



COST ACTION FP1303

Cooperative Performance Test

Dear colleagues,

Cost Action FP 1303 “Performance of bio-based building materials” has successfully started in October 2013 and we are looking forward to an ambitious program during the next 3.5 years. Cost Actions provide an excellent opportunity for collaborative research, e.g. in the frame of Round Robin tests. As we have learned from earlier actions it is valuable to start with such cooperative activities as early as possible in the life of the action. This allows harvesting results within the runtime of the action and will initiate lively discussions during the upcoming workshops and meetings.



The idea is to distribute a fairly simple test set up among as many places in Europe as possible to collect performance data under the full range of climatic conditions to be expected. Furthermore we would like to consider performance in its manifold meaning, i.e. optical, aesthetical, moisture and functional performance and durability. In contrast to traditional Round Robin tests aiming on comparative evaluation and validation of results from different test labs, this initiative aims on collecting performance data under climatically different exposure conditions. Therefore it will be required to provide weather data from the respective test sites to allow establishing relationships between climate conditions and the following measurands, which shall be evaluated regularly:

- Decay
- Discoloration (e.g. through color measurements)
- Development of mold and other staining fungi
- Corrosion
- Formation of cracks
- Moisture performance (if data logging device is included)

If you decide to participate you will receive detailed instructions how to do the assessments, as well as template files for the different tests and assessment schemes. Test is planned to start in May 2014. It is expected, that we will run the test at least until the end of the action.

The results expected from this cooperative performance test will contribute to a better understanding of performance aspects of bio-based materials in the building sector under the influence of geographical and climatic differences. Furthermore it will enable you to estimate your own location in terms of exposure severity and performance to be expected.

Idea...



Test set up...

... a Performance table

A folding table with boards made from three different materials (i.e. Norway spruce, English oak and thermally modified spruce) serves as easy shippable and ready-to-use test object. The boards are fixed with partly stainless and partly ordinary steel screws. Dimension of the table is (50 (w) × 70 (l) × 50 (h) cm). The table is available in three versions:

Version A: Performance table with 3 materials mounted; including data logging device for recording temperature and wood MC (8 channels)

Version B: Performance table with 3 materials mounted, no data logger

Version C: Performance table, blank rig for testing extra materials according to your personal/regional preferences (will be delivered only in addition to version A or/and B)

You and your colleagues are very welcome to join this cooperative initiative!

Please feel free to spread this invitation!

If you decide to do so, please fill in the attached order form and send it to the coordinator, Prof. Dr. Miha Humar (miha.humar@bf.uni-lj.si) not later than **March 14th 2014**.

Please note that we require getting weather data from a meteorological station nearby (at least min. + mean + max. temperature, precipitation, wind speed and direction, RH are needed). Table should be positioned on open place.

All collected data will be freely available via a web data base and might get used for common publication within this COST Action and beyond. After termination of the trial the performance table and connected data loggers will stay your property.

If you have any further questions do not hesitate to contact us!

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