TOOLS & MATERIALS

Tools and Materials (1 per team) - For the 2020 Structural Engineering contest, participants are required to provide their own toolbox and materials. Each toolbox must include identification (school name, address, and advisor cell phone number). The size of the toolbox must be no larger than twenty (20) inches (508 mm) length x ten (10) inches (254 mm) width x ten (10) inches (254 mm) height to contain tools needed to fabricate a solution/entry. Only approved cutting devices such as listed below will be allowable in 2020. Examples of approved cutting tools include: Kelvin Balsa StiKutter; Pitsco Easy Cutter; Pitsco Timber Cutter; Midwest Easy Miter Box Set; X-traSafe Safety Cutter, Single – Crewsafe XSCU.

Tools - Each Team is required to bring the following tools:

____ two (2) pair ANSI safety glasses*
____ up to two (2) cutting devices (see sample images of allowable device styles)
____ Insta-Cure+ / Super Glue / CA or similair
____ Uncure or Debonder is recommended
____ INSTA-SET Cyanoacrylate Accelarator is recommended
____ two (2) 12” rulers
____ two (2) pencils and sharpener
____ one (1) roll masking tape (¾ inch wide)
____ one (1) cutting surface that prevents table top marring
____ straight Pins
____ abrasive sheets, sponge, or emery board(s)
____ wax paper large enough to cover 11”x17” or larger

*In lieu of safety glasses, prescription eyewear may be worn.

Materials - Each team will be PROVIDED the following materials on-site in 2020.

____ balsa 1/8” x 1/8” x 24” (10 sticks per Middle School teams ONLY)
____ balsa 1/8” x 1/8” x 24” (12 sticks per High School teams ONLY)
____ balsa 1/8” x 1/4” x 24” (12 sticks per High School teams ONLY)
____ drawing paper with ¼” or 1/8” grids for sketching the structure
____ pin board

Once tool box sizes are evaluated, teams will self-examine their competitor’s tools and materials using this Verifications Sheet. If there is a dispute, a judge will be summoned to determine a final ruling. Any disallowed tools or materials will be held by the event coordinator until the contest is complete.

Participants without the toolbox and materials will not be allowed to compete.