RILEM TG2 – Compaction Protocol Template/ Questionnaire • **Answer questions that apply to your method** • **Add additional information that you feel is missing**		
	General Information:	
1	What is the compactor type? What are any other names or aliases?	French Giratory Compactor
2	Generally describe the laboratory compactor. • How does it work? • Describe any technical terminology used specifically with this equipment	Static vertical loading + circular transversal displacement on a cylindrical sample See EN standards
3	What documents (standard or in-house specifications) are referenced for the use of this machine?	EN 12697-31
4	Provide any information on the Precision and Bias of this procedure.	Not available
5	Provide several digital photos of the compactor.	See below
6	What do you like about this method?	The newer version of giratory compactor is very safe and easy to handle. The sample is lifted by a crane.
7	What do you dislike about this method?	Nothing in particular
	Specimen:	
8	Describe the shape, size and weight of the specimens produced.	Cylinder: 150mm diameter, 150mm high when compacted
9	How do you select compaction temperature?	Compaction temperature is determined depending on binder nature and grade. For experimental binders, viscosity measurements are done.
10	What is the compaction temperature?	Binder dependant. The target is the temperature at which the binder viscosity is 200mPa.s.
11	How long is the conditioning temperature applied?	Typically around 1h (standard says between 45min and 2h30)
12	Are molds preheated? To what temperature? What other tools, etc. are preheated?	Molds are preheated at compaction temperature The compactor's inner slot is also preheated.
13	How long does the compaction process take?	Around 10min for each sample
	Procedure for preparing the sample:	
14	What is the general procedure for compacting samples?	See standard
15	What are the settings required to compact the sample? • Pressure or load applied to sample • Angles if applicable • Number of passes or gyrations	 See standard 1° 200 total. Material specs requirements are set at different numbers of gyrations depending of mixture type.
16	Is a pre-inspection of equipment required? (molds – clean, serviceable, etc)	No. Annual verification only.
17	What is the procedure for loading the molds? • Is paper (or water)used to prevent material from bonding to plates • How are molds loaded? (rodding, tamping, troweling	See standard Yes. Automatic lifting system. Very easy
	Compacted sample	

18	What measurements can be taken of the sample? • Sample height • Pressure readings • Counters for passes and gyrations	 Yes No Yes
19	How are the measurements recorded?	Computer file
20	How is the sample removed from the compactor and mold? (post-compaction activities)	Samples are unmolded manually or with hydrolic pressure. The samples are not used for mechanical testing, they are trashed.
21	How are the volumetric properties determined?	Measurement of specific gravity for all granular cuts and binder.
22	How is unit mass and density calculated?	Mass is determined by weighing the different components before mixing. Measurement of sample density through geometric measurements.
23	How do you characterize properties of the specimen?	Gyratory compaction is used to assess material's ability to compact. Samples are not used for additional mechanical testing.
24	Is a graphical presentation (plot) generated?	Yes.


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