



HIMACHAL PRADESH

☎ 0177-2621401 PUBLIC WORKS DEPARTMENT

e-mail :-pwd-hp-@ nic.in

No PW /CTR//32-20/Tender Documents /2023-24- 19114-213 Dated:- 15/1/24

To

The Engineer –in -Chief, (P)  
HPPWD Shimla-2.

All the Chief Engineers,  
in HPPWD.

All the Superintending Engineers,  
in HPPWD.

All the Executive Engineers,  
in HPPWD.

Subject:- Regarding analysis of rates of MSS Type "A" & "B" Category.

In this regard, it is intimated that the rates for subject cited matter have been finalized as under:-

- |    |  |                      |
|----|--|----------------------|
| 1. | 25 mm thick MSS Type A<br>(>1500mm rain fall)        | =Rs. 338.65Per. sqm. |
| 2. | 25 mm thick M.S.S ' Type B'<br>( < 1500mm rain fall) | =Rs. 314.85 per sqm. |

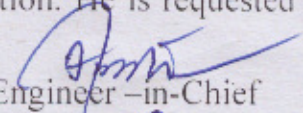
You are, therefore, requested to take further necessary action in the matter accordingly & direct all the field units working under your control to follow the rates of above item in letter and spirit to avoid un- necessary litigation at later stage.

Encl. As above.

Engineer –in-Chief  
HPPWD, Shimla-2.

Copy of above is forwarded to :-

1. The Principal Secretary (PW) to the Govt., of H.P. Shimla for information.
2. The Executive Engineer (IT) in this office for information. He is requested to upload the same on the departmental website.

  
Engineer –in-Chief  
HPPWD, Shimla-2



**Analysis of rate FOR > 1500 mm Rainfall**

**Mix Seal Surfacing 25 mm thicktype-A grade**

Providing, laying and rolling of close-graded Mix Seal Surfacing surfacing material of 25 mm thickness composed of 11.2 mm to 0.9 mm (Type-A) @ 0.338 kg/per ten square meter aggregates using penetration grade bitumen @ ie binders content @27.50kg/10 sqm or 5.11% by weight and minimum density of MSS should be 2.10 gm/cc to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a three wheel 8-10 kN static roller and finishing to required level and grades as per Technical Specification Clause 509 including all leads, Lifts and carriage of materials complete as per entire satisfaction of the Engineer in Charge.

**By Mechanical Means**

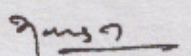
**Type A 25 mm**

**(I) Bitumen (S-90)**

Unit = sqm

Taking output = 4000 sqm (80 cum)

<b>a) Labour</b>					
Mate	day	0.65	437.50	284.38	
Mazdoor (Unskilled)	day	12.50	437.50	5,468.75	
Mazdoor (Skilled)	day	3.75	437.50	1,640.63	
<b>b) Machinery</b>					
HMP of appropriate capacity	hour	9.00	16,896.00	1,52,064.00	
Electric generator set 125 KVA	hour	9.00	1,125.00	10,125.00	
Front end loader 1 cum bucket capacity	hour	9.00	1,281.00	11,529.00	
Tipper 5.5 10 t capacity	hour	5.40	570.00	3,078.00	
Paver finisher	hour	9.00	4,300.00	38,700.00	
Three wheel 80-100 kN static roller	hour	27.00	741.00	20,007.00	
<b>c) Material</b>					
Bitumen (S-90) @ 22.0 kg per 10 sqm of 20 mm hence 25 mm thicknees = $25 \times 22 / 20 = 27.50 \text{ kg} / 10 \text{ sqm}$	t	11.00	43998.14	4,83,979.49	
Stone crushed aggregates 11.2 mm to 0.09 mm @ 0.338 cum per 10 sqm	cum	135.20	1,581.51	2,13,820.45	
				<b>9,40,696.69</b>	
d) Add 10% over head charges				<b>94,069.67</b>	
				<b>10,34,766.35</b>	
e) Add 10% contractor profit				<b>1,03,476.64</b>	
				<b>11,38,242.99</b>	
f) Add 1% labour cess				<b>11,382.43</b>	
g) Add 18% GST				<b>2,04,883.74</b>	
Cost of 4000 sqm = a+b+c+d+e				<b>13,54,509.16</b>	
Rate per sqm = (a+b+c+d+e)/4000				<b>338.63</b>	
			Say rs.	<b>338.65</b>	

  
 SECD-II)



**Analysis of rate FOR < 1500 mm Rainfall**

**Mix Seal Surfacing 25 mm thick Type-B grade**

Providing, laying and rolling of close-graded Mix Seal Surfacing surfacing material of 25 mm thickness composed of 13.2 mm to 0.9 mm (Type-B) @ 0.338 kg/per ten square meter aggregates using penetration grade bitumen @ ie binders content @23.75kg/10 sqm or 5.11% by weight and minimum density of MSS should be 2.10 gram /cc to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a three wheel 8-10 kN static roller and finishing to required level and grades as per Technical Specification Clause 509 including all leads, Lifts and carriage of materials complete as per entire satisfaction of the Engineer in Charge.

**By Mechanical Means**

**Type B 25 mm**

**(I) Bitumen (S-90)**

Unit = sqm

Taking output = 4000 sqm (80 cum)

<b>a)</b>	<b>Labour</b>				
	Mate	day	0.65	437.50	284.38
	Mazdoor (Unskilled)	day	12.50	437.50	5,468.75
	Mazdoor (Skilled)	day	3.75	437.50	1,640.63
<b>b)</b>	<b>Machinery</b>				
	HMP of appropriate capacity	hour	9.00	16,896.00	1,52,064.00
	Electric generator set 125 KVA	hour	9.00	1,125.00	10,125.00
	Front end loader 1 cum bucket capacity	hour	9.00	1,281.00	11,529.00
	Tipper 5.5 10 t capacity	hour	5.40	570.00	3,078.00
	Paver finisher	hour	9.00	4,300.00	38,700.00
	Three wheel 80-100 kN static roller	hour	27.00	741.00	20,007.00
<b>c)</b>	<b>Material</b>				
	Bitumen (S-90) @ 23.75 kg per 10 sqm	t	9.50	43998.14	4,17,982.28
	Stone crushed aggregates 11.2 mm to 0.09 mm @ 0.338 cum per 10 sqm	cum	135.20	1,581.51	2,13,820.45
<b>d)</b>	Add 10% over head charges				8,74,699.48
					87,469.95
<b>e)</b>	Add 10% contractor profit				9,62,169.43
					96,216.94
					10,58,386.37
<b>f)</b>	Add 1% labour cess				10,583.86
<b>g)</b>	Add 18% GST				1,90,509.55
	Cost of 4000 sqm = a+b+c+d+e				12,59,479.79
	Rate per sqm = (a+b+c+d+e)/4000				314.87

Rs. 314.85 sqm

*Signature*  
SECO-ID)