

Standards for European Model Railroads

## Area Clearances on Straight Track

102

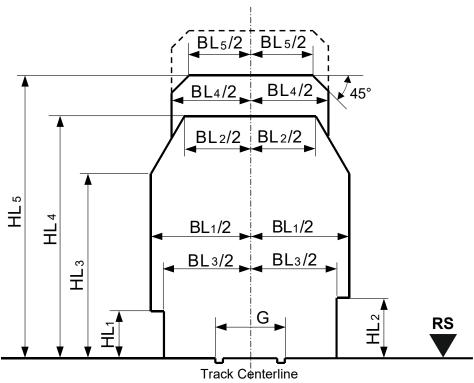
1 Pag

Binding Standard

**Dimensions in mm** 

Edition 2019 (20231122) (First English Edition)

For the replication of normal and wide gauge railroads<sup>1)</sup>, this standard specifies the clearance area into which no fixed object may enter<sup>2)</sup> in order to guarantee impact free operation per NEM 301.



## **Table of Dimensions:**

Gauge	G 1)	BL <sub>1</sub>	BL2	BL <sub>3</sub> <sup>2)</sup>		HL <sub>1</sub>	HL <sub>2</sub> <sup>4)</sup>	HL <sub>3</sub>	HL <sub>4</sub>	with overhead line 5)		
				В	L3 -/	IIL1	ПL2 */	пЦ3	пц4	BL <sub>4</sub>	BL₅	HL <sub>5</sub> <sup>6)</sup>
Z	6.5	20	14	18	17 <sup>3)</sup>	4.5	5	18	23	16	13	27
N	9.0	27	18	25	23 <sup>3)</sup>	6	7	25	31	22	18	37
TT	12.0	36	24	32	30 <sup>3)</sup>	8	9.5	33	41	28	22	48
H0	16.5	48	32	42	40 <sup>3)</sup>	11	13	45	57	38	30	65
S	22.5	66	44	57	55 <sup>3)</sup>	15	17	60	77	50	38	87
0	32.0	94	63	82	80 3)	22	25	85	109	68	52	120
I	45.0	130	87	114	110 3)	30	35	118	153	93	71	165
II	64.0	184	124	156		43	50	168	218	140	106	235

- <sup>1)</sup> Per NEM 010, for wide gauge rolling stock use the nominal track gauge, **G**, as basis. For the width and depth of the flangeway see NEM 110.
- <sup>2)</sup> Functional elements and trackside power delivery are may enter the lower clearance area.
- These values may only be applied when all rolling stock complies with the definition of the kinematic boundary according to NEM 301, Edition 2018, or their interference free passing is confirmed through testing.
- 4) Only for freight ramp tracks.
- <sup>5)</sup> Overhead catenary usage see NEM 201 and 202.
- 6) The dimension **HL**<sub>5</sub> specifies the limit of the clearance area with lowest contact wire position and simple overhead without catenary wire.
  - For bridges and tunnels, the  $HL_5$  clearance must be increased to account for the dimensions of the overhead system or catenary construction.
  - The overhead line and its support are allowed to enter the clearance area above the power wire elevation, *HF* (NEM 201).