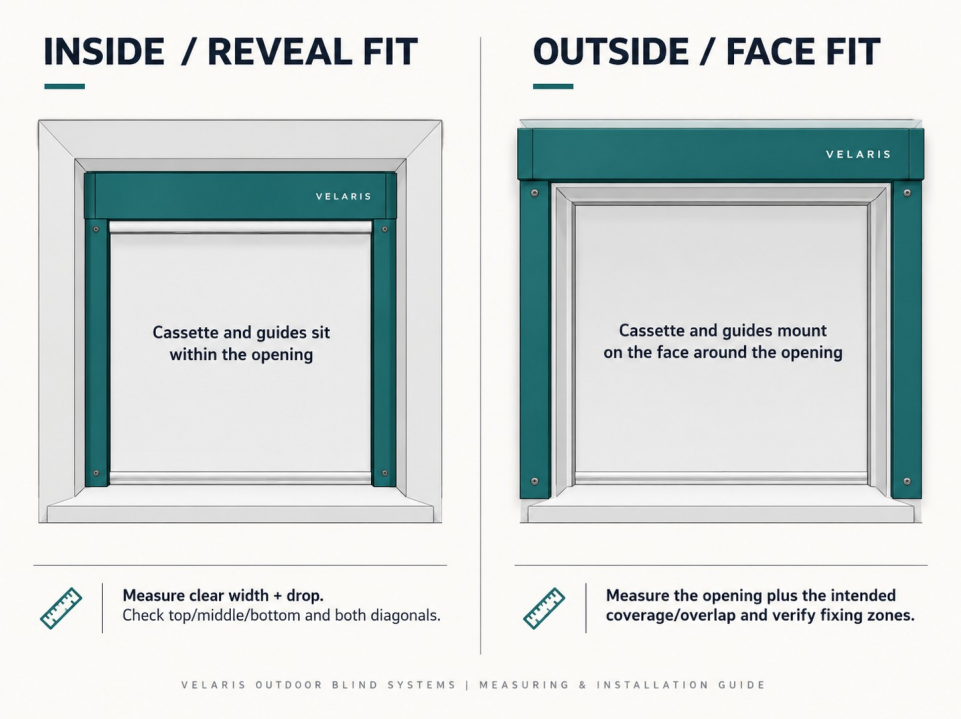
VELARIS

OUTDOOR BLIND SYSTEMS

MEASURING & INSTALLATION GUIDE

V7.3 / V8 · Reveal fit · Face fit · Measuring · Installation · Commissioning



Installer use This guide is written for the purchaser's chosen local installer, builder or project team. Apollo NZ Global is supply-only. Local installation, site measurement, structural adequacy, fastener selection, electrical work and local compliance remain with the purchaser's project team.

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Contents

Current-document rule Use the confirmed project order, supplied component pack, motor/control documentation and any project-specific drawings ahead of this general guide if there is any conflict. Do not infer fixing sizes, wind ratings, deductions or electrical details from a different Velaris model or an older project.

A general installation method - not a substitute for project-specific engineering

Velaris Outdoor Blind Systems are track-guided screen systems used to manage sun, glare, privacy, airflow and weather exposure across residential, hospitality and commercial openings. The V7.3 and V8 pathways cover different opening ranges and hardware classes. The final system is selected around the actual opening, fabric, controls, exposure and supporting structure.

- ☐ Confirm the exact Velaris model and supplied components before starting work.
- ☐ Confirm that the opening and supporting structure match the approved project dimensions.
- ☐ Use substrate-appropriate fasteners selected by the installer/engineer. This guide intentionally does not prescribe universal fastener diameters, embedment depths or centres.
- ☐ Electrical connection, isolation and testing must be completed by a suitably qualified person where required by local law.
- ☐ Use safe access equipment and lifting methods appropriate to cassette length and weight. Large-format V8 assemblies may require multiple installers or lifting assistance.
- ☐ Do not install a damaged cassette, bent guide, torn fabric, damaged cable or component that does not match the project order.

> **Important** Velaris is a screen system, not a structural wall, security shutter or guaranteed watertight enclosure. Mesh is not waterproof. Severe-weather operating instructions are project-specific.

Recommended installation team preparation

- Tape/laser measure and steel rule
- Long spirit level or laser level
- Plumb laser / plumb line
- Square and diagonal measurement capability
- Non-marking clamps and packers/shims
- Drill/driver and substrate-appropriate bits
- Installer-selected fasteners suitable for the confirmed substrate
- Safe access equipment / platform
- Electrical test equipment where applicable
- Clean gloves and non-abrasive cleaning cloths

Identify the parts before you measure or drill

Component	Purpose / check
Cassette / headbox	Houses the roller, fabric and operating components. Must be level, supported and matched to the project opening.
Side guides / tracks	Keep the fabric edge guided. Must be plumb, parallel and aligned to the cassette.
Fabric / screen	Mesh, clear PVC or blockout pathway as ordered. Keep clean and protected from sharp edges.
Bottom rail	Weights and stabilises the lower edge. Must seat without twisting or binding.
Motor / manual drive	Depends on ordered configuration. Do not assume control type from another project.
Sensors / smart control	Selected projects may use Tuya, wind/rain sensors or other approved controls. Follow the supplied control manual.
Fixings / brackets	Project and substrate dependent. Confirm fixing zones and local structural requirements before drilling.

Current model-selection reference

Model	Published planning range	Notes
V7.3-100	3.0-4.3 m wide · 1.6-3.0 m drop	100-class cassette; integrated LED option published.
V7.3-110	3.0-4.8 m wide · 2.4-3.5 m drop	Published maximum area up to 12 m²; LED option available.
V7.3-120	3.0-6.0 m wide · 1.7-5.0 m drop	Published maximum area up to 15 m²; LED option available.
V7.3-130	3.0-6.0 m wide · 2.6-5.5 m drop	Published maximum area up to 15 m².
V8-100	10-15 m wide · 2.5-3.0 m drop	Published case 100 × 120 mm with 70 mm tube.
V8-120	10-15 m wide · 3.5-5.0 m drop	Published case 120 × 140 mm with 85 mm tube.
V8-140	10-15 m wide · 5.8-7.0 m drop	Published case 140 × 160 mm with 85 mm tube.

Selection only These ranges are a planning reference, not a universal order formula. Final dimensions, area, fabric, tube, motor, tracks, fixing and exposure are confirmed together for the actual project.

Measure the structure, not just the empty space

☐ Identify the exact intended plane of the cassette and side guides.

☐ Confirm whether the installation is reveal/inside fit or face/outside fit.

☐ Check whether posts, walls, beams or soffits are straight, sound and capable of taking the system loads.

☐ Look for cladding build-ups, gutters, flashings, handles, balustrades, doors, downpipes, lights, heaters and other obstructions.

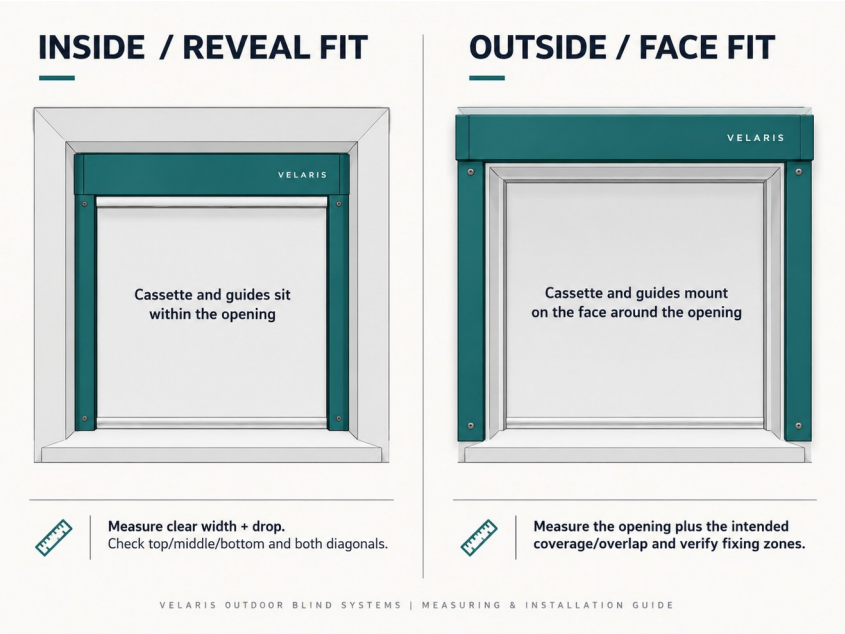
☐ Confirm where power/control cabling can enter without interfering with the roller or guide path.

☐ Check the full travel path of the bottom rail and screen - including furniture, steps, deck edges and sloping floors.

☐ Photograph the opening straight-on, from each corner and at the fixing surfaces. Include a tape measure in at least one reference image.

Measure twice The manufacturing size must come from the agreed order method. Do not casually “take 5 mm off” or apply a remembered deduction from another blind system. Record the raw opening measurements first.

Reveal fit vs face fit



Reveal / inside fit

The cassette and guides sit within the opening/reveal. This usually gives the cleanest integrated appearance, but it places more importance on the opening being square, the reveal being deep enough for the selected hardware and the side fixing surfaces being straight and continuous.

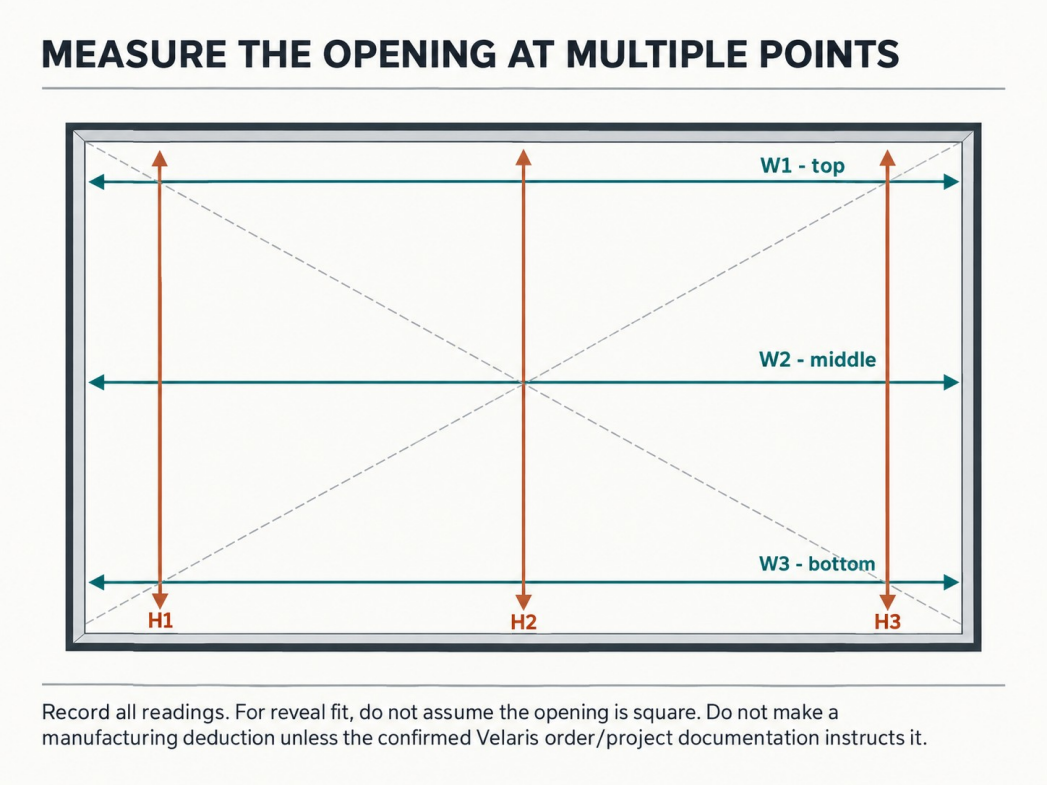
- Measure clear width at top, middle and bottom.
- Measure clear drop at left, centre and right.
- Measure both diagonals.
- Check reveal depth and any obstructions.
- Confirm that the side guides can be fixed to sound material over their full required height.
- Record the smallest and largest readings; do not choose a deduction until the project/order method is confirmed.

Face / outside fit

The cassette and guides mount to the face around the opening. This can help when the reveal is shallow, tapered or obstructed, and it can provide additional coverage around the opening. The installer must confirm that the mounting face is flat, continuous and structurally suitable.

- Measure the clear opening first.
- Then establish the intended top, left and right coverage/overlap.
- Check that the cassette will clear fascia, soffit, door heads, gutters and other projections.
- Confirm both side guides have suitable fixing faces from top to bottom.
- Check the finished bottom rail position relative to deck/floor level and any step or fall.

How to measure an outdoor blind opening correctly



1. **Record the fit type -** Write REVEAL FIT or FACE FIT before taking dimensions.

2. **Take three widths -** Measure at the top, middle and bottom between the exact fixing/reference surfaces.

3. **Take three drops -** Measure left, centre and right from the exact cassette reference line to the intended lower position.

4. **Check diagonals -** Measure corner-to-corner both ways to identify out-of-square openings.

5. **Check depth and projection -** For reveal fit, record usable reveal depth. For face fit, record

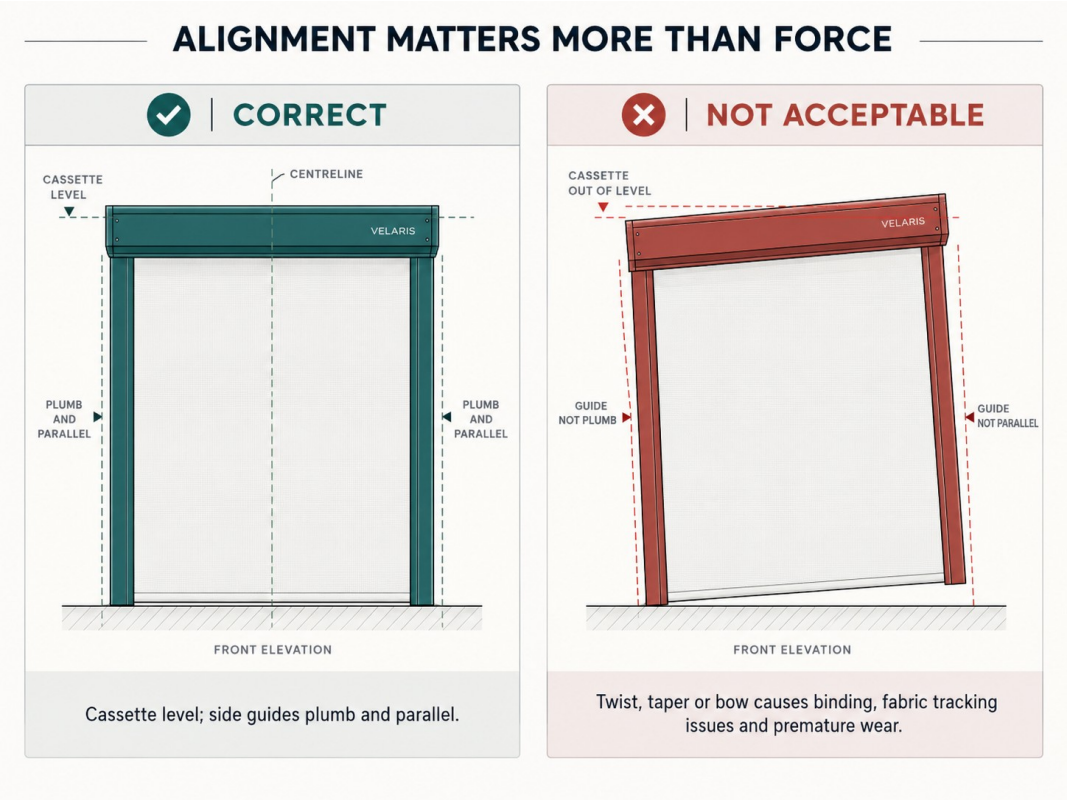
available face width and any projections.

6 **Record obstructions -** Mark handles, gutters, downpipes, light fittings, balustrades, deck edges, steps and adjacent doors/windows.

7 **Photograph and label -** Label each opening uniquely: e.g. B01 North, B02 West. Keep photos and dimensions matched.

8 **Do not self-deduct -** Provide the raw measurements and use only the confirmed Apollo/order-sheet deduction method for the selected system.

A blind can be made square; the building opening may not be



A tapered or twisted opening can cause the guides to converge, the fabric to bind, the zip edge to load unevenly, or the bottom rail to sit crooked. The installer should establish a true installation plane even where packers/shims or local substrate correction are required.

☐ Cassette reference line level across full width.
☐ Left and right guide reference lines plumb.
☐ Guide lines parallel to each other.
☐ Guide faces not bowed inward or outward.
☐ Top corners square enough for clean guide-to-cassette alignment.
☐ Fixings land in sound structure - not just cladding skin unless the approved detail specifically allows it.

Do not force alignment If guides need force to meet the cassette or the opening is materially outside the approved dimensions, stop and resolve the substrate/measure issue before operating the blind.

Plan electrical access before the cassette is fixed

☐ Confirm motor side and cable exit/entry before lifting the cassette.
☐ Confirm isolator/power route and whether cabling will be concealed or surface-run.
☐ Keep electrical connections accessible for service where required.
☐ Do not pinch motor leads behind cassette brackets or guide tracks.
☐ For Tuya or sensor-equipped projects, complete physical installation and safe motor limits before smart-control pairing.
☐ Weather sensors are not a substitute for project-specific severe-weather operating instructions.
☐ Any mains-voltage connection must be completed by a suitably qualified person where local law requires.

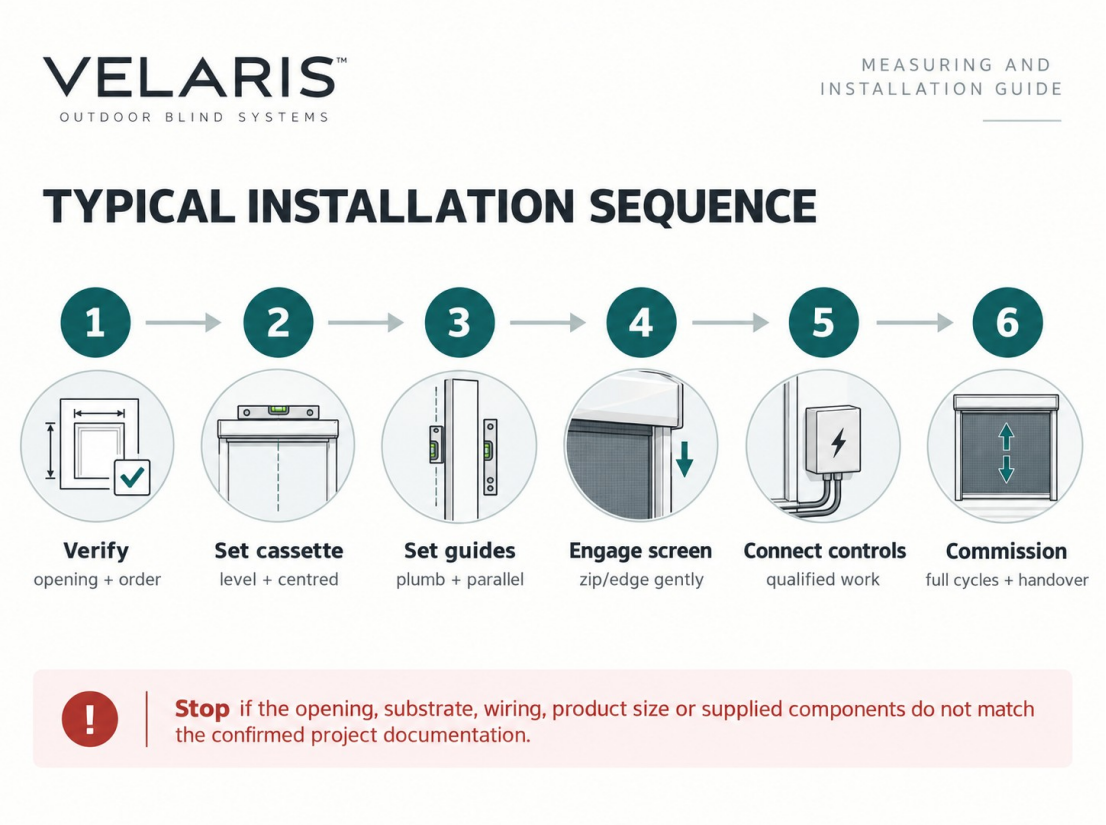
> **Control documentation** Programming procedures can vary by motor/controller. Use the control instructions supplied with the project rather than assuming a generic button sequence.

Open the crate carefully and verify before drilling

Check	Pass criteria
Project ID / opening ID	Components match the correct opening and confirmed order.
Cassette	No transit distortion, dents affecting operation or damaged end components.
Guides	Straight, correct length/hand and free from impact damage.
Fabric	Correct type/colour; no tears, deep creases, cuts or contamination.
Bottom rail	Straight and complete.
Motor / manual parts	Match ordered control pathway.
Sensors / remotes	Present where ordered; batteries/accessories checked.
Opening	Dimensions and fixing surfaces still match the approved measure.
Substrate	Installer has confirmed suitable fixing method and local requirements.

Stop-work trigger If the product dimensions do not match the approved opening, do not modify the cassette or guides on site without approval. Photograph the issue and resolve it before continuing.

Typical Velaris installation workflow



1 **Set out -** Transfer the approved cassette and guide positions to the structure. Re-check level, plumb and clearances.

2 **Prepare fixings -** Confirm substrate-appropriate fasteners, packers/shims and safe drill locations. Avoid hidden services.

3 **Install cassette/headbox -** Lift safely, support across the span, set level and secure without twisting the cassette.

4 **Install side guides -** Fit guides to the intended cassette interfaces; set plumb and parallel before fully tightening.

5 **Engage screen edge -** Follow the supplied guide/zip arrangement. Keep the fabric supported and clean; never pull the edge into a misaligned guide.

6 **Check bottom rail -** Confirm free movement and even seating at the intended lower position.

7 **Connect operation -** Complete manual drive or qualified electrical/control connection as applicable.

8 **Set limits / commission -** Run short controlled movements first, then full cycles once alignment is proven.

9 **Finish and hand over -** Check fixings, covers, tracks, cleaning, remotes/sensors and operating instructions.

11 · CASSETTE / HEADBOX

Install the cassette level and without twist

☐ Mark the confirmed cassette reference line and fixing zones.
☐ Use enough installers/lifting support to prevent the cassette sagging or twisting during placement.
☐ Check level across the full width before final tightening.
☐ Pack behind brackets/fixing points where required to maintain a straight cassette line; do not pull a bowed wall straight by overtightening the product.
☐ Keep motor/control cable clear of pinch points and sharp edges.
☐ Confirm guide interfaces/end caps remain square and undamaged after fixing.
☐ Re-check overall width and guide-start positions before installing both side tracks.

> **Large-format V8** Long cassettes need disciplined lifting and support. The installation team should plan handling method and access before the product is unpacked.

Plumb, parallel and in the same plane

1. **Offer up both guides -** Confirm correct side/hand and guide orientation before drilling.
2. **Fix lightly first -** Set initial fixings so each guide can still be adjusted.
3. **Plumb each guide -** Use a laser or long level over the full drop.
4. **Check parallelism -** Measure between guides at several heights. The guides must not converge or flare.
5. **Check the plane -** Sight/laser across the faces so one guide is not set materially forward of the other.
6. **Pack rather than distort -** Use suitable packers/shims behind fixing points where the substrate is uneven.
7. **Tighten progressively -** Secure from top down while repeatedly re-checking plumb and spacing.
8. **Clean the track -** Remove swarf, dust and packaging debris before operating the screen.

No universal fastener schedule Concrete, masonry, structural steel, aluminium posts and timber framing require different fastening solutions. Fastener type, diameter, embedment and spacing are site/project responsibilities unless a project-specific fixing detail is supplied.

Protect the screen and let alignment do the work

☐ Use clean gloves when handling light fabrics, clear PVC or finished rails.

☐ Keep the fabric away from sharp corners, swarf, drill bits and abrasive ground surfaces.

☐ Engage the guided/zip edge according to the supplied track arrangement. If resistance is high, stop and check guide alignment.

☐ Do not use tools to lever or force the fabric edge into a track.

☐ Keep the bottom rail level as the screen is first lowered.

☐ Check that the rail clears deck/floor irregularities and does not contact furniture or door hardware.

☐ For clear PVC, allow the material to hang naturally before judging minor packing creases; do not apply heat unless the supplied product instructions specifically allow it.

Commission slowly before full-speed use

First movement

- Clear all people/tools from the travel path.
- Operate only a short distance first.
- Watch both guide edges simultaneously where possible.
- Stop immediately if the fabric bunches, a guide flexes, the cassette moves, or the bottom rail becomes noticeably uneven.

Full-cycle checks

- Run the blind fully down and up several times.
- Listen for rubbing, knocking or repeated drag points.
- Confirm the bottom rail finishes evenly.
- Confirm the fabric remains centred and tension appears even.
- Check cassette/guide covers and visible fixings remain secure.
- Set motor limits only using the supplied motor/controller procedure.
- Test remotes, wall controls, Tuya integration and sensors only if included in the project.

> **Before smart pairing** A blind should operate mechanically and electrically correctly before app/sensor setup. Smart control cannot compensate for poor alignment.

Installer completion & customer handover

☐ Blind runs through at least three clean full cycles.
☐ Cassette is level; guides are plumb and parallel.
☐ Bottom rail seats evenly without binding.
☐ All covers/end caps are fitted and secure.
☐ Tracks are clean and free from drill swarf/debris.
☐ Controls/remotes are labelled where there are multiple blinds.
☐ Customer understands safe operation and severe-weather retraction requirements.
☐ Customer knows mesh is not waterproof and the blind is not a structural/security wall.
☐ Customer has project-specific motor/control documentation and any warranty/care information.
☐ Installer has photographed final installation and retained opening/fixing records.

Good ownership starts with clean tracks and sensible weather use

- Keep side guides free of leaves, insects, grit and other debris.
- Clean fabric gently using methods compatible with the supplied fabric. Avoid aggressive solvents or abrasive tools.
- Inspect after strong weather for loose covers, guide movement, damaged fabric edges or debris in tracks.
- Coastal installations require more frequent fresh-water rinsing and inspection because salt accumulation can affect finishes and moving parts.
- Retract before forecast high winds or airborne-debris risk unless written project-specific operating instructions explicitly state otherwise.
- Do not operate an iced, obstructed or visibly damaged blind.
- For motors/sensors, follow the supplied manufacturer/controller maintenance information.

Common symptoms and first checks

Symptom	Likely first checks	Action
Blind binds part-way	Guides not parallel; debris; edge not engaged correctly	Stop. Clean tracks, verify plumb/parallel and re-check edge engagement.
Bottom rail is uneven	Cassette/guide alignment; fabric tracking; obstruction	Stop before repeated cycling. Verify level, plumb, travel path and tracking.
Fabric pulls to one side	Guide spacing/plane; cassette level; uneven obstruction	Do not force. Recheck geometry and fixings.
Motor runs but blind does not travel normally	Mechanical obstruction or drive/control issue	Isolate where appropriate; do not continue repeated operation. Follow supplied motor/control diagnostics.
Blind will not respond	Power/isolation, remote battery, pairing/control state	Verify safe power supply and supplied control procedure; use qualified electrical support where required.
Screen flaps excessively	Exposure/wind condition, openness, operating position	Retract if conditions exceed the project operating guidance. Do not treat the blind as a storm shutter.
Water passes through/around screen	Mesh/opening interfaces are not watertight	Expected for mesh. Reconfirm the intended weather-control outcome and fabric pathway.
Clear PVC looks creased after unpacking	Packing/temperature memory	Allow to hang naturally; do not apply unapproved heat or chemicals.

Velaris opening measurement sheet

Field	Record
Project / customer	
Site address	
Opening ID	
Fit type	Reveal / inside ☐ Face / outside ☐
Orientation / exposure	
Width - top (W1)	
Width - middle (W2)	
Width - bottom (W3)	
Drop - left (H1)	
Drop - centre (H2)	
Drop - right (H3)	
Diagonal A	
Diagonal B	
Reveal depth / face-fixing width	
Top fixing substrate	
Left fixing substrate	
Right fixing substrate	
Bottom condition / floor fall	
Power / motor side	
Fabric outcome	Mesh ☐ Clear PVC ☐ Blockout ☐ To confirm ☐
Controls	Manual ☐ Motor ☐ Hybrid ☐ Smart/sensors ☐
Photos recorded	Yes ☐ No ☐
Notes / obstructions	

Installer completion sheet

Check	Complete / notes
Opening ID / product matches order	
Cassette level	
Guides plumb and parallel	
Guide spacing checked at multiple heights	
Fixings/substrate verified by installer	
Screen edge runs cleanly	
Bottom rail level / travel clear	
Manual/motor operation checked	
Motor limits set to supplied procedure	
Remotes / wall control tested	
Smart control / sensors tested where supplied	
Minimum three full cycles complete	
Tracks cleaned / swarf removed	
Care / severe-weather instructions handed over	
Final photos recorded	
Installer / company	
Date	
Signature	

REFERENCE

Velaris installer principles - one-page summary

☐ MEASURE: three widths, three drops, two diagonals, reveal/face depth and all obstructions.

☐ DECIDE: reveal/inside fit or face/outside fit before manufacturing dimensions are confirmed.

☐ VERIFY: project order, model, fabric, controls, motor side, fixing zones and substrate before drilling.

☐ ALIGN: cassette level; guides plumb, parallel and in the same plane.

☐ DO NOT FORCE: misalignment should be corrected at the substrate/fixing level, not overcome by pulling the product into place.

☐ COMMISSION: short first movement, then multiple full cycles before control/sensor handover.

☐ PROTECT: retract in severe wind/debris conditions unless project-specific instructions state otherwise.

☐ REMEMBER: Apollo NZ Global supplies the system and product information; local measurement, installation, electrical work, engineering and compliance remain with the purchaser's project team.

Support For product/order clarification, use the current Velaris Outdoor Blind Systems page, current project quotation and Technical & Specifier Centre at apollonzglobal.com.

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