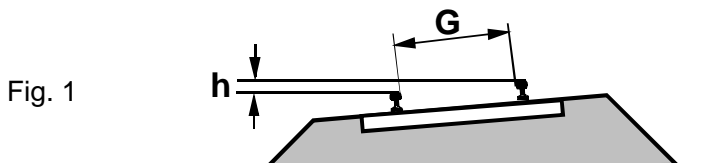


1. Purpose and Terminology

Raising a track's outside rail on a curve (superelevation) results in increased comfort and safety at speed because the superelevation counteracts to some extent the inertial and centrifugal forces encountered entering and transiting the curve (Fig. 1).



In model railway operation, superelevation is not required for reasons of physics and actually increases the likelihood of rolling stock toppling from the track. Rather, its use is for strictly aesthetic reasons and should be kept within the maximum ($G/15$) specified by the following table:

Gauge	6,5	9	12	16,5	22,5	32	45
h_{\max}	0,4	0,6	0,8	1	1,5	2	3

2. Implementation

Throughout the curve, the height of the inner rail is to remain constant with that of the connecting straight track (maintaining the same grade if on an incline). The height of the outside rail is increased to the maximum value h above that of the inner rail.

For best operation, always use superelevation in conjunction with transition curves (see NEM 113). The length of transition to superelevation and the length of the transition curve should be equal.

The transition to superelevation should be distributed evenly over the length of the transition curve (Fig. 2).

