

RE:UKRAINE VILLAGES

The RE:Ukraine Villages project was created in response to the destruction and damage caused to village homes as a result of the full-scale Russian invasion.

Our goal is to preserve the already formed organic image of Ukrainian villages and prevent it from being erased by uniform buildings. The appearance of a modern Ukrainian village was shaped by thousands of personal and collective decisions throughout the year. Behind every decorative element lies the taste of the person who built and planned their home. Our efforts will not be in vain if the RE:Ukraine Villages volunteer project simplifies the process of rebuilding or repairing at least one village home – this will be our contribution to preserving the soul and identity of the villages.

The RE:Ukraine Villages project began with an expedition to the villages of the de-occupied Kyiv region – this area became the first in a series of studies and the basis for the creation of the constructor. We will gradually add new data from different regions of Ukraine affected by the war.

balbek bureau architecture studio

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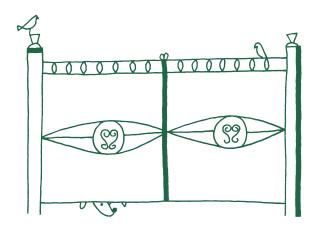
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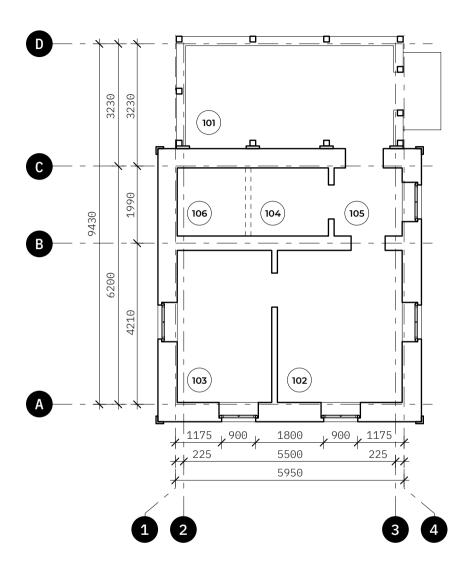
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SECTION I

Here you may find a ready-made set of instructions for rebuilding or building a village house according to the parameters that you have chosen for yourself using the RE:Ukraine Villages online constructor. The constructor offers design elements typical for the selected area – both basic and decorative. These are our recommendations, formed by researching the most characteristic decoration options. Section II will come in handy for additional inspiration and ideas, where we collected a variety of options for typical solutions.





No	NAME	AREA, M ²
101	Veranda	14.6
102	Kitchen	13.3
103	Living room	10
104	Corridor	3.7
105	WC	3.2
106	Service room	3.2

NOTES:

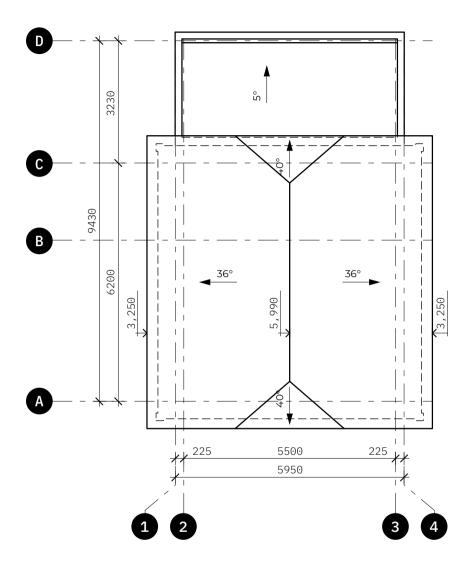
Total area

1. Layout schematic is not prescriptive in nature



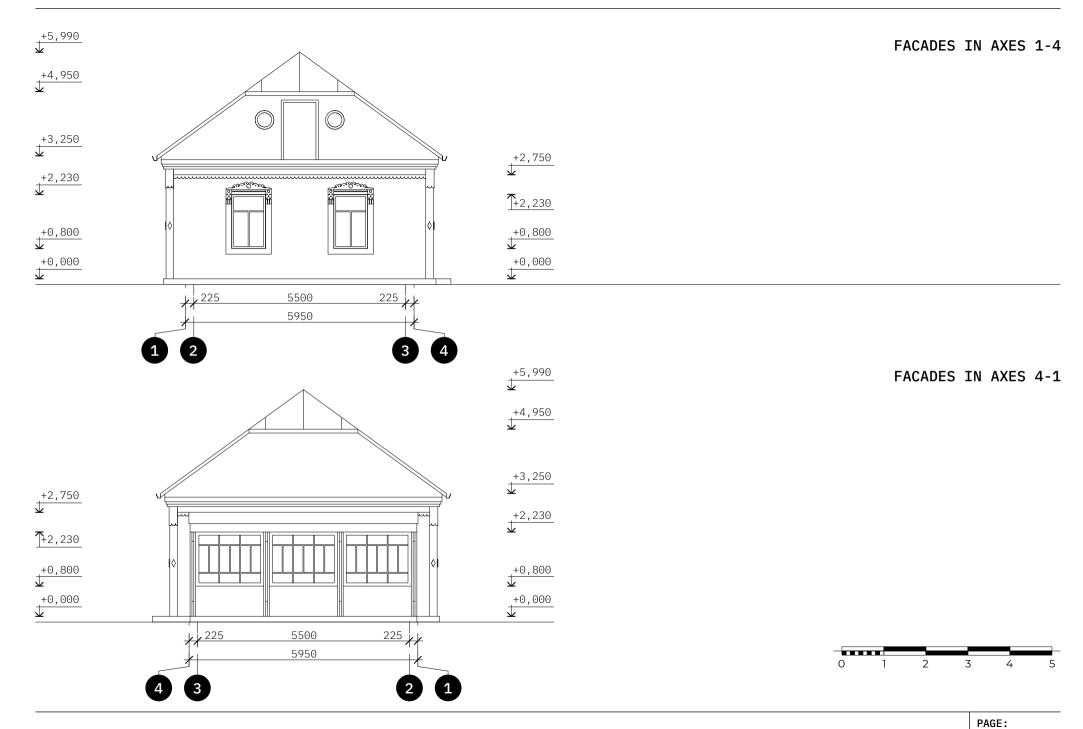
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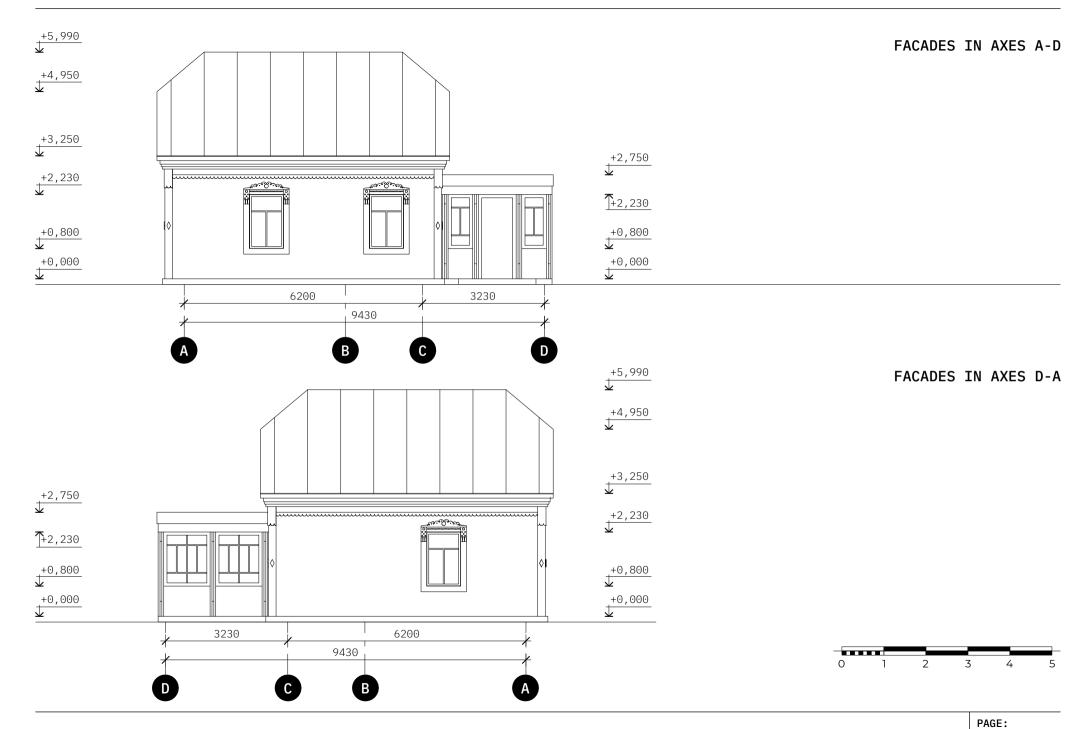
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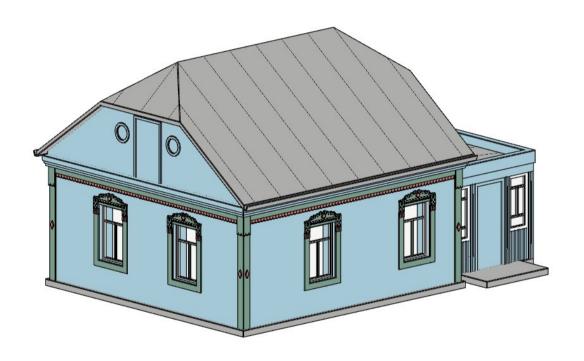
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COLOR SCHEME

On the next sheet is the color scheme that you have selected using the RE:Ukraine Villages online constructor. A complete set of color combinations characteristic of rural houses in the Kyiv region is located on sheet 58. Under each color there is a RAL – a special index, using which you can order the desired paint.



COLOR SCHEME #4:

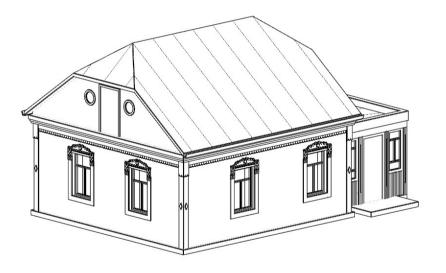
RAL 6028

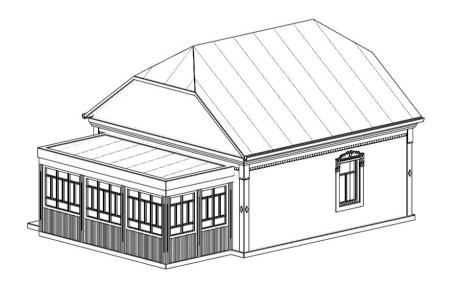


RAL 3013

PAINT IT YOURSELF:

Ukrainian houses have always been a space for experimentation. So feel free to disregard our advice and give free rein to your imagination: here you can create your own color scheme and paint the elements of your future house just as your heart desires.

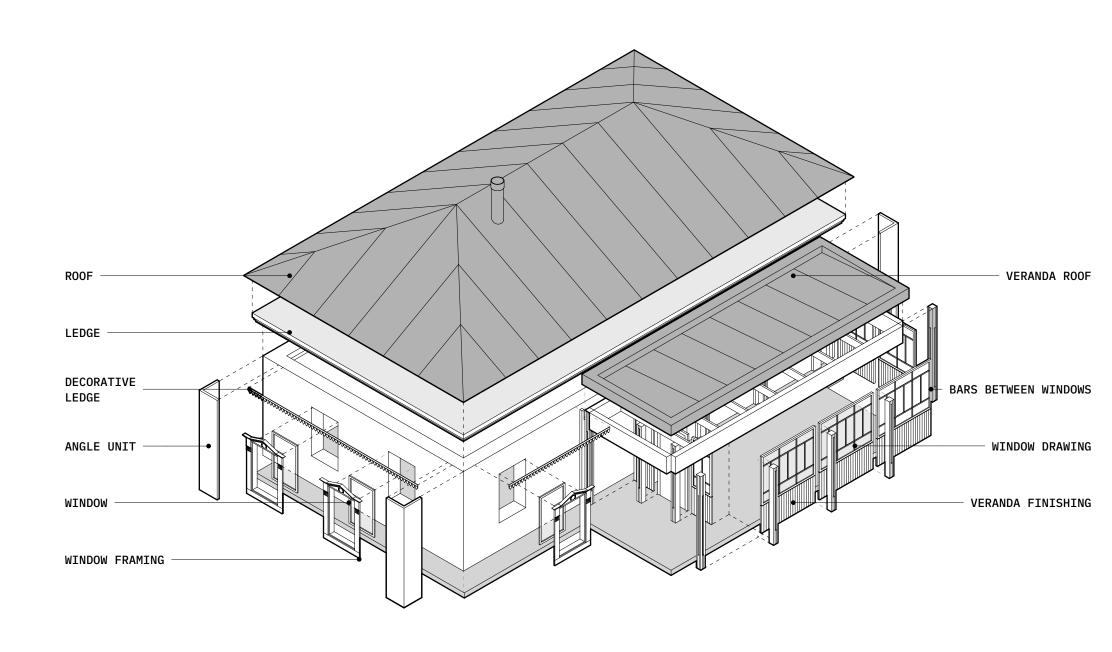




SECTION II



The next section is a collection of typical solutions, which is the result of our studies in the Kyiv region. Here we offer to get acquainted with the most characteristic decor options inherent in this area, as well as typical construction solutions. The collected information will be useful during reconstruction or construction from scratch.

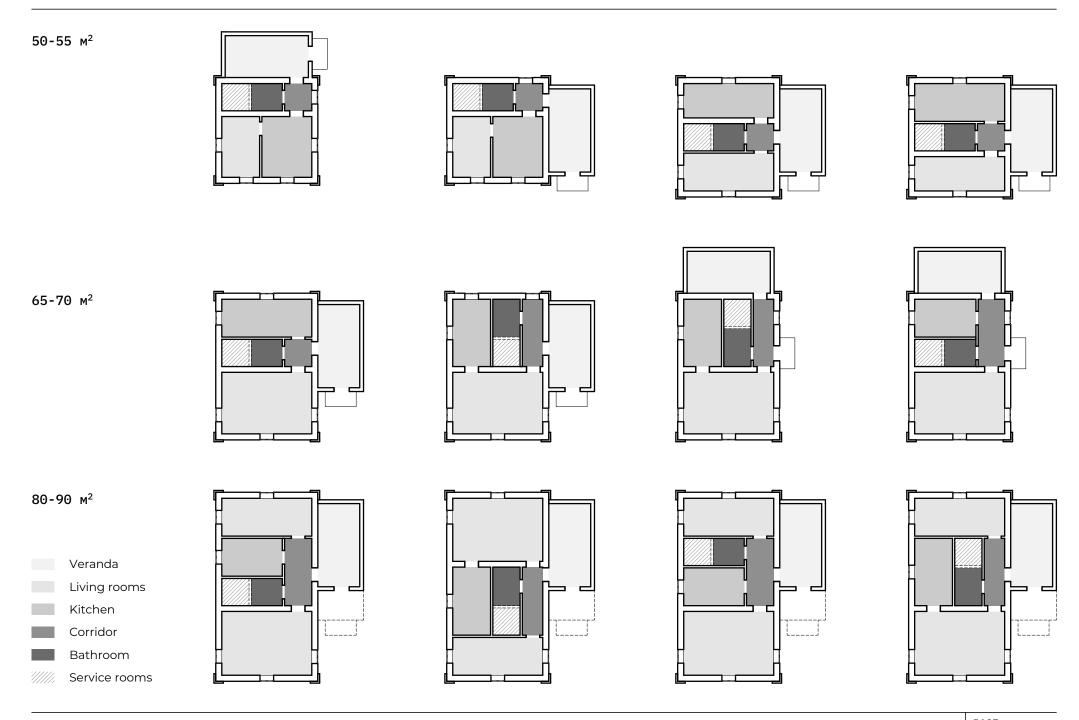


LAYOUTS

When starting research for the RE:Ukraine Villages project, we collected a small library of thematic literature. However, most of the books were devoted to the traditional architecture of Ukrainian villages, which was characteristic to the end of the 19th and the first half of the 20th centuries. The 'People's Architectural Creativity of Ukraine' by V. P. Samoilovych described the houses with which we are working presently and became our greatest asset.

During the development of the layouts, our basis became the elongated form, which was the most characteristic of Ukrainian rural houses. The zoning was left conditional – the space is divided by function without partitions and allows you to determine the internal layout of the rooms at your own discretion.

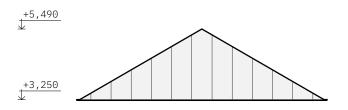
Having studied the dimensions, proportions, and logic of room placement, we have derived 12 typical layouts, allowing you to choose the area and option that best suits your unique needs. Layouts are recommendatory.



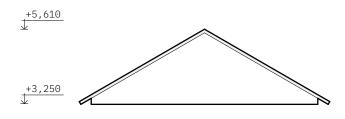
ROOFS

We present five types of roofs that are most often found in houses in the Kyiv region. In some options, it is possible to arrange and access the attic. You can also add the desired number of windows to the gable. Schemes are of a recommendatory nature.

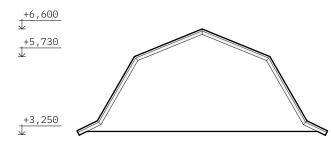
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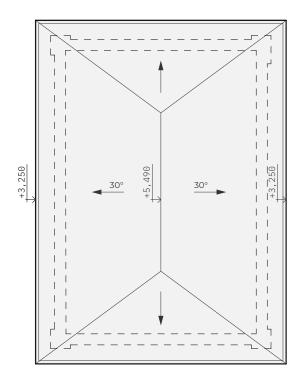


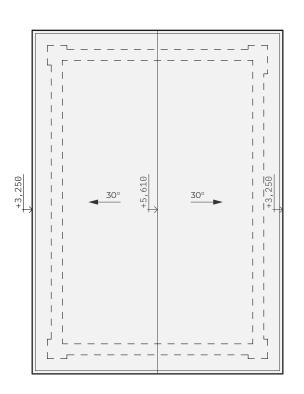
TYPE 2

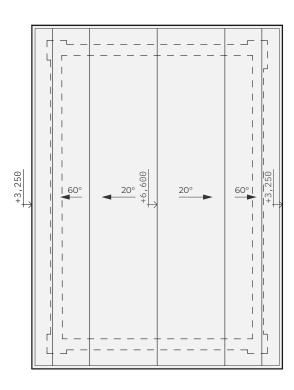


TYPE 3

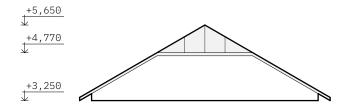




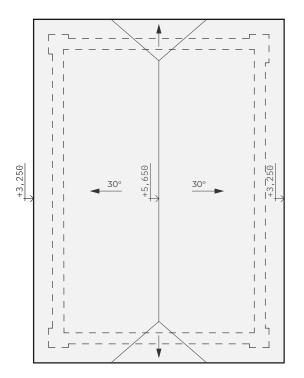


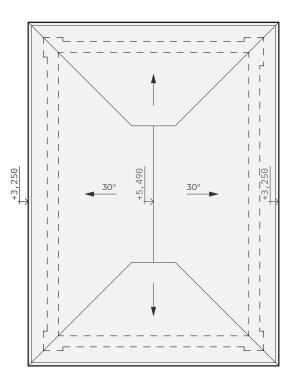


TYPE 4 TYPE 5







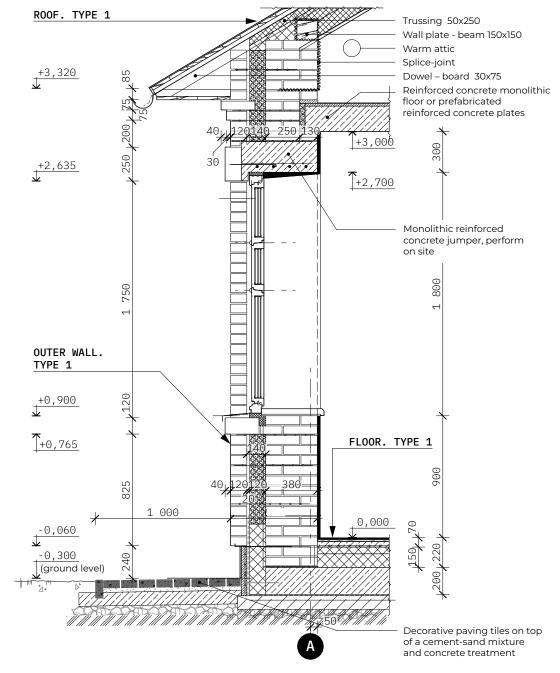


DESIGN SOLUTIONS

It's always best to rely on available building materials: based on them, we offer different options for foundations, external walls, ceilings and partitions.

These can be both ready-made elements of building structures (reinforced concrete foundation blocks, floor slabs, beams, lintels) and wooden materials (posts, beams, etc.).

For external walls built from man-made materials (bricks and foam blocks), we offer a thickness that guarantees the structural integrity of the house. To ensure the house is warm enough, it is also suggested to insulate the walls externally. Schemes and construction solutions are of a recommendatory nature.



ROOF. TYPE 1

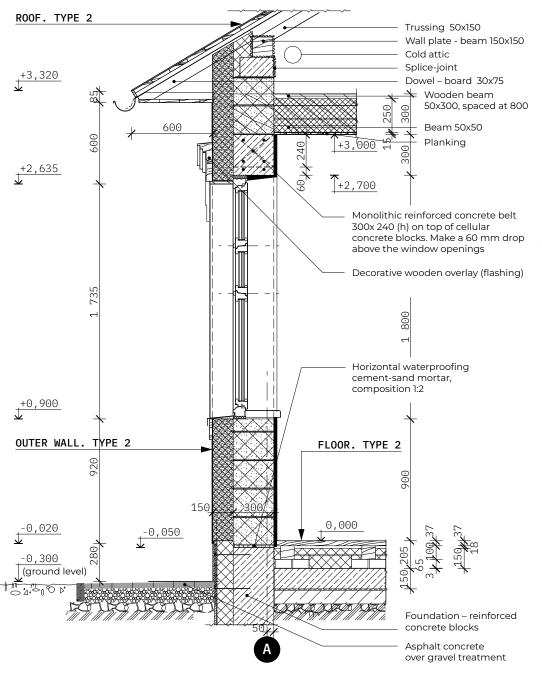
· Flooring – wooden treated board 150 x 30(h), paced at 250	30
· Waterproofing anti-condensation membrane	
· Counter batten – wooden treated beam 50 x 30, spaced at 800	30
· Trussing – wooden treated beam 50 x 250, spaced at 800	250
· Insulation – slabs of basalt wool, γ = 35 kg/m³, thickness 250 mm (100+100+50)	250
· Vapor barrier film	
· Boarding – board, planking	
· Warm attic	
· Linoleum	
· Cement-sand screed M150	20
· Vapor barrier film	
· Monolithic or prefabricated reinforced concrete floor	

OUTER WALLS. TYPE 1

· Exterior tier – solid red ceramic brick, or decorative clinker ceramic brick	120
· Air space	20
· Insulation plates made of basalt wool, γ = 45 kg/m³	120
· Internal wall – solid red ceramic brick	380
· Plastering with cement-lime mortar	20
· Interior finishing	

FLOOR. TYPE 1

Parquet board or laminate	14
· Sublayer	3
· Plywood layer	10
· Ceresit CN-72 levelling layer	3
· Ceresit CT-17 priming	
· Cement-sand screed with mesh reinforcement Ø3 Vr1, cell 50x50	40
· Thermal insulation – plates made of extruded polystyrene foam Y=35 kg/m³	150
· Monolithic reinforced concrete foundation slab	200
· Waterproofing	
· Treatment, concrete	100
· Soil compacted with crushed stone	



ROOF. TYPE 2

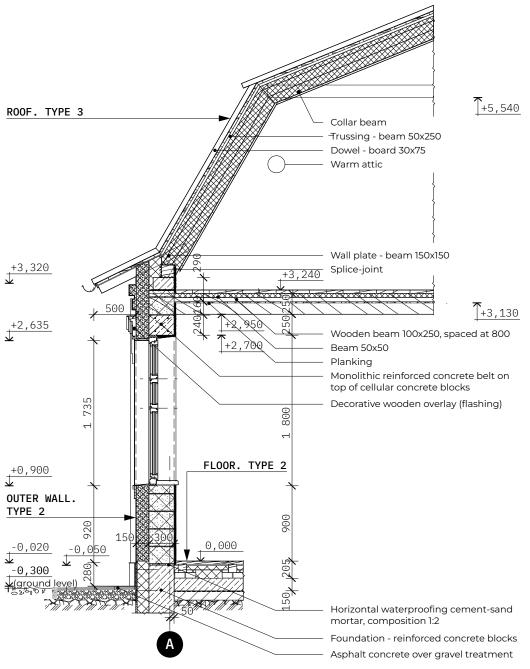
· Galvanized roofing steel	
· Flooring – wooden treated board 150 x 30(h), spaced at 250	30
· Waterproofing anti-condensation membrane	
· Counter batten – wooden treated beam 50 x 30, spaced at 800	30
· Trussing – wooden treated beam 50 x 150, spaced at 800	150
· Cold attic	
· Flooring - wooden treated board 150x30(h)	30
· Beam – wooden treated beam 50 x 300, spaced at 800	300
· Air space	50
· Insulation - slabs of basalt wool, γ = 35 kg/m³, thickness 250 mm (100+100+50)	250
· Vapor barrier film	
· Boarding – board, planking	

OUTER WALLS. TYPE 2

· Decorative facade plaster	
· Insulation plates made of basalt wool, γ = 45 kg/m³, on glue and mechanical connectors	15C
· Autoclaved cellular concrete blocks, γ = 600 kg/m³	300
· Plastering with cement-lime solution	20
· Internal finishing	

FLOOR. TYPE 2

· Wooden floor board	37
· Floor joists – treated wooden beam 100 x 100, spaced at 600	100
· Air space	18
· Thermal insulation – slabs of basalt wool Y = 35 kg/m³	100
· Brick columns 250 x 250 x 65(h), spaced at 600 x 900	65
· Substrates for bricks – roofing felt	3
· Monolithic reinforced concrete slab	150
· Waterproofing	
· Treatment, concrete	100
· Soil compacted with crushed stone	



ROOF. TYPE 3

· Corrugated asbestos-cement sheets	65
· Flooring – wooden treated board 150 x 30(h), spaced at 250	30
· Waterproofing anti-condensation membrane	
· Counter batten – wooden treated bar 50 x 30, spaced at 800	30
· Trussing – wooden treated beam 50 x 250, spaced at 800	250
· Insulation – slabs of basalt wool, γ = 35 kg/m³, thickness 250 mm (100+100+50)	250
· Vapor barrier film	
· Boarding – board, planking	15
· Warm attic	
· Wooden floor – board	37
· Beam – wooden treated beam 100 x 250	250
· Sound insulation – slabs of basalt wool, g = 35 κ r/ M^3 , thickness 50 mm	50
· Vapor barrier film	
· Rail – wooden treated beam 50 x 30 long the truss	30
· Boarding – planking board	15

OUTER WALLS. TYPE 2

· Decorative facade plaster	
· Insulation plates made of basalt wool, γ = 45 kg/m³, on glue and mechanical connectors	150
· Autoclaved cellular concrete blocks, γ = 600 kg/m³	300
· Plastering with cement-lime solution	20
· Internal finishing	

FLOOR. TYPE 2

· Wooden floor board	37
· Floor joists – treated wooden beam 100 x 100, spaced at 600	100
· Air space	18
· Thermal insulation – slabs of basalt wool Y = 35 kg/m³	100
· Brick columns 250 x 250 x 65(h), spaced at 600 x 900	65
· Substrates for bricks – roofing felt	3
· Monolithic reinforced concrete slab	150
· Waterproofing	
· Treatment, concrete	100
· Soil compacted with crushed stone	

GENERAL GUIDELINES:

1. Structural component features:

foundations

- girder brick; precast foundation blocks (PFB); monolithic reinforced concrete;
- post footing brick; monolithic concrete posts with a framing beam;
- piles screw piles, or concrete micro-piles with a framing beam;
- monolithic reinforced concrete slab;

· outer walls

- multi-layer, facade masonry: inner wall made of solid red ceramic brick KRPv 1/125/1800/50, (DSTU B V.2.7-61-97) thickness 380 mm based on cement mortar M 100; exterior tier made of solid red ceramic brick KRPv 1/125/1800/50, (DSTU B V.2.7-61-97) thickness 120 mm based on cement mortar M 100 or made of decorative clinker ceramic brick, thickness 120 mm, angle units thickness 250 mm; filling of the insulation board with basalt wool, γ = 45 kg/m³, thickness 120 mm based on glue and mechanical connectors;
- made of solid red ceramic brick KRPv 1/125/1800/50, (DSTU B V.2.7-61-97) thickness 380 mm based on cement mortar M 100, external insulation with mineral wool boards made of basalt wool, γ =100...150 kg/m³, thickness 150 mm based on glue and mechanical connectors as a base for light wet method plastering or ventilated facade with mineral wool boards insulant made of basalt wool, γ = 80...100 kg/m³, thickness 150 mm;
- made of autoclaved aerated concrete blocks γ = 600 kg/m³, thickness 300...400 mm based on Termoshov mixture with external insulation and mineral wool boards:
 - made of a wooden-board frame filled with mineral wool board insulant:
- made of sandstone blocks, 400 mm thick based on Termoshov mixture, external insulation with mineral wool boards;
 - made of a solid wooden beam;

internal walls

- made of solid red ceramic brick, KRPv 1/100/1800/25 (DSTU B V.2.7-61-97), thickness 380 mm based on M75 cement mortar:
 - made of autoclaved aerated concrete blocks g = 400 kg/m³, thickness 300 mm;
 - made of a solid wooden beam;

· internal partitions

- made of effective ceramic red brick, KRPv 1/50/1450/15, (DSTU B V.2.7-61-97, thickness 120 mm based on cement mortar M25:
- made of gypsum panels according to Knauf system, thickness 100 mm on the frame WV, WC 50, with two tiers of gypsum panels closure on both sides. Frame filling mineral wool boards, γ =30 kg/m³, thickness 50 mm of basalt wool;
 - made of autoclaved aerated concrete blocks $g = 400 \text{ kg/m}^3$, thickness 100 mm;

ceiling

- monolithic reinforced concrete slabs with a thickness of 200 mm;
- prefabricated reinforced concrete slabs with a thickness of 220 mm;
- made of beams (concrete or wooden) with plank flooring;

· roof

- pitched roof with an external downspout on the drainage system.

roof covering

- galvanized sheet roofing folded steel over a wooden floor made of boards;
- metal tiles based on wooden slats;
- wavy asbestos-cement sheets based on a wooden floor made of boards:
- snow retainers on each slope;
- waterproofing and vapour barrier in the roof film;
- roof insulation made of basalt wool γ =30 kg/m³, thickness 250 mm on the covering plates, or between the trussing if the attic space is warm;
- sound insulation (insulant) in the floor plates made of extruded polystyrene foam, γ = 35 kg/m³ or basalt wool (depending on the construction of the floor thickness 150...200 mm, without a basement, and thickness 50 mm if there is a basement;
 - horizontal waterproofing of external walls cement-sand mortar thickness 20 mm;
 - waterproofing in the floors waterproof solutions;

2. Paving

- width 1000 mm, asphalt concrete or concrete, over base concrete - thickness 100 mm and a base of crushed stone, thickness 100 mm, impregnated with bitumen to full saturation:

3. Outside finish:

plinth

- facing with ceramic tiles;
- plastering with a cement-sand solution;

· walls

- painting with facade paints;
- decorative facade plaster;
- face ceramic brick:

· roof covering

- flat folded steel sheet;
- metal tile:
- corrugated asbestos-cement sheets;

· window and door blocks

- wooden or metal-plastic;
- glazing two-chamber double-glazed windows;

· stairs and porches

- facing with ceramic tiles;

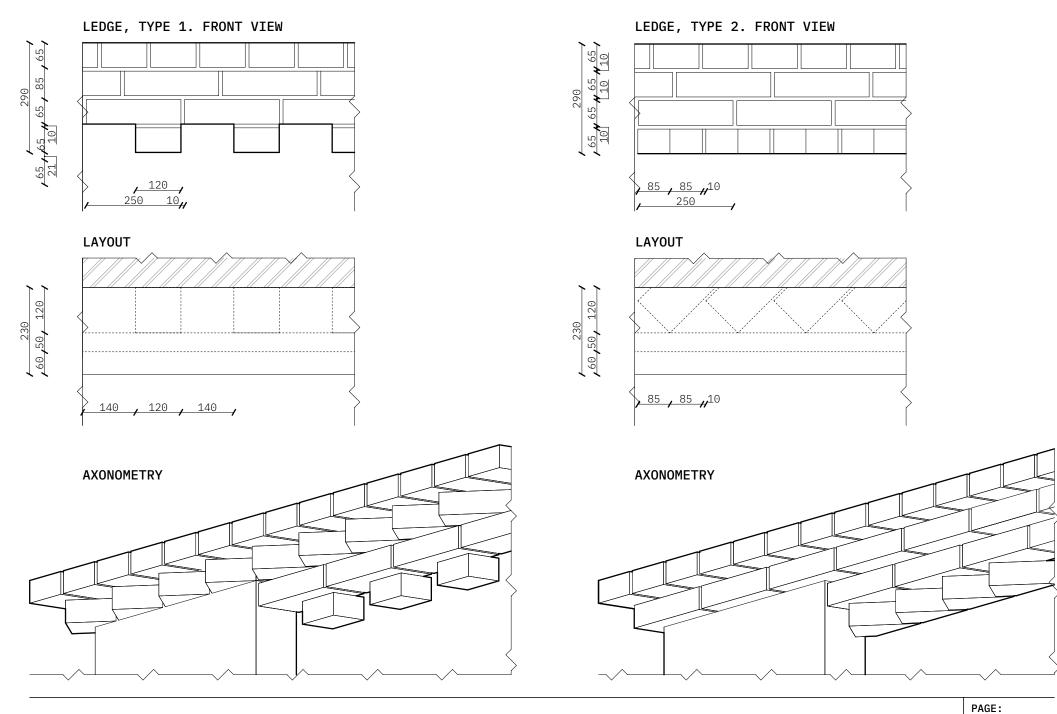
· windowsill drains, covering of decorative cornices on the facades

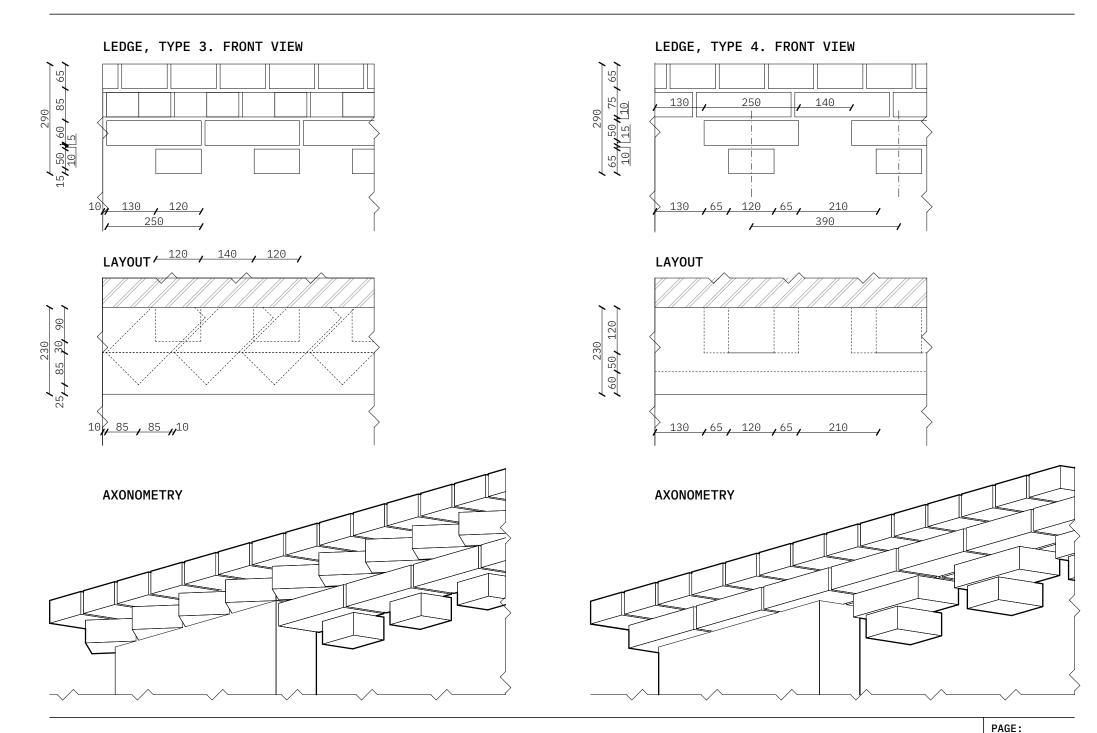
- flat steel sheet.

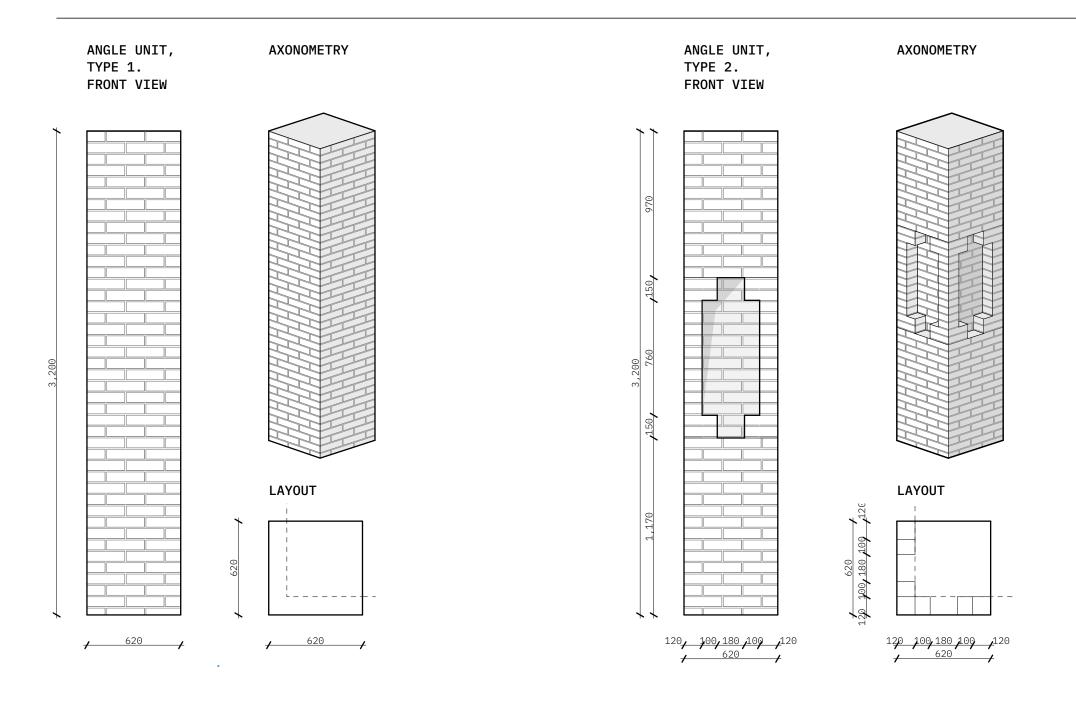
DECORATIVE ELEMENTS

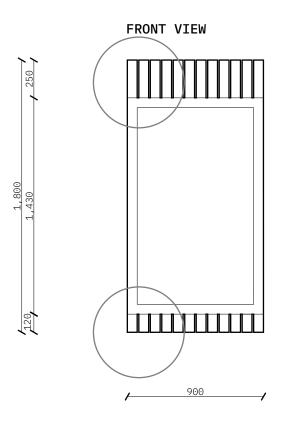
The houses of the Kyiv region are rich in decorative elements and ornaments. We have chosen the most characteristic decor options – both basic and intricate. On the following sheets you will find schemes of brick and wooden elements that can be recreated and used in your home.



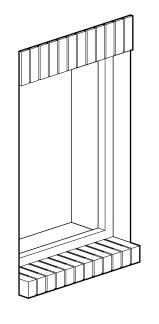




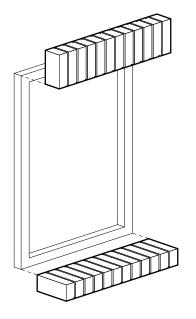




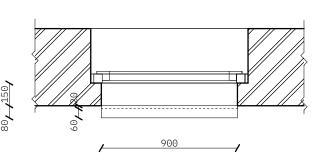


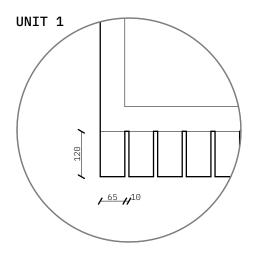


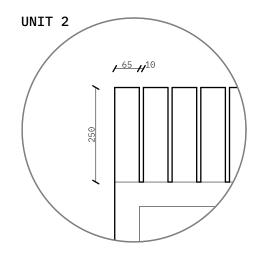
ASSEMBLY SCHEMATIC

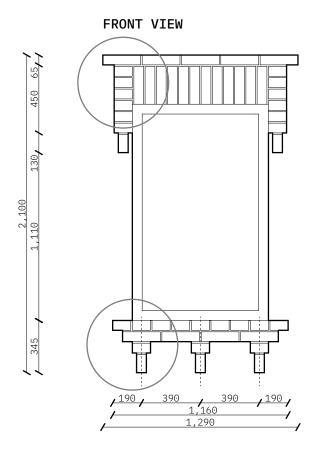


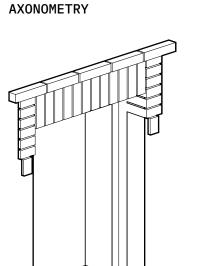


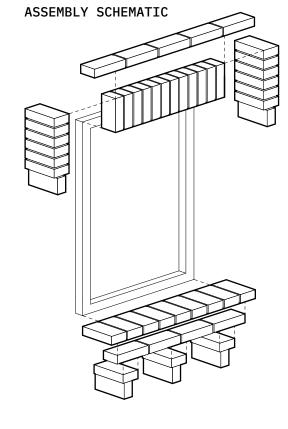




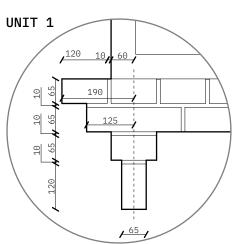


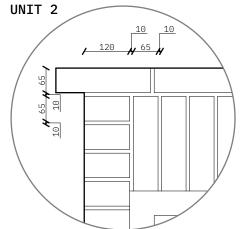




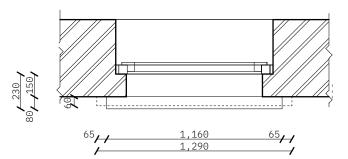


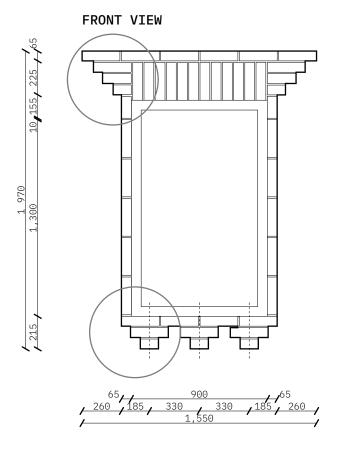




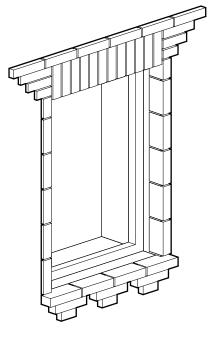


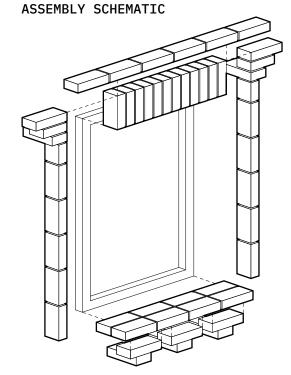
LAY0UT



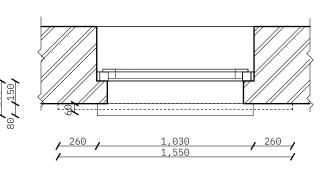


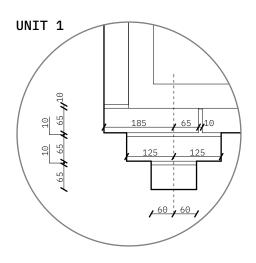
AXONOMETRY

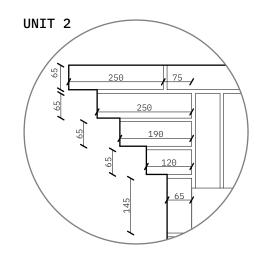


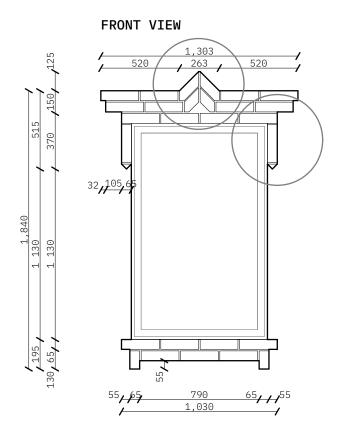




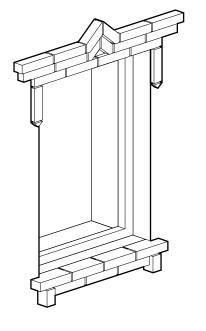


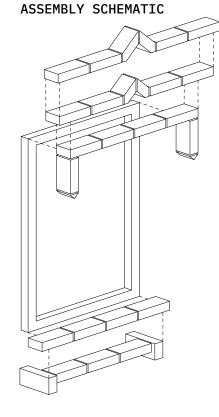




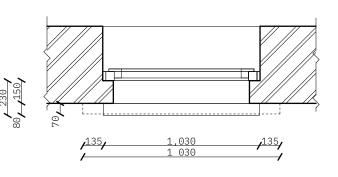


AXONOMETRY

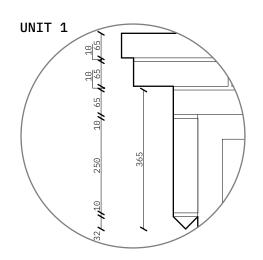


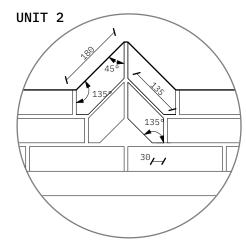


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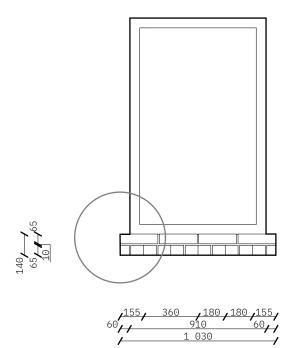


REFUKRAINE VILLAGES

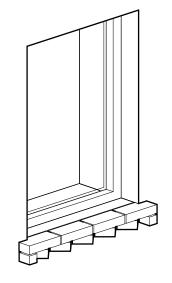




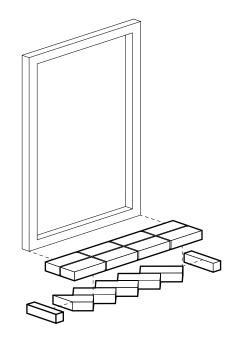
FRONT VIEW



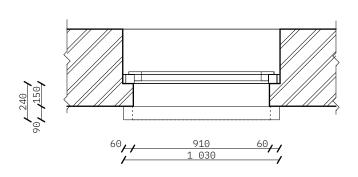
AXONOMETRY

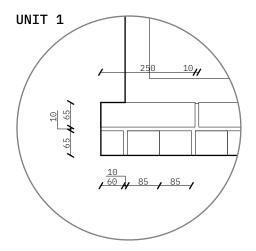


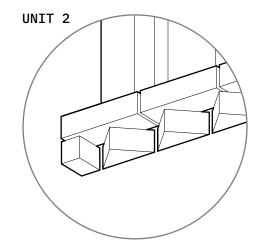
ASSEMBLY SCHEMATIC



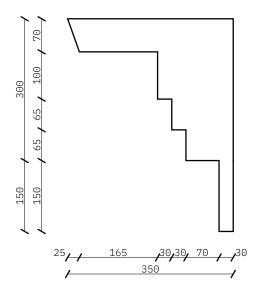
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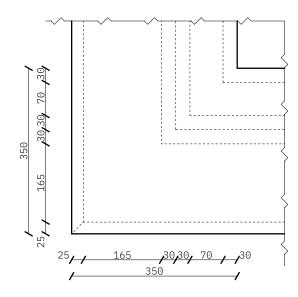




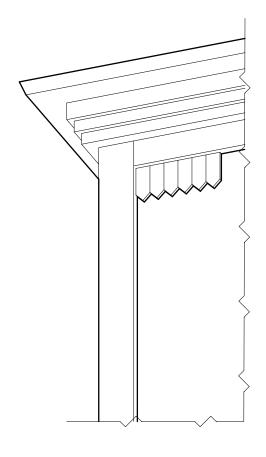
PROFILE

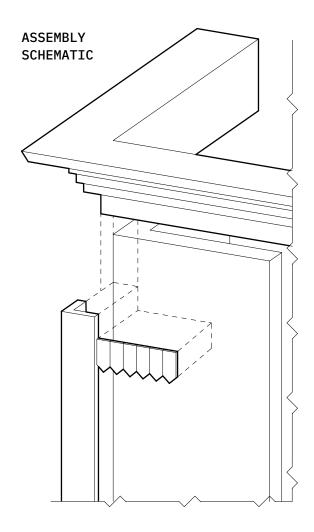


LAYOUT

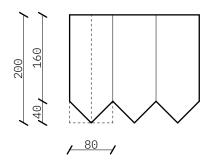


AXONOMETRY

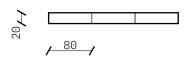




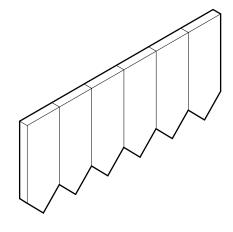
LEDGE, TYPE 1. FRONT VIEW



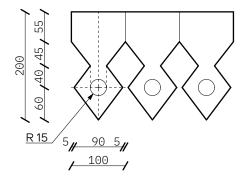
LAY0UT



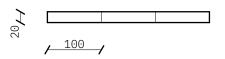
AXONOMETRY



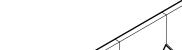
LEDGE, TYPE 2. FRONT VIEW



LAY0UT

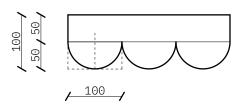


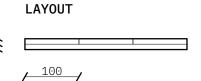
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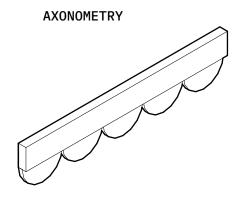




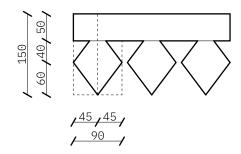
LEDGE, TYPE 3. FRONT VIEW



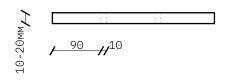


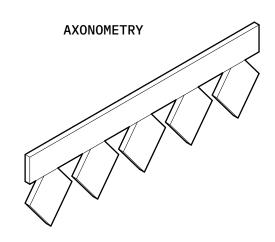


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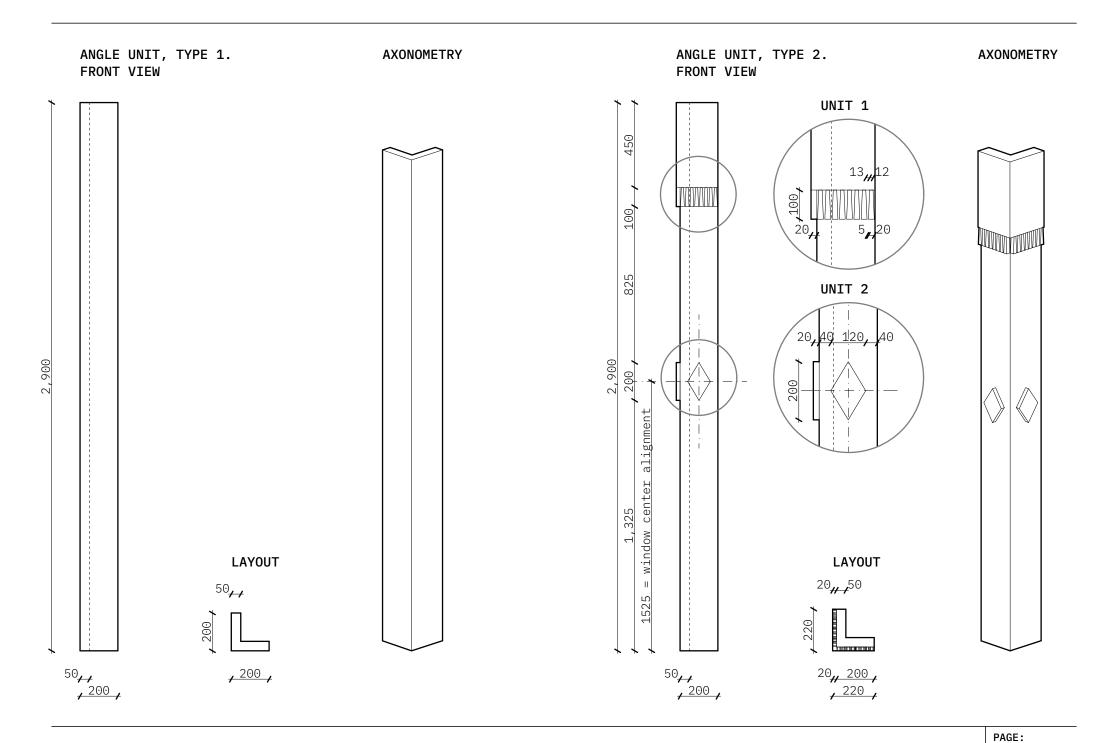


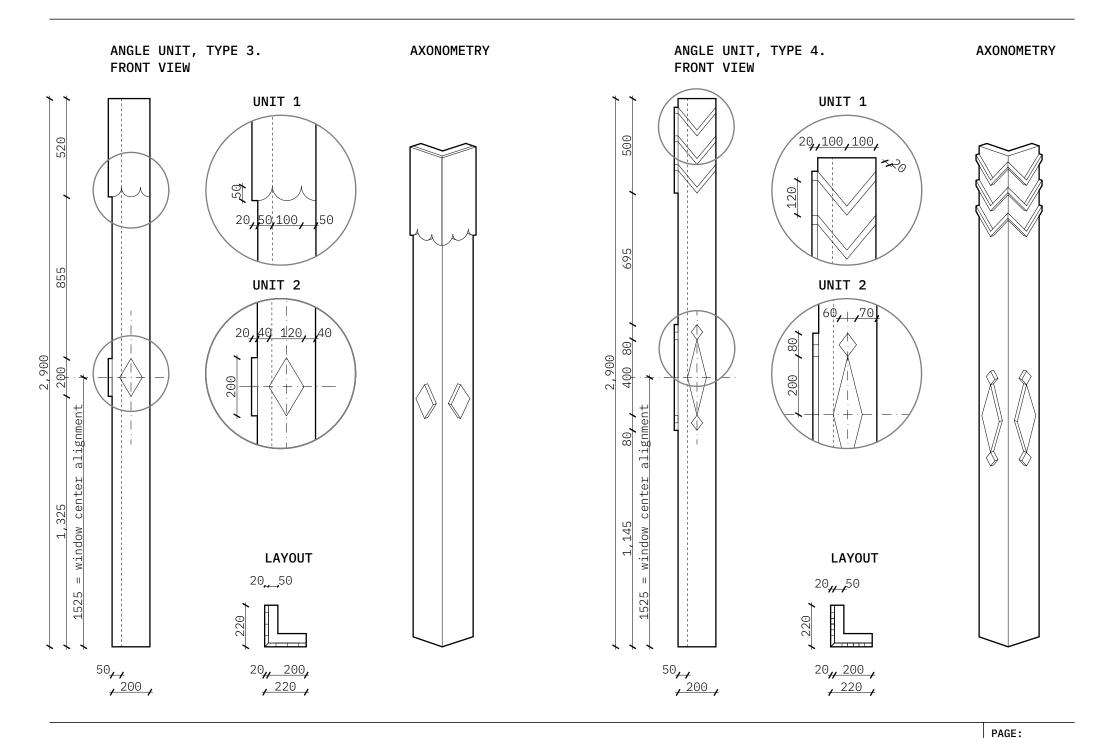
LAY0UT



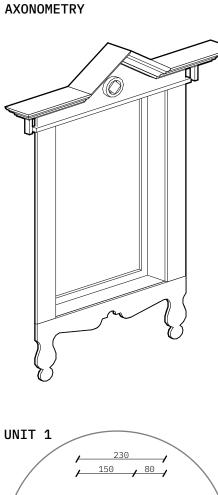


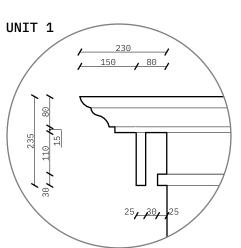
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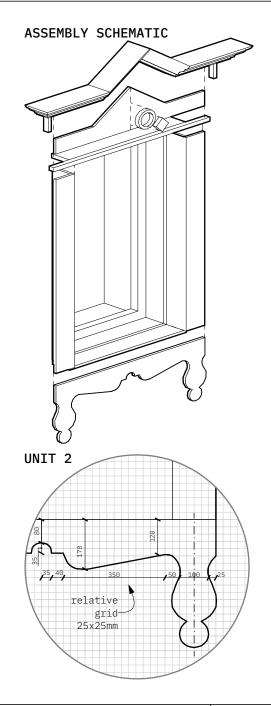




FRONT VIEW 30,110,95, 225 145° LAY0UT



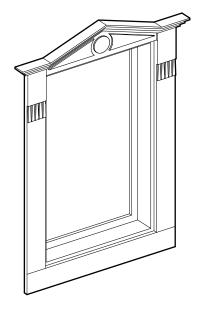




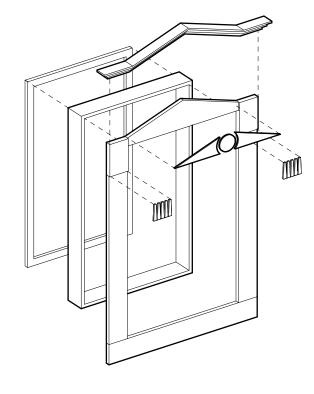
FRONT VIEW

150, 900

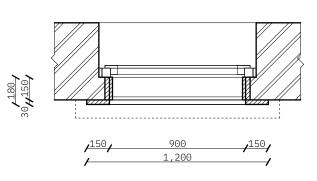
AXONOMETRY

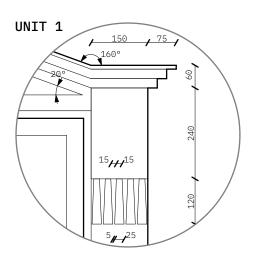


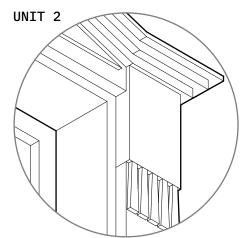
ASSEMBLY SCHEMATIC



LAY0UT



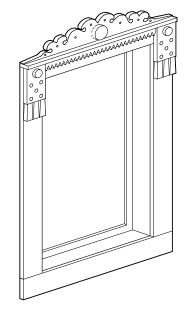




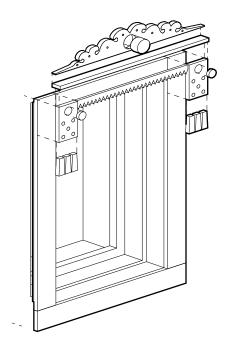
FRONT VIEW

150, 900 150, 1,200

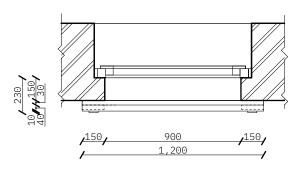
AXONOMETRY

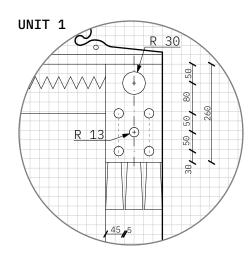


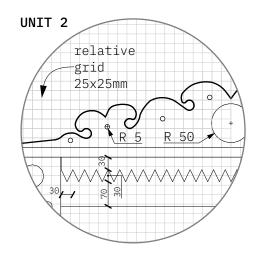
ASSEMBLY SCHEMATIC

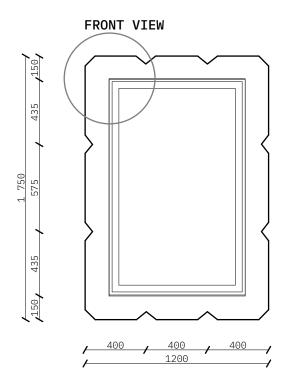


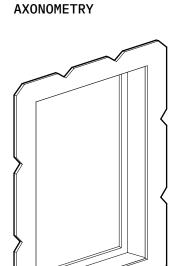
LAY0UT

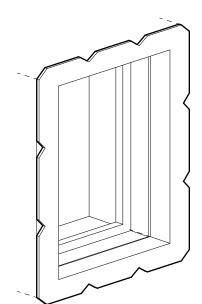




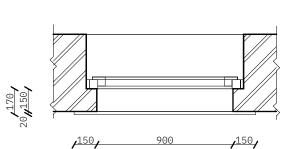




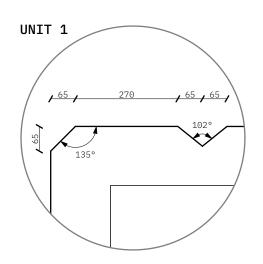


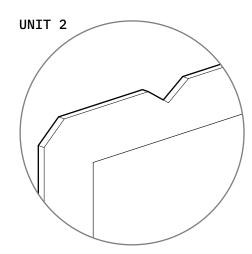


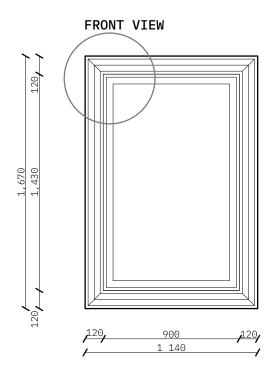
ASSEMBLY SCHEMATIC

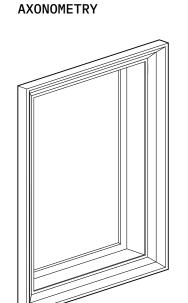


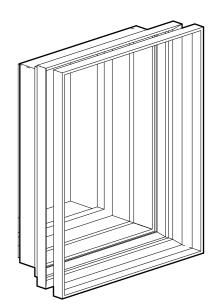
1,200



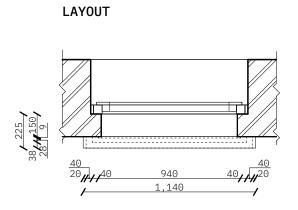


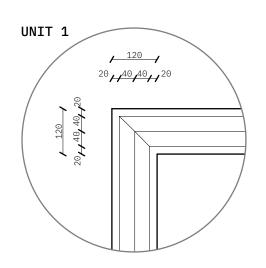


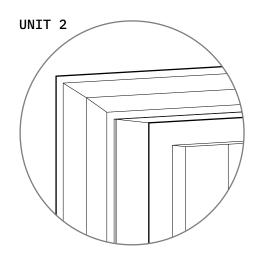




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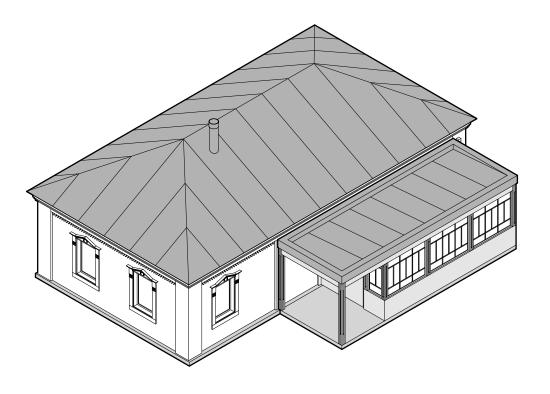


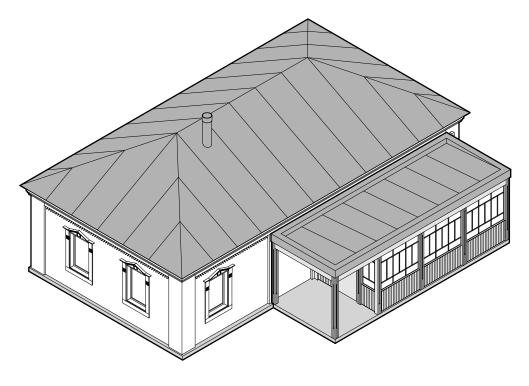




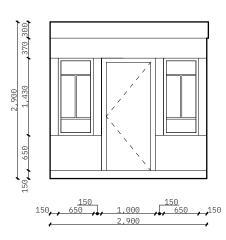
VERANDAS

We aimed to keep elements of traditional design, simultaneously taking into account the specifics of rural life and modern needs. A separate area of the online constructor allows you to add a glazed veranda to the planning, which is an extremely characteristic and functional part of many Ukrainian rural houses. It has also been somewhat modernized – the slope of the roof is now flat, with an internal slope. In total, there are two types of verandas in terms of size and finishing materials, from which you can choose the option that suits you best.

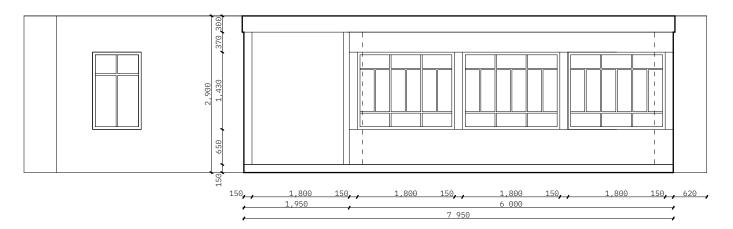




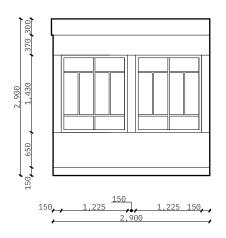
BRICK VERANDA WOODEN VERANDA

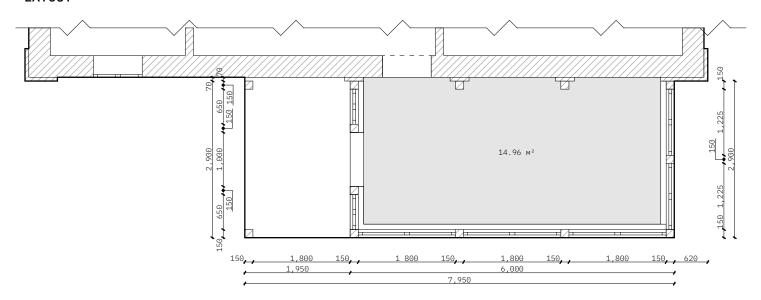


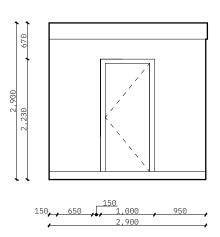
FRONT FACADE



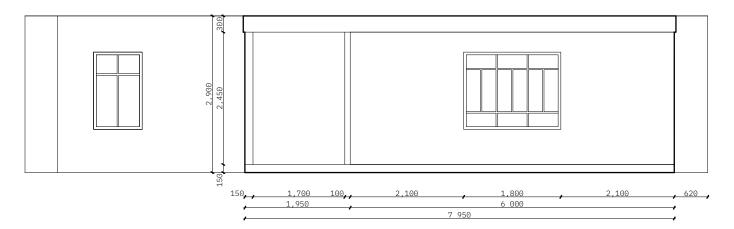
RIGHT FACADE



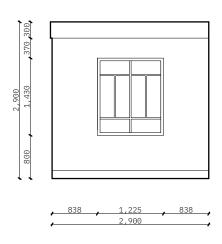


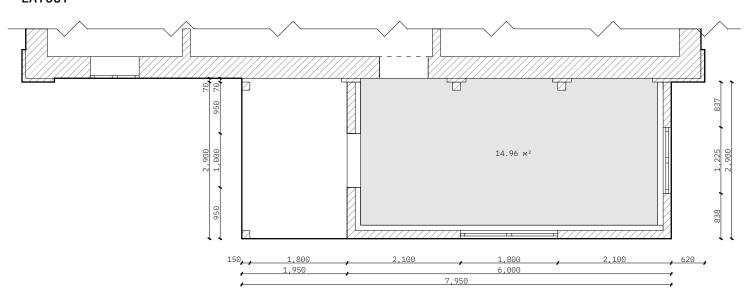


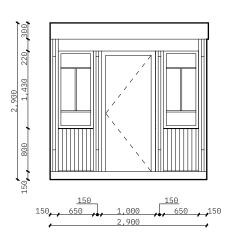
FRONT FACADE



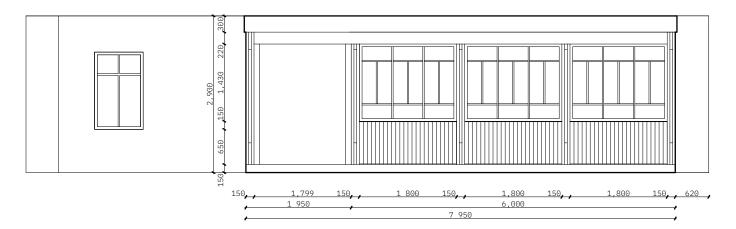
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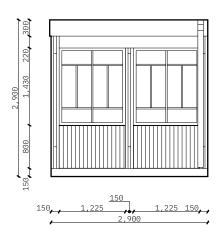


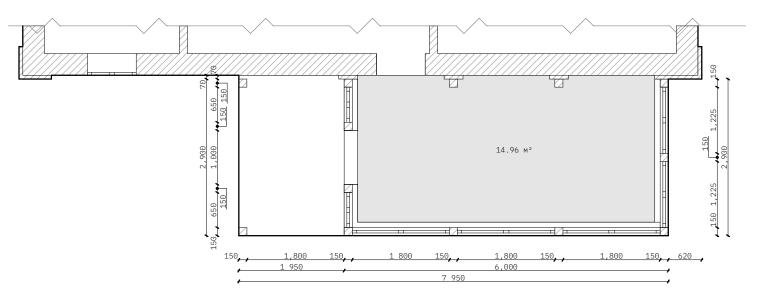


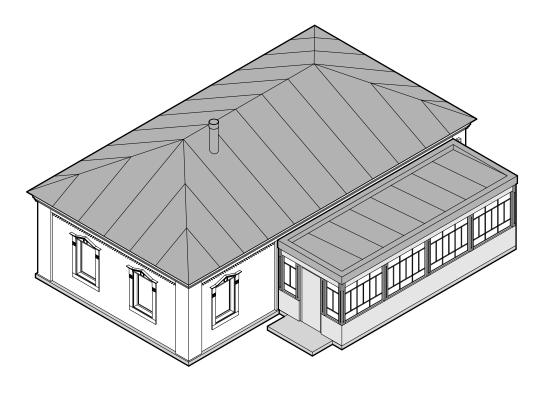
FRONT FACADE

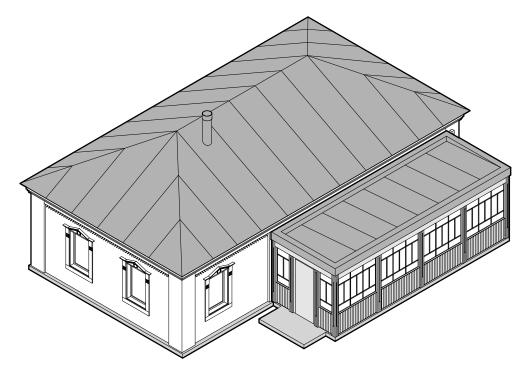


RIGHT FACADE



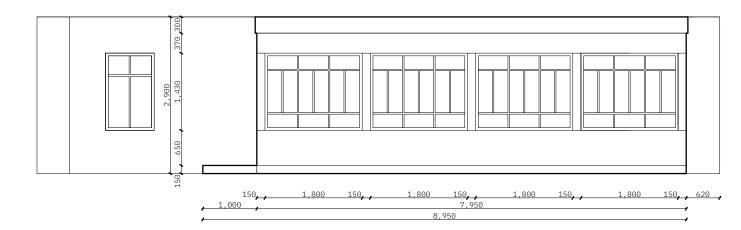




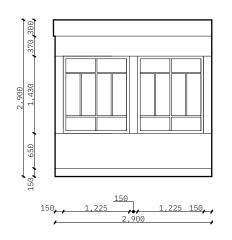


BRICK VERANDA WOODEN VERANDA

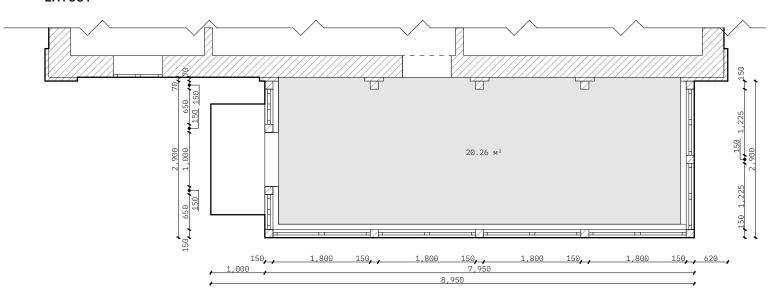
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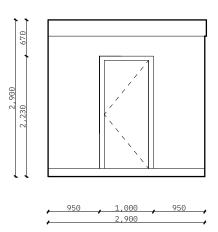


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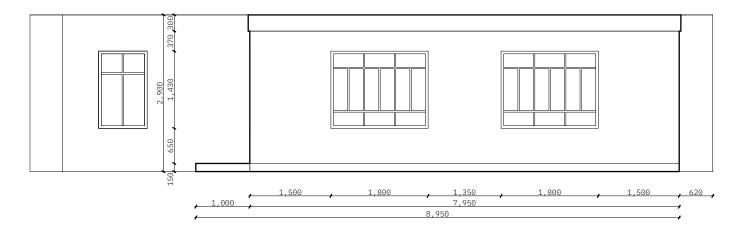


REUKRAINE VILLAGES

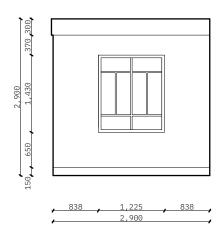


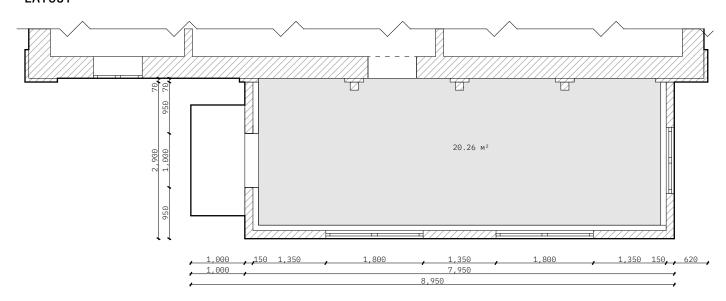


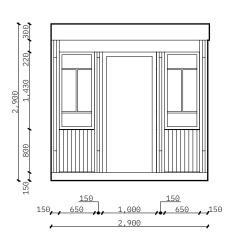
FRONT FACADE



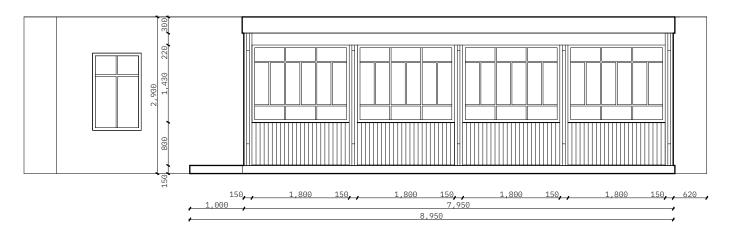
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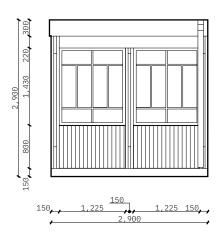


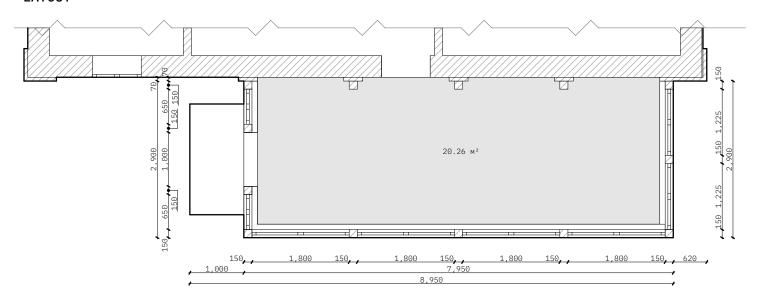


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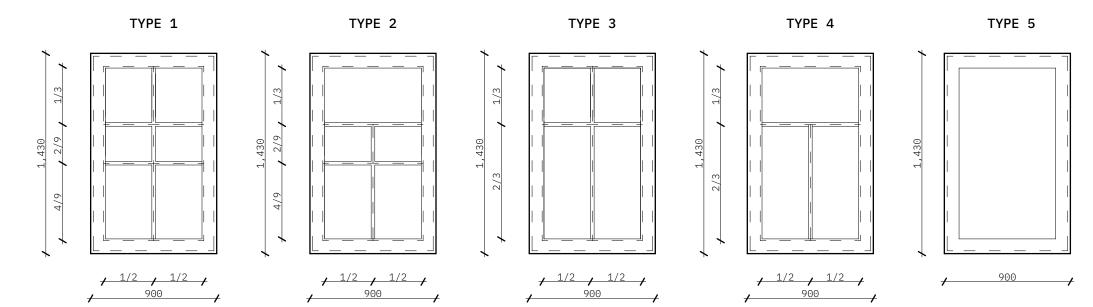




WINDOWS

While developing the design and planning of the windows, we slightly enlarged them: this solution preserves the traditional proportions but is more comfortable for modern residents. The construction of the window is formed with the help of thin slats that allow you to divide one large glass surface into sections. They can be cut and placed in wooden frames with an overlay on the glass or glued if the glazing option is double-glazed.

OPTIONS FOR WINDOWS DIVISION USING MUNTINS. FRONT VIEW



NOTES:

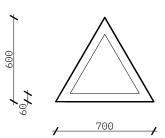
1. Muntin recommended width is 25 mm

PAGE:

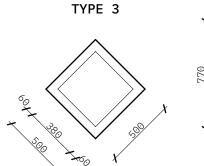
STANDARD ATTIC WINDOWS. FRONT VIEW

ATTIC VENT HOLES. FRONT VIEW

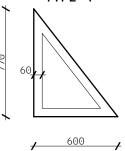
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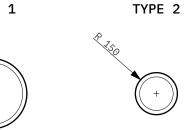
TYPE 2



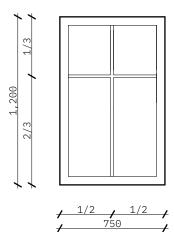
TYPE 4



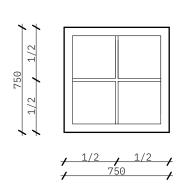
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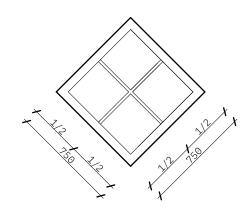
TYPE 5



TYPE 6



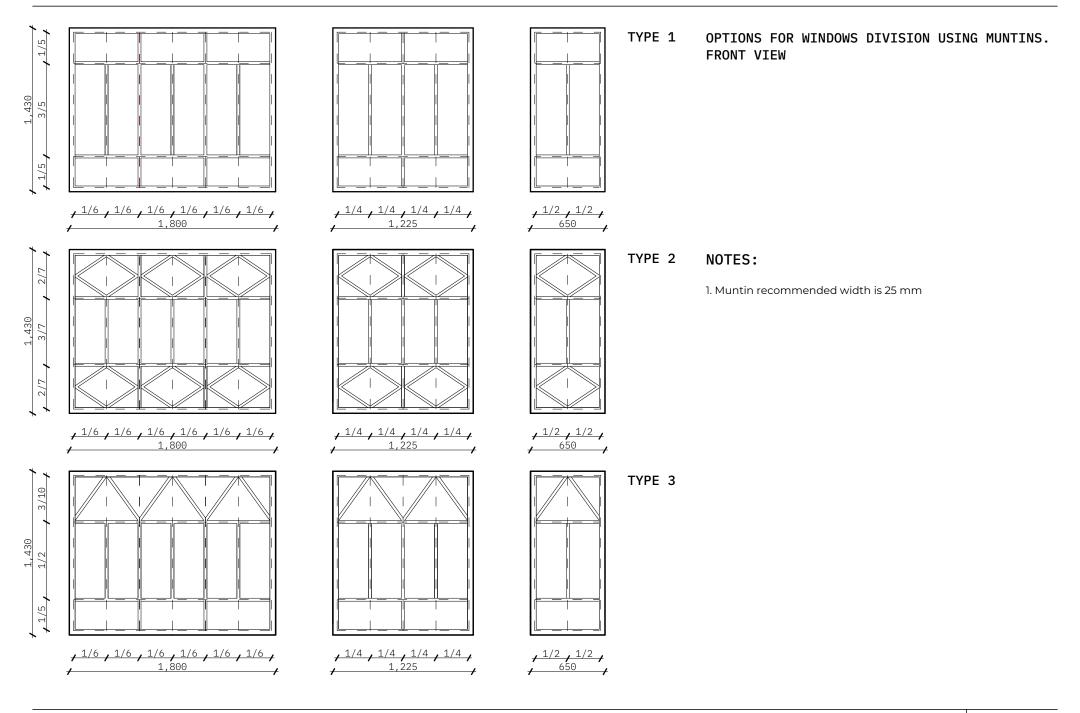
TYPE 7

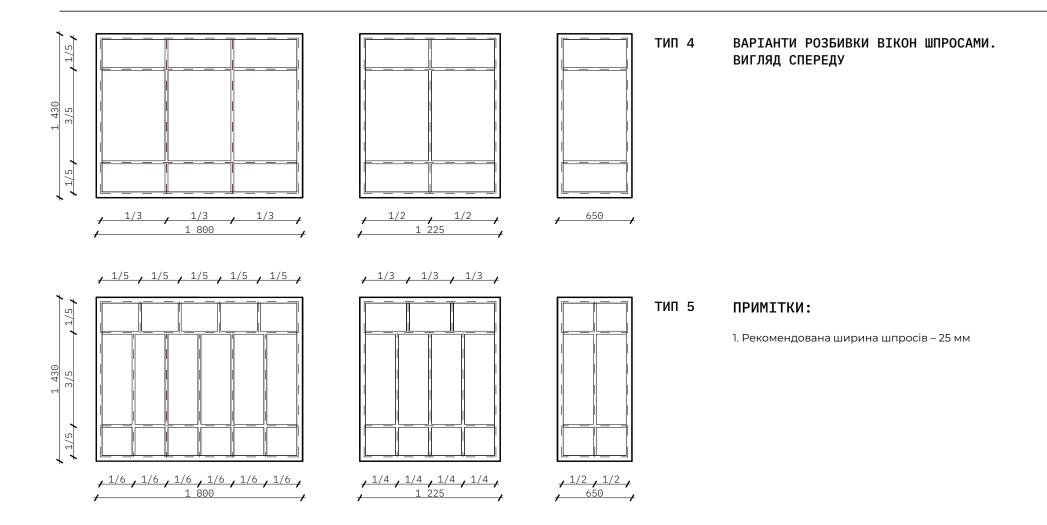


NOTES:

1. Muntin recommended width is 25 mm

PAGE:

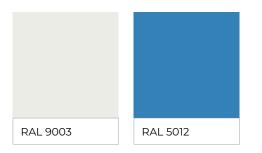




COLOR SCHEMES

We analyzed the color schemes most often used for painting rural houses in the Kyiv region, and created color combinations based on these studies. On the next sheet you can find the most common color schemes used, as well as those, which, in our opinion, successfully emphasize the architecture. Under each color there is a RAL – a special index, with which you can order the desired paint.

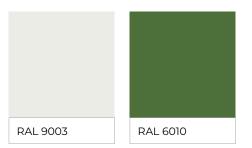
COLOR SCHEME №1



COLOR SCHEME №3



COLOR SCHEME №2



COLOR SCHEME №4



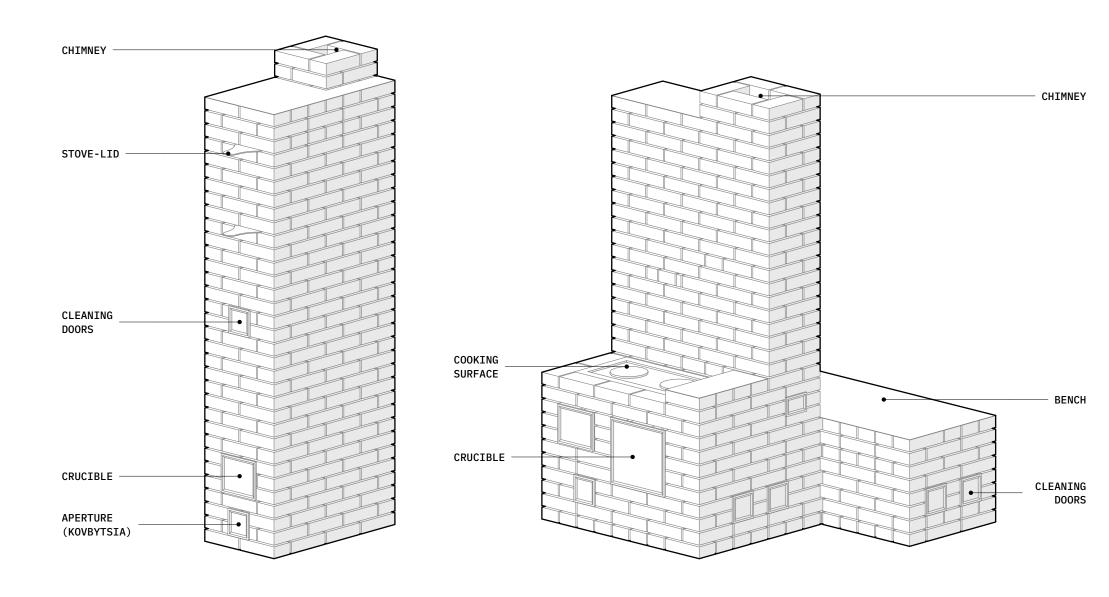
STOVES

The stove is a traditional center point of the Ukrainian dwelling. Construction was usually commenced exactly with the stove.

The stove had an almost sacred meaning. It was used to cook food, heat the house, inhabitants slept on the hearth or bench. People believed that the stove heat had healing properties. History preserved various rituals related to household usage and stove construction. For example, at the first kindling, a new clay pot was placed inside. If it cracked, the stove was reconstructed. Decor was no less important – the stove was decorated with paintings, carvings or coloring.

Like rural architecture, the traditional stove has undergone transformations over time. From clay it turned into a brick one, from a smoky to a chimney one. Unfortunately, due to rural houses gasification, this Ukrainian dwelling feature element started receding into the past. However, the adapted traditional stoves are still being built allowing the house being more autonomous with no gas or electricity dependence.

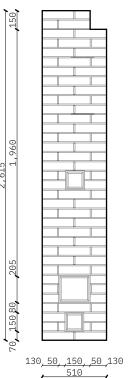
We offer several typologies - heating, cooking and heating stoves and a full-fledged stove with a bench.

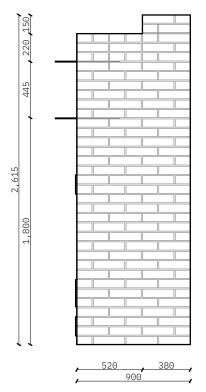


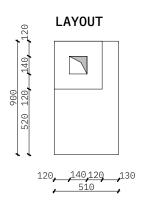
FRONT VIEW

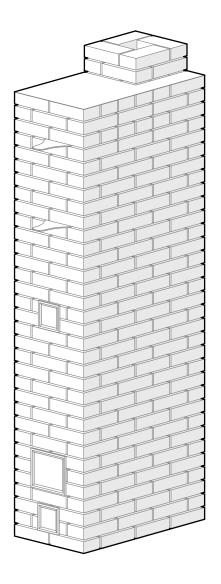
SIDE VIEW

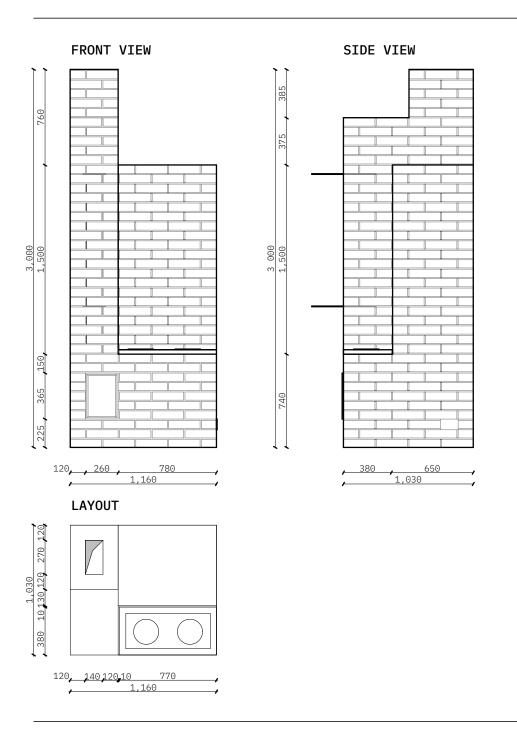
AXONOMETRY

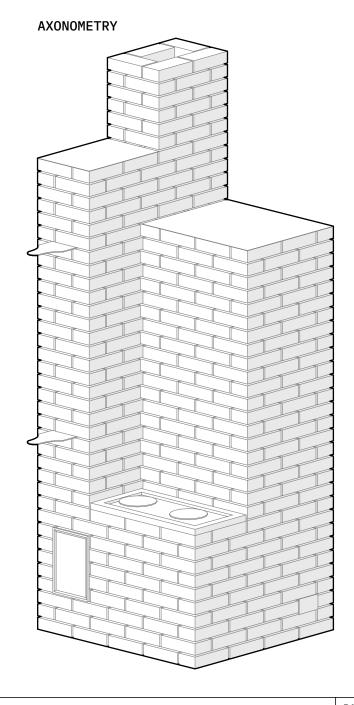




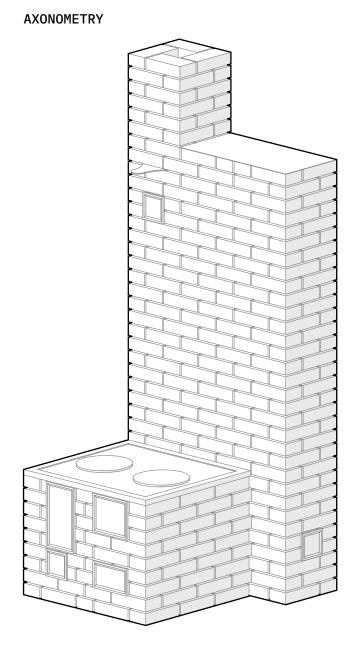


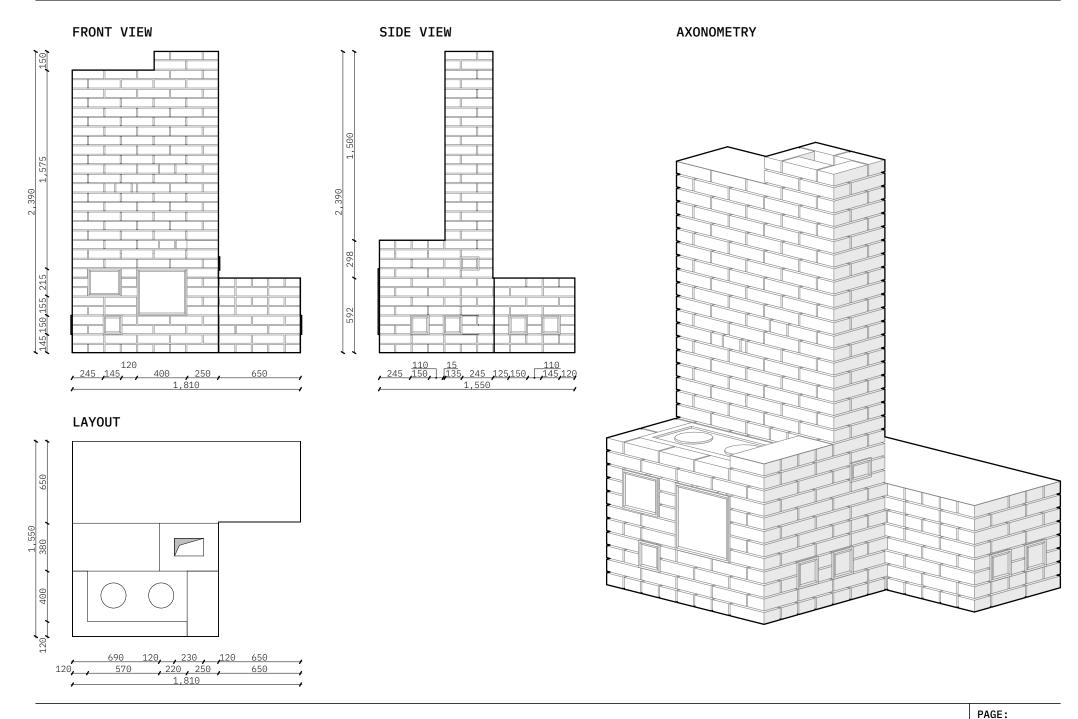






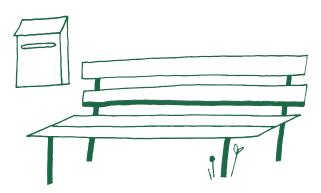


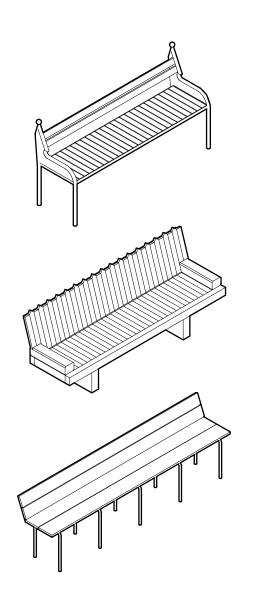


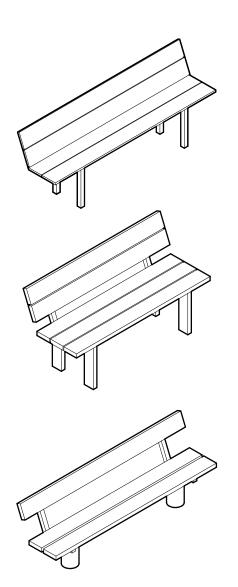


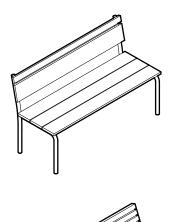
BENCHES

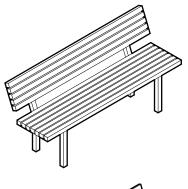
Thousand functions item, the true soul of a Ukrainian village. During our Kyiv region expeditions, we discovered 12 bench typologies, but we know very well – each one is unique in its own intricate charm.

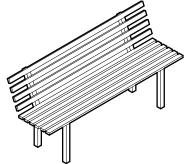


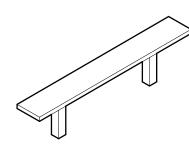


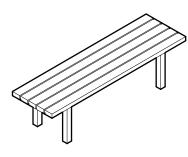


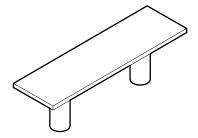














TOGETHER TO VICTORY!