RESTREPO STANDARD

Pre-Wall. Pocket. Reveal.

Shades

Mapped to the Restrepo Standard.

EDITION
v1.0 · 2026 · Internal & client distribution only

VOLUME
03 · Companion Reference

00 WHY THIS EXISTS

The pocket is the architecture. Set it at framing or live with the gap forever. Motorized shades succeed or fail before the first roller ever ships. They succeed when the pocket is dimensioned for the chosen system at framing, when the bracket rough-in is set to the manufacturer's mounting plate, when the light gap is held to half an inch on Palladiom wired and to the bracket projection on Wire-Free, and when the QS link, QSPS panel, and Class 2 SELV separation are roughed in to the wiring guide. They fail when any of those decisions slides downstream to the installer at trim-out. This reference codifies the upstream discipline in the language we use on site so the framer, drywaller, painter, electrician, and AV integrator are working from the same dimensions, the same tolerances, and the same wire counts.

This document supplements Lutron manufacturer instructions — it does not replace them. For listed assemblies (Sivoia QS Triathlon, Sivoia QS Wireless, Palladiom wired and Wire-Free, Drapery Lite, Architectural Drapery, HomeWorks QSX), the published Lutron installation and wiring & programming guides govern.

Code is the floor.
Standard is the ceiling.

01 POCKET · RECESS · LIGHT GAP

CODE INTENT (PARAPHRASED)

Motorized shades are a framing-stage decision. The pocket is sized to the shade family, the recess depth holds the bracket plus the chosen fascia or fabric reveal, and the light gap is the manufacturer tolerance — not a finish opinion. If the pocket is wrong at framing, the shade is wrong forever. Field-cutting a recess to fit a shade ordered before framing is sized off the shade spec, never improvised in drywall.

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- Sivoia QS Triathlon recess: per Triathlon Tech FAQ — pocket depth and width sized by shade family before drywall is closed.
- Palladiom wired light gap: ½ in. on the head, ½ in. each side — confirmed against framing tolerance, not drywall finish.
- Palladiom Wire-Free pocket: 6 in. minimum room-side clearance for IR/RF envelope and battery sleeve, per App Note #802.
- Drapery Lite pocket: 1.06 in. minimum width × 1.3 in. minimum depth per spec sheet 085334c — pinch-pleat capacity per Sivoia QS data.
- Mount a Triathlon WIDR shade outside spec'd recess depth — rollup clearance is published per width — only with written direction.
- Fascia options confirmed at framing: architectural, fabric-wrapped, or exposed — each has its own bracket footprint and projection.
- Where the bracket cannot hold tolerance, re-frame the bracket face. Never trim the bracket face to fit the pocket.

> **FIELD CHECK · POCKET**
> Stand a 24 in. straightedge across the pocket opening at three points along the run. If it rocks on either side or fails to seat flat, the pocket is out of plane — re-frame before drywall closes the wall, not after.

02 BRACKET ROUGH-IN & STUD BLOCKING

CODE INTENT (PARAPHRASED)

Brackets fasten to wood, not to drywall. The Restrepo standard sets stud blocking at framing for every bracket pair on every motorized shade — Triathlon, Sivoia QS Wireless, Palladiom wired, Palladiom Wire-Free, Drapery Lite. Bracket projection is published per system; the framer sets the rough-in to the bracket's published mounting plate, not to a generic header. Top-treatment installers walk every bracket location at framing before drywall.

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- Sivoia QS Triathlon: WIDR roller up to 144 in.; bracket spacing per Triathlon WIDR install guide 045612 and the architectural fascia drawing.
- Sivoia QS Wireless: Roller 64 / Roller 100 EDU — wired 24 V system per spec 086126; bracket projection per spec.
- Palladiom wired: brackets project per spec 085560l; light gap is dimensioned from the bracket face, not the fascia face.
- Palladiom Wire-Free: bracket projection 0.625 in. maximum per spec 085708k — pocket and recess sized to this number, not field-trimmed.
- Drapery Lite: bracket spans up to 216 in. per spec 085334c; intermediate bracket required per published table — coordinate at framing.
- Battery D-cell count on Triathlon and Wire-Free: confirmed against published tables before bracket installs — drives service interval.
- Photo log every bracket and stud-blocking location before drywall. Required for the as-built and warranty record.

> **FIELD CHECK · BRACKET ROUGH-IN & STUD BLOCKING**
> At framing, push every bracket location laterally with two fingers. If you feel any deflection in the blocking, add another stud or sister the existing one. A bracket that flexes at install will telegraph as fascia drift on every cycle.

03 QS LINK · QSPS · J-BOX DISCIPLINE

CODE INTENT (PARAPHRASED)

Wired Lutron shades run on QS link and QSPS panel power, both Class 2 SELV. The wiring & programming guide 045314 governs link topology, panel sizing, and j-box placement. The Restrepo standard sizes the QSPS for full-draw plus integration overhead, terminates QS link at the bracket location, and never bonds Class 2 SELV to mains conductors. Fish counts are walked at framing — not estimated at trim-out.

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- QS link: 18 AWG minimum, daisy-chain, T-tap, or Y-configuration per spec 045314 — terminations at the bracket, not at the wall.
- QSPS panel power supply sized against load: shade EDUs at full draw, plus integration overhead — never nameplate-only sizing.
- Junction box QSPS-J-1-35V used for individual Sivoia QS Wireless Roller 64 shades where panel power is impractical — per spec 085705c.
- Wire length per gauge published in guide 045314 — no field improvisation past the published tables.
- Class 2 SELV/PELV separation maintained against line voltage in every back-box and conduit run.
- Service loops at the bracket: one full coil minimum, dressed inside the bracket sleeve, never under the fascia.
- Wireless main repeater (RR-MAIN-REP-WH) line-of-sight tested at framing — satellite repeaters added where RF is shadowed, per spec 086126.

> **FIELD CHECK · QS LINK**
> Pull each QS link drop and measure twice: once at the panel, once at the bracket. If the run exceeds the published 18 AWG length, upsize to 16 AWG before drywall closes — there is no field path to upsize after.

04 COORDINATION — FRAMER · DRYWALL · PAINTER

CODE INTENT (PARAPHRASED)

Shades cross three trades the moment the wall closes. The framer sets the pocket and the bracket blocking. The drywaller returns to the bracket face — never trims the bracket. The painter cures the surface before any shade is hung. Walkthroughs at framing, at rock, and at paint are non-negotiable on every Restrepo project. Substitutions require written direction from the lighting designer or the audio designer — never verbal.

RESTREPO STANDARD

- Framer walkthrough: pocket dimensions, bracket projection, and stud blocking confirmed against the shade schedule before close-in.
- Drywall walkthrough: returns dimensioned to the bracket face — drywall never cuts into the bracket footprint or the light gap.
- Painter walkthrough: cure window committed in writing before any shade hangs. No motorized shade installs into wet paint.
- Specifier alternates — Lutron Serena, Architectural Drapery — only on the lighting plan, never as a field substitution.
- Field-cut a pocket to fit a shade ordered before framing is sized off the shade spec, with written direction from the designer.
- Substitutions to non-Lutron motor or controller mid-job because the bracket landed late: only with written direction.
- Photo log every framing, rock, and paint walkthrough — included in the warranty record and turnover package.

> **FIELD CHECK · COORDINATION — FRAMER**
> At each walkthrough, count brackets against the shade schedule, not against memory. A missing bracket at framing is a missing shade at trim-out — no retrofit path holds the same light-gap tolerance.

05 COMMISSIONING, LIMITS & SPARES

CODE INTENT (PARAPHRASED)

Commissioning is where the discipline becomes the experience. Limits are set per Triathlon WIDR setup 045507 and Sivoia QS wiring & programming 045314. Hembar alignment is verified across grouped openings, out-of-alignment shades reset and not accepted. Astronomic time-clock and scene programming live in the QSX as-built. Spare batteries, fabric color samples, and one spare D-cell sleeve per project delivered at closeout.

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- Limits set per shade with installation guide 045612 (Triathlon WIDR) or 045507 (Triathlon Lite); QS wireless per programming guide 045314.
- Hembar alignment verified across grouped openings — out-of-alignment shades reset, not accepted.
- Astronomic time-clock and scene programming logged per zone in the QSX as-built database — owner walkthrough demonstrates every scene.
- RF link tested from every shade to its repeater under closed-cell condition, not open-rack. Battery cycle test logged.
- Burn-in 24 h moderate-cycle on every battery shade before owner walkthrough — exposes any motor or end-stop fault before turnover.
- Spare batteries, fabric color samples, and one spare D-cell sleeve per project delivered at closeout — minimum 5% of each fabric used.
- Owner walkthrough: every Pico, Caséta, RadioRA 3, or HomeWorks keypad button labeled, programming exported to Lutron cloud or QSX export.

> **FIELD CHECK · COMMISSIONING, LIMITS & SPARES**
> Run every shade in the project end-to-end at the design scene from a single Pico or app command. If any shade lags, mistracks, or fails to align with its neighbor, do not turn the system over — debug, reset, and re-test before owner walkthrough.

06 APPLIES-TO MATRIX

SITUATION	CODE	RESTREPO ACTION
Sivoia QS Triathlon (battery roller & cellular)	§01	Pocket sized per Triathlon Tech FAQ. WIDR up to 144 in. Standard pocket depth set at framing.
Sivoia QS Wireless (wired AC/LV roller)	§01	24 V Roller 64/100 EDU; bracket projection per spec 086126. QS link required.
Palladiom wired	§01	½ in. light gap on the head and each side, dimensioned from the bracket face per spec 085560l.
Palladiom Wire-Free	§01	Bracket projection 0.625 in. maximum. Pocket 6 in. minimum room-side clearance per App Note #802.
Drapery Lite (Sivoia QS Wireless)	§01	Track up to 216 in. Pocket 1.06 in. × 1.3 in. minimum per spec 085334c.
QS link & QSPS panel	§03	18 AWG minimum, Class 2 SELV/PELV, sized for full-draw plus integration per guide 045314.
Wireless main repeater	§03	RR-MAIN-REP-WH line-of-sight tested at framing; satellites added where RF is shadowed.
HomeWorks QSX integration	§04	All new construction; existing HomeWorks QS upgrade per App Note #840.

07 QC GATE · MATCHES THE REFERENCE CARD

- ☐ Pocket & recess dimensions verified
- ☐ Light gap held to spec (½ in. on Palladiom wired)
- ☐ Bracket stud-blocking present at framing
- ☐ QS link or RF path tested before drywall closes
- ☐ QSPS sizing & j-box placement match design package
- ☐ Hembar alignment verified across grouped openings
- ☐ Limits programmed at bracket before fascia install
- ☐ Spare batteries & fabric samples delivered at closeout

08 CITATIONS & FURTHER READING

Lutron — Sivoia QS Triathlon Spec (085333)
Battery-powered roller and cellular shade up to 144 in. WIDR — wireless RF, no QS link.
https://www.lutron.com/TechnicalDocumentLibrary/0853333.pdf

Lutron — Triathlon WIDR Install Guide (045612)
WIDR roller installation, bracket spacing, fascia coordination, limit programming.
https://www.lutron.com/TechnicalDocumentLibrary/045612.pdf

Lutron — Triathlon Setup Guide (045507)
Lite/standard Triathlon setup, limit programming, Pico and Caséta pairing.
https://www.lutron.com/TechnicalDocumentLibrary/045507.pdf

Lutron — Triathlon Tech FAQ
Recess depth and pocket sizing per shade family — manufacturer reference.
https://www.lutron.com/TechnicalDocumentLibrary/Triathlon_Tech_FAQ.pdf

Lutron — Sivoia QS Wireless System (086126)
24 V Roller 64 and Roller 100 EDU, panel power, repeater topology, bracket spec.
https://www.lutron.com/TechnicalDocumentLibrary/086126.pdf

Lutron — Sivoia QS Wireless Programming (045314)
QS link wire counts, QSPS sizing, daisy-chain/T-tap/Y topology, limit programming.
https://www.lutron.com/TechnicalDocumentLibrary/045314.pdf

Lutron — Sivoia QS Drapery Lite Spec (085334c)
Pinch-pleat drapery up to 216 in. — pocket 1.06 in. × 1.3 in. minimum.
https://www.lutron.com/TechnicalDocumentLibrary/0853343.pdf

Lutron — Palladiom Shading Wired (085560l)
Wired Palladiom — ½ in. light gaps, bracket projection, fascia options, finish list.
https://www.lutron.com/TechnicalDocumentLibrary/3691046.pdf

Lutron — Palladiom Shading Wire-Free (085708k)
Wire-Free Palladiom — 0.625 in. max bracket projection, battery cycle, pocket clearance.
https://www.lutron.com/TechnicalDocumentLibrary/3691047.pdf

Lutron — App Note #802 Wire-Free Doors
Pocket clearance and IR/RF envelope on Wire-Free Palladiom — door application notes.
https://www.lutron.com/TechnicalDocumentLibrary/AppNote802.pdf

Lutron — App Note #840 QSX Migration
Existing HomeWorks QS upgrade to HomeWorks QSX — wire-type changes and field method.
https://www.lutron.com/TechnicalDocumentLibrary/AppNote840.pdf