

Installation tolerances

Table 1

Straightness of base (backing wall) (picture 1 and 2)

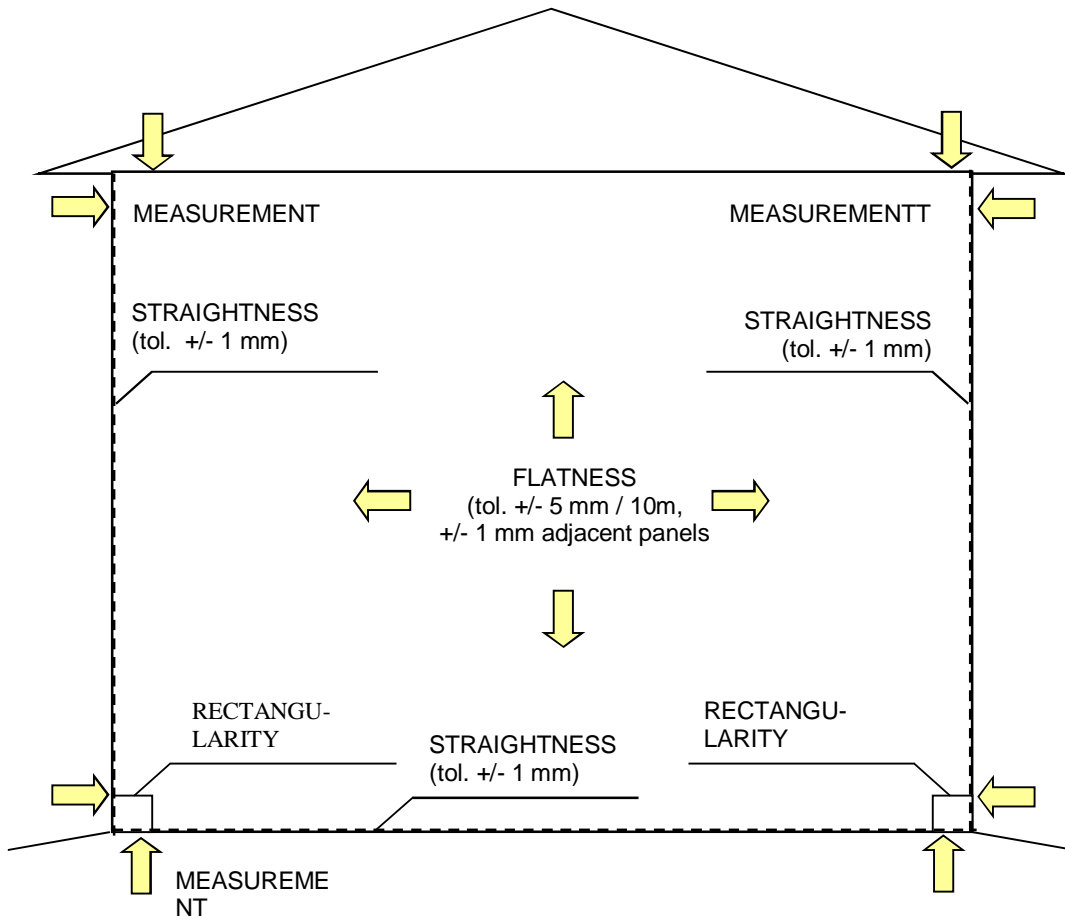
Deviation between subframes at one panel/lamella/design -length	±1 mm
Flatness	±5 mm / 10 m
Deviation from vertical direction from the theoretical line parallel the plane	±5 mm
Deviation from vertical direction from the theoretical line perpendicular the plane	± 2 mm (corners (±1 mm

Check the straightness of base (backing wall)

Check the facade's (backing wall) dimensions on the worksite that they are as according to the project designs, especially if the backing wall is other than Ruukki Sandwich –panel. Ensure that the backing wall surface is flat and even and dimensions as in the project designs and within the required tolerances.

- The vertical support studs (sub-frame) fastened on the outside face of a backing wall provide the fixing base for the rainscreen panels or cladding lamellas. The system principle installation detail gives the specific tolerances required from the sub-frame installed (below).
- The vertical support studs can be fastened directly onto the backing wall if the backing wall dimensions are within the required tolerances.
- In case of backing wall dimensions are outside the required tolerances, then adjustment needed between the vertical support studs and the backing wall. For this purpose for example the system Adjustable fasteners can be used.

Picture 1

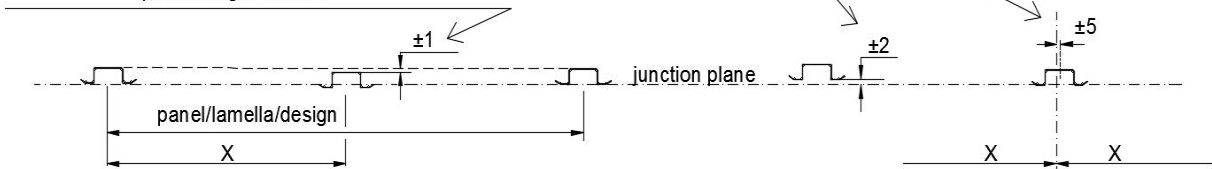


Picture 2

SUBFRAME (BASE) TOLERANCES:

Deviation from vertical direction: ± 5 mm from theoretical line parallel the plane
 ± 2 mm from theoretical line perpendicular the plane (e.g. plinth/eave)
 - at corners tighter: ± 1 mm

Deviation between subframes at one panel/lamella
 - profile length ± 1 mm



Prior to component delivery and installation, on-site measurement shall be taken and ensured that the facade can be realized as according to the project designs.

- Especially pay attention for the vertical dimensions at corners if the rainscreen panels are used around there or corner lamellas are used. deviation of the vertical dimensions on the sub-frame is maximum ± 1 mm.

- In case of adjustable fasteners are used ensure that the adjustment allowance of the fastener allows installation as in the project designs.
- Ensure also possible openings locations and dimensions on the façade that they are as in the project designs.
- If the measurements deviate from those indicated in the project designs or the tolerances exceed the given limits, you should contact the project's designer immediately.

Please note that the components will be delivered to the worksite according to the measurements specified in the designs. There will be major problems in installation if the site measurements differ from those in the designs.

Table 2

Tolerances of metal sheet panels from the vertical and horizontal lines (picture 3)

Tolerances of metal sheet panels from the vertical and horizontal	1 mm
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Picture 3

Dimensional deviations of panels from the planned dimension network

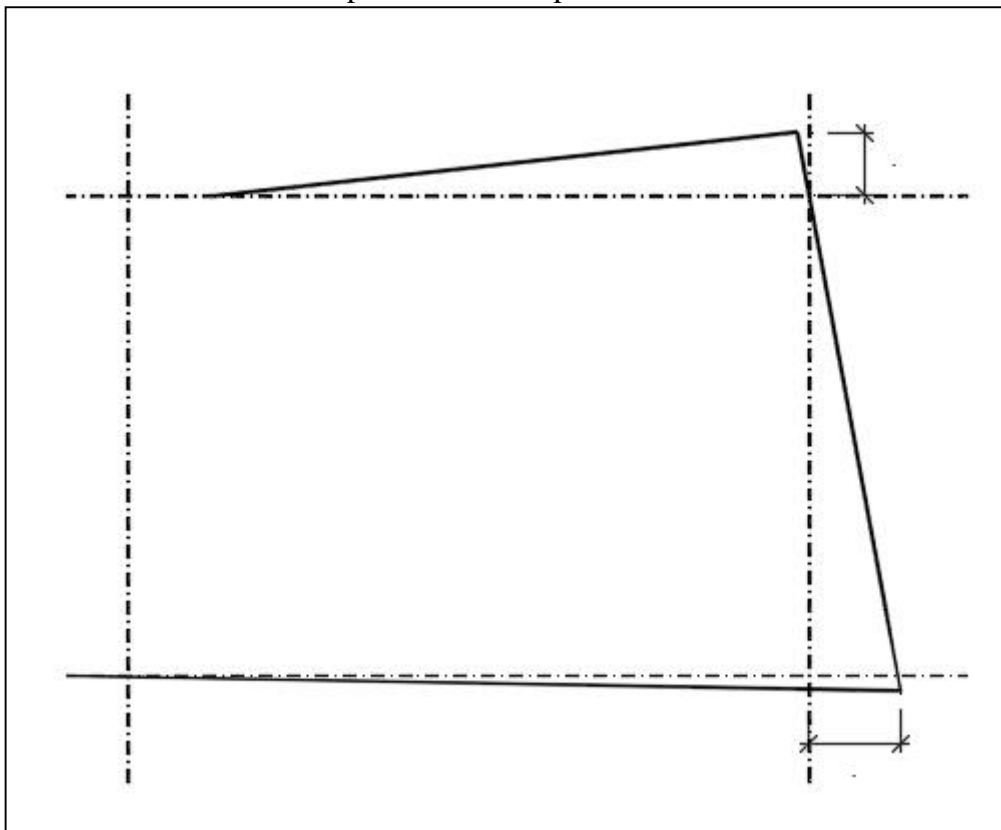


Table 3

Protrusion tolerances of panel cladding (picture 4)

butt joint	1 mm
open joint	1 mm

Picture 4
 Protrusion

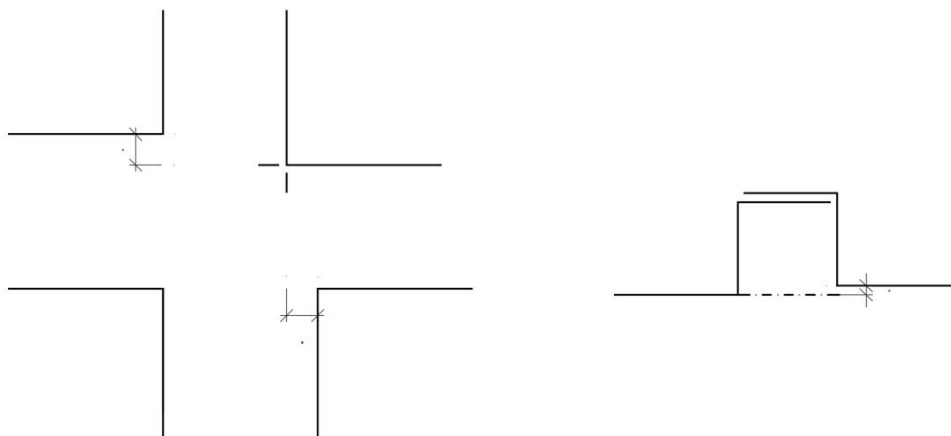


Table 4
 Tolerances of the width of a panel joint (picture 5)

tolerance of joint width of a butt joint	± 1 mm
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NOTE: The protrusion tolerance of butt joints of interior claddings ± 1 mm. The tolerances of open joints are the same in both internal and external claddings.

Picture 5

