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ТЕХНИЧЕСКОЕ СОСТОЯНИЕ ПЛАНИРУЕМОЙ ПОД РЕКОНСТРУКЦИЮ ЧАСТИ ЗДАНИЯ – СПОРТЗАЛА БЫВШЕЙ ШКОЛЫ ПО АДРЕСУ Спорди 2, Кохтла Ярве



# **TECHNICAL CONDITION OF THE PART OF THE FORMER SCHOOLBUILDING - GYM, WHICH IS PLANNED TO BE RECONSTRUCTED.**

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#### HISTORICAL BACKGROUND



Kohtla-Järve Eesti Keskkool 1949. a





The school was built in 1940 according to project designed by Anton Soans. In 1941 and 1944 the building was damaged by fires. The gym suffered the worst damage and was rebuilt in 1953.





In the following years, internal layout of the rooms in the building was partially redesigned. At present, the tower and staircase adjacent to the gym are in particularly poor condition.







Vertical layout does not meet the requirements; ground level has gone up; blind area and drainage system are missing, which leads to water and moisture leaking through into the building's underground structures.

There are cracks in external walls; numerous signs of deterioration of paint and plaster layers; damaged decorative elements. However, there is no significant damage to the bearing structures.



Finishing layer on the internal structures shows signs of damage.



Signs of roof leakage and finishing layer damage can be observed in the gym.







Annexes are in very poor condition.



Flooring on all levels is deteriorating.





Basement floors are in disrepair; numerous signs of damage to wooden structures.





Floor covering and foundation in the gym are deteriorating.



Basement walls are in very poor condition; there are numerous signs of leaks and damage to both finishing layer and wall structure proper. Mold is present in many locations.



Ceiling in the basement rooms shows signs of deformation and structure damage.





In general, the condition of bearing structures of the gym roof is satisfactory although in some locations there are signs of decay on the trussing and curb plates. There is no lighting or ventilation in the garret rooms.





Insulation of the garret floor does not meet the quality standards.

Drainage system is missing.







The condition of existing internal doors and windows is satisfactory. However, they do not meet the energy-saving standards and require renovation.



External doors need to be replaced.





There is no ventilation system in the building. Basement ventilation is not functioning.

The mainlines of the central heating system in the basement are oxidized. Window openings in the basement are either blocked or shuttered with wood.





Central heating radiators in the gym are in working condition. However, they require cleaning. Tubing needs to be completely replaced.



Electrical wiring and distribution units are not up to standards.



Central heating assembly unit has been renovated. Boiler is not functioning.

### SUGGESTIONS FOR RENOVATION

- 1. Ensure that water does not enter the underground structures by building a proper blind area around the building, resolving the vertical layout, and installing drainage system. Provide the foundation and basement walls with heat insulation up to ground level and install waterproofing. Provide removal of rain water from the roof.;
- 2. Clean the damaged plasterwork off the facade, cover with new plaster and paint. Carry out the necessary research and paint layer probing in order to determine the original shade of plaster and composition of the existing plastering layer;
- 3. Renovate windows and internal doors, replace external doors. Restore blocked window openings in the basement;
- 4. Remove flooring off the stair landings and steps, examine the condition of floors. Restore the flooring in the gym. In the basement, replace wooden floor structures and renovate concrete ones;
- 5. Renovate internal walls following proper research to determine the original wall paint colour and designing a project of internal architecture;
- 6. Provide garret floor with heat insulation following removal of existing insulation, install new walkways;
- 7. Replace the heating assembly unit. The new unit should be triple-circuit. Install energy-saving pumps and provide hot water supply;
- 8. When designing the renovation project, include replacement of decaying parts of bearing structures. Replace roof covering with concrete, strengthen the structures as needed, restore dormers. Use historically suitable materials as covering;
- 9. Restore ventilation of garret space;
- 10. Provide the entire building with a ventilation system;
- 11. Clean and renovate the existing radiators in the gym, replace the tubing and radiators in the basement;
- 12. Completely replace the electricity supply system, install an automated system in the building.