

SECTION 72- PAVEMENTS QUANTITIES

1507. Table 15.1 gives the volume of material required for various widths and thicknesses of construction.

1508. In assessing transport requirements, use Figures relating to the uncompacted thickness of material.

**TABLE 15.1-PAVEMENTS DESIGNS SUITABLE FOR GIVEN TRAFFIC
AND SUBGRADE CONDITIONS**

(To be used as a guide in hasty work)

Type of traffic	Type of sub-grade	Suitable pavement		
		Sub-base	Base	Surfacing
(a)	(b)	(c)	(d)	(e)
Light, ie, cars, light vans, $\frac{1}{4}$ ton trucks or wheel load is $\frac{1}{2}$ ton	Soft (Loam, soft clay)	6 ins gravel or clinker	6 ins hardcore, stone pitching, or macadam	3 ins gravel
		ditto	Ditto	2 ins bituminous surfacing
		ditto	4 in 1:2:4 concrete	-
	Medium (Sand, stiff clay, chalk, gravel)	3 ins gravel or clinker	6 ins hardcore, stone pitching or macadam	3 ins gravel
		ditto	Ditto	2 ins bituminous surfacing
		ditto	4 ins 1:2:4 concrete	-
	Hard (Gravel, solid chalk, rock)	-	-	3 ins gravel
		3 ins sand or gravel	-	3 ins gravel
		-	3 ins gravel or clinker	2 ins bituminous surfacing
Medium, ie, trucks (load not exceeding 3 tons) or when maximum	Soft (Loam, soft clay)	6 ins gravel or clinker	6 ins hardcore, stone pitching, or macadam	Bituminous surfacing
		ditto	4 ins 1:2:4 concrete	-

RESTRICTED

wheel load is 4 tons (approximately Class 9 vehicles)		3 ins gravel or clinker	6 ins 1:2:4 concrete	-
		6 ins gravel or clinker	9 ins hardcore, stone pitching, or macadam	3 ins gravel
		ditto	Ditto	3 ins bituminous surfacing
	Medium (Sand, stiff clay, chalk, gravel)	3 ins gravel or clinker	6 ins hardcore, stone pitching, or macadam	Bituminous surfacing
		ditto	4 ins 1:2:4 concrete	-
		6 ins gravel or clinker	6 ins hardcore, stone pitching, or macadam	$2\frac{1}{2}$ ins bituminous surfacing
	Hard (Gravel, solid chalk, rock)	-	3 ins gravel or clinker	$2\frac{1}{2}$ ins bituminous surfacing
		1 in sand or clinker	4 ins 1:2:4 concrete	-
		-	6 ins hardcore, stone pitching, or macadam	3 ins gravel
Heavy, ie, trucks (load exceeding 3 ton) or when maximum wheel load is 4 tons (approximately Class 40 vehicles)	Soft (Loam, soft clay)	6 ins gravel or clinker	9 ins hardcore, stone pitching, or macadam	3 ins bituminous surfacing
		ditto	6 ins 1:2:4 concrete	-
		ditto	8 ins 1:2:4 concrete	-
	Medium (Sand, stiff clay, chalk, gravel)	3 ins gravel or clinker	9 ins hardcore, stone pitching, or macadam	3 ins gravel
		ditto	Ditto	3 ins bituminous surfacing
		ditto	6 ins 1:2:4	-

RESTRICTED

			concrete	
	Hard (Gravel, solid chalk)	-	6 ins hardcore, stone pitching, or macadam	$2\frac{1}{2}$ bituminous surfacing
		1 in sand or clinker	4 ins 1:2:4 concrete	-

TABLE 15.2-VOLUME OF MATERIAL REQUIRED FOR VARIOUS WIDTHS AND THICKNESS OF CONSTRUCTION LAYERS

Ser No	Road width (ft)	Volume of material required					
		Thickness of construction layer					
		$1\frac{1}{2}$ ins	2ins	$2\frac{1}{2}$ ins	3 ins	4 ins	6 ins
		Cu yds per 100 yds length					
1	9	12.5	16.7	20.8	25.0	33.3	50.0
2	10	13.9	18.5	23.2	27.8	37.1	55.6
3	12	16.7	22.2	27.8	33.3	44.4	66.8
4	16	22.2	29.7	37.0	44.4	59.3	88.9
5	18	25.0	33.3	41.7	50.0	66.7	100.0
6	20	27.8	37.0	46.3	55.6	74.1	111.2
7	24	33.3	44.4	55.6	66.7	88.9	133.2
8	30	41.7	55.6	69.4	83.3	111.0	166.8
		Cu yds per mile length					
9	9	220	293	367	440	587	880
10	10	245	396	408	489	652	978
11	12	293	391	489	587	782	1172
12	16	391	522	652	782	1043	1565
13	18	440	587	733	880	1173	1760
14	20	489	652	815	978	1304	1956
15	24	587	782	978	1173	1565	2348
16	30	733	978	1222	1467	1956	2932