

**THE DEPARTMENT OF TRANSPORT SPECIFICATION FOR HIGHWAY WORKS**

**TABLE 6/4 : METHOD COMPACTION FOR EARTHWORKS MATERIALS : PLANT AND METHODS**

TYPE OF COMPACTION PLANT	CATEGORY	BOMAG MODEL	METHOD 1		METHOD 2		METHOD 3		METHOD 4		METHOD 5		METHOD 6		
			D	N	D	N	D	N	D	N	D	N	N for D=110mm	N for D=140mm	N for D=250mm
SMOOTH WHEELED ROLLER OR VIBRATORY ROLLER OPERATING WITHOUT VIBRATION	Mass per metre width of roll: Over 2100 kg up to 2700 kg	BW141AD-5 BW151AD-5 BW154AD-5 BW151AD-4 BW161 ADCV-5 BW154 AP-4 BW177D-4 BW177DH-4 BW177 D-5 BW177 DH-5 BW 197 DH-5	125	8	125	10	Unsuitable		175	4	Unsuitable		Unsuitable	Unsuitable	Unsuitable
	Over 2700 kg up to 5400 kg	BW141AD-4 BW154AD-4 BW161AD-4 BW211D-4 BW 161 AD-5 BW 174 AP4i BW 161 ADO (Deadweight) BW213DH-4/4i BW214DH-4/4i BW216DH-4/4i BW 211D-4i BW213D/DH5 BW214D5 BW216D/DH5 BW6	125	6	125	8	Unsuitable		200	4	Unsuitable		16	Unsuitable	Unsuitable
			125	6	125	8	125	8	200	4	Unsuitable		16	Unsuitable	Unsuitable
	Over 5400 kg	BW219DH-4/4i BW226DH-4/4i	150	4	150	8	Unsuitable		300	4	Unsuitable		8	16	Unsuitable
DEADWEIGHT TAMPING ROLLER (Padfoot Excluding Shell Kit)	Mass per metre width of roll : Over 4000 kg up to 6000 kg	BW216PDH-4/4i BW216PD/PDH5	225	4	150	12	250	4	350	4	Unsuitable		12	20	Unsuitable
	Over 6000 kg	BW219PDH-4/4i BW219PD/PDH5	300	5	200	12	300	3	400	4	Unsuitable		8	12	20
PNEUMATIC TYRED ROLLER	Mass per wheel : Over 2500 kg up to 4000 kg	BW24RH BW27RH4i	225	4	125	10	Unsuitable		400	4	Unsuitable		Unsuitable	Unsuitable	Unsuitable
VIBRATORY TAMPING ROLLER	Mass per metre width of a vibrating roll : Over 700 kg up to 1300 kg	BMP851 BMP8500	100	6	100	6	150	6	100	5	Unsuitable		Unsuitable	Unsuitable	Unsuitable
	Over 1300 kg up to 1800 kg	BW124PDH-4	125	12	125	12	Unsuitable		175	8	Unsuitable		12	Unsuitable	Unsuitable
	Over 1800 kg up to 2300 kg	BW145PDH-4 BW145PDH-5	150	12	150	12	Unsuitable		Unsuitable		Unsuitable		8	12	Unsuitable
	Over 2300 kg up to 2900 kg	BW177PDH-4 BW177 PDH-5	150	9	150	9	Unsuitable		Unsuitable		400	5	6	10	Unsuitable
	Over 2900 kg up to 3600 kg	BW211PD-4/4i BW213PDH-4/4i BW6S	200	9	200	9	Unsuitable		Unsuitable		500	6	6	10	Unsuitable
	Over 3600 kg up to 4300 kg	BW214PDH-4i	225	9	225	9	Unsuitable		Unsuitable		600	6	4	8	Unsuitable
	Over 5000 kg	BW 216PDH-4/4i BW219PDH-4/4i	275	9	275	9	Unsuitable		Unsuitable		800	6	3	6	10

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TYPES OF COMPACTION PLANT	CATEGORY	BOMAG MODEL	METHOD 1		METHOD 2		METHOD 3		METHOD 4		METHOD 5		METHOD 6		
			D	N	D	N	D	N	D	N	D	N	N for D=110 mm	N for D=140 mm	N for D=250 mm
VIBRATORY ROLLER	Mass per metre width of a vibrating roll : Over 270 kg up to 450 kg	BW55E	Unsuitable		75	16	150	16	Unsuitable		Unsuitable		Unsuitable		Unsuitable
	Over 450 kg up to 700 kg	BW71E-2	Unsuitable		75	12	150	12	Unsuitable		Unsuitable		Unsuitable		Unsuitable
		BW65H BW75H	Unsuitable		75	6	150	6	Unsuitable		Unsuitable		Unsuitable		Unsuitable
	Over 700 kg up to 1300 kg	BW80AD-2 BW80ADH-2 BW90AD-2 BW100ADM-2 BW80AD-5 BW90AD-5 BW100ADM-5 BW100AD-4	100 12	125 10	150 6	125 10	Unsuitable		Unsuitable		16		Unsuitable		Unsuitable
		BW100AD-5 BW120AD-4 BW120AD-5	100 6	125 5	150 3	125 5	Unsuitable		Unsuitable		16		Unsuitable		Unsuitable
	Over 1300 kg up to 1800 kg	BW135AD BW135AD-5 BW138AD BW138AD-5	125 4	150 4	Unsuitable		175 2		Unsuitable		3		8		Unsuitable
		BW124DH	125 8	150 8	Unsuitable		175 4		Unsuitable		6		16		Unsuitable
	Over 1800 kg up to 2300 kg	BW145D-3 BW145DH-3 BW 145 D-5 BW 145 DH-5	150 4	150 4	Unsuitable		Unsuitable		Unsuitable		4		6		12
	Over 2300 kg up to 2900 kg	BW177D-4 BW177DH-4 BW177 D-5 BW 177 DH-5 BW141AD-4 BW141AD-5 BW151AD-4 BW151AD-5 BW154AD-5 BW 154 AP-4	175 4	175 4	Unsuitable		Unsuitable		400 5		3		5		11
			175 2	175 2	Unsuitable		Unsuitable		400 3		2		3		6
Over 2900 kg up to 3600 kg	BW179DH-4 BW211D-4 BW213D/DH-4/4i BW213D/DH5 BW6 BW 161 AD-5 (half the number of passes)	200 4	200 4	Unsuitable		Unsuitable		500 5		3		5		10	
		200 4	200 4	275 8		Unsuitable		500 5		3		5		10	
		200 2	200 2	275 4		Unsuitable		500 3		2		3		5	
Over 3600 kg up to 4300 kg	BW214DH-4/4i BW214D5	225 4	225 4	Unsuitable		Unsuitable		600 5		2		4		8	
Over 4300 kg up to 5000 kg	BW216D-4/4i	250 4	250 4	Unsuitable		Unsuitable		700 5		2		4		7	
Over 5000 kg	BW216DH-4/4i BW219DH-4/4i BW226DH-4/4i BW216D/DH5 BW219D/DH5 BW226DH5	275 4	275 4	Unsuitable		Unsuitable		800 5		2		3		6	
VIBRATING PLATE COMPACTOR	Mass per m2 of base plate : Below 880 kg	BP6/30 BP8/34 BP10/36-2 BP18/45-2 BP1845D-2 BPR25/45-3 BVP10/36 BVP18/45 BP10/35 BP12/40 BP12/50A BP20/50D	SEE CLAUSE 612, SUB CLAUSE 6 For procedure on use of alternative methods (Testing to confirm – proof rolling)												
	Over 880 kg up to 1100 kg	BPR35/60D BPR 25/40D	Unsuitable		Unsuitable		75 6		Unsuitable		Unsuitable		Unsuitable		Unsuitable
	Over 1400 kg up to 1800 kg	BPR35/42D BPR45/55D BPR55/65D BPR70/70D	100 6	125 6	150 4		Unsuitable		Unsuitable		8		Unsuitable		Unsuitable
	Over 2100 kg	BPH80/65S BPR100/80D	200 6	200 5	250 4		Unsuitable		Unsuitable		3		6		12
VIBROTAMPER	Mass : Over 50 kg up to 65 kg	BT60/4	100 3	100 3	150 3		125 3		Unsuitable		4		8		Unsuitable
	Over 65 kg up to 75 kg	BT65/4	125 3	125 3	200 3		150 3		Unsuitable		3		6		12
	Over 75 kg up to 100 kg	BT80D	150 3	150 3	225 3		175 3		Unsuitable		2		4		10