

Airtightness of Estonian dwellings – median and base-values for heat loss estimation

Hallik, Jaanus; Kalamees, Targo; Pikas, Ergo Journal of Physics: Conference Series 2023 / 9 p <https://doi.org/10.1088/1742-6596/2654/1/012063> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Analyses of the extra cost of NZEB and low energy apartment buildings

Thalfeldt, Martin; Pikas, Ergo; Kurnitski, Jarek World Sustainable Energy Days 2015 : Young Researchers' Conference : Energy Efficiency : 25-27 February 2015, Wels, Austria 2015

Application of the domain theory to warehouse concept development : a case study [Online resource]

Pikas, Ergo; Koskela, Lauri; Singh, Vishal; Dave, Bhargav; Liias, Roode; Sacks, Rafael Proceedings of the CIB World Building Congress 2016. Volume V, Advancing Products and Services 2016 / p. 374-385 : ill <http://urn.fi/URN:ISBN:978-952-15-3745-5>

Case study on design management : inefficiencies and possible remedies

Pikas, Ergo; Koskela, Lauri; Dave, Bhargav; Liias, Roode Global Knowledge - Global Solutions : 23rd Annual Conference of the International Group for Lean Construction : Perth, Australia, July 29-31, 2015 : proceedings of IGLC23 2015 / p. 547-557 : ill

Causality and interpretation : a new design model inspired by the Aristotelian legacy

Pikas, Ergo; Koskela, Lauri; Seppänen, Olli Construction management and economics 2022 / p. 507-525 : ill <https://doi.org/10.1080/01446193.2021.1934884> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Causality and interpretation : integrating the technical and social aspects of design = Põhjuslikkus ja tõlgendamine : projekteerimise tehniliste ja sotsiaalsete aspektide sidumine

Pikas, Ergo 2019 https://www.ester.ee/record=b5234938*est <https://digi.lib.ttu.ee/i/?11966>

Collaboration in design - justification, characteristics and related concepts

Pikas, Ergo; Koskela, Lauri; Trelldal, Niels; Ballard, Glenn; Liias, Roode 24th Annual Conference of the International Group for Lean Construction : Boston, USA, 20-22 July 2016 2016 / p. 143-152 : ill <http://iglc.net/Papers/Details/1270>

Comparing the methods of A3 and canvas

Koskela, Lauri; Broft, Rafaella D.; Pikas, Ergo; Tezel, Algan Proceedings 28th Annual Conference of the International Group for Lean Construction (IGLC28), Berkeley, California, USA 2020 / p. 13-24 <https://doi.org/10.24928/2020/0136>

Complexity in designing energy efficient buildings : towards understanding decision networks in design

Pikas, Ergo; Koskela, Lauri; Thalfeldt, Martin; Dave, Bhargav; Kurnitski, Jarek Global Knowledge - Global Solutions : 23rd Annual Conference of the International Group for Lean Construction : Perth, Australia, July 29-31, 2015 : proceedings of IGLC23 2015 / p. 213-222 : ill

Construction with digital twin information systems

Sacks, Rafael; Brilakis, Ioannis; Pikas, Ergo; Xie, Haiyan Sally; Girolami, Mark Data-centric engineering 2020 / art. e14, 26 p <https://doi.org/10.1017/dce.2020.16>

Cost optimal and nearly zero energy building solutions for office buildings

Pikas, Ergo; Thalfeldt, Martin; Kurnitski, Jarek Energy and buildings 2014 / p. 30-42 : ill

Cost-benefit analysis of nZEB energy efficiency strategies with on-site photovoltaic generation

Pikas, Ergo; Kurnitski, Jarek; Thalfeldt, Martin; Koskela, Lauri Energy 2017 / p. 291-301 : ill <https://doi.org/10.1016/j.energy.2017.03.158>

Creation of digital twin models for renovation: an integrative literature review

Löhmus, Daniel; Pikas, Ergo Proceedings of the 2023 European Conference on Computing in Construction and the 40th International CIB W78 Conference 2023 / art. 303649 <https://doi.org/10.35490/EC3.2023.307>

Design management in a design office : development of the knowledge base

Pikas, Ergo; Koskela, Lauri; Liias, Roode 2017 Lean and Computing in Construction Congress (LC3), Volume II - Part 2 : proceedings of the 25th Annual Conference of the International Group for Lean Construction (IGLC), July 9-12, 2017, Heraklion, Crete, Greece 2017 / p. 539-546 : ill http://www.lc3-2017.com/uploads/IGLC_Full_Proceedings-part_2.pdf <https://doi.org/10.24928/2017/0316>

Design management in a design office : development of the model for 'To-Be'

Pikas, Ergo; Koskela, Lauri; Seppänen, Olli 2017 Lean and Computing in Construction Congress (LC3), Volume II - Part 2 : proceedings of the 25th Annual Conference of the International Group for Lean Construction (IGLC), July 9-12, 2017, Heraklion, Crete, Greece 2017 / p. 555-562 : ill <https://doi.org/10.24928/2017/0317> http://www.lc3-2017.com/uploads/IGLC_Full_Proceedings-part_2.pdf

Design management in a design office : solving the problem of relevance

Pikas, Ergo; Koskela, Lauri; Seppänen, Olli 2017 Lean and Computing in Construction Congress (LC3), Volume II - Part 2 : proceedings of the 25th Annual Conference of the International Group for Lean Construction (IGLC), July 9-12, 2017, Heraklion, Crete, Greece 2017 / p. 547-554 : ill http://www.lc3-2017.com/uploads/IGLC_Full_Proceedings-part_2.pdf <https://doi.org/10.24928/2017/0315>

Digital last planner system whiteboard for enabling remote collaborative design process planning and control

Pikas, Ergo; Pedo, Barbara; Tezel, Algan; Koskela, Lauri; **Veersoo, Markus** Sustainability 2022 / art. 12030

<https://doi.org/10.3390/su141912030> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Epistemological explanation of lean construction

Koskela, Lauri; Ferrantelli, Andrea; Niiranen, Jarkko; **Pikas, Ergo**; Dave, Bhargav Journal of construction engineering and

management 2019 / p. 04018131-1 -04018131-10 [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0001597](https://doi.org/10.1061/(ASCE)CO.1943-7862.0001597) [Journal metrics at Scopus](#)

[Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Exploration towards the development of a concept and requirements for FMBIM information management : research report [Online resource]

Pikas, Ergo; **Tamme, Mats**; **Liias, Roode** 2016

<http://www.rkas.ee/files/Exploration%20Towards%20the%20Development%20of%20the%20FMBIM%20Information%20Concepts%20and%20Requirements%20Pikas.pdf>

Extra cost analyses of two apartment buildings for achieving nearly zero and low energy buildings

Pikas, Ergo; **Thalfeldt, Martin**; **Kurnitski, Jarek**; **Liias, Roode** Energy 2015 / p. 623-633 : ill

Extra cost analyses of two apartment buildings for achieving nearly zero and low energy buildings

Pikas, Ergo; **Thalfeldt, Martin**; **Kurnitski, Jarek**; **Liias, Roode** Liginullenergiahooned täna ja homme : artiklite kogumik 2015 / p. 83-90 : ill

Facade design principles for nearly zero energy buildings in a cold climate

Thalfeldt, Martin; **Pikas, Ergo**; **Kurnitski, Jarek**; **Voll, Hendrik** Energy and buildings 2013 / p. 309-321 : ill

Foundational concepts for BIM

Sacks, Rafael; **Pikas, Ergo** BIM Teaching and Learning Handbook : Implementation for Students and Educators 2021 / p. 5-22 : ill

<https://doi.org/10.1201/9780367855192>

From checklists to design process support systems: Initial framing

Pikas, Ergo; Koskela, Lauri; Oehmen, Josef; Dave, Bhargav Proceedings of the 27th Annual Conference of the International Group

for Lean Construction (IGLC), IGLC 2019, 1 July 2019 - 7 July, 2019, Dublin, Ireland 2019 / p. 83-96 <https://doi.org/10.24928/2019/0173>

Heat loss characteristics of typology-based apartment building external walls for a digital twin-based renovation strategy tool

Iliste, Elisa; **Lomp, Siim**; **Pikas, Ergo**; **Arumägi, Endrik**; **Hallik, Jaanus**; **Õiger, Karl**; **Kisel, Einari**; **Liiv, Innar**; **Kalamees, Targo**

Journal of Physics: Conference Series 2023 / 8 p <https://doi.org/10.1088/1742-6596/2654/1/012125> [Conference proceedings at Scopus](#)

[Article at Scopus](#)

Hoonete rekonstrueerimise pikaajaline strateegia

2020 <https://www.mkm.ee/media/155/download>

If CPM is so bad, why have we been using it so long?

Koskela, Lauri; Howell, Greg; **Pikas, Ergo**; Dave, Bhargav Proceedings of IGLC22 : 22nd Annual Conference of the International

Group for Lean Construction : Understanding and Improving Project Based Production : Oslo Norway, June 25th-27th 2014 2014 / p.

27-37

Iganenud tehnilised lahendused pärsivad ehitustööde tulemuslikkust

Salak, Annika Ehitaja 2016 / lk. 12-14, 16 : ill http://www.ester.ee/record=b1072123*est https://artiklid.elnet.ee/record=b2806832*est

Improving building design processes and design management practices: A case study

Pikas, Ergo; Koskela, Lauri; Seppänen, Olli Sustainability 2020 / 18 p. : ill <https://doi.org/10.3390/su12030911>

Improving design quality by contractor involvement : an empirical study on effects

Lappalainen, Eelon; Uusitalo, Petteri; **Pikas, Ergo**; Seppänen, Olli; Peltokorpi, Antti; Uusitalo, Petri; Reinbold, Ana; Menzhinskii,

Nikolai Buildings 2022 / art. 1188 <https://doi.org/10.3390/buildings12081188> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics](#)

[at WOS](#) [Article at WOS](#)

Intelligent products : shifting the production control logic in construction (with lean and BIM)

Dave, Bhargav; Kubler, Sylvain; **Pikas, Ergo** Global Knowledge - Global Solutions : 23rd Annual Conference of the International

Group for Lean Construction : Perth, Australia, July 29-31, 2015 : proceedings of IGLC23 2015 / p. 341-350 : ill

Kaheksa uut tenuuriprofessorit

Sell, Raivo; Pikas, Ergo; Hints, Olle; Veski, Siim; Lahtvee, Petri-Jaan; Ottis, Rain; Kiviste, Mihkel; Ross, Peeter Mentel et Manu 2021 / lk. 48-51 : portr [Mentel et Manu 1/2021](https://www.ester.ee/record=b1242496*est) https://www.ester.ee/record=b1242496*est

Kas liginullenergiahoone vajab suuremat investeringut?

Pikas, Ergo; Thalfeldt, Martin Ehitaja 2015 / lk. 26-33 : ill https://artiklid.elnet.ee/record=b2740494*est

Kas moodsad pöörded keeravad ehitussektori argielu pea peale?

Talve, Tanel arileht.delfi.ee 2023 [Kas moodsad pöörded keeravad ehitussektori argielu pea peale?](https://www.ester.ee/record=b1242496*est)

Koostöös planeerimine on eeldus edukaks projekteerimiseks

Pikas, Ergo; Aru, Minni Ehitaja 2019 / lk. 19-22 : ill http://www.ester.ee/record=b1072123*est

Kuidas viia Eestis sujuvalt läbi renoveerimislaine?

Kisel, Einari; Kalamees, Targo; Pikas, Ergo; Liiv, Innar; Arumägi, Endrik Mentel et Manu 2023 / lk. 40-41 : fot https://www.ester.ee/record=b1242496*est

Kvaliteedifilosoofia kolm vaala tuleb tuua Eesti ehituskultuuri

Tammaru, Enn; **Pikas, Ergo** Ehitaja 2017 / lk. 38-39 http://www.ester.ee/record=b1072123*est https://artiklid.elnet.ee/record=b2825525*est

Madalenergia büroohoone fassaadi majandusanalüüs

Thalfeldt, Martin; Pikas, Ergo; Kurnitski, Jarek Ehitaja 2015 / lk. 22-25 : ill https://artiklid.elnet.ee/record=b2720865*est

Madalenergia büroohoone fassaadi majandusanalüüs

Thalfeldt, Martin; Pikas, Ergo; Kurnitski, Jarek Liginullenergiahooned täna ja homme : artiklite kogumik 2015 / lk. 52-58 : ill

Modularization : Exploring opportunities for knowledge transfer between the mechanical engineering and construction industry

Kohl, Markus; Wilberg, Julian; Tommelein, Iris D.; **Pikas, Ergo**; Lindemann, Udo Proceedings of the 21st International Conference on Engineering Design ; Design Information and Knowledge; vol. 6 2017 / p. 227-236 [Modularization...](https://www.ester.ee/record=b1072123*est)

Mõtemallid - suurim takistus projekteerimise korraldamises

Pikas, Ergo Ehitaja 2018 / lk. 16-18 : ill http://www.ester.ee/record=b1072123*est

A new framework for construction project definition stage

Pikas, Ergo; Oehmen, Josef; Koskela, Lauri; Thuesen, Christian Design 2018 : Excellence in design : 15th International Design Conference, May, 21-24, 2018 - Dubrovnik, Croatia : [proceedings] 2018 / p. 1301-1312 : ill <https://doi.org/10.21278/idc.2018.0542>

On epistemology of construction engineering and management

Koskela, Lauri; **Pikas, Ergo**; Niiranen, Jarkko; Ferrantelli, Andrea; Dave, Bhargav 2017 Lean and Computing in Construction Congress (LC3), Volume II - Part 1 : proceedings of the 25th Annual Conference of the International Group for Lean Construction (IGLC), July 9-12, 2017, Heraklion, Crete, Greece 2017 / p. 169-176 <https://doi.org/10.24928/2017/0336> http://www.lc3-2017.com/uploads/IGLC_Full_Proceedings-part_1.pdf

Open-source, low-code, no-code : digitalization of renovation processes

Pikas, Ergo; Koskela, Lauri Jaakko; Kalamees, Targo; Iliste, Elisa; Viik, Joosep 5th International Conference Forum Wood Building Baltic : 26-28 February 2024, Tallinn, Estonia : proceedings 2024 / p. 16-17 <https://digikogu.taltech.ee/et/item/22318c67-e0ef-42f1-88c7-34c9d9677b17> https://www.ester.ee/record=b5668645*est

Quality and accuracy of digital twin models for the neighbourhood level building energy performance calculations

Parts, Egert-Ronald; Pikas, Ergo; Parts, Tuule Mall; Arumägi, Endrik; Liiv, Innar E3S Web of Conferences : 11th International Conference on Indoor Air Quality, Ventilation and Energy Conservation in Buildings, IAQVEC2023 2023 / art. 04021, 8 p. : ill <https://doi.org/10.1051/e3sconf/202339604021> [Conference proceedings at Scopus Article at Scopus](https://www.ester.ee/record=b1072123*est)

Quantification of building envelope heat losses on a district level for comparative renovation strategies assessment

Arumägi, Endrik; Hallik, Jaanus; Pikas, Ergo; Kalamees, Targo; Liiv, Innar; Kisel, Einari Journal of Physics: Conference Series 2023 / 10 p <https://doi.org/10.1088/1742-6596/2654/1/012003> [Conference proceedings at Scopus Article at Scopus](https://www.ester.ee/record=b1072123*est)

Quantification of economic benefits of renovation of apartment buildings as a basis for cost optimal 2030 energy efficiency strategies

Pikas, Ergo; Kurnitski, Jarek; Liias, Roode; Thalfeldt, Martin Energy and buildings 2015 / p. 151-160 : ill

Quantification of the economic benefits of renovation of apartment buildings as a basis for cost optimal 2030

Pikas, Ergo; Thalfeldt, Martin Liginullenergiahooned täna ja homme : artiklite kogumik 2015 / p. 74-82 : ill

Review of lean design management : processes, methods and technologies

Uusitalo, Petteri; Olivieri, Hylton; Seppänen, Olli; **Pikas, Ergo**; Peltokorpi, Antti 2017 Lean and Computing in Construction Congress (LC3), Volume II - Part 2 : proceedings of the 25th Annual Conference of the International Group for Lean Construction (IGLC), July 9-12, 2017, Heraklion, Crete, Greece 2017 / p. 571-578 : tab http://www.lc3-2017.com/uploads/IGLC_Full_Proceedings-part_2.pdf
<https://doi.org/10.24928/2017/0224>

Rhetorical design game for expectation alignment

Koskela, Mikael; **Pikas, Ergo** Proceedings of the Design Society: International Conference on Engineering Design 2019 / p. 1593-1602 <https://doi.org/10.1017/dsi.2019.165>

Sihtväärtuse kavandamine : sissejuhatus, raamistik ja praegune võrdlusalus

Tommelein, Iris D.; Ballard, Glenn 2017 http://www.ester.ee/record=b4742292*est

The dual nature of design management

Pikas, Ergo; Koskela, Lauri; Tredal, Niels; Knotten, Vegard; Bølviken, Trond Envolving lean construction towards mature production management across cultures and frontiers : proceedings of the 26th Annual Conference of the International Group for Lean Construction : Volume 1 & 2, July 16th to 22nd 2018, Chennai, India 2018 / p. 647-657 : ill <https://doi.org/10.24928/2018/0537>
http://iglc.net/Content/Proceedings/IGLC-2018-Proceedings-Vol1_Vol2.pdf

Timmitud ehituse seminaril kohtus teooria praktikaga

Pikas, Ergo Ehitaja 2013 / lk. 20, 22 : ill https://artiklid.elnet.ee/record=b2609925*est

Timmitud kavandamine väikeettevõttes

Pikas, Ergo Ehitaja 2019 / lk. 22-25 : ill http://www.ester.ee/record=b1072123*est

To trust or not to trust : is trust a prerequisite for solving design quality problems?

Uusitalo, Petteri; Lappalainen, Eelon; Seppänen, Olli; **Pikas, Ergo**; Peltokorpi, Antti; Menzhinskii, Nikolai; Piitulainen, Mikko Construction management and economics 2021 / p. 279-297 <https://doi.org/10.1080/01446193.2020.1865553>

Total economy of windows and facades in low energy office buildings

Thalfeldt, Martin; Kurnitski, Jarek; Voll, Hendrik; **Pikas, Ergo** The REHVA European HVAC journal 2014 / p. 19-24 : ill

Towards shared understanding on common ground, boundary objects and other related concepts

Koskela, Lauri; **Pikas, Ergo**; Gomes, Danilo 24th Annual Conference of the International Group for Lean Construction : Boston, USA, 20-22 July 2016 : proceedings 2016 / p. 63-72 <http://iglc.net/Papers/Details/1352>

University ecosystem for student startups : a 'platform of trust' perspective

Ainamo, Antti; Pikas, Ergo; Mikkilä, K. Educating Engineers for Future Industrial Revolutions : Proceedings of the 23rd International Conference on Interactive Collaborative Learning (ICL2020). Volume 2 2021 / p. 269-276 https://doi.org/10.1007/978-3-030-68201-9_28
https://acris.aalto.fi/ws/portalfiles/portal/86345674/ENG_Ainamo_et_al_University_ecosystem_for_student_startups_ICL2020.pdf Conference proceedings at Scopus Article at Scopus Article at WOS

Using real-time indoor resource positioning to track the progress of tasks in construction sites

Zhao, Jianyu; **Pikas, Ergo**; Seppänen, Olli; Peltokorpi, Antti Frontiers in Built Environment 2021 / art. 66166
<https://doi.org/10.3389/fbuil.2021.661166>

ViBR - conceptualising a virtual big room through the framework of people, processes and technology

Dave, Bhargav; **Pikas, Ergo**; Kerosuo, Hannele; Mäki, Tarja Procedia economics and finance 2015 / p. 586-593 : ill

Viimase plaanija süsteem : projekteerimise ja ehitustootmise juhtimise juhendid

Koskenvesa, Anssi; Mäki, Tarja 2020 https://www.ester.ee/record=b5361907*est

Window model and 5 year price data sensitivity to cost-effective facade solutions for office buildings in Estonia

Thalfeldt, Martin; **Pikas, Ergo**; Kurnitski, Jarek; Voll, Hendrik Energy 2017 / p. 685-697 : ill
<https://doi.org/10.1016/j.energy.2017.06.160>

Wrong, but not failed? A study of unexpected events and project performance in 21 engineering projects

Wied, Morten; Oehmen, Josef; Welo, Torgeir; **Pikas, Ergo** International journal of managing projects in business 2021 / p. 1290-1313
<https://doi.org/10.1108/JMPB-08-2020-0270> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS