

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](#)

Calculation and compliance procedures of thermal bridges in energy calculations in various European countries

Kuusk, Kalle; Kurnitski, Jarek; Kalamees, Targo Energy procedia 2017 / p. 27-32 : ill <https://doi.org/10.1016/j.egypro.2017.09.626>

Case-study analysis of concrete large-panel apartment building at pre- and post low-budget energy-renovation

Kuusk, Kalle; Kalamees, Targo; Link, Siim; Ilomets, Simo; Mikola, Alo Journal of civil engineering and management 2017 / p. 67-75 : ill <http://dx.doi.org/10.3846/13923730.2014.975741>

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>

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>

Circularity concepts for offsite prefabricated energy renovation of apartment buildings

Kuusk, Kalle; Kullerkupp, Kristel; Pihelo, Peep; Ritzén, 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](#)

Cost effectiveness of energy performance improvements in Estonian brick apartment buildings

Kuusk, Kalle; Kalamees, Targo; Maivel, Mikk Energy and buildings 2014 / p. 313-322 : ill

Cost optimal energy savings and scenarios for ENMAK 2030+ energy action plan

Kurnitski, Jarek; Kuusk, Kalle Liginullenergiahooned täna ja homme : artiklite kogumik 2015 / p. 63-73 : ill

Cost optimal renovation solutions for apartment buildings

Kuusk, Kalle Liginullenergiahooned täna ja homme : artiklite kogumik 2015 / p. 132-138 : ill

Cost-effective energy and indoor climate renovation of Estonian residential buildings

Kalamees, Targo; Kuusk, Kalle; Arumägi, Endrik; Alev, Üllar Cost-effective energy-efficient building retrofitting : materials, technologies, optimization and case studies 2017 / p. 405-454 : ill http://www.eester.ee/record=b4674305*est <https://doi.org/10.1016/B978-0-08-101128-7.00015-0>

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 / 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](#)

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](#)

Eesti eluasemefondi ehitustehniline seisukord - ajavahemikul 1990-2010 kasutusele võetud korterelamud : uuringu lõpparuanne

Kalamees, Targo; Ilomets, Simo; Liias, Roode; Raado, Lembi-Merike; Kuusk, Kalle; Maivel, Mikk; Ründva, Marko; Klõšeiko, Paul; Liho, Eva; Paap, Leena; Mikola, Alo; Seinre, Erkki; Lill, Irene; Soekov, Erki; Paadam, Katrin; Ojamäe, Liis; Kallavus,

Urve; Mikli, Lauri; Kõiv, Teet-Andrus 2012 http://www.ester.ee/record=b2878060*est

Eesti eluasemefondi telliskorterelamute ehitustehniline seisukord ning prognoositav eluiga : uuringu lõpparuanne
Kalamees, Targo; Kõiv, Teet-Andrus; Liias, Roode; Öiger, Karl; Kallavus, Urve; Mikli, Lauri; Ilomets, Simo; Kuusk, Kalle; Maivel, Mikk; Mikola, Alo; Klõšeiko, Paul; Agasild, Tõnis; Arumägi, Endrik; Liho, Eva; Ojang, Tanel; Tuisk, Tanel; Raado, Lembi-Merike; Jõesaar, Tõnu 2010 http://www.ester.ee/record=b2665958*est

Effects of energy retrofits on indoor air quality in three Northern European countries

Prasauskas, Tadas; Martuzevicius, Dainius; Kalamees, Targo; Kuusk, Kalle; Leivo, Virpi; Haverinen-Shaughnessy, Ulla Energy procedia 2016 / p. 253-259 : ill <https://doi.org/10.1016/j.egypro.2016.09.134>

Energy and investment intensity of integrated renovation and 2030 cost optimal savings

Kurnitski, Jarek; Kuusk, Kalle; Tark, Teet; Uutar, Aivar; Kalamees, Targo; Pikas, Ergo Energy and buildings 2014 / p. 51-59 : ill

Energy consumption and indoor climate analysis in detached houses

Maivel, Mikk; Kuusk, Kalle Environmental Science and Sustainability : proceedings of the 2nd WSEAS International Conference on ... [NAHA'09, CGB'09, URES'09] : Baltimore, USA, November 7-9, 2009 2009 / p. 97-101 : ill

Energy efficiency and indoor climate of apartment and educational buildings in Estonia

Kõiv, Teet-Andrus; Maivel, Mikk; Mikola, Alo; Kuusk, Kalle Recent Researches in Energy, Environment, Devices, Systems, Communications and Computers : International Conference on Energy, Environment, Devices, Systems, Communications, Computers (EEDSCC'11) : Venice, Italy, March 8-10, 2011 2011 / p. 191-196 : ill

Energy efficiency and indoor climate of apartment buildings in Estonia

Kõiv, Teet-Andrus; Mikola, Alo; Kuusk, Kalle International journal of energy science 2012 / p. 94-99 : ill

Energy performance, indoor air quality and comfort in new nearly zero energy day-care centres in northern climatic conditions

Kuusk, Kalle; Kaiser, Ahmed; Lolli, Nicola; Johansson, Jan; Kouvola, Tero Hasu; Gunnarshaug Lien, Anne; Arumägi, Endrik; Kalbe, Kristo; Hallik, Jaanus; Kurnitski, Jarek; Kalamees, Targo Journal of sustainable architecture and civil engineering 2019 / p. 7-16 <https://doi.org/10.5755/j01.sace.24.1.23228>

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...](#)

Estonian grant scheme for renovating apartment buildings

Kuusk, Kalle; Kalamees, Targo Energy procedia 2016 / p. 628-637 : ill <https://doi.org/10.1016/j.egypro.2016.09.113>

Evaluation of renovation strategies : cost-optimal, COle optimal, or total energy optimal

Kertsmik, Kadri-Ann; Kuusk, Kalle; Lylykangas, Kimmo Sakari; Kalamees, Targo Energy and buildings 2023 / art. 112995 <https://doi.org/10.1016/j.enbuild.2023.112995>

Exhaust air heat pump heat recovery system for apartment buildings

Kõiv, Teet-Andrus; Mikola, Alo; Kuusk, Kalle Lecture Notes in Information Technology. Vol 13, 2012 International Conference on Power and Energy Systems (ICPES 2012), April 12-13, 2012, Hong Kong 2012 / p. 250-255 : ill

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

Experimental validation of simulation and measurement-based overheating assessment approaches for residential buildings

Simson, Raimo; Kurnitski, Jarek; Kuusk, Kalle Architectural science review 2017 / p. 192-204 : ill <https://doi.org/10.1080/00038628.2017.1300130>

A guide for renovation solution types of ventilation and building envelopes of typical post WWII apartment buildings

Kalamees, Targo; Thalfeldt, Martin; Zelenski, Maksim; Meos, Heiki; Laas, Margus; Kurnitski, Jarek; Kuusk, Kalle 14th International Conference on Indoor Air Quality and Climate (Indoor Air 2016) : Ghent, Belgium, 3-8 July 2016. Vol. 3 2016 / p. 1618-1625 : ill

Hoonete kuluoptimaalsete energiatõhususe miinimumtasemete analüüs [Võrguteavik]

Arumägi, Endrik; Simson, Raimo; Kuusk, Kalle; Kalamees, Targo; Kurnitski, Jarek 2017 https://www.ester.ee/record=b4762265*est

Impact of linear thermal bridges on thermal transmittance of renovated apartment buildings

Ilomets, Simo; Kuusk, Kalle; Paap, Leena; Arumägi, Endrik; Kalamees, Targo Journal of civil engineering and management 2017 / p. 96-104 : ill <http://dx.doi.org/10.3846/13923730.2014.976259>

The impact of the technical requirements of the renovation grant on the ventilation and indoor air quality in apartment buildings

Mikola, Alo; Hamburg, Anti; Kuusk, Kalle; Kalamees, Targo; Voll, Hendrik; Kurnitski, Jarek Building and environment 2022 / art. 108698 <https://doi.org/10.1016/j.buildenv.2021.108698> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Indoor climate and energy consumption in residential buildings

Kõiv, Teet-Andrus; Voll, Hendrik; Kuusk, Kalle; Mikola, Alo Selected topics on energy and development-environment-biomedicine 2009 : proceedings of the 3rd International Conference on Energy and Development-Environment-Biomedicine (EDEB 09) 2009 / p. 82-86

Indoor climate and energy consumption in residential buildings in Estonian climatic conditions

Kõiv, Teet-Andrus; Voll, Hendrik; Mikola, Alo; Kuusk, Kalle; Maivel, Mikk WSEAS transactions on environment and development 2010 / 4, p. 235-244 : ill

Indoor climate and energy performance in nearly zero energy day care centers and school buildings

Kaiser, Ahmed; **Kuusk, Kalle; Heininen, Henrik; Arumägi, Endrik; Kalamees, Targo; Hasu, Tero; Lolli, Nicola; Kurnitski, Jarek** E3S Web of Conferences : CLIMA 2019 Congress, Bucharest, Romania, May 26-29, 2019 2019 / art. 02003 ; 9 p. : ill <https://doi.org/10.1051/e3sconf/201911102003> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Indoor hygrothermal conditions in Estonian old multi-storey brick apartment buildings

Kalamees, Targo; Ilomets, Simo; Arumägi, Endrik; Alev, Üllar; Kõiv, Teet-Andrus; Mikola, Alo; Kuusk, Kalle; Maivel, Mikk The 12th International Conference on Indoor Air Quality and Climate, June 5-10, 2011, Austin, Texas, USA 2011 / [6] p

Indoor temperature and humidity conditions in modern Estonian apartment buildings

Kalamees, Targo; Ilomets, Simo; Kuusk, Kalle; Paap, Leena Proceedings of CLIMA 2013 : 11th REHVA World Congress and the 8th International Conference on Indoor Air Quality, Ventilation and Energy Conservation in Buildings, Prague 16th-19th June, 2013 2013 / [10] p. : ill

Integrated cost-optimal renovation of apartment buildings toward nearly zero-energy buildings = Korterealamute kuluoptimaalne tervikrenoveerimine liginullenergiahooneks

Kuusk, Kalle 2015 https://www.ester.ee/record=b4482703*est

Low- and nearly zero energy solutions for apartment buildings in Estonia

Kuusk, Kalle; Kalamees, Targo Proceedings of CLIMA 2013 : 11th REHVA World Congress and the 8th International Conference on Indoor Air Quality, Ventilation and Energy Conservation in Buildings, Prague 16th-19th June, 2013 2013 / [10] p. : ill

Market based renovation solutions in non-residential buildings - Why commercial buildings are not renovated to NZEB

Kuivjõgi, Helena; Uutar, Aivar; Kuusk, Kalle; Thalfeldt, Martin; Kurnitski, Jarek Energy and buildings 2021 / art. 111169, 13 p. : ill <https://doi.org/10.1016/j.enbuild.2021.111169> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nearly zero energy renovation concepts for apartment buildings

Kuusk, Kalle; Naumann, Jens; Gritzki, Anina; Felsmann, Clemens; De Carli, Michele; Kurnitski, Jarek E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 18009, <https://doi.org/10.1051/e3sconf/202017218009> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Nearly zero energy wooden buildings : day-care centres from NERO project

Kuusk, Kalle; Kaiser, Ahmed; Lolli, Nicola; Jan, Johansson; Hasu, Tero; Gunnarshaig Lien, Anne; Arumägi, Endrik; Kalbe, Kristo; Hallik, Jaanus; Kurnitski, Jarek; Kalamees, Targo Proceedings of the I Forum Wood Building Baltic, 2019 : [27.02-1.03.2019, Tallinn] 2019 / p. 54-55 : ill https://www.ester.ee/record=b5197207*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>

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>

nZEB retrofit of a concrete large panel apartment building

Kuusk, Kalle; Kalamees, Targo Energy procedia 2015 / p. 985-990 : ill

Performance of heat recovery ventilation system with ground source brine heat exchanger pre-heating system in the context of nZEB

Kuusk, Kalle; Hallik, Jaanus; Kalamees, Targo; Märing, Tõnu Proceedings of REHVA Annual Conference "Advanced HVAC and Natural Gas Technologies" : Riga, Latvia, May 6-9, 2015 / p. 17-22 : ill

Piskust ei piisa : korterleamute kuluoptimaalne tervikrenoveerimine liginullenergiahooneks

Kuusk, Kalle EhitusEST 2015 / lk. 36-37 https://artiklid.elnet.ee/record=b2747278*est

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/>

QUALICHeCK overview of EPC compliance and quality issues on the ground

Kurnitski, Jarek; Kuusk, Kalle; Simson, Raimo The REHVA European HVAC journal 2016 / p. 25-28 : ill
<http://www.rehva.eu/publications-and-resources/rehva-journal/2016/052016/042016.html>

Realisation of energy performance targets of an old apartment building renovated to nZEB

Hamburg, Anti; Kuusk, Kalle; Mikola, Alo; Kalamees, Targo Energy 2020 / art. 116874, 10 p. : ill
<https://doi.org/10.1016/j.energy.2019.116874> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Redefining cost-optimal nZEB levels for new residential buildings

Simson, Raimo; Arumägi, Endrik; Kuusk, Kalle; Kurnitski, Jarek E3S Web of Conferences : CLIMA 2019 Congress, Bucharest, Romania, May 26-29, 2019 / art. 03035, 7 p. : ill <https://doi.org/10.1051/e3sconf/201911103035> [Conference proceedings at Scopus](#) [Article at Scopus](#)

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 / art. 03023, 6 p <https://doi.org/10.1051/e3sconf/201911103023> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Renovation of ventilation in apartment buildings - Estonian experience

Mikola, Alo; Kuusk, Kalle; Hamburg, Anti; Kurnitski, Jarek; Kalamees, Targo The REHVA European HVAC journal 2019 / p. 20-26 : ill <https://www.rehva.eu/rehva-journal/chapter/renovation-of-ventilation-in-apartment-buildings-estonian-experience>

Renovation vs. demolition of an old apartment building : energy use, economic and environmental analysis

Kuusk, Kalle; Ilomets, Simo; Kalamees, Targo; Tuudak, Sten; Luman, Andre NSB 2014 : 10th Nordic Symposium on Building Physics, 15-19 June 2014, Lund, Sweden : full papers 2014 / p. 1213-1220 : ill

Research demand of old apartment buildings in Estonia

Kalamees, Targo; Ilomets, Simo; Arumägi, Endrik; Kuusk, Kalle; Liias, Roode; Kõiv, Teet-Andrus; Õiger, Karl IEA Annex 55 (RAP-RETRO) : working meeting : Holzkirchen, Germany, 15-16 April, 2010 / [8] p

Retrofit cost-effectiveness : Estonian apartment buildings

Kuusk, Kalle; Kalamees, Targo Building research & information 2016 / p. 920-934 : ill
<http://dx.doi.org/10.1080/09613218.2016.1103117>

State-subsidised refurbishment of socialist apartment buildings in Estonia

Kuusk, Kalle; Kurnitski, Jarek Housing estates in the Baltic countries : the legacy of central planning in Estonia, Latvia and Lithuania 2019 / p. 339-355 : ill https://doi.org/10.1007/978-3-030-23392-1_16 https://www.ester.ee/record=b5284229*est

Status on the ground : overview of existing surveys on energy performance related quality and compliance [Online resource]

Maivel, Mikk; Kuusk, Kalle; Simson, Raimo; Kurnitski, Jarek; Kalamees, Targo 2015 <http://qualicheck-platform.eu/wp-content/uploads/2015/06/QUALICHeCK-Report-Overview-of-existing-studies.pdf>

The economic challenges of deep energy renovation - differences, similarities, and possible solutions in Northern Europe : Estonia and Denmark

Rose, Jorgen; Kuusk, Kalle; Thomsen, Kirsten Englund; Kalamees, Targo; Morck, Ove Christen ASHRAE transactions. Vol. 122, pt. 1 2016 / p. 58-68 : ill

The first year's results from the first passive house in Estonia

Kalamees, Targo; Kuusk, Kalle; Paap, Leena NSB 2014 : 10th Nordic Symposium on Building Physics, 15-19 June 2014, Lund, Sweden : full papers 2014 / p. 758-765 : ill

Uute puidust hoonete sisekliima ja energiatõhususe analüüs Põhjamaades

Kuusk, Kalle Kõik ärikinnisvarast : [ajalehe Äripäev lisa] 2021 / Lk. 30 https://static-pdf.aripaev.ee/QddBW9e_Hq4l1zNz_G0UWVGUltE.pdf
https://www.ester.ee/record=b5223461*est

Uute puidust koolide ja lasteaedade sisekliima ning energiatõhusus

Kuusk, Kalle Ehitaja 2021 / lk. 38-39 : ill https://www.ester.ee/record=b1072123*est

Ventilation system design in three European geo cluster

Zemitis, Jurgis; Borodinecs, Anatolijs; Geikins, Aleksandrs; **Kalamees, Targo; Kuusk, Kalle** Energy procedia 2016 / p. 285-293 : ill
<https://doi.org/10.1016/j.egypro.2016.09.151>

What kind of heat loss requirements nZEB and deep renovation sets for building envelope?

Kalamees, Targo; Lupišek, Antonin; Sojkova, Katerina; **Kuusk, Kalle** CESB 16 - Central Europe Towards Sustainable Building 2016 : Innovations for Sustainable Future : [book of abstracts] 2016 / p. 55-56 : tab

What kind of heat loss requirements nZEB and deep renovation sets for building envelope? [Online resource]

Kalamees, Targo; Lupišek, Antonin; Sojkova, Katerina; **Kuusk, Kalle** CESB 16 - Central Europe Towards Sustainable Building 2016 : Innovations for Sustainable Future : [electronic proceedings] 2016 / p. 137-144 : ill

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>