



TROPICAL J's INCORPORATED

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CANOPIES

Made in Hawai'i Pre-Engineered for Hawai'i

Tropical J's is Hawai'i's leader in custom manufactured canopies. We've developed a style of canopy design we call cable tension that we have been refining over 20 years of commercial installations in Hawai'i. We've also stayed on the forefront of technological innovation. We no longer need to sew panels together meaning we can avoid stitch holes into the main decks of our canopies. Our equipment allows to to manufacture with fully waterproof, heat-welded seams as per the industry standard in 2024.

Canopies can be a simple and cost effective solution to quickly transform an outdoor area into a revenue generating space. Fabric allows for a lot of natural light and requires much less framing than typical roofs. Our structures are typically fabricated and finished at our shop, so time on site is usually 2-5 business days. Canopies are a permittable product and it's up to the owner of the property to determine project feasibility.

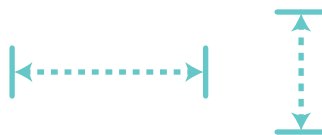


CUSTOMIZATION POINTS

1. TYPE



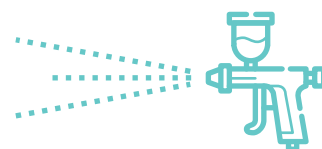
2. SIZE



3. SIDES



4. PAINT COLOR



5. FABRIC/COLOR

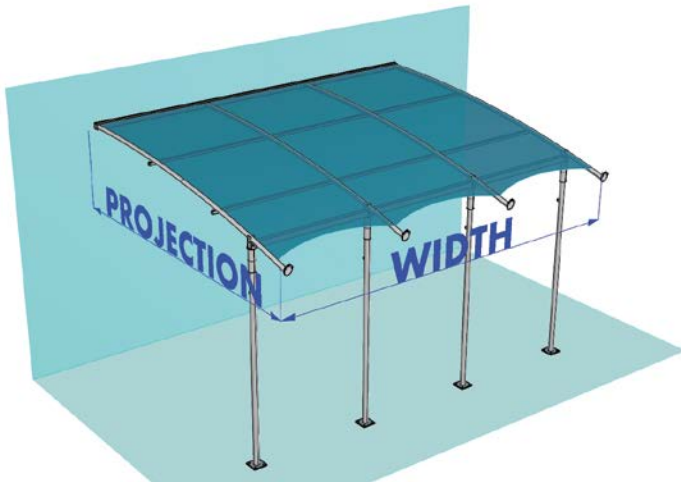


Quote requests and project galleries at **tropicaljs.com**



TYPES

All canopies are made to order



ATTACHED

This canopy mounts to a building and waterproofs the connection. Water drains to the front.



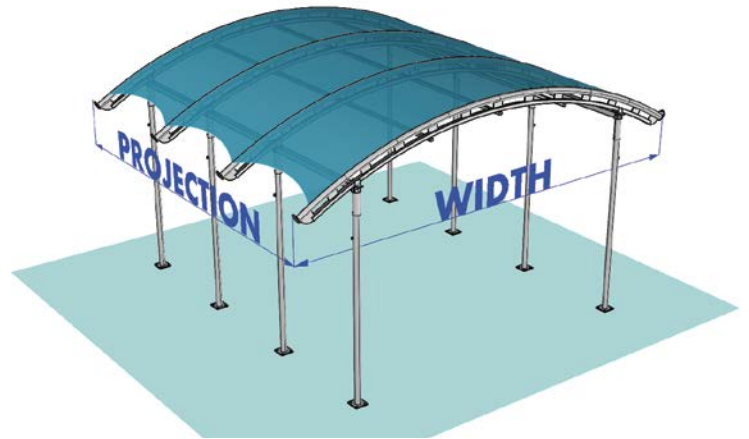
SIZE

WIDTH There aren't many concerns with manufacturing attached canopies up to 60' wide. 60'+ is possible but may require a special design/engineering event.

PROJECTION Rafters are engineered to span distances (projections) of up to 40'. This means we know the design and the amount of steel required to meet code. After 40' projection, we may require a design/engineering event to price the product.



SIDES



FREE STANDING

This canopy can be free standing or attached to a building (on the width side) like an off the wall canopy. Water drains to the sides.

WIDTH Rafters are engineered to span distances (widths) of up to 40'. This means we know the design and the amount of steel required to meet code. After 40' projection, we may require a design/engineering event to price the product.

PROJECTION There aren't many concerns with manufacturing free standing canopies up to 60' projection. 60'+ is possible but may require a special design/engineering event.



FRAME

We manufacture from tube steel pulled from inventory on our racks. If we don't stock it, we can bring it in. We have a CNC bender that can bend up to 4" tubes and we work with pipes up to 18" diameter. We typically manufacture from Galvanized steel because of the strength. Most of our frames are finished in the shop and we can field weld if needed.



Steel is typically used when an awning frame requires strength. In this case, we always use galvanized or stainless steel. If plates or tabs are required, they are always 304 or 316 stainless

plate. Diameters and thickness are determined by engineering.

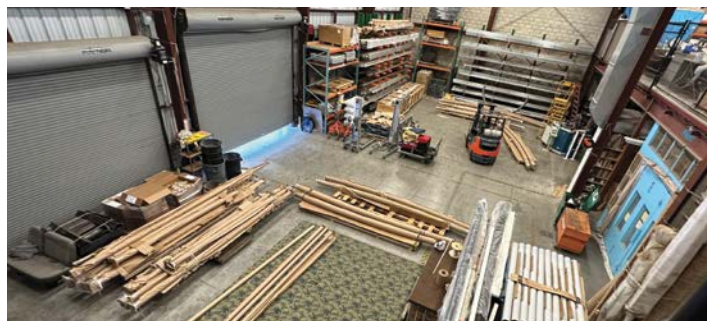


PAINT

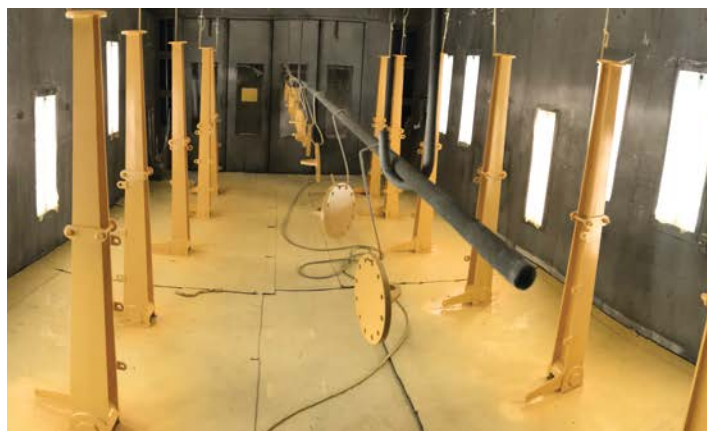
Our paint preparation process begins in our weld department, where all welds receive priming and frames undergo a light sanding before entering our paint booth. Our painter applies a high solids epoxy primer base coat followed by two-part urethane enamel topcoat. Our topcoat is available in high gloss white or high gloss black. Custom colors and color matching available.



Kapiolani Medical Center porte cochere canopy field welding



Our shop in preparation for a canopy at Straub Hospital



Painting custom posts for canopy onboard the USS Missouri

CABLE TENSIONING SYSTEM



The fabric cover has a curved pocket sewn in the front called a cantenary. We run a cable through that pocket and we use that cable(s) to tension the fabric. On smaller covers, we use one continuous cable. For larger covers, the cables need to terminate at fabric plates at each rafter.



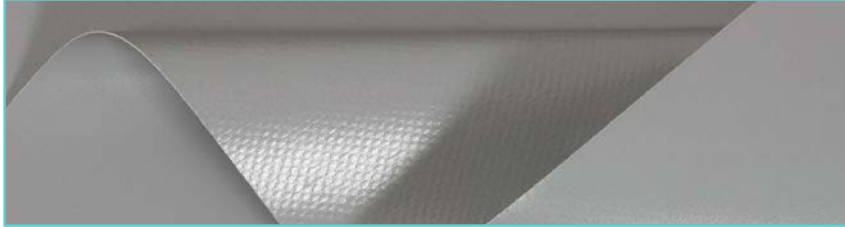


FABRICS

Serge Ferrari
Premium Partner group

Soltis
Proof 502

Vinyl



Commercial buildings require fire retardant fabrics

Vinyl Fabric

We have partnered with Serge Ferrari, the leading manufacturer of high performance commercial vinyls. Serge Ferrari manufacturers Proof 502, perfect for most fabric canopies because of its strength, manufacturing qualities and color selection.

Proof 502 has an inner weave that is pretensioned before the final PVDF coating is applied. They call this preconstraint (French for prestretched) and it means that our fabric covers will not relax once we install them. The coating also means that the fabric is 100% waterproof and heat weldable which is a must in canopies.



Fabric welding

Our industry started out with cotton fabrics sewn with cotton thread. The rain would cause the thread to swell, waterproofing the holes. Modern fabrics and threads with longer warranties are not organic and don't behave the same way when stitched. The material doesn't swell which means that when you tension a cover with stitch holes, you inevitably stretch out the stitch holes and create many tiny points of entry for water.

Vinyl fabrics are designed to be heat welded. This means that instead of putting thousands of tiny holes in your cover using needle and thread to stitch it, we use heat and pressure to make waterproof seams. Our industry has been heading in this direction for years, and we've stayed at the forefront by constantly investing in the equipment to heat weld fabrics to offer the best product. The heat welds are incredibly strong, will not let water in, and are barely visible.

There are some areas on the cover that need to be sewn, but the main fabric panels are all heat welded.

MANUFACTURING

Eastman Eagle CNC Cutting Table



The Eastman Eagle Conveyor Belt cutting table takes our designs straight from our 3D software and cuts with incredible accuracy. Besides the cutting tools, it has a pen allowing us to mark the panels for the sew department and also make large lifesize prints for our weld department.

Miller WeldMaster RFlex



The RFlex heat welds by sending radio frequencies through a bar that also acts like a press, clamping fabric panels together. This machine allows us to weld in tight spots that are difficult with the other machines.

Miller WeldMaster T-500



The T-500 lets the fabric travel through it over a hot air that melts the fabric and then into wheels that press the melting fabric together creating the weld. There are no constraints on length of weld.

Miller WeldMaster 112



The T-112 is designed for super accurate welding of panels. The fabric gets clamped down and the welding head actually moves over the fabric. This machine is highly effective for welds up to 20'.



INSTALLATION

Our operations team will strategize the best plan to execute your project quickly and safely. Your project may require working with customers while you stay open, closing the area down for the duration of the install, or requiring Tropical J's to work outside of your normal business hours, usually at overtime rates. Tropical J's is licensed and insured to operate on construction sites. We can provide all required safety documentation and certifications.

FREQUENTLY ASKED

What are your installation hours?

A typical installation window is M-F, 7:00AM ~ 3:15PM. Tropical J's may be able to operate outside this on a case by case basis at overtime rates.

Are you licensed?

Yes. Our license number is C-23241.

Are you insured?

Yes. We carry 1 Million dollar liability insurance. We can get higher policies if needed.

Can I do my own installation?

Yes but customer installation voids all warranties.

Will your work vehicles fit in my parking garage?

Not typically. Our vehicles start at 6'8" clearance

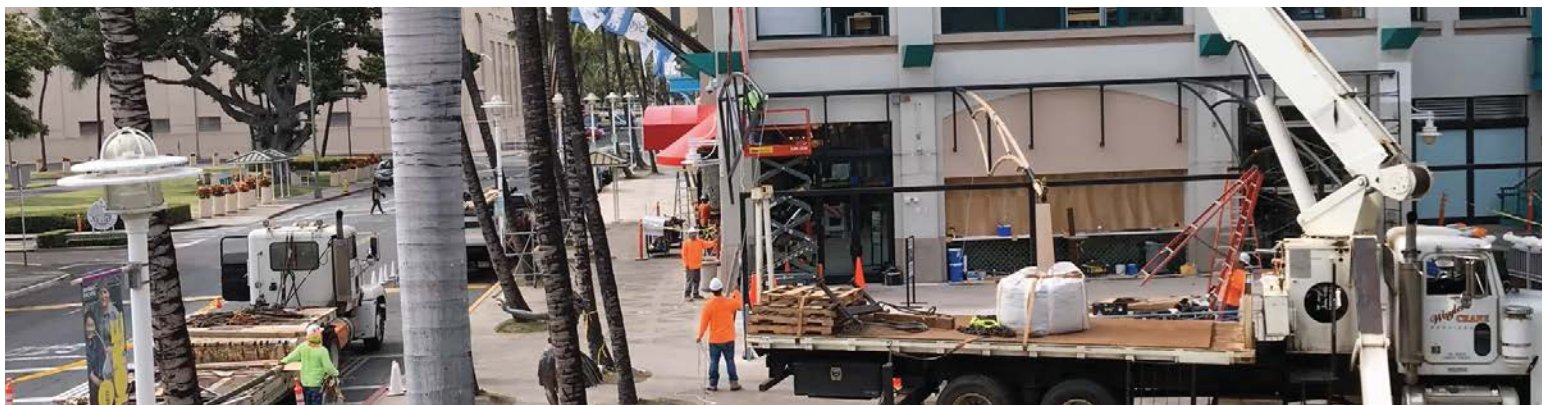
What kind of certifications do you have?

We can provide certifications for scaffold assembly, fall protection, CPR safety, powered manlifts, forklifts, all installation practices and operation of commercial vehicles. This allows us to operate on all construction sites.

Do you offer any warranties?

Installation: Tropical J's offers a 1 year warranty on all frames and installations. If something is done poorly with an awning it is almost always apparent within the first month.

Fabrics have their own warranty, usually prorated and typically 5-10 years.

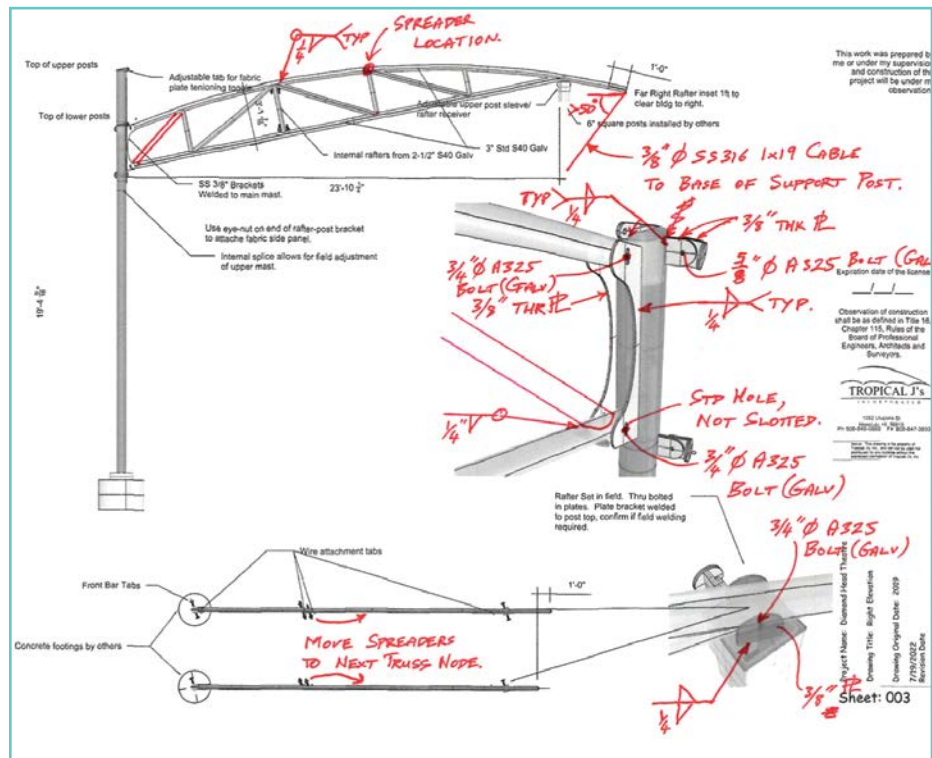


Installation of the Old Spaghetti Factory canopy at Aloha Tower Marketplace

PERMITTING

If your project requires permitting we can help. We do all our frame and fabric designs in 3D CAD and we have software that runs FEA analysis on what we design. Our structural engineer will review this data and use it in calculations to show the product meets all applicable building codes.

If permits are being pulled, the DPP will also want to know that the building can handle the additional loads generated when the product is providing stress to the building at 130 mph. An engineer will have to approve this and go on record for the building. Talk to your salesman for a better understanding of Tropical J's role in the process.



FREQUENTLY ASKED

Does Tropical J's pull permits?

Tropical J's is not an authority on permitting. We can provide the data that shows our products meet code, but we will not manage the process of pulling permits.

What is a feasibility review?

A feasibility study is an assessment of the allowability of the project. It also established within what setbacks the product(s) can be installed. A feasibility review may determine that products are **not** allowed.

Do permits require engineering?

Yes. A locally licensed structural engineer will need to stamp drawings and provide calculations showing that the product meets or exceeds code. This event can be costly which is why Tropical J's has pre-engineered some products.

Does a pre-engineered product still need engineering?

Yes. The DPP will require that the stamped drawings are of your specific location. Since we have standardized our designs, this event is not as lengthy as it used to be and we find savings here.

What if I pursue without permitting?

If the DPP discovers that your product was installed without a permit, you may be required to take it down. To reinstall it, or to be allowed to continue to have it, you will have to show proof that it meets code. This means a stamped engineering packet needs to be made. You will also have to pay a fine.

What is a design/engineering event?

In the event in which we are asked to price a project but do not have an engineering precedent for the size of the tubes, attachments, and footings, we may require a design/engineering event. In this event, we will do our best to ballpark the project based on past experience and possibly a conversation with our structural engineer. If the ballpark price sounds reasonable, we open a design/engineering contract in which we design the structure, and the engineer confirms that tube sizes are adequate. This is a necessary step in the process. By doing this before the sale, we ensure that we are not overcharging you just in case engineering requires larger tubes than we expected. This way we charge for the minimal amount of steel required to do the project.