

Building Blocks for Your Ideas







STEKO® – Revolutionary Building System Construct Your House in Just 3 Days Save Energy – Save Money



New era – new thinking – new way of construction

At the beginning of each great solution is SIMPLICITY

STEKO® – we respect the future in each detail



STEKO® – Revolutionary Building System

STEKO® South America is presenting a revolutionary building system STEKO®. This unique system was invented in Switzerland in 1997 by Professor Anton Steurer and Architect Joseph Kolb. At the present time it is well known in Europe (Switzerland, Germany, Austria, Belgium, Netherland, Italy, England, France, Spain, Czech Republic, Slovakia), Russia, Australia, USA and now entering South America.



- Significantly lowers heating costs of the building
- Faster to construct than regular timber-frame buildings, which saves time and money and lowers the labor cost
- Guarantees a high quality building every time
- Designed for energy efficient and green houses
- Walls are load bearing and space forming
- Needs no glue, nails or other fasteners
- Facilitates logistics
- Facilitates planning
- Enables architects and builders to express their own creativity
- Uses sustainable materials, which don't impact the environment



The STEKO® building system was developed in labs of universities in Switzerland and was strictly tested for the stability, heat engineering, acoustics, fire, grading and earthquake resistance. (ETH/SFIT Zurich, EMPA)



New era - New thinking - New way of Construction

More and more people desire new and better living. This brings a need for a new way of construction. People are now seeking a high quality of living combined with low operational costs. This new way of construction is at the same time economical and environmentally considerate. This system combines renewable resources with the most modern technologies and brings economy and ecology to harmony.



STEKO® shows that it is possible to build alternatively and in a better way: easier, with lower costs, while respecting the environment and human health.



STEKO® is a modular system of the most modern construction on a highly technical level. It fulfills all the technical requirements for stability, firmness, heat resistance and comfort of living.

This building system offers the latest innovations to architects, builders and structural designers.

It has never been simpler to build high quality houses and respect the environment as well as the human health at the same time.

Exterior and interior walls are built from standardized, industrially produced solid wood modules, which are easy to assemble.

Construct Your House in Just 3 Days

Due to a very sophisticated technology, STEKO® makes the process of construction significantly faster.

Five layers of wood make up each module, with outer and inner vertical boards glued to horizontal-grain battens and vertical-grain studs. The modules are stacked on top of each other in staggered rows. Dowels projecting from the bottom of the blocks fit into holes in the top of the blocks below, preventing lateral movement. The resulting construction is both weather tight and load bearing. The planed timber finish means that internal walls can be left untreated, or drywall boards can be added and other services run within the spaces inside the blocks, which are then filled with cellulose insulation. External insulation can also be added, if desired.





Why is the STEKO® System more efficient?

- Framing errors are minimized
- Placement plans are generated and delivered with each module package, picking up all bearing locations and showing correct placement for easy assembly
- Each module is marked accordingly
- Easier manipulation with STEKO® modules than with 2"x4" or 2"x6" studs and plywood sheeting
- No need of a framing gun while assembling the walls
- No need of a diffusion barrier

A STEKO® house can be **built in three days** and is **less expensive** and **quicker to build** than custom timber-framed buildings.

At the Beginning of each great Solution is SIMPLICITY

The basic elements of the STEKO® building system are solid wood modules which can be easily interconnected in rows and stacked. Inner and outer walls formed like this are bearing and also boundary walls. STEKO® modules are produced in various heights, lengths and with a variety of surface finishes.

STEKO® walls can be easily combined with commonly available windows, doors and ceiling and roof constructions. The STEKO® system, combined with standardized supplementary elements, is a simple, **solid** and **economical construction system**.









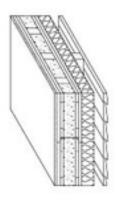




At the Beginning of each great Solution is SIMPLICITY (Cont.)

A good idea is never forgotten. Because each module constructed of dry solid wood and natural insulation materials, STEKO® walls "breath" and are open for diffusion. In contrast to the usual way of construction, STEKO® walls do not require a vapor barrier, which affects the temperature balance in summer and winter. Pores and cells in solid wood regulate temperature and moisture.

STEKO®'s solid walls retain heat in the winter and keep interiors cool in the summer. With these excellent thermal insulation properties, it creates an incomparably comfortable and healthy living environment. The walls thus create a temperature comfort zone, achieving optimal temperature in a house.



Example of standard STEKO® wall with lap siding.

R-Value 30





Save Energy - Save Money

Insulation is usually discussed in terms of R-Values: higher R-values represent better insulation and greater resistance to heat flow. Typically, higher R-values are recommended for ceilings than for walls and floors. Although your local building codes specify R-values for homes, these building codes often represent a minimum level of insulation necessary for comfort, rather than a level recommended for optimal energy efficiency.

Using the STEKO® system to build your house will reach a 38% higher R-Value than with standard framing. Then by just adding insulation of the desired thickness, you can build an energy-efficient house.

A USA example: if you spend about US\$3,000 a year on energy bills in a standard framed house, in the same sized STEKO® house you will spend only US\$1,860. It is a savings of US\$1,140 per year. If you live in the house for 30 years, you can save as much as US\$34,200 based on current energy costs.

Comparison of R-Values for standard timber framed house (2x6 inch wall) and a STEKO® system House (wall thickness 6"):



Standard STEKO® house wall.
R-Value = 22



Energy efficient STEKO® house wall R-Value = 41.5



Passive STEKO® house wall R-Value = 57

Standard timber framed family house: STEKO® system family house:

effective R-Value 16 effective R-Value 22

The R-Value of a STEKO® standard wall is about 38% higher than a standard timber framed wall or a one meter thick stone wall. Additional insulation on the exterior increases the quality of the heat protection so that the STEKO® system creates buildings with minimal energy consumption: energy efficient houses and passive houses.



We can expect higher energy prices in the future. That's why it will be necessary to build energy efficient houses now, using green products and energy saving appliances.

Build with STEKO® and SAVE!

Preparing STEKO® sill for Electrical



And Floor Heating



STEKO® Roof



Modular Building Benefits

Modular construction is changing the way the world builds. Build naturally faster and smarter with STEKO®.

People associate modular building with pre-fabricated "kit" homes, they think temporary, box-like or boring. Perhaps for you, the word "modular" may conjure images of worksite accommodation or flimsy portable classrooms. This way thinking isn't wrong, as up until now this has often been the case. However, permanent prefabricated construction like STEKO® has completely revolutionized modular building.

Unlike "kit" homes STEKO® allows creative freedom and individuality to be maintained whilst enjoying all the benefits of a modular system. The efficiency of the worksite when using a modular system like STEKO® will ensure that you can step back and enjoy the process as everything falls neatly into place. A solid, durable home can be constructed – from foundation to lock-up – within a matter of days. STEKO®'s efficiency is due to the simplicity and elegance of the design, which has been engineered to ensure ultimate productivity on the construction site.



SAVES TIME

by creating efficient building sites



REDUCES WASTE

making it environmentally sustainable



SAVES MONEY

as both time and waste are reduced



ACCURATE BUDGET

can be obtained during early stages of planning



SWISS QUALITY

is guaranteed ensuring strength, quality and perfection every time Saves time on building site by improving efficiency and productivity. All modules are manufactured off site and ordered as needed. This ensures that the time it takes to build will be as short as possible – a medium size house can be built in as little as 3 days.

Reduces waste, no off-cuts! Reducing waste has a dual advantage. It minimizes environmental impacts and saves you money.

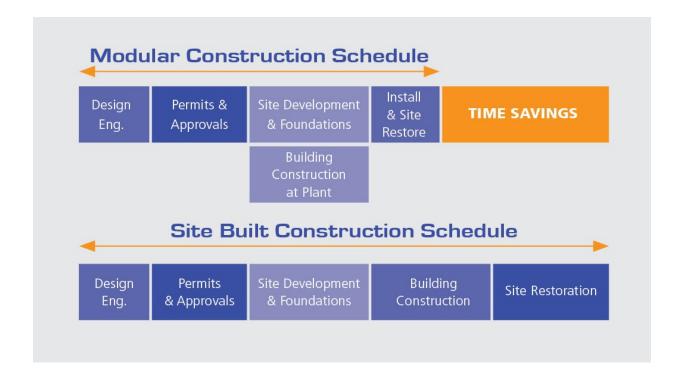
STEKO® can reduce planning time and council approval and most importantly labor time due to the fast building process. Saving time saves you money.

The more that you know about your building project, the more accurate you can budget. Because the cost of building with STEKO® is calculated by the number of modules (or square meters) required, our CAD program can give you an accurate quote during the design process.

Guarantees quality, strength and perfection every time. No STEKO® module leaves the factory until it has been meticulously tested. Therefore you can rest assured that you will receive nothing short of building perfection.



Building Time Schedule



Due to the nature of STEKO®, restoring and cleaning up your building site after construction will be quick and an easy process. Therefore reducing overall build time and allowing you to move in faster!

Who should build with STEKO®?

The versatility of the STEKO® building system is almost endless, making it an incredibly convenient way for anyone to build.

STEKO® is a suitable building system for residential buildings as well as communal, agricultural, industrial or business buildings. Furthermore, the wooden modules are able to be used for temporary buildings, trade fair and stage construction, renovations, extensions, as room dividers or as infill for skeleton structures. The possibilities are limited only by your innovation.

Owner Builders:

Considering building your own house? There's nothing stopping you now. STEKO® is ideal for those who want the satisfaction of building their own house and who are also handy with a hammer. Building with STEKO® reduces the complexity of construction by eliminating the need to measure and cut – it's all been done for you. This also means that you won't need expensive, specialized tools as the wall modules are prefabricated, ready to be push fitted together. The whole family can even help, as the standard module weighs only 6.5kg, so it's perfect for those restricted by heavy lifting. The simplicity and speed of construction with STEKO® makes building a sheer joy for do-it-yourself homebuilders.

Remote Communities:

No more sourcing issues.

Because STEKO® is a complete building system, each order will arrive at the pre-arranged site with all materials required for assembling your construction. This means that you don't need to wait for numerous different components to arrive from regional centers. Once the STEKO® modules arrive, you will be able to have constructing completed within a matter of days.

Environmentally Aware:

Is building a sustainable, healthy home something that matters to you? Alternative building methods are steadily increasing in demand as many home owners begin to realize that smart housing doesn't necessarily need to be expensive or complex. Simple, natural materials, if utilized properly can result in comfortable, affordable construction. Using STEKO®, building a home that complies with sustainable building practices is easy. A STEKO® home owner can enjoy STEKO®'s recognized capacity for improved energy efficiency, knowing that the reduction of waste during the building process, as well as the ease of recycling will leave you feeling good about your healthy new home. If you are looking to build sustainable, low energy home, then STEKO® is right for you!



Who should build with STEKO®? (Cont.)

Commercial:

No more pillars or posts.

STEKO® isn't limited to building houses. The fast construction and affordable costs of STEKO® are ideal for businesses and factories. STEKO® can be built up to 10 storeys high without compromising any structural stability. All walls are load bearing meaning that there is a reduced need for pillars or other supports. This increases the versatility as it is possible to have large open areas, which can later have partition walls added if required.

Schools:

Create a healthy learning environment. Neurologists have found a link between healthy brain development in children and the use of natural building materials in their surrounding environment. Timber as opposed to steel, concrete or other man-made products produces a healthy, welcoming environment for students. STEKO® blocks are also fast to assemble and reusable, which makes them ideal for the construction of portable classrooms.

Planning Retirees:

STEKO®'s load bearing capabilities mean that you can live today knowing that you've already planned for tomorrow. All STEKO® walls are load bearing. This means that if particular walls require handrails for wheelchair or elderly access then they can be easily installed when required. Installation can be done without the need for reconstructing the wall to find noggins and support studs. Adding support rails as an afterthought in a traditional timber framed house can be very costly and time consuming. Due to the load bearing walls, STEKO® is ideal for all buildings that may require wheelchair accessibility. Plan today, so that you can be prepared for tomorrow.

STEKO® is an Investment in the Environment

Excellent thermo insulation characteristics are the result of intensive, systematic research and development performed in university test labs and current building practice.









STEKO® works with solid wood (no plywood with toxic glues and nails). Such wood comes from forests maintained with great care while protecting its resources. Using wood as the only construction material, which during its growth produces oxygen and reduces carbon dioxide, is a valuable way to contribute to a reduction of the greenhouse effect in the atmosphere. Wood is a material, which consumes minimal energy by treatment and guarantees low secondary and maintenance costs. And finally, STEKO® modules from solid wood can be easily re-used.

STEKO® – we respect the future in each detail. Now available in South America. Please contact us for more information.



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STEKO® World wide:

Switzerland, Germany, Austria, Belgium, Netherland, Italy, England, France, Spain, Czech Republic, Slovakia, Russia, Australia, USA and

now entering South America