

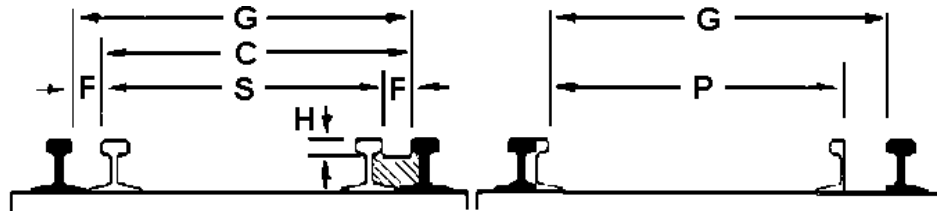
**NMRA Standard**  
**S-3.3, Track Work, Scales with deep flanges**

NMRA Standard

**Trackwork**  
**Scales with Deep Flanges**

Approved: July 2004

S-3.3



Name of Scale	G	C	S	F	H	P	Notes
	Track Gage (Min./Max.)	Check Gage (Min.)	Span (Max.)	Flangeway (Max.)	Flange Clearance (Min.)	Switchpoint Spread (Max) (Elec/Mech)	
<b>G</b>	With the exception of the minimum Flange Clearance, G uses the same track geometry as #1 Gauge track (see S-3.2)			See Note 2	.118 (3.0. mm)		Note 3
<b>O<sub>HI</sub></b>	1.250*(31.75) 1.278 (32.45)	1.156 (29.35)	1.090 (27.7)	.094 (2.4)	.094 (2.4)	1.131 (28.7)	
<b>O<sub>27</sub></b>	O <sub>27</sub> uses the same track geometry as O <sub>HI</sub> Gauge track.						
<b>S<sub>HI</sub></b>	.865* (22.0 mm) 885 (22.5 mm)	.772 (1) (19.6 mm)	.703 (17.85mm)	.096 (1) (2.4 mm)	.094 (2.4 mm)	.744 (18.9 mm)	

\* Denotes Preferred Dimension for Tangent Track (see note 5)

**NOTES:**

- For information on both minimum and maximum manufacturing limits please see NMRA Tech Note: TN-1.2.1
- For backwards compatibility with legacy G models with back to back wheels of as small as 1.542", the flangeway Fmax for the wing rail can be increased from 0.106" to as large as 0.131". (The wing rail is the guard rail closest to the frog.) The guard rail flange however must not be greater than the specified F max of 0.106" Note turnouts built with this increased flangeway must clearly be labeled as G only as they will not accommodate #1 scale wheels. H max for these turnouts should be 3mm as the wheels will typically run through these turnouts on their flange rather than the tread.
- For the G numbers not listed see S-3.2 #1 scale track
- Other than note 2, the F limit applies only to the wing rail, and the C limit applies only to the guard rail. Both apply to the same rail only in special work such as a crossing.
- For Gauge widening in curves for long wheelbase equipment see RP-8.
- For a full discussion of minimum radius, minimum turnout and radius equivalents of degrees of curvature. etc., see S-8 and RP-11.
- Guard and wing rails shall be flared to a minimum dimension across the flared flangeway end of 1.5 x Fmax. Flare angle shall not exceed 10 degrees, and the Flare must disappear before reaching the working area of its rail.
- P electrical is only needed if the points are electrically connected together. If the points are electrically connected to their corresponding stock rail and are thus electrically isolated from each other (the preferred approach) then P electrical does not apply.