
STRAW FILLER CONCRETE - SUSTAINABLE METHOD FOR AGRICULTURAL WASTE MANAGEMENT

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SUMMARY

In the areas of agriculture - rural in Vietnam, solving the problem of straw treatment after each season so that the smallest impact on the environment is an especially important task; reducing environmental impact is becoming an important requirement in human activities. This paper proposes and shows the designing method of the concrete component using straw fillers. Based on the criteria of lightweight concrete, through the testing of basic features, the result shows that the concrete using straw fillers in reasonably proportion will satisfy the basic properties of lightweight concrete. With straw filler concrete made from concrete B15 and the straw content of about 10 ÷ 18% by weight of cement, the mixture ensures compliance with the provisions of Vietnam standards of lightweight concrete. The use of this concrete will not only reduce material cost but also contribute to reducing environmental impacts from the agricultural by-product.

Keywords: Agricultural by-product, compressive strength, light weight concrete, straw filler concrete, volumetric mass.

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