

**PAVEMENT THICKNESS CHART FOR VARIOUS ROADS**

**DZONGKHAG ROADS (Feeder Roads)**

CBR	TRAFFIC IN MILLION STANDARD AXLES														
	0.3 - 0.7			0.7 - 1.5			1.5 - 3			3 - 6			6 - 10		
3 - 4%	WBM	150		WBM	150		WBM	200		WBM	200		WBM	200	
	SB	150		SB	200		SB	175		SB	225*		SB	275*	
	SR	200		SR	200		SR	200		SR	200		SR	200	
5 - 7%	WBM	150		WBM	150		WBM	200		WBM	200		WBM	200	
	SB	200		SB	250		SB	225		SB	275*		SB	325*	
8 - 14%	WBM	150		WBM	150		WBM	200		WBM	200		WBM	200	
	SB	125		SB	175		SB	150		SB	200		SB	250	
15 - 29%	WBM	150		WBM	150		WBM	175		WBM	200		WBM	225	
	SB	100		SB	100		SB	100		SB	125		SB	250	
30% +	WBM	150		WBM	150		WBM	175		WBM	200		WBM	225	

**Note**

WBM = Water Bound Macadam (50 - 20 mm aggregate)

SB = Sub Base (63 - 40 mm aggregate)

SR = Soil Replacement (preferably quarry materials)

\* = up to 100mm of SB may be substituted with SR provided the SB is not reduced to less than

WBM thickness or 200mm whichever is greater.

## SECONDARY NATIONAL HIGHWAY

CBR	TRAFFIC IN MILLION STANDARD AXLES											
	0.7 - 1.5			1.5 - 3			3 - 6			6 - 10		
<b>3 - 4%</b>	AC		50	AC		50	AC		50	AC		50
	WMM		175	WMM		175	WMM		175	WMM		200
	GSB		175	GSB		225*	GSB		275*	GSB		300*
	SR		200	SR		200	SR		200	SR		200
<b>5 - 7%</b>	AC		50	AC		50	AC		50	AC		50
	WMM		175	WMM		175	WMM		175	WMM		200
	GSB		225	GSB		275*	GSB		325*	GSB		350*
<b>8 - 14%</b>	AC		50	AC		50	AC		50	AC		50
	WMM		175	WMM		175	WMM		175	WMM		200
	GSB		150	GSB		200	GSB		250	GSB		275*
<b>15 - 29%</b>	AC		50	AC		50	AC		50	AC		50
	WMM		150	WMM		175	WMM		175	WMM		200
	GSB		100	GSB		125	GSB		150	GSB		175
<b>30% +</b>	AC		50	AC		50	AC		50	AC		50
	WMM		150	WMM		175	WMM		200	WMM		225

**Note**

AC = Asphaltic Concrete (mix design required)

WMM = Wet Mix Macadam (40 mm down aggregates, mix design required)

GSB = Granular Sub Base (63 - 40 mm aggregate or 70mm down aggregates)

SR = Soil Replacement (preferably quarry materials)

\* = up to 100mm of SB may be substituted with SR provided the SB is not reduced to less than WMM thickness or 200mm whichever is greater

For shoulders 150mm thick GSB to be applied which shall be flushed with BT surface

## PRIMARY NATIONAL HIGHWAY

CBR	TRAFFIC IN MILLION STANDARD AXLES											
	3 - 6			6 - 10			10 - 17			17 - 30		
<b>3 - 4%</b>	AC		40	AC		40	AC		50	AC		50
	DBM		60	DBM		60	DBM		75	DBM		100
	WMM		200	WMM		200	WMM		225	WMM		250
	GSB		200	GSB		225	GSB		225	GSB		250
	SR		200	SR		200	SR		200	SR		200
<b>5 - 7%</b>	AC		40	AC		40	AC		50	AC		50
	DBM		60	DBM		60	DBM		75	DBM		100
	WMM		200	WMM		200	WMM		225	WMM		250
	GSB		225	GSB		250	GSB		250	GSB		275
<b>8 - 14%</b>	AC		40	AC		40	AC		50	AC		50
	DBM		60	DBM		60	DBM		75	DBM		100
	WMM		200	WMM		200	WMM		225	WMM		250
	GSB		150	GSB		175	GSB		175	GSB		175
<b>15 - 29%</b>	AC		40	AC		40	AC		50	AC		50
	DBM		60	DBM		60	DBM		75	DBM		100
	WMM		200	WMM		200	WMM		225	WMM		250
	GSB		100	GSB		100	GSB		100	GSB		100
<b>30% +</b>	AC		40	AC		40	AC		50	AC		50
	DBM		60	DBM		60	DBM		75	DBM		100
	WMM		200	WMM		200	WMM		225	WMM		250

**Note**

AC = Asphaltic Concrete (mix design required)

WMM = Wet Mix Macadam (40 mm down aggregates, mix design required)

GSB = Granular Sub Base (63 - 40 mm aggregate or 70mm down aggregates)

SR = Soil Replacement (preferably quarry materials)

For shoulders 150mm thick GSB to be applied which shall be flushed with BT surface

If Traffic is <3msa, use thickness adopted for 3-6 msa against design CBR.