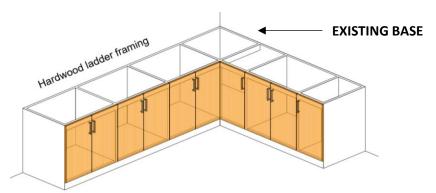
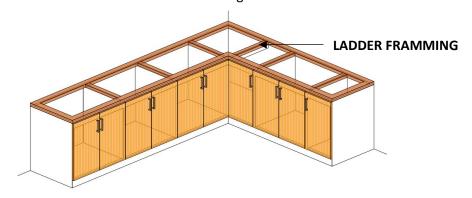
KITCHEN INSTALLATION

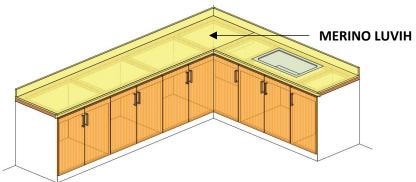
When installing the Merino Luvih Blocks, the sufficient ventilation on both sides of the panel must be ensured for expansion and contraction.



Different temperatures or moisture levels in front and behind of the countertop can lead to warping of the Blocks. For this reason, the panels should be placed on a sufficiently stable substructure so that air circulation is guaranteed on the front and back of the panel. If the base cabinets are not strong enough, they must be reinforced with additional elements. The base cabinets and substructures should also be aligned.

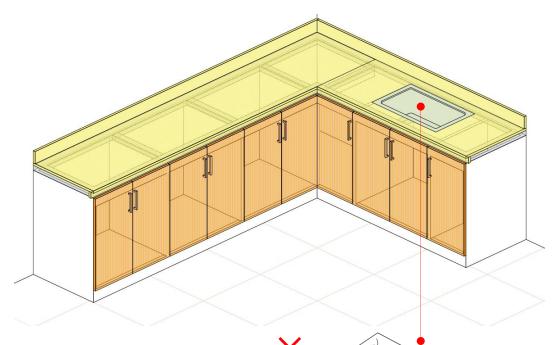


Any differences in height should be compensated, for example with a suitable spacer, In order to properly "ventilate" the Luvih Blocks, it is necessary to design the kitchen/worktop base cabinets with an open top so that an air exchange can take place.



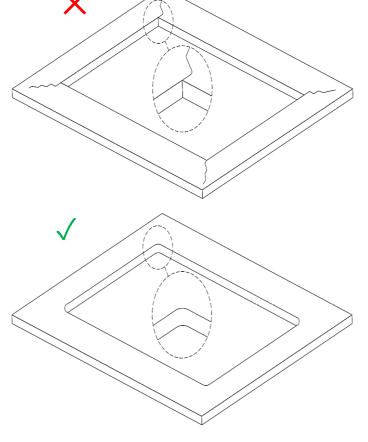
CUT-OUTS

Sharp corners: Cut-outs and apertures, for example for switches, ventilator grills or access openings, always have to be rounded, since sharp corners can lead to the formation of cracks.



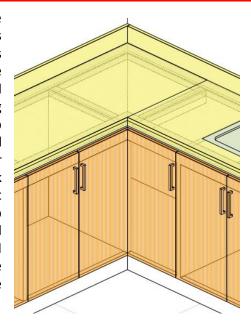
Smooth and curved corners:

Inside corners should be cut with an inner radius of at least 15 mm. All edges must be smooth, free of cracks and notches. Grooves and rebates also have to be rounded in order to avoid notch cracks. Cut-outs can be made directly with a router or predrilled with an appropriate radius and then sawn out from drill hole to drill hole. Sufficient expansion gaps must be allowed for integrated components.



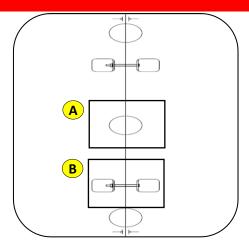
WORKTOP JOINTS

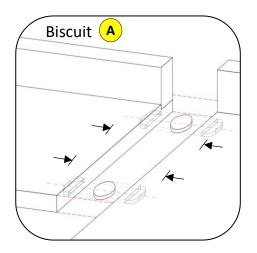
When making corner joints, it must be ensured that the base cabinets are aligned and any height differences should be compensated for using spacers. Worktop joints must be made using suitable connection means. Please note when using glue for worktop joints that a wall thickness of at least 3 mm is maintained after subtracting all tolerances. Suitable connection means for worktop joints are for example dowels, grooves, biscuits, special millings etc. Please follow our recommendations for drilling blind holes vertically and parallel to the Luvih Block surface. Using only glue for worktop joints is not recommended! Glued corner joints and worktop extensions should always be supported with mechanical connections. When making worktop joints connections to other furniture parts, walls, etc., please observe the necessary expansion space for a tension-free movement of the Merino Luvih Blocks.

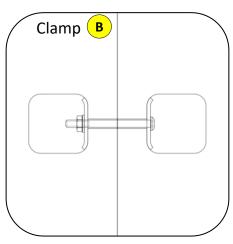


BISCUIT JOINTS

Biscuits used to join pieces of wood are oval-shaped, thin, dried, and compressed of wood, compact or metal, often made with beech wood. A tool known as a biscuit joiner cuts a slot into each of the two pieces of LUVIH edges to be joined, adds glue to the slots, inserts the biscuit into one and then the other to join the pieces together. Metal clamps are used to press and hold the two pieces of LUVIH together to allow the glue to dry and the connection to set. The biscuit joiner aligns the slots precisely so that when the two pieces of LUVIH are clamped together, the edges align perfectly, and the top surface plane is maintained.



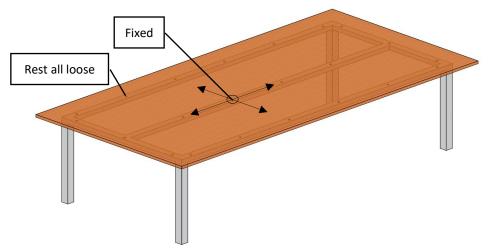




MECHANICAL FASTENING - SLIDING AND FIXED POINT

Due to the material characteristics of Merino Luvih Block, the fastening points must be designed as fixed and loose points.

Fastening: The Luvih Bloc should be fastened from the middle outwards. The Luvih Blocks can be fastened in different ways, but due to the material characteristics it is always important to ensure that they are installed in a tension-free manner. The fastening can be done mechanically with screws from the bottom. The screws can either be screwed directly into the panel or screwin sleeves with external and internal threads can also be used.

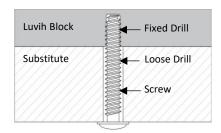


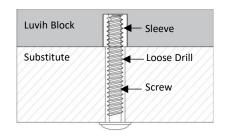
Should the panels be fastened directly by screw or if a screw-in sleeve is used, it should be noted that the Luvih Blocks must be pre-drilled one thread smaller than the screw or sleeve and that a wall thickness of at least 2.0 mm is maintained after subtracting all tolerances. Suitable screws are those with a metric thread and a flat head. Do not use counter sunk screws. If necessary, use washers/rosettes.

Please observe our recommendations for drilling blind holes vertically and parallel to the LUVIH.

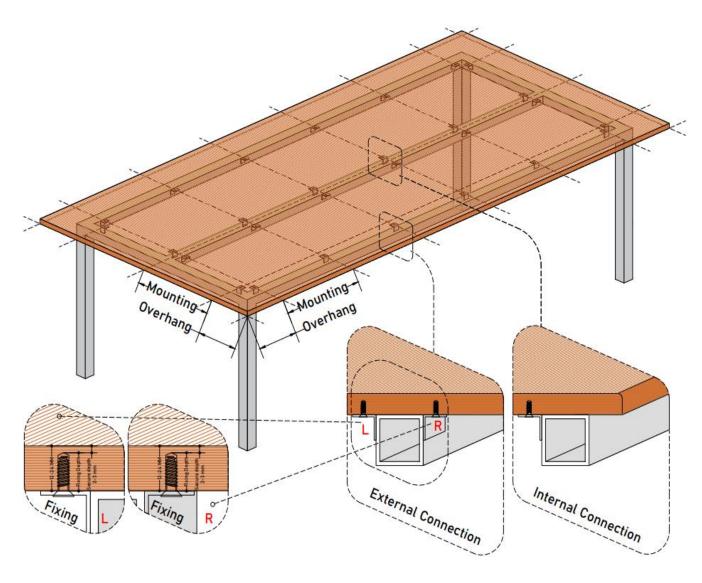
Fixed Point: The fixed point serves the uniform distribution (halving) of the swelling and shrinkage movements. The drill hole for the fixed point in the Merino Luvih Block should have the same diameter as the screw. For each block screw points, fixed point are placed as close as possible to the center of the panel element. All other fastening holes in substitute are designed as loose points.

Loose Point: Based on how much space is needed for expansion, the diameter of the drill hole in the substructure/ substitute should be that much larger than the diameter of the fastening screw. The screw head should always cover the drill hole. The fastening means is to be set such that the Block can move. The screws must not be too tight. The center of the hole in the substructure must match the center of the hole in the Luvih Block. Drill with a centering device.





CONCEALED MOUNTING - L ANGLE AND POINTLESS SS SCREW MOUNTING



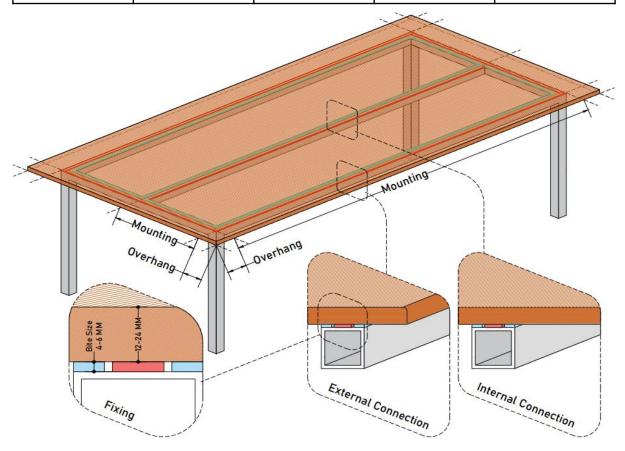
LUVIH Mounting on MS, SS metal and Hardwood wooden frame using the heavy duty (6-8 MM thick) SS nut/screw and the washer at the bottom of the frame and tighten it into the pre-holed LUVIH through the L brackets and frame properly.

Fixing slots: Due to the climatic changes in the environment for expansion and contraction in LUVIH compact, make sure that the drilling hole diameter in main frame should be 2-3 mm larger then the assembly SS bolt/screw and the same size pre-hole should be done in LUVIH. eg: Nut thickness is 6 mm \varnothing so the 8-9 mm \varnothing hole has to be drilled in main frame and (bolt size) 6 mm \varnothing pre-hole has to be done in LUVIH.

Note: Mounting distance between the nut fixings should be equally divided under the dimensions mentioned in the table.

CONCEALED MOUNTING – ADHESIVE AND DOUBLE SIDED ADHESIVE TAPE

Luvih Thickness (MM)	Silicone & Double Tape Size (MM)	Silicone & Tape Bite Thick (MM)	Mounting Dist. (MM)	Overhang Dist. (MM)
12 MM	12 MM Min	2 - 4 MM	300 MM – Full Length	75 MM Max
16 MM	12 MM Min	2 - 4 MM	300 MM – Full Length	100 MM Max
18 MM	12 MM Min	2 - 6 MM	300 MM – Full Length	125 MM Max
24 MM	12 MM Min	2 - 6 MM	300 MM – Full Length	150 MM Max



LUVIH Mounting on MS/SS metal frame using PU silicone sealant and VHB double sided adhesive tape.

The recommended PU silicone is good source for bonding both LUVIH and metal together which is the long life solution for the LUVIH.

VHB double sided adhesive tape: The VHB is used beside the silicone sealant for giving the extra bonding strength to both LUVIH & Metal frame for long lasting strength.

Note: Always use 304 or higher grade SS frame for rendering the LUVIH, also the MS frame can be used and it should be stain resistant coated to avoid debonding/ separation between the LUVIH & metal frames.