

## Fine Aggregate Angularity Calibration Worksheet

Equipment ID: _____	Date: _____
Manufacturer: _____	Performed By: _____
Model #: _____	Last Calibration: _____
Serial #: _____	Next Calibration Due: _____
Storage Location: _____	

Calibration Item: Verify critical dimensions of the funnel, stand, cylindrical measure, and spatula  
 Determine the volume of the cylindrical measure

Calibration Procedure: In-House Procedure for Verifying Fine Aggregate Angularity Device

Calibration Equipment: Ruler readable to 1 mm  
 Caliper readable to 0.1 mm      *Caliper ID:* \_\_\_\_\_  
 Straightedge  
 Protractor  
 Glass Plate (60 mm x 60 mm)  
 Grease or Vaseline

<u>Funnel</u>	<u>Measurement</u>	<u>Tolerance</u>	<u>Pass / Fail</u>	
Inside Diameter of Funnel Opening	_____	12.7 ± 0.6 mm	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
Slope Angle of Funnel	_____	60 ± 4 °	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
Funnel Height	_____	at least 38 mm	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail

<u>Funnel Stand</u>	<u>Measurement</u>	<u>Tolerance</u>	<u>Pass / Fail</u>	
Distance from opening to cylindrical measure	_____	115 ± 2 mm	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail

<u>Cylinder Dimensions</u>	<u>Measurement</u>	<u>Tolerance</u>	<u>Pass / Fail</u>	
Inside Diameter of Cylinder	_____	≈ 39 mm	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
Inside Height of Cylinder	_____	≈ 86 mm	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
Thickness of Base Plate	_____	at least 6 mm	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail

<u>Cylinder Volume</u>	<u>Measurement</u>	<u>Tolerance</u>	<u>Pass / Fail</u>	
Mass of cylinder, grease, glass plate (g)	_____	$V = 1000 \frac{M}{D}$		
Mass of cylinder, grease, glass plate, water (g)	_____			
Temperature of Water	_____			
Density of Water at Measured Temp (kg/m <sup>3</sup> )	_____			
Volume of Cylinder (mL)	_____	≈ 100 mL	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail

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<u>Spatula</u>	<u>Measurement</u>	<u>Tolerance</u>	<u>Pass / Fail</u>	
Length of Blade (straight)		≈ 100 mm	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
Width of Blade		at least 20 mm	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
Is the end cut at a right angle to blade?	<input type="checkbox"/> Yes <input type="checkbox"/> No	at right angle	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail

**Table 3—Density of Water**

Temperature			
°C	°F	kg/m <sup>3</sup>	lb/ft <sup>3</sup>
15.6	60	999.01	62.366
18.3	65	998.54	62.336
21.1	70	997.97	62.301
(23.0)	(73.4)	(997.54)	(62.274)
23.9	75	997.32	62.261
26.7	80	996.59	62.216
29.4	85	995.83	62.166

Pass / Fail \_\_\_\_\_

Initial By \_\_\_\_\_