

# STUDENT STEEL BRIDGE COMPETITION

## EQUIPMENT TRANSFER GUIDE

*Here's what you need to know about transferring the equipment to your campus!*

First of all, thank you! We are looking forward to working with you as the host of next year's Student Steel Bridge Competition (SSBC) regional competition. This document contains information to guide you through the process of obtaining your region's equipment for the competition.

### OVERVIEW

AISC has standardized and provided the necessary equipment for every SSBC regional competition, including steel angels, grating, measuring devices, and safety supports. The equipment belongs to the region, and it is the responsibility of the host schools to transfer, inventory, and store the equipment each year.

Most regions have equipment for the following:

- 2 construction lanes
- 1 lateral loading station
- 2 vertical loading stations
- 1 weigh station




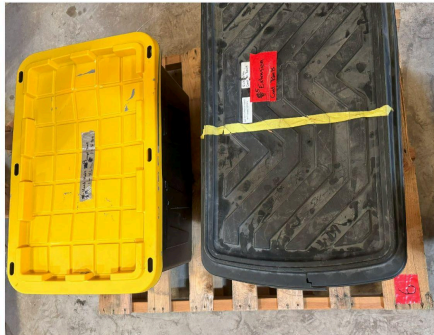
Some of the smaller regions have fewer stations, and larger regions may have more. Refer to the following table for your specific case.

REGION	Constr.	Lat.	Vert.	Weigh	Approx. Total Weight
ASCE Region 6*, Eastern Great Lakes, Gulf Coast, Indiana-Kentucky, Intermountain Southwest, Metropolitan, Mid-America, Mid-Atlantic East, Mid-Atlantic West, Mid-Pacific, Mid-South, Northeast, Pacific Northwest, Pacific Southwest, Rocky Mountain, Southeast, Upstate New York - Canada, Western Great Lakes*	2	1	2	1	6500
Carolinas, Virginias	1	1	1	1	4000

*\* Additional equipment will be added to these regions in 2025 to increase lane counts to 3 construction lanes and 3 loading lanes.*

## HOW MUCH IS IT?

In general, the equipment is stored on pallets. A typical region will have four pallets of angles and two or three pallets with everything else. In total, it all (typically) weighs about 6,500 lbs. Here are some sample photos:

<p><b>Loading Angles</b> [Typ. 4 Pallets, ~1350 lbs. each]</p> <p><i>~50 angles per pallet</i></p> <p><i>These pallets can be stacked for easy storage.</i></p>	
<p><b>Jack Stands</b> [Typ. 1 Pallet, ~ 280 lb total]</p> <p><i>(16) total jack stands</i></p>	
<p><b>Miscellaneous Equipment</b> [Typ. 1-2 Pallets, ~1000 lbs total]</p> <p><i>Includes 1/4" plates, grates, wood boxes for member check, plastic containers with deflection equipment, lateral load stand, pair of slotted steel plates, levels, plywood templates, other wood pieces</i></p>	
<p><b>Miscellaneous Storage Bins [&lt; 50 lbs]</b></p> <p><i>(1) Plastic storage tub with PPE for judges</i></p> <p><i>(1-2) Box or tub of miscellaneous equipment (laser plumb bobs, tape measures, clipboards, flashlights, stopwatches, sway targets, etc.)</i></p>	

## STORAGE

The host school is responsible for storing the region's equipment for the current competition year until the next host school takes possession. Approximately 200 square feet of space is needed to store the equipment. A forklift or pallet jack may be required to move pallets carrying the loading angles.

The angle pallets can be stacked, but it depends on the resources available and how hosts load them into the storage location. For example, stacking the pallets often requires access to a forklift. The other equipment (safety supports, lateral loading stand, deflection measuring devices, scales, etc.) will typically be stored on 4 ft. x 4 ft. pallets and should not be stacked.

## TRANSFERRING THE EQUIPMENT

AISC recommends obtaining the equipment as soon as you can following the previous regional competition so that you have ample time to conduct an inventory. We strongly suggest that someone also conducts an inventory of the items while packing after the competition to make sure everything is ready to make the trip.

### Coordinating with current host

No matter how you decide to transfer the equipment, you'll need to have close coordination with the previous host school. Approximately one month before the current year's competition, check with the host regarding the equipment and start making a plan. You may even find it helpful to join one of their planning committee meetings.

Some questions for you to consider:

- ☐ Who is responsible for packing the equipment after the competition?
- ☐ Who will be responsible for inventorying the items while packing?
- ☐ Where will everything be stored after the competition?
- ☐ Where and when can it be picked up?

### What you'll need for picking up the equipment

You will need a vehicle (or vehicles) to transport the pallets to your school. Many schools opt to use some sort of trailer. If your trailer will also be hauling other competition equipment (such as a concrete canoe), be sure to coordinate and consider how much space is needed to organize and arrange everything.

If you do not have access to a trailer, renting a box truck can be a good alternative. Previous hosts have had success renting a 26-ft long box truck with a lift gate.

In addition to the vehicle itself, you will also need to coordinate with the current host regarding how to move the equipment. Some questions to consider:

- ☐ How will you load your vehicle?
- ☐ Will there be a forklift or pallet jack available?
- ☐ Where will you load your vehicle?
- ☐ Is there a loading dock at the facility?
- ☐ Who is the best point of contact on site?
- ☐ Confirm how everything is packed (photos are great!)

### Option #1: Taking it home with you

In many cases, it can be advantageous to take everything home with you following the ASCE Student Symposium. Typically the symposium weekend is packed full of activity, so advance planning is vital so that there are no surprises when you are ready to depart.

If you plan to pick it up at the current symposium, here are some additional things to consider:

- ☐ Does the current host have enough time and support to get everything packed in time?
- ☐ Would you (future host) be able and willing to help pack?
- ☐ How does packing the equipment and loading a vehicle fit into the event schedule for the symposium?
- ☐ Will you be transporting any other team and/or hosting equipment in the same vehicle(s)? If so, do you have enough space for everything?

### Option #2: Picking it up at a later date

In other cases, it may be easier for you and/or the current host if you pick up the equipment at a later date. Similar to the previous option, coordination and communication with the current host is important.

Here are some questions to ask:

- ☐ Where will the equipment be stored?
- ☐ When will everything be ready?
- ☐ Can you share photos of the equipment after it is packed?

### Option #3: Using a third-party shipping company

If transporting the equipment yourself does not seem like a viable option, you may consider using a third-party professional shipping company. Typically, the pallets would then be transported on open-air flatbed trucks. Shipping costs vary depending on the distance and are typically in the range of \$1,500-\$3,000.

AISC has previously worked with Steven's West ([www.stevenswest.com](http://www.stevenswest.com)) for flatbed shipping services. You may reach out to the following contact directly for a quote. Nathan is familiar with this equipment, so be sure to mention AISC and the Student Steel Bridge Competition. Pictures of your packed-up equipment can be helpful for obtaining an accurate quote.

J. Nathan Baumgardner  
nathan@stevenswest.com  
303-886-6285 – cell/texting

All equipment should be safely secured to pallets and be packaged for transit prior to the driver's arrival. If things are not ready to go, you may incur additional charges.

## PACKING THE EQUIPMENT

The equipment should be packaged so that it will not be damaged or lost during transportation. Typically the current host will take the lead on packing the equipment. You should communicate and coordinate accordingly.

### Recommendations for Packing Equipment

- Place all small materials such as clipboards, tape measures, stop watches, small wood blocks, magnets, etc. in boxes. Clearly label the contents of each box on two sides of the box and tape it closed.
- Organize the pallets of angles to include (50) angles per pallet. Tie the angles down to the pallets with ratchet straps, steel bands, or rope.
- Organize other large items such as the lateral load device, steel plates, jack stands and wood templates on pallets. Tie the materials down to the pallets with straps or rope and shrink wrap the pallet. Start at the bottom and wrap around all sides by circling around the pallet, covering as much area and space as possible; there shouldn't be any openings where the wrapping could potentially tear.



## Example photos of equipment packed up and ready to go



## CONDUCTING AN INVENTORY ONCE ON YOUR CAMPUS

Once the equipment is on your campus, you should conduct an inventory to make sure that everything successfully made the journey and is in working order. AISC will provide replacements for select missing or damaged items, and we'll need enough notice to get you the replacement items in time for your competition. The sooner you can finish and submit your inventory, the better!

Further instructions and guides are available on the host resources page of [aisc.org/ssbc](https://aisc.org/ssbc).

## ADDITIONAL RESOURCES

AISC has several hosting resources available on the host resources page of [aisc.org/ssbc](https://aisc.org/ssbc). We'll also keep in touch with you via email (typically monthly) with reminders, resources, and other information. In the meantime, you are always welcome to [contact us](#) with any questions. We are here to help!