

CLT | Special

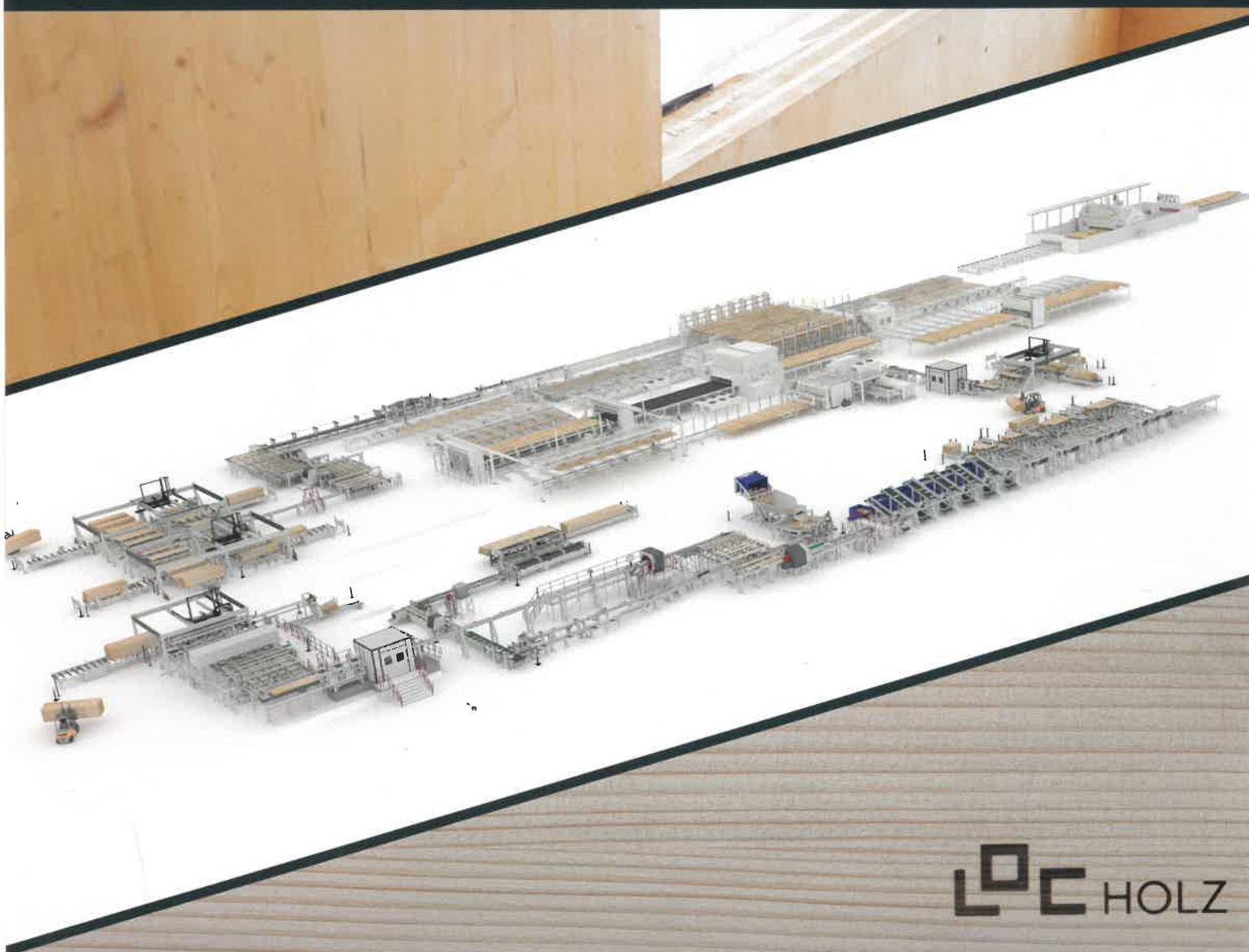
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Wall-floor anchors for houses in furniture-grade quality

The Walco L wall-floor anchors by Knapp, Euratsfeld/AT, are used for manufacturing solid wood and wooden post-and-beam walls. These anchors allow for prefabricating wall modules with finished surfaces. And after assembly, they are no longer visible.

The connectors are also used by Ulrich Zeh from Maierhöfen/DE. The timber construction company from the Allgäu region utilizes them in the construction of solid wood houses. The company brushes the inner surface of its multi-layer dowelled timber walls to furniture quality in-house, thus delivering products in surface quality. This procedure eliminates the need for visible tie rods in the installation of wall and ceiling elements. Reason enough for Ulrich Zeh to opt for the two-part Walco L anchors from Knapp.

Mounting the wall-floor anchors

The Walco L wall connector is milled into the outer face during prefabrication and nailed up with ribbed nails. Its counterpart is dowelled onto the concrete slab below the mounting sill; this is done on site. When mounting the walls, the lower portion of the wall bracket overlaps with the upper part of the floor bracket.

The pre-drilled holes in the wall bracket are used to drill through the floor bracket which is subsequently bolted down with thread-cutting screws. The screws serve as connectors between the two elements, absorbing tensile and shear forces. For wall-to-wall connections that are subjected to wind loads and tensile and shear forces, Ulrich

Zeh uses the Walco V 80/VK connector solution which allows for faster assembly of the wall elements. Reworking, such as screwing or plugging of assembly openings, becomes obsolete.

Compact information and further details

According to Knapp, the Walco L and T anchors are suitable for moving walls on pre-assembled floor sills. They can also be mounted directly on the floor slab, and in addition, they are suitable as a system solution for closed prefabricated walls in timber frame construction. The Walco V wall connectors can also be combined.

Wall modules can be completely prefabricated in the factory. Due to the anchoring in the wall axis, the components can absorb high tensile and shear forces; tie rods and angle brackets guarantee the stable anchorage of the wall modules.

Transporting the modules is easy because there are no protruding parts, and the assembly time is reduced by up to 20 minutes per wall element.

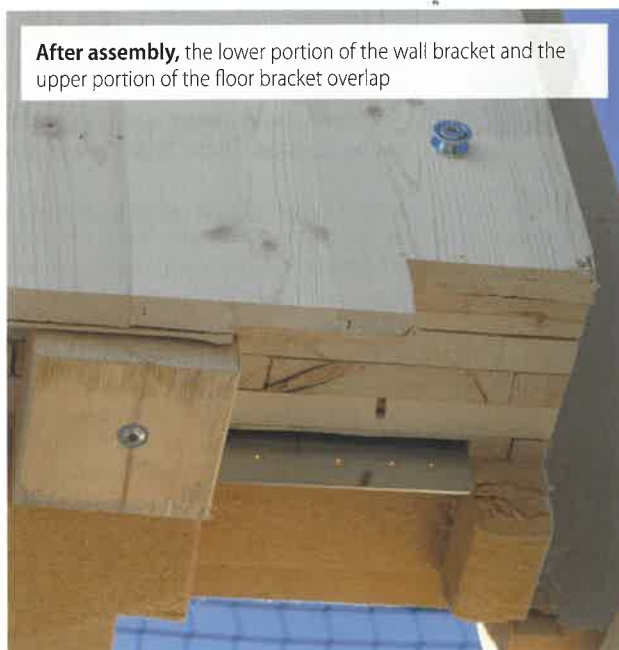
Knapp shares further details on the Walco product line in their specially produced 2 1/2-minute video which can be found on the company's dedicated YouTube channel.



For quick assembly, the wall bracket is equipped with predrilled holes



Knapp's Walco connectors were used for building this wooden house



After assembly, the lower portion of the wall bracket and the upper portion of the floor bracket overlap



The installation hole is plugged with wood-fiber insulation at the end