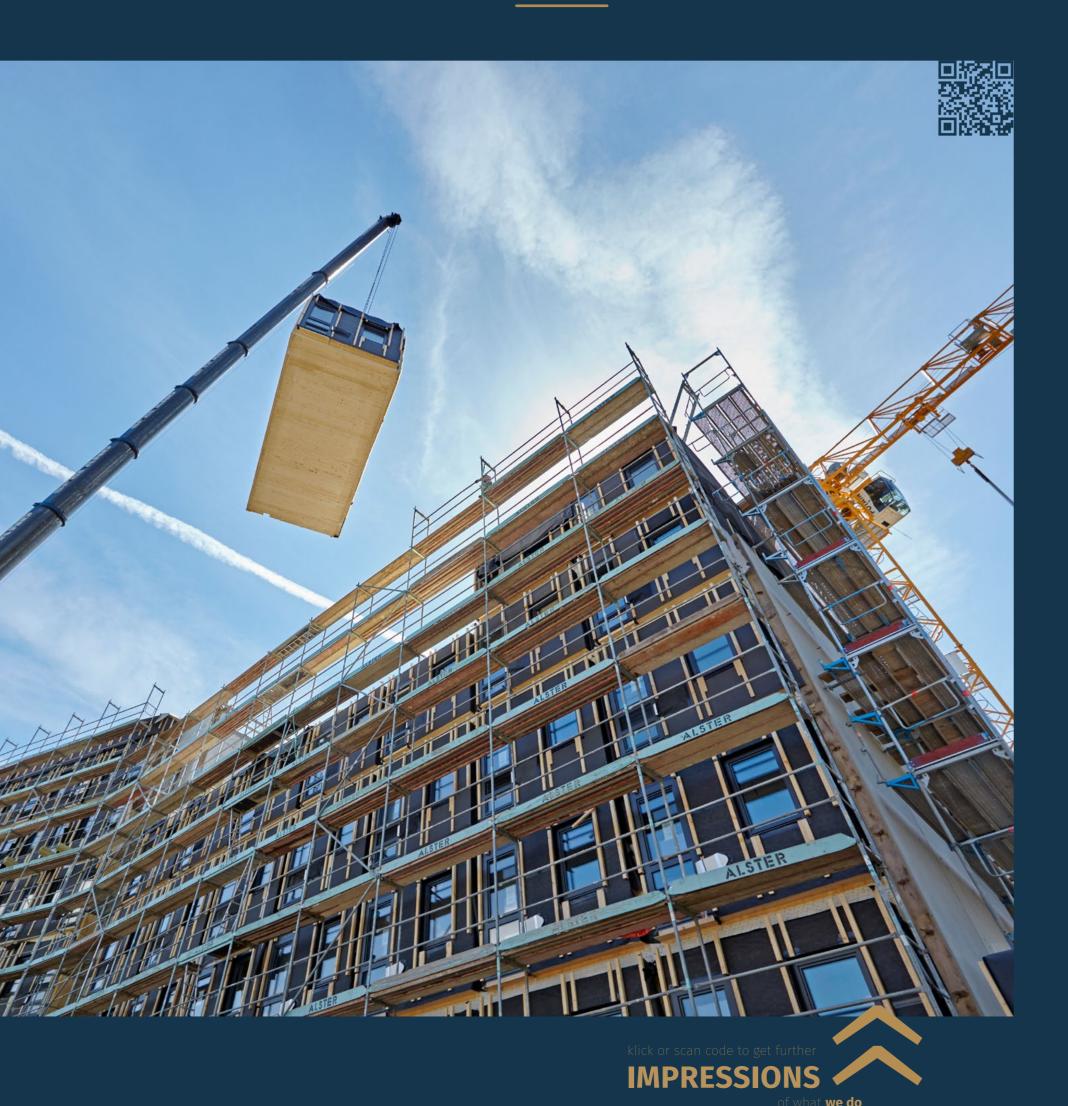


#### » **SERIAL PREFAB**, MODULARITY AND WOOD ARE THE FUTURE OF HOUSING. «



# 



#### » THE **REVOLUTION** IN MULTI-STOREY RESIDENTIAL BUILDING «

purelivin is the revolutionary new approach to planning and fabrication, makes construction times short, reduces local made of solid wood are combined according to the "plug & 100% recyclable. play" principle to create multifunctional residential homes. in terms of health, indoor climate and long-lasting value.

purelivin is synonymous with climate-positive construction. useful life. The use of solid wood, combined with top-quality serial pre-

construction. Serially prefabricated complete room modules emissions to a minimum and creates homes that are virtually

The resulting rooms and buildings are not only guaranteed to Using the high-tech building material wood saves non-refeel modern and special, but they also offer clear advantages newable resources, permanently binds CO2, largely avoids CO2-intensive building materials and ensures that buildings are returned to the raw material cycle at the end of their



#### » MAXIMUM **FLEXIBILITY** WHEN COMBINING APARTMENTS. «







# SIMPLE



#### » MODULAR PLANNING CONCEPT WITH ARCHITECTURAL DIVERSITY. «

Prototypes are good, standardisation is better! We have does not have to be reinvented from scratch but, instead, is based on a simple, easily scalable construction princip- mensional, digital "twin" in BIM. le: the three basic modules can be put together in numerent shapes and sizes up to six storeys high.

Standardisation brings significant advantages during the diversity. planning process and in prefabrication. Each new building

taken a new approach to planning and building. purelivin it is already largely in existence in the form of a three-di-

rous ways to make 1- to 4-room apartments. The various At the planning stage, the function is given its form; the layouts can then be combined to create buildings of diffe- function being the standardised apartment. The shape of the building and the shell are an individual response to its location and use, thereby guaranteeing architectural





#### » 3 HOMES A DAY, 1000 HOMES A YEAR. «



# H H E PREFAB



#### » EFFICIENT CONSTRUCTION FOLLOWING THE "PLUG & PLAY" PRINCIPLE. «

built in if desired. Afterwards, the finished modules go that is more time-efficient.

The room modules are planned in 3D and prefabricated up through our strict quality control process before leaving to 95% completion in a 13,000 m<sup>2</sup> module factory, where up the factory. The timing of the delivery logistics has been to 37 modules at a time can be processed simultaneously perfected so that each module arrives "just in time" on on the 130 m assembly line. Just like in the automotive the building site and can be moved by crane directly from industry, the individual production processes are "docked" the lorry to its position on the building. By the time the along the assembly line. All the room modules are fully crane has positioned the module, the next one is already finished inside, including all surfaces, windows and doors, waiting. This method of construction is about 75% quicker all the sanitary fittings are installed and furniture can be than the conventional method. There is no way of building







#### A purelivin apartment permanently **ABSORBS AROUND**

We can build our way out of the climate problem. Every cubic metre of wood used in construction permanently absorbs a tonne of CO2. Every tree that is felled makes space for new trees, which in turn will actively extract CO2 from the air. Every building made of wood also helps to avoid the CO2 emissions that result from other, CO2-intensive construction materials such as concrete or steel. The positive CO2 benefits are therefore threefold. Wood is also the only raw material that renews itself naturally and does not consume finite resources. At the end of a wooden building's life cycle, it can be almost entirely recycled.

>> 25 t CO2

#### **% RECYCLABLE**

Conventionally constructed buildings are mainly made from non-renewable and therefore finite resources. At the end of their life cycle, only up to 30 % of the used materials can be recycled. It is a very arduous, labor intense and difficult task to seperate those materials. Thermal insulation facades made of styrofoam are and will remain hazardous waste. purelivin modules can be completely dismantled and broken down into their original components. Certain components or even whole modules can be reused or recycled. This means that the capital bound up in the materials is not lost but is released for another purpose.

The purelivin apartments have been optimised to make best use of space in different sizes. A 1-room unit measures 37 m<sup>2</sup>, a 2-room unit 50 m<sup>2</sup>, a 3-room unit 62 m<sup>2</sup> and a 4-room unit 73 m<sup>2</sup>. They could hardly be more efficient. The reduced appartment size leads to potential savings in terms of rent and purchase price up to 20 %. This is our contribution to affordable homes, whether they are owner-occupied or rented.











### by up to **75%** reduced construction time

As purelivin modules are industrially prefabricated in our module factory and because of the contemporaneous structural work on site, the construction time is reduced by up to 75 %. The short construction time has the effect of reducing emissions on site and it means that there is far less construction traffic and less stress caused to neighbours by noise and dirt. For property developers and investors this also means faster cash flow because the building can be occupied sooner.

## 50 % COST AND TIME SAVINGS

purelivin is based on a simple, easily scalable construction princip- at the planning stage le: the three basic modules can be put together in numerous ways to make 1- to 4-room apartments. The various layouts can then be combined to create buildings of different shapes and sizes. So, on a typical storey, almost any combination of apartment sizes is possible. Standardisation offers significant potential for saving both time and money at the planning stage. Each new building does not have to be reinvented from scratch but, instead, it is already largely in existence in the form of a three-dimensional, digital "twin".



100%

#### COST CERTAINTY ...

Serial prefabrication by purelivin, at a clearly quantifiable cost, and the reduced life cycle costs of wooden buildings bring great certainty and clear, calculable costs for property developers and investors. Every purelivin module and consequently every residential unit is precisely planned using BIM before production and details of all the included fittings are defined. Costs can therefore be clearly calculated and will not change once manufacturing work begins at the factory.

### **%** PREFABRICATED

On the 130 m long assembly line at the purelivin module factory, up to 37 modules can be processed simultaneously. Just like in the automotive industry, the individual production processes are "docked" along the assembly line. All the room modules are fully finished inside, including all surfaces, windows and doors, all the sanitary fittings are installed and furniture can be built in if desired. Afterwards, the finished modules go through our strict quality control process before leaving the factory. The results are about 2.500 turnkey modules with outstanding quality per year.

with outstanding quality

