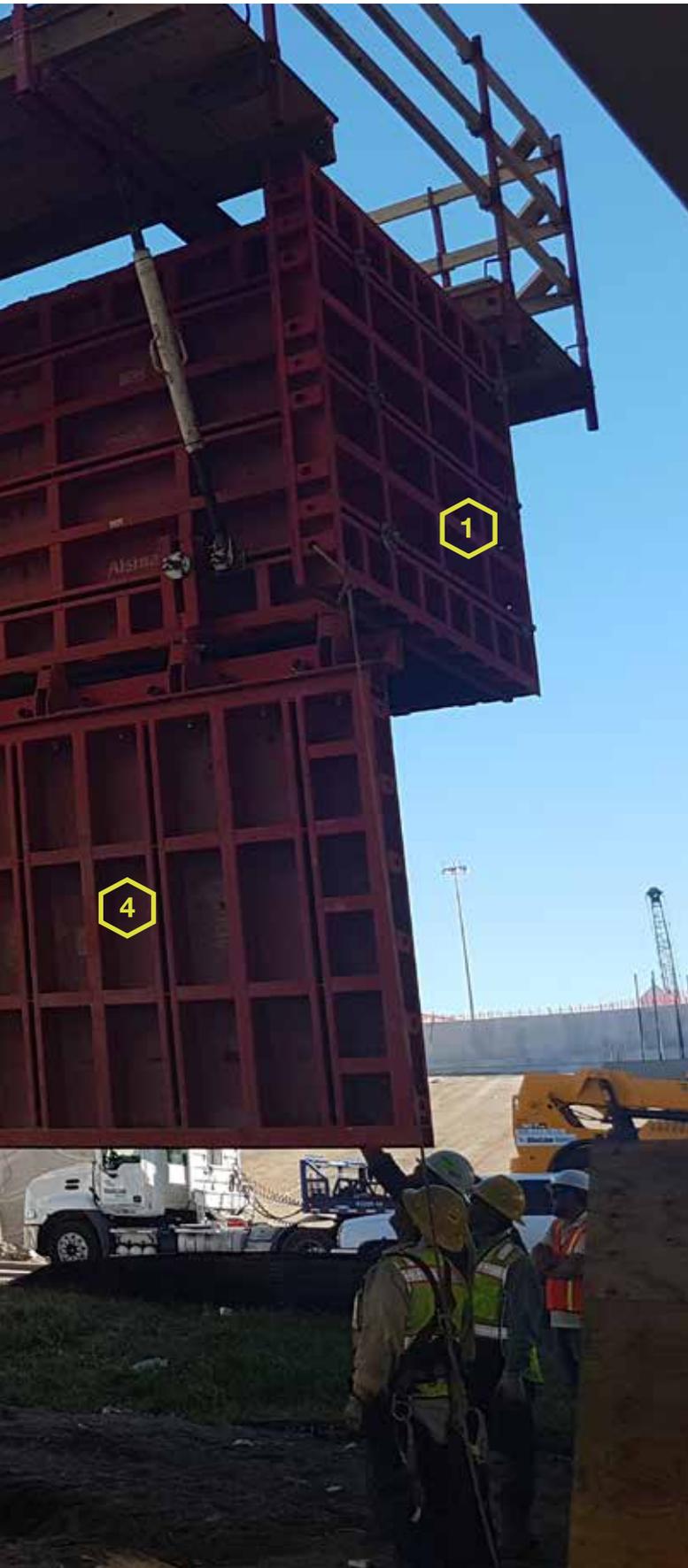
### ► Multiple accesories



Thanks to several multi-hole double channels, accessories can be connected anywhere, as needed. Multiform aligner waler, walkway brackets, hinged corners.

## System components





## KEY

1. **Universal Panels.** Same panel is used for side, bulkhead and soffit. High versatility, double channel allows pouring different piers and pier cap widths with the same panel.
2. **Distribution Beam.** Allows connection between panels and brackets.
3. **Brackets.** Form support in concrete piers. Standard brackets are 70 kips or 140 kips.
4. **Hinged soffit.** Allows placing form after cap rebar and faster stripping.
5. **Safety platform.** Designed for working on the assembling and pouring comfortably.

## Assembly and stripping

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### ■ Step 1: Bracket placement

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Placing brackets is easy and quick with our thru-bolts system. Alsina Engineering Department will provide the torque needed on the anchor bolts.

### ■ Step 2: Form placing on top of brackets

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With one single crane movement, form is placed on top of the brackets.

### ■ Step 3: Alignment, soffit closing and pouring



Once the form is on top of the brackets it is time to align side forms and close soffit panels. After working on final adjustments it is time to pour concrete.

### ■ Step 4: Stripping



Once concrete strength has been reached, soffit needs to be opened and stripping can be made in one single crane movement.

## Self-Spanning System

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### ■ Friction collars

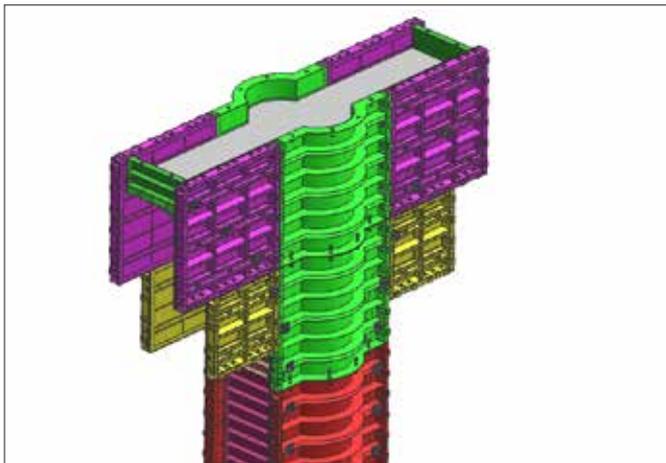
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Friction collar is a temporary support that transfer the vertical load to the concrete columns by friction between concrete and collar. This solution transfer the loads to the concrete column with no need of anchors.

### ■ Custom panels design

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Alsina Forms can design and manufacture custom components to meet any design requirement.

### ■ Arquitectural finish

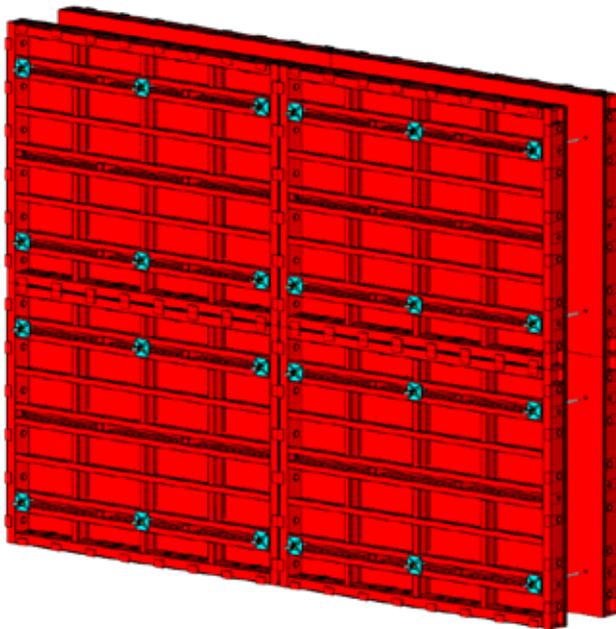
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Rustication, Chamfers and Form liners can be attached to the form face. The Steel face sheet provides a great finish, reducing finishing costs.

## Self-Spanning solutions

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### ■ Wall solutions

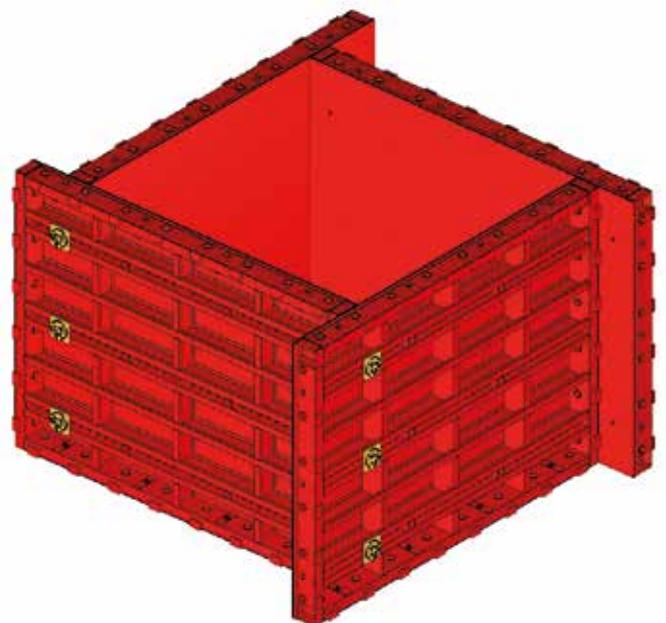
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The Self-Spanning system can be used as a heavy gang wall form system by crossing some ties. Alsina can provide all accessories making this a great solution for walls at your heavy civil projects.

### ■ Piers solutions

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Panels have been designed to work as column panels as well. Even panels can be cycled from column forms to pier cap forms.





**Hollow Columns**



**Successive Cantilever Carriages**



**Steel Columns**



**Tunnel Formwork**



**Pier caps and Custom Forms**



**C-240 Climbing System**



**Alispaly Wall Solutions**



**Interior Climbing System**