

FIELD MANUAL · VOLUME 03

Shades. Pre-Wall. Standards.

Lutron Sivoia QS, Palladiom and HomeWorks QSX shading for luxury residential construction. The pocket is the architecture.

PREPARED FOR

Lighting Designers · Framers · Drywall · Painters · GCs · Owner's Reps

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MANIFESTO

The pocket is the architecture.

Set it at framing or live with the gap forever. A motorized shade succeeds or fails before the first roller ever ships. It succeeds when the pocket is dimensioned for the chosen system, when the bracket rough-in is set to the published mounting plate, when the light gap is held to half an inch on Palladiom wired and to the 0.625 in. bracket projection on Wire-Free, and when QS link, QSPS panel, and Class 2 SELV separation are roughed in to the wiring guide. It fails when any of those decisions slides downstream to the installer at trim-out — by then the bracket is the wall, the wall is the bracket, and the light gap is whatever the framer happened to leave.

Lutron-only by design: Sivoia QS Triathlon (battery roller and cellular up to 144 in. WIDR) where wireless RF is the right answer; Sivoia QS Wireless (Roller 64 / Roller 100 EDU on 24 V wired QS) where panel power and link reliability govern; Palladiom wired where the design demands a half-inch light gap and an architectural fascia; Palladiom Wire-Free where conduit is impossible and a 0.625 in. maximum bracket projection is the budget. Drapery is Sivoia QS Wireless Drapery Lite up to 216 in., or Architectural Drapery where a heavier hand is specified. New construction lives in HomeWorks QSX; existing HomeWorks QS migrates per Application Note #840. Every shade has a pocket, a bracket, a reveal, and a wire path — and every one of them is a framing-stage commitment.

HOW TO USE THIS MANUAL

Sections are numbered §01–§13. Each section opens with a kicker, explains the operating principle, lists the standards, and ends with field rules and inspection callouts. The drapery and specialty geometry chapter (§08) is treated as its own discipline because pocket geometry, intermediate brackets, and pinch-pleat capacity behave differently from a roller. The QC gate at the back of the manual matches the gate on the one-page reference card.

CALLOUT LEGEND

FIELD RULE	A non-negotiable rule applied on site, every job.
BEST PRACTICE	Restrepo standard above code minimum. Default unless waived in writing.
DO NOT	Defects we refuse to ship. Pull and rework, no exceptions.
INSPECTION	What the lighting designer or owner's rep checks at QC.

NOTE	Context, citation, or product clarification.
SPECIFICATION	A number, tolerance, or model that must be matched exactly.

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CONTENTS

Table of Contents

Five parts, thirteen sections, one QC gate. Linked to bookmarks in this PDF.

01	Operating Principles	p. 7
02	Approved Platforms — Restrepo Lutron Baseline	p. 8
03	Without Written Direction — Do Not Default	p. 9
04	Sivoia QS Triathlon	p. 13
05	Sivoia QS Wireless — Wired	p. 14
06	Palladiom Wired	p. 15
07	Palladiom Wire-Free	p. 16
08	Drapery, Honeycomb & Specialty	p. 19
09	QS Link, QSPS & Wire Management	p. 22
10	HomeWorks QSX Integration	p. 23
11	Drywall, Plaster & Painter Coordination	p. 26
12	Commissioning, Limits & Programming	p. 27
13	Specifier Alternates, Closeout & Spares	p. 28



PART 1

Operating Principles

Sections 01-03 — pre-wall mindset, the Lutron baseline, what we refuse

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§ 01

Operating Principles

PRE-WALL IS A FRAMING-STAGE DECISION

Motorized shades are framing-stage decisions performed at finish. The pocket geometry, the bracket rough-in, the light gap, the QS link drop, and the QSPS panel circuit are committed when stud bays are open, before drywall, before paint. Field-cutting a recess to fit a shade ordered before framing was sized off the shade spec is a recovery move, not a method. There is no retrofit path that holds the same light-gap tolerance as a properly framed pocket.

Restrepo treats every shade zone as a coordinated framing detail. The lighting designer publishes shade locations, models, and fascia direction. The framer leaves a pocket sized to the shade family with stud blocking behind every bracket pair. The electrician pulls QS link to the bracket, leaves a service loop inside the bracket sleeve, and tags the run by zone. The drywaller returns to the bracket face and never trims into it. The painter finishes the pocket interior to the manufacturer-approved finish and starts the cure clock at final coat. Only then is the shade installer's hand on the roller.

FIELD RULE

FIELD RULE — No retrofit pockets

Every motorized-shade location is committed at framing. We do not cut into a finished header or jamb to install a Triathlon, Sivoia QS Wireless, or Palladiom shade. If the program changes after rock, the room reverts to the surface-mount or alternate documented in §13.

INSPECTION STANDARD

INSPECTION — Framing walkthrough

Lighting designer walks the framed shell with the GC, the electrician, and the Restrepo PM before insulation. Confirm every shade location matches the lighting plan, every pocket is sized to the right shade family, every bracket has stud blocking, and every QS link drop is pulled and tagged.



§ 02

Approved Platforms — Restrepo Lutron Baseline

FOUR MOTOR PLATFORMS, ONE DRAPERY, ONE ECOSYSTEM

The Restrepo baseline is four motorized-shade platforms — Sivoia QS Triathlon, Sivoia QS Wireless, Palladiom wired, Palladiom Wire-Free — and one drapery platform, Sivoia QS Wireless Drapery Lite. All five live inside the Lutron ecosystem (Sivoia QS link, RadioRA 3, Caséta, HomeWorks QS, HomeWorks QSX). The baseline is chosen so that every standard residential program (battery roller, wired roller, architectural light-gap, conduit-impossible retrofit, wide-span drapery) is covered without leaving the Lutron family. Anything outside the baseline is a specifier-driven alternate and is treated as such in §13.

Sivoia QS Triathlon (battery-powered roller and cellular up to 144 in. WIDR) is the wireless RF default where panel power is impractical or the design calls for a battery system. Sivoia QS Wireless (24 V Roller 64 and Roller 100 EDU) is the wired QS platform where link reliability and integration depth govern; the QSPS panel powers the EDUs and the QS link routes scenes from the processor. Palladiom wired delivers a half-inch light gap and architectural fascia for high-design rooms. Palladiom Wire-Free delivers the same fascia language with a 0.625 in. maximum bracket projection and no conduit. Drapery Lite handles pinch-pleat drapery up to 216 in.; Architectural Drapery is the heavier specifier alternate for wider spans or higher fabric weights.

BEST PRACTICE

BEST PRACTICE — One platform per zone

Pick one shade platform per zone and stay with it. Mixing Triathlon (battery RF) and Sivoia QS Wireless (wired QS) inside the same room produces audible motor-sound differences and split scene-programming surfaces. Where the program spans multiple platforms, the integration designer documents per-platform scene logic in the QSX as-built.

NOTE

NOTE — HomeWorks QSX is the integration baseline

Every Restrepo new-construction project lands on HomeWorks QSX. Existing HomeWorks QS systems migrate per Application Note #840. Caséta and RadioRA 3 are remodel-only — they do not appear on new-construction shade scopes without written direction.



§ 03

Without Written Direction — Do Not Default

WHAT WE REFUSE, IN WRITING

Some defaults exist only because trades reach for them when tolerances slip. We refuse those defaults in writing and on site. Without explicit written direction from the lighting designer, audio designer, or interior designer, the items below do not appear on a Restrepo motorized-shade installation.

Pocket field-cut to fit a shade ordered after framing

Recess depth, pocket width, and light-gap tolerance are sized off the published shade spec before framing closes. Field-cutting drywall to make a too-large shade fit is a defect to re-frame, not a tolerance to live with.

Bracket fastened to drywall instead of stud blocking

Brackets fasten to wood. Toggle bolts and drywall anchors are not on the Restrepo standard for any motorized shade. A bracket that flexes at install will telegraph as fascia drift on every cycle and shorten motor life.

Trimming the bracket face to fit a pocket

If the bracket cannot hold tolerance, re-frame the bracket face. Never trim, grind, or shim the bracket face to fit a pocket the framer left short. The bracket is published — the pocket is the variable.

QS link smaller than 18 AWG

18 AWG minimum on QS link, daisy-chain, T-tap, or Y-configuration per Lutron spec 045314. Wire length per gauge is published; field improvisation past those tables is denied at warranty.

Class 2 SELV bonded to mains in shared back-boxes

QS link and QSPS panel power are Class 2 SELV/PELV. They never share a back-box with line-voltage conductors without code-compliant separation. Where geometry forces a shared rough-in, the electrician adds a divided box and documents it on the as-built.

Verbal product substitutions

Any substitution off the Restrepo Lutron baseline requires written direction from the lighting designer. Verbal approvals do not survive a warranty call to Lutron.

DO NOT**DO NOT — Field-modify a Lutron motor or bracket**

Motor torque, end-stop, and bracket geometry are tuned by Lutron. Do not cut, drill, or repack a motor housing or bracket to fit a stud bay that's out of tolerance. Re-frame the bay, or rotate the shade location to a bay that meets manufacturer dimensions.



PART 2

Pocket, Bracket & Reveal

Sections 04–07 — Triathlon, Sivoia QS Wireless, Palladiom wired & Wire-Free

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§ 04

Sivoia QS Triathlon

BATTERY ROLLER & CELLULAR — WIRELESS RF UP TO 144 IN.

Sivoia QS Triathlon is the Restrepo default where wireless RF is the right answer: a battery-powered roller or cellular shade up to 144 in. with WIDR (Wide-Internal Diameter Roller) options for wider openings. Triathlon is the platform of choice when conduit is impossible, when the architectural detail forbids visible wire, or when retrofit timelines do not permit a wired QS link drop. The shade pairs to Pico, Caséta, RadioRA 3, or HomeWorks and operates inside the Lutron RF mesh through a main repeater.

Pocket and recess depth follow the Triathlon Tech FAQ — sized by shade family before drywall closes. The WIDR install guide (045612) documents bracket spacing and architectural fascia coordination per width. Battery D-cell scales by width — confirm against the published table at design and label the service interval on the as-built. Limits are programmed at the bracket before fascia install, per setup guide 045507. The wireless main repeater (RR-MAIN-REP-WH) is line-of-sight tested at framing; satellites are added where the RF envelope is shadowed by metal studs, mineral-wool insulation, or appliance racks.

SPECIFICATION

SPECIFICATION — Triathlon WIDR

WIDR roller up to 144 in. per spec 085333. Cellular shade per spec 085275g. Recess depth per Triathlon Tech FAQ — pocket family is the design variable. Architectural fascia per the Triathlon fascia document; field-cut bracket spacing only with written direction.

FIELD RULE

FIELD RULE — Battery cycle test before turnover

Every Triathlon battery shade runs a 24-hour moderate-cycle burn-in before owner walkthrough. A motor or end-stop fault exposed in burn-in is replaced before turnover, not after. The service interval is labeled on the as-built and the keypad.



§ 05

Sivoia QS Wireless — Wired

ROLLER 64 · ROLLER 100 EDU ON 24 V QS LINK

Sivoia QS Wireless on the wired-EDU side is the Restrepo platform for projects where panel power, link reliability, and full QS integration are the design constraints. The Roller 64 and Roller 100 EDU are 24 V motorized shade EDUs powered from a Lutron QSPS panel; control rides the QS link to the HomeWorks or RadioRA 3 processor. Wire counts, panel sizing, and link topology are governed by spec 086126 and the wiring & programming guide 045314.

Bracket projection is published per spec 086126 — the framer rough-ins to that dimension, never to a generic header. QS link is 18 AWG minimum, daisy-chain or T-tap per the published topology, terminated at the bracket and not at a wall plate. QSPS-J-1-35V junction-box power supply covers the case where panel power is impractical for an individual Roller 64 install — per spec 085705c. Wireless main repeaters extend the RF mesh where Pico or Caséta override surfaces are added; the wired QS link itself does not require RF for shade scene execution.

SPECIFICATION

SPECIFICATION — QSPS panel sizing

QSPS panel power supply sized against full-draw EDU load plus integration overhead — never nameplate-only sizing. Document load calculation on the as-built and on the panel schedule. Do not share a QSPS circuit with non-shade Lutron loads.

INSPECTION STANDARD

INSPECTION — Pre-rock walk

Lighting designer and Restrepo PM walk every wired QS shade location before drywall. Verify bracket model, projection, level, plumb; verify QS link drop is pulled, tagged, and within published wire-length-per-gauge limits. Photograph each location with the lighting plan tag visible.



§ 06

Palladiom Wired

HALF-INCH LIGHT GAPS · ARCHITECTURAL FASCIA

Palladiom wired is the Restrepo platform for high-design rooms where the half-inch light gap is the architectural language. Light gap is dimensioned from the bracket face, not the fascia face — the framing tolerance carries the gap, not the drywall finish. Palladiom keypads coordinate finish with the rest of the Lutron keypad family per documents 369857r and 369881n; finish selection is a project-wide decision, not a per-room one.

Wire counts and bracket projection live in spec 085560I. The Palladiom shading brochure and 2022 brochure document fascia options — architectural, fabric-wrapped, or exposed motorized — and each fascia choice has its own bracket footprint and projection. Door applications follow Application Note #802 for pocket clearance and IR/RF envelope. Drapery integration is available where the design calls for a wired drapery beside a wired Palladiom roller; coordinate the panel power and the link topology at framing, not at trim-out.

FIELD RULE

FIELD RULE — Half-inch light gap is framing tolerance

Palladiom wired light gap: ½ in. on the head, ½ in. each side, dimensioned from the bracket face. Framing tolerance carries the gap. If the framer leaves a header out of plumb, the drywaller does not split the difference — the bracket face is re-framed.

NOTE

NOTE — Palladiom keypad finish is a project decision

Palladiom keypad metal and color finish coordinates with every other Lutron keypad in the project. Finish selection happens at design, not at field. Palladiom keypads in Vol 07 (Flush-Mount) live on the same finish standard.



§ 07

Palladiom Wire-Free

0.625 IN. MAX BRACKET PROJECTION · BATTERY

Palladiom Wire-Free is the Restrepo platform for retrofit and for rooms where conduit is impossible but the design language still demands the Palladiom fascia. Bracket projection is 0.625 in. maximum — that number drives the pocket sizing at framing, and it does not field-trim. Battery sleeve and IR/RF envelope require 6 in. minimum room-side clearance per Application Note #802. The shade pairs to Pico, Caséta, RadioRA 3, or HomeWorks through the Lutron RF mesh.

Wire-Free brackets land on stud blocking added at framing — drywall anchors are not on the Restrepo standard for any Palladiom installation. Battery cycle is published per spec 085708k; the service interval is labeled on the as-built and on the keypad. Limits are programmed at the bracket before fascia install. Astronomic time-clock and scene programming live in the QSX as-built database where the project lands on HomeWorks; Pico-only projects export the program to the Lutron cloud at closeout.

SPECIFICATION

SPECIFICATION — Wire-Free pocket clearance

Pocket: 6 in. minimum room-side clearance for IR/RF envelope and battery sleeve, per Application Note #802. Bracket projection: 0.625 in. maximum per spec 085708k. Pocket is sized to these numbers at framing, not field-trimmed.

DO NOT

DO NOT — Anchor a Wire-Free bracket to drywall

Wire-Free brackets fasten to stud blocking added at framing. Drywall toggles, hollow-wall anchors, or bracket re-pinning into blueboard are defects to re-frame. The bracket is published; the framing is the variable.



PART 3

Drapery & Specialty

Section 08 — Drapery Lite, Architectural Drapery, honeycomb, specialty geometry

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§ 08

Drapery, Honeycomb & Specialty

DRAPERY LITE · ARCHITECTURAL DRAPERY · HONEYCOMB

Drapery and specialty geometry behave differently from a roller. Pocket geometry is dimensioned on every dimension — width, depth, length — and intermediate brackets land per the published table. Pinch-pleat capacity is sized at design from the Sivoia QS Wireless Drapery Lite spec sheet 085334c. Honeycomb cellular shades follow the Triathlon cellular spec 085275g; specialty geometry — skylight, arch, sloped — coordinates with Lutron specials at design, not as a field improvisation.

Sivoia QS Wireless Drapery Lite handles pinch-pleat drapery up to 216 in. with a pocket 1.06 in. minimum width by 1.3 in. minimum depth per spec 085334c. The 24 V system pulls the same wire counts as the wired Roller 64 / Roller 100 EDU and lives on the same QSPS and QS link. Architectural Drapery is the specifier alternate for wider spans or heavier fabric weights documented in the full Sivoia QS Wireless system guide. Wood-blind Triathlon variants confirm valance dimensions per the Triathlon Solutions Brochure.

SPECIFICATION

SPECIFICATION — Drapery Lite pocket

Pocket: 1.06 in. minimum width × 1.3 in. minimum depth per spec 085334c. Track up to 216 in. Intermediate bracket per published table; pinch-pleat capacity per Sivoia QS data.

INSPECTION STANDARD

INSPECTION — Drapery hembar alignment

Hembar alignment verified across grouped openings at commissioning — out-of-alignment drapery panels are reset, not accepted. Photograph the alignment from the design seat under scene lighting before owner walkthrough.



PART 4

Power, Link & Integration

Sections 09–10 — QS link, QSPS panel, Class 2 SELV, HomeWorks QSX integration

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§ 09

QS Link, QSPS & Wire Management

18 AWG MINIMUM · CLASS 2 SELV · PUBLISHED TOPOLOGY

Wired Lutron shades run on QS link and QSPS panel power, both Class 2 SELV/PELV. 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 in a shared box without code-compliant separation. Fish counts are walked at framing — not estimated at trim-out.

QS link is 18 AWG minimum, daisy-chain, T-tap, or Y-configuration per spec 045314 — terminations at the bracket, not at the wall. Wire length per gauge is published; runs that exceed the published 18 AWG length upsize to 16 AWG before drywall closes, because there is no field path to upsize after. The QSPS junction-box supply (QSPS-J-1-35V) covers the individual Sivoia QS Wireless Roller 64 case where panel power is impractical, per spec 085705c. Service loops at the bracket: one full coil minimum, dressed inside the bracket sleeve, never under the fascia.

FIELD RULE

FIELD RULE — Class 2 separation, every box

QS link and QSPS conductors maintain Class 2 SELV/PELV separation against line voltage in every back-box and conduit run. Where geometry forces a shared rough-in, the electrician installs a divided box and documents it on the as-built. No exceptions.

SPECIFICATION

SPECIFICATION — Wire length per gauge

QS link 18 AWG minimum per guide 045314. Published wire-length-per-gauge tables govern; runs exceeding 18 AWG length upsize to 16 AWG before close-in. Junction box QSPS-J-1-35V per spec 085705c for individual Sivoia QS Wireless Roller 64.



§ 10

HomeWorks QSX Integration

THE INTEGRATION BASELINE · APP NOTE #840 MIGRATION

Every Restrepo new-construction project lands on HomeWorks QSX. QSX is the integration baseline because it carries every shade platform — Triathlon, Sivoia QS Wireless wired and wireless, Palladiom wired and Wire-Free, Drapery Lite — on the same processor, the same RF main, and the same as-built export. QSX also coordinates with audio, video, HVAC, and security scenes so shade behavior follows scene logic instead of a standalone Pico program.

Existing HomeWorks QS systems migrate to QSX per Application Note #840. The migration is a wire-type and field-method change as much as a software upgrade — link main is QSX-LINK, not QS link, on new runs. Legacy HomeWorks Illumination upgrades follow App Note #840 wire-type changes; do not field-mix QS and QSX on the same project. Astronomic time-clock and scene programming are logged per zone in the QSX as-built database — every Pico, Caséta, RadioRA 3, or HomeWorks keypad button is labeled, and the program is exported to the Lutron cloud at closeout.

NOTE

NOTE — App Note #840 governs migration

Existing HomeWorks QS to HomeWorks QSX upgrade: wire-type and field-method changes per App Note #840. Do not field-mix QS and QSX on the same project; the migration is a written-direction decision before pulling new wire.

INSPECTION STANDARD

INSPECTION — QSX as-built export

At commissioning, the lighting designer exports the QSX program to the Lutron cloud. The export is the as-built — every keypad label, every scene value, every astronomic event. Closeout without the export is incomplete; punch-list returns until the export is logged.



PART 5

Coordination & Closeout

Sections 11–13 — trades, commissioning, programming, spares

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§ 11

Drywall, Plaster & Painter Coordination

THREE TRADES, ONE BRACKET REFERENCE

A motorized shade passes through three trade boundaries after the framer has set the pocket and the bracket blocking: drywaller, plasterer, painter. Each trade has a published reference line from the manufacturer install manual, and each trade has a specific procedure that must match the platform. The Restrepo standard is to walk the lighting plan with all three trades before any compound is applied, leave the install guide at the wall, and stage the work so no trade is asked to recover for another's misstep.

Drywall returns dimensioned to the bracket face — drywall never cuts into the bracket footprint or the light gap. The plasterer skims the pocket interior to the manufacturer's approved finish and verifies the lap under raking light before primer. The painter masks the bracket per the install manual, primes per the manufacturer-approved finish, and starts the cure clock at final coat. No motorized shade installs into wet paint; the cure window is committed in writing on the closeout schedule before the shade installer is on site.

FIELD RULE

FIELD RULE — Install manual at the wall

The relevant section of the Lutron install manual is physically present at every shade location during finish work. Trades reference the manual, not memory, when they cut, skim, or paint.

INSPECTION STANDARD

INSPECTION — Three trade walks

Restrepo PM walks the lighting plan with the drywaller before rock, with the plasterer before skim, and with the painter before primer. Photograph the bracket reference at every shade after final skim and before primer.



§ 12

Commissioning, Limits & Programming

LIMIT SET PER SPEC · SCENE LOGGED IN QSX

Commissioning is where the discipline becomes the experience. Limits are set per shade with installation guide 045612 (Triathlon WIDR) or 045507 (Triathlon Lite); QS Wireless wired shades follow programming guide 045314. Hembar alignment is verified across grouped openings — out-of-alignment shades are reset, not accepted. Astronomic time-clock and scene programming are logged per zone in the QSX as-built database, and the owner walkthrough demonstrates every scene from a single keypad or app command.

RF link is tested from every shade to its main repeater under closed-cell condition (drywall closed, fascia installed, pocket trimmed) — not under open-rack bench conditions. Battery cycle test is logged on every Triathlon and Wire-Free shade. Burn-in is 24 hours of moderate cycling before owner walkthrough; a motor or end-stop fault exposed in burn-in is replaced before turnover. The owner walkthrough confirms every Pico, Caséta, RadioRA 3, or HomeWorks keypad button label and demonstrates every scene end-to-end.

BEST PRACTICE

BEST PRACTICE — End-to-end scene run before turnover

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.

NOTE

NOTE — No tuning by ear at closeout

Limits, scene values, and astronomic events are set with the QSX programming surface and logged in the as-built. The owner does not tune by feel at closeout; the lighting designer hands off a measured, logged configuration.

§ 13

Specifier Alternates, Closeout & Spares

LUTRON SERENA · ARCHITECTURAL DRAPERY · SPARES ≥ 5%

By the time the lighting designer is on site for commissioning, every pocket is in spec, every bracket is in spec, every QS link drop is verified, the cure window has elapsed, and the burn-in has run. Closeout is the handoff: spares delivered, as-built exported, programming labeled, owner trained. Specifier alternates outside the Restrepo Lutron baseline live here — Lutron Serena and Architectural Drapery cover the cases the baseline does not, but only on the lighting plan, never as a field substitution.

Spare batteries, fabric color samples, and one spare D-cell sleeve per project are delivered at closeout with a signed client receipt — minimum 5% of each fabric used. The QSX as-built export is the program of record: every keypad label, every scene value, every astronomic event. The owner walkthrough demonstrates every scene from a single keypad or app command. Programming is exported to the Lutron cloud and stored in the closeout package alongside the photo log of every framing, rock, and paint walkthrough.

SPECIFICATION

SPECIFICATION — Spares ≥ 5%

Spare batteries, fabric color samples, and one spare D-cell sleeve per project delivered at ≥ 5% of each type at closeout, with a signed client receipt. Spares are stored in the owner's AV closet with a labeled inventory.

NOTE

NOTE — Specifier-driven alternates

Lutron Serena and Architectural Drapery are approved specifier-driven alternates outside the Restrepo Lutron baseline. Any alternate not on the lighting plan or interior design spec requires written direction from the relevant designer; verbal approvals do not survive a warranty call to Lutron.



APPENDIX A

QC Gate — Verify Before Close-In

Every Restrepo motorized-shade installation passes through this gate before the wall closes and again before commissioning. The gate matches the QC list on the Shades Reference Card.

Pocket & recess dimensions verified at framing	Light gap held to spec (½ in. on Palladiom wired)
Bracket stud-blocking present behind every bracket pair	QS link or RF path tested before drywall closes
QSPS sizing & j-box placement match design package	Class 2 SELV separation maintained in every back-box
Hembar alignment verified across grouped openings	Limits programmed at bracket before fascia install
Burn-in 24 h before owner walkthrough	Spare batteries & fabric samples delivered (≥ 5%)

APPENDIX B

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 Cellular Spec (085275g)

Triathlon cellular honeycomb shade — pocket sizing, fabric capacity, motor data.

<https://www.lutron.com/TechnicalDocumentLibrary/0852753.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 and 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 document.

https://www.lutron.com/TechnicalDocumentLibrary/Triathlon_Tech_FAQ.pdf

Lutron — Triathlon Architectural Fascia

Fascia options and dimensions — architectural, fabric-wrapped, exposed motorized.

https://www.lutron.com/TechnicalDocumentLibrary/Triathlon_Fascia.pdf

Lutron — Triathlon Selection Guide

Performance tiers, room sizing, motor pairing — Triathlon family selection.

https://www.lutron.com/TechnicalDocumentLibrary/Triathlon_Selection.pdf

Lutron — Triathlon Solutions Brochure

Triathlon family overview, valance integration, wood-blind variants.

https://www.lutron.com/TechnicalDocumentLibrary/Triathlon_Solutions.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 Roller 64 Spec (085705c)

Roller 64 EDU spec, junction-box supply QSPS-J-1-35V, individual-shade power.

<https://www.lutron.com/TechnicalDocumentLibrary/085705.pdf>

Lutron — Sivoia QS Drapery Lite Spec (085334c)

Pinch-pleat drapery up to 216 in. — pocket 1.06 in. × 1.3 in. minimum, intermediate brackets.

<https://www.lutron.com/TechnicalDocumentLibrary/0853343.pdf>

Lutron — Palladiom Shading Wired (085560I)

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 — Palladiom Shading Brochure

Palladiom family overview, fascia and finish coordination, design language.

https://www.lutron.com/TechnicalDocumentLibrary/Palladiom_Brochure.pdf

Lutron — Palladiom 2022 Brochure

2022 Palladiom updates, finish options, integration with Lutron keypad family.

https://www.lutron.com/TechnicalDocumentLibrary/Palladiom_2022.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 — Palladiom Keypad QS (369857r)

Palladiom keypad on QS link — wiring, finish coordination, scene programming.

<https://www.lutron.com/TechnicalDocumentLibrary/369857.pdf>

Lutron — Palladiom Keypad HomeWorks (369881n)

Palladiom keypad on HomeWorks — wiring and integration with QSX scenes.

<https://www.lutron.com/TechnicalDocumentLibrary/369881.pdf>

Lutron — HomeWorks QSX Architecture

QSX processor, link main, RF main, integration baseline for new construction.

https://www.lutron.com/TechnicalDocumentLibrary/HomeWorks_QSX.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>

Lutron — HomeWorks QS Wired Shades App Note

HomeWorks QS application note for wired Sivoia QS shade integration.

https://www.lutron.com/TechnicalDocumentLibrary/HW_QS_Wired_Shades.pdf

Lutron — HomeWorks QS Wireless Shades App Note

HomeWorks QS application note for wireless Sivoia QS and Triathlon integration.

https://www.lutron.com/TechnicalDocumentLibrary/HW_QS_Wireless_Shades.pdf

Lutron — Residential Shades Consumer (3671319)

Consumer-facing residential shade overview — fabrics, finishes, application matrix.

<https://www.lutron.com/TechnicalDocumentLibrary/3671319.pdf>

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