

🗦 🖤 Buildwise

Annual report 2022

Ambitions & achievements



24 self-funded

12.565 technical advice including

828 site visits

646.711 publications downloaded including

165.330

1179 pages published

TINs published







D 270 publications in the external media





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Buildwise, more than just a new name

The construction sector is currently going through a challenging and complex period. Challenging, because we are in the middle of an exciting digital and industrial transformation expected to provide concrete and effective solutions to the societal challenges of this century and set to quickly modernise the sector's image. Complex because setbacks are occurring again and again at a rapid pace, complicating the organisation of construction and renovation activities.

Despite all this, we need to seize this moment to make structural changes in our sector. As a process, construction remains mainly linear and fragmented, but we all know that this business model is difficult to maintain. Moreover, there is no shortage of challenges: the challenge of sustainability (with a big role assigned to circular construction), the technological challenge (making construction more efficient), the challenge regarding new forms of housing (people's needs are changing) ... Not to mention, the biggest challenge of all: how can we respond together to all these situations?

It is precisely these challenges which are driving Buildwise to fulfil its ambition to be a catalyst for disruptive collaboration among stakeholders in their search for concrete solutions and new models. A difficult task, and one that is not purely technological. Both logistically and organisationally, this structural modernisation of the construction sector also requires the development of new forms of cooperation and business models. Above all, contractors need to expand the range of skills and services offered to their clients. They often also need to focus on professionalising the maintenance, management and renovation of buildings.

As shown in this Annual Report, our focus in 2022 was on accompanying and supporting this transformation at all levels. The results were achieved through the high level of multidisciplinary expertise of the Buildwise staff, who remain in touch with the day-to-day on-site reality of construction work through the work of the Technical Committees. Our way of working always takes into account the sometimes very specific needs of the different construction trades, constituting a richness of which we are very proud. A construction research centre that wants to increase its impact and added value by pursuing

Buildwise: a catalyst for innovation, helping the construction sector modernise



concrete changes in the field, must obviously also take the human aspect into account. And that is precisely the path Buildwise took in 2022 to become the industry's innovation centre.

Buildwise, a new name and a new strategy, including in terms of marketing, is continuing on its chosen path to realise its ambitions for 2025. We start this report by highlighting this strategy, before focusing on the progress made in 2022 with regard to the three pillars of these ambitions: Skilled Trades, the Green Deal and Construction 4.0.

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New name, new strategy

After more than half a century, the Belgian Building Research Institute (BBRI) has changed its name to Buildwise. This transformation was presented to more than 1,000 construction professionals in November 2022. During this occasion we unveiled our new positioning and strategy, aimed at creating more added value for contractors and other construction professionals. In this context, a special edition of our magazine, now called Buildwise Magazine, was published. Sent out to more than 120,000 professionals, it included many testimonials from contractors and representatives of professional associations.



What exactly does this transformation entail?

From research centre to innovation centre



Thanks to its knowledge acquired over the years, Buildwise has become *the* key reference centre for construction expertise. While applied research remains at the core of our DNA, our goal now goes further. We want to contribute to the wide adoption of this knowledge to improve

quality, productivity and sustainability, paving the way for innovation on construction sites and in construction companies. For **Jean-Pierre Waeytens**, Managing Director of **Bouwunie**, this goal reflects the need for contractors to have more support from Buildwise. The course outlined should therefore be quite a reassurance.

A catalyst for sharing knowledge and connecting



The construction process is very complex and fragmented. Therefore, Buildwise wants to strengthen its connecting role. We can only overcome the sectoral and societal challenges by getting the whole industry to change tack, rethinking the way we work together. **Niko Demeester**, CEO of **Embuild**,

believes this is a sine qua non for progress and for the necessary modernisation of construction trades and of building or renovation itself.

From multidisciplinary to transdisciplinary expertise



Buildwise stands apart through its pragmatic and multidisciplinary approach. We have been applying this principle for many years, presenting, for example, <u>construction details</u> that meet the requirements of the various construction trades involved. Finding robust and innovative

solutions to the sometimes complex issues requires a comprehensive, inclusive approach. Sometimes we even have to dare to go outside our sector in our search for creative solutions. To improve the energy efficiency of our buildings on a large scale, all players (governments, banks, owners, architects, contractors, manufacturers, etc.) need to be involved. **Raymund Trost**, CEO of CFE and President of **VBA-ADEB**, confirms that we face a great challenge and an important social responsibility. We can only overcome this challenge by breaking taboos and proposing innovative and bold solutions.

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Marketing strategy for a greater impact

In 2022, Buildwise rolled out a marketing strategy aimed at sharing our knowledge in a more individual way with each company, whatever its type, in every construction field. In doing so, we want to encourage growth and innovation in construction companies. For example, we have rolled out communication campaigns focused on specific trades, namely joiners and HVAC and sanitary installers. As a result, many companies have become more familiar with the services offered by our Centre. Recently, all our different publications, services, tools, training courses, etc. can be found on our website, sorted by construction field, allowing surfers to access the right information much more intuitively and easily.

Overall, the number of companies requesting Buildwise knowledge at least once a year has increased by 30% in just one year, and the subscriptions to our newsletter have quadrupled (more than 120,000 subscribers).

With a new strategic positioning comes a new name. We wanted to boost our impact, highlighting that we are a guide in construction matters (build) and that we offer



wisdom/knowledge (wise) to meet the challenges of modernisation and to contribute to a more sustainable world. To reach more players in the construction industry, we launched this new name with a large-scale communication campaign, managing to reach more than 800,000 interested people.

Also in 2023, we will continue to refine our marketing strategy to communicate even more effectively, with a strong focus on the added value we can offer our members and all other players in the construction industry.

Buildwise wants to make an impact by offering the right knowledge in the right form at the right time



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Skilled trades: focus on needs on the ground

Buildwise has been at the service of construction professionals for decades, responding to the day-to-day needs and concrete questions of construction companies, both in terms of technology as well as business management. On the initiative of the Technical Committees, research is being conducted to expand our knowledge and meet the requirements of the sector.

In 2022 for example, two in-house research projects were conducted to investigate acoustic problems on construction sites. The first highlighted the potential impact that an insulation layer under a floating screed can have on a floor's acoustic insulation. Thanks to this project, recommendations were drawn-up for construction professionals on ways to obtain the best performance in such commonplace situations. The second project focused on noise pollution (in the form of popping noises) from aluminium joinery exposed to major temperature fluctuations. An on-site method was developed to detect and locate its origin using an acoustic camera, allowing the contractor to determine where intervention is required. Still in the field of acoustics, <u>TIN 281</u> was published in 2022,



One of its ambitions, Skilled Trades, is a key priority of Buildwise

focusing on sound insulation between dwellings.

Within the pre-normative <u>CoDyNi</u> study (funded by the Federal Public Service Economy, SMEs, Self-Employed and Energy), research was conducted on measuring the actual energy performance of the building envelope. The existing measurement technique (*co-heating*) has major drawbacks. Leading to the development of a shorter measurement method in 2022, the project was validated using numerical simulations and put into practice in fifteen homes.

Since there is no uniform method for dimensioning heat generators for domestic hot water production, each designer adopts his own approach, usually based on methods from abroad. In 2022, Buildwise conducted surveys to measure the consumption of domestic hot water in the residential sector. These led to the development of dimensioning formulas in the context of the <u>OPTIDIM</u> project (funded by the Federal Public Service Economy, SMEs, Self-Employed and Energy). These take into account not only the Belgian consumption profiles, but also the type of hydraulic installation used. The project <u>Sanitair warm</u> <u>water 2.0 (SWW 2.0)</u> (Domestic Hot Water 2.0 (DHW 2.0) (funded by VLAIO) is developing an app enabling the use of dimensioning formulas and graphs in a user-friendly manner.

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SKILLED TRADES AMBITIONS 2025



The effect of wind on flat roofs is an important issue for the construction sector. On-site assessments of existing flat roofs are frequently requested, for example, in the event of doubt after difficulties or bad weather during installation, or when one wants to preserve a complex to be renovated. As part of the in-house project '*Windweerstand van daken - Evaluatie in het labo en in situ* (Wind resistance of roofs - Laboratory and on-site evaluation)', a method was developed for a tensile test to be performed on-site. This test gives an idea of the strength of the existing roof. In addition to the numerical value, abnormally low adhesion is also immediately detected. Moreover, one of our bestsellers was revised in 2022: TIN 280, the reference for flat roofs.

Buildwise regularly conducts on-site measurement and monitoring campaigns, such as large-scale load tests on various types of deep foundations. With the help of optical fibre sensors (project <u>Monitoring van structuren</u> <u>en systemen met optische vezel sensor technologie</u> (Monitoring structures and systems with optical fibre <u>sensor technology</u>) - funded by VLAIO), we can obtain a detailed picture of the load-bearing capacity of the foundation element and its interaction with the soil. These tests allow us to verify and/or optimise on-site dimensioning and to support manufacturers in the development of innovative systems.

Buildwise prioritises the dissemination of research results and our knowledge to the sector, reaching out to construction professionals and supporting them in their work. This is done through our Technical Information Notes (TINs), including <u>TIN 283</u> on the installation of exterior joinery and <u>TIN 284</u> on interior plastering in 2022. Also worth mentioning are two reference documents related to an important cross-trade theme, fire safety: the revised version of <u>Innovation Paper 37 'Fire safety of façades</u> in high-rise buildings' (first published in 2017 after the Grenfell Tower fire), and <u>TIN 282</u> on the fire safety of curtain walls. Other resources, such as Pathologies Sheets (14 in 2022) and tools and applications, complement these core publications, as do the no less than 643 courses and trainings sessions organised in 2022.

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The Green Deal: opportunities for growth and innovation in the construction sector

In 2022, the energy crisis in Belgium and the rest of Europe caused household and business energy bills to shoot up. In addition, construction companies are facing rising material prices and supply chain uncertainties. Climate change is also making itself felt, resulting in hot and very dry summers. Demand for comprehensive energy renovations, renewable energy, the transition from gas to electricity with heat pumps, blue and green grids, reuse and circular construction became red-hot topics for the construction sector in 2022.

Driven by its ambitions for 2025 in terms of Skilled Trades, Construction 4.0 and the Green Deal, Buildwise is working with the sector on new solutions and best practices.



Supported by Interreg, the <u>CBCI</u> (Circular Bio-based Construction Industry) project is seeking to reduce the construction industry's materials footprint, focusing on circular construction and bio-based materials. The <u>Circular Built</u> tool supports contractors and construction professionals in concretising circular ambitions and in their practical implementation in construction projects. There was also a strong focus on promoting knowledge about wood and biomaterials, with regard to both implementation aspects and the environmental impact of these building concepts. Partners Embuild Flanders, Kamp C and KULeuven have helped establish market and legislative studies, demo spaces and pilot projects, in order to effectively open up the construction market. Climate neutrality, climate change and resource efficiency constitute unprecedented opportunities for the construction sector to grow and innovate

By late summer, groundwater levels were at a record low. Associated with climate change, the drought issue has therefore moved up the agenda in Belgium in recent years. Looking specifically at groundwater extraction, the role played by drainage in construction projects is not to be overlooked. While such drainage at construction sites is necessary, new construction techniques and innovative methods can reduce the impact, as can reuse. In cooperation with Embuild Flanders, Buildwise is implementing the VLAIO-COOCK project <u>Grondwaterbeheersing bij bouwprojecten</u> (Groundwater management in construction projects). Various study days and the creation of technical data sheets are helping raise the awareness of contractors, designers, owners and administrations about this topic.

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Greenery in the built environment also contributes to climate adaptation, having a positive impact on summer comfort and energy consumption for cooling. <u>Innovation</u> <u>Paper 38</u> '*Begroende gevels*' (Green Façades) addresses the various points to take into account for a successful green façade.

Rising prices for gas and electricity in particular are accelerating demand for in-depth renovation. To achieve the 3% renovation rate needed to meet the 2050 climate goals, a new structural approach is needed. The <u>RENO+</u> project, with the support of the Walloon Public Service (SPW, *Service Public de Wallonie*), promises that owners will be able to renovate their homes easily, risk-free, thoroughly and at the right cost. Buildwise, Embuild Wallonia and Greenwin are collaborating on a thoughtful customer approach and a tailored industry offering to bring about a wave of renovation. Alongside various events, special attention has been paid to new financing models and RENO+'s test cases and tools.

Reflecting the same need for energy transition, Buildwise remains committed to new technologies and practices, such as shallow geothermal energy for heating, cooling and seasonal heat storage. With the support of Belspo, the <u>GeoCamb</u> project is looking into the geothermal potential of soil and aquifers in and around Brussels for the heating and cooling of public buildings. Test drilling in rock up to 150 metres deep in combination with building and soil simulations, as well as the renovation of a social housing

complex as an application, have already demonstrated the potential of this technology.

2022 was also an important year for the development of top European research infrastructure, as witnessed by the <u>HAMSTER</u> testing facility at Buildwise Brussels. With the support of ERDF Brussels and Innoviris, this testing facility allows us to assess the energy-related and hygrothermal properties of walls and building components, optimise their performance and validate their durability, if necessary under extreme climatic conditions. In cooperation with contractors and the industry, innovative building systems and restoration techniques for wooden windows are already being tested.

The construction sector is a key player in the transition to a circular, climate-neutral society via a very necessary energy transition. Politics are setting the stage, but economic realities (energy, resources, manpower) and climate change constitute a major challenge for the sector. In collaboration with its partners, Buildwise offers contractors new insights and innovative practices expected to allow this challenge to become a market opportunity.

The ambition for Europe to become the first climate-neutral continent, protection against climate change and the need for resource efficiency represent key opportunities for the construction sector to grow and innovate. But they also involve taking on responsibility.

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Digitalisation: a new horizon for construction

Digital technologies have dramatically changed many industries, the construction sector is no exception. Digital construction offers many ways to improve the quality, speed and profitability of projects without sacrificing safety and sustainability. Buildwise has been researching digitalisation in construction for several years, raising awareness about and demonstrating its undeniable benefits. This overview lists the flagship projects carried out in 2022.

The aim of the <u>COOCK-3D</u> project (subsidised by VLAIO) is to increase the use of 3D measurement techniques in companies, accelerating and objectivising measurement through the use of devices such as smartphones, drones and scanners. This will considerably shorten the time needed to produce quotes. Various actions (digitalconstruction.be) are being taken to publicise this work: major on-site events, as well as a Belgium-wide roadshow.

The pre-normative <u>BIDS</u> study (subsidised by the FPS Economy) is developing the use of BIM to facilitate interpartner communications within a construction project by specifying the information to be included in the digital model for each project phase. At present, engineering firms tend to use their own non-standardised modelling conventions in their design software, leading to missing, Digital technologies can create new business opportunities, improve productivity and promote the environmental transition

untraceable or unusable information. The results are published in the form of an information sheet. We are working with the CRTI-B (Luxembourg) to achieve the widest and most uniform adoption.

The aim of the <u>DeepConstruct</u> project (subsidised by DGO6) is to solve the time-consuming problems of managing a construction site's resources (checking the documents of the workers present on site and drawing up optimal resource allocation plans). A collaborative digital solution is being developed to automatically share, recognise and access administrative documents related to the construction site resources. A tool is also being developed for general construction companies and their subcontractors to help optimise resource planning.

The aim of the <u>Pointify</u> project (subsidised by Innoviris) is to speed up preparations for renovation work by using point cloud-based measurement techniques. There are two main aspects: to better support construction professionals in the use of 3D scanning by offering them practical 3D digitali-



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sation guides in line with recurring needs, and to create an intuitive application to facilitate point cloud processing by providing rapid access to useful information.

In 2022, we developed a functional prototype of the Pointify application. The principle behind the tool is to easily export 2D views (e.g., floor plans, façade views) from the 3D file and to annotate them.

Furthermore, our new demo centres (Buildwise Experience) in Zaventem (Construction 4.0, subsidised by ERDF and VLAIO) and in Limelette (Build4Wal, with financial support of the Walloon Region) offer all players in the sector the opportunity to learn about digital technologies (drones, exoskeletons, rapid 3D/2D measurements, IoT, 3D printers, cobots, etc.). We have set up a series of demonstrations based on the needs of different construction trades and adapted to a company's digital maturity. Some of these technologies can also be put on a lorry and taken to a building site where a contractor can try them out under real-life conditions.

Last but not least, Buildwise developed several apps in 2022, including <u>WindETICS</u>, <u>Calc&Go</u>, <u>Coplaco</u> and <u>BETON</u> (now available for iPhones and Android).

In short, Buildwise's 2022 digitalisation actions focused on raising awareness and improving construction work processes through the use of digital technologies. Communication activities (publications, training courses, etc.) and collaborations with other organisations will undoubtedly promote the broad and uniform adoption of these innovative solutions for a more digital future of the sector and support the environmental transition. By joining forces and efficiently interweaving the efforts of different government bodies, we can make significant progress.

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Statutory bodies

During the meeting of the General Council of Buildwise on 16 May 2022, the composition of the General Council and the Standing Committee was approved as follows:

General Council

Chairman: J. Willemen

Vice-Chairmen: J. Lembrechts, T. Scorier, L. Mohymont

Honorary chairmen: J. Gheysens, R. Lenaers

Honorary Director-General: J. Venstermans

Members appointed by Embuild: Y. Biesmans, M. Bonten, P. Crohin, A. De Cesco, N. Demeester, B. Geentjens, B. Georges, R. Hinnens, S. Kaye, E. Keijers, V. Lausier, E. Leskens, C. Maes, S. Magnée, G. Mahaux, O. Mareschal, S. Maris, H. Michot, K. Neyrinck, P. Pattyn, J. Pérard, D. Peytier, B. Piron, J. Polet, B. Schrevens, P. Segers, W. Simoens, W. Straetmans, B. Tasiaux, M. Therer, V. Van Esbroeck, G. Van Gucht, E. Vigoureux, N. Vromant

Members co-opted by Embuild: N. De Smet, C. Hautier, B. Heiderscheidt, D. Holemans, L. Mohymont, C. Peeters

Members appointed by the Bouwunie: G. Baert, J. Debuf, B. De Malsche, D. Hellemans, K. Kempeneers, P. Suys, L.-J. Vancauwenberghe, F. Verkest, J.-P. Waeytens

Member appointed by the FEB: J. Lembrechts

Member appointed by the Federal Public Service Economy: R. Collette

Members appointed by the Flemish Region: S. Faignet, L. Van de Loock

Member appointed by the Brussels-Capital Region: O. Eugene

Member appointed by the Walloon Region: A. Gillin

Members appointed by the workers' organisations: P. Cuppens, G. De Vlaminck, M. Diku Biduaya, B. Hilami, J. Vandycke

Auditors: J. Lembrechts, B. Tasiaux

Statutory auditor: HLB Dodémont-Van Impe & C°

Standing Committee

Chairman: J. Willemen

Vice-Chairmen: J. Lembrechts, T. Scorier, L. Mohymont

Members: R. Collette, A. De Cesco, N. Demeester, G. De Vlaminck, K. Kempeneers, V. Lausier, K. Neyrinck, P. Pattyn, B. Piron, J.-P. Waeytens

Observers: A. Gillin, L. Van de Loock



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Technical Committees

The activities of Buildwise are guided by fifteen Technical Committees. While eleven of them directly represent a specific construction trade and are composed primarily of contractors, the others focus on subjects of interest to several trades. In order to guarantee this bottom-up approach, each Committee defines the actions that will be carried out in the following year, via work plans submitted to the Standing Committee of Buildwise for approval.

Rough Structure and General Contractors

Chairman: X. Braet

Members: K. Andries, J. Bosmans, L. Courard, C. De Cesco, G. De Schutter, P. De Vylder, J. Deceuster, D. Dechamps, F. Demeulemeester, R. Dhuyvetter, P. Dresse, T. Eeckhaut, B. Geentjens, P. Goetinck, J. Govaerts, C. Grancitelli, M.-L. Heyndrickx, P. Heyns, P. ibens, S. Kaye, F. Lederer, J. Maertens, F. Marchand, A. Parewyck, P. Pirotton, S. Scharlaken, M. Seculier, T. Spapens, R. Van Acker, D. Van Campenhaut, T. Van Put, E. Vandewiele, A. Vermeyen, J. Willen Engineers-leaders: V. Dieryck, N. Huybrechts, B. Parmentier

Advisor: A. Van der Auwera

IIII Heating and Climate Control

Chairman: D. Peytier

Members: P.-Y. Badot, W. Beeck, M. Blondiau, L. Brees, M. Decat, L. Dedeyne, M. Fatzaun, G. Gronsfeld,
E. Maertens, J. Mampaey, L. Mehaudens, W. Neuville,
C. Nonneman, J. Nouwynck, A. Palumbo, I. Piette,
F. Santucci, J.-P. Somers, M. Therer, V. Vancaeyzeele,
K. Vanlancker, W. Vanmeert, K. Van Campenhout,
E. Vandenbosch, K. Wuyts
Engineers-leaders: C. Delmotte,
P. Van den Bossche
Advisors: I. De Pot, V. Jadinon

Paintwork, Flexible Wall and Floor Coverings

Chairman: S. Magnee

Members: G. Baert, C. Callandt, T. De Jaegher, J. Debuf, O. Delvaux, B. Dethune, E. Fleurinck, L. Gailly, A. Gulisano, R. Hermans, B. Klinkers, J.-P. Lempereur, A. Mertens, P. Noe, P. Pattyn, M. Van Den Branden, D. Van Kerckhove, D. Vanden Driessche, L. Vanrenterghem, L. Verhelst, T. Vrambout, J. Watteyn Engineers-leaders: E. Cailleux, E. Nguyen Advisors: K. Janssens, T. Rondou

Hard Wall and Floor Coverings

Chairman: P. Goegebeur

Members: T. Archambeau, R. Baugnies, M. Bauters,

- T. Beernaert, H. Berth, B. Broekaert, D. Crombez,
- G. Cuttaia, G. De Smet, J. De Smet, P. De Stobbeleir,
- P. Dresse, E. Godderis, T. Hemelsoet, S. Hens,
- P. Holderick, M. Keulen, V. Lefort, A. Mahaux, G. Mahaux,
- M.-M. Mennens, F. Miesse, P. Noé, G. Pardon,
- S. Piedboeuf, G. Ponzo, B. Roten, B. Royaux, K. Stroobants,
- A. Tandt, C. Van De Velde, D. Van Kerckhove,
- E. Van Rumst, L. Vandewiele

Observers: C. Arnould, B. Vangeersdaele, T. Verstaen **Engineers-leaders:** T. Vangheel, E. Nguyen **Advisors:** L. Firket, J. Van den Bossche

Glazing

Chairman: A. Sanchez Vice-chairman: J. Jacobs Members: A. Cassauwers, G. De Landtsheer, L. Delvoie, D. Dequidt, J. Devilers, E. Dupont, J.-D. Fontaine, T. Hens, M. Janssens, T. Laurens, G. Martens, M. Martinez, Y Vazquez, T. Meyers, A. Minne, R. Nokerman, F. Symoens, J. Verschueren Engineer-leader: V. Detremmerie Advisors: F. Caluwaerts, R. Durvaux, L. Lassoie

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Sealing Works

Chairmen: R. Evens, Y. Biesmans

Members: S. Baelen, F. Belin, H.-C. Boulanger, F. Coninx, J. Coumans, C. Coussens, H. De Schepper, K. Derde, M. Kersschot, P. Kerstenne, F. Louwers, K. Mangelschots, H. Michot, J. Moens, R. Naert, Y. Rosier, E. Schomus, S. Terryn, P. Van Acker, L. Van Audenhaege, G. Van Dyck, D. Van Genechten, D. Van Kerckhove, P. Van Rysseghem, P. Verbrugghe, M. Wagneur, K. Wienen Engineers-leaders: E. Mahieu, E. Noirfalisse Advisor: D. De Bock

Roof Coverings

Chairman: C. Vandermosten
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A. Bountzouklis, F. Cauwelier, J.-F. Crohin, S. Daelman,
C. Degreef, S. Depuis, G. Derde, P. Donner, Y.-M. Dron,
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T. Stockman, C. Suarez, A. Thierens, J. Van Leeuwen,
N. Vander Putten, M. Vanherle, A. Vanhove, R. Vignix,
D. Wattel, L. Zanussi

Engineers-leaders: F. Dobbels, L. Lassoie, E. Noirfalisse **Advisors**: D. De Bock, L. Geerts, E. Mahieu

Sanitary and Industrial Plumbing, Gas Installations

Chairman: P. Deweer

Members: W. Beeck, K. Beenaerts, V. Cazier,
B. Claessens, S. Creffier, M. Decat, L. Dedeyne, D. Déom,
J.-P. Geerts, G. Gronsfeld, E. Maertens, J.-F. Minne,
C. Nonneman, D. Peytier, F. Santucci, Y. Simar,
K. Van Campenhout, C. Van Dinter, P. Van Rompaey,
K. Wuyts
Engineers-leaders: B. Bleys, V. Jadinon
Advisor: I. De Pot

Joinery

Chairman: W. Simoens
Members: J. Andries, G. Baens, A. Cassauwers, R. De Cort, R. De Schepper, J. De Wyngaert, C. Decaesstecker, H. Frère, J. Geebelen, S. Kempeneers, P.-J. Simoens, J. Van Hal, N. Van Hee, D. Van Kerckhove,
W. Van Overstraeten, F. Vanholst, M. Vanzurpele, J. Verniers, D. Versluys
Engineers-leaders: V. Detremmerie, E. Kinnaert, Y. Martin
Advisor: F. Caluwaerts

I Stone and Marble

Chairman: S. Maris

Members: A. Abraham, J. Abraham, R. Baugnies, K. Callebaut, H. Callewier, G. Claerbout, J.-P. Cnudde, V. Cnudde, A. Demesmaeker, G. Denayer, P. Dethier, J. Elsen, P. Goegebeur, E. Latour, G. Legein, M.-M. Mennens, B. Misonne, C. Mordant, P. Noe, D. Pallix, S. Piedboeuf, S. Renier, J. Spinato, F. Tourneur, G. Van Gucht, K. Vandenneucker, B. Wauters Engineer-leader: D. Nicaise Advisors: L. Firket. J. Van den Bossche

Plastering, Jointing and Façade Work

Chairman: D. Verhaegen

Members: P. Beaujean, J. Beke, B. Broekaert, P. Cherchye, J. Coose, O. Cremer, E. De Bolster, R. De Haes, J.-P. Demuynck, C. Denayer, M. Dutry, E. Godderis, J. Govaerts, H. Hendriks, J.-Y. Huberty, S. Jamar, M. Meert, G. Mostenne, M. Oldyck, U. Peter, S. Piedboeuf, J. Schalley, I. Segers, H. Spoormakers, J. Storme, A. Tandt, P. Thomas, D. Van Kerckhove, W. Van Lancker, I. Vandendael, C. Van Loock, V. Verachten, S. Verhoeven, G. Veys, M. Veys, N. Vromant Engineers-leaders: I. Dirkx, Y. Grégoire Advisors: S. Korte, M. Lignian

Building Physics, Comfort and Safety

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Chairman: M. Ruebens

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Advisor: K. Janssens

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Further achievements

Vision Committee

A detailed analysis of the construction sector trends and the expected short- and long-term impact on the various construction trades was conducted in collaboration with KPMG, at the initiative of the Vision Committee of Buildwise. The report of this analysis is available (<u>Innovation Paper 40</u>), and provides the Technical Committees with inspiration for future research topics. The study specifically identifies five potential implications for the Belgian construction sector: thinking in ecosystems and co-creation, the transition to processdriven construction, evolutions and changes within value chains, the development of new markets and the need for systematic long-term thinking about our future.



CSR

2022 was the year in which Buildwise committed itself to concretise its CSR (corporate social responsibility) strategy. In parallel with the many projects from the 'Green Deal' axis of 'Ambitions 2025', Buildwise also wants to better manage its own environmental impact and actively respond to societal challenges. By leading by example, we can take a credible leadership role in a sector transitioning to greater sustainability.

Human Resources

Through its HR policy, Buildwise aims to support and develop the expertise of its employees to boost their workplace well-being and their motivation, as well as their commitment to the Buildwise vision, mission and strategy and to their own function and evolution. Following the rebranding, our HR department launched several major internal recruiting efforts to reflect the new expectations. For example, we began digitalising HR processes and took the first steps towards a talent management policy. After in-depth discussions driven by the strategic repositioning and the challenges facing construction companies, a new organisational structure was introduced, the first phase of which was rolled out in late 2022.

Projects

Buildwise is participating in numerous projects at international, European, federal and regional level. An overview of all these projects can be found on <u>Buildwise.be</u>.

Further figures

Sources of financing



Allocation of resources



Locations

Buildwise Zaventem

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Technical advice – Publications Management – Quality – Information technology Development – Valorisation Technical Approvals – Normalisation

Buildwise Limelette

Avenue Pierre Holoffe 21 B-1342 Limelette T 02/655 77 11

Research and innovation Training Library

Buildwise Brussels

Dieudonné Lefèvrestraat 17 B-1020 Brussels T 02/233 81 00

Annual Report 2022

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buildwise.be

W E After more than half a century, the Belgian Building Research Institute (BBRI) has changed its name to Buildwise. This new name also entails a new direction, with a greater focus on innovation, collaboration and a more integrated multidisciplinary approach. Since Buildwise is primarily financed by the membership fees of some 100,000 construction companies, these also help determine our activities, e.g. through their involvement in setting priorities and steering actions via the Technical Committees.

From research centre to innovation centre

Thanks to its knowledge acquired over the years, Buildwise has become *the* key reference for construction expertise. Buildwise is there to support all actors in the value chain. Our goal? To pass on all knowledge set to improve quality, productivity and sustainability and to pave the way for innovation on building sites and in construction companies.

A catalyst for sharing knowledge and connecting

The construction process is very complex and fragmented. Therefore, Buildwise wants to strengthen its connecting role. We can only overcome the sectoral and societal challenges by getting the whole sector to change tack, rethinking the way we work together.

From multidisciplinary to transdisciplinary expertise

Buildwise stands apart through its pragmatic and multidisciplinary approach. Finding robust solutions requires a comprehensive, integrated approach. Our ambitions are therefore built around three pillars: digital technology, sustainability and craftsmanship (represented by the contractors within the Technical Committees).



Responsible publisher: Olivier Vandooren, Buildwise, Kleine Kloosterstraat 23 B-1932 Zaventem. D/2023/0611/11