

The new intelligent Light Gauge Steel Frame "eDream Home and Offices" from MISOLIMA, are residential and commercial buildings made to last for generations. They are designed ready with MISOLIMA Home Automation, energy saving and family safety in mind.

Welcome to MISOLIMA®, which is a registered trademark of FIKO Software Co., Ltd. in Chiang Mai, Thailand. MISOLIMA has main offices in Thailand as well as in both Auckland - New Zealand and Abidjan - Ivory Coast. MISOLIMA is a company group supported by both Thai Board of Investments and National Innovation Agency in Thailand. We have for several decades been involved in R&D within innovative intelligent embedded software for Home Automation, Multimedia, GPS navigation, Energy saving and building solutions, specialising in light steel frame (LSF) construction.

MOSOLIMA eDream Home and Offices are built to handle floods, hurricanes and earthquakes. As a result of seamless interface between computer aided design and computer aided manufacturing, MISOLIMS homes are erected with cost efficiency and speed in mind. We have introduced this modular cost efficient building technique to the market, to provide our customers with financial and effective alternative to regular financing. In fact, if the customers got the land, there should not be any need for financing at all. We call this "*Build without financing*" and we are offering a 30% finance structure to everyone that are first time home owners, are just married and between 24 and 38 years old. If you fit this criteria, this means you will only pay 70% of the cost of building your brand new MISOLIMA home.





MISOLIMA modular eDream Home and Offices are based on 4x4 or 4x2m (13' 1.48"x13' 1.48" or 13' 1.48" x 6' 6.74") modules. Each module has an almost unlimited variety of combinations.



Today we can see that the majority, estimated to be 85%, of all residential and office constructions are built with wood, red bricks, cement or concrete blocks.

MISOLIMA eDream Homes and Offices uses light gauge steel frames for its construction. To compare with traditional

brick or wood construction, light gauge steel frames are far more superior for a multitude of good reasons. It is faster, lighter and provides easy guidance so corners are all nice, sharp and in 90 degrees. Once the wall frames are up, the out- and inside boards can be screwed to the steel frame by special self threading screws.

MISOLIMA eDream Homes and Offices are based on light gauge steel frames, and are far more energy efficient compared to traditional concrete blocks or wooden houses. They are therefore far more eco-friendly. Due to its characteristic, building with concrete blocks gives a relatively solid mass where heat easily transfers through the block or brick walls to the inside of the homes or offices. As a result, during the night the walls of concrete blocks or bricks would also radiate outwards the heat collected during the day. We know from some clothing that air space is considered an excellent form of insulation and therefore in wood houses (not solid wood built) they use glass- or stone wool as insulation to keep air between the inner and outer walls. Light gauge steel frame constructions has much less mass than concrete block, bricks or even wood studs, and much more air space within the wall significantly reducing the direct heat transfer.

Compared to wood, steel material is really consistent and will ensure straight walls and square corners, therefore the finishes of MISOLIMA eDream Home and Office is typically far cleaner than a home built with i.e. concrete block.

MISOLIMA modular eDream Home and Offices are based on steel frame and are therefore high-quality buildings. Our concept is built in just 15 days, depending on size, and by virtue of pre-made materials used and its characteristics and properties, our steel studs offer significant advantages to both home or office owners as well as builders. Steel studs and joists are really strong, lightweight, and made from uniform-quality material. This ecofriendly construction virtually does away with the need for costly repairs and errors during constructions.

MISOLIMA eDream Homes walls and floors are developed in such way that both insulation and drywalls fits 100% the hight and width without any cutting. This speeds up the building process where special self tapping screws ensure fast and easy constructions. The outer LSF walls fits both the hight and width of the plasterboards, that has most commonly a thickness's of 10mm, 13mm, and 16mm. The outer walls are 89mm, but even ticker is possible by extending the wall thickness and using two layers of insulation.













Design Flexibility

Warranty

Finance



## MISOLIMA eDream Homes framing are made from light gauge, high tensile steel, which is about 1/3 of the weight of comparable timber framing.

The cost between brick, wood or concrete varies with the location, quantities and discount prices that one buys, and the design adopted. Generally speaking, the cost of steel constructions is similar to timber. It is likely that the framing costs would be the same although framing costs would only be 10-15% of the total building cost. Where MISOLIMA steel frames offers significant cost-saving in the terms of time, is its modular concept, as it is a lot faster to erect, and frames are much lighter and easier to handle. There is money to be saved because erecting MISOLIMA steel frames does not require special skilled labour, and time used are so short that the frames can be erected within a day or two, depending on the size of the house. Therefore the final construction cost of the framing will always be less than a traditional house of comparable size and quality.

Wood construction are today an environmental problem, a grate concern to wildlife habitats and are requiring selective cutting of timber. More importantly wood has numerous problems when used for construction in hot or humid climate



This image shows an example of MISOLIMA 4x4m module of eDream Home and Offices. Side walls has several options with regards to walls, doors and window positions and shapes.



Example of MISOLIMA eDream Homes erected as a block section climates such as in Asia or European countries. In these places, unless all lumber is pressure treated, the new home could be destroyed from the inside out due to termites or water leakage. Infestation, as well as if not dried enough or the constructions are conducted in rain or snow, mould could easily creating a serious environmental and health hazard for those living inside.

Build with your needs. The concept of MISOLIMA modular eDream Home and Offices are based on "build with your needs", where it's fairly easy to expand existing MISOLIMA buildings by connecting new module or via a bridge system that connects to the existing walls. The bridge is an indoor space suitable for office, eating-, or playground area for the kids. It can also act as a winter garden where it's possible to grow inn-door fruit and vegetables. Surrounded with single, double glassing, the bridge gives plenty of sunlight if needed. It may also be ventilated to extract heat trough an open roof mechanism. The roof itself can act as space for solar cells. MISOLIMA modular eDream Homes and Offices are standing on steel pillars. Such a solution has its advantages, as the entire ground floor may be used as parking space, playground, garden, or outdoor area. The backside of the home has a 4x2m utility room.

MISOLIMA eDream Homes and Offices comes with home automation as an option. The MISOLIMA® DOLLx8 Embedded Network, provides a flexible way to integrate intelligence to the home, where additional DOLLx8 modules can be added as needed. We provides a complete solution ranging from energy saving products to security and Q-SAMA multi-room multimedia. MISOLIMA house system are designed for one or two floor, but a maximum of three floors are possible on same or other home designs.



MISOLIMA eSherlock with static touch panel is the main home automation and security unit. It is based on GSM, USB or Wi-Fi communications. It uses the latest embedded technologies with DOLLx8.

MISOLIMA DOLLx8 modules consists of home automation, alarm, RGB and white LED light control, solar cell battery charger, multiroom audio, alarm, text messaging and more.

## High performance GSM alarm system

MISOLIMA eSherlock 1800 Tx8 is a sophisticated GSM system that has home and office alarm integrated. The eSherlock command set can be controlled and managed via wire or wireless means of communication. By using eSherlock with Wi-Fi or GSM, all commands and functions can be set-up and managed via two independent MASTER smart phones and software. Once set-up, each family member can use its own smart phone. Each room may have its own DOLLx8 zone, and each room can therefore be managed independently from another, either by person or by system software.

## **Digital One Line Link (DOLLx8)**

The idea behind DOLLx8 embedded network, is to integrate home, office, vehicle, caravan, recreation and vacation into one and same system, using one and same software for its controls and management. Imagine to be able to use the same mobile smart phone and software at both home and elsewhere. The reason why this is possible is because the DOLLx8 software fits most computer systems available today, including Windows, Linux, iOS, Android and others. No matter what operating system is used, MISOLIMA are able to offer an unified system that is expandable, easy to install and use. For more information about MISOLIMA's modular houses, DOLLx8 embedded electronics, and product services, please visit our website or contact us by e-mail or write to:

MISOLIMA Software and Technology Park 221 moo 5, Tamboon San Sai Ampoe Phrao Chiang Mai 50190 Thailand

contacts@misolima.com

FAX: +66 53 245-859 Phone: +66 53 852-955 Mobile: +66 084 6082-682 Mobile: +66 081 7844-486

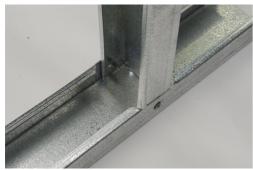


with space for 12 spectacular homes. Each home has solar cell collectors, where the power is collected into a private 12 volt grid. Each house has internal and external LED lights fed by the private 12V power grid. Street lights are also fed from the same power source. In the case of low battery power, the DOLLx8 embedded network will automatically switch over to the 220V mains and continue charge the batteries from there.

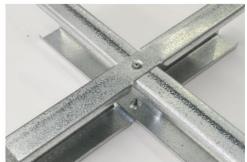
**MISOLIMA eDream Homes** are using superior modern manufacturing system based on CAD/CAM technologies. Wall, roof and floors are manufactured using robust CNC machines producing cold steel drywall C formed studs and tracks for both residential and commercial buildings including schools and health clinics.



The above image shows how a typical MISOLIMA eDREAM HOMES wall. One such wall is approximately 50 Kg or 110 pounds. Each wall and LSF piece are marked with text and a number according to the architect drawings. The wall can be delivered ready assembled, or can be delivered as parts only, where the customers can assemble the wall themselves to save costs. The



studs has ready holes and PCV protection ring for 220V electricity, 12V solar cell power and Internet UTP and DOLLx8 network cabling.



The above images shows how the studs are joint by heavy gauge metal framing - self tapping screws on each side. The assembling of studs to trucks are fast and a wall can be assembled in no time using only an electric screw driver as tool.

MISOLIMA (NZ) Ltd.
FIKO Software Co., Ltd.
EuroAsia IT Co., Ltd.
FIKO Technologie Côte d'Ivoire SARL

Auckland - New Zealand Chiang Mai – Thailand Chiang Mai, Thailand Abidjan, Ivory Coast