

Circular renovation of an apartment building with prefabricated additional insulation elements to nearly zero energy building

Nigumann, Eero; Kalamees, Targo; Kuusk, Kalle; Pihelo, Peep Journal of sustainable architecture and civil engineering 2024 / p. 22-34 <https://doi.org/10.5755/j01.sace.34.1.35674> [Journal metrics at Scopus](#) [Article at Scopus](#)

Circular renovation of an apartment building with prefabricated insulation elements

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Commissioning of moisture safety of nZEB renovation with prefabricated timber frame insulation wall elements

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Deep energy renovation of old concrete apartment building to nZEB by using wooden modular element

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