

## Review Form 1.6

Journal Name:	<a href="#">Journal of Engineering Research and Reports</a>
Manuscript Number:	Ms_JERR_92822
Title of the Manuscript:	Comparative Study of the Compressive Strength of Concrete made from Different Brands of Cements in Ghana
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. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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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)
<b>Compulsory</b> REVISION comments	<p><b>ABSTRACT</b> The abstract deserves to be more precise as the case of the conclusion. Indeed, there are no numerical results in the summary.</p> <p><b>2. EXPERIMENTAL METHODS</b></p> <p>The strengths of concrete being a function of the proportions of the components (cement, sand, gravel and water), it would be important to specify the proportions of these components and the method which made it possible to determine them or justify these proportions. Also the assumptions of the formulations must also be specified (desired resistances and consistency of the concrete above all). The chemical composition of the cement intervening in the property of the cement in particular its resistance, it is also desirable that the chemical compositions of all the cements are specified, especially that the discussion relied on the chemical composition of the chemicals of the cements.</p> <p><b>3.2 Discussions</b> "A compressive strength of 30N/mm<sup>2</sup> was the target that was set for the concrete mixes since all 32.5 and 42.5 cements brands are required by their own standards to meet it as the minimum 28<sup>th</sup> day strength using the mix proportions adopted in this study." In the discussion, it says "A compressive strength of 30N/mm<sup>2</sup> was the target that was set for the concrete mixes since all 32.5 and 42.5 cements brands are required by their own standards to meet it as the minimum 28<sup>th</sup> day strength using the mix proportions adopted in this study.", which should be corrected. Because the strength of the concrete is a function of the formulation which is based on the basic assumptions and the quality of the materials. From these two elements (hypotheses envisaged and quality of the components in particular of the cement), the proportions of the components are determined. For this study, if the proportions of the components (cement, water, sand and gravel) used are the same, we cannot expect the same resistance for the two types of cement (32.5 and 42.5). It is therefore not normal for the 30MPa resistance to be considered as a reference for the comparison. Thus the reference values of cement types 32.5 and 42.5 could be respectively 25MPa and 30MPa. This justifies the results of the concrete resistances: values higher than 25MPa and 30MPa respectively for cements 32.5 and 42.5. In all cases, the methodology must clearly specify the types of concrete envisaged C30????? and justify it for the two types of cements (32.5 and 42.5) <b>NB:</b> After redefining the reference concrete, the summary, the discussion and the conclusion must be resumed for this conforming to these references.</p>	
<b>Minor</b> REVISION comments		
<b>Optional/General</b> comments	<p>The study carried out by the authors is very relevant, because it reassures the actors of the constructions on the various types of cements which are on the market of the BTP. The taking into account of the observations made, will make it possible to better reassure the actors and by consequence to value the results.</p>	

**PART 2:**

	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)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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