

PAROC[®] Built-on[™] facade solutions

Corrugated steel sheet, Cassettes, Timber, Glass, Ceramic tiles, Bricks



COMBINE PANELS WITH OTHER CLADDING MATERIALS. CERAMIC TILES, GLASS, TIMBER OR BRICKS, WHEN COMBINED WITH ELEGANT STEEL-FACED PAROC PANELS, CREATE NEW POSSIBILITIES FOR FACADE DESIGN.



PAROC panels

Due to the unique strength properties of PAROC panels, you can easily attach additional cladding materials directly to panel facing. You can choose panel types AST® T, AST® S, AST® F and AST® E with

- Declared cross panel tensile strength > 0.1 MPa
- Exterior steel sheet thickness ≥ 0.5 mm

Design of panel structures

Panels can be installed horizontally or vertically. Maximum allowed panel deflection is depending on cladding material (to be checked with cladding manufacturer) as follows:

- Corrugated steel sheet L/100
- Timber L/100
- Glass L/400
- Ceramic tiles L/400
- Render L/400
- Cassettes L/100... L/400 according to the diagram beside

Temperature between panels and cladding has to be checked case by case.

Dead load of the additional facing structure is to be taken into account in the dimensioning of panel fixing. Check also if the wall structure has fire requirements according to local fire regulations. If so, please always contact Paroc Panel System.

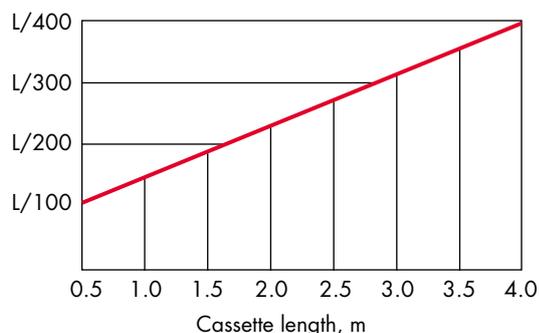
If the additional cladding is not water tight horizontal and vertical exterior panel joints need to be sealed.

Dimensioning of suspensions

Suspensions are dimensioned according to Paroc Panel System's Technical Guide, section Suspensions.

Define maximum line loads (pressure, tension and shear) for hat profiles. Maximum loads for fasteners as well as dimensioning rules and amount of fixings into panel surface are dimensioned using coefficient C_{p1} according to EN 1991-1-4_wind.

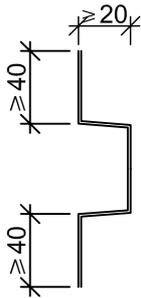
If separate suspensions, such as signs, are fixed with penetrating fixing screws and support plates on both sides of panels, they have to be dimensioned for tension and pressure on both sides of the panels.



Allowed deflection for PAROC panels with cassette cladding

Hat profiles

Hat profiles may be made of zinc coated steel or aluminum with thickness ≥ 0.9 mm. Profile height shall be at least 20 mm. Recommended support width is 40 mm/side and minimum allowed support width is 25 mm/side.



Maximum distance between hat profiles is 600 mm when installed lengthways the panels, and 1200 mm when installed across the panels. In the edge zones the distance is always 600 mm.

When profiles are installed across the panels, recommended profile length is 2380 mm or 3580 mm. Align profile joints with panel joints.

When hat profiles are installed along with panel length, they shall have moving joints at maximum c/c 6000 mm.

Fixing of hat profiles

Cladding material + hat profiles

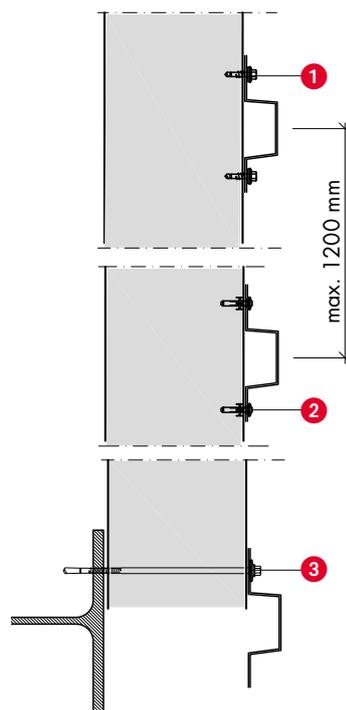
$\leq 45 \text{ kg/m}^2$

Hat profiles are fastened with SFS Intec's Bulb-Tite/Peel rivets to panels' exterior steel sheets. In case screws are used there shall be predrilled holes in the hat profiles or alternatively the screws can have a thread-free zone under the screw head for about 3 mm and a washer with rubber sealant.

Cladding material + hat profiles

$> 45 \text{ kg/m}^2$

An additional securing system is to be built by hanging profiles vertically from load-bearing floors/beams with stainless steel fasteners through the panel. Always contact Paroc Panel System in these cases.



- 1 In case screws are used there shall be predrilled holes in the hat profiles or alternatively the screws can have a thread-free zone under the screw head for about 3 mm and a washer with rubber sealant.
- 2 Recommended fixing type is SFS-Intec's Bulb-Tite rivet.
- 3 Fixing to frame through the panel is recommended where it is possible.

Fixing of timber battens

When using pressure impregnated timber containing aggressive substances, a butyl rubber seal has to be applied between the panels and timber beams. Note also that pressure impregnated timber must be fixed with stainless steel fasteners.

Fixing of cladding on materials

Cladding materials are fixed to hat profiles according to manufacturer's instructions.

Paroc is the leading manufacturer of energy-efficient insulation solutions in the Baltic Sea region. The cornerstones of our operations are customer and personnel orientation, constant innovation, profitable growth and sustainable development. Paroc products include building insulation, technical insulation, marine and offshore insulation, sandwich panels and acoustic products. The products are manufactured in Finland, Sweden, Lithuania and Poland and as of 2013 also in Russia. Paroc has sales and representative offices in 14 European countries.



Building Insulation offers a wide range of products and solutions for all traditional building insulation. The building insulation products are mainly used for the thermal, fire and sound insulation of exterior walls, roofs, floors and basements, intermediate floors and partitions.



Sound absorbing ceilings and wall panels for interior acoustic control, as well as industrial noise control products, are available in the range.



Technical Insulation products are used for thermal, fire and sound insulation in building techniques, industrial processes and pipe work, industrial equipment and ship structures.



Sandwich panels are lightweight steel-faced panels with a core material of stone wool. Paroc panels are used for façades, partitions and ceilings in public, commercial and industrial buildings.

Warranty disclaimer

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