

**This innovation** aims to provide a simple T-24 house made from PVC pipes and GRC boards. The structure of a simple house building according to the invention consists of PVC pipes and GRC boards arranged according to an earthquake-friendly and environmentally friendly simple building construction design; paralon pipe as a component of the building's space frame and roof is strengthened and tied with a mixture of reinforced concrete and paralon rods at the ends of the ties and the room corners.

## RS T24 PRO-G



The potential for simple home users for MBR is very large covering all regions of Indonesia. With a shortage of one million houses per year, the PUPR Ministry is only able to fulfill 30% or around 400,000 units per year of the public housing infrastructure needs. Commercial Value The T-24 Simple House has financial advantages, because in addition to the relatively faster construction process and cheaper construction costs compared to conventional simple houses. In addition, this simple house is a growing house concept that can be expanded according to the needs of its inhabitants. For example: RS T-24 can be expanded to RS T-36, RS T-45, etc.



The benefits and advantages of innovation are that the space frame building construction consists of sloof beams, columns and ring beams made from PVC pipes which are environmentally friendly because they are easily recycled. The simple house innovation is an earthquake-friendly building because the combination of building materials consisting of PVC pipes and concrete will provide resistance to earthquake disasters. In summary, the project has a process for making a house building structure made of paralon pipes consisting of the following steps: 1) Installation of brick foundations, 2) Installation of sloof, column and ring block construction with paralon material and concrete mixture, 3) Installation of the main roof structure (horses and battens) made of paralon, 4) Installation of roofs and walls made of GRC, 5) Building fittings such as doors and windows use a combination of paralon materials, GRC boards, and glass materials..