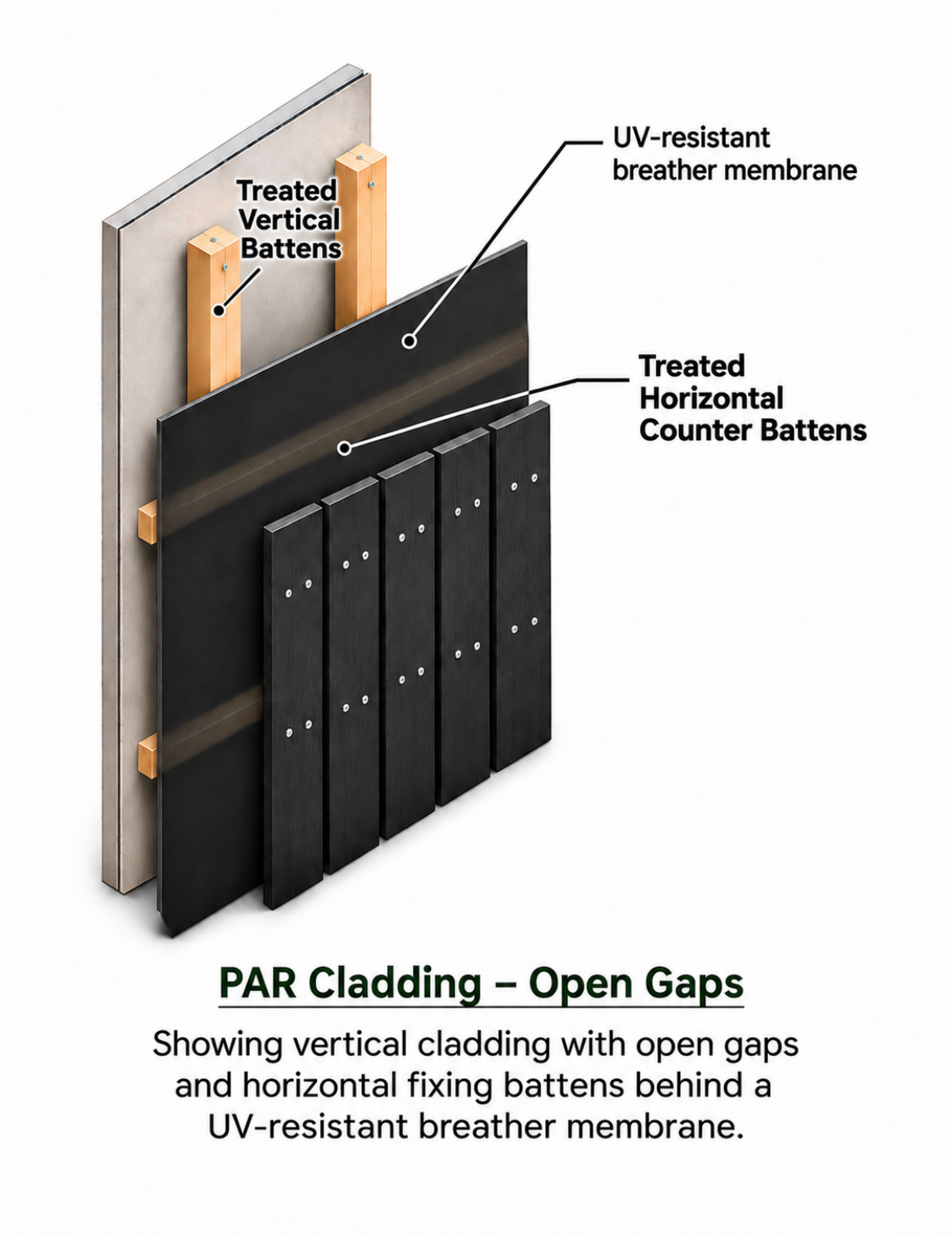
Open-Joint PAR Cladding

Vertical charred timber cladding - fixing and ventilated wall assembly



Typical wall build-up (inside to outside)

Structural wall / sheathing → UV-resistant breather membrane → treated vertical battens → treated horizontal counter battens → open-joint PAR cladding.

Diagram is illustrative only. Components, dimensions, fixing design and membrane specification must be confirmed for the project.

01 Before installation

Check the design and materials

• Confirm the approved façade design, substrate, wind loads, fire requirements and local building regulations.

• Use a UV-resistant breather membrane expressly approved by its manufacturer for the proposed open-joint width and percentage of exposed area.

• Check the supplied PAR board dimensions and finish. Set the nominal open joint to **6 mm**, unless the approved project detail specifies otherwise.

• Allow approximately 10–15% extra material for cuts and installation waste, adjusted to the project layout.

Store and handle the boards

• Store horizontally on level supports, in a sheltered, dry, ventilated location, at least 200 mm above ground.

• Allow boards to acclimatise for several days as site conditions require; avoid prolonged storage in sealed packaging.

• Lift boards rather than dragging them. Protect the charred or brushed face from abrasion, tools and debris.

• Install only when the boards and supporting wall are dry.

02 Build the supporting system

Step 1 - UV-resistant breather membrane

Fit the membrane to the prepared external wall in accordance with the membrane manufacturer’s instructions. Seal laps, penetrations and junctions using compatible components. Keep the membrane continuous behind the open joints, with appropriate drainage and flashing details.

Step 2 - Treated vertical battens

Install straight, dry, treated vertical battens over the membrane and anchor them to the load-bearing structure using suitable fixings. Maintain a continuous drainage and ventilation path. Batten dimensions and anchor spacing must be selected for the actual wall and wind load.

Step 3 - Treated horizontal counter battens

Fix treated horizontal counter battens **on top of** the vertical battens. These support the vertical PAR boards. Typical fixing-support centres are **400–600 mm**, subject to board dimensions, wind loading and the approved design. Prefer chamfered upper edges and ensure that horizontal members do not block drainage or airflow.

Ventilation and moisture control

Provide a continuous ventilated cavity, generally at least 20–30 mm as appropriate to the system, with air inlets at the bottom and outlets at the top. Protect openings with suitable insect mesh without restricting airflow. The earlier INFLAMED guidance recommends keeping cladding at least 300 mm above finished ground level; verify the applicable project detail.

03 Fix the PAR boards

Step 4 - Set out the boards

Establish a level starting datum and vertical alignment. Distribute the boards and joints evenly across the elevation. Maintain a consistent **6 mm open gap** between boards; allow for timber movement and check the approved details at corners, openings and abutments.

Step 5 - Face-fix with stainless steel screws

• Use exterior-grade **A2 stainless steel screws** in normal exposure; consider **A4 stainless steel** for coastal or highly corrosive exposure.

• Use **two screws per board at each horizontal counter-batten fixing support**, positioned symmetrically and with sufficient edge distance for the species and profile.

• Keep fixing rows straight and consistent using a laser or string line. Do not overdrive screws or crush the charred surface.

• Pre-drill near board ends, for hardwoods and where splitting is possible. Confirm screw length, diameter, embedment and edge distances with the project fixing design.

Step 6 - Finish junctions and inspect

• Treat freshly cut ends with the appropriate compatible finish where required.

• Keep water-shedding flashings, cavity openings and drainage paths clear.

• Remove swarf and construction debris promptly without abrasive cleaning.

• Check joint consistency, fixing alignment, board stability and membrane visibility through the gaps.

Ongoing care

Inspect periodically for loose fixings, blocked ventilation openings, trapped moisture and finish wear. Colour and texture may change naturally with weather exposure. Follow the maintenance instructions for the specific species and finish.

Installer checklist

■ Approved façade design ■ Correct UV-rated membrane ■ Ventilated cavity ■ Treated double-batten arrangement ■ 6 mm joints ■ Two screws at every support ■ Clear drainage and ventilation ■ Final inspection

Important: This is general installation guidance, not an engineered construction detail or certification. The architect, façade designer and installer must verify substrate, membrane suitability, fire performance, wind loading, fixings, movement allowances and compliance with applicable regulations.