

## ANSWERS TO ROLL BAR STANDARDS FAQ

1. Convertibles are defined as cars with retractable tops, whether soft-top or folding hard top and all cars without any top.
2. Convertibles must use a 5- or 6-point harness for each occupant.
3. Cars equipped with only factory pop-up posts or similarly activated rollover protection are not allowed.
4. Cars with factory installed, fixed roll over protection (targas, T-Tops, etc) are a Cascade Sports Car Club decision on an individual basis.
5. The roll bar must be within 6 inches of the back of the occupants helmets and the top of the helmets must be below the top of the roll bar. If the roll bar is farther than 6 inches away from the back of the helmets, the top of the roll bar must be 2 inches above the top of the helmet and the occupants must pass a helmet reference plane standard.
6. Material, welding, bracing and mounting plates for roll bars must meet certain standards. Listed below are a few of the standards. Be sure to review the entire Appendix E for a complete list of roll bar standards.
  - A. Material - Drawn Over Mandrel mild steel tubing (SAE 101,1020,1025 or equivalent)
  - B. Size of tubing is based on vehicle curb weight. Curb weight includes fluids but not occupants.
    - Under 2000 lbs, 1.50 x 0.120 or 1.75 x 0.090 inches (outside diameter x wall thickness)
    - 2001 lbs - 3500lbs, 1.75 x 0.120 inches (outside diameter x wall thickness)
    - over 3500 lbs, 2.00 x 0.120 inches (outside diameter x wall thickness)
  - C. Welding shall conform to American Welding Society D1.1, Structural Welding Code, Chapter 10, Tubular Structures.
  - D. Bracing, roll bars shall have two (2) fore/aft braces with tubing diameter and wall thickness the same as the roll bar. Roll bars shall have a diagonal brace with tubing the same size as the roll bar.
  - E. Mounting plates for roll bar hoops and braces shall be attached to the chassis and must be at least 3/16-inch thick. If mounting plates are bolted they shall have a minimum of three (3) bolts per mounting plate.
  - F. The list above are a few of the standards required for roll bars . Be sure to read and understand the entire Appendix E to avoid having your roll bar fail inspection at our Driver Trainings.