NMRA RECOMMENDED PRACTICES	
FROG & WING RAILS	
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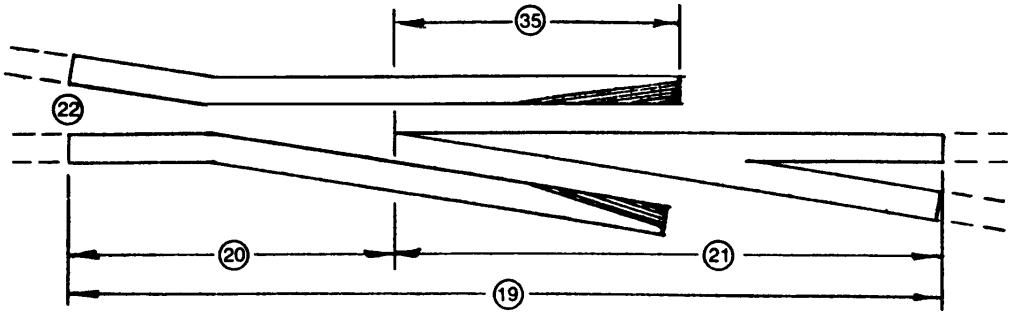
RP-13.7 Frog & Wing Rails

To avoid confusion the sketch shows only the railhead. Dimensions **[19]**, **[20]**, **[21]** and **[22]** are listed in the **RP-12** series for each scale.



Note **

The Wing Rail Extension back of the Frog Point, dimension **[35]** will be noted as one half the Frog Heel length **[21]** as tabulated by Frog Number in each Scale:

Wing Rail Extension [35]

	Frog Number						
SCALE:	#4	#5	#6	#7	#8	#9	#10
O	13/16"	29/32"	1"	1 3/32"	1 1/4"	1 13/32"	1 9/32"
S	5/8"	11/16"	3/4"	13/16"	15/16"	1 1/16"	1 3/16"
0n3/OO	17/32"	19/32"	21/32"	23/32"	13/16"	29/32"	11/32"
HO	15/32"	17/32"	19/32"	21/32"	3/4"	27/32"	15/16"
Sn3	7/16"	15/32"	17/32"	9/16"	21/32"	3/4"	13/16"
TT	3/8"	7/16"	15/32"	17/32"	19/32"	11/16"	3/4"
HOn3	11/32"	13/32"	7/16"	15/32"	17/32"	5/8"	11/16"
N	1/4"	9/32"	5/16"	11/32"	13/32"	29/64"	1/2"

A Frog is neither left hand nor right hand, being symmetrical. Both routes thru the Frog and Wing Rail are straight for the entire Overall Frog Length **[19].**

In Turnouts with lower numbered Frogs, such as numbers 4 and 5, the abruptness with which the oncoming wheel meets the junction of the Closure Rail with the Wing Rail, markedly greater than the Flare Angle at the ends of Wing and Guard Rails, suggests running at the slower speeds ordinarily associated with switching in yards rather than the higher speeds typical of mainline operation.

Accordingly, for all but the smallest layouts, a Turnout with a number 6 Frog Angle **[18]** is the lowest numbered Turnout recommended for mainline purposes. Larger numbered Turnouts, consistent with the limiting radius used on the layout, are recommended for smoothest operation.

See **RP-11** for practical limitations on the size of equipment considered suitable for various Frog Numbers.

Protection against hangup of dragging equipment may be had by extending the open end of the Wing Rail by 3 1/2 scale inches to include a 3 1/2" x 45 degree chamfer of the sharp corner. See **[39]** in **RP-13.8**.

**** Note:**
Circled numbers on the drawing are represented by numbers in brackets in the text. **[35]** represents the number **35** in a circle.