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Title: Intraregional reuse of emergency temporary housing in Japan

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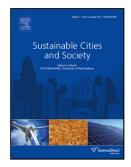
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ACCEPTED MANUSCRIPT

Title: Intraregional reuse of emergency temporary housing in Japan

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Highlights

· Wooden piles in the foundations of emergency temporary housing at the time of supply tend to

cause labor to remove them and warping of other components, so the use of the materials other than

wooden piles should be discussed.

· Joining methods, used at the time of supply, such as adhesive and nails can result in damage of

components or an increase of labor to dismantle housing, so bolts and screws should be used.

• When the floor plan of housing is changed, it should be taken into consideration whether the

dismantled materials are capable of accommodating the changes.

Abstract

The aim of this study is to examine cases in which emergency temporary housing units constructed recently in Japan, and which were dismantled as of December 2016, were reused intraregionally. Interview surveys were conducted with local governments that reused emergency temporary housing and with building contractors who undertook the construction work necessary for reuse. Eight applicable

cases were used as subjects.

The results indicated that changes in floor plan and specifications of foundation are issues during the reconstruction planning stage. The former are due to changes in sites and use, which affect changes in dimensions of material. The latter are caused by laws and regulations that require the use of wooden piles

in the foundations of emergency temporary housing.

From these results, to reuse emergency temporary housing, it is necessary to use components in circulation that are capable of accommodating changes in floor planning, and to join them with bolts,

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