IS : 6241 - 1971

(Reaffirmed 1998)

Indian Standard

METHOD OF TEST FOR DETERMINATION OF STRIPPING VALUE OF ROAD AGGREGATES

UDC 625·7·07 : 620·179·4 [665·45]

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 1

Price Rs 1·50

December 1971

Indian Standard

METHOD OF TEST FOR DETERMINATION OF STRIPPING VALUE OF ROAD AGGREGATES

Stones Sectional Committee, BDC 6

Chairman	*Representing*
SHRI O. MUTHACHEN	Central Public Works Department, New Delhi
Members	
SHRI K. K. AGRAWALA	Builders' Association of India, Bombay
SHRI K. K. MADHOK (*Alternate*)	
SHRI T. N. BHARGAVA	Ministry of Shipping & Transport
CHIEF ARCHITECT	Central Public Works Department (Architectural Wing)
SHRI G. C. DAS	National Test House, Calcutta
SHRI P. R. DAS (*Alternate*)	
DR M. P. DHIR	Central Road Research Institute (CSIR), New Delhi
SHRI R. L. NANDA (*Alternate*)	
SHRI H. D. GUPTA	Public Works Department, Government of Rajasthan
SHRI C. B. L. MATHUR (*Alternate*)	
SHRI M. K. GUPTA	Himalayan Tiles and Marble Pvt Ltd, Bombay
SHRI S. D. PATHAK (*Alternate*)	
DR IQBAL ALI	Engineering Research Laboratory, Government of Andhra Pradesh
SHRI A. B. LINGAM (*Alternate*)	
SHRI JACOB THOMAS	Public Works Department, Government of Kerala
SHRI V. S. KAMAT	The Hindustan Construction Co Ltd, Bombay
SHRI T. R. MEHANDRU	Institution of Engineers (India), Calcutta
SHRI G. S. MEHROTRA	Central Building Research Institute (CSIR), Roorkee
SHRI MOHINDERJIT SINGH	Stonco, New Delhi
SHRI PREM SWARUP	Department of Geology & Mining, Government of Uttar Pradesh
SHRI A. K. AGARWAL (*Alternate*)	
DR A. V. R. RAO	National Buildings Organization, New Delhi
DEPUTY DIRECTOR (MATERIALS) (*Alternate*)	
SHRI M. L. SETHI	Department of Geology & Mining, Government of Rajasthan
SHRI Y. N. DAVE (*Alternate*)	
DR B. N. SINHA	Geological Survey of India, Calcutta
SHRI K. SUNDERNAIK	Public Works Department, Government of Mysore

(*Continued on page* 2)

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 1

(*Continued from page* 1)

Members	*Representing*
SUPERINTENDING ENGINEER (DESIGNS & MARINE WORKS) DEPUTY CHIEF ENGINEER (I & D) (*Alternate*)	Public Works Department, Government of Tamil Nadu
SHRI S. V. SURYANARAYANA	Central Water & Power Commission, New Delhi
SHRI M. V. YOGI SHRI K. N. SUBHA RAO (*Alternate*)	Engineer-in-Chief's Branch, Army Headquarters (Ministry of Defence)
SHRI D. AJITHA SIMHA, Director (Civ Engg)	Director General, ISI (*Ex-officio Member*)

Secretary

SHRI K. M. MATHUR
Assistant Director (Civ Engg), ISI

Indian Standard

METHOD OF TEST FOR DETERMINATION OF STRIPPING VALUE OF ROAD AGGREGATES

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 24 September 1971, after the draft finalized by the Stones Sectional Committee had been approved by the Civil Engineering Division Council.

0.2 The road system in the country is developing at a fast rate and, as a result, the old sources of road aggregates with proven performance characteristics are getting fast depleted. Newer sources of aggregates, performance records for which are not yet available, are thus being established. This standard has been prepared to lay down the method of test for the property of adhesion of aggregates with different types of bituminous binders so that suitability of aggregates could be ascertained.

0.3 In the formulation of this standard considerable assistance has been rendered by Central Road Research Institute, New Delhi, who has supplied suitable test method.

0.4 In reporting the results of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS : 2-1960*.

1. SCOPE

1.1 This standard covers the procedure for determining stripping value by static immersion method of aggregates used in road construction with binders like penetration grade bitumen, flux bitumen and road tar.

2. PROCEDURE

2.1 Retain on 12·5-mm IS sieve 200 g of aggregates passing 20-mm IS sieve. Dry, clean and mix with 5 percent binder by weight of aggregates in a small casserole, binder being heated previously to 160°C if bitumen and 110°C if tar. The aggregates are also to be heated prior to mixing

*Rules for rounding off numerical values (*revised*).

to a temperature of 150°C and 100°C, when these are to be mixed with bitumen and tar respectively. After complete coating the mixture is transferred to a 500 ml beaker and allowed to cool at the room temperature for about two hours. Distilled water is then added to immerse the coated aggregates. The beaker is covered and kept in a water-bath maintained at 40°C, taking care that the level of water in the water-bath comes up to at least half the height of the beaker. After the expiry of 24 hours the beaker is taken out, cooled at room temperature and the extent of stripping is estimated visually while specimen is still under water.

3. EVALUATION

3.1 The stripping value shall be the ratio of the uncovered area observed visually to the total area of the aggregates in each test expressed as a percentage.

4. REPORTING OF RESULT

4.1 The mean of the three results shall be reported as stripping value of the tested material and shall be expressed nearest to whole number.