



Standards of European Model Railroads  
**Cross-section of the Formation  
 for Narrow Gauge Railroads**

**NEM**  
**123**  
 1 Page

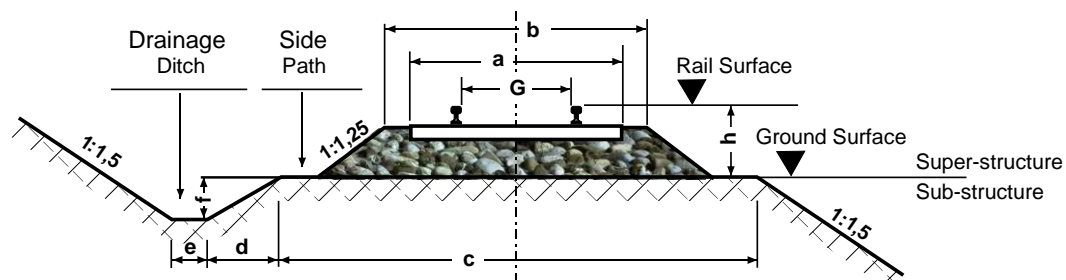
Recommendation

Dimensions in mm

**Edition 2005**  
 (First English Edition)

1. This standard contains guidelines for the cross-section of the formation of narrow-gauge railroads. For the purposes of this standard, "sub-structure" and "super-structure" are meant in the railroad engineering sense.
2. The figure shows the regular cross-section of a single track with straight track. When depicting special terrain, e.g. rock formations or supporting walls, the cross-section of the sub-structure shown can be deviated from: the dimension "c" is also to be adhered to in these cases.

**Note:** <sup>1)</sup> In case of a modern substructure, an underground drainage pipe is provided instead of a drainage ditch.



**Dimension Table „m“:**

Scale	Gauge G	a	b	c	k	f	h <sup>2)</sup>
Zm	4.5	8	10	19	1.5	1	3
Nm	6.5	12	14	26	2	1.5	4
TTm	9	15	18	35	3	2.5	5
H0m	12	21	25	48	4	3	6
Sm	16.5	28	34	66	5	3.5	8
Om	22.5	40	49	94	7	5	11
Im	32	56	69	132	9	6	16
IIIm	45	80	98	188	13	9	22

**Note:** <sup>2)</sup> In the reproduction of old tracks with a light superstructure, the superstructure height is 2/3 h.

**Dimension Table „e“:**

Scale	Gauge G	a	b	c	k	f	h
Ne	4.5	9.5	12	19	2	1.5	3
TTe	6.5	12.5	16	25	3	2.5	3.5
H0e	9	17	22	35	4	3	4.5
Se	12	23.5	30	48	5	3.5	5.5
Oe	16.5	33	42	68	7	5	7
Ie	22.5	47	60	96	9	6	10
Ile	32	67	85	136	13	9	14
IIIe	45	94	120	194	19	12	20

**Dimension Table „i“ <sup>3)</sup>:**

Scale	Gauge G	a	b	c	k	f	h <sup>4)</sup>
TTi	4.5	11	14	25	3	2.5	-
H0i	6.5	15	20	35	4	3	-
Si	9	20	27	47	5	3.5	-
Oi	12	29	38	67	7	5	-
Ii	16.5	41	53	94	9	6	-
Ili	22.5	58	76	133	13	9	-
IIIi	32	81	106	188	19	12	-

**Notes:** <sup>3)</sup> The measurement table "i" does not apply to pure field railroads.

<sup>4)</sup> No specification, as the model of the gravel usually passes into the substructure without any step.

3. If track curves with super-elevation are constructed, NEM 114 must be observed.
4. When installing signals, overhead wire masts, etc. in the side path, the clearance of the clear area according to NEM 104 must be observed.