

Construction period moisture load on CLT - example of 5 CLT buildings

Kalbe, Kristo; Kukk, Villu; Kalamees, Targo Proceedings of the III Forum Wood Building Baltic, Riga Technical University, 09-10.05, 2022, Riga, Latvia 2022 / p. 42–43 <https://forumwoodbuilding.rtu.lv/wp-content/uploads/sites/37/2022/05/FWBB2022-2022.05.09-speakers-day-1-and-2.pdf>

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>

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.jobbe.2024.111411>

Evaluating moisture safety strategies in CLT buildings – predictions vs actual outcomes

Kalbe, Kristo; Kalamees, Targo Case studies in construction materials 2025 / art. e04958, 17 p. : ill <https://doi.org/10.1016/j.cscm.2025.e04958>

Experimental analysis of moisture uptake and dry-out in CLT end-grain exposed to free water

Kalbe, Kristo; Annuk, Alvar; Ruus, Aime; Kalamees, Targo Journal of Physics: Conference Series 2021 / art. 012050, 8 p. : ill <https://doi.org/10.1088/1742-6596/2069/1/012050> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Factors affecting the deep renovation of a single-family building – a case study

Bergmann, Triinu; Ruus, Aime; Kalbe, Kristo; Kiviste, Mihkel; Tintera, Jiri E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 05004, 8 p. : ill <https://doi.org/10.1051/e3sconf/202124605004> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Identification and improvement of critical joints in CLT construction without weather protection

Kalbe, Kristo; Kukk, Villu; Kalamees, Targo E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 10002, 8 p. : ill <https://doi.org/10.1051/e3sconf/202017210002> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Influence of CLT wetting during the construction phase on the crack formation and air leakages in the CLT

Kalbe, Kristo; Kukk, Villu; Kalamees, Targo AIP conference proceedings 2023 / p. 020028-1-020028-8 <https://doi.org/10.1063/5.0171342> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Influence of window details on the energy performance of an nZEB

Kalbe, Kristo; Kalamees, Targo Journal of sustainable architecture and civil engineering 2019 / p. 61-70 : ill <https://doi.org/10.5755/j01.sace.24.1.23234>

Influence of window details on the energy performance of an nZEB

Kalbe, Kristo; Kalamees, Targo Proceedings of the I Forum Wood Building Baltic, 2019 : [27.02-1.03.2019, Tallinn] 2019 / p. 58-59 https://www.ester.ee/record=b5197207*est

Kuidas vältida õhulekkeid tehasemajades?

Kalbe, Kristo Oma Maja : Äripäeva Kuukiri 2021 / Lk. 40, 42 : ill <https://dea.digar.ee/article/apomamaja/2021/04/29/24.3>

Laboratory tests and modelling of mineral wool insulated steel sandwich panels

Laukkarinen, Anssi; Vinha, Juha; Kalbe, Kristo; Kalamees, Targo E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 17006, 8 p. : ill <https://doi.org/10.1051/e3sconf/202017217006> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

Moisture drying capacity of mineral wool insulated steel-faced sandwich panels by convection

Lomp, Siim; Kalbe, Kristo; Kalamees, Targo Acta Polytechnica CTU proceedings 2022 / p. 347-353 <https://doi.org/10.14311/APP.2022.38.0347> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Moisture dry-out capability of steel-faced mineral wool insulated sandwich panels

Kalbe, Kristo; Piikov, Hubert; Kalamees, Targo Sustainability 2021 / 18 p. : ill <https://doi.org/10.3390/su12219020> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Moisture dry-out from steel faced insulated sandwich panels

Kalbe, Kristo; Piikov, Hubert; Kurnitski, Jarek; Kalamees, Targo E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 17007, 8 p. : ill <https://doi.org/10.1051/e3sconf/202017217007> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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 of cross-laminated timber construction = Ristkihtliimpuit ehituse niiskusturvalisus

Kalbe, Kristo 2025 https://www.ester.ee/record=b5750525*est <https://digikogu.taltech.ee/et/Item/75dac979-4e4c-4fd7-8d66-ade40d647e91> <https://doi.org/10.23658/taltech.44/2025>

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

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

A novel approach to quantify crack formation in CLT

Kalbe, Kristo; Kalamees, Targo 5th International Conference Forum Wood Building Baltic : 26-28 February 2024, Tallinn, Estonia : proceedings 2024 / p. 156-157 : ill <https://digikogu.taltech.ee/et/Item/22318c67-e0ef-42f1-88c7-34c9d9677b17> https://www.ester.ee/record=b5668645*est

Numerical simulation of CLT moisture uptake and dry-out following water infiltration through end-grain surfaces

Brandstätter, Florian; Kalbe, Kristo; Autengruber, Maximilian; Lukacevic, Markus; Kalamees, Targo; **Ruus, Aime; Annuk, Alvar;** Füssl, Josef Journal of Building Engineering 2023 / art. 108097 <https://doi.org/10.1016/j.jobbe.2023.108097> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Weather exposed CLT construction – observations and improvement concept

Kalbe, Kristo; Kuk, Villu; Kalamees, Targo Forum Wood Building Baltic : proceedings of the II Forum Wood Building Baltic, Riga Technical University Digital Conference, 14-16 April 2021 2021 / p. 84-85 : ill <https://issuu.com/matijsbabris/docs/fwbb2021>

Wetting circumstances, expected moisture content, and drying performance of CLT end-grain edges based on field measurements and laboratory analysis

Kalbe, Kristo; Kalamees, Targo; Kuk, Villu; Ruus, Aime; Annuk, Alvar Building and environment 2022 / art. 109245 <https://doi.org/10.1016/j.buildenv.2022.109245> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Õhulekked tehases toodetud puitmajas

Kalbe, Kristo EhitusEST 2021 / lk. 22-23 : ill https://www.ester.ee/record=b4442657*est <https://ehitusest.ee/uudis/2021/03/23/ohulekked-tehases-toodetud-puitmajas/>

Õhulekked tehases toodetud puitmajas ja nende vältimine

Kalbe, Kristo Ehitaja 2021 / lk. 40-42 : fot https://www.ester.ee/record=b1072123*est <https://www.ehitusuudised.ee/uudised/2021/04/15/kuidas-valtida-ohulekkeid-tehases-toodetud-puitmajas>