Student Steel Bridge Competition

2020 Host Guide

Smarter. Stronger. Steel.

Table of Contents

Part One
Overview

Thank you for hosting a Student Steel Bridge Competition – Regional Event. While not exhaustive, this guide has been designed to assist you in the effective planning, organization and administration of a safe, quality and fun competition. It is intended to serve as a guide that should stimulate thinking on the part of the Regional Event Host Planning Committee.

Our Vision

Empower students to acquire, demonstrate, and value the knowledge and skills that they will use, as the future generation of design professionals, to contribute to the structural steel design community and construction industry in the United States.

Our Mission

Challenge students to extend their classroom knowledge to a practical and hands-on steel-design project that grows their interpersonal and professional skills, encourages innovation, and fosters impactful relationships between students and industry professionals.

History

The Student Steel Bridge Competition (SBBC) is a program sponsored by the American Institute of Steel Construction (AISC). The SSBC began in the 1980's as an AISC competition between three universities in Michigan. For many years it was incorporated into the American Society of Civil Engineers (ASCE) Student Chapter spring conference events with the program co-sponsored by AISC and ASCE. Starting with the 2019 competition year, the SSBC is sponsored solely by AISC. In 2020 there will be 18 SSBC Regional Events with more than 200 schools participating. Teams come from universities in the United States and U.S. territories to compete in the events. The top finishers of the Regional Events advance to the National Finals. AISC is the organizing sponsor for the Student Steel Bridge Competition and works with Host Schools to plan the Regional Events and the National Finals.

1.1 Support from AISC

AISC is here to support you as a Regional Event Host. With AISC as the sole organizing sponsor of the Student Steel Bridge Competition, AISC has created two positions that are dedicated to supporting the competition, hosts and teams.

Sadie Brown, CMP
Special Event Planner
312.802.4170
brown@aisc.org

Contact Sadie for questions about:

- Regional Event Planning
- Sponsorships
- Regional Event Websites & Registration Setup

Sean Faron
Programs Assistant
312.670.8315
faron@aisc.org

Contact Sean for questions about:

- General Participant Inquiries
- Regional Event Pre-Registration and Registration Inquiries/ Cancellations
- Team Participation & Funding
- AISC Student Clubs & Teams
- Fabricator Partnerships
- Faculty Advisor and Judge Reimbursements
- Equipment Delivery & Logistics

1.2 General Competition Structure

Regional Events

The 18 Regional Events are organized independently by Host Schools under the guidance of AISC. View the 2020 Regional Events at www.aisc.org/ssbc. The top finishers of the Regional Events, with the exception of Guest Teams, advance to the National Finals.

National Finals

Top finishers at the 2020 Regional Events qualify to compete at the 2020 National Finals to be held at Virginia Tech, May 22-23, 2020. Please note: The competition is on Memorial Day weekend.

National Finals Qualifications

The number of teams from each Regional Event that qualify for the National Finals is dependent on the number of teams that have entered the Regional Event, excluding Guest Teams. See the table below:

# of Teams at Regional Event*	# of Teams that can qualify for National Finals from Regional Event
2-5 teams	1 team invited to National Finals
6-11 teams	2 teams invited to National Finals
12-17 teams	3 teams invited to National Finals
18+ teams	4 teams invited to National Finals

*does not include guest teams

The Rules Document

All of the Regional Events as well as the National Finals are based on the same Rules document that describes the competition and states the official Rules. The Rules are developed by the SSBC Rules Committee and are changed every year. The current Rules must be used without modification for every Regional Event and the National Finals. This is necessary so that bridges from all conferences may compete nationally without disadvantage.

AISC maintains a website, www.aisc.org/ssbc, where the Rules can be downloaded and Rules questions are addressed. Rules questions may be submitted only through the official online forms. Rules questions are reviewed by the SSBC Rules Committee, and the Rules clarifications issued by the Rules Committee are posted online for access to all competitors.

Host School

The Host School is responsible for all aspects of planning and setup of the event. This includes making venue arrangements, communication with participants, recruiting of volunteers, fundraising, setup and cleanup, and coordination with AISC. The Host School invests a great deal of time and resources into preparation for the event in addition to participating in the event with a competing team of students.

Well in advance of the competition, the Host School should alert participants of any local conditions that may affect the competition. The Host School should provide each competitor with a schedule of events, a map to the contest site, and travel recommendations.

Competition Participants

Student teams from approximately 200 schools are expected to participate in the SSBC at the Regional Event level. These teams consist of undergraduate and/or graduate students from colleges and universities with an ABET accredited engineering program in the United States and U.S. territories. Composition of regions and teams will be based on the ASCE Student Conference divisions with rare exception. Each team should designate a captain. The top teams at Regional Events will advance to the National Finals.

Conference Switch

In rare instances, schools will ask to switch to a different conference region than their assigned ASCE region due to a schedule conflict or travel issues. AISC will contact the Host for approval prior to approving the switch.

Non-ASCE Conference Schools

AISC will review requests to join a Regional Event from new schools not already part of an ASCE Student Conference. AISC will notify Regional Event Host Schools to determine if the additional school(s) can be accomodated.

International Guest Schools

International teams may be allowed to participate as Guest Teams* at Regional Events. Regional Event Host Schools are welcome to invite Guest Teams at their discretion. Before inviting Guest Teams, Host Schools should determine if venues can accommodate these additional teams.

Some Guest Teams may need a letter of invitation from the Regional Event organizers to obtain travel visas. Please direct international schools to Sadie Brown (brown@aisc.org) if a letter of invitation is needed.

*AISC does not fund Guest Teams to participate in the Student Steel Bridge Competition. These Guest Teams are not eligible to qualify for the National Finals.

1.3 Judges & Volunteers

Head Judge

The Head Judge is the person with full authority over the conduct of the competition, safety and interpretation of the Rules. There is a Head Judge at each Regional Event. The National Head Judge serves as the Head Judge for the National Finals.
The role of the Regional Head Judge is to work with the Host School organizing committee to determine competition setup and judge assignments prior to the competition and to also train and direct the other judges during the competition. In many regions, the Head Judge returns to the role each year. Host Schools should inform AISC whom they have chosen to be their Head Judge. If the Host School does not have a Head Judge for their Regional Event, a Head Judge will be appointed by AISC in November. Regional Head Judges will attend an online training session led by AISC and the National Head Judge.

Judges

Judges assist the Head Judge with the conduct of the competition, safety and interpretation of the Rules. Judges are assigned to moderate each event of the competition: aesthetics, construction, lateral loading, vertical loading and weighing. They have complete and final authority for enforcing the Rules of the contest, scoring and rating bridges, resolving ambiguities in the Rules and settling disputes. Judges are directed and empowered to halt any activities they deem hazardous. Competitors should be respectful of the judges at all times.

of Judges Required

The Host School recruits volunteers that serve as judges. In many regions, there is a regular group of people who volunteer to serve as judges year after year. Additional judges will likely need to be recruited by the Host School. The Host School should recruit judges who will be fair, unbiased and competent. The Regional Event Head Judge will direct the Host School on the exact number of judges needed, but the Host School may use the table below as a guide:

Lane/Station	Minimum # of Judges per Lane/Station
Construction	3-5 Judges
Lateral Load Station	1 Judge
Vertical Load Station	1 Judge
Weight Station	1 Judge

Judges' Training

The Regional Head Judge will manage and lead the work of the other judges. A training meeting should be held at the discretion of the Head Judge. This may be an in person meeting at the Regional Event or an online meeting before the Regional Event. Host Schools work with their Regional Head Judge to determine what support or facilities from the Host School is needed.

At the Judges' Training meeting, questions regarding the Rules and procedures should be discussed and resolved. In addition, the duties of each judge should be defined. The judges should be prepared to answer questions and resolve disputes that may arise during the competition. Procedures for resolving protests are described in the Rules document (Section 15). Learn more about the Judges' Training in Section 3.5: Judges' Training.

Guidelines for Judges

Before the Judges' Training meeting, each judge should carefully study this guide and the current Rules and the Official Clarifications.

Judges are reminded that competitors have invested significant amounts of time and money in their bridges. They will expect judges to make accurate measurements, keep careful records, compute scores and ratings accurately, understand and enforce the Rules, and to be fair in all decisions. Interactions with competitors must be collegial and professional regardless of how the competitors may present themselves.

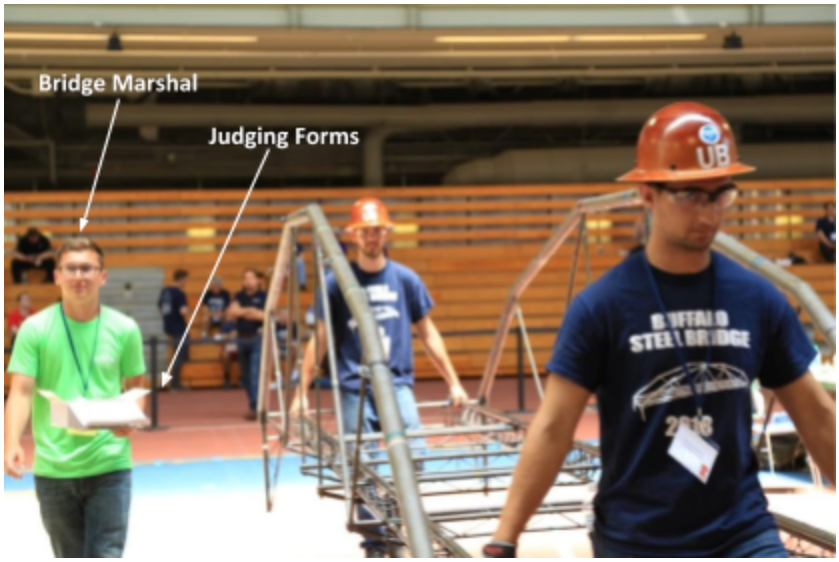
Judge giving instructions at load station

Judges at work during bridge construction

Marshals

At the National Finals and some Regional Events, marshals are used to escort bridges through the complete construction and testing sequence. The duties of the marshals are to carry the judging forms from station to station, ensure that the bridge is not altered or enhanced after the erection phase, note damage to the bridge as it is

moved, and to assist those entering scoring data in resolving any questions regarding the completed judging forms.



Other Volunteers

The Host may have other volunteers at the competition that work on a variety of tasks such as registration of teams, equipment preparation, and venue setup and cleanup. The estimated minimum number of recommended volunteers needed based on the size of the Regional Event is shown below. Please keep in mind these are only estimates and do not take into account the actual logistics and needs of the event. The Host School must take great care in determining the volunteer needs for setup and their events.

	2-5 teams	6-11 teams	12-17 teams	18+ teams
main competition floor taping & setup (allow for 4+ hours)	3	3-4	4-5	5-6
equipment preparation	1-2	1-2	2	2-3
registration/check-in	1	2	2-3	2-3
during event (runners, meals, etc)	1	2	3	4
clean up	3	3	4	5

Recruiting Volunteers & Judges

Steel fabrication companies are good sources of judges. Structural engineers, erectors, architects, and others associated with the steel construction industry also make good judges. No previous engineering or competition experience is required. AISC has provided a sample volunteer recruitment letter in Appendix 5: Templates.

AISC Call for Volunteers

AISC will provide additional support to Hosts by contacting our membership base with a call for volunteers for their Regional Event. AISC's members will express their interest through an interest form. The form responses will be sent to the host. It is the host's responsibility to respond to all individuals that express interest. The Host will handle scheduling and assignments with the volunteers directly.

Part Two
Regional Event Planning

Overview

Part Two: Regional Event Planning is intended to give guidance on how to plan a SSBC Regional Event and the responsibilities of the Host School. This includes registration, sponsorships, finances, communication with participants, websites and more. You can find the requirements for each specific event in Part Three: Events & Venues.

Recommended Committee Structure and Responsibilities

The Regional Event Host School should form a planning committee consisting of students and advising faculty. The composition of the Regional Event Host committee will depend on the size and events of the competition and the personnel available. At a minimum, the Host School must have an advising faculty member and two student chairs. The Host is expected to notify AISC of any changes in the committee.

The committee organization of each Regional Event will be unique. Typical subcommittees of the planning committee are fundraising, publicity, facilities and contracts, program, technical setup, registration, and volunteer coordination. The Host Planning Timeline and Checklist identifies fundamental technical responsibilities and concepts for typical subcommittees.

2.1 Insurance Coverage

AISC will provide a certificate of insurance (COI) to Host Schools for their Regional Event. AISC will contact all hosts by January to provide them with a COI.

At AISC, safety is paramount in all of our initiatives. Hosts are expected to follow this practice and take every precaution to ensure their committee and all participants are safe while engaging in SSBC activities. However, accidental instances of property damage, personal injury or loss may occur during official SSBC activities and events. If a situation arises, any losses or injuries should be reported to AISC immediately.

Report an Incident

If an incident occurs during the SSBC Regional Event, the Host School, or committee members present, must take the following steps **immediately**:

1. Secure the personal safety of all involved. If someone is seriously hurt, call 911.
2. Document the incident:
    a. Gather the contact information for all persons involved.
    b. Take photos of any damage to personal or private property as well as any injuries.
    c. Write up a brief description of the events that occurred, including the date and time of the incident.
3. Send the documentation as detailed above to the following parties at AISC:
    a. Mike Mospan, director of finance & accounting (mospan@aisc.org)
    b. Wendy Jimenez, senior staff accountant (jimenez@aisc.org)
    c. cc: Sadie Brown, special event planner (brown@aisc.org)

2.2 Pre-Registration

In order for a school to compete in the 2020 AISC Student Steel Bridge Competition, the team Faculty Advisor must complete the pre-registration form by November 15, 2019. Upon completion of this form, the team will receive their $500 SSBC Participating Team Stipend from AISC. The information received from this form will be provided to the Host School to assist with planning for the Regional Event. The form will collect:

- School
- Regional Event: ASCE Region, SSBC Region, domestic or international school
- Faculty Advisor name and contact information
- Address for team stipend check and mailers
- Captain(s) name and contact information
- Team Information: expected # of members attending the Regional Event

The team pre-registration form only pre-registers a team as a participating school for the 2020 competition. The team must also register at a later date to attend the Regional Event. See 'Individual Regional Event Registration' below.

Host School Approval

In some instances, AISC will contact the Host School to approve a pre-registration for their event. We ask that the Host responds, with approval or denial, within 2 weeks of being contacted by AISC in the following situations:

1. A team pre-registers for a SSBC Regional Event and it is outside of their assigned ASCE Student Conference region.
2. A team pre-registers and does not have an ASCE conference region (new schools).
3. A team that is licensed or chartered outside of the U.S. or a U.S. Territory pre-registers for their Regional Event.

2.3 Individual Regional Event Registration

After all schools wishing to participate in the 2020 competition have pre-registered with AISC, all participating students and faculty must register individually to attend the Regional Event. This individual registration can be done through the Host School or AISC depending on the Host's preference.

Planning Worksheet

To help guide registration planning, AISC has created a registration planning worksheet for Hosts. The registration worksheet can be found in Appendix 5: Templates. Hosts are asked to submit their worksheet to AISC once completed.

Regional Event Registration through AISC

AISC is offering to run registration for all SSBC hosts through our online registration platform, iMIS. Training and further instructions will be provided when they are available in the fall. In summary, the process will go as follows:

1. Host School will provide AISC with the information that needs to be collected in the registration form.
2. AISC will build the registration site for the Host and send it for their review. Once approved, the registration site will be published and the link sent to the Host School.
3. The Host School will announce that registration is open, provide registration instructions on their website, and schools will register. Once a school registers, the following will take place:
    - The school will receive a confirmation email and electronic invoice. Payment can be made via check or credit card and will be processed through AISC.
    - The Host School will receive a confirmation email for each school registration with the details. The Host School can monitor the status of their event by viewing completed registration details in a spreadsheet updated daily.
    - The Host School will be mailed a check with the registration funds on a monthly basis.
4. Schools will be instructed to contact AISC for any registration refunds, cancellations, or troubleshooting. AISC will notify the Host of any changes.

Regional Event Registration through Host School

If the Host School prefers to run their own registration, they must follow the registration guidelines listed below. Before registration is open, the Host School must send their completed registration worksheet to AISC.

Following the competition, Host Schools will be required to submit a Post-Event Report. This report will require a full registration report with the data collected during registration and income earned from registration fees.

Registration Timeline & Due Dates

The Host is responsible for setting the following registration deadlines and communicating them to AISC.

Pre-Registration Form Deadline	November 15, 2019
Regional Event Registration Opens	[recommended December/January]
Regional Event Registration Deadline	[recommended 6 weeks prior to event]
Regional Event Registration Payment Due	[recommended 3-4 weeks prior to event]

Registration Opening

Regional Event registration should open anytime between December & January. The sooner you can open registration, the better!

Registration Deadline

The Regional Event registration deadline date will be determined by the Regional Event Host. When choosing a registration deadline, please keep in mind the timeframe needed to guarantee catering, create a competition schedule, order t-shirts, etc. AISC recommends the deadline be March 1st or 6 weeks before the competition.

Payment Deadline

AISC recommends that Hosts set a payment deadline for registration that is 2 weeks after the registration deadline. This will give schools an opportunity to mail in payment via check following their registration.

Regional Event Registration Guidelines

Pricing

Registration can be charged individually, per school or both. The goal is to keep the registration cost as low as possible for participants. The Host should make every effort to keep the registration fee from exceeding $50 per person. We encourage you to keep registration costs as low as possible through sponsorships and fundraising.

The Host should clearly communicate what is included in registration prices. See our sample mailers for examples.

Payment

If the Host School is not utilizing AISC's registration platform, the Host School must provide an option for teams to register with a check payment.

Data Collection

All participating students and attending faculty must be registered for the competition. This includes all build team members, team members not on the competition floor, captains, and team leaders. At a minimum, the following information should be collected during registration:

- First and Last Name
- Email Address
- Team Name/School
- Academic Year
- Role in competition (e.g. Build Team, Captain, Guest, Faculty Advisor, etc.)
- RSVP to any additional competition events (e.g. banquet)
- T-shirt size (if applicable)
- Dietary Restrictions or Comments

Registration Policies

AISC has established recommended registration policies for Host Schools to advertise with their registration. They are below:

- Teams that fail to register and pay the registration fee by the deadlines set by the Host School will not be able to participate in the competition.
- Due to the careful budget preparations of the Host Schools, AISC is not able to offer refunds for registration.
- Individual late registration may be permitted on a case-by-case basis.

2.4 Hotels

The Host School should reserve hotel rooms for the competition based on travel expectations for participating schools. Generally, hotels will give a group discount.

When reserving room blocks, the Host School should avoid a guaranteed minimum number of rooms with a hotel, as this could hold the Host School financially responsible for anything below the guaranteed amount. Please contact Sadie Brown (brown@aisc.org) if you need assistance with housing setup.

Communicating Hotel Blocks

Hotel information should be provided on the Host website for competitors, sponsors, and judges. An example on how to communicate hotel information is provided below:

Example:

Holiday Inn Downtown Chicago	[Hotel Name]
123 Example St, Chicago IL 60601	[Hotel Address]
$139	[Rate]
Group Code: SSBC	[Group Code or Reservation Link]
Reservation Deadline: 3/25	[Reservation Deadline]

2.5 Equipment

AISC has standardized the necessary equipment for every SSBC Regional Event. The equipment is the property of AISC and will be sent to each Host School in the summer or fall prior to the competition. Items that will be provided include angle steel, grating, measuring devices, stop watches, and a multitude of others.

Equipment Inventory

A complete inventory for each region can be found in Appendix 2: Regional Event Equipment Inventory Checklist. Appendix 3: Equipment Guide provides instructions on how to operate some of the items.

Pre-Event Inventory

The Host will notify AISC of any missing or broken equipment inventory by November 1, 2019. The Host must complete the inventory checklist in Appendix 2 and submit it to Sean Faron (faron@aisc.org) so that AISC can arrange for replacement equipment.

Post-Event Inventory

After the Regional Event concludes, Hosts are required to complete a full inventory check using the inventory checklist in Appendix 2. We ask that inventory is completed immediately following the competition, before it is transported to next year's Host. Please be careful and diligent when doing inventory. Submit the inventory checklist within 2 weeks after the event to Sean Faron (faron@aisc.org).

Damaged Equipment

If any equipment is broken or damaged, we ask that Hosts clearly describe the damage in the 'Notes' section of the inventory checklists. Photo documentation is also recommended. Please be as detailed as possible as this will help AISC determine if the equipment needs to be replaced or simply repaired.

Storage

The Host is responsible for storing the region's equipment for the 2020 competition year until it can be passed along to the 2021 host.

Storage Space Specifications

Approximately 200 square feet of space is needed to store the equipment. Access by forklift may be required for pallets carrying the loading angles. It is the Host School's

responsibility to unload, maintain and reload the equipment to be handed off to the next Host School.

- Angle Pallets: The angles will come on 3ft x 3ft pallets holding 1,250 lbs each. The angle pallets can be stacked, but it depends on the resources available and how Hosts load them into the storage location. For example, to stack the pallets, Hosts will need access to a forklift. AISC does not provide a forklift.
- Misc 4ft x 4ft Pallets: The 4x4 pallets will have a max weight of 1,250 lbs and cannot be stacked.

Host is Unable to Store Equipment

If the Host cannot store the equipment before their competition AISC will find a local fabricator to store the equipment. The 2020 Host is responsible for:

1. the initial transportation of equipment to the local fabricator for storage
2. picking up the equipment prior to their competition
3. transporting the equipment back to the fabricator after the competition if the 2021 host cannot pick up the equipment at the competition.

AISC will reimburse the equipment transportation costs up to $500.

Packaging Equipment

Once Hosts have completed their Post-Event inventory, they must repack the equipment so that it will not be damaged or lost in transport to next year's host. If you have any questions or concerns on how to package the equipment, please contact Sean Faron (faron@aisc.org)

Guidelines 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 angle to include (50) angles per pallet. Tie the angles down to the pallets with straps 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.

Shrink Wrap Tip
The most common and best method for packaging the pallets is to use shrink wrap. 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.

Pallet Example

Preparation for Professional Delivery

If the equipment is being transported via a professional shipping company, the Host School must follow the instructions below.

- If the equipment is being delivered, it must be safely secured and packaged for transit. Often, the equipment is delivered on open-air flatbed trucks. Hosts must account for this by packaging the equipment to the packing guidelines detailed above.
- The drivers picking up the equipment WILL NOT package it for you. If the equipment isn't ready upon the driver's arrival, the driver will leave and you will still be charged for the delivery. If this situation occurs due to the equipment not being properly packed, the Host School will be responsible for the charge of rescheduling delivery.

2.6 AISC Regional Event Sponsorships

AISC is the organizing sponsor of the Student Steel Bridge Competition. AISC will provide the following to each Regional Event Host School:

- $2,500 donation from AISC
- 100% of the funds raised by AISC for the Regional Event through sponsorships

Sponsorship Overview

AISC receives contributions from members of the steel industry in support of the program. There are two types of SSBC sponsorships: Event sponsors and National Program sponsors. Funds from National Program sponsors go toward the overall SSBC program. Funds from Event sponsorships go directly to the Host Schools and will be distributed to Host Schools as they are confirmed. These funds come from steel industry members that have an interest in their specific region.

Benefits Overview

For all AISC event sponsorships confirmed by AISC, certain benefits are guaranteed to the sponsors. Regional Event hosts have the responsibility of fulfilling and coordinating the benefits of sponsors in their region. The sponsorship levels, benefits and the responsibility as a Host are described below. Hosts are welcome to provide additional benefits if they desire. Hosts are expected to communicate their benefit plan by completing the Sponsorship Benefit Planning Worksheet, found in Appendix 5: Templates. This worksheet should be submitted to AISC 10 weeks prior to the event.

	Diamond $5,000	Gold* $2,500	Silver $1,000	Bronze $500
Sponsor Table at Regional Event	X	X	X	-
Sponsor logo on Regional Event website	Large Logo	Large Logo	Small Logo	Name
Sponsor Logo on Event Program	X	X	X	X
[Insert Additional Host Benefit. Example: Complimentary Banquet Ticket]	3	2	1	1

**National Program Steel sponsors receive Gold level benefits for all Regional Event competitions.*

Sponsor Table at Regional Event

Diamond through Silver sponsors are guaranteed tables at the Regional Event, ideally during the Aesthetics portion of the competition and/or during the main competition if

that would be more appropriate for sponsor tables. Hosts will have to procure the tables through their own means. We suggest a 6ft or 8ft table and two chairs for each sponsor. The goal of this benefit is that while the students and judges are walking around looking at the bridges, the sponsors can network with students as they pass their table. Therefore, the sponsor tables should be located in an area with high traffic.

Company Logo on Website

All sponsors are recognized on AISC's Regional Event webpages to varying degrees of size (large logos, small logos, company names). AISC will upload the sponsor logos to the Host School's Regional Event website.

Company Logo on Program

All sponsors get recognition on Regional Event programs with their logos printed. It is the responsibility of the Host to ensure the logos are printed on the program.

Host Responsibilities

Host Schools are responsible for providing the on-site benefits to the sponsors who attend the competition. An overview of the responsibilities are below:

1. Complete sponsorship benefit planning worksheet.

   The Sponsorship Benefit Planning Worksheet can be found in Appendix 5: Templates. This worksheet outlines the Host's benefit plan for AISC, and it should be submitted to AISC 10 weeks prior to the event. AISC will use this worksheet to communicate with Sponsors and collect RSVPs.

2. Obtain sponsor information and logos from AISC.

   Sponsorship information, payment and logos will be sent to hosts as the sponsorships are confirmed.

3. Ensure the sponsor benefits are met at the competition & welcome the sponsors

   Please take time to welcome each sponsor at the Competition. AISC will coordinate RSVP of Sponsors. After RSVPs have been received, AISC will pass this information to the Host School. The Host School will be responsible for assigning the sponsors a point of contact upon arrival to show them to their table and answer any questions they may have.

2.7 Finances & Fundraising

The Host School is expected to fund the remainder of the competition after AISC's contributions. This can be accomplished through local sponsorships and participant registration fees. The Host School should carefully prepare a budget and create a proactive fundraising campaign. The goal is to keep this cost as low as possible for participants.

Budget Template

An event budget/balance sheet template can be found in Appendix 5: Templates. It is not required that Hosts use this template, but all Hosts will be required to submit a detailed event budget in their Post-Event Report.

Host School Fundraising & Sponsorships

The following types of organizations are most likely to make donations: the college or university, chapters of engineering societies, trade associations, design firms, and companies with an interest in producing, supplying, fabricating or erecting structural steel. AISC has provided a sponsorship solicitation letter template in Appendix 5: Templates.

Host School Sponsorship Benefits

Hosts are not required to create their own sponsorship structure. If the Host chooses to create their own sponsorship structure in addition to AISC's, please try to keep the benefits comparable to what is being offered through AISC's Regional Event sponsorships with similar costs. See examples below:

AISC Regional Event Sponsorships	Diamond $5,000	Gold $2,500	Silver $1,000	Bronze $500	-	-
Host School Sponsorships	*[Insert Type] $5,000*	*[Insert Type] $2,500*	*[Insert Type] $1,000*	*[Insert Type] $500*	*[Insert Type] $250*	*[Insert Type] $100*
Sponsor Table at Regional Event	X	X	X	-	-	-
Sponsor logo and recognition on the Regional Event website	Large Logo	Large Logo	Small Logo	Name	Name	Name
Sponsor Logo on Event Program	X	X	X	X	Name	Name
[Insert Additional Host Benefit. *Example: Comp. Banquet Ticket*]	3	2	1	1	1	-

Solicitation Request

Regional Hosts are asked not to solicit donations from AISC's member fabricators. This is because our member fabricators are asked to sponsor hosts via AISC's Regional Event sponsorships, and we don't want them to be solicited twice.

To find out if there are any conflicting companies, search AISC's fabricators with our membership lookup here. Once on the website, click the category drop down, select 'Fabricator', and input the area you'd like to search. We ask that Hosts do not solicit any companies that populate on this list. If you have questions, please contact Sadie Brown (brown@aisc.org).

Adopt-a-School

However, Regional Event Hosts and any other schools may request to partner with AISC's member fabricators via the Adopt-a-School program to help with bridge team expenses, donate materials for bridges, and provide fabrication assistance. Schools can request a list of fabricators to partner with by completing this form.

2.8 Communications and Mailers

Communication with Participants

AISC encourages an eco-friendly approach when communicating with Regional Event schools and having them register for the competition. Therefore, we recommend that Hosts email the Mailers via email blasts, in lieu of traditional 'snail mail.' All Mailers should be submitted to AISC as a courtesy, before they are sent to participants.

The Regional Event Host email blasts should include every team faculty advisor and bridge captain. This list will be provided to Hosts by AISC.

Mailer Templates & Schedule

AISC has created Mailer templates for each scheduled email blast. We encourage Host Schools to utilize these templates, as they have been created to meet the needs of competitors.

Mailer #1 | October	download template	• introduction to event • pre-registration instructions
Mailer #2 | December	download template	• Regional Event registration • competition details
Mailer #3 | 4-6 weeks before event	download template	• registration closed • updates
Mailer #4 | 2-3 weeks before event	download template	• updates • event locations and map(s) • parking information

Instructions for Use of Mailer Templates

The templates are created in Google Docs. While not required, we recommend that Hosts also make the templates in Google Docs because the formatting does not transfer well to Microsoft Word. Hosts can make a free Google account if they do not have one already. To use the templates, please follow the instructions in Appendix 5: Templates.

2.9 Website

AISC will provide each Host School with a Regional Event website as a source of information and registration for all participating teams, sponsors and judges. To help Host Schools with the updating of their website, AISC will provide website templates for Host Schools to reference. The website content and timeline closely mirrors that of the Mailer templates.

Website Instructions & Template

AISC is still developing website templates and instructions and expects them to be available late September or early October. They will be emailed to all Hosts when available.

2.10 Promotional Materials

SSBC Images and Logos

For event promotion, Hosts are welcome to use the images and logos in this zip file. The zip file includes:

- High and low resolution SSBC images
- SSBC logos

Host School Promotional Graphics

AISC will provide Regional Event promotional graphics to each Host School. These graphics will be available at www.aisc.org/ssbchostresources.

Hosts are encouraged to use the promotional graphics that AISC provides, but they may also create their own graphics. If a Host chooses to create their own, we simply ask that it is approved by AISC first.

Competition T-Shirts

While not required, t-shirts provide a souvenir for participants as well as an opportunity to display sponsor logos. The Host School may provide event t-shirts for the participants and volunteers. Judges and volunteers may be provided distinct shirts to distinguish them from others at the event. Shirts should be distributed at registration.

Sponsor Logos

AISC will provide National and Regional Event sponsor logos to the Host School as they are available. If the Host School has their own sponsorship structure, they will be responsible for gathering and posting those logos properly. Avoid downloading logos from sponsor websites. Contact each sponsor to receive the most current logo. AISC recommends asking for two different types of logo sizes:

- Logo for website and web use - .jpg, .tif , .png or vector format - minimum 500 pixels wide
- Logo for printed signage - vector image (scalable) in either an .eps OR .ai file - the resolution for this image needs to be high resolution, at least 300-dpi

2.11 SSBC Style Guide

The official SSBC Style Guide can be found below. All SSBC templates are formatted to the SSBC style guide. If Hosts need to create other official competition materials, AISC recommends Hosts follow this guide.

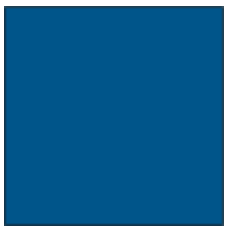
Referencing SSBC

- Refer to the competition as a whole on first reference as the "Student Steel Bridge Competition" and the "SSBC" thereafter.

- There are two levels of Student Steel Bridge Competition: Regional Events and the National Finals.
    - When referencing the Regional Event and not the entire competition, refer to it as "Student Steel Bridge Competition - Regional Event" on first reference and "Regional Event" thereafter.
    - When referencing the National Finals and not the entire competition, refer to it as "Student Steel Bridge Competition - National Finals" on first reference and "National Finals" thereafter

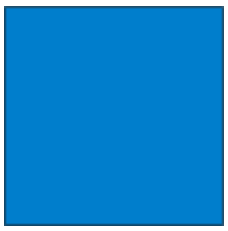
Colors

Primary



Hex Code: 00558a
RGB: 0, 85, 138
HSL: 203, 100%, 27%

Secondary



Hex Code: #007ecc
RGB: 0, 126, 204
HSL: 203, 100%, 40%

Fonts

Avenir is the SSBC standard font. It can be found for free in Google Docs. If Hosts do not have Avenir, Helvetica is also a great option.

Title	Avenir 48 pt Bold
Heading	Avenir 24 pt Bold
Subhead	Avenir 14 pt Bold Avenir 14 pt Bold
Body	Avenir 12 pt

2.12 Host Planning Timeline & Checklist

March - September

Committee
- ❑ Host School to appoint a faculty advisor and student chairs(s)
- ❑ organize SSBC Regional Event student planning committee
- ❑ sign AISC intent to host agreement

Venues
- ❑ select competition date(s) and venues
- ❑ finalize all competition venues with signed contracts by September 2019
- ❑ update the 'Event Information' spreadsheet on your Regional Event host page in the Host Portal

Finances & Fundraising
- ❑ develop preliminary budget spreadsheet
- ❑ develop fundraising plan and strategies

Registration
- ❑ develop preliminary registration plan with AISC

Equipment
- ❑ determine the storage location for competition equipment so that shipping can occur as soon after the competition as possible.

Host will receive the following items from AISC:
- ❑ Host Guide
- ❑ Host Portal (sites.google.com/aisc.org/ssbchostportal)

October

Finances & Fundraising
- ❑ continue to develop preliminary budget spreadsheet
- ❑ continue to develop fundraising plan and strategies
- ❑ begin developing preliminary event costs to help establish registration pricing. (catering, misc. facility costs, floor covering, etc)

Communication & Media
- ❑ submit Mailer #1 to AISC as a courtesy
- ❑ send out Mailer #1
- ❑ complete website update #1
- ❑ develop plan to recruit volunteers, judges, and sponsors. Prepare correspondence letters

Registration
- ❑ begin the registration planning worksheet

Equipment

- ❑ start pre-event equipment inventory (due November 15)

Host will receive the following items from AISC:

- ❑ website templates & training
- ❑ promotional graphics
- ❑ $2,500 Host School stipend check from AISC

November

Venues & Events

- ❑ determine logistics and needs for each event and venue
- ❑ source catering and other event needs

Finances & Fundraising

- ❑ continue to develop and update budget spreadsheet
- ❑ continue to develop preliminary event costs to help establish registration pricing. (catering, misc. facility costs, floor covering, etc)
- ❑ continue to develop fundraising plan and strategies
- ❑ begin the sponsorship benefit planning worksheet.

Communication & Media

- ❑ prepare Mailer #2
- ❑ prepare for website update #2
- ❑ contact potential sponsors
- ❑ send recruitment letters to potential volunteers/judges

Registration

- ❑ pre-registration closes (November 15)
- ❑ determine registration fees
- ❑ complete the registration planning worksheet
- ❑ determine hotel blocks

Equipment

- ❑ complete pre-event equipment inventory and submit to AISC by November 15.

Host will receive the following items from AISC:

- ❑ full team registration list (After November 15)
- ❑ Head Judge assignment

December/January

Venues & Events

- ❑ ongoing planning activities for venue logistics and catering
- ❑ work with Head Judge to plan Judges' Training and event logistics
- ❑ begin development of signage, event promotional materials, t-shirts and giveaways

Finances & Fundraising

- ❑ continue to develop and update budget spreadsheet
- ❑ finalize registration costs (early December)

- ❑ finalize fundraising plan and strategies
- ❑ submit sponsorship benefit planning worksheet to AISC

Communication & Media

- ❑ submit Mailer #2 to AISC as a courtesy (by December 15)
- ❑ send out Mailer #2 (by December 15)
- ❑ complete website update #2 (by December 15)
- ❑ recruit judges and competition volunteers

Registration

- ❑ finalize registration fees and registration process
- ❑ submit registration worksheet to AISC (early December)
- ❑ work with AISC to create registration form
- ❑ Regional Event registration opens

Host will receive the following items from AISC:

- ❑ certificate of insurance
- ❑ registration payments (via monthly checks)

6-8 Weeks Before Event

Venues & Events

- ❑ finalize schedule, venue logistics and catering
- ❑ start developing parking instructions and campus maps for attendees
- ❑ start developing main competition & aesthetics layouts
- ❑ order signage, promotional materials, t-shirts and giveaways

Finances & Fundraising

- ❑ continue to update budget spreadsheet and manage registration funds
- ❑ coordinate AISC Regional Event sponsorship benefits

Communication & Media

- ❑ submit Mailer #3 to AISC as a courtesy
- ❑ send out Mailer #3
- ❑ complete website update #3
- ❑ finalize recruitment of judges and competition volunteers
- ❑ send judges and competition volunteers event details and confirmations
- ❑ start developing competition and banquet program books

Registration

- ❑ close Regional Event registration

Host will receive the following items from AISC:

- ❑ registration payments (via monthly checks)
- ❑ list of AISC Regional Event sponsors attending your event

3-4 Weeks Before Event

Venues & Events

- ❑ finalize catering contracts and determine menus
- ❑ finalize parking instructions and campus maps for attendees

- ❑ finalize main competition & aesthetics layouts
- ❑ signage, promotional materials, and giveaways are ordered and in hand (or on their way)

Finances & Fundraising

- ❑ continue to update budget spreadsheet

Communication & Media

- ❑ submit Mailer #4 to AISC
- ❑ send out Mailer #4
- ❑ complete Website Update #4
- ❑ confirm all judges and competition volunteers and ensure that they have received event details and instructions
- ❑ provide event details and instructions to sponsors that RSVP'd through AISC
- ❑ finalize competition and banquet program books

Registration

- ❑ order materials for name tags and registration/check-in

Equipment

- ❑ develop plan for transporting all equipment to the venue safely and on time
- ❑ develop plan for inventorying and packing equipment after competition
- ❑ order any materials needed for packing equipment

Host will receive the following items from AISC:

- ❑ registration payments (via monthly checks)
- ❑ list of AISC staff attending event
- ❑ tracking information for SSBC awards shipment

2-3 Weeks Before Event

❑ Review 'Host Preparations'

Each SSBC event has its own preparation requirements. Review the 'Host Preparations' for each event in Part 3 of the Host Guide.

❑ Check-in with committee

Spend time talking with the people who have been delegated responsibilities. Make sure they are clear on what to do and have what they need. Do they have any questions? Solve those problems together.

❑ Inventory and test equipment

At least two weeks before the Regional Event, the Host School should review the equipment for a final time, ensuring that no items have been damaged or gone missing while in storage. See more in Section 2.5: Equipment.

- ❑ Prepare Data Entry station
  See more in Section 3.19: Data Entry Station.

- ❑ Confirm volunteers, judges and sponsors
  Make final contact with volunteers and judges to confirm attendance and inform them of any changes. Provide them with a final plan on when and where to be and their duties. For sponsors, please ensure their sponsor benefits are met and they are greeted upon arrival.

- ❑ Confirm headcounts with the banquet or caterers
  Confirm with any vendors arrival times, clean up, set up, etc. Make sure that your contracts are in order. Many caterers are not able to adjust headcounts the day of the event. Be sure to update them several days prior to the competition with your current headcount. Delegate people to pick up food if necessary.

- ❑ Review SSBC Rules
  As the Host, you may get questions about the competition Rules and procedures. Review the Rules and competition procedures so you can be helpful, but realize your role is not to be the judge.

Post Event Tasks

- ❑ Submit competition score sheet to AISC
  Immediately following the event, the Host School must email the completed scoring spreadsheet and scans of the physical judging data forms to ssbcscorekeeper@aisc.org. This is critical for teams to be invited to the National Finals. Instructions on how to email the results are in the scoring spreadsheet.

- ❑ Inventory equipment
  After your Regional Event concludes, it is required that you complete a full inventory check using the inventory checklist in Appendix 2. We ask that you complete your inventory immediately following the competition, before it is transported to next year's Host. Please submit your inventory checklist within 2 weeks after your event to Sean Faron at faron@aisc.org.

- ❑ Package equipment
  Once you have completed inventory, you must repack your equipment so that it will not be damaged or lost in transport to next year's host. Review the packaging instructions in the Equipment section of the Host Guide. If you have any questions or concerns on how to package your equipment, please contact Sean Faron at faron@aisc.org.

- ❑ Close finances
  Pay vendors. Compile a list of all expenses incurred for the event into your budget.

- ❑ Debrief with planning team
  Discuss and document possible improvements in the process. You may use the questions within the Post-Event Report as a starting point. Document all event details so that future hosts may benefit from your experience.

- ❑ Submit Post Regional Event Report to AISC
  The post Regional Event report and instructions can be found in Appendix 7: Post Regional Event Report. Please submit your post Regional Event report and attachments within 60 days after your event.

- ❑ Thank judges, volunteers and sponsors
  Send a thank you letter to those who helped make your competition a success!

Part Three
Events and Venues

Required Events

The SSBC - Regional Event can be a one-day or two-day event at the discretion of the Host School depending on the number of participating teams and available facilities. For regions with more schools or regions where the pace of competition may be slow, it may be more reasonable to spread the competition events over two days. Required events include the following:

- Registration/Check In
- Captains' Meeting
- Team Practice and/or Social Event (optional)
- SSBC Participant Forum (previously called Business Meeting)
- Judges' Training Session
- Aesthetics (previously called Display)
- Main Competition
- Awards Presentation (banquet optional)

Sample Regional Event Schedule

Sample schedules are shown below for the typical Regional Event spanning over one or two days.

Day One	
Noon. - 2:00 p.m.	Judges' Training
Noon - 2:00 p.m.	Check-in/Aesthetics Setup
2:00 p.m. - 4:00 p.m.	Aesthetics Judging
5:00 p.m. - 7:00 p.m.	SSBC Participant Forum
7:00 p.m. - 9:00 p.m.	Captains' Meeting
Day Two	
8:00 a.m. - 4:00 p.m.	Main Competition
Noon - 2:00 p.m.	Lunch
5:00 p.m. - 6:00 p.m.	Awards Ceremony

3.1 Registration / Check-in

General Information

Before the competition begins, participating students and volunteers should check in with the Host School. The registration table should be in an easily accessible location. The location should be advertised to the participants prior to the competition. At registration, guests should receive a final event program, t-shirts, name badges, and any other information they will need for the competition.

Successful registration table set up example

Event Program

The event program should be distributed to all attendees. Hosts can find a detailed event program sample in Appendix 5: Templates.

Host Preparation

The Host should provide the following:

- ❑ Printed Registration List
- ❑ Pens
- ❑ Name Tags
- ❑ Event Programs

- ❑ Make sure that all teams and judges know when and where the check-in is to be held well in advance of the day.
- ❑ Create a competition program to distribute to attendees.
- ❑ The Host should create name tags for all registered attendees.
- ❑ AISC recommends that Hosts organize materials at the registration table by team in advance. Place all name tags, t-shirts and other materials for the team in a box, and allow one representative from a team to check in. The representative can distribute items to their team accordingly.
- ❑ Prepare check-in items for volunteers, sponsors and judges in addition to attendees.

3.2 Team Practice / Social Events

General Information

If the Regional Event schedule and budget allows for an additional activity, we recommend hosting a social event or team practice.

Team Practice

If the Host School wishes to organize a team construction practice please be sure to schedule it before any competition events start. We recommend a 4 hour, A.M. time slot the day before the main competition. The easiest way to organize this would be in the main competition space if the floors are already taped. If this is not possible, we've seen success with the Host simply providing a separate space and the teams will tape the construction dimensions themselves.

Social Events

Suggestion for social event activities from past SSBC - Regional Events are below. Please keep in mind the additional workload that comes with planning a social event. Alcohol is not permitted at any SSBC - Regional Event activity.

- Dodgeball/Cornhole Tournament
- Off-site event (e.g. bowling, trampoline park, arcade, indoor waterpark)
- Social BBQ



3.3 Team Captains' Meeting

General Information

During the Captains' Meeting, the Rules and Official Clarifications are reviewed and questions are answered by the Regional Event Head Judge for the last time before the competition begins. The flow of the competition, competition order, and competition floor layout are usually discussed at this meeting. Local site conditions are also discussed and if any modifications have been made.

It is a critical event that takes place before teams take to the floor to build their bridges, and therefore, all captains are required to attend. The captain should report back to his/her team and inform them of pertinent information that was discussed.

This meeting is typically conducted by the Head Judge who may invite other judges. Participation in this meeting is often restricted to just team captains and the judges for reasons such as room size limitations.

Head Judge listens to a question

Student asks a question

Captains' Meeting Venue Requirements

Suitable venues may include classrooms and lecture halls with an audio/visual system and a white/black board or flip chart. There should be enough seating for team captains, other team representatives, and any judges who wish to attend. The Captains' Meeting typically lasts between one to two hours.

Host Preparation

The Host should provide the following:

- ❏ A venue that can accommodate the expected crowd. Microphones and an A/V system may be necessary in some cases.
- ❏ A white/black board or flip chart on an easel is very helpful for people wishing to sketch scenarios that clarify their questions and/or answers.
- ❏ A copy of the Rules and the current Official Clarifications to the judge conducting the meeting.
- ❏ Sign in/Attendance sheet

❏ The Host should coordinate with the Head Judge while planning this meeting.

❏ The Head Judge leads the meeting, but all judges should be invited to attend.

❏ The Host should make sure that all teams and judges know when and where the meeting is to be held well in advance of the meeting day.

❏ The Host should make sure that all teams know if the meeting is restricted to the team captains only or if other team members may attend.

3.4 SSBC Participant Forum

General Information

The SSBC Participant Forum is an opportunity for all teams in a region to gather with AISC and discuss the future of the competition in their region. It is required for the Host School to Host the forum in the competition schedule. It is strongly encouraged that each team attends the meeting, but it is not required. The SSBC Participant Forum typically lasts between one to two hours.

Participant Forum Venue Requirements

Suitable venues may include classrooms and lecture halls. An audio/visual system is not required. There should be enough seating for all attendees. If the Host needs to limit attendance we recommend limiting to at least 3 people per team and any judges/faculty who wish to attend. Be sure to notify the teams of any attendance limits.

Sample Agenda/Discussion Topics

1. Introduction & Welcome ~ 5 minutes
2. Attendance is taken ~ 5 minutes
3. Updates from AISC ~ 10 minutes
    a. New scholarships, opportunities and resources for students
    b. Competition changes and updates
4. Discuss the current competition year, open floor. ~ 20 minutes
    a. What challenges did you have this year?
    b. How can AISC support you?
    c. What Rules would you change this year?
5. Future Competitions ~10 minutes
    a. Introduce 2021 Host
    b. Discuss 2022 Host
6. Close & Final Questions

Host Preparation

The Host should provide the following:

- ❑ A venue that can accommodate the expected crowd. Microphones and an A/V system may be necessary in some cases.
- ❑ A white/black board or flip chart on an easel is very helpful for people wishing to sketch scenarios that clarify their questions and/or answers.

- ❑ A copy of the Rules and the current Official Clarifications to the judge conducting the meeting.
- ❑ Sign in /Attendance sheet
- ❑ Printed agendas

- ❑ The Host will work with AISC to create an agenda for the meeting 1 month prior to the event, based on Region feedback from that year. A representative from AISC will lead the meeting.
- ❑ The Host should print meeting agendas for each attendee.
- ❑ The Host will have a least one committee member present to take detailed notes from the forum to submit to AISC.

3.5 Judges' Training

General Information

The SSBC Regional Event Head Judge should hold a training session for the judges before the competition. The training can consist of an in-person training session the day before the competition or earlier as an online training session. This training typically consists of an overview of the Rules, anticipated violations, and techniques for determining compliance with the Rules. Host Schools work with their Regional Event Head Judge to determine what support or facilities from the Host School is needed.

Judges' Training Venue Requirements

A variety of spaces may be suitable, please discuss the venue needs with the Regional Head Judge. If the Regional Head Judge is unable to provide venue specifications, AISC suggests reserving a room on campus, such as a classroom or lecture hall.

Host Preparation

- ❑ The Host is responsible for coordinating all Judges' Training logistics with the Head Judge.
- ❑ The Host must reserve the on campus venue if requested by the Head Judge.
- ❑ The Host should have the Judges' Training scheduled at least 2 months prior to the event, and should make sure that all judges know when and where the training is to be held.

Judge Preparation

- ❑ The Head Judge is responsible for coordinating all Judges' Training logistics with the Host.
- ❑ Head Judge should provide judge assignments and training agenda.
- ❑ Review Rules prior to attending.

3.6 Aesthetics

General Information

Before the main competition, Aesthetics judging (previously called Display) takes place. During Aesthetics judging, all of the bridges will be erected and on display at the same time in the same location.

Aesthetics consists of three parts: Appearance, Name and Poster Board. The Rules do not give any specific guidance on how to combine these three components to arrive at a final ranking of the participating bridges. The Head Judge at each Regional Event can determine the process that will be used. At the National Finals where 40+ bridges are ranked, the official scoring spreadsheet is used to determine aesthetics scores and the aesthetics rankings.

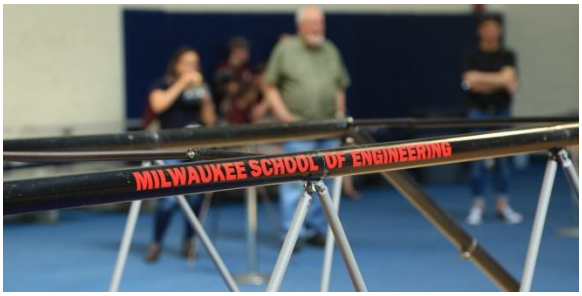
Bridge with school name clearly labeled and poster

Appearance

This is very subjective and is based solely at the judges' discretion.

Name

The name of the school should be displayed on the bridge so that it is easily identified by the judges. It is recommended that letters are at least 1 inch tall and that the full name of the school is used.

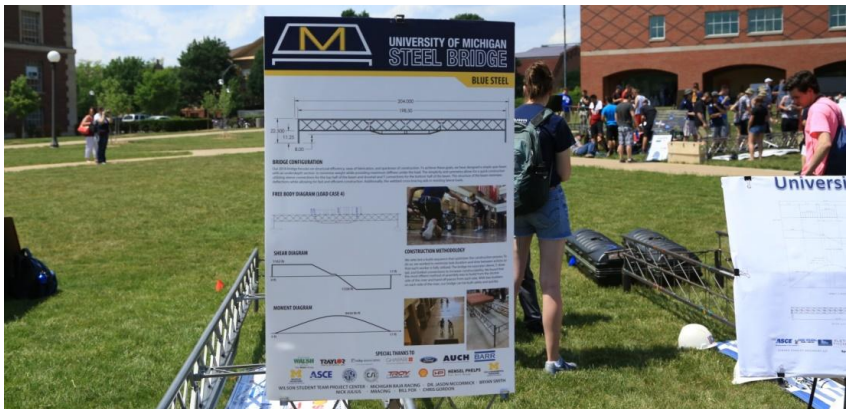


Good example of school name on bridge

Good example of school name on bridge

Poster Board

The Rules list required components for the poster.



Poster at Aesthetics

Aesthetics Venue Requirements

A variety of spaces may be suitable, i.e. plazas, baseball fields, gyms, etc. An area of approximately 8'x24' (this includes aisle space between bridges) will be required for each bridge. Locations for bridge unloading and loading also must be established. A sample layout can be found in Appendix #6: Sample Aesthetics Layout.

Host Preparation

The following items should be provided by the Host at Aesthetics:

- ❑ (1) Copy of the Rules and Official Clarifications
- ❑ A set of aesthetics judging forms (printed from the scoring spreadsheet) for each Aesthetic Judge.
- ❑ Pencils and clipboards for each judge.

- ❑ Computer with the scoring spreadsheet on it. (The results of the aesthetics judging must be entered while the judges are all there and with the bridges still on display so that they can break any ties if necessary.)

- ❑ Review Rules Section 6.2.1.
- ❑ Recruit judges and volunteers.
- ❑ The Host should make sure that all teams and judges know when and where Aesthetics is to be held well in advance of the meeting day.
- ❑ The Host should provide instructions such as a venue plan that indicates where each team should set up their bridge. A committee member or volunteer should be present to provide instructions for setup upon a teams arrival.

Judge Preparation

- ❑ Review Rules Section 6.2.1.
- ❑ Head Judge should assign a panel of judges to score the bridges (three to six works well).

3.7 Main Competition

General Overview

Approximately 10,000 square feet (includes space for spectators) of level floor space is required for the main competition. Typically, two construction lanes, one lateral loading station, two vertical loading stations, one weigh station and a scoring station are operating simultaneously at a Regional Event. Specific lane and station counts for each region can be found in Appendix #2 .

There are 7 stages to the main competition. Each stage is explained in further detail in a separate section of this guide, along with setup instructions.

1. Pre-Construction
2. Construction
3. Post- Construction
4. Lateral Load Test
5. Vertical Load Test
6. Bridge Weight
7. Data Entry

Main Competition Venue

The main competition venue should be finalized with signed contracts by September 2019 unless discussed with AISC. Approximately 10,000 square feet (includes space for spectators) of level floor space is required for the main competition. A venue that is indoors or weather resistant with a concrete floor surface is ideal. Some indoor facilities, such as athletic facilities with sensitive floors, may require installation of a protective layer of plywood. For outdoor venues, paved areas, such as parking lots, work well. Hosts should follow the following guidelines when reserving a main competition space:

- A smooth and level ground surface is needed at the location where bridges are constructed and dimensions are checked since clearances are measured from the ground. Load testing requires rigid (i.e. Portland cement concrete) pavement that is level and smooth. If rigid pavement is not accessible, provision must be made to prevent bridges from sinking during load testing. Floor areas where bridges will bear should lie in a common plane. Ideally, the Host will provide a floor that deviates from planarity less than +/- ¼".
- If any competition event is located outside, a rain alternate must be booked as an alternate

- Ample parking should be available near the competition venue for judges and competitor loading and unloading. Bathrooms should be available near the competition venue, as well.
- The Host is responsible for setting up the competition space prior to the event. This includes taping and protecting the floors. The set-up must be complete 4 hours prior to the competition start. This should be allocated for in the venue reservation contract. AISC recommends that the venue reservation includes at least 24 hours prior to your competition start time for setup.
- There must be a power source for the scoresheet computer.

Competition Space Layout

Hosts should create a plan of the competition space that shows each station in order to determine if there are any space conflicts and to aid in setup. See Appendix 1: Sample Competition Layout for an example. This should be reviewed by the Regional Head Judge.

Safety Gear

Before the start of Construction and Vertical and Lateral Loading, judges should verify that all participating team members are wearing proper safety equipment. Proper safety equipment includes

Student dressed in proper safety gear

- Hardhat
- Protective eyewear
- Work gloves
- Construction boots

Lunch

If the competition is expected to run through lunch time, a meal should be provided for the judges, other volunteers and competitors. Host Schools may either include

lunch in the registration fee and provide box lunches at the competition or they may ensure that there are vendors at the competition venue (food counters, food trucks, etc.) that participants can quickly access on their own. Judges and volunteers may not have time to leave the competition floor so it is preferred that the Host School provides lunch to these people.

Host Preparation

- ❑ The Host is responsible for setting up the competition space prior to the event. The set-up must be complete 4 hours prior to the competition start.
- ❑ The Host must have all competition lanes and stations completely ready prior to the start of the competition.
- ❑ The Host should protect the floor if required by the venue.
- ❑ The Host should test the equipment in advance to ensure that everything is functioning properly.

Judge Preparation

- ❑ Review Rules Sections 10.1.5 and 11.2.1.3
- ❑ Judges should read the Rules to determine what equipment is required during construction and loading.

3.8 Construction Area Setup

Equipment

At each construction station, set out all equipment. The items listed are for each construction lane. The following items are provided by AISC and should be found in the equipment shipment.

1	Plywood template for passageway (Rule 9.3.8)
1	Plywood template for ground clearance (Rule 9.3.4)
1	Wood box for member check (Rule 8.2.2.2)
2	2"x4"x 6" Wood block with 25 ft string line
1	Magnet
1	4"-0" Level
1	Flashlight
2	Stopwatch
2	Tape measure (25 ft minimum)
5	Clipboard
1	Roll of tape
1	1/8" x1" x3" Steel bar (Rule 9.3.9)
1	1/4" x1" x3" Steel bar (Rule 9.3.9)

Host Preparation

The following items should be provided by the Host for each construction lane:

- ❑ (1) Copy of the Rules and Official Clarifications
- ❑ (15) Data entry sheets printed from Scoring Spreadsheet
- ❑ Pencils
- ❑ Tape - The Host should purchase additional tape for the construction lanes. A variety of masking tape, duct tape, and other types can be used to tape the floor. The selected tape should be tested to ensure that it adheres to the competition floor surface but does not damage the floor. Tape in a color that contrasts with the floor surface is recommended so

that it is easily seen by judges. Clear tape can be used over the masking tape in the footing and river bank areas for protection.

- ❑ The Host should have the construction site completely ready prior to the start of the competition. This includes setting out the equipment for each stage.
- ❑ See Appendix 4: Construction Lane Taping Plan for instructions on how to tape the construction lanes.
- ❑ The Host should test the equipment in advance to ensure that everything is functioning properly.
- ❑ If the Host is unfamiliar with construction, go to YouTube and search on "steel bridge competition" to see a variety of construction videos.

3.9 Pre-Construction

Pre-Construction Equipment

The following equipment will be used by the judges during this phase:

- ❏ Tape measure
- ❏ Magnet
- ❏ Tape for marking members that need to be watched during construction
- ❏ Wood box for member check
- ❏ Clipboards and pencils

Staging area with bridge ready to go

General Information

Once the team begins to move their equipment and materials into the staging area, the judges can start checking the members for compliance with the Rules using the data entry sheets. Everything that goes into the staging area is subject to the Rules whether it is used in the bridge or not. Any noncompliant item will be penalized.

Judges should verify that competitors are wearing the required safety equipment correctly. See Rules Section 10.3.2 for details.

Competitors are responsible to make sure that members, fasteners, tools, piers (if applicable per Rules), and other items are placed in the staging area as specified in the

Rules. Competitors are encouraged to be efficient in laying out their items so as to not inhibit the flow of the competition.

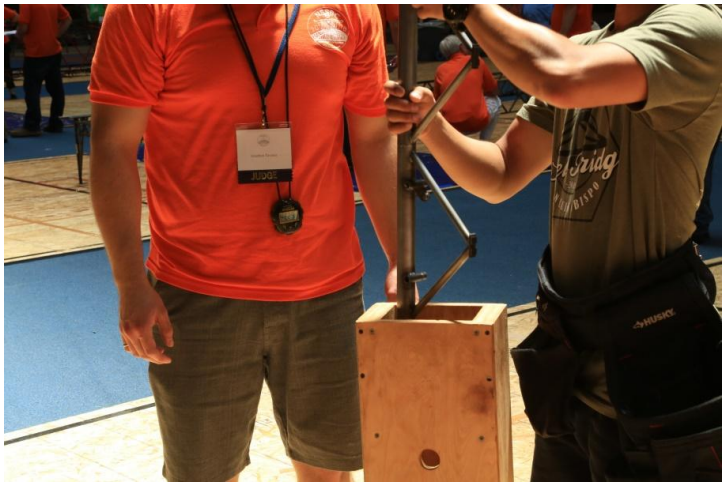
After the judges have completed the check, the team captain is to sign the bottom of the pre-construction checklist. The team captain's signature indicates that they understand and accept any penalties that have been levied. The team captain should be given time to check the Rules and make any appeals necessary to the Head Judge before signing the form.

Common Violations

There are several common violations. Some are design issues and others are either fabrication or erection issues. The following sections are intended to alert the judges and competitors. Read the Rules for complete information.

Member Size Limits - Rules Section 8.2.2.2

It would appear that the majority of violations to this rule result from designers pushing the specified limits. The judges will try to orient the member in the most advantageous position to get it in the box, but if it doesn't fit EASILY into the box, a penalty is imposed.



Bolt, Nut and Hole Specifications – Rules Sections 8.2.3, 8.2.4, and 8.2.5

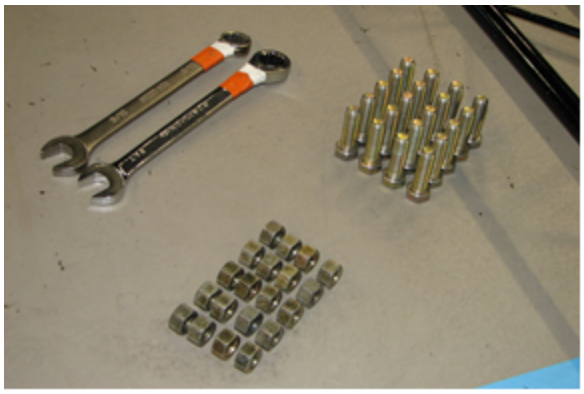
Bolts and loose nuts must not be modified in any way (they may be painted) from their purchased condition. Bolts may not be ground to a point on their ends. Nuts may be welded to members. Holes must meet certain requirements specified in the Rules.

Tool Size - Rules Section 10.2.4

A tool must not weigh more than 20 pounds. Tools must fit into the same member box. However, after timed construction has started, tools may be assembled to form a larger tool.

Item Layout - Rules Section 10.6.1

There are a number of specific requirements about where particular types of items can be placed. Watch for how competitors lay out their items in the staging yard.
Certain items are to be in designated locations in the staging yard, and nuts and bolts may be in contact with each other. However every member, tool, loose nut and bolt must be in contact with the ground. In the provided image, some of the nuts and bolts are not in contact with the ground and hence are illegal. This must be fixed before timed construction.



Permissible way to lay out items

Illegal way to lay out items

3.10 Construction

Construction Equipment

The following equipment will be used by the judges during this phase:

- ❏ Stopwatches
- ❏ Clipboards and pencils

General Information

The team captain notifies the lead lane judge that the team is ready to start. The lane judges verify that the site is ready, and then they start the team with a countdown.

One lane judge should have primary responsibility for the stopwatch. If any judge calls out "stop," the stopwatch is paused as well any activity on the floor. Judges will stop the erection of the bridge if any of the Rules in Section 10.7.1 are violated. As specified in the Rules, the team captain is told the reason for the stop work order and is given a short time to consider with the team how they can build the bridge without violating the Rules.

At no time should the judges or spectators make suggestions to the team on how they can comply with the Rules. Judges shall only tell them what the Rules will not allow them to do.

If the team is unable to find a means for constructing the bridge according to the Rules, then the Head Judge is called in to rule the bridge as being ineligible to complete. The Head Judge marks the applicable ineligibility on the construction checklist and has the team captain sign the bottom of the form. If a bridge is ruled as being ineligible, it is removed from the remainder of the competition and does not proceed to the subsequent stations and load tests.

'Accidents' as defined in the Rules do not result in stop time. One lane judge should have primary responsibility for keeping the checklist for construction and will record accidents as they occur. Judges will call out accidents as they occur.

Accidents must be rectified immediately. For example, if a builder drops a fastener in the water, a builder must retrieve the fastener immediately. If a builder has to create another accident by stepping in the water to retrieve the errant fastener they are not assessed for the necessary accident. If a builder does not move to rectify the accident, then the judge may call the accident again and again until it is rectified. See Rules Section 10.4 for a full explanation of accidents.

Time is complete when the team captain indicates that they are done and the judges ensure that all items and people are where they should be per the Rules Section 10.9.1.

Team during construction

Team during construction

3.11 Post-Construction

Post-Construction Equipment

The following equipment will be used by the judges during this phase:

- ❑ Plywood template for passageway (Rules Sections 9.3.8)
- ❑ Plywood template for ground clearance (Rules Section 9.3.4)
- ❑ 1/8"x1"x3" steel bar (Rules Section 9.3.9)
- ❑ 1/4"x1"x3" steel bar (Rules Section 9.3.9)
- ❑ Tape measure
- ❑ 4 foot level
- ❑ Flashlight
- ❑ Clipboards and pencils
- ❑ 2"x4"x6" wood blocks with 25-foot string line

General Information

Once the team captain turns the bridge over to the judges for the post-construction check, the team can do no more work on the bridge. The judges then inspect the bridge for compliance under the Rules Section 9. Any violations are recorded on the judging form. Teams are only allowed to repair certain violations as dictated in Section 9.4 of the Rules. Certain violations must be fixed. If it is not possible to fix these problems, then the bridge will be ruled ineligible for any awards by the Head Judge and will not be approved for load testing.

Once the judges finish their work, they meet with only the team captain to review the results. If the team captain disputes the findings or asks for clarifications, he/she works with the lane judges to resolve the issues. If the disputes are not resolved, the Head Judge is called in to make a ruling. At the end of this process, the team captain is to sign the bottom of the form which, along with the rest of the judging forms, is moved with the bridge to the next station. Teams may appeal certain decisions after the competition by following Rules Section 15.

Common Violations

There are several common violations that seem to occur. Some are design issues, others are either fabrication or erection issues. The following sections are intended to warn bridge designers and judges of these persistent problems.

Clearance - Rules Sections 9.3.4, 9.3.5, and 9.3.8:

There is a passage way above the decking support and also a navigation clearance under the bridge. There have always been clearance problems at the competition as teams, feel the need to push these limits.
The clearance is measured with plywood templates. Alternatively, the judges may measure from a taut string line if there is a question of the flatness of the floor. The height of this clearance varies from year to year and is likely to be different than shown in the accompanying images.

Plywood templates for passageway and ground clearance checks

Connections - Rules Section 9.4

Be sure to read this section carefully. We tend to see quite a few violations of these Rules.

3.12 Transportation from Station to Station

General Information

While transporting the bridge from the erection site to the loading areas, it is possible that the fasteners may fall off or other damage occurs. If this happens, the marshal or a judge should notify the Head Judge at once. There is a penalty for falling fasteners. Also, care should be taken during transport and staging to ensure that the bridge is not 'preloaded' either by bouncing or other means that would remove as-built slack from the bridge. Marshals and judges should make sure that no one leans or sits on a bridge. At Nationals, if such situations arise, the Head Judge will make the team disassemble their bridge and start over again. There are safeguards put in place to ensure that the rebuild cannot improve on the original performance (but you can do worse!). So, don't mess with the bridge!

Competitor sitting on a bridge

Host Preparation

- ❑ When designing the competition floor plan be sure to keep the flow of bridges from station to station in mind.

3.13 Lateral Load Station Setup

Equipment

At each lateral load station, set out all equipment. The items listed are for each lateral load station. The following items are provided by AISC and should be found in the equipment shipment.

1	Lateral load stand with rope lanyard,carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)
1	Steel grating (no tabs)
3	Loading angles (25 lb. each)
1	Tape measure (25 ft minimum)
1	Clipboard
1	Laser plumb-bob
4	AAA batteries
1	Roll of tape
4	Paper sway target with 1" radius

Host Preparation

The following items should be provided by the Host for each lateral load station:

- ❑ (1) Copy of the Rules and Official Clarifications
- ❑ Pencils

- ❑ Review Rules Section 11.4.
- ❑ The Host should have the lateral load stations completely ready prior to the start of the competition.
- ❑ The Host should test the equipment in advance to ensure that everything is functioning properly.

3.14 Lateral Load Test

General Information

At the load station, the judge makes sure that all team members have the required safety gear. One piece of grating and 75 pounds of load are added to the bridge as specified by the Rules. The judge installs the laser plumb bob and paper target. The competitors may provide lateral restraint to the bridge.

Competitors may provide their own lateral restraint devices (Rules Section 11.4.1) to resist sliding. Note that any device used must only prevent sliding and cannot prevent uplift or rotation. The devices must not do damage to the floor. It is most common for competitors to use their feet as the restraining devices.

Lateral load test station

Use of an object (steel angle) to resist sliding

Pushing down on bridge is not permitted

Foot of competitor used to prevent sliding

A pulley system is used to apply the lateral load to the bridge. The lateral load pulley stand should be set up next to the bridge. On one end of the pulley, a dog collar is attached to the bridge stringer. On the other end of the pulley, loading plates are applied. One team member should stand on the stand in order to prevent slip of the pulley stand.

Lateral load pulley stand

Lateral Load Test Judges Preparation

- ❑ Review Rules Section 11.4.
- ❑ Judges should test the equipment in advance to ensure that everything is functioning properly.

3.15 Vertical Load Station Setup

Equipment

At each vertical load station, set out all equipment. The items listed are for each vertical load station. The following items are provided by AISC and should be found in the equipment shipment.

8	Safety support jack stands
4	Steel bearing plates (24" x 24")
2	Steel grating with tabs
100	Loading angles (25 lb. each)
2	Vertical deflection measurement device
1	2”x4”x 4” Wood block
1	Tape measure (25 ft minimum)
1	Clipboard
1	Laser plumb-bob
4	AAA batteries
1	Roll of tape
4	Paper sway target with 1” radius
1	2" x 4" x 3'-6" Wood piece
2	C-clamp

Host Preparation

The following items should be provided by the Host for each vertical load station:

- ❑ (1) Copy of the Rules and Official Clarifications
- ❑ (3) Binder clips
- ❑ Pencils

- ❑ Review Rules Section 11.5.
- ❑ The Host should test the vertical deflection measurement devices and replace batteries prior to the competition per the Equipment Guide.
- ❑ The Host should have the vertical load stations completely ready prior to the start of the competition.
- ❑ The Host should protect the floor if required by the venue.
- ❑ Sturdy shoes (leather boots preferred) on the feet of all volunteers working in the loading areas.

3.16 Vertical Load Test

General Information

At the load station, the judge ensures that all team members have the required safety gear. The judge then will have the team position the bridge in the loading area.

The load judge will place safety supports under the grating in such a way that prevents the grating from falling more than a few inches in case of failure while still permitting the maximum allowed deflection. These safety supports are modified jack stands.

Once the safety supports are in place, the load judge will carefully locate the decking on the bridge and have the team apply the preload.

The sway targets and vertical deflection measuring devices are then installed and initial readings taken and recorded on the judging form for the load station. The Team Captain should be invited to verify the setup and initial readings.

Loading is done manually by team members. Once loading starts, it should be accomplished in a safe, smooth, and continuous manner. Teams should not be allowed to stop the loading to look at gages or develop strategy. All teams should load in the same manner. Judges may stop loading for safety reasons or if the bridge exceeds sway or deflection limits.

Vertical load station

At the end of the load stage, the judge will record the deflection readings and allow the team captain to verify them.

After the last deflection reading, the team should unload the bridge safely and quickly. Note that the bridge does not pass the load test until it is fully unloaded. If it collapses at any time it will be penalized according to the Rules.

Do not touch the deflection measurement devices. If the devices are compromised in any way by anyone during load testing, then the bridge must be disassembled and the team must start the entire competition sequence again in accordance with Rule 11.5.4. The reason for this is that the initial loading will take out any slack in the joints and reloading the bridge has the potential to result in smaller deflections than would have been seen in an uninterrupted first loading.

When all is done and recorded, the judge reviews the data form with the team captain. The team captain signs the form when all questions have been resolved and the forms are given to the marshal who accompanies the bridge to the next station.

Judges Preparation

- ❑ Review Rules Section 11.5.
- ❑ Sturdy shoes (leather boots preferred) on the feet of all volunteers working in the loading areas.
- ❑ Judges should test the equipment in advance to ensure that everything is functioning properly.
- ❑ For safety reasons, do not stick your head or any other body part under the bridge to read gages or for any other reason. Competitors must be encouraged to keep their feet from under the bridge as well. Bridges may down very quickly and without warning.

3.17 Weight Station Setup

Equipment

At each bridge weight station, set out all equipment. The items listed are for each bridge weight station. The following items are provided by AISC and should be found in the equipment shipment.

1	Clipboard
4	Scales

Weigh Station Host Preparation

The following items should be provided by the Host for each vertical load station:

- ❑ (1) Copy of the Rules and Official Clarifications
- ❑ Pencils
- ❑ (4) Plywood pieces to protect top of scales. The plywood piece should be 11 x 11 inches and at least 1 inch thick.

❑ The Host should have the weigh station completely ready prior to the start of the competition.

❑ The Host should test the equipment in advance to ensure that everything is functioning properly.

3.18 Bridge Weight Station

Bridge on the scales to measure weight

General Information

The goal at this station is to determine the weight of the bridge to the nearest pound. A scale will be positioned under each leg of the bridge.

The judging forms and scoring spreadsheet have space to record four measurements. The weighing judge should not add up the values. The spreadsheet will compute the total weight.

The team captain should verify all weight measurements and certify the results by signing the judging form. The judging forms are then sent with the team captain to the data entry station, if this is the end of the judging, or to the next station.

3.19 Data Entry Station

General Information

Only the marshal (if assigned) and the team captain should go to this station. The marshal may help resolve any issues that the data entry person has with interpreting the handwriting of the judges. A judge should also be assigned to either oversee or actually do the data entry.

It is best if the team captain reads off the data as the computer operator inputs the values. The two of them should verify that all data is entered correctly.

Once the data is input, the data entry person prints out a copy of the results for the team captain to review. The team captain is responsible for verifying that the scoring computations are correct.

If there is a problem with the scoring spreadsheet, do not modify the spreadsheet. Send an email to ssbcscorekeeper@aisc.org with a contact phone number and a description of the problem. The issue will be resolved as soon as possible which may be after the competition. Keep all raw data in the data entry sheets.
Once all concerns are resolved, then the team captain signs the printout and returns it to the data entry person who staples the print out to the judging forms. The marshal is free to go at this point.

Data from score sheets is entered to the computer spreadsheet

An additional copy of the results are printed so that the team captain has something to take to show the team. A PDF version of the team results can also be emailed to the faculty advisor and local contact whose email addresses are entered into the spreadsheet. The team captain is informed that the results are not final until after a second check on data entry is made after the competition.

At the end of the competition, the Head Judge or someone designated by the Head Judge should go back through the judging forms and scoring spreadsheet to double check that all data was properly input. Data entry errors are very common. An effort should be made to contact the affected team captain before the awards ceremony if a discrepancy is found during this later check.

At the end of the data entry, run the ranking macro in the scoring spreadsheet to determine the final results. Do not try to sort and rank manually. The button for the macro can be found on the results sheet.

Then, run the printing macro to get a properly formatted copy of the results. Sufficient copies of the final result page should be printed/copied for distribution to the teams at the awards ceremony. The Host can also automatically send the ranking sheet to all faculty advisors and local contacts listed in the spreadsheet.

There is also a tab in the scoring spreadsheet labeled 'Banquet'. This sheet can be printed for use during the awards ceremony.

Submit Scoresheet to AISC

Finally, the Host School should email the completed scoring spreadsheet to ssbcscorekeeper@aisc.org. Instructions on how to email the results are in the spreadsheet. The Rules Committee must have this spreadsheet as soon as possible after the competition so that they have a basis for evaluating appeals. Also, AISC cannot send invitations to the National Finals until this spreadsheet is received. AISC will post the scores to aisc.org/ssbc.

The physical judging data forms should be scanned and sent with the scoring spreadsheet. Once the Host School receives an email confirming that the spreadsheet and data forms have been received, they may dispose of the paper copies.

Host Preparation

The following items should be provided by the Host for the data entry station:

- ❑ Table and chairs
- ❑ Power source, extension cords, power strip
- ❑ Computer with scoring spreadsheet

- ❑ Printer with paper and ink/toner*
- ❑ Pen
- ❑ Stapler with plenty of staples
- ❑ Copy of the Rules and Official Clarifications
- ❑ Internet (if necessary)

❑ Hosts should assign one committee member or trusted volunteer to run the scoresheet table.

❑ Hosts should locate the data entry station away from prying eyes.

❑ Host must submit the scoresheet and scanned physical judging data forms to ssbcscorekeeper@aisc.org immediately following the competition.

3.20 Awards Ceremony

General Overview

The ceremony can be as simple as a presentation of the awards on the competition floor, or it may be a more extensive banquet with a keynote speaker. All awards ceremonies should be hosted by a student MC(s) and should include an acknowledgement to sponsors and volunteers and a presentation of awards. Optional components may include a keynote speaker, and refreshments and food. No alcohol should be served at SSBC events.

Plaques/Awards

AISC provides a total of nine plaques for the competition to be distributed at the awards ceremony. These will be shipped to the Host School to arrive two weeks ahead of the Regional Event.

- 1st, 2nd, and 3rd Place Overall
- 1st Place Construction Speed
- 1st Place Lightness
- 1st Place Aesthetics
- 1st Place Stiffness
- 1st Place Economy
- 1st Place Efficiency

Awards Ceremony Venue

The awards ceremony location can be on the main competition floor and should include seating for all participants and any sponsors, judges, and volunteers who wish to attend. Audio/visual equipment should be provided. Possible venues may include auditoriums, large lecture rooms, and banquet facilities.

Host Preparation

At a minimum, the following items should be provided by the Host for the awards ceremony:

- ❑ Table for displaying awards
- ❑ AV and Microphone
- ❑ Hosts should review the awards prior to the competition to check for damage during transport.
- ❑ Host must have the awards at the ceremony and display them in order of award announcement.

Part Four

Appendix & Templates

Appendix 1: Sample Competition Layout

The following drawing is an example of a competition space layout. The number of stations will vary from region to region.

Appendix 2: Regional Event Equipment Inventory Checklist

This is a list of all items provided by AISC for Regional Event hosts. Please review the inventory carefully and verify that all items have been received and are in good working condition. If you find any equipment in poor condition, please note this in the notes section and take detailed pictures.

2020 SSBC Carolinas Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	1	2	1

Equipment Overview
Total weight: ~6200 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				1	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				1	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			203	☐			☐		
Vertical deflection measurement device			2		2	6	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2"x4"x 6" Wood block with 25 ft string line	2					4	☐			☐		
2"x4"x 4" Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4"-0" Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			7	☐			☐		
Clipboard	5	1	1	1		14	☐			☐		
Laser plumb-bob		1	1			3	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			12	☐			☐		
Roll of tape	1	1	1			5	☐			☐		
Paper sway target with 1" radius		4	4			12	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8" x1" x3" Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		

2020 SSBC Deep South Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	1	2	1

Equipment Overview
Total weight: ~6200 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				1	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				1	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			203	☐			☐		
Vertical deflection measurement device			2		2	6	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2”x4”x 6” Wood block with 25 ft string line	2					4	☐			☐		
2”x4”x 4” Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4”-0” Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			7	☐			☐		
Clipboard	5	1	1	1		14	☐			☐		
Laser plumb-bob		1	1			3	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			12	☐			☐		
Roll of tape	1	1	1			5	☐			☐		
Paper sway target with 1” radius		4	4			12	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8” x1” x3” Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		
Bare prepped calipers (spare for Deflection Measurement System)						0	☐			☐		

2020 SSBC Great Lakes Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	2	2	1

Equipment Overview
Total weight: ~6500 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				2	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				2	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			206	☐			☐		
Vertical deflection measurement device			2		2	6	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2”x4”x 6” Wood block with 25 ft string line	2					4	☐			☐		
2”x4”x 4” Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4”-0” Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			8	☐			☐		
Clipboard	5	1	1	1		15	☐			☐		
Laser plumb-bob		1	1			4	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			16	☐			☐		
Roll of tape	1	1	1			6	☐			☐		
Paper sway target with 1” radius		4	4			16	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8” x1” x3” Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		

2020 SSBC Metropolitan Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	1	1	1

Equipment Overview
Total weight: ~3700 lbs. 2 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				1	☐			☐		
Safety support jack stands			8			8	☐			☐		
Steel bearing plates (24" x 24")			4			4	☐			☐		
Steel grating no tabs		1				1	☐			☐		
Steel grating with tabs			2			2	☐			☐		
Loading angles (25 lb. each)		3	100			103	☐			☐		
Vertical deflection measurement device			2		2	4	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2”x4”x 6” Wood block with 25 ft string line	2					4	☐			☐		
2”x4”x 4” Wood block			1			1	☐			☐		
Magnet	1					2	☐			☐		
4”-0” Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			6	☐			☐		
Clipboard	5	1	1	1		13	☐			☐		
Laser plumb-bob		1	1			2	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			8	☐			☐		
Roll of tape	1	1	1			4	☐			☐		
Paper sway target with 1” radius		4	4			8	☐			☐		
2" x 4" x 3'-6" Wood piece			1			1	☐			☐		
1/8” x1” x3” Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			2	☐			☐		
Bare prepped calipers (spare for Deflection Measurement System)						0	☐			☐		

2020 SSBC Mid-Atlantic Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	1	2	1

Equipment Overview
Total weight: ~6200 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				1	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				1	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			203	☐			☐		
Vertical deflection measurement device			2		2	6	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2”x4”x 6” Wood block with 25 ft string line	2					4	☐			☐		
2”x4”x 4” Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4”-0” Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			7	☐			☐		
Clipboard	5	1	1	1		14	☐			☐		
Laser plumb-bob		1	1			3	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			12	☐			☐		
Roll of tape	1	1	1			5	☐			☐		
Paper sway target with 1” radius		4	4			12	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8” x1” x3” Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		
Bare prepped calipers (spare for Deflection Measurement System)						0	☐			☐		

2020 SSBC Mid-Continent Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	2	2	1

Equipment Overview
Total weight: ~6500 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				2	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				2	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			206	☐			☐		
Vertical deflection measurement device			2		2	6	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2”x4”x 6” Wood block with 25 ft string line	2					4	☐			☐		
2”x4”x 4” Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4”-0” Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			8	☐			☐		
Clipboard	5	1	1	1		15	☐			☐		
Laser plumb-bob		1	1			4	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			16	☐			☐		
Roll of tape	1	1	1			6	☐			☐		
Paper sway target with 1” radius		4	4			16	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8” x1” x3” Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		
Bare prepped calipers (spare for Deflection Measurement System)						0	☐			☐		

2020 SSBC Mid-Pacific Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	1	3	1

Equipment Overview
Total weight: ~8700 lbs. 6 pallets of angles, 3-4 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				1	☐			☐		
Safety support jack stands			8			24	☐			☐		
Steel bearing plates (24" x 24")			4			12	☐			☐		
Steel grating no tabs		1				1	☐			☐		
Steel grating with tabs			2			6	☐			☐		
Loading angles (25 lb. each)		3	100			303	☐			☐		
Vertical deflection measurement device			2		2	8	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2”x4”x 6” Wood block with 25 ft string line	2					4	☐			☐		
2”x4”x 4” Wood block			1			3	☐			☐		
Magnet	1					2	☐			☐		
4”-0” Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			8	☐			☐		
Clipboard	5	1	1	1		15	☐			☐		
Laser plumb-bob		1	1			4	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			16	☐			☐		
Roll of tape	1	1	1			6	☐			☐		
Paper sway target with 1” radius		4	4			16	☐			☐		
2" x 4" x 3'-6" Wood piece			1			3	☐			☐		
1/8” x1” x3” Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			6	☐			☐		
Bare prepped calipers (spare for Deflection Measurement System)						0	☐			☐		

2020 SSBC Midwest Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	1	2	1

Equipment Overview
Total weight: ~6200 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				1	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				1	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			203	☐			☐		
Vertical deflection measurement device			2		2	6	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2"x4"x 6" Wood block with 25 ft string line	2					4	☐			☐		
2"x4"x 4" Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4"-0" Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			7	☐			☐		
Clipboard	5	1	1	1		14	☐			☐		
Laser plumb-bob		1	1			3	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			12	☐			☐		
Roll of tape	1	1	1			5	☐			☐		
Paper sway target with 1" radius		4	4			12	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8" x1" x3" Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		

2020 SSBC New England Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	2	2	2

Equipment Overview
Total weight: ~6500 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				2	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				2	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			206	☐			☐		
Vertical deflection measurement device			2		2	6	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2"x4"x 6" Wood block with 25 ft string line	2					4	☐			☐		
2"x4"x 4" Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4"-0" Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			8	☐			☐		
Clipboard	5	1	1	1		16	☐			☐		
Laser plumb-bob		1	1			4	☐			☐		
Scale				4	1	9	☐			☐		
AAA batteries		4	4			16	☐			☐		
Roll of tape	1	1	1			6	☐			☐		
Paper sway target with 1" radius		4	4			16	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8" x1" x3" Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		

2020 SSBC North Central Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	1	2	1

Equipment Overview
Total weight: ~6200 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				1	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				1	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			203	☐			☐		
Vertical deflection measurement device			2		2	6	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2”x4”x 6” Wood block with 25 ft string line	2					4	☐			☐		
2”x4”x 4” Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4”-0” Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			7	☐			☐		
Clipboard	5	1	1	1		14	☐			☐		
Laser plumb-bob		1	1			3	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			12	☐			☐		
Roll of tape	1	1	1			5	☐			☐		
Paper sway target with 1” radius		4	4			12	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8” x1” x3” Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		
Bare prepped calipers (spare for Deflection Measurement System)						0	☐			☐		

2020 SSBC Ohio Valley Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
3	1	2	1

Equipment Overview
Total weight: ~6500 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				1	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				1	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			203	☐			☐		
Vertical deflection measurement device			2		2	6	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					3	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					3	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					3	☐			☐		
2"x4"x 6" Wood block with 25 ft string line	2					6	☐			☐		
2"x4"x 4" Wood block			1			2	☐			☐		
Magnet	1					3	☐			☐		
4"-0" Level	1					3	☐			☐		
Flashlight	1					3	☐			☐		
Stopwatch	2					6	☐			☐		
Tape measure (25 ft minimum)	2	1	1			9	☐			☐		
Clipboard	5	1	1	1		19	☐			☐		
Laser plumb-bob		1	1			3	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			12	☐			☐		
Roll of tape	1	1	1			6	☐			☐		
Paper sway target with 1" radius		4	4			12	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8" x1" x3" Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					3	☐			☐		
C-clamp			2			4	☐			☐		

2020 SSBC Pacific Northwest Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	2	2	1

Equipment Overview
Total weight: ~6500 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				2	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				2	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			206	☐			☐		
Vertical deflection measurement device			2		2	6	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2”x4”x 6” Wood block with 25 ft string line	2					4	☐			☐		
2”x4”x 4” Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4”-0” Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			8	☐			☐		
Clipboard	5	1	1	1		15	☐			☐		
Laser plumb-bob		1	1			4	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			16	☐			☐		
Roll of tape	1	1	1			6	☐			☐		
Paper sway target with 1” radius		4	4			16	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8” x1” x3” Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		
Bare prepped calipers (spare for Deflection Measurement System)						0	☐			☐		

2020 SSBC Pacific Southwest Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	2	2	1

Equipment Overview
Total weight: ~6500 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				2	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				2	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			206	☐			☐		
Vertical deflection measurement device			2		4	8	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2”x4”x 6” Wood block with 25 ft string line	2					4	☐			☐		
2”x4”x 4” Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4”-0” Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			8	☐			☐		
Clipboard	5	1	1	1		15	☐			☐		
Laser plumb-bob		1	1			4	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			16	☐			☐		
Roll of tape	1	1	1			6	☐			☐		
Paper sway target with 1” radius		4	4			16	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8” x1” x3” Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		
Bare prepped calipers (spare for Deflection Measurement System)						0	☐			☐		

2020 SSBC Rocky Mountain Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	1	2	1

Equipment Overview
Total weight: ~6200 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				1	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				1	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			203	☐			☐		
Vertical deflection measurement device			2		3	7	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2”x4”x 6” Wood block with 25 ft string line	2					4	☐			☐		
2”x4”x 4” Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4”-0” Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			7	☐			☐		
Clipboard	5	1	1	1		14	☐			☐		
Laser plumb-bob		1	1			3	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			12	☐			☐		
Roll of tape	1	1	1			5	☐			☐		
Paper sway target with 1” radius		4	4			12	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8” x1” x3” Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		
Bare prepped calipers (spare for Deflection Measurement System)						0	☐			☐		

2020 SSBC Southwest Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
3	1	3	1

Equipment Overview
Total weight: ~9100 lbs. 6 pallets of angles, 3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				1	☐			☐		
Safety support jack stands			8			24	☐			☐		
Steel bearing plates (24" x 24")			4			12	☐			☐		
Steel grating no tabs		1				1	☐			☐		
Steel grating with tabs			2			6	☐			☐		
Loading angles (25 lb. each)		3	100			303	☐			☐		
Vertical deflection measurement device			2		2	8	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					3	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					3	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					3	☐			☐		
2”x4”x 6” Wood block with 25 ft string line	2					6	☐			☐		
2”x4”x 4” Wood block			1			3	☐			☐		
Magnet	1					3	☐			☐		
4”-0” Level	1					3	☐			☐		
Flashlight	1					3	☐			☐		
Stopwatch	2					6	☐			☐		
Tape measure (25 ft minimum)	2	1	1			10	☐			☐		
Clipboard	5	1	1	1		20	☐			☐		
Laser plumb-bob		1	1			4	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			16	☐			☐		
Roll of tape	1	1	1			7	☐			☐		
Paper sway target with 1” radius		4	4			16	☐			☐		
2" x 4" x 3'-6" Wood piece			1			3	☐			☐		
1/8” x1” x3” Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					3	☐			☐		
C-clamp			2			6	☐			☐		
Bare prepped calipers (spare for Deflection Measurement System)						0	☐			☐		

2020 SSBC Texas Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	1	2	1

Equipment Overview
Total weight: ~6200 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				1	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				1	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			203	☐			☐		
Vertical deflection measurement device			2		2	6	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2"x4"x 6" Wood block with 25 ft string line	2					4	☐			☐		
2"x4"x 4" Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4"-0" Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			7	☐			☐		
Clipboard	5	1	1	1		14	☐			☐		
Laser plumb-bob		1	1			3	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			12	☐			☐		
Roll of tape	1	1	1			5	☐			☐		
Paper sway target with 1" radius		4	4			12	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8" x1" x3" Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		

2020 SSBC Upstate New York Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	1	2	1

Equipment Overview
Total weight: ~6200 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				1	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				1	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			203	☐			☐		
Vertical deflection measurement device			2		2	6	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2”x4”x 6” Wood block with 25 ft string line	2					4	☐			☐		
2”x4”x 4” Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4”-0” Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			7	☐			☐		
Clipboard	5	1	1	1		14	☐			☐		
Laser plumb-bob		1	1			3	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			12	☐			☐		
Roll of tape	1	1	1			5	☐			☐		
Paper sway target with 1” radius		4	4			12	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8” x1” x3” Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		
Bare prepped calipers (spare for Deflection Measurement System)						0	☐			☐		

2020 SSBC Virginias Regional Event, Inventory Checklist

Number of Stations			
Construction	Lateral Loading	Vertical Loading	Weighing
2	1	2	1

Equipment Overview
Total weight: ~6200 lbs. 4 pallets of angles, 2-3 material pallets

Item	#Per Construction	# Per Lateral	# Per Vertical	# Per Weighing	# Extra	# Total	Pre-Event Inventory *check box if quantity matches total	Pre-Event Inventory Adjusted Quantity	Notes	Post-Event Inventory *check box if quantity matches total	Post-Event Inventory Adjusted Quantity	Notes
Lateral load stand with rope lanyard, carabiners and dog collar to attach bridge to weight with a 50 lb. load (eye bolt with square and two slotted plates)		1				1	☐			☐		
Safety support jack stands			8			16	☐			☐		
Steel bearing plates (24" x 24")			4			8	☐			☐		
Steel grating no tabs		1				1	☐			☐		
Steel grating with tabs			2			4	☐			☐		
Loading angles (25 lb. each)		3	100			203	☐			☐		
Vertical deflection measurement device			2		2	6	☐			☐		
Plywood template for passageway (Rules 9.3.8)	1					2	☐			☐		
Plywood template for ground clearance (Rule 9.3.4)	1					2	☐			☐		
Wood box for member check (Rule 8.2.2.2)	1					2	☐			☐		
2”x4”x 6” Wood block with 25 ft string line	2					4	☐			☐		
2”x4”x 4” Wood block			1			2	☐			☐		
Magnet	1					2	☐			☐		
4”-0” Level	1					2	☐			☐		
Flashlight	1					2	☐			☐		
Stopwatch	2					4	☐			☐		
Tape measure (25 ft minimum)	2	1	1			7	☐			☐		
Clipboard	5	1	1	1		14	☐			☐		
Laser plumb-bob		1	1			3	☐			☐		
Scale				4	1	5	☐			☐		
AAA batteries		4	4			12	☐			☐		
Roll of tape	1	1	1			5	☐			☐		
Paper sway target with 1” radius		4	4			12	☐			☐		
2" x 4" x 3'-6" Wood piece			1			2	☐			☐		
1/8” x1” x3” Steel bar (Rule 9.3.9) 1/4" x1" x3" Steel bar (Rule 9.3.9)	1					2	☐			☐		
C-clamp			2			4	☐			☐		
Bare prepped calipers (spare for Deflection Measurement System)						0	☐			☐		

Appendix 3: Equipment Guide

This guide gives detailed instructions on how to use certain equipment provided for the competition. This document is not a comprehensive explanation of the competition Rules and equipment. Instead, it is intended to highlight equipment that may be new to users.

The Host School should review the guide in order to verify and test the equipment before the competition. The Head Judge should also review this guide in its entirety and share pertinent information with other judges.

Note that the Rules change from year to year. The photos are shown as examples, and bridges may not match the configuration shown for this year's competition.

Pre-Construction

1. The judges should use the wood box for member check to determine if each member meets the requirement of the Rules Section 8.2.2.2.

   The member should fit complete in the box.

Figure 1a. Wood box for member check.

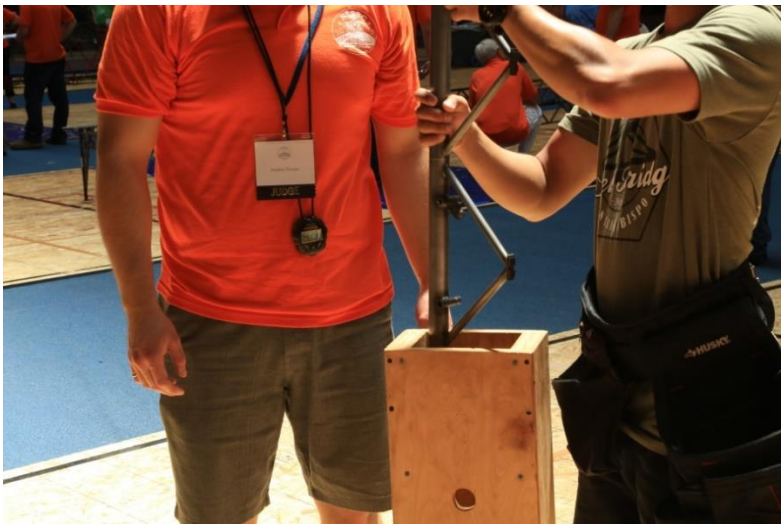


Figure 1b. Judge has competitor peform member check.

2. Use the magnet to determine material compliance with the Rules.

Post-Construction

1. The judge should use the plywood template for ground clearance to determine if the bridge complies with Rules Section 9.3.4.

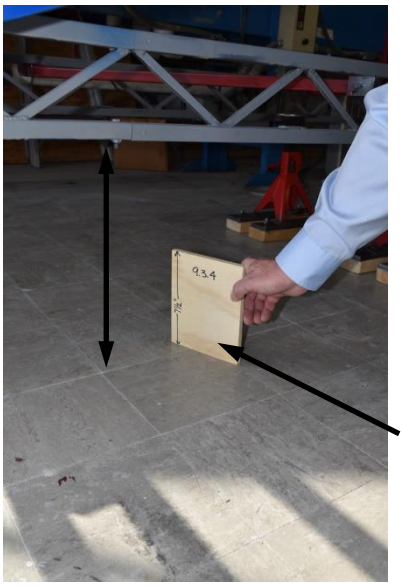


Figure 1. Plywood template for ground clearance.

2. The judge should use the plywood template for passageway to determine if the bridge complies with Rules Section 9.3.8.

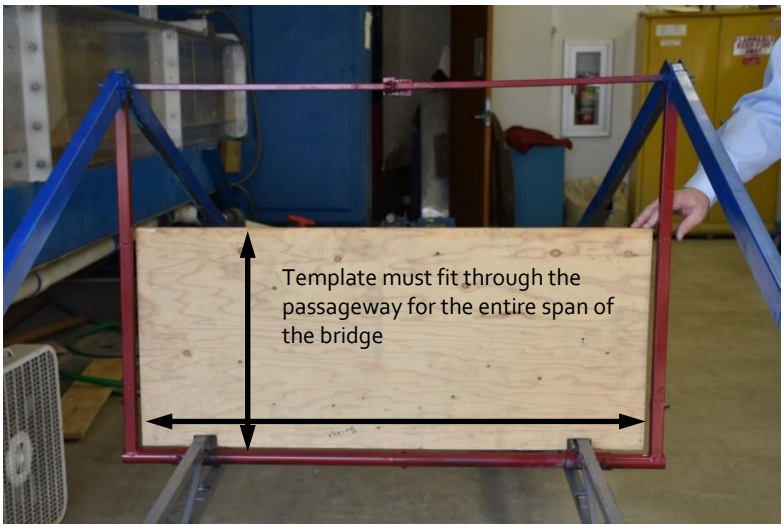


Figure 2. Plywood template for ground clearance.

3. The judges should complete post construction checks including verification of other dimensional requirements using provided equipment such as tape measures and steel bars.

Lateral Load Test

1. The judge may allow the competitors to preload the bridge. Place grating (no tabs) on the bridge at the location along the span indicated by Rules Section 11.4 and the Lateral Load Test Plan of the Competition Rules.

   Set three angles (75 lbs. total) over the stringer indicated in the Lateral Load Test Plan of the Competition Rules. Center the stack of angles on the grating.

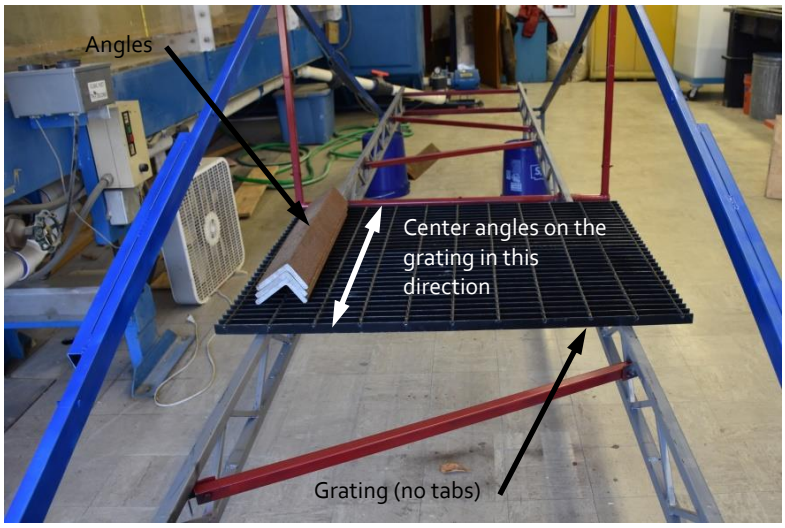


Figure 1. Lateral load test preload.

2. The judge should attach the laser plumb-bob to the bridge stringer at the location labeled as "sway point" in the Lateral Load Test Plan of the Competition Rules.

   The bottom of the laser plumb-bob should be positioned about one to two inches above the floor surface. Loop any extra chain length around the stringer and attach the hooked end so that the plumb-bob is securely positioned at the appropriate height.

Figure 2a. Laser plumb-bob.

Figure 2b. Chain secured.

3. The judge should set up the lateral load stand. The final setup before loading is shown here.

   Position the lateral load stand so that rope runs perpendicular to the bridge stringer. The rope should run parallel to the floor. See Step 5 for how to adjust stand height. The rope should be taught before loading begins.

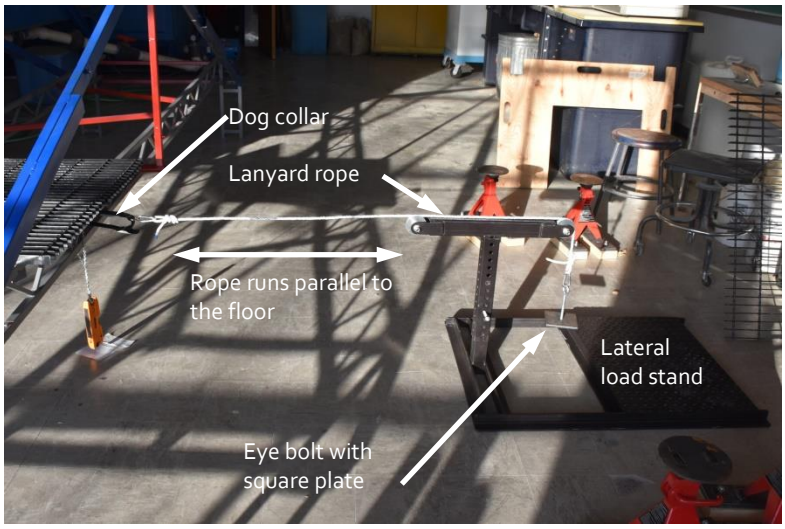


Figure 3. Lateral load stand setup

4. At the bridge end of the rope, connect the carabiner clip to the D-ring of the dog collar. Attach the dog collar to the bridge stringer as close to the laser plumb-bob as possible but at least one grating bar away from the laser plumb-bob so that the two items do not touch. The position of the dog collar and laser plumb-bob should be the same for each bridge.

   At the load stand end of the rope, connect the carabiner clip to the eye bolt with small plate.

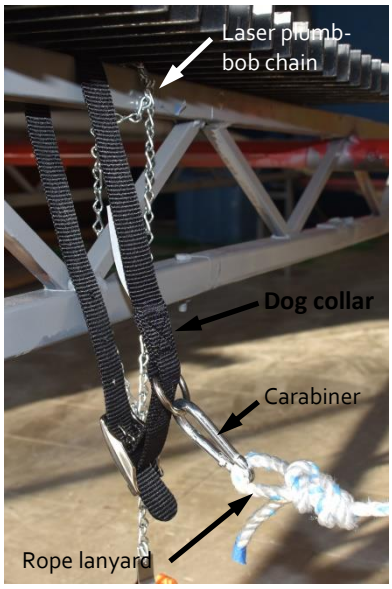


Figure 4a. Rope to bridge.

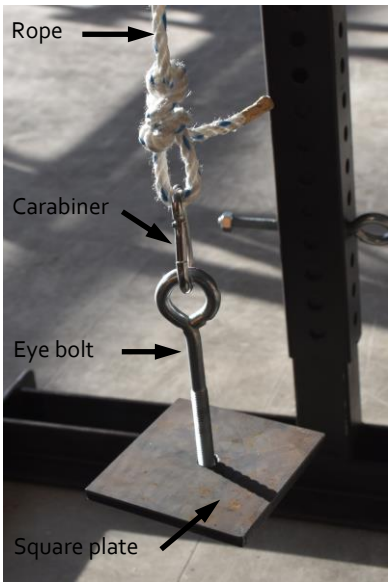


Figure 4b. Rope to eye bolt.

5. The height of the lateral load stand should be adjusted so that the rope is parallel to the floor. To do this, remove the bolt and slide the outer tube sleeve up or down. Reinsert the bolt and secure once the optimal height is found.

   Ensure a minimum of two inches between the bottom of the plate and eyebolt and the floor surface.

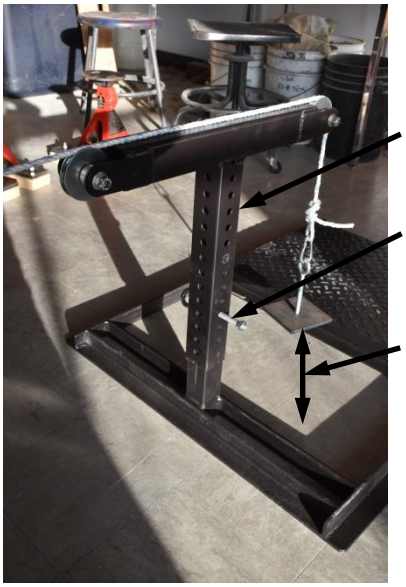


Figure 5. Lateral load stand height.

6. The judge should turn on the laser plumb-bob and position a paper target on the floor so that the laser points to the center of the target. Secure the target to the floor surface with tape.

Figure 6. Paper target start position.

7. To prevent slip at the foundation during the lateral load test, competitors may provide lateral restraint at the base of the structure at the floor level per Rules Section 11.4.1.

Competitors may use a foot at each support or an object such as an angle.

Figure 7a. Acceptable restraint.

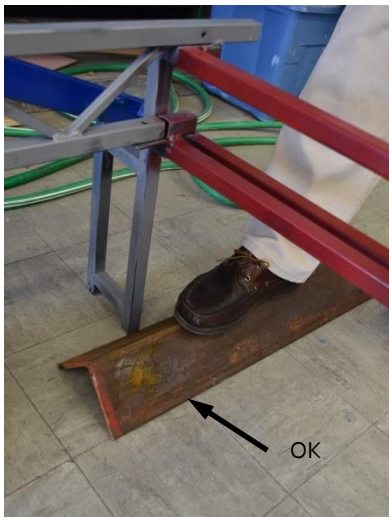


Figure 7b. Accetable restraint.

Do not apply restraint above the floor level. Do not push down on the bridge.

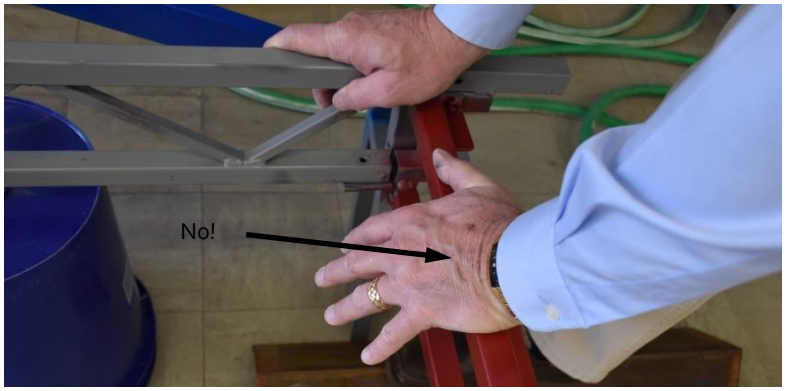


Figure 7c. Unacceptable restraint.

8. A competitor **must stand on the lateral load stand** to prevent slip. The competitor should load the pulley with the two slotted steel plates.

Note: Did you spot the rule violation shown in this photo? The participant should be wearing work boots.

Figure 8. Load applied to lateral load stand.

9. Once the load sequence is complete, the judge should check the location of the laser on the paper target.

   If the laser falls outside of the circle, the bridge fails the lateral load test per Rules Section 11.4.2.

Figure 9. Laser on paper target.

10. Unload the bridge. Once the slotted plates are removed from the pulley, the competitor may step off from the stand. Disconnect the rope from bridge and remove preload grating and angles.

Vertical Load Test

1. Figure 1 shows a bridge under vertical load.

   To begin setup, the bridge should be positioned over the steel bearing plates.

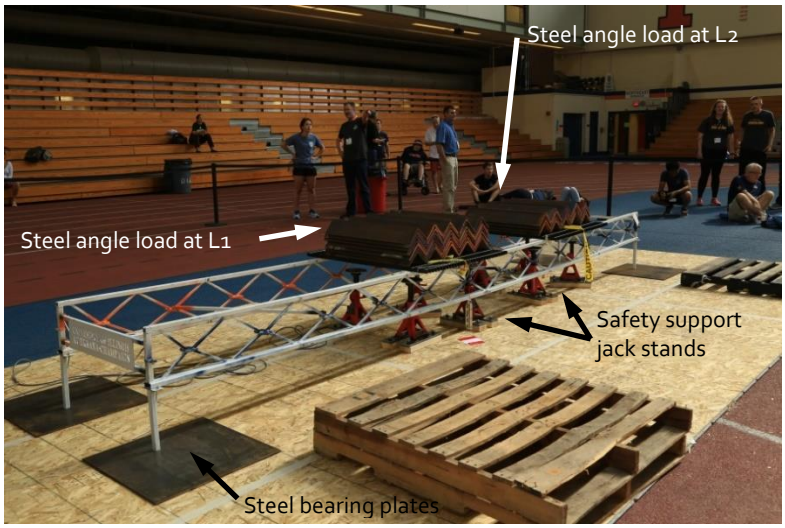


Figure 1. Bridge at vertical load station.

2. The judge should position four jack stands beneath the bridge in each of the two load areas where decking is shown in the Vertical Load Test Plan as indicated in the Competition Rules.

   There should be a total of eight jack stands.

Figure 2. Jack stands under bridge at load location.

3. The judge should lay the 2x4 (2" x 4" x 3'-6" wood piece) across the tops of the two bridge stringers.

   Place the 4" block on the jack stand. Raise the height of the jack stand until the top of the 4" block touches the 2x4 and set the jack stand height. Note: there may be about ½" between the block and the 2x4.

   Do this for each of the eight jack stands.

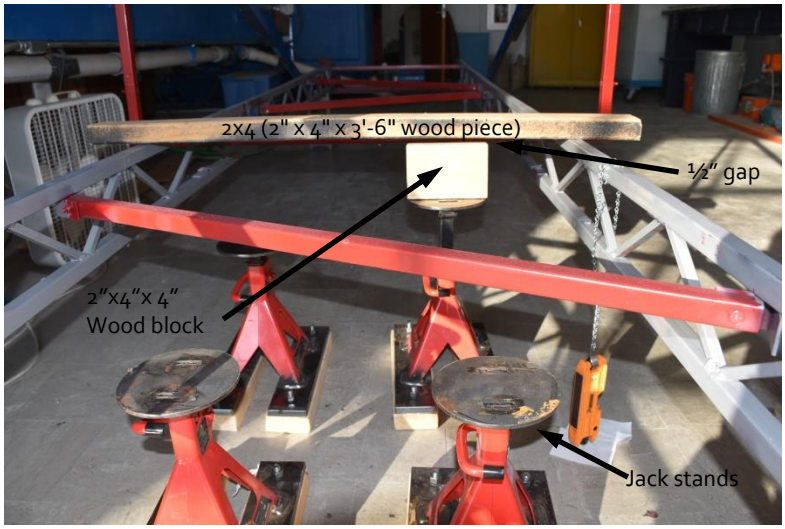


Figure 3. Jack stand height adjustment.

4. Judges should direct the competitors to place the grating (with tabs) on top of the bridge stringers in the two load locations along the span of the bridge.

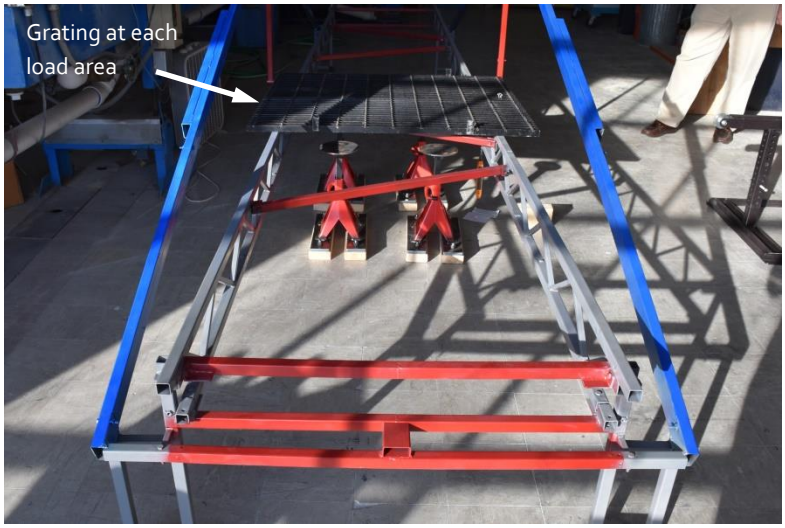


Figure 4. Grating in position.

5. Judges should direct the competitors to position the grating so that the tabs face upward and the bars span from stringer to stringer.

   Position the grating at locations L1 and L2 determined by Rules Section 7.1 and the Vertical Load Test Plan and Elevation of the Competition Rules.

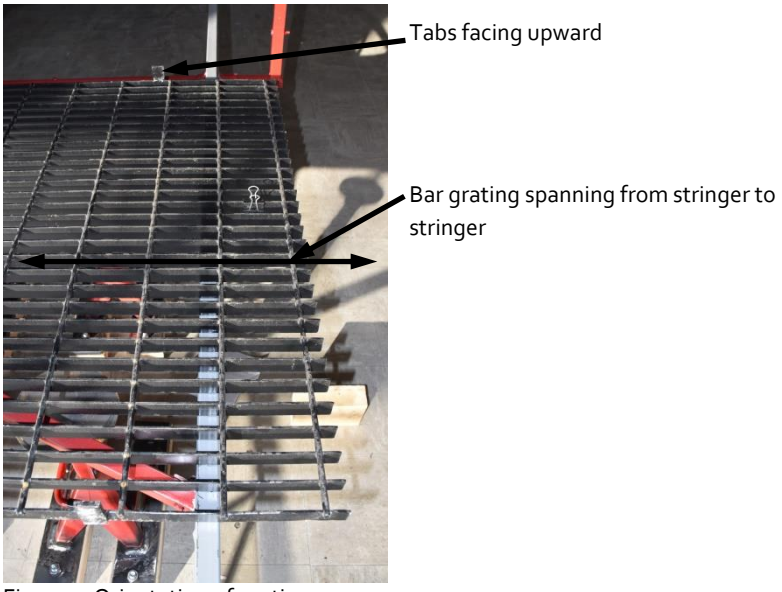


Figure 5. Orientation of grating.

6. If necessary, reposition jack stands so that they sit directly beneath the grating.

   Do not place the jack stands under any obstructions such as horizontal bracing running between stringers.

Figure 6a. Correct position.

Figure 6b. Incorrect position.

7. Judges may allow competitors to preload the bridge at locations L1 and L2 per Rules Section 11.5.3(1).

   Position the angles so that the outer angles touch the grating tabs. The inner angles should touch the outer angles

   Angles should be oriented in the same direction (for example, long leg of angles all facing north.)

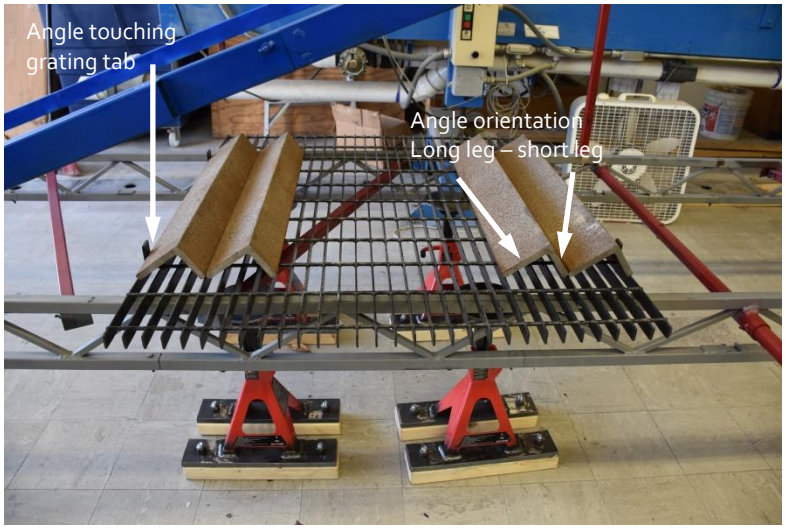


Figure 7. Position of vertical preload.

8. The judge should use the C-clamp to ensure that the bottom of the decking touches the top of the stringer per Rules Section 11.5.1.1. The C-clamp should be removed when no longer needed.


Figure 8a. C-clamp

Figure 8b. C-clamp

9. The judge should attach the laser plumb-bob to the bridge stringer at the location indicated in the Vertical Load Test Plan. Use the 2"x4"x 4" wood block as a spacer in order to set the height of the laser bob.

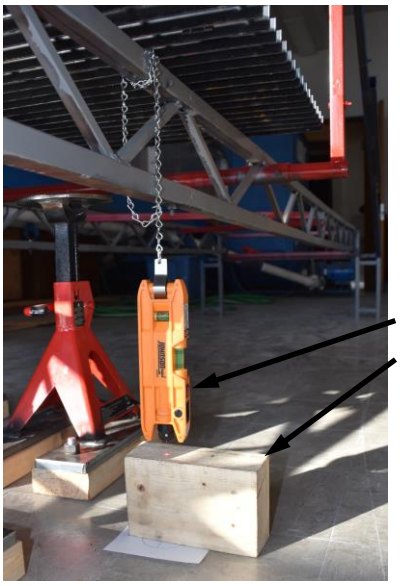


Figure 9. Laser plumb-bob position.

10. Turn on the laser plumb-bob and position a paper target on the floor so that the laser points to the center of the target. Secure the target to the floor surface with tape.

Figure 10. Paper target start position.

11. Locate the two vertical deflection measurement devices. Each device consists of three parts:
    (1) plate with hook
    (2) caliper stand
    (3) protective cover

    Set the display unit to decimal inches.

    Place the gage under the bridge.

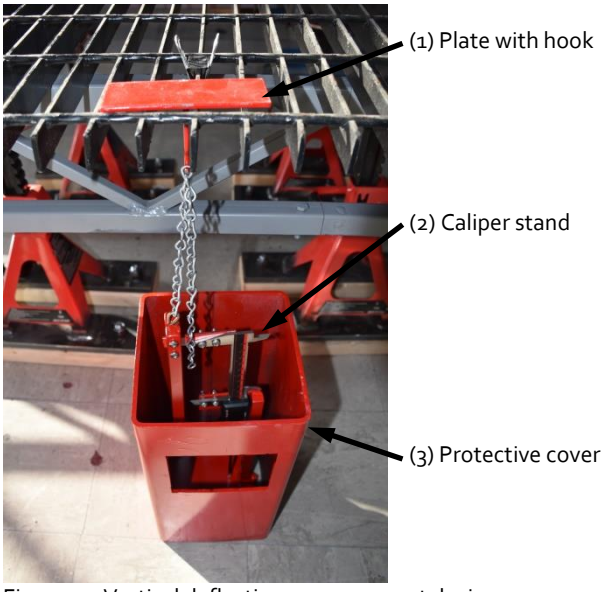


Figure 11. Vertical deflection measurement device.

12. The bar weights attached to the chain and upper jaw should be vertical.

    Place the steel protective sleeve over the gage with the display showing. Not shown here for clarity.

    Press the 'zero' button.

    Pull the chain to open the caliper so that it can measure the maximum deflection allowed by competition rules plus a minimum of 0.5 inches.

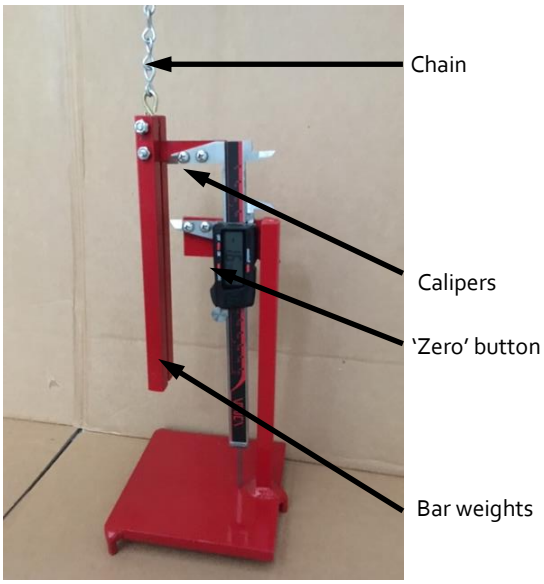


Figure 12. Caliper stand.

13. Use the provided hook to connect the chain to the decking at the location specified by competition rules.

    Move the gage and sleeve so that the chain is vertical. It should not have kinks.

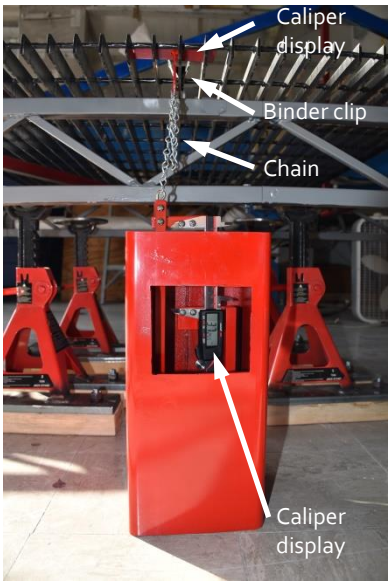


Figure 13a. Device setup.

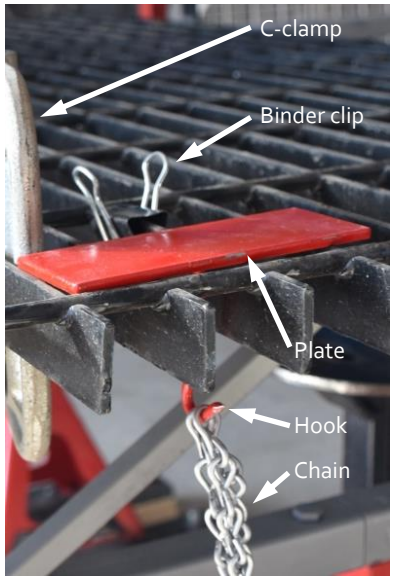


Figure 13b. Chain to hook.

14. Initial values should be recorded rather than using the 'zero' button.

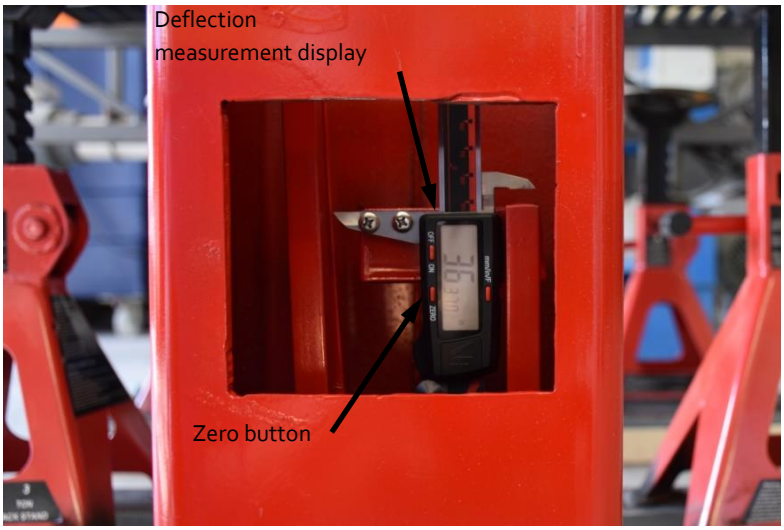


Figure 14. Record initial values.

15. The competitors can commence load placement starting at L1.

Stack angles in layers. Layer one should have angle legs faced down. Layer two should have angle legs faced up in a nested position. Alternate each layer.

When stacking, a short offset of about ½" to 1" may be used to facilitate safe and easy stacking and unstacking.

Do not stack angles using a large offset. Do not stack angles with the offset in one direction only.

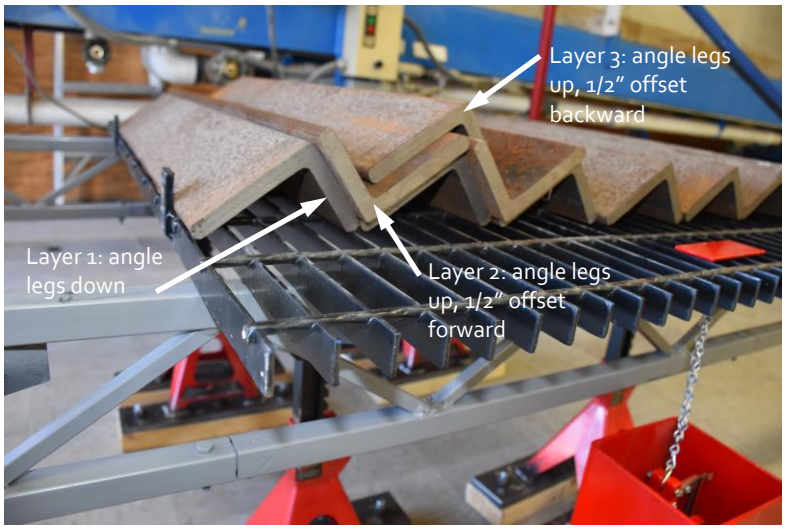


Figure 15a. Proper stacking of loading angles.

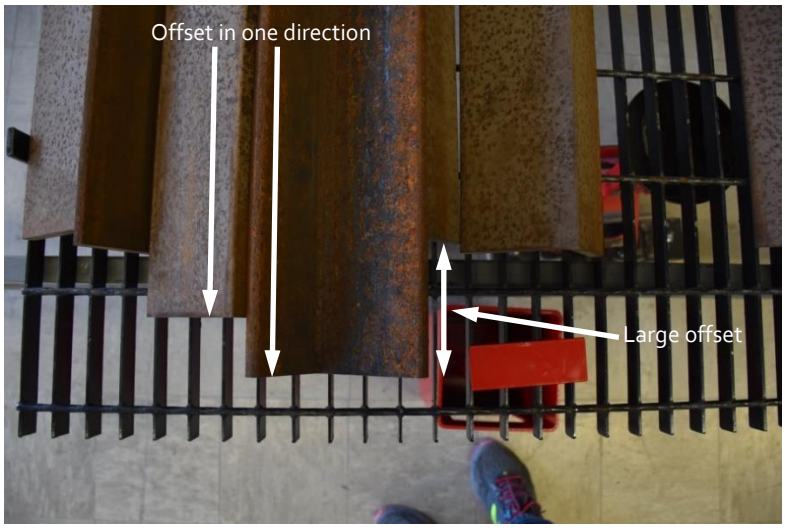


Figure 15b. Improper stacking of loading angles.

16. Loading should be accomplished in a safe, smooth, and continuous manner. Judges should monitor the sway and deflection measurements per Rules Section 11.5.2. The judge should record the deflection readings at the end of the load stage and allow the team captain to verify them.

Competitors should then remove all loading angles.

Vertical Deflection Measurement Device Instructions

Preparation for Competition

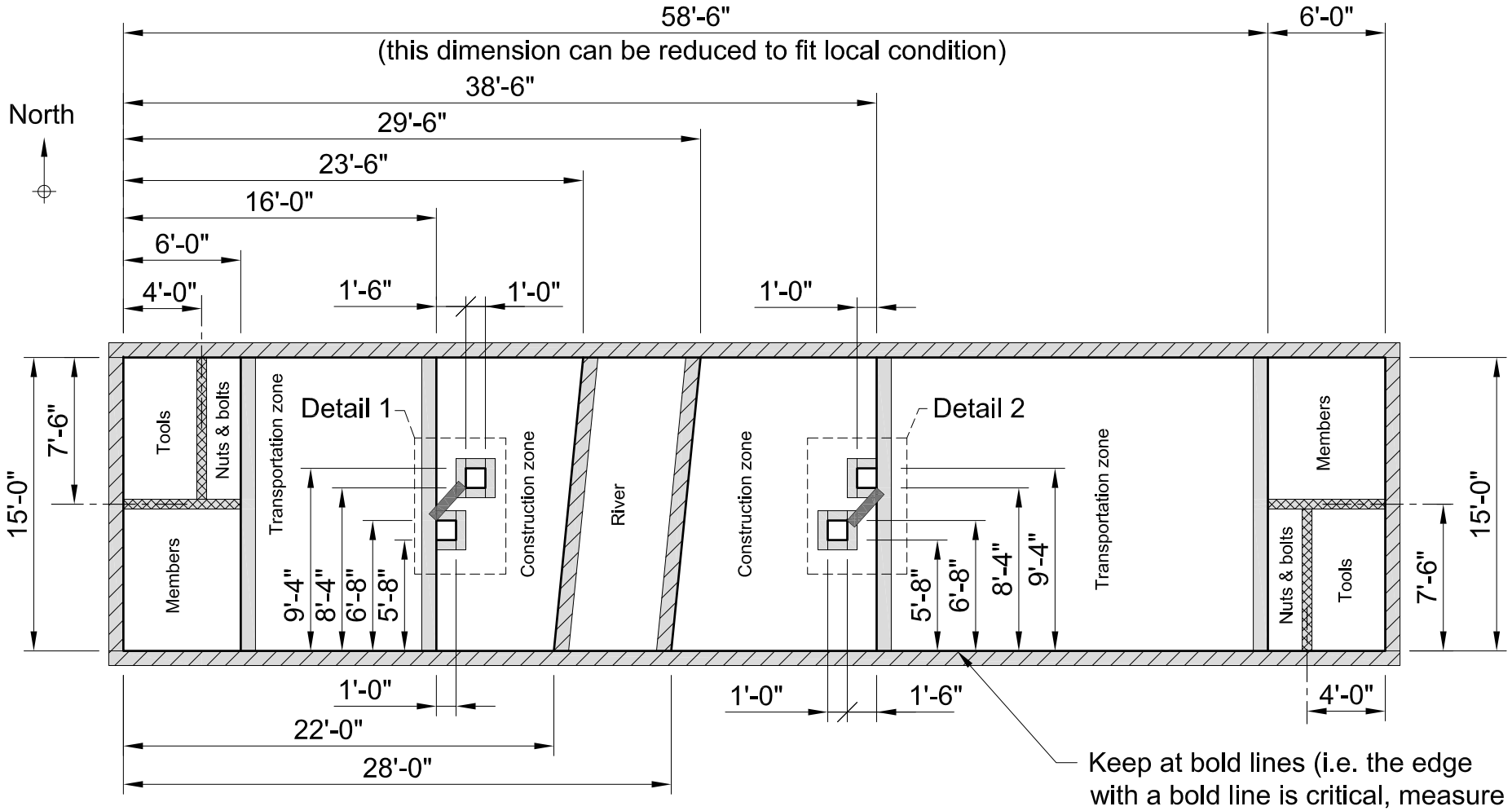
1. The scoring spreadsheet should round deflection values to ±0.01 inch.
2. Check that the screws on the jaws are tight.
3. Replace the battery with a new 357 button cell. The installed battery runs down during storage, and if it fails during operation, the deflection measurement is lost. The battery is under a sliding cover located just below the display. Be careful not to lose or damage the cover.
4. Have extra 357 button cells available.
5. Assure smooth operation. With the gage on a firm surface, the top jaw should slide up without the base lifting and should slide down with only gravitational force. Values should display when the upper jaw is moved. If the action is not smooth, pull the upper jaw to full extension and clean the groove in the sliding part and the depth probe protruding from the bottom of the caliper. Liquid cleaner and liquid lubricant are not recommended.

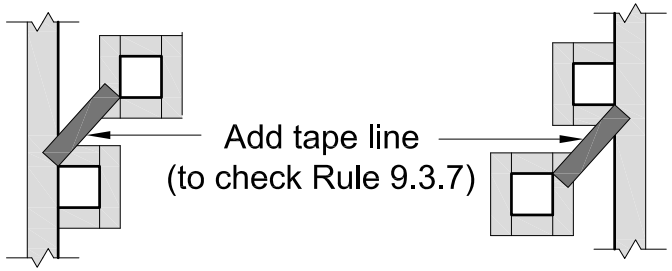
Operation

1. Set the display unit to decimal inches.
2. Place the gage under the bridge.
3. The bar weights attached to the chain and upper jaw should be vertical.
4. Place the steel protective sleeve over the gage with the display showing.
5. Press the 'zero' button.
6. Pull the chain to open the caliper so that it can measure the maximum deflection allowed by competition rules plus a minimum of 0.5 inches.
7. Use the provided hook to connect the chain to the decking at the location specified by competition rules.
8. Move the gage and sleeve so that the chain is vertical. It should not have kinks.
9. Initial values should be recorded rather than using the 'zero' button, which is very sensitive.
10. If there is no deflection for several minutes, the display will sleep. However, the last value displayed is retained and the display will wake when deflection resumes. NOTE: The display may be wakened by lightly tapping the chain.
11. If the upper jaw does not slide smoothly (see item 5 above in "Preparation…"), push it down before reading each measurement, using no more force than necessary.

Appendix 4: Construction Lane Taping Plan

This drawing provides guidance on how to tape the construction lanes. It shows which dimensions are critical during setup and which side of the tape dimensions should be taken. Note that one dimensions may be reduced by the Host if local conditions cannot accommodate the full length. If this dimension must be reduced, all construction lanes at the event must be the same.





Detail 1
NTS

Detail 2
NTS

	Bridge out of bounds (i.e. builder can step on tape but bridge cannot touch tape)
	Out of bounds (i.e. stepping on tape is a penalty)
	Dimensions to CENTER of tape. Builder can step on tape but parts cannot touch tape

2020 SSBC -TAPING PLAN

*Use diagonal measurements to check square

Appendix 5: Templates

Templates

Throughout this Host Guide, you will find a variety of templates to assist you with planning your SSBC Regional Event. They are listed here for convenience:

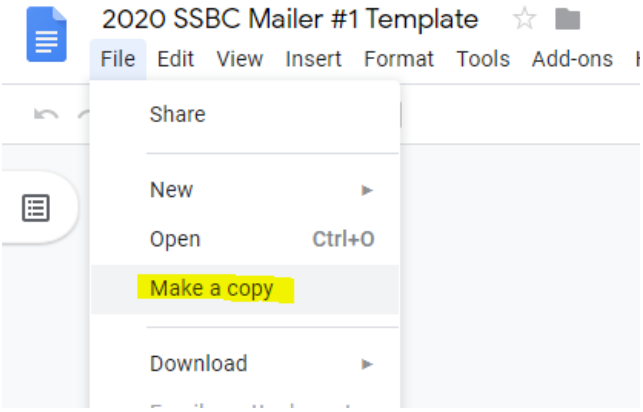
Host Registration Planning Worksheet	download worksheet
Sponsorship Benefit Planning Worksheet	download worksheet
Sponsor Introduction Letter	download template
Sponsorship Solicitation Letter	download template
Volunteer Solicitation Letter	download template
Budget/Balance Sheet	download template
Mailer #1	download template
Mailer #2	download template
Mailer #3	download template
Mailer #4	download template
Event Program	download template

Instructions for Use of Templates

The templates are created in google docs. While not required, we recommend that you also make your templates in google docs because the formatting does not transfer well to Microsoft Word/Excel. This will require you to make a free google account if you do not have one already. To use the templates, simply follow the steps below:

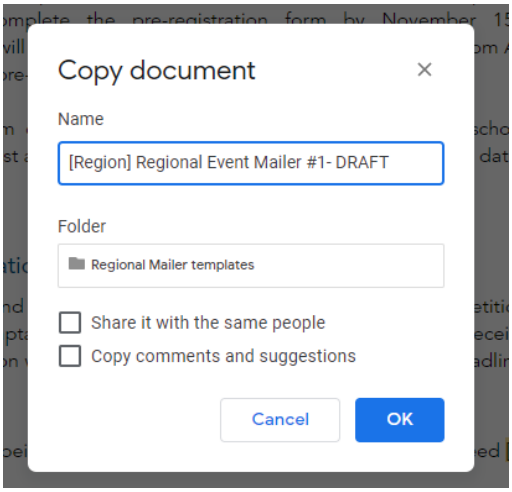
Step 1: Open document & make a copy

Select 'File' then 'Make a Copy'.
Alternatively, If you do not have a google doc account or want to use the templates in Word, select 'Download' and skip to Step 3.



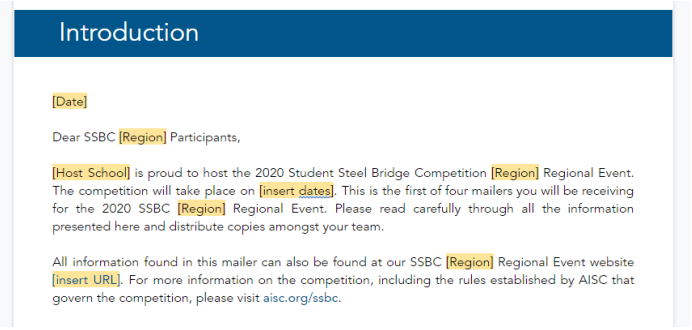
Step 2: Rename the file

You can also select the folder where you want the document to be saved.



Step 3: Start Editing!

Your new document is ready to edit. All text highlighted in yellow should be changed by the Host School. Hosts are encouraged to make any other changes they see fit. The template is only a guide.



Introduction

[Date]

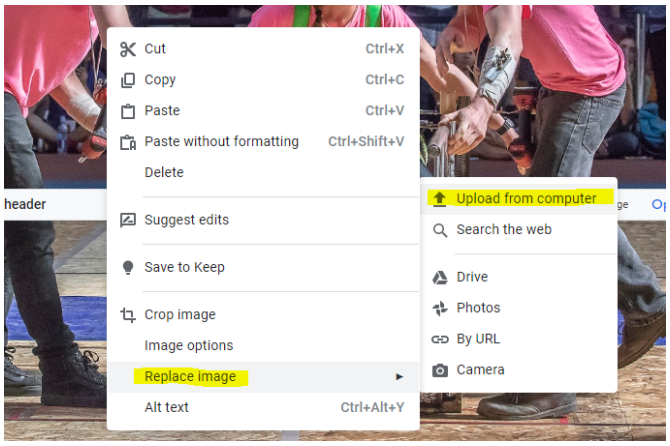
Dear SSBC [Region] Participants,

[Host School] is proud to host the 2020 Student Steel Bridge Competition [Region] Regional Event. The competition will take place on [insert dates]. This is the first of four mailers you will be receiving for the 2020 SSBC [Region] Regional Event. Please read carefully through all the information presented here and distribute copies amongst your team.

All information found in this mailer can also be found at our SSBC [Region] Regional Event website [insert URL]. For more information on the competition, including the rules established by AISC that govern the competition, please visit aisc.org/ssbc.

Step 4: Update Cover Image (if applicable)

Right click the cover image. Select 'Replace Image', then 'Upload from Computer'. Adjust your image as needed. You are encouraged to represent your school or region with this image and have fun with it!



Step 5: Share!

When complete, save your document as a PDF and send it to your recipients.

Appendix 6: Sample Aesthetics Layout

Competition Order

Team #	Competition Order	Team #	Competition Order
1	Brigham Young University	22	University of Alaska, Anchorage
2	University of Colorado Denver	23	Case Western Reserve University
3	Clarkson University	24	North Dakota State University
4	SUNY Canton	25	Arkansas State University
5	University of Connecticut	26	New York City College of Technology
6	University of North Carolina at Charlotte	27	Missouri S&T
7	Norwich University	28	Lafayette College
8	Youngstown State University	29	University of California, Berkeley
9	University of Oklahoma	30	The College of New Jersey
10	University of Florida	31	University of Akron
11	Kennesaw State University	32	Louisianna State University
12	Kansas State University	33	University of Texas at San Antonio
13	Alaska Fairbanks	34	Michigan Technological University
14	Cooper Union	35	University of Wisconsin Madison
15	Southern Illinois University	36	Oregon Institute of Technology
16	West Virginia University	37	Utah State University
17	Louisiana Tech University	38	Drexel University
18	South Dakota State University	39	Purdue Northwest
19	University of Puerto Rico at Mayagüez	40	Texas A&M University
20	University at Buffalo	41	Catholic University
21	Christian Brothers University		

Aesthetics Bridge Set Up Layout

Appendix 7: Post-Regional Event Report

The Post-Regional Event report is an online form, which can be found here. (https://form.jotform.com/92554147930157) You must upload all attachments and documents to the form and submit it within 60 days of your event. If you have any questions regarding your Post-Event Report, contact Sean Faron (faron@aisc.org).

Required Attachments

AISC asks that you requires that you upload the following documents in your post-event report

1. Registration Report
   Learn about what is required in the registration report in the registration section of the Host guide.
2. Financial Summary
   View our budget template for expectations on how to track your income, costs and budget.
3. Judges List
   At a minimum, this list should include the judges names and email addresses. It is extremely helpful if you provide notes for future hosts for each judge. For example: did the individual volunteer because they are connected to your school? Or, do they volunteer every year and would be a good person to contact to judge next year?
4. Mailers
   Please upload your completed Mailers or event summaries.

Optional Attachments

Be considerate of next year's Host! You might also upload:

- a full agenda of your ASCE conference to assist future hosts with planning a Regional Event on the same weekend
- a statement of the positive/negative aspects of your competition, including planning, organization, implementation and follow-up
- photos of event
- suggestions for next year's host

Post Regional Event reports are due 60 days after your event