

**PROFORMA FOR RECORD
OF
TEST VALUES
OF
LOCALLY AVAILABLE
PAVEMENT CONSTRUCTION
MATERIALS**

Published by:

INDIAN ROADS CONGRESS

Jamnagar House, Shahjahan Road,
New Delhi-110 011

1972

Price : ₹ 80/-
(Plus Packing & Postage)

IRC:42-1972

First Published	:	August, 1972
Reprinted	:	March, 1987
Reprinted	:	April, 2002
Reprinted	:	January, 2006
Reprinted	:	March, 2016

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Printed by India Offset Press, New Delhi-110 064
(500 Copies)

PROFORMA FOR RECORD OF TEST VALUES OF LOCALLY AVAILABLE PAVEMENT CONSTRUCTION MATERIALS

1. INTRODUCTION

1.1 There is need for carrying out extensive surveys of locally available pavement construction materials with a view to their optimal utilisation in road projects and achieving greater economy in construction costs. For making best use of information from such surveys, it is essential that the sampling and testing of materials, as also recording of test results, be done in a systematic manner without omitting any important aspect.

1.2 Towards this end, the Soil Research Committee (now called Soil Engineering Committee) personnel given below, had developed certain standard Proforma for recording test results and other relevant particulars of the pavement construction materials. These have been vetted further by the Specifications and Standards Committee in their meetings held on the 8th December, 1970 and 18th & 19th November, 1971 and approved by the Executive Committee in their meeting held on the 26th and 27th April 1972. Later, the Standard was approved by the Council at their 78th meeting held at Nainital on the 10th July, 1972.

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1.3 The Proforma are intended for application at the pre-specifications stage by way of guidance to the survey and design staff and not for purpose of quality control during construction.

2. SCOPE

2.1 The Proforma recommended relate to locally available pavement construction materials such as road stones, slag, low-grade aggregates and soil-gravel mixtures. There are three separate Proforma, I to III, as under:

Proforma I: For record of test values of hard aggregates;

Proforma II: For record of test values of low-grade/soft aggregates; and

Proforma III: For record of test values of naturally occurring soil-gravel/moorum mixtures.

3. NOTES ON THE USE OF PROFORMA

3.1 The Proforma are meant essentially to aid the design engineer in evaluation of locally available materials for incorporation in different pavement courses and, in addition, framing of realistic cost estimates. Accordingly, these have been developed with an eye on the specifications generally in use.

3.2 For proper correlation, the Proforma should be accompanied by an index map drawn to a suitable scale. On this map, the material sources should be distinctly marked. The map should also show existing haul roads for working out costs.

4. SAMPLING AND TESTING

4.1 Before extracting samples, the material source should be closely examined and subdivided into groups as necessary, depending on variability of the material, so that representative samples may be obtained from each. For each class of material three specimens should be taken from each sample, preferably by quartering, and the requisite tests performed for completing the Proforma.

4.2 To have uniformity in testing, reference has been drawn in the Proforma to relevant Standards of Indian Standards Institution, British Standards Institution or Indian Roads Congress as applicable.

STATE :—
DISTRICT :—

**PROFORMA FOR RECORD OF TEST VALUES
OF HARD AGGREGATES**

PROFORMA I

LOCATION AND NAME OF QUARRY (IF ANY (CORRELATED WITH INDEX MAP)	PETROGRAPHIC DESCRIPTION (GROUP CLASSIFICATION OR TRADE NAME)	SAMPLE NO.	TEST NO.	AGGREGATE IMPACT VALUE [IS: 2386 - PART-IV]	LOS ANGELES ABRASION VALUE [IS: 2386 - PART IV]	SPECIFIC GRAVITY [IS: 2386 - PART III]	WATER ABSORPTION PERCENT [IS: 2386 - PART II]	FLAKINESS INDEX [IS: 2386 - PART I]		STRIPPING VALUE ** [VIDE METHOD GIVEN IN IRC: 14]	FOR SLAG AGGREGATES ONLY			REMARKS REGARDING PERFORMANCE OF THE AGGREGATE WHEREVER A SYSTEMATIC EVALUATION HAS BEEN MADE		ADDITIONAL REMARKS LIKE NEW/OLD QUARRY APPROXIMATE QUANTITY AVAILABLE, EXISTING ACCESS TO QUARRY ETC.
								NOMINAL SIZE 45 mm	NOMINAL SIZE 19 mm		BULK DENSITY [IS: 2386 - PART II]	SULPHUR CONTENT [BS: 1047]	CHEMICAL STABILITY [BS: 1047]	PERFORMANCE IN SUB-BASE/BASE COURSE	PERFORMANCE IN WEARING COURSE	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		1	1													
			2													
			3													

NOTE :—

**THIS TEST NEED BE PERFORMED ONLY WHERE THE MATERIAL IS PROPOSED
TO BE USED IN BITUMINOUS CONSTRUCTIONS.

SIGNATURE

DESIGNATION

DATE

STATE : —

DISTRICT ; —

PROFORMA FOR RECORD OF TEST VALUES
OF LOW-GRADE/SOFT AGGREGATES

PROFORMA II

LOCATION AND NAME OF QUARRY IF ANY (CORRELATED WITH INDEX MAP)	DESCRIPTION SUCH AS LATERITE, KANKAR, DHANDLA BRICK METAL ETC.	SAMPLE NO.	TEST NO.	AGGREGATE IMPACT VALUE		WATER ABSORPTION [IS: 2386- PART III]	CHEMICAL TESTS, WHERE NECESSARY	SOUNDNESS TEST, WHERE NECESSARY	REMARKS REGARDING PERFORMANCE OF THE AGGREGATE WHEREVER A SYSTEMATIC EVALUATION HAS BEEN MADE	ADDITIONAL REMARKS LIKE NEW/OLD QUARRY, APPROXIMATE QUANTITY AVAILABLE, EXISTING ACCESS TO QUARRY ETC.
				DRY TEST [IS: 2386- PART IV]	WET TEST [IS: 5640]					
I	2	3	4	5	6	7	8	9	10	11
		1	1 2 3							

SIGNATURE.....

DESIGNATION.....

DATE.....

STATE:—
DISTRICT:—

**PROFORMA FOR RECORD OF TEST VALUES OF NATURALLY
OCCURRING SOIL-GRAVEL/MOORUM MIXTURES**

PROFORMA III

LOCATION AND NAME OF QUARRY IF ANY (CORRELATED WITH INDEX MAP)	GENERAL DISCRIPTION OF THE MATERIAL	SAMPLE NO.	TEST NO.	GRADATION - IS:2720 - PART IV							OPTIMUM MOISTURE CONTENT [IS: 2720-PART VII]	PROCTOR DENSITY	ATTERBERG LIMITS [IS: 2720-PART V]			CBR** VALUES	ADDITIONAL REMARKS LIKE NEW/OLD QUARRY, APPROXIMATE QUANTITY AVAILABLE, EXISTING ACCESS TO THE QUARRY ETC.
				PERCENT BY WEIGHT PASSING SIEVE NO.*									L.L.	P.L.	P.I.		
				90 mm	45 mm	9.5 mm	4.75 mm	600 MICRON	425 MICRON	75 MICRON							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
		1	1														
			2														
			3														

NOTES: * SIEVES INDICATED IN METRIC SYSTEM ARE INDIAN STANDARD SIEVES CONFORMING TO IS: 460.
 ** TESTED IN ACCORDANCE WITH IS: 2720 - PART XVI ON SAMPLES PREPARED AT MAXIMUM DRY DENSITY AND
 OPTIMUM MOISTURE CONTENT CORRESPONDING TO IS: 2720 - PART VII. SAMPLES TO BE SOAKED IN WATER FOR
 4 DAYS UNLESS OTHERWISE SPECIFIED, A SET OF THREE SPECIMENS SHOULD BE TESTED FROM EACH SAMPLE.

SIGNATURE

DESIGNATION

DATE

STATE :—
DISTRICT :—

**PROFORMA FOR RECORD OF TEST VALUES
OF HARD AGGREGATES**

PROFORMA I

LOCATION AND NAME OF QUARRY (IF ANY (CORRELATED WITH INDEX MAP)	PETROGRAPHIC DESCRIPTION (GROUP CLASSIFICATION OR TRADE NAME)	SAMPLE NO.	TEST NO.	AGGREGATE IMPACT VALUE [IS: 2386 - PART-IV]	LOS ANGELES ABRASION VALUE [IS: 2386 - PART IV]	SPECIFIC GRAVITY [IS: 2386 - PART III]	WATER ABSORPTION PERCENT [IS: 2386 - PART II]	FLAKINESS INDEX [IS: 2386 - PART I]		STRIPPING VALUE ** [VIDE METHOD GIVEN IN IRC: 14]	FOR SLAG AGGREGATES ONLY			REMARKS REGARDING PERFORMANCE OF THE AGGREGATE WHEREVER A SYSTEMATIC EVALUATION HAS BEEN MADE		ADDITIONAL REMARKS LIKE NEW/OLD QUARRY APPROXIMATE QUANTITY AVAILABLE, EXISTING ACCESS TO QUARRY ETC.
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		1	1													
			2													
			3													

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OF LOW-GRADE/SOFT AGGREGATES

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				DRY TEST [IS: 2386- PART IV]	WET TEST [IS: 5640]					
I	2	3	4	5	6	7	8	9	10	11
		1	1 2 3							

SIGNATURE.....

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OCCURRING SOIL-GRAVEL/MOORUM MIXTURES**

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