

Adding waste paper to clay plaster to raise its ability to buffer moisture
Nutt, Nele; Kubjas, Ardo; Nei, Lembit Proceedings of the Estonian Academy of Sciences 2020 / p. 179–185 : ill
<https://doi.org/10.3176/proc.2020.3.01> https://kirj.ee/public/proceedings_pdf/2020/issue_3/proc-2020-3-179-185.pdf Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Air leakage levels in timber frame building envelope joints
Kalamees, Targo; Alev, Üllar; Pärnalaas, Mihkel Building and environment 2017 / p. 121-129 : ill
<https://doi.org/10.1016/j.buildenv.2017.02.011> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Air permeability properties of cross laminated timber
Luciani, Giovanni; Horta, R.; Kallakas, Heikko; Kers, Jaan Proceedings of the 12th Meeting of the Northern European Network for Wood Science and Engineering (WSE) : Wood Science and Engineering - a Key Factor on the Transition to Bioeconomy : September 12-13, 2016, Riga, Latvia 2016 / p. 80 <http://www.kki.lv/dokumenti/WSE2016.pdf>

The analysis of indoor hygrothermal loads based on measurements in multi-storey wooden apartment buildings
Kalamees, Targo; Arumägi, Endrik; Thalfeldt, Martin; Ilomets, Simo; Klöšeiko, Paul; Alev, Üllar Proceedings of the 5th International Building Physics Conference (IBPC) : Kyoto, Japan, May 28-31, 2012 2012 / p. 225-232 : ill

Avoiding mould growth in an interiorly insulated log wall
Alev, Üllar; Kalamees, Targo Building and environment 2016 / p. 104-115 : ill <https://doi.org/10.1016/j.buildenv.2016.05.020> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Capillary condensation redistribution (CCR) test: measurement results of 5 materials and comparison to modelling
Klöšeiko, Paul; Valk, Thorny; Pöldaru, Mattias; Kalamees, Targo Journal of Physics: Conference Series 2023 / 8 p
<https://doi.org/10.1088/1742-6596/2654/1/012047> Conference proceedings at Scopus Article at Scopus

Case-study analysis on hygrothermal performance of ETICS on concrete wall after low-budget energy-renovation
Ilomets, Simo; Kalamees, Targo Proceedings of XII International Conference on Performance of Exterior Envelopes of Whole Buildings 2013 / [15] p. : ill

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

Comparison of mineral wool, cellulose and reed mat for interior thermal insulation of log walls
Alev, Üllar; Uus, Andres; Kalamees, Targo Journal of civil engineering and architecture research 2015 / p. 938-946 : ill

Designing highly insulated cross-laminated timber external walls in terms of hygrothermal performance : field measurements and simulations
Kukk, Villu; Kaljula, Laura; Kers, Jaan; Kalamees, Targo Building and Environment 2022 / art. 108805
<https://doi.org/10.1016/j.buildenv.2022.108805> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Determination of clay-sand plaster hygrothermal performance : influence of different types of clays on sorption and water vapour permeability
Altmäe, Erik; Ruus, Aime; Raamets, Jane; Tungel, Ernst Cold Climate HVAC 2018 : Sustainable buildings in cold climates : proceedings of the 9th Cold Climate HVAC conference, Kiruna, Sweden, 2018, 12-15 March 2019 / p. 945-955
https://doi.org/10.1007/978-3-030-00662-4_80

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>

Diagnosis of moisture movements in massive dolostone walls of medieval churches
Kurik, Lembit; Kalamees, Targo; Kallavus, Urve Recent developments in building diagnosis techniques 2016 / p. 69-90 : ill
http://dx.doi.org/10.1007/978-981-10-0466-7_5

Durability performance of semiconductor strain gauges in GFRP laminate
Herranen, Henrik; Saar, Tõnis; Gordon, Rauno; Pohlak, Meelis; Lend, Henri Proceedings of the 6th ECCOMAS Thematic Conference on Smart Structures and Materials, SMART 2013 : Turin, Italy, June 24-26, 2013 2013 / p. 1-14 : ill

Eesti eluasemefondi puitkorterelamute ehitustehniline seisukord ning prognoositav eluiga : uuringu lõpparuanne

Kalamees, Targo; Arumägi, Endrik; Just, Alar; Kallavus, Urve; Mikli, Lauri; Thalfeldt, Marko; Klöšeiko, Paul; Agasild, Tõnis; Liho, Eva; Haug, Priit; Tuurmann, Kristo; Liias, Roode; Öiger, Karl; Langepron, Pritt; Orro, Oliver; Välja, Leele; Suits, Maris; Kodi, Georg; Ilomets, Simo; Alev, Üllar; Kurik, Lembit 2011 http://www.esther.ee/record=b2720728*est

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

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.jobe.2016.02.002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ehitusteadlased selgitavad : miks me kannatame siseruumides liiga kuiva õhu käes?

Nõges, Krõõt Ehitaja 2020 / lk. 45-46 http://www.esther.ee/record=b1072123*est

Energy and hygrothermal performance challenges in the renovation of a over 100-year-old wooden apartment building into a nearly zero-energy building

Evard, Anni; Arumägi, Endrik; Lomp, Siim; Kalamees, Targo 2nd International Conference on Moisture in Buildings 2023, 3-4 July 2023 2023 / 2 p <https://doi.org/10.14293/ICMB230053>

Enhancing CLT construction – Hygrothermal modelling, novel performance criterion, and strategies for end-grain moisture safety

Kalbe, Kristo; Pärn, Roland; Ruus, Aime; Kalamees, Targo Journal of building engineering 2024 / art. 111411 <https://doi.org/10.1016/j.jobe.2024.111411>

Evaluation of the criticality of thermal bridges

Ilomets, Simo; Kalamees, Targo Journal of building pathology and rehabilitation 2016 / art. 11, p. 1-13 : ill <http://dx.doi.org/10.1007/s41024-016-0005-6>

Experimental study on hygrothermal performance and durability of sandwich wall panels made of fiber reinforced AAC and PU foam insulation

Klöšeiko, Paul; Talvik, Martin; Kaljuvee, Kaire; Tuisk, Tanel; Ilomets, Simo; Kalamees, Targo Multiphysics and Multiscale Building Physics: Proceedings of the 9th International Building Physics Conference (IBPC 2024) ; Volume 3: Building Systems and HVAC Technologies 2025 https://doi.org/10.1007/978-981-97-8313-7_42

Failure analysis of a spray polyurethane foam roofing system

Kalamees, Targo; Pöldaru, Mattias; Ilomets, Simo; Klöšeiko, Paul; Kallavus, Urve; Rosenberg, Margit; Öiger, Karl Journal of building engineering 2020 / art. 101752, 9 p. : ill <https://doi.org/10.1016/j.jobe.2020.101752> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fatigue performance of semiconductor strain gauges in GFRP laminate

Herranen, Henrik; Saar, Tõnis; Gordon, Rauno; Pohlak, Meelis; Lend, Henri Advances in applied materials and electronics engineering III 2014 / p. 244-248 <https://doi.org/10.4028/www.scientific.net/AMR.905.244> [Article at Scopus](#)

Field study of hygrothermal performance of log wall with internal thermal insulation

Arumägi, Endrik; Ilomets, Simo; Kalamees, Targo; Tuisk, Tanel XII International Conference on Durability of Building Materials and Components (XII DBMC), Porto, Portugal, April 12th-15th, 2011 2011 / p. 811-819 : ill <https://www.irbnet.de/daten/iconda/CIB22427.pdf>

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

Pihelo, Peep; Kalamees, Targo; Kikkas, Henri; Mauring, 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

Hygrothermal criteria for design and simulation of buildings

Kalamees, Targo 2006 [https://www.esther.ee/record=b2226959*est](http://www.esther.ee/record=b2226959*est)

Hygrothermal criteria for design of cross-laminated timber external walls with ventilated facades = Soojus- ja niiskustehnilised kriteeriumid tuulduva fassaadiga ristkihtliimpuidust välisseinte projekteerimiseks

Kukk, Villu 2022 <https://doi.org/10.23658/taltech.33/2022> <https://digikogu.taltech.ee/et/item/aedf3ed3-26d7-49be-b386-20cd705ac4b7> http://www.esther.ee/record=b5501869*est

Hygrothermal performance of a massive natural stone masonry wall insulated from the internal side with hemp concrete – field measurements in cold climate

Pau, Markus; Kalamees, Targo; Kallavus, Urve Journal of physics : conference series 2021 / art. 012068, 9 p. : ill

Hygrothermal performance of a massive stone wall with interior insulation : an in-situ study for developing a retrofit measure

Klöšeiko, Paul; Kalamees, Targo; Arumägi, Endrik; Kallavus, Urve Energy procedia 2015 / p. 195-200 : ill

[Conference proceedings at Scopus Article at Scopus Article at WOS](https://doi.org/10.1016/j.egypro.2015.11.139)

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

[Conference proceedings at Scopus Article at Scopus](https://doi.org/10.1063/5.0170884)

Hygrothermal performance of cross-laminated timber walls with interior insulation

Kukk, Villu; Kalamees, Targo Durability and Climate Change : Changing Climatic loads as may affect the Durability of Building Materials, Components and Assemblies : proceedings of the CIB / NRC Symposium : National Research Council Canada, Construction Research Center, Ottawa, Canada, 21 September, 2018 2018 / p. 23-24 : ill

https://site.cibworld.nl/dl/publications/W080_pub414.pdf

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 internally insulated brick wall in cold climate : a case study in a historical school building

Klöšeiko, Paul; Arumägi, Endrik; Kalamees, Targo Journal of building physics 2015 / p. 444-464 : ill

<https://doi.org/10.1177/1744259114532609> [Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS](#)

Hygrothermal performance of internally insulated brick wall in cold climate : field measurement and model calibration

Klöšeiko, Paul; Arumägi, Endrik; Kalamees, Targo Contributions to Building Physics : proceedings of the 2nd Central European Symposium on Building Physics : 9-11 September 2013, Vienna, Austria 2013 / p. 185-192 : ill

Hygrothermal performance of lime-based thermal insulation mortars: water absorption, hygroscopic sorption, and water vapour permeability

Ruus, Aime; Kaeramaa, Ave-Ly; Kirtsi, Karin; Mihkelsoo, Madis; Kiviste, Mihkel; Raamets, Jane Journal of Physics: Conference Series 2023 / 8 p. : ill <https://doi.org/10.1088/1742-6596/2654/1/012083> [Conference proceedings at Scopus Article at Scopus](#)

Hygrothermal performance of mass timber wall assembly with external insulation finish system

Kukk, Villu; Kers, Jaan; Kalamees, Targo Buildings XIV : thermal performance of exterior envelopes of whole buildings : [conference proceedings] 2019 / 9 p [Hygrothermal Performance of Mass Timber](#)

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

Pihelo, Peep 2020 <https://digikogu.taltech.ee/el/Item/d748fbdf-83e0-4377-a8d3-5e7e327e102e>

Hygrothermal performance of thick PCM mortar behind PV panels in energy-activated ETICS facades

Talvik, Martin; Ilomets, Simo; Klöšeiko, Paul; Kalamees, Targo; Pöldaru, Mattias; Heim, Dariusz Buildings 2023 / art. 1572

<https://doi.org/10.3390/buildings13061572> [Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS](#)

Impact of built-in moisture on the design of hygrothermally safe cross-laminated timber external walls : a stochastic approach

Kukk, Villu; Kers, Jaan; Kalamees, Targo; Wang, Lin; Ge, Hua Building and environment 2022 / art. 109736

<https://doi.org/10.1016/j.buildenv.2022.109736> [Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS](#)

Impact of cracks to the hygrothermal performance of cross laminated timber

Kukk, Villu; Püssa, Martin; Kallakas, Heikko; Kers, Jaan Proceedings of the 12th Meeting of the Northern European Network for Wood Science and Engineering (WSE) : Wood Science and Engineering - a Key Factor on the Transition to Bioeconomy : September 12-13, 2016, Riga, Latvia 2016 / p. 143 <http://www.kki.lv/dokumenti/WSE2016.pdf>

Impact of cracks to the hygrothermal properties of CLT water vapour resistance and air permeability

Kukk, Villu; Horta, R.; Püssa, Martin; Luciani, Giovanni; Kallakas, Heikko; Kalamees, Targo; Kers, Jaan Energy procedia 2017 / p. 741-746 : ill <https://doi.org/10.1016/j.egypro.2017.10.019> [Conference proceedings at Scopus Article at Scopus Article at WOS](#)

Indoor climate conditions and hygrothermal loads in historic wooden apartment buildings in cold climates

Arumägi, Endrik; Kalamees, Targo; Kallavus, Urve Proceedings of the Estonian Academy of Sciences 2015 / p. 146-156 : ill

https://artiklid.elnet.ee/record=b2727447*est <https://doi.org/10.3176/proc.2015.2.03> [Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS](#)

Indoor climate loads to assess hygrothermal performance of building envelope [Online resource]

Ilomets, Simo; Kalamees, Targo Durability and Climate Change : Changing Climatic loads as may affect the Durability of Building Materials, Components and Assemblies : proceedings of the CIB / NRC Symposium : National Research Council Canada, Construction Research Center, Ottawa, Canada, 21 September, 2018 2018 / p. 9-10 : ill
https://site.cibworld.nl/dl/publications/W080_pub414.pdf

Indoor hygrothermal condition and user satisfaction in naturally ventilated historic houses in temperate humid continental climate around the Baltic Sea

Alev, Üllar; Kalamees, Targo; Eskola, Lari; Arumägi, Endrik Architectural science review 2016 / p. 53-67 : ill
<https://doi.org/10.1080/00038628.2015.1038980> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Indoor hygrothermal loads in Estonian dwellings

Kalamees, Targo The 4th European Conference on Energy Performance & Indoor Climate in Buildings. The 27th Conference of the Air Infiltration & Ventilation Centre : Lyon, France, 20-22 November. 2 2006 / p. 541-546

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](#)

Katuse niiskus- ja soojustoimivus

Kalamees, Targo Pööning : ajalooga majad, aiad ja disainiklassika 2020 / lk. 86-90 : ill https://www.estet.ee/record=b4516546*est

Microstructural Characterization and Hydrothermal Ageing Resistance of Rice Husk Silica-Doped Alumina Toughened Zirconia Biocomposite

Gupta, Ashutosh; Pandey, Vaibhav; Singh, Satyendra Kumar; Yadav, Mayank Kumar; Majhi, Manas Ranjan Silicon 2025 / 11 p
<https://doi.org/10.1007/s12633-025-03353-0>

Mida teha külmade ja niiskete sigalatega?

Kaera, Olev Sotsialistlik Pöllumajandus 1971 / lk. 362-364 : joon., tabelid https://www.estet.ee/record=b1232872*est

Moisture buffer value of composite material made of clay-sand plaster and wastepaper

Nutt, Nele; Kubjas, Ardo Journal of sustainable architecture and civil engineering 2020 / p. 108-115

<https://doi.org/10.5755/j01.sace.27.2.25391> [Journal metrics at Scopus](#) [Article at Scopus](#)

Moisture convection performance of wall and attic floor joint

Kalamees, Targo; Kurnitski, Jarek Proceedings of the 8th Symposium on Building Physics in the Nordic Countries : Copenhagen, Denmark, June 16-18, 2008. 2 2008 / p. 777-784

https://www.researchgate.net/publication/228777811_Moisture_convection_performance_of_wall_and_attic_floor_joint

Non-isothermal cup test for liquid and vapour conductivity curve calibration

Klöšeiko, Paul; Margus, Karl; Kalamees, Targo AIP conference proceedings 2023 / art. 020030 <https://doi.org/10.1063/5.0171189> [Conference proceedings at Scopus](#) [Article at Scopus](#)

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>

Performance of interiorly insulated log wall : Experiences from Estonian cold climate conditions

Kalamees, Targo; Arumägi, Endrik; Alev, Üllar Conference Report : The 3rd International Conference on Energy Efficiency in Historic Buildings 2018 / p. 99-107 : ill <http://eehb2018.com/wp-content/uploads/2018/09/Conference-Report-The-3rd-International-Conference-on-Energy-Efficiency-in-Historic-Buildings.pdf>

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/mediabinary/2A179311-431D-479F-9B86-AC05B769477E/images/Moisture_conf_proceedings.pdf

Preliminary field study on hygrothermal performance of ETICS using thick lime plasters on various insulation materials for historic buildings in wet and cold climate

Talvik, Martin; Klöšeiko, Paul; Vilba, Kristina; Pöldaru, Mattias; Olak, Henri; Kalamees, Targo 2025

Reliability of interior thermal insulation as a retrofit measure in historic wooden apartment buildings in cold climate

Arumägi, Endrik; Pihlak, Margus; Kalamees, Targo Energy procedia 2015 / p. 871-876 : ill

Renovation need and performance of envelopes of concrete apartment buildings in Estonia = Eesti raudbetoon-suurpaneelelamute piirdetarindite renoveerimisvajadus ja toimivus

Ilomets, Simo 2017 <https://digi.lib.ttu.ee/i/?7670> https://www.estr.ee/record=b4674186*est

Renovation of historic wooden apartment buildings = Ajalooliste puitkorterelamute renoveerimine

Arumägi, Endrik 2015 http://www.estr.ee/record=b4483126*est

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.estr.ee/record=b5197207*est

The analysis of indoor hygrothermal conditions in multi-storey wooden apartment buildings

Kalamees, Targo; Arumägi, Endrik; Ilomets, Simo IEA Annex 55 (RAP-RETRO), Working meeting, Porto, Portugal, 18-20 April 2011 / [17] p

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

Validation of a simulation model for hygrothermal performance of log wall with internal thermal insulation in cold climate

Arumägi, Endrik; Kalamees, Targo Proceedings of the 5th International Building Physics Conference (IBPC) : Kyoto, Japan, May 28-31, 2012 2012 / p. 345-352 : ill

Validation of the method to evaluate the corrosion propagation stage by hygrothermal simulation

Ilomets, Simo; Kalamees, Targo; Lahdensivu, Jukka CESB 16 - Central Europe Towards Sustainable Building 2016 : Innovations for Sustainable Future : [book of abstracts] 2016 / p. 317-318 : ill

Validation of the method to evaluate the corrosion propagation stage by hygrothermal simulation [Online resource]

Ilomets, Simo; Kalamees, Targo; Lahdensivu, Jukka CESB 16 - Central Europe Towards Sustainable Building 2016 : Innovations for Sustainable Future : [electronic proceedings] 2016 / p. 1113-1120 : ill

Влияние тепловлажностной обработки на гидратацию сланцевольного цемента

Piksarv, Evald; Kikas, Verner; Reispere, Harri Сборник трудов по изучению золы сланца-кукерсита. 6 1972 / с. 33-45 : илл https://www.estr.ee/record=b2190533*est <https://digikogu.taltech.ee/et/item/29889133-4a49-423b-82d3-22a748732c52>