

FINE AGGREGATE

A/ INTRODUCTION

- 1/ Participants are invited to perform tests as the majority of **routinely tested** sample.
- 2/ For each test performed please report the result of a single determination only, not the average of two or more, except in cases where an average is called for in the method or specification.
- 3/ Ultimately, though, it is the responsibility of the participating laboratories to avoid **collusion or falsification** of results. Laboratories found to be **falsifying** results may be refused participation in subsequent proficiency tests.
- 4/ to permit an estimate of single-operator precision, the same operator should conduct tests. Treat each sample as you would treat a typical “testing” sample. Any special handling or preparation needs will be included below or within the Sample Instructions Document.
- 5/ all tests should be conducted according to **ASTM Standard** Test Methods indicated.

B/ PROFICIENCY TESTING PLAN

SAMPLE	ROUND
MATERIALS FINER THAN 75-MM	ASTM C117
SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES	ASTM C136
RELATIVE DENSITY (SPECIFIC GRAVITY) AND ABSORPTION OF FINE AGGREGATE	ASTM C128
SOUNDNESS OF AGGREGATES BY MAGNESIUM SULFATE	ASTM C88
SAND EQUIVALENT VALUE OF SOILS AND FINE AGGREGATE	ASTM D2419

The **_FINE AGGREGATE** Proficiency Samples are currently being processed. Please take note of the following dates and deadlines associated with these samples:

➤ Shipping

Immediately after the shipping date, **PTTn** will send email informing you the track shipment number. Upon receipt of the samples, please open the boxes and ensure that all contents are included. If the samples are seriously damaged or missing a component, please notify us immediately and we will send replacements.

The outside of the sample box is labeled samples

Datasheets and instructions will be communicated to participants by email.

➤ Non-Receipt Date:

If you have not received the samples by the non-receipt date or If the samples are seriously damaged or missing a component, please notify us immediately; through email at info@pt-tn.com ; and we will send replacements.

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➤ **Closing Date:**

We encourage you to submit your results email at info@pt-tn.com, as soon as possible. This enables you to receive instant confirmation of data submitted and revise data if needed. Test results received after the closing date will not be included in the final report.

➤ **Final Report Date:**

PTTn will provide a final report approximately two weeks after the closing date.

PT reports will be provided by email. Laboratories will be notified by email when the final report becomes available

C/CONFIDENTIALITY

Of course, **confidentiality** of individual laboratory results will be maintained. However, general information regarding the round of testing, such as statistical summary tables and z-score associated with the analysis of data.

D/ INSTRUCTIONS

➤ **Materials Finer Than 75- μ m Sieve by Washing (Procedure B), ASTM C117-17:**

Oven dry the sample, weigh it, place it in the container, add water and wetting agent, and wash it over the 75- μ m (No. 200) sieve (as directed by C117, Procedure B). Determine the amount of material finer than the 75- μ m sieve by washing. Report the percentage finer than the 75- μ m (No. 200) sieve to the nearest 0.01 percent.

➤ **Sieve Analysis, ASTM C136-19:**

Oven dry the sample (after the wash) and sieve it (as directed by C136. Report to the nearest 0.1 percent the total material *passing* each of the following sieves: 4.75-mm, 2.36-mm, 1.18-mm, 600- μ m, 300- μ m, 150- μ m, and the 75- μ m. Report the percentage passing the 75- μ m sieve to the nearest 0.01 percent. Calculate the percent of each fraction based on the total original oven dry mass before the sample was washed.

➤ **Specific Gravity and Absorption of Fine Aggregate, ASTM C128-15:**

Oven dry the sample at $110 \pm 5^\circ\text{C}$ ($230 \pm 9^\circ\text{F}$), soak in water and determine the bulk specific gravity, the bulk specific gravity (SSD) and the apparent specific gravity [or relative density (OD), relative density (SSD), and apparent relative density for C128] in accordance with the test method. Report these to the nearest 0.001 units. Determine the absorption and report it to the nearest 0.01 percent.

➤ **Sulfate Soundness, ASTM C88-18:**

The test may be performed using **MAGNESIUM SULFATE**, or both solutions if desired. Perform five cycles on the following sizes: passing the 2.36-mm and retained on the 1.18-



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mm sieve; passing the 1.18-mm and retained on the 600- μ m sieve; passing the 600- μ m and retained on the 300- μ m sieve. For each size fraction, report the amount of material finer than the designated sieve as a percentage of the original mass of the fraction to the nearest 0.01 percent. **Do NOT compute the weighted, or weighted average, loss.**

➤ **Sand Equivalent Test, ASTM D2419-14:**

Report the average of the three sand equivalent determinations.

Special Instructions: After test specimens are obtained (Specimens may be obtained using either the Air Dry or Pre-Wet method according to ASTM Procedure A or B), dry each test specimen to constant mass at $110 \pm 5^{\circ}\text{C}$ ($230 \pm 9^{\circ}\text{F}$) and cool to room temperature before testing. (Moist test specimens produce lower sand equivalent values than corresponding oven dry specimens. We are asking laboratories to oven dry the prepared test specimens before pouring them into the plastic cylinder in order to obtain more consistent results for between laboratory comparisons.)

For more details please contact **PTTn** at info@pt-tn.com

Sincerely,

PTTn Proficiency Testing Tunisia