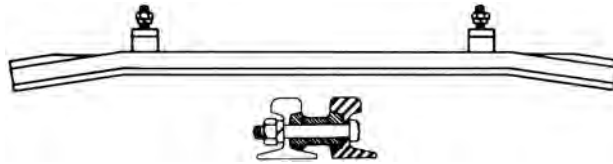


# GUARD RAILS

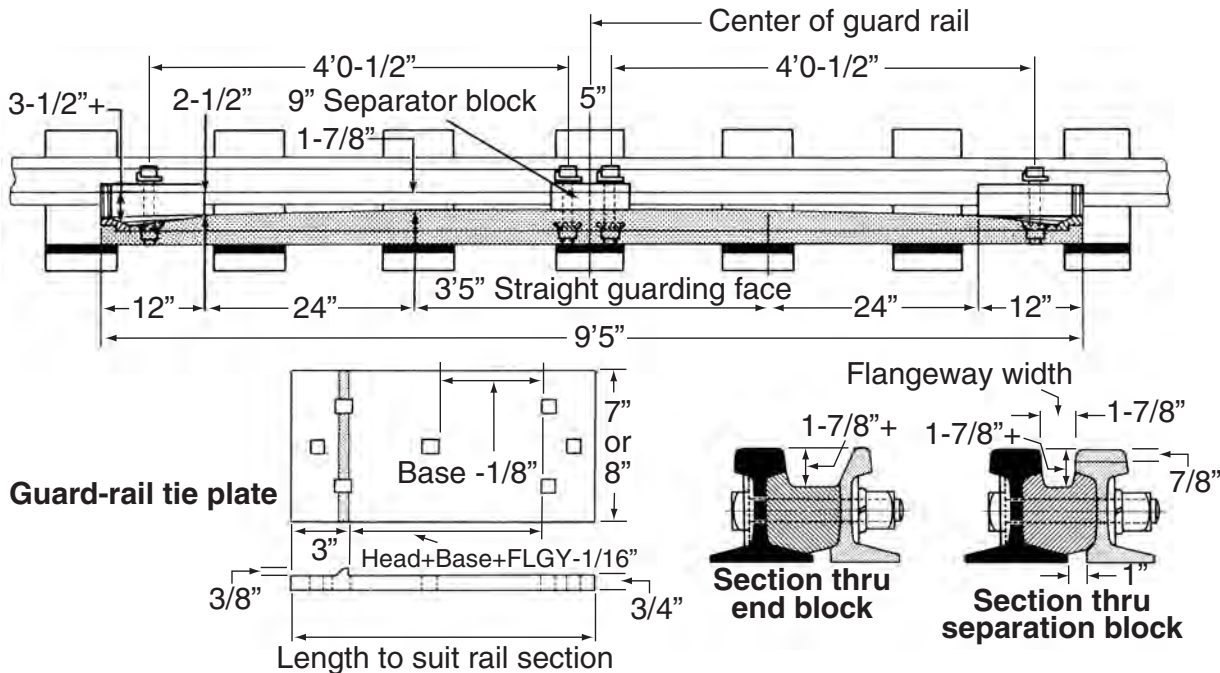


A **Guard Rail** is a rail laid parallel with the running rails to hold wheels in correct alignment. Guard rails are most commonly used opposite a frog where they prevent derailments and protect the point of the frog.

**American Mining Congress Design** guard rails (shown below) are used with light rails in mines and industrial plants. They have the flares bent and the flanges removed, and are equipped with blocks and bolts for mounting onto the stock rails. American Mining Congress recommended lengths are 4' 6" for No. 2, 2-1/2 and 3 frogs; 6' 0" for No. 4, 5 and 6 frogs and 8' 3" for No. 7 and No. 8 frogs. A 1-5/8" flangeway width is standard for rails up to 75 lb. A 1-7/8" flangeway width is standard on 80 lb and above.



**AREMA Design** guard rails are planed and beveled, and are equipped with distinct end and separator blocks. These blocks come complete with bolts, nuts, spring washers, head locks and web washers. These guard rails are commonly used with single plates (either flat or shouldered) or twin tie plates (either flat or hook). The standard lengths, and quantities of blocks and single plates are given in the tables below.



**AREMA Design Plan 504-71**

Length	Separator Block	End Block	Plates
9'5"	1	2	7
12'6"	2	2	9
15'0"	2	2	10

**AREMA Design Plan 504-89**

Length	Separator Block	End Block	Plates
13'0"	2	2	9
16'6"	3	2	11
20'0"	4	2	13