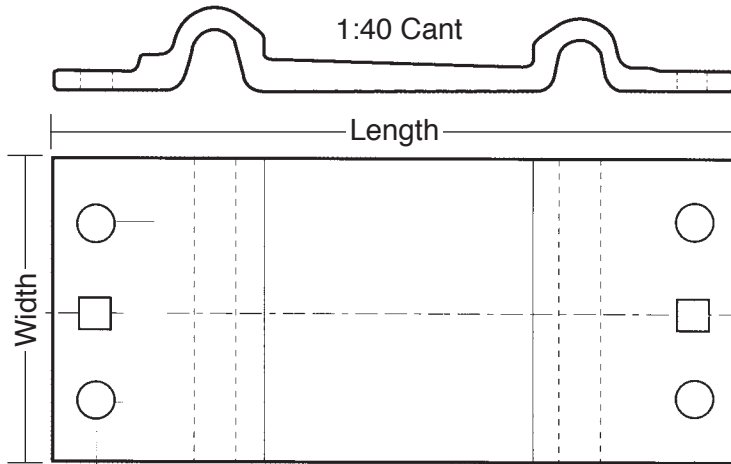


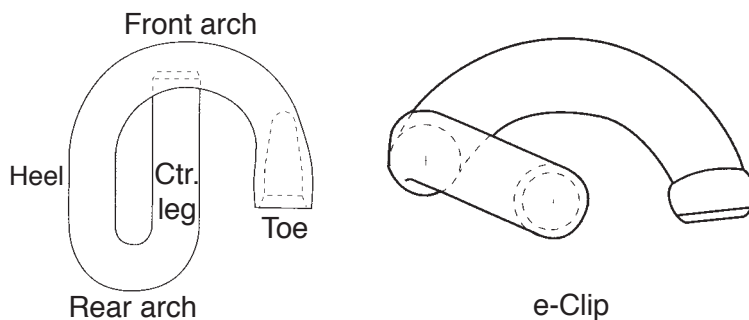
# DIRECT FIXATION TIE PLATES, STEEL TIES



**Direct fixation tie plates** utilize an elastic clip (“e-Clip”) design to secure the rail to the base plate. The spring and torsion work in unison to produce a high clamping force, aiding in preventing rail rollover and providing longitudinal restraint.

Plates are available for 5-1/2” and 6” rail base widths with a 1:40 cant. Standard punching includes four round holes and 2 square holes. Other designs may be available upon request.

Plates can be securely fastened to wooden ties by means of screw-spikes. Alternate design clips are available for use at track joints, where joint bars would obstruct the use of standard clips.



As an alternate to wooden ties, **steel ties** are available for traditional railroad applications. Utilizing a “hook-in shoulder” design, steel ties have superior gage and cant holding capabilities. Along with standard 56-1/2” gage, steel ties are available for switch installations as per AREMA or railroad specifications. Each set comes with prepunched labeled ties and all standard or speciality fasteners necessary to secure the points, rail, frog, guard rails, and switch machine to the ties. Steel track and turnout ties can be assembled efficiently even with an inexperienced crew. They can reduce the amount of ballast required up to 40% compared to other tie materials. Steel ties can also be used to extend the life of wooden ties when interspersed.

