



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2014_BJAST_14885
Title of the Manuscript:	AN APPROACH OF EXERGY ANALYSIS OF HUMAN PHYSIOLOGICAL RESPONSE IN THE OUTDOOR CONDITIONS DURING BLOCKLAYING IN OGUN STATE, NIGERIA
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	1) It will be better to provide the exergy in terms of input variables expressed in this article. 2) In Conclusion, the recommendation should be given which will be useful to masons to acquire full effort with variable environmental conditions. 3) In result and discussion part the effect of outside parameters such as metabolic activities and respiration of mason in terms of skin and core temperature can be considered for analysis in detail for different atmospheric conditions. 4) In July, the temperature is low with higher humidity ratio. In particular the effect of work output of a mason on those climates can be discussed elaborately. 5) It would be appreciable if limitations of the study are added. Also, mention the variations and novelty in your study based on results with comparison to other studies in the same domain which was published very recently.	1. Reference to my equation 17, stored exergy can only be quantified at different air temperature, skin temperature, as well as the air pressure and skin pressure. 2. It is already given in the conclusion. 3. These parameters have been considered in the analysis. The air temperature (T_a) and core temperature (T_c). 4. The effect of low outdoor temperature and high humidity has been included now for your references. 5. The limitation is now included in the study.



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<u>Minor</u> REVISION comments	1) Providing quantification of exergy terms in terms of Sankey diagram would be better. 2) Apart from the articles that you made in references one more reference could be added M. Prek, M. Mazej and V. Butala (2008) “ An approach to exergy analysis of human physiological response to indoor conditions and perceived thermal comfort”, 7th International Thermal Manikin and Modelling Meeting - University of Coimbra.	1. Sankey diagram is not necessary. The exergy diagram in figure is a simplified one that deal with core, skin and the air temperature. 2. The reference is included now.
<u>Optional/General</u> comments	I appreciate authors for the significant contribution for social benefit to enhance the comfort and performance of masons. This work can be extended in future work in considering the following points (i) Effect of materials that creates enormous heat while reacting with water such as cement in working environment could be studied. (ii) The study can be extended if we provide artificial covers over a building that could change the effectiveness of masons work potential.	1. Thank you for the comment. 2. The future work is noted for further research. 3. I appreciate the comments of the reviewer.