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## THE MODULAR-HOTEL "SWISSTUBE"

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A new concept of a modular-hotel which can be easily transported has been developed. This module is a convenient solution to host people during a limited period of time in areas where hotel facility is not available. The proposed module consists of cylindrical room units laid out horizontally one on another. A cylindrical unit is composed of annular gluelaminated timbers covered with horizontal wooden planks around the perimeter. The exterior shell consists of a polyester-fiberglass shell.

## 1. INTRODUCTION

The modular-hotel "Swisstube" consists of transportable room units (on the road, by train or by air) of cylindrical shape with a length of 8.50 m and a diameter of 3.50 m. Each tube is laid out horizontally and can be installed individually or in groups of units one on another in order to match particular demands as single guest or family rooms, holiday home, hotel facility, etc. An example of a 32 beds hotel facility for young people is illustrated in fig. 1.

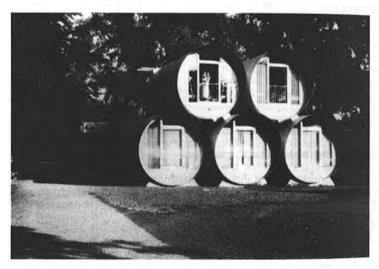


Figure 1: Front view of a 32 beds hotel facility composed of "Swisstube" units

## STRUCTURE

2.

The structure of the tube comprises annular glue-laminated timbers placed every 1.80 m and longitudinal wooden planks inside the annular glue-laminated timbers. Vertical loads due to snow, additional layers of tubes above and the floor are carried by the annular glue-laminated timbers to the foundation. The stability of the tube is provided by the longitudinal wooden planks. The timber structure is protected against climatic impact with an external polyester-fiberglass shell as illustrated in fig. 2. The connections between the tubes are made with PURelastomer bearings so that noise and vibration propagation are minimized.

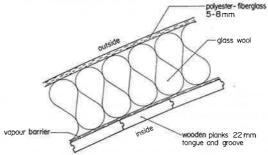


Figure 2: Cross-section of the modular-hotel "Swisstube"

## 3. APPLICATIONS

The curved shape of the unit as well as the visible longitudinal wooden planks lead to a cozy interior as shown in fig. 3. It is a ready-to-use unit (furnished and equipped) which can be used in various multi-story configurations. The unit is a durable structure with a fire resistance of 30 minutes. Its high thermal insulation due to the glass wool and due to the longitudinal wooden planks disposed around the whole perimeter as well as the combination of polyester-fiberglass shell allow to use the unit in various kinds of environment and during all seasons. Finally, high noise and vibration absorption and nice equipment lead to a very high living standard.



Figure 3: Internal view of the modular-hotel "Swisstube"