

# Instruction manual

**KOMA**  
Modular

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# **1. Basic information**

The residential and sanitary modules are spatial units used separately or arranged together in modular buildings. These structures may be used in a variety of the following applications. The main advantages of these units are mobility, speed and price. The products of KOMA MODULAR s.r.o. are certified for use worldwide.

## **1.1. Basic types**

- Low-energy modules M3 – Comfortline Modular Buildings
- Residential and sanitary modules C3 – Standartline Residential Modules
- Economic modules E3E – Economicline Uni-modules
- Z3 Storeline Storage containers

## **1.2. Application**

Offices, accommodation, schools, kindergartens, canteens, restaurants, shops, kitchens, apartment blocks, social flats, special technological modules, manufacturing plants, etc.

## **1.3. Approval certification**

- ISO 9001:2015, ISO 14001:2015 – Integrated Management System certification according to the applicable standards
- LGA Bautechnik GmbH, Nuremberg, Certificate No. 131514. Certificate of Conformity for construction products from September 2, 2020
- TÜV Rheinland Köln, Certificate No. 0035-CPR-1090-1.02838.TÜVRh. Conformity of the Factory Production Control from October 7, 2014 (first issue)
- Assessment of Fire Resistance of Building Structures for KOMA housing and sanitary modules by PAVUS a.s., Certificate No. 216/C5/2019/0031/O1 from March 22, 2021 (not for standard versions)
- European Technical Assessment (ETA) 15/0119, from October 30, 2015 for housing and sanitary modules C3, M3, and E3
- Certificate of Constancy of Performance No. 1020-CPR-070050838 from July 28, 2016 in accordance with Regulation (EU) No. 305/2011 of the European Parliament and of the Council), drawn up by Dipl.Ing.Ivo Stařecký, 760 01 Zlín, Odboje 401; ČKAIT 1300008

## **1.4. Design**

**The supporting structure** of the modules and all other metal elements in the frame are made of hot-dip galvanized material. The floor is insulated by mineral wool or possibly by mineral wool combined with extruded polystyrene or PUR panels. The supporting layer is made of cement bonded particleboards (Cetris) or chipboards with various surface finishes – PVC, ceramic tiling, carpet, cast floor, etc.

**External walls** have a sandwich design with wooden frames and mineral insulation on the internal side with a melamine chipboard surface finish. From the outside, the structure is provided with galvanized sheet-metal cladding, with the final finish coating in a RAL shade (fig. 3).

**The sandwich frames** of the external walls are made of metal sheet section pieces; they are provided with plaster board or plaster wood-fibre board cladding with the surface finish in the form of wallpaper, painting, or tiling, etc.

**Ceiling composition (sandwich)** is the same as in the case of the external walls; there is trapezoidal galvanized metal sheet attached on the outside. The roof is flat with water draining in the corners of the module or it may be single-pitched or double-pitched with water drainage to gutters.

**Internal partition walls** consist of wooden frames (or galvanized section pieces) filled with insulation and lined with melamine chipboards or plaster boards, plaster wood-fibre boards, etc. A modular building may be finally lined with various facade systems (insulation system, cassette, finished cladding, etc.). Secondary roofs – either single- or double-pitched design or other.

In case of production lines **M3 – Comfortline** and **E3E – Economicline**, PU sandwich panels are used as insulation and external cladding. The **M3 – Comfortline** with its characteristics place these modules among low-energy demanding structures.

### **1.5. Transport insurance**

Transport is realized by the manufacturer – if so required by the customer. Our carriers have above-standard insurance for the delivery of our products – this concerns both the actual modules and the accessories placed inside them. In the case of supplies where we do not provide assembly, proper acceptance of modules from the carrier is required, whereas contingent defects need to be recorded in the transport documents. In the case that the recipient requires packaging of the module (export packaging by thick protective transport foil), we recommend that the transport foil should not be removed until the module is actually used and this reservation be recorded in the transport documents (impossible to check at the moment of acceptance) – this applies only in the case of intact transport foil – visual inspection is still necessary. This is not performed in the case of arranged modules where only the fully completed structure is handed over.

### **1.6. Installation**

Installation is performed by the manufacturer if it is required in the order or under the contract. In the case that installation is performed by the customer, the manufacturer recommends that the assembling personnel be trained or the manufacturer offers the option of expert supervision of the installation. Installation may be performed according to the instructions for installation; see clauses 10 and 11.

#### **NOTE:**



**In the case that installation is performed by the customer, the manufacturer does not assume responsibility for contingent claims due to faulty installation.**

### **1.7. Building construction**

**Preparation of the site** – strengthen surface, strip foundation or foundation footings, panels, steel beams, all within the limit of  $\pm 5$  mm. Networks requisite for connecting the structure must be ready before the actual implementation of the superstructure. Power supply, water supply, sewerage line, gas line, access road, etc. unless agreed otherwise. The supplier accepts the foundation structure and a record is made of the acceptance of the foundations. Installation of the modules is performed by crane with loading capacity according to the loading diagram and the respective distance. Connecting to utility networks (water, gas, power) shall be secured by the customer.

Preparation of the substructure may also be realized by the contractor – KOMA MODULAR s.r.o. shall secure a complete turnkey supply including the superstructure and utility networks and roads.

## **1.8. Supply and advisory service**

KOMA MODULAR s.r.o. provides full guarantee and post-guarantee servicing for its customers including consultation before the actual supply. For inquiries, please call +420 577 007 711.

Further information is available at: <http://www.koma-modular.cz>

## **2. Instructions for placing of modules**

Actual handling of modules is performed by crane with the load capacity according to weight of individual modules and the requisite radius. If the crane is not included in the subject of the supply, we recommend that its parameters be consulted in advance with the dispatcher of KOMA MODULAR s.r.o. Modules are always lifted using rope or chain slings with the corresponding loading capacity anchored to all top corners of the module! It is forbidden to handle insufficiently fixed modules. The ropes need to have the same length and must have the maximum angle of 60° (fig. 1). **J It is forbidden to place the modules to sites where they would be in direct contact with water or snow. At the same time it is forbidden to roll the surrounding earth up to walls and the frame of the module.** The vertical distance between the bottom edge of the module and the earth must be preserved at least at 200 mm (fig. 2), in order to preserve ventilation of the space under the modules. In the case of modular buildings, the recommended distance value may alter depending on the covered area and shall be determined by the manufacturer based on the design of the foundations. If it is necessary to place the modules to the level of the terrain, it is necessary to agree on a particular solution already at the stage of ordering. Our workers shall recommend you the most suitable technical solution.

The joint between individual modules shall be 12.5 mm ±2.5 mm.

When a module is mounted, it is also necessary to secure drainage of rain water from downpipes so that in winter they do not freeze up.

In the case of a turnkey supply the foundations plan shall be a part of the supply; if only the superstructure is implemented, only the proposed foundations design is provided. If necessary, the width of foundation strips shall be determined by customer's designer based on earth bearing capacity on site. The foundation plan must be always approved by the designer of KOMA MODULAR s.r.o.



### **NOTE:**

**Depending on its length, the module is supported at 4 points with length up to 3m, at 6 points with length between 3-6m, at 8 points with length between 6-9m and at 10 points with length up to 10m (Fig. 2).**

### **2.1. Stand-alone module**

The module is placed on a level compacted bed see article 1.7. without a bond to the subbase. The module needs to be earthed. For this purpose there are earthing screws placed usually at the lower part of the front face of the module frame (fig. 9). The actual earthing needs to be performed according to the electric engineering project specifying the earthing point and the method of earthing - usually by earthing rod. The earthing rod is not a standard part of the supply; however, it may be ordered.

## **2.2. Modular buildings**

The proposed design of foundations for modular building shall be always provided by the manufacturer, or the customer shall have his foundations plan approved by designers from KOMA MODULAR s.r.o. These plans shall contain the dimensions and placement of individual above-the-ground parts of the foundations.

The foundations plan for modular building supplied by the manufacturer shall contain indication of connection points of wiring, water service pipe, sewerage, light current distribution system or connection to water conduits, heating distribution system, gas distribution system, etc.



### **NOTE:**

**If the foundations of modular buildings are not performed according to the foundations plan approved by the manufacturer, the manufacturer shall not be liable for subsequent damages caused by e.g., insufficient ventilation of foundations, insufficient bearing capacity of foundation strips and footings and subsequent settlement of the structure.**

All modules are mutually interconnected by earthing wire (fig. 9). Earthing of a modular building with circumference over 40 m shall be performed by more than one earthing points. Their number and placement shall be specified in the wiring project and it is necessary to take this into account already during preparation of foundations to which earthing strip shall be placed with requisite number of terminals.

## **3. Utility network connection**

### **3.1. Electric engineering**

Connecting of modular building is usually implemented by underground service line which is then by cable trough routed to the switchboard. It is also possible to connect the modules by an overhead service line when the cable is routed to a wall-mounted connector 400V/32A or a larger one. Mutual interconnecting of modules in modular building shall be performed by external connecting cables; within the modular building by distribution cables in cable troughs or by terminals (fig. 10).



### **NOTE:**

**The external socket of the module is designed solely for interconnecting of modules. Connecting of other appliances is forbidden.**

### **3.2. Water conduit and sewerage**

Connecting of modules to a water service line and house sewer shall be dealt with by project documentation. Service lines shall be made ready together with the substructure (foundations) to which the connecting points of the superstructure shall be linked. Connecting of the superstructure and the substructure shall be implemented through an opening in the wall or a shaft in the floor. Implementation of the connecting shall be performed by KOMA MODULAR s.r.o., or by the customer according to the agreement under the contract or the order.

#### 4. Draining of rain water from the roof

Draining of rain water from the roof shall be usually performed by internal gutters and downpipes. The gutters are placed on the face of the module and the plastic downpipes in each corner of the module. In winter, it is necessary to secure safe drainage of water from the downpipe, in order to avoid blocking of the downpipe by ice and its subsequent damage. Therefore it is necessary to observe, in particular, the minimum vertical distance between the bottom edge of the module and the earth, see clause 2. (fig. 2). In the case of modular building, the rain water from the area under the modules is drained to sewerage by concrete troughs. If a modular building is provided with a secondary roof, water drainage is secured by gutters and downpipes on the outside of the modular building. In the case of an integrated pitched roof, water drainage may be also secured by gutters and downpipes.



**NOTE:**

**Within maintenance of modules, it is necessary to perform at least 2 x per year a visual check of the roof, gutters, module downpipes and possibly downpipes of external roofs and remove impurities, in particular, leaves, which might cause clogging of outlet points (fig. 14).**

#### 5. Heating

Heating of the module is basically designed by means of electric heating convectors. **It is forbidden to cover the heaters in any way.** Another possibility of heating is the use of gas heaters, central gas or electric hot water heating, heat pump, etc. The method of heating needs to be considered before the actual implementation. Thermal insulation properties of standard modules are given according to the used material in the external walls of the structure and are based on standard ČSN EN ISO 6 946 and ČSN EN ISO 10211-1. Thermal insulation properties of the module may be further enhanced by greater thickness of the thermal insulation or by using external facade insulating system.



**NOTE:**

**In the case of additional mounting of external insulation system, it is necessary to consult with the designing department of KOMA MODULAR s.r.o., in order to prevent possible damage to distribution systems in walls, downpipes, disturbance of structural characteristics of the module, formation of condensate in walls, etc. It is forbidden to use open fire for heating of the module!**

#### 6. Electric wiring

A standard module is equipped with two electric sockets 230V protected by 1-phase 16A breaker, one 2kW socket intended for connecting of a heater, separately protected by 1-phase 16A breaker, light circuit with a switch and two fluorescent tubes 1x36W protected by 1-phase 10A breaker. The breakers are placed in the switchboard of the module, which also contains the main breaker - 3-phase 40A. With the connected appliances, the above mentioned protection values shall not be exceeded. In the case of E3E – Economicline modules, the wiring is routed in plastic rails on the surface.

Wiring distribution system is included in documentation.

## 7. Additional openings in walls and ceiling



**NOTE:**

**The manufacturer forbids disrupting of internal module walls and the roof in any way (openings for network connections, passages, windows, doors, etc.). The bearing capacity and the stability of individual structures may be disrupted, electric wiring may be damaged, the surface material may be damaged, the roof cladding and facade tightness may be compromised!**

Additional modifications may be performed only subject to consulting with the manufacturer - KOMA MODULAR s.r.o. If it be to the contrary, the manufacturer shall not accept any claims!

## 8. Allowed loading

The standard bearing capacity of the module integrated roof for all module lines is 150 kg/m<sup>2</sup> for flat or pitched roofs. The standard bearing capacity of a single- or double-pitched external roof is 70 kg/m<sup>2</sup>. The standard bearing capacity of the floor is 250kg/m<sup>2</sup>; in the case of E3E – Economicline modules, it is 200 kg/m<sup>2</sup>.



**NOTE:**

**These values shall not be exceeded unless provided otherwise in project documentation. It is forbidden to place any objects on the roof.**



**NOTE:**

**The weight of the modules stated on the name plate mounted on the outer frame post is the value given for handling and transport. The stated weight must not exceed during handling and transport. It is forbidden to handle the loaded (equipped) module!**

## 9. Module maintenance

- After each transport of the module, it is necessary to check again due operation of windows, doors and adjust these if necessary. Wrong operation of windows or doors may be caused by the placing of the module on insufficiently levelled base; therefore it is necessary that you pay enough attention to surface preparation.
- Perform regular maintenance (at least once a year) of all moving parts of windows and doors by grease or oil. (do not use acid or resin-containing grease for lubrication). Adjust windows and doors as necessary using setting mechanisms. Rubber sealing elements in windows and doors need to be treated by silicone oil to maintain their flexibility (1x per two years).
- Washing of external and internal surface may be performed by common detergents.

- It is forbidden to use water under pressure for internal and external washing of modules!
- In winter, it is necessary to secure safe drainage of rain water from the downpipe, in order to avoid blocking of the downpipe by ice and its subsequent damage.
- In the case of mounting of drainpipes and downpipes with heating cables, these cables need to be activated (if they are deactivated in the summer using the breaker in the switchboard) when there is a risk of freezing of downpipes (snow, frost).
- In the case that heating cables are mounted on water supply conduit or on the sewerage line, these cables need to be activated (if they are deactivated in the summer using the breaker in the switchboard) when there is a risk of freezing.
- At times of snow falls, it is necessary to check regularly the layer of snow on the roof and if there is a risk of exceeding of permissible loading of the roof, remove the snow immediately. The integrated flat or pitched roof has standard bearing capacity of  $150 \text{ kg/m}^2 = 1.5 \text{ kN/m}^2$ ; the external module single- or double-pitched roof has standard bearing capacity of  $70 \text{ kg/m}^2 = 0.7 \text{ kN/m}^2$ . The bearing capacity of the roof is always stated in the Instruction manual or in the technical description of each module or module group. However, take into account the location of the module according to the snow fall maps and make sure that roof bearing capacity is always higher than the snow loading!! The table E1 may be used for visual assessment of the weight of the snow layer (according to ČSN EN 1991-1-3 appendix E).

Type of snow	Volume weight of snow [kN/m <sup>3</sup> ]
fresh	1,0
packed snow (several hours or days after snow fall)	2,0
old snow (several weeks or months after snow fall)	2,5 – 3,5
wet	4,0

- It is necessary to remove snow regularly from the sheds placed on the external facade.
- Even in case that the snow melts on roof surface, it is not sure that the resulting water may drain from the roof. Check whether the gutters and downpipes are free and are not blocked by ice or snow (fig. 14). If necessary, clean the valley gutter and sprinkle with salt. There are two types of salt that may be used for melting of ice and snow.
- 1-sodium chloride (common salt - NaCl) 2-calcium chloride (CaCl<sub>2</sub>), which needs to be dissolved first in water in order to make salt solution for maximum efficiency. In order to limit future corrosion, it is necessary to flush the roof and the gutters with sweet water immediately after getting rid of the snow.



**NOTE:**

**The use of salt on our buildings shall be limited to extreme situations only.**

- Within maintenance of modules, it is necessary to perform as necessary, however, at least 2 x per year, a visual check of the roof of the module and remove impurities, in particular, dead leaves which might cause clogging of downpipes (fig. 14).

- Each module contains a leaf trap at the drain pipe which needs to be cleaned as necessary, however, minimally 2x per year (fig. 14)
- It is necessary to secure regular air exchange in the module in order to decrease air humidity and thus to prevent undesirable effects (mould, water condensation on structures, etc.). This function is provided either by a fixed mounted ventilation grille in the external wall of the module which is permanently open and secures continuous air exchange, a closing ventilation grille in window wing or in the wall, whereas, in one room one ventilation grille needs to be permanently open. If there is no ventilation grille in the module or the room, it is necessary to secure air exchange by regular ventilation.
- Due to the design and caps of apertures, windows and outer doors, the relative humidity of air in the module has to be maintained below 50% at all times. These values can be achieved if the module is not mechanically ventilated and only natural ventilation is used. It means ventilation by draught, i.e. windows or doors fully opened, diagonally if possible, for 10-15 min at least twice or even better three times a day, or during activities producing increased humidity (such as bathing, cooking etc.). This way the internal temperature will decrease only slightly and will be balanced very quickly. We recommend purchasing a humidity meter with a thermometer and checking whether the humidity increased above 50 % of relative humidity of air at the prescribed temperature.
- In rooms with mounted humidity sensor connected to the ventilator, it is necessary to set the required value at which the ventilator switches. The set value shall not exceed 50 % air humidity.
- Relative humidity of air together with the temperature maintained this way in habitable rooms at least within standard values are optimal for health and comfort of people and for the module structure itself. Higher values of humidity at lower temperatures or larger fluctuations in both temperatures and humidity damage the structure (water condensation on surfaces with lower temperature) or cause mould growth at places such as the contact of the jamb with the window, corners of rooms etc. and possibly formation of cracks or noises in the structure; a permanent effect may also deteriorate thermal insulation characteristics or damage the structure invariably and irreversibly.
- Persons living in the facility and their doings, such as cooking, bathing and growing flowers, are the biggest sources of humidity in the modules. The module should also be used in compliance with the design conditions and not converted to a laundry, drying room and others.
- The thermal comfort should be kept in modules in use as stipulated by standard values for individual rooms as follows: habitable rooms min. 20°C, better 22°C, bathroom 24°C, auxiliary premises and corridors min. 15°C, however, if these areas are part of habitable rooms, the required minimal temperature is 20°C. If the module is heated at least to these values and properly ventilated, as defined above, no negative effects can occur.
- Furnishings are to be kept clean, their operability and safe fixing shall be checked.
- Check fixing of waste piping and do not load piping by placing any objects on it.
- If the sanitary module is not heated in winter, it is necessary to drain the piping and water heaters using drain valves in order to prevent damage to the piping. At the same time, remaining water in toilets and stench traps of basins, shower tubs and urinals is to be secured against freezing, e.g. by blowing by air, pouring antifreeze mix or adding salt.
- Do not drain impurities (sand, earth or other solid materials) to toilets, basins, etc. - it may cause clogging of waste piping.
- Cleaning of sanitary facilities is to be performed only with the recommended agents - not aggressive ones. Aggressive agents may damage some parts of the sanitary facility (water tanks, plastic stench traps, plastic piping, toilet seats, connecting tubes to water taps, basins, etc.)

- If the hot water piping is plastic, set the maximum temperature of water heating to 60°C. If the piping is made of copper, the water temperature may be set up to 80°C.
- Check proper operation of relief valves during heating of hot water.
- Check proper operation of control valves and cleanness of the filter.
- It is forbidden to cover electric heating elements.
- Internal installed appliances are always to be used in conformity with the enclosed Operating and maintenance instructions!!!
- Operation of the breakers installed in the switchboard is to be checked after 3 to 6 months – using test button on the breaker, all according to ČSN EN 61 008 and ČSN EN 61 009.
- It is forbidden to transport the module with the heater and piping filled with water!! If it be to the contrary, there is a risk of the heater going loose and falling down and its subsequent damage and the damage to the whole module!!!

## **10. External joints**

Connecting of modules to modular building may be performed by manufacturer's mounting teams or persons trained and tested by the manufacturer. The manufacturer shall not guarantee the joints implemented by untrained workers.

**Before you start the installation, it is necessary to check the following facts:**

- readiness of foundations and their levelling
- utility networks
- electric service line 230/400V
- access road and type of crane

The modules are tied together by tightening bolts at the top and bottom parts (fig. 4, 5). A rubber shaped sealing is placed in the joint between frames and the element copies the shape of the joint of modules excluding the floor joint. This sealing shall be of one piece - it shall not be spliced/extended (fig. 6). The sealing must run under the connection cube at top eyelets in order to secure water drainage! The roof joint is subsequently covered with aluminium bitumen tape or galvanized overlapping plates (fig. 7).

ISO openings in the frame intended for handling and clamping of modules may be fitted after setting with rubber caps in module colour (fig. 6). The manufacturer shall supply these caps upon request.

## **11. Standard internal joints**

If modules are mounted together without adjacent walls, it is necessary to cover the internal horizontal and vertical joints. The internal space of the module without walls is secured by transport foil, which needs to be removed before connecting of modules in order to prevent damage to the module.

The below mentioned joints are used for the usual arrangement of modules.

### **11.1. Internal vertical joint**

The vertical joint between modules is to be filled with wool or with insulation foam. If any wiring runs through here, it needs to be connected. Further the insulation wool is added to the space among wooden section pieces so that the entire empty space is filled. The joint shall be covered with vapour barrier. The joint shall be covered with coated chipboard from

the mounting material which is on sides provided with fixed end plastic F or U section strips, which are subsequently fixed using screws.

The screws are placed to wooden beams. When screwed in, the screws are covered with plastic caps.

### **11.2. Internal ceiling joint**

During mounting of the cover of the horizontal ceiling joint, the joint is to be filled with wool or with insulation foam. The overlapping vapour barrier of the two adjacent modules is placed on top of each other and fixed together in airtight way by proper tape. The empty space is to be filled with insulation wool. Further steps are the same as in the case of the vertical joint.

### **11.3. Internal floor joint**

- a) floor board to the edge of the frame, sheet metal L strip is inserted under the floor board. Grey rubber sealing is to be placed in the formed joint before tightening bolts are tightened (fig. 8).
- b) floor board terminated 20 mm from the edge of the frame or further. Insulation is to be placed in the joint formed in this way and a strip of cetris (chipboard) board is to be placed and screwed between the floor boards. This joint is to be covered with a putty and ground to be smooth (fig. 8). Then the joint may be covered with PVC, tiling, carpet, etc.

## **12. Documentation**

### **12.1. Each module or modular building includes the following:**

- Instruction manual
- instruction manuals for the fitted furnishings
- module or modular building drawing, electric wiring project
- initial inspection of wiring (according to contract)

### 13. Pictures

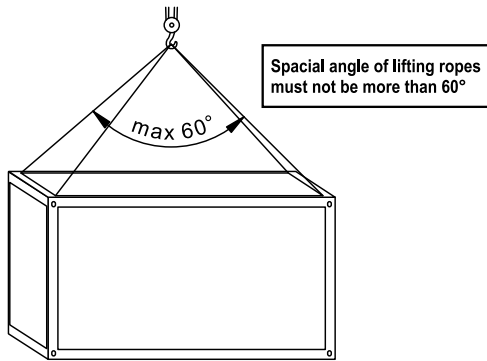
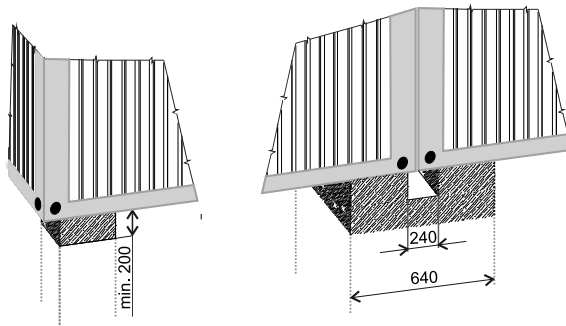


Figure 1 Fixing the module to a crane



PLACING THE MODULE

PLACING WITH CONTROLLED WATER DRAINAGE

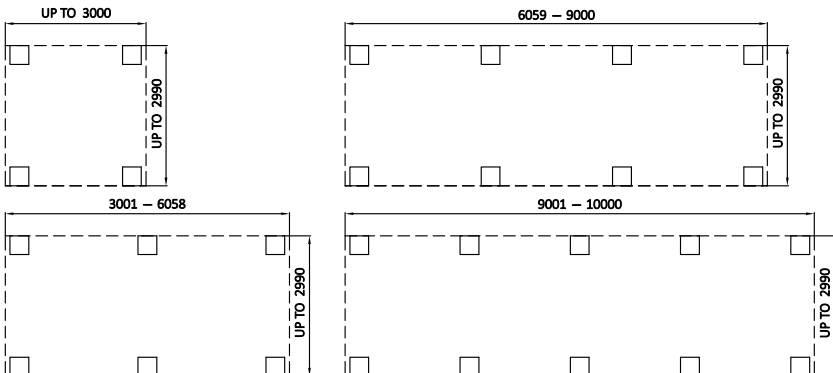


Figure 2 Bedding on the foundations

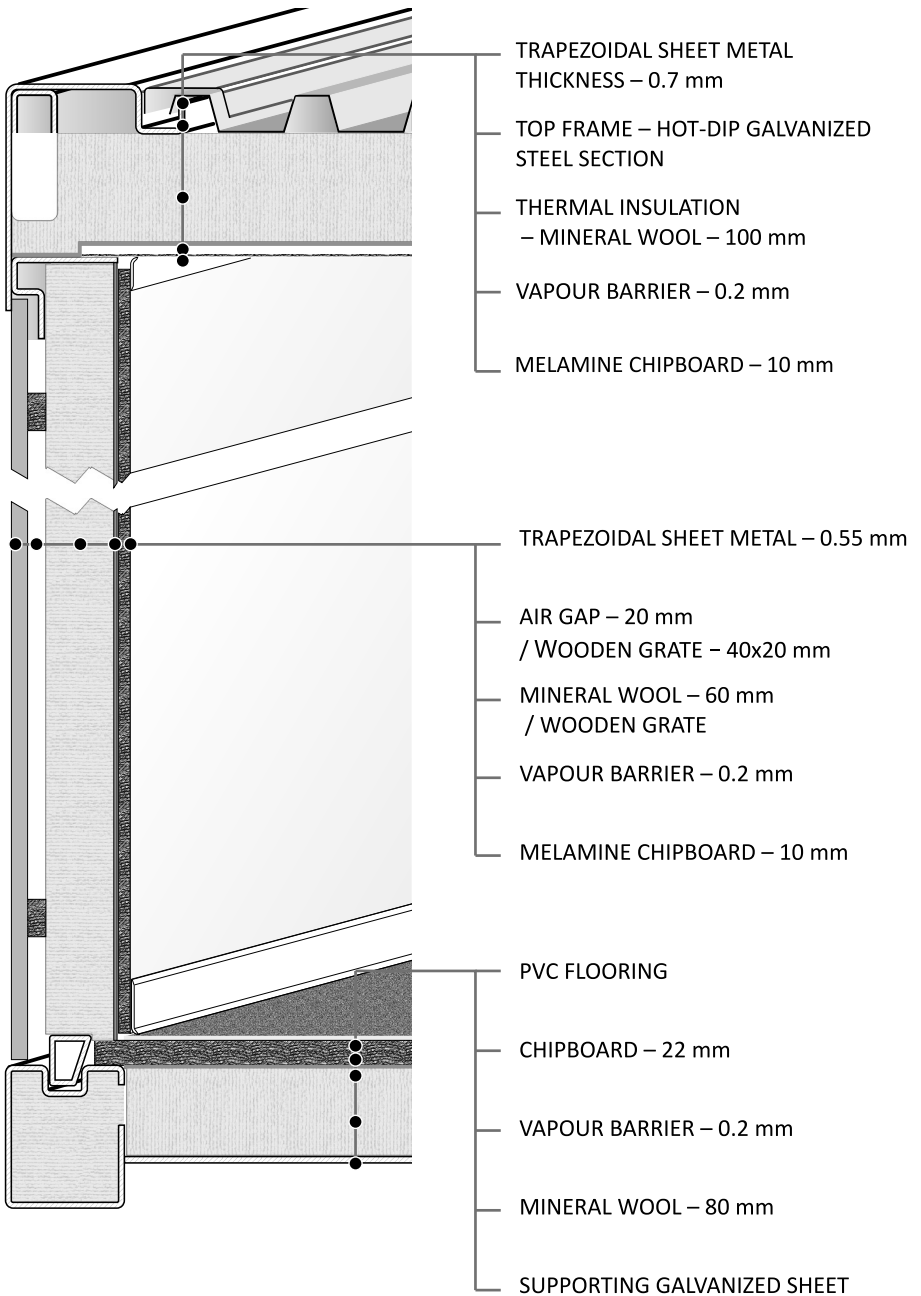


Figure 3 Section of module wall, insulation

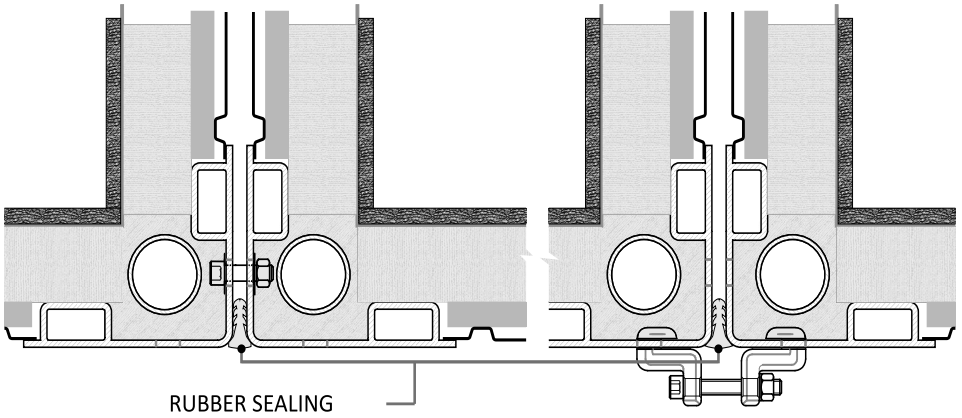


Figure 4 External and wall joint of modules

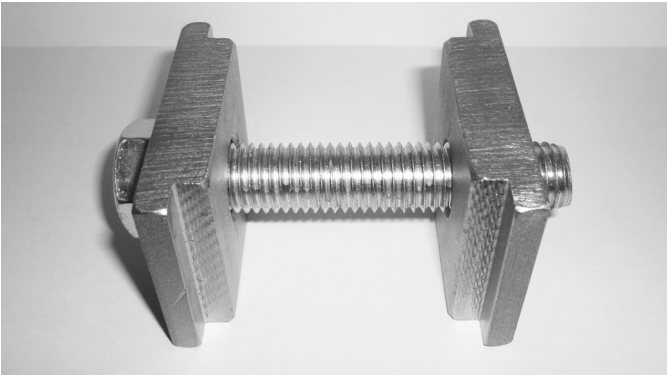
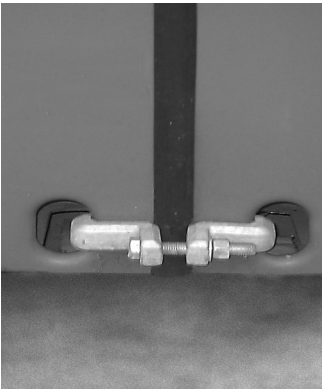


Figure 5 Connecting modules together

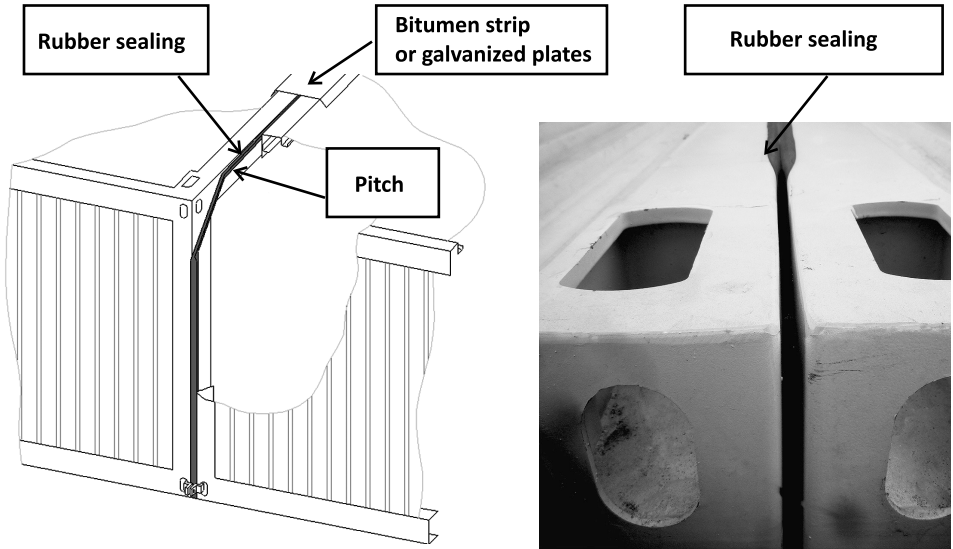
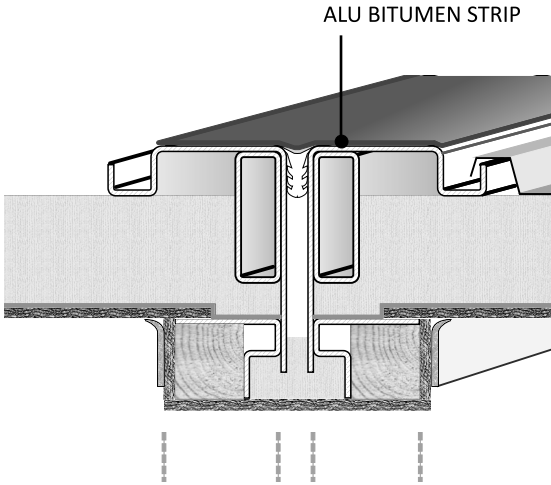


Figure 6 Implementation of joint sealing

## 1. ALU BITUMEN SEALING



## 2. COVER SHEET METAL

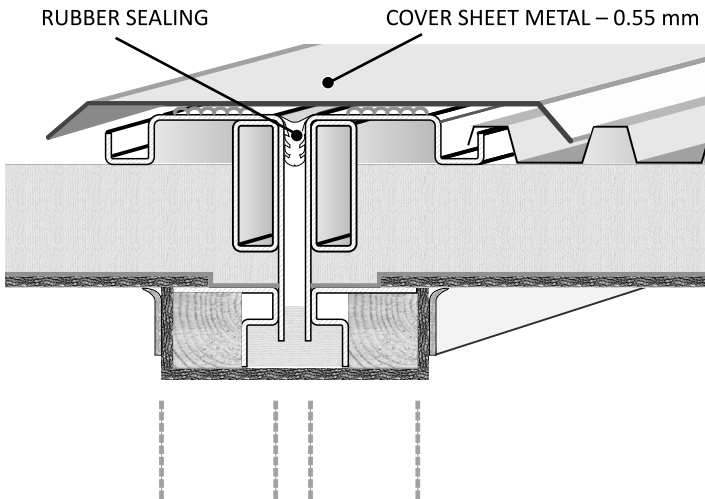
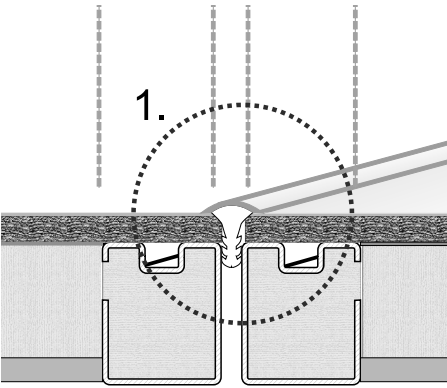
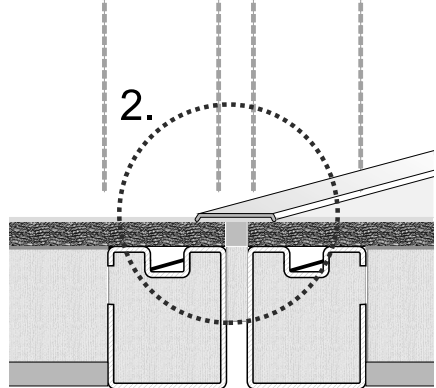


Figure 7 Module joint - ceiling

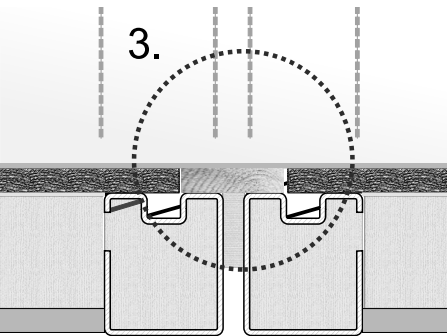
1. RUBBER SECTION STRIP



2. CONNECTION METAL SHEET STRIP



3. INSERTED THRESHOLD  
(FOR PERMANENT USE)



4. INSERTED THRESHOLD  
(FOR SHORT-TERM RENT)

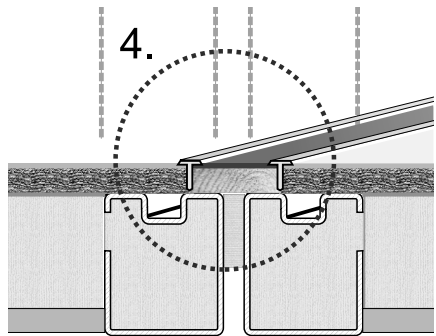


Figure 8 Module joint – floor, variants

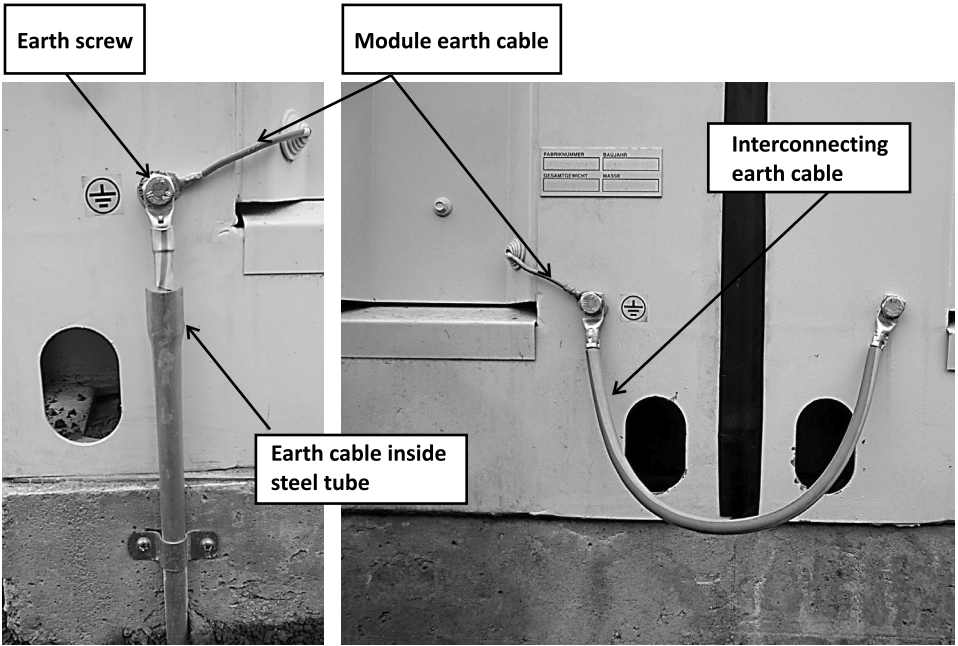


Figure 9 Module earth cables

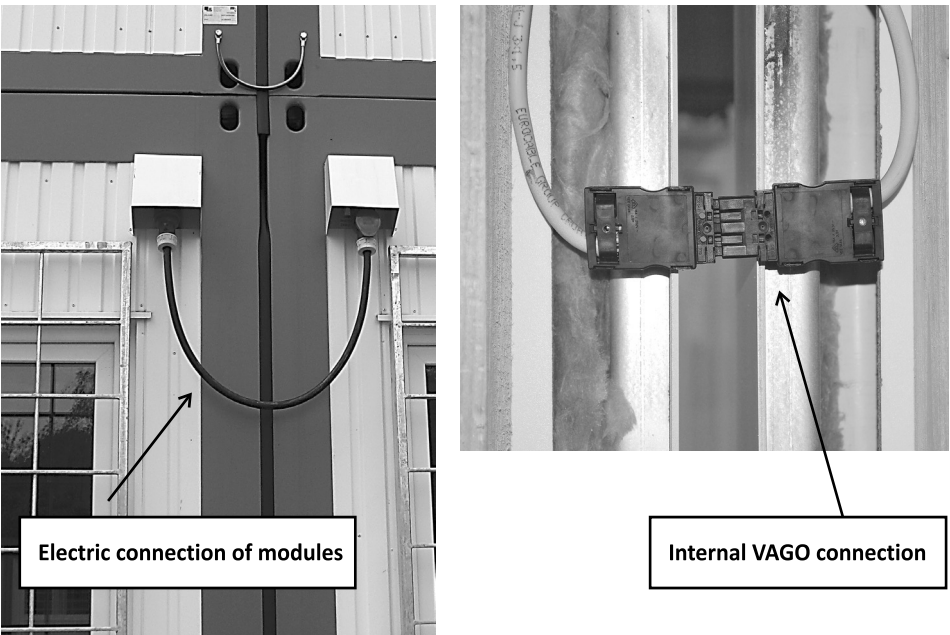


Figure 10 External, internal electrical connection of modules



Figure 11 Water supply and sewage line outlet through module side wall



Figure 12 Installing through the floor



Figure 13 Openings for fork-lift vehicle

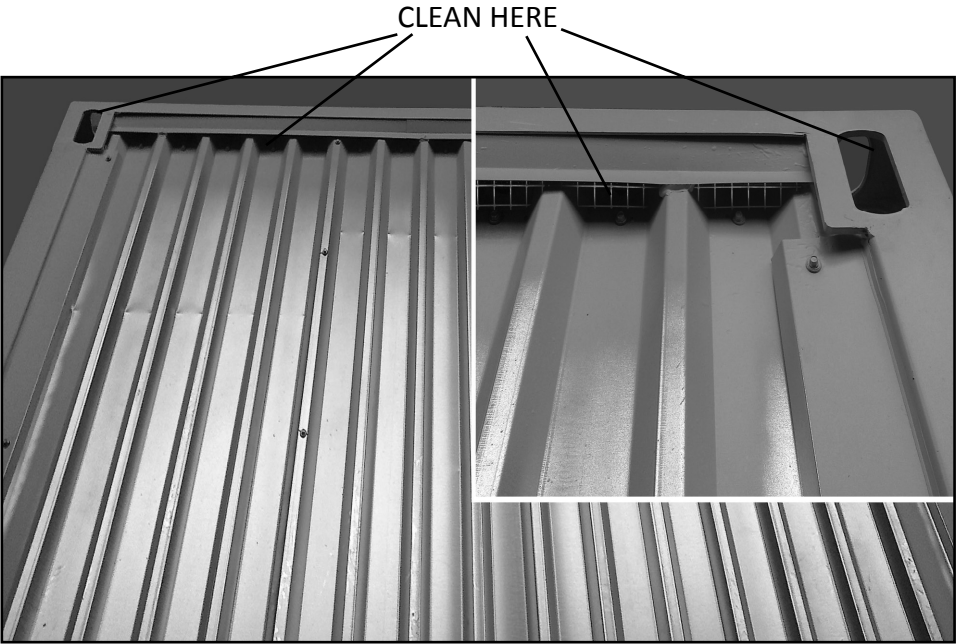


Figure 14 Roof maintenance

## **14. Warranty**

KOMA MODULAR s.r.o. provides a guarantee period of 24 months for the structure and workmanship of modules and of 8 years for the frame; in the case of structures for permanent use, it is 36 months and 8 years for the frame from the due handover of the goods.

KOMA MODULAR s.r.o. provides a guarantee period to electric appliances and other special parts of furnishings which KOMA MODULAR s.r.o. purchases from its subcontractors and which have their special warranty certificates according to the guarantee period of its subcontractors.

The manufacturer - firma KOMA MODULAR s.r.o. - shall not guarantee for defects and damage that the user causes by inexpert handling, unsuitable treatment and maintenance and that are caused due to vandalism or due to force majeure. The customer is bound to use the goods according to the Instruction manual.

The manufacturer - KOMA MODULAR s.r.o. - is bound to correct the justified claims made in writing in conformity with the effective Commercial Code.

The customer shall be responsible for the defects and the damage that occur later due to the implementation of foundations that do not conform to the requirements of KOMA MODULAR s.r.o. (in particular, due to insufficient ventilation of the foundation and increased humidity under the steel structure ).

The failure to observe the provisions of this Instruction manual shall result in expiry of the guarantee.

## 15. Final inspection report

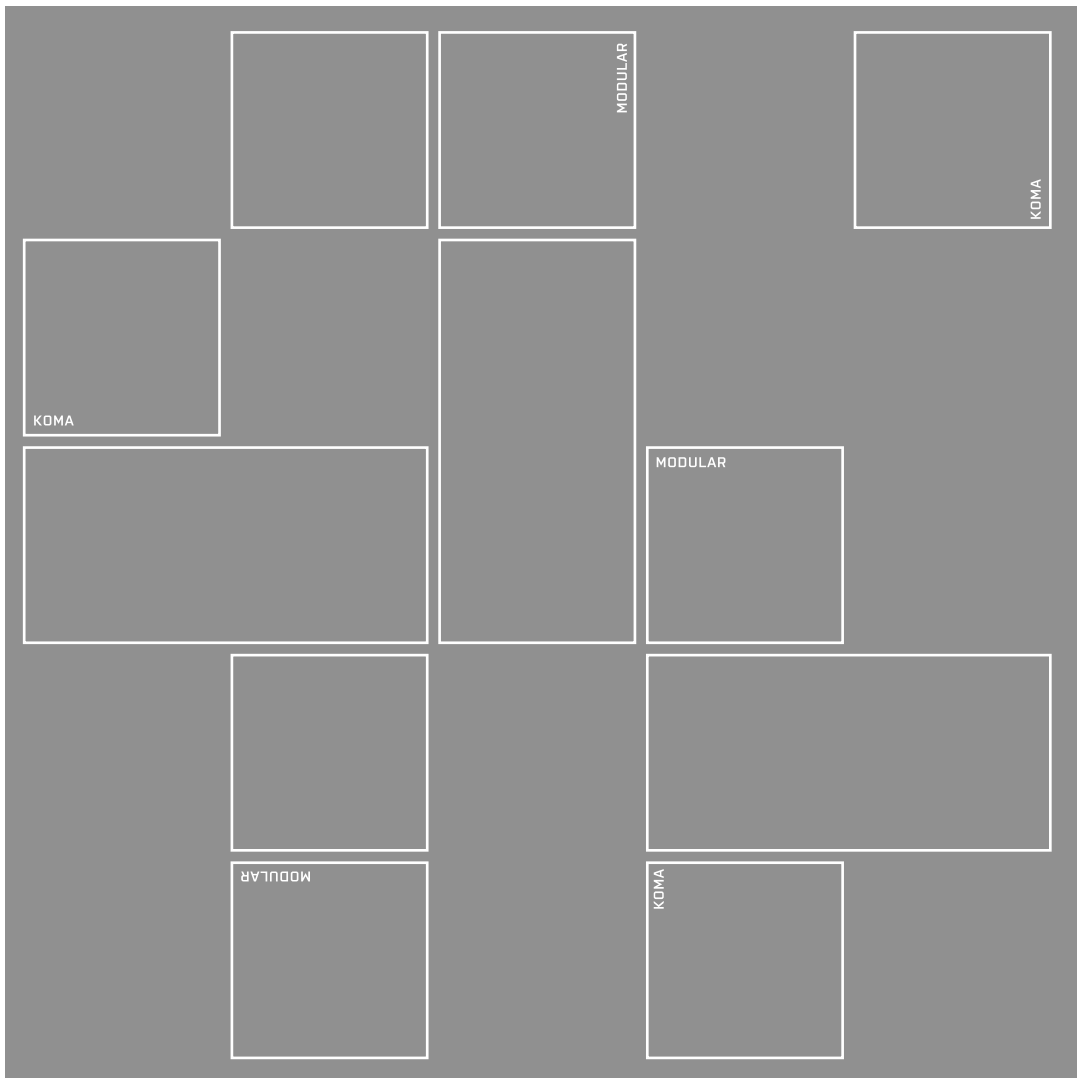
Module number: .....

Order: .....

Final inspection performed on: .....

.....  
Signature

.....  
Stamp



[www.koma-modular.cz](http://www.koma-modular.cz)

In case of any enquiry please call +420 577 007 711  
or you can find more on [www.koma-modular.cz](http://www.koma-modular.cz)

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