

Abstract

Flexibility, Versatility and Functionality ver. 1.0

“tailor-made with future options”

Building a house satisfying your current needs requires preparation. Building a house meeting future needs requires vision and thorough analysis. Reality shows that the “requirements-gap” already starts with the tender defining current needs and expectations. That is why Van Welleman Villas® uses an exhaustive “generic” tender (with a focus on Comfort, Quality and Safety) with a maximum of “modularity”. Specific customer requirements are added after checking for “future proof”-ness.

At Van Welleman Villas® we think that it is almost impossible to define exhaustively what is one’s ideal home. The reason for that is that people start from “known” requirement within the boundaries of their current situation. As a result most houses do not comply with future customer needs. That is why we start with broad and future proof “ideal” customer requirements to which the current customer requirements are added.

Flexibility

According to Van Welleman Villas®, the “flexibility” of a design refers to the potential of modification afterwards. This not only covers the construction, it also covers the electricity, plumbing, heating etc. In fact, most of the space is build without specific upfront requirement. As a result, most (if not all) of the rooms could be used as a kitchen or bathroom, and all of this without heavy constructional works.

Versatility

Versatility refers to the “broadness” of usability. By default, all of our bedrooms have their private bathrooms. The master bedroom also have separate toilets as well as a large polyvalent space (dressing, sauna etc.). As such, they are versatile today, and flexible towards the future.

Functionality

According to Van Welleman Villas®, all solutions should be functional above all. We try to avoid multi-purpose devices as much as possible. Given our focus on flexibility and versatility, this might sound strange and confusing, but it really is not. In fact, all solutions should be -above all- functional from a (a) “safe”, (b) “quality” and (c) “comfort” point of view. That is why we do not go for “Swiss Knife” solutions since they can do it all, but none of it perfectly.

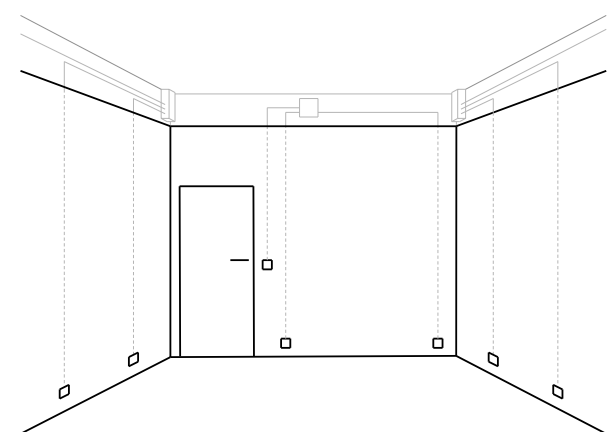
As a conclusion one might state that:

“Van Welleman Villas® gives priority to safe functionality, with comfortable versatility and an enhanced flexibility towards future changes ... according to the highest quality standards”

Should this “Abstract” trigger your hunger for more information then there are a multitude of “White-Papers” available containing more detailed information on our solutions for maximum flexibility, versatility and functionality.

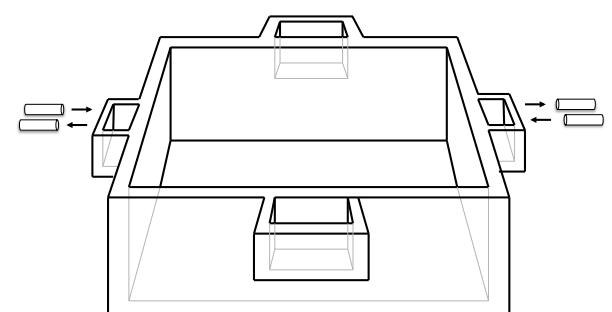
Modular Technical Ceilings

Modular technical ceilings for maximum safety and almost limitless flexibility in the future.



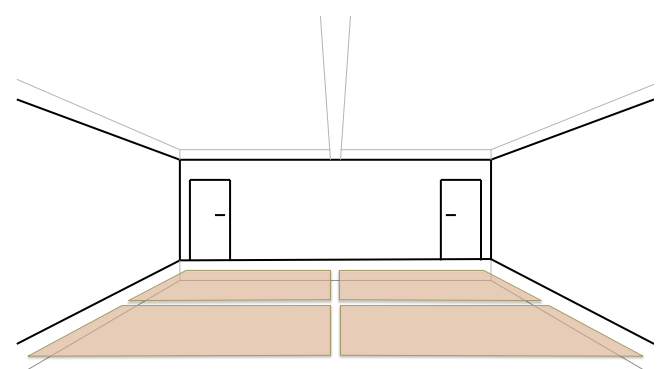
Multiple Inspection Manholes

At least 4 inspection manholes are provided for flexible access of electricity, water, etc. around the house (garden, utilities, parking ...).



Multi-Purpose Flex-Zones

Large multi-purpose zones instead of small uni-purpose zones ensure maximum flexibility in the future. Who knows, your house of today might become multiple apartments in the future.



What makes Van Welleman Villas® different ...

Multi-Purpose Flex-Zones

Instead of creating rooms for specific purposes (e.g. kitchen, bathroom, living), Van Welleman Villas® creates large zones with subdivided floor heating (instead of large heated surfaces) as well as modular electric circuits and plumbing in lowered technical ceilings. Flex-zones enable easy transformation of the size (e.g. smaller or larger room) as well as the purpose (e.g. bathroom instead of an office) of your in-house space.

Modular Technical Ceilings

All Van Welleman Villas® include lowered technical ceilings with a visible as well as accessible technical infrastructure instead of cables and ducts running in the screed under the floor. As such, it remains easy to perform technical inspections, or even modify the plumbing or electrical cabling afterwards should this be required. Additionally, visual inspection remains possible until the very last stage of the construction project avoiding "hidden" faults or inconsistencies. Also, a ceiling-mounted infrastructure solves the problem of cables and tubes being damaged on the construction site.

Modular Industrial Automation

Multi-purpose flex-zones and modular technical ceilings can not go without an equally modular home automation. The problem with traditional tailor-made home automation is the vulnerability for software bugs and/or configuration errors. That is why Welleman Villas® uses modular building blocks instead. Exhaustive testing of these modular building blocks eliminates the risk for bugs and configuration errors.

Ready for Wheelchairs and Mobile Hospital Beds

Van Welleman Villas® houses are build so that all rooms are accessible for wheelchairs. Also, all major rooms (i.e. dining room, living, entrance, terrace) are accessible for mobile hospital beds, by default. As such we ensure that heavily disabled persons remain involved in the daily activities, without the need for structural construction works.

Multiple Technical Ducts

A minimum of three technical ducts (i.e. one central and two extremities) are available for additional cabling and tubes. As such it remains simple to add or modify plumbing and/or electrical cabling. With the exception of the floor heating, most (if not all) of the technical infrastructure should be easily replaceable thanks to the combination of technical ducts, modular technical ceilings and inspection hatches. All of this without the need for breaking or drilling.

Multiple Inspection Manholes

All of the flexibility above is not limited to the inside of the house, it also applies to the exterior. Thanks to multiple inspection holes, integrated with the outside of the foundations, outside access remains simple at all times. Also, thanks to the double throughput (i.e. two outside concrete walls) the access remains watertight under all circumstances so that your cellar remains dry for decades.

Supporting Beams with Modular Walls

All non-supporting walls are replaced by a combination of heavy supporting beams and lightweight modular walls. Although more expensive, they provide a significant increase in future modularity. Also, due to the type of construction, they have far better acoustic properties (less contact noise) than their brick-wall counterparts.

Modular Electrical Cabling

Modular electrical cabling implies much more than some cables in lowered technical ceilings. Modularity consists out of (a) wider cable tubes enabling cables to be replaced easily, (b) spare cable in the ceiling, (c) star-based cabling with individual connections, (d) individual connection-boxes per room, (e) all lighting cables must be useable for mains sockets (i.e. 2,5mm² instead of 1,5mm²) for future flexibility, (f) 4 instead of 8 outlets per segment for future expandability, (g) spare segments per room, (h) a modular approach instead of a room-based approach, (i) a power closet with room for expandability, ...

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Van Welleman Villas®

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