

Analysis of causes of the end of service life of a spray polyurethane foam and polyurea roof

Kalamees, Targo; Ilomets, Simo; Põldaru, Mattias; Klõšeiko, Paul; Kallavus, Urve; Rosenberg, Margit; Öiger, Karl E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 15002, 6 p. : ill <https://doi.org/10.1051/e3sconf/202017215002> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

The analysis of indoor hygrothermal loads based on measurements in multi-storey wooden apartment buildings

Kalamees, Targo; Arumägi, Endrik; Thalfeldt, Martin; Ilomets, Simo; Klõšeiko, Paul; Alev, Üllar Proceedings of the 5th International Building Physics Conference (IBPC) : Kyoto, Japan, May 28-31, 2012 2012 / p. 225-232 : ill

Capillary condensation experiment for inverse modelling of porous building materials

Hirsch, Hauke; Heyn, Rüdiger; Klõšeiko, Paul E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 17003, 7 p. : ill <https://doi.org/10.1051/e3sconf/202017217003> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Capillary condensation redistribution (CCR) test: measurement results of 5 materials and comparison to modelling

Klõšeiko, Paul; Valk, Thorny; Põldaru, 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 : in-situ testing and model calibration of interior insulation solution for an office building in cold climate

Klõšeiko, Paul; Kalamees, Targo CESB 16 - Central Europe Towards Sustainable Building 2016 : Innovations for Sustainable Future : [book of abstracts] 2016 / p. 61-62 : ill

Case study : in-situ testing and model calibration of interior insulation solution for an office building in cold climate [Online resource]

Klõšeiko, Paul; Kalamees, Targo CESB 16 - Central Europe Towards Sustainable Building 2016 : Innovations for Sustainable Future : [electronic proceedings] 2016 / p. 159-166 : ill

Construction process and measuring initial dryout of PCM mortar in energy activated ETICS façade

Talvik, Martin; Ilomets, Simo; Klõšeiko, Paul; Kalamees, Targo; Heim, Dariusz Thermal performance of the exterior envelopes of whole buildings : Buildings XV Conference 2022 / p. 757-764 <https://www.scopus.com/record/display.uri?eid=2-s2.0-85163701291&origin=inward&txId=c83aa5cf70cab7322515343c3d634b25>

Dependence of measured specific air leakage rate (qE50) on envelope pressure differences and measurement position: A case study in an apartment building in winter conditions

Klõšeiko, Paul; Arumägi, Endrik; Hallik, Jaanus; Kalamees, Targo Journal of Physics: Conference Series 2021 / art. 012229, 3 p. : ill <https://doi.org/10.1088/1742-6596/2069/1/012229> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Deterioration of building envelope of wooden apartment buildings built before 1940 based on external survey

Klõšeiko, Paul; Agasild, Tõnis; Kalamees, Targo Proceedings of the 9th Nordic Symposium on Building Physics (NSB 2011), 29 May-2 June 2011, Tampere, Finland 2011 / p. 917-924 : ill https://www.researchgate.net/publication/290428833_Deterioration_of_building_envelope_of_wooden_apartment_buildings_built_before_1940_based_on_external_survey

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 puitkorterelamute ehitustehniline seisukord ning prognoositav eluiga : uuringu lõpparuanne

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

Eesti uuritud kirikute ehitustehniline seisund

Klõšeiko, Paul; Kalamees, Targo The Final Research Report of the project "Sustainable Management of Historic Rural Churches in the Baltic Sea Region (SMC)" 2013 / lk. 7-29 : ill

Effect of freezing and thawing on the performance of “capillary active” insulation systems: a comparison of results from climate chamber study to HAM modelling

Klõšeiko, Paul; Varda, Kadi; Kalamees, Targo Energy procedia 2017 / P. 525-530 : ill <https://doi.org/10.1016/j.egypro.2017.09.714>

[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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

Klõšeiko, 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; Põldaru, Mattias; Ilomets, Simo; Klõšeiko, Paul; Kallavus, Urve; Rosenberg, Margit; Õiger, 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](#)

Generative reverse-modelling approach to hygrothermal material characterization

Klõšeiko, Paul; Freudenberg, Peggy 4th Central European Symposium on Building Physics (CESBP 2019) MATEC web of conferences 2019 / art. 02088, 6 p. : ill <https://doi.org/10.1051/mateconf/201928202088>

Hygrothermal performance of a brick wall with interior insulation in cold climate : vapour open vs vapour tight approach

Klõšeiko, Paul; Kalamees, Targo Journal of building physics 2022 / p. 3-35 : ill <https://doi.org/10.1177/17442591211056067> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Klõšeiko, Paul; Kalamees, Targo; Arumägi, Endrik; Kallavus, Urve Energy procedia 2015 / p. 195-200 : ill <https://doi.org/10.1016/j.egypro.2015.11.139> [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

Klõšeiko, 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

Klõšeiko, 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 masonry walls retrofitted with interior insulation in cold climate = Kiviseinte seespoolse lisasoojustuse soojus- ja niiskustehniline toimivus külmas kliimas

Klõšeiko, Paul 2022 <https://doi.org/10.23658/taltech.41/2022> <https://digikogu.taltech.ee/et/Item/e4e4dc01-f8cf-4d60-b205-3f01529a8fc1> https://www.ester.ee/record=b5508993*est

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

Talvik, Martin; Ilomets, Simo; Klõšeiko, Paul; Kalamees, Targo; Põldaru, 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 ETICS on corrosion propagation of concrete facade

Ilomets, Simo; Kalamees, Targo; Lahdensivu, Jukka; Klõšeiko, Paul Energy procedia 2016 / p. 67-76 : ill <https://doi.org/10.1016/j.egypro.2016.09.101> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Long term measurements and HAM modelling of an interior insulation solution for an office building in cold climate

Klõšeiko, Paul; Kalamees, Targo 7th International Building Physics Conference IBPC2018: Healthy, Intelligent and Resilient Buildings and Urban Environments: proceedings : Syracuse, NY, USA, September 23-26, 2018 2018 / p. 1419-1424 : ill <http://ibpc2018.org/wp-content/uploads/2018/11/FINAL-IBPC2108-Proceedings.pdf>

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

Klõšeiko, 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](#)

Numerical analysis of additional heat loss induced by air cavities between insulation boards due to non-ideality

Hallik, Jaanus; Klõšeiko, Paul; Piir, Reimo; Kalamees, Targo Journal of building engineering 2022 / art. 05221 <https://doi.org/10.1016/j.jobe.2022.105221> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On site measurement and hygrothermal modelling of degraded ETICS facade with EPS and mineral wool fire breaks

Talvik, Martin; Klõšeiko, Paul; Kalamees, Targo; Liisma, Eneli; Ilomets, Simo Journal of Physics: Conference Series 2023 / 8 p <https://doi.org/10.1088/1742-6596/2654/1/012124> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Overview of damage to facades and interior surfaces of medieval rural churches in Estonia

Klõšeiko, Paul; Kalamees, Targo ISBP 2015 : 1st International Symposium on Building Pathology : conference proceedings :

Overview of damage to medieval rural churches in Estonia

Klõšeiko, Paul; Kalamees, Targo Case studies of building pathology in cultural heritage 2016 / p. 47-68 http://dx.doi.org/10.1007/978-981-10-0639-5_3

PCSP's diagonal tie connectors thermal bridges impact on energy performance and operational cost : case study of a high-rise residential building in Estonia

Kiil, Martin; Käär, Martin-Sven; Klõšeiko, Paul; Võsa, Karl-Villem; Simson, Raimo; Sarevet, Henri; Thalfeldt, Martin; Kurnitski, Jarek E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 80060, 8 p. : ill <https://doi.org/10.1051/e3sconf/202017208006> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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; Klõšeiko, Paul; Vilba, Kristina; Põldaru, Mattias; Olak, Henri; Kalamees, Targo 2025

A state-of-the-art empirical round robin validation of heat, air and moisture (HAM) models

Dang, Xinyuan; Guimarães, Ana Sofia; Sarkany, Andreas; Laukkanen, Anssi; Xu, Bingyu; Vanderschelden, Bruno; Rode, Carsten; Xia, Changchang; Feng, Chi; Whitman, Chris; **Klõšeiko, Paul; Kalamees, Targo; Kukk, Villu** Building and Environment 2025 / art. 112867 <https://doi.org/10.1016/j.buildenv.2025.112867>

Thermal bridge effect of vertical diagonal tie connectors in precast concrete sandwich panels : an experimental and computational study

Klõšeiko, Paul; Piir, Reimo; Jeltsov, Marti; Kalamees, Targo E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 08001, 7 p. : ill <https://doi.org/10.1051/e3sconf/202017208001> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Thermal performance of ETICS, energy activated with PCM and PV

Talvik, Martin; Ilomets, Simo; Kalamees, Targo; Klõšeiko, Paul; Heim, Dariusz; Wieprzkowicz, Anna; Knera, Dominika Journal of physics : conference series 2021 / art. 012116, p. 1-8 : ill <https://doi.org/10.1088/1742-6596/2069/1/012116> [Conference Proceedings at Scopus](#) [Article at Scopus](#)