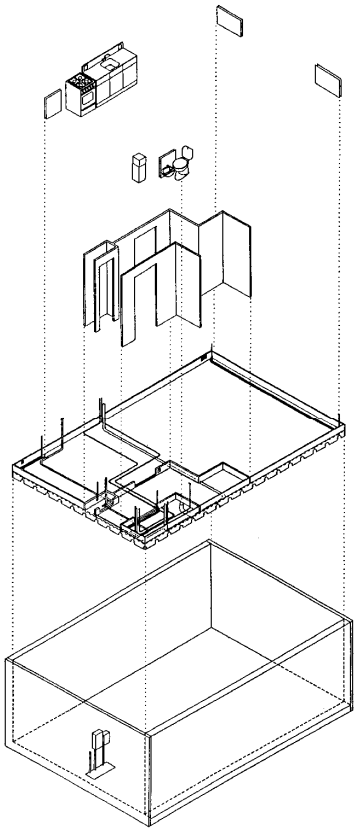
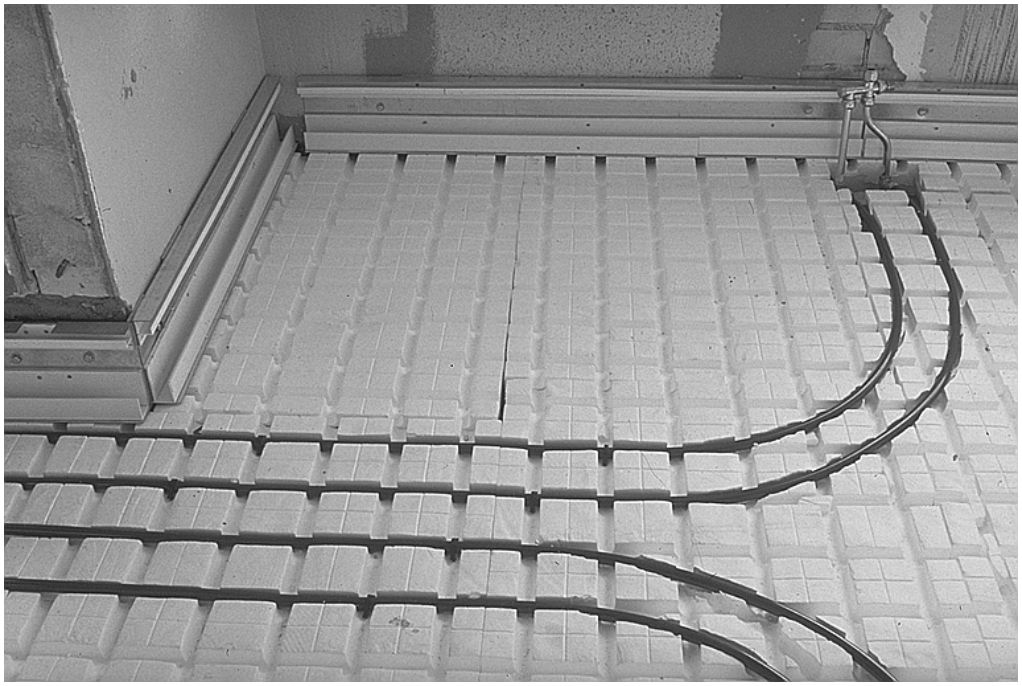
FLEXIBLE FLOOR SYSTEM FOR DISTRIBUTION, VARIES – MATURA

Location: Varies
Designer: John Habraken Matura Infill System



The Flexible Floor System is an integrated infill system which allows for flexibility for interior layout and design. The word "infill" represents systems, components, and fixtures within the building such as HVAC, electric, plumbing, and cabinets. Integrated infill systems typically include the distribution components for these systems (e.g., pipes, wires), as well as components that allow for routing these distribution components in a manner that minimizes entanglements with the building structure. This system is made of two elements: the Matrix Tile and the Baseboard Profile. These components provide adaptability in design, fast on-site installation, and future changeability in concrete building.

- Matrix Tile component is applied to the sub-floor of a building. This specially designed tile provides pathways to horizontally distribute plumbing lines, electrical and communications wiring, and ductwork. The tile also accommodates zero-slope gray water drain lines as well as dedicated water supply lines in pre-formed grooves in the tile. The tile system is based on a 10cm x 20cm grid system that accounts for the positioning of each component and its relationship to other elements.



- Baseboard Profile (on top of the Matrix Tile), is a track component which integrates into the tiles and serves as the base for interior partitions. In addition to joining wall partitions to the floor tiles, the Base Profile also includes a wiring chase for baseboard wiring runs and receptacles. Together, the Matrix Tile and Base Profile allows for quick installation and incorporates 23 different subsystems for a wider choice of floor plans.

The software (MaturaCads) allows a designer to test various product configurations, and generates output for cost, production, container packing, and on-site assembly. Once a design is established, many components of the system are prefabricated to reduce on-site installation time, while other components may simply be pre-cut in a factory setting. At the time of installation, the infill components are shipped to the site in containers, with parts loaded according to the sequence of installation on the site. A separate container containing all of the required tools for the installation team is also sent to the site.

In order to efficiently accommodate future occupants, anonymous in the conceptualization phase, this systematic approach simplifies the extent of the internal configurations and ensures compatibility yet separation with the structure. In many instances, however, technical complexity deterred occupants from maximizing the full potential of such components. The Matura Infill System, which was originally introduced to the market by Infill Systems BV in 1993, is certified and code approved in Germany and the Netherlands. Although the application of this infill system is primarily intended for multi-family buildings, the individual technologies that make up the system illustrate possibilities for single-family applications.

This information was provided by "The Adaptable House," Avi Friedman, GcGraw Hill, New York, 2002. Page 45

Concept Home Principles – Organized and Accessible Systems Research Summary, June 2005, Dr. Carlos Martin

Image Source: *Residential Open Building*, by Stephen Kendall and Jonathan Teicher Concept Home Principles – 27 Organized and Accessible Systems