

# ZB 293

## Chrushchevka 2.0

Chrushchevka 1.0

Chrushchevka is a well-known slang name of the pre-fab housing type. Nikita Khrushchev has invented it in 60th in order to overcome housing crisis. This pre-fab structure was implied as a transition to a brighter future which forms the largest part of dwelling fund in Russia and post-Soviet time. In order to deeper analyze this type of housing I have chosen central district in Novosibirsk (RU), where about 150000 people live in this kind of building.

According to conducted research only three structure types are dominating in this area, namely: 1-335, 1-466, 1-464-A.

After the fall of Soviet Union the expectation of living quality has strongly changed. Nobody was happy anymore with 5m2 kitchen and felt uncomfortable to host grandparents for a weekend in such small apartments. According to research Chrushchevka is more obsolete mostly than physically. Concerning the fact that the Russian budget does not allow new housing reform, the only way is - rebuilding.

The aim is to improve living conditions through increasing floor heights in the living space and give an old facade a new identity.

**problematic features of the pre-fab:**

- absolutely flat
- lack of the new dwelling types
- lack of natural light
- small apartments
- exterior without identity
- short elevation
- low ceiling
- physical depreciation of the building
- non sustainable systems

**measures:**

- increasing of the elevation
- horizontal extension
- additional structure
- deconstruction + new facade
- deconstruction partly
- openings enlargement
- ceiling deconstruction
- horizontal connections
- extra balconies and living space
- connection minimizing

Schwarzplan Beirik Zhelezodorozhnyj Novosibirsk



Lageplan



perspective elevation / west



fat example / interior space / model image



fat example / interior space / model image

fat example parents + 2 kids + grandma

ground floor plan

**Analysis**

Since there is not enough experience with obsolete pre-fab housing I researched all existing pre-fab based projects all over Europe. Analysis includes built projects and competitions in Germany, France, Spain and Slovakia with main topics: dealing with pre-fab. Despite different environmental situations many of examples had same or similar issues, they can be solved by certain measures.

project	1-335	1-466	1-464-A
construction	1961-1971	1961-1971	1961-1971
year of construction	1961-1971	1961-1971	1961-1971
amount in Novosibirsk	1400	1300	1300

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The main purpose of the rebuilding is to extend lacking spaces of existing flats, to improve living conditions of local population and to densify and revitalize typical district of Novosibirsk by creating a new housing typology.

All additional functions, which are: living room, dining room and cabinet, are moved to the new structure, connected by bridges with the existing building. Considering the modern building requirements, the existing structure needs to be insulated and covered with a double concrete panels.

The circulation in the Chrushchevka residence is represented by staircases including elevators in old part of the building and galleries in additional structure.

Chrushchevka 2.0 represents three apartment typologies which are located in existing building and additional structure.

1st type includes extra living space and dining room, 2nd type is situated in supplementary part and designed for large people or young couple.

3th type is a part of existing building and supplementary structure, where the bridge-connector turned into a dining room and kitchen. The entire ground floor is intended only for public facilities.

structure of rebuilding

axonometric view of existing building + additional structure

elevation South

elevation East

elevation West

section a-a

4th floor plan

3rd floor plan

2nd floor plan

1st floor plan

ground floor plan

environmental model / concrete

facade concept of the existing building / new decorative panels with external insulation

facade concept / additional building

building structure

perspective section

diagram / extension

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study model / concrete

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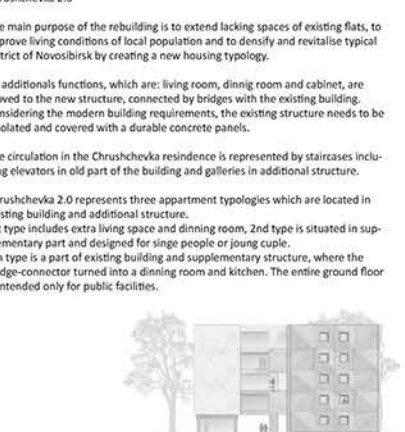
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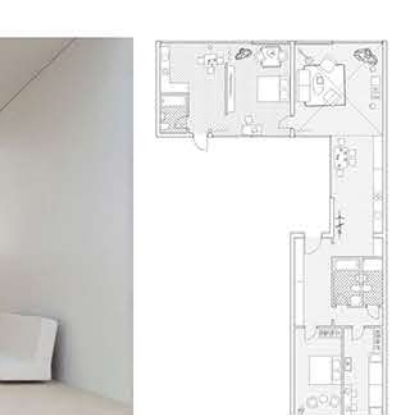
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Lageplan



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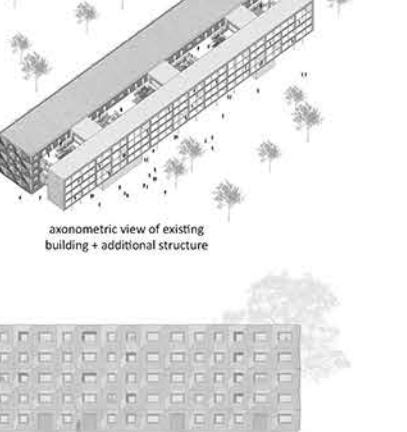
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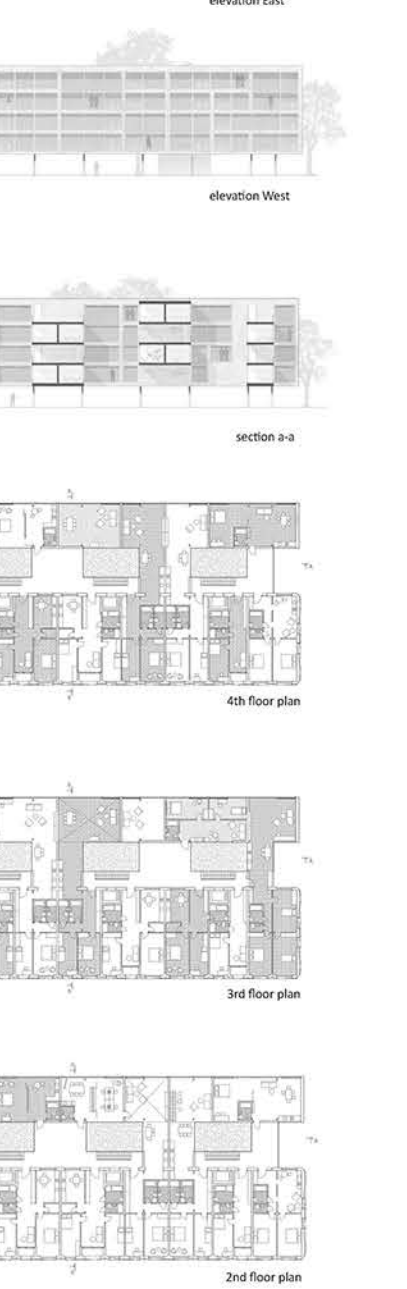
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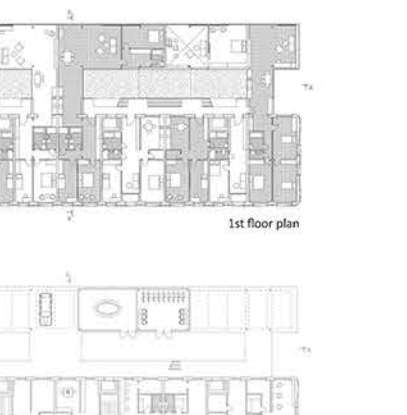
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