

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

Nigumann, Eero; Kalamees, Targo; Kuusk, Kalle; Pihelo, Peep 5th International Conference Forum Wood Building Baltic : 26-28 February 2024, Tallinn, Estonia : proceedings 2024 / p. 96-97 : ill <https://digikogu.taltech.ee/et/Item/22318c67-e0ef-42f1-88c7-34c9d9677b17> https://www.ester.ee/record=b5668645*est

Circularity concepts for offsite prefabricated energy renovation of apartment buildings

Kuusk, Kalle; Kullerkupp, Kristel; Pihelo, Peep; Ritzen, Michiel; Tisov, Ana; Kalamees, Targo Journal of physics : conference series 2021 / art. 012074 <https://doi.org/10.1088/1742-6596/2069/1/012074> Conference Proceedings at Scopus Article at Scopus

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

Pihelo, Peep; Kalamees, Targo Wood material science and engineering 2021 / p. 110-117 <https://doi.org/10.1080/17480272.2019.1635206> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Commissioning of thermal performance of prefabricated timber frame insulation elements for nZEB renovation

Pihelo, Peep; Kalamees, Targo 4th Central European Symposium on Building Physics (CESBP 2019) MATEC web of conferences 2019 / art. 02004, 6 p. : ill <https://doi.org/10.1051/mateconf/201928202004>

Commissioning the design and construction of prefabricated renovation

Jürgenson, Alari; Pihelo, Peep 5th International Conference Forum Wood Building Baltic : 26-28 February 2024, Tallinn, Estonia : proceedings 2024 / p. 102-109 : ill <https://digikogu.taltech.ee/et/Item/22318c67-e0ef-42f1-88c7-34c9d9677b17> https://www.ester.ee/record=b5668645*est

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

Kalamees, Targo; Pihelo, Peep; Kuusk, Kalle II Miedzynarodowa Konferencja : Forum Holzbau Polska 2018 2018 / 10 p. : ill <http://forum-holzbau.pl/category/filmy-i-zdjecia/> <https://www.etis.ee/File/DownloadPublic/b9656a11-ef9e-4b34-9033-83254134f617?name=Deep%20energy%20renovation%20of%20old%20concrete%20apartment%20building%20to%20nZEB%20by%20using%20wooden%20modular%20elements.pdf&type=application%2Fpdf>

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

Kalamees, Targo; Pihelo, Peep; Kuusk, Kalle Forum Holz Bau Garmisch 17 : 23. Internationales Holzbau-Forum (IHF 2017) : aus der Praxis - für die Praxis : Kongresszentrum, Garmisch-Partenkirchen ; B. 2 2017 / p. 317-325 : ill <http://www.gbv.de/dms/tib-ub-hannover/1014402786.pdf>

Development and performance assessment of prefabricated insulation elements for deep energy renovation of apartment buildings

Pihelo, Peep; Kuusk, Kalle; Kalamees, Targo Energies 2020 / art. 1709, 20 p. : ill <https://doi.org/10.3390/en13071709> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Development of prefabricated additional insulation elements for the renovation of high-rise apartment buildings

Pihelo, Peep; Kalamees, Targo Journal of sustainable architecture and civil engineering 2024 / p. 8-22 <https://doi.org/10.5755/j01.sace.35.2.35422> Journal metrics at Scopus Article at Scopus

Development of prefabricated additional insulation elements for the renovation of high-rise apartment buildings

Pihelo, Peep; Kalamees, Targo 5th International Conference Forum Wood Building Baltic : 26-28 February 2024, Tallinn, Estonia : proceedings 2024 / p. 98-99 : ill <https://digikogu.taltech.ee/et/Item/22318c67-e0ef-42f1-88c7-34c9d9677b17> https://www.ester.ee/record=b5668645*est

Development of prefabricated insulation elements for buildings with aerated autoclaved concrete walls

Pihelo, Peep; Kalamees, Targo E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 18001, 8 p. : ill <https://doi.org/10.1051/e3sconf/202017218001> Conference proceedings at Scopus Article at Scopus Article at WOS

Doktoritöö aitab anda Eesti paneelmajade uuendamisele tööstusliku mõõtme [Võrguväljaanne]

Oldermaa, Jaan-Juhan novaator.err.ee 2020 / fot [Doktoritöö aitab anda Eesti paneelmajade uuendamisele tööstusliku mõõtme](https://www.ester.ee/record=b5668645*est)

Driving decarbonisation of the EU building stock by enhancing a consumer centred and locally based circular renovation process

Tisov, Ana; Kuusk, Kalle; Navarro Escudero, Miriam; Pihelo, Peep; Kalamees, Targo E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 <https://doi.org/10.1051/e3sconf/202017218006> Conference proceedings at Scopus Article at Scopus Article at WOS

The effect of thermal transmittance of building envelope and material selection of wind barrier on moisture safety of timber frame exterior wall

Pihelo, Peep; Kalamees, Targo Journal of building engineering 2016 / p. 29-38 : ill <https://doi.org/10.1016/j.jobbe.2016.02.002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Estonia : [the More-Connect approach]

Kalamees, Targo; Pihelo, Peep; Kuusk, Kalle A Guide into Renovation Package Concepts for Mass Retrofit of Different Types of Buildings with Prefabricated Elements for (N)Zeb Performance 2018 / p. 50-55 : ill [Guide into renovation...](#)

Experiences from design process of renovation of existing apartment building to nZEB

Kuusk, Kalle; Kalamees, Targo; Pihelo, Peep CLIMA 2016 - proceedings of the 12th REHVA World Congress. Vol. 1 2016 / [10] p. : ill http://vbn.aau.dk/files/233707163/paper_591.pdf

Field study on hygrothermal performance of highly insulated exterior wall in Estonia

Pihelo, Peep; Kalamees, Targo; Kikkas, Henri; Muring, Tõnu; Valge, Margus; Valler, Raimond CLIMA 2016 - proceedings of the 12th REHVA World Congress. Vol. 2 2016 / [10] p. : ill http://vbn.aau.dk/files/233715342/paper_188.pdf

A Guide into Renovation Package Concepts for Mass Retrofit of Different Types of Buildings with Prefabricated Elements for (N)Zeb Performance [Online resource]

Rovers, Ronald; Kuusk, Kalle; Pihelo, Peep; Kalamees, Targo 2018 [A Guide into Renovation Package Concepts for Mass Retrofit of Different Types of Buildings with Prefabricated Elements for \(N\)Zeb Performance](#)

Hygrothermal performance of AAC exterior wall after additional insulation with prefabricated elements in Estonia

Pihelo, Peep; Kalamees, Targo 5th Central European Symposium On Building Physics (CESBP) 2023 / p. 020049-1-020049-8 <https://doi.org/10.1063/5.0170884> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Hygrothermal performance of highly insulated timber-frame external wall

Pihelo, Peep; Kikkas, Henri; Kalamees, Targo Energy procedia 2016 / p. 685-695 : ill <https://doi.org/10.1016/j.egypro.2016.09.128> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Hygrothermal performance of prefabricated insulation elements for serial renovation of apartment buildings in a moderately continental German climate

Pihelo, Peep; Kalamees, Targo Journal of Physics: Conference Series 2023 / art. 012001 <https://doi.org/10.1088/1742-6596/2654/1/012001> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Hygrothermal performance of prefabricated timber frame insulation elements for deep energy renovation of apartment buildings = Puitkarkass-lisasoojustuselementide niiskustehniline toimivus suurpaneelalamute tervikrenoveerimisel

Pihelo, Peep 2020 <https://digikogu.taltech.ee/et/Item/d748bdf-83e0-4377-a8d3-5e7e327e102e>

Influence of moisture dry-out on hygrothermal performance of prefabricated modular renovation elements

Pihelo, Peep; Lelumees, Magnus; Kalamees, Targo Energy procedia 2016 / p. 745-755 : ill <https://doi.org/10.1016/j.egypro.2016.09.137> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Madal- ja liginullenergiahoonete piirdetarindite niiskusturvalisuse tagamine

Pihelo, Peep Liginullenergiahooned täna ja homme : artiklite kogumik 2015 / lk. 59-62 : ill

Moisture safety in prefabricated roof renovations : causes and strategies

Kodi, Georg-Mihkel; Kalbe, Kristo; Pihelo, Peep; Kalamees, Targo Journal of sustainable architecture and civil engineering 2024 / p. 68-83 <https://doi.org/10.5755/j01.sace.35.2.35825> [Journal metrics at Scopus](#) [Article at Scopus](#)

Moisture safety strategies for renovations of a roof with prefabricated additional insulation elements: A whole building heat, air, and moisture simulation approach

Kalamees, Targo; Kalbe, Kristo; Kodi, Georg-Mihkel; Pihelo, Peep; Simson, Raimo; Arumägi, Endrik Multiphysics and Multiscale Building Physics : Proceedings of the 9th International Building Physics Conference (IBPC 2024) ; Volume 1: Moisture and Materials 2025 / p. 262-269 https://doi.org/10.1007/978-981-97-8305-2_36

Moisture safety strategies for roof renovation with prefabricated additional insulation elements

Kodi, Georg-Mihkel; Kalbe, Kristo; Pihelo, Peep; Kalamees, Targo 5th International Conference Forum Wood Building Baltic : 26-28 February 2024, Tallinn, Estonia : proceedings 2024 / p. 154-155 : ill <https://digikogu.taltech.ee/et/Item/22318c67-e0ef-42f1-88c7-34c9d9677b17> https://www.ester.ee/record=b5668645*est

nZEB renovation of multi-storey building with prefabricated modular panels

Pihelo, Peep; Kalamees, Targo; Kuusk, Kalle IOP conference series : materials science and engineering 2017 / art. 012056, 8 p. : ill <https://doi.org/10.1088/1757-899X/251/1/012056> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

nZEB renovation of multi-storey building with prefabricated modular panels

Pihelo, Peep; Kalamees, Targo; Kuusk, Kalle 3rd International Conference "Innovative Materials, Structures and Technologies" : Riga, Latvia, 27-29 September 2017 : [abstracts] 2017 / p. 129

nZEB renovation with prefabricated modular panels

Pihelo, Peep; Kalamees, Targo; Kuusk, Kalle Energy procedia 2017 / p. 1006-1011 : ill <https://doi.org/10.1016/j.egypro.2017.09.708>
[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Performance evaluation and development of prefabricated insulation elements for renovation of apartment buildings with autoclaved aerated concrete external walls

Pihelo, Peep; Kalamees, Targo Energy and buildings 2025 / art. 115439 <https://doi.org/10.1016/j.enbuild.2025.115439>

Potential of moisture dry-out from concrete wall in Estonian climate

Pihelo, Peep; Lelumees, Magnus; Kalamees, Targo International RILEM Conference on Materials, Systems and Structures in Civil Engineering 2016 : segment on Moisture in Materials and Structures : Lyngby, Denmark, August 22-24, 2016 2016 / p. 289-298 : ill https://files.conferencemanager.dk/medialibrary/2A179311-431D-479F-9B86-AC05B769477E/images/Moisture_conf_proceedings.pdf

Prefabricated wooden modular elements for nZEB renovation

Pihelo, Peep; Kalamees, Targo; Kuusk, Kalle Advanced Building Skins : 13th Conference on Advanced Building Skins, 1-2 October, 2018, Bern, Switzerland 2018 / p. 591–598 : ill <https://abs.green/files/pdf/content-2018.pdf> <https://abs.green/conference-proceedings/>

Renovation of apartment buildings with prefabricated modular panels

Kuusk, Kalle; Pihelo, Peep; Kalamees, Targo E3S Web of Conferences : CLIMA 2019 Congress, Bucharest, Romania, May 26-29, 2019 2019 / art. 03023, 6 p <https://doi.org/10.1051/e3sconf/201911103023> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Teadlane: renoveerimise tempo peaks olema vähemalt kaks-kolm korda kiirem = Ученый: скорость реноваций должна быть в 2-3 раза выше

Pihelo, Peep Elamu 2020 / lk. 15, 36 https://www.ester.ee/record=b1072137*est https://www.ester.ee/record=b5342136*est

Tehaseline renoveerimine on korteriomanike otsustada

Liias, Roode; Pihelo, Peep maaleht.delfi.ee 2024 [Tehaseline renoveerimine on korteriomanike otsustada](#)

Tehases toodetud valmiselemendid annavad renoveerimisele kiirema käigu

Vilk, Urve Äripäev 2020 / Lk. 8, 10-11 <https://dea.digar.ee/publication/aripaev>

Tehases toodetud valmiselemendid kiirendavad renoveerimist

Pihelo, Peep Ehitaja 2020 / lk. 26-29 : fot http://www.ester.ee/record=b1072123*est
<https://www.ehitusuudised.ee/uudised/2020/07/29/tehas-es-toodetud-valmisesel emendid-annavad-renoveerimisele-kiirema-kaigu>

Testing of moisture safety and energy performance quality commission process of nZEB renovation

Pihelo, Peep; Kalamees, Targo Proceedings of the I Forum Wood Building Baltic, 2019 : [27.02-1.03.2019, Tallinn] 2019 / p. 66-67 : ill https://www.ester.ee/record=b5197207*est

Энергетическая реновация типового бетонного жилого дома в Эстонии с использованием деревянного модульного элемента

Kalamees, Targo; Pihelo, Peep; Kuusk, Kalle Строительные материалы 2018 / с. 13–17 : илл <https://doi.org/10.31659/0585-430X-2018-764-10-13-17>