AEDES NETWORK · BUILDER MANUAL

Disposable Aedes MD

Single-Use Autonomous Aerial Platform · 250mm 5-inch class

DOCUMENT	BUILDER MANUAL · v1.0
Target build time	3–4 hours per unit (experienced)
First-build time	5–7 hours
Skill level required	Beginner-friendly with basic soldering
Tooling cost (one-time)	$150–250 for full bench setup
Per-unit BOM cost	~$220 (excluding payload)
Output cadence (1 builder, full bench)	2–3 units per day

NOTE · Read this manual end-to-end before starting your first build.
Each section assumes the previous section is complete. Skipping ahead causes the most common build errors. Print this manual or open it on a tablet beside your workbench — you will reference multiple sections during a build.

1. About This Build

What you are building

The Disposable Aedes MD is a 250mm-class autonomous quadcopter designed for single-mission deployment. Unlike a hobby FPV drone or a commercial inspection platform, this airframe is designed to be flown once. After it delivers its payload — a medical aid package, a sensor, a communications relay node — the airframe may not be recovered, and that is acceptable by design.

Why this matters

Single-use UAVs fill mission profiles that reusable platforms cannot serve economically: aid delivery into denied or dangerous areas, sensor deployment in atmospheric hazards, and disposable ISR for disaster response. Aedes builders are the production base for these platforms. Your build quality determines whether a medical package reaches a person in need.

Builder commitment

As an Aedes network builder, you are agreeing to:

- Build to specification — no improvised modifications
- Complete the QC checklist before handoff
- Sign the non-weaponization affirmation for every unit
- Report any request to modify the platform for prohibited use

2. Skill Check & Time Commitment

Skills you should have before starting

SKILL	WHAT YOU NEED TO KNOW	LEVEL
3D printer operation	Load filament, level bed, start a print, recover from failure	Basic
Soldering	Tin a wire, make clean joints on through-hole pads, apply heat shrink	Basic
Hand tools	Hex driver, screwdriver, side cutters, wire strippers	Basic
Computer use	Install software, connect via USB, basic file management	Basic
Reading schematics	Identify components by marking, follow a wiring diagram	Helpful

TIP · Never soldered before?

Aedes provides a 90-minute soldering primer course in the Builder Portal. Complete it before starting your first build. The investment pays back in your first unit — a clean solder joint is the difference between a 30-second connection and a 10-minute rework.

Time breakdown (per unit)

PHASE	DESCRIPTION	TIME
3D printing	Hands-off; printer runs unattended	3–4 hr
Print prep	Support removal, deburring, test fit	15 min
Electronics sub-assembly	Solder motors to ESC, stack FC, integrate peripherals	60–90 min
Frame integration	Mount motors, install electronics stack, mount GPS	45 min
Firmware & calibration	Flash, configure, calibrate sensors	30 min
Bench test & QC	Pre-flight checks, sign-off documentation	20 min
TOTAL ACTIVE BUILD	**(printing runs in background)**	**~3–4 hr**

3. Workspace Setup & Safety

Workspace requirements

- **Workbench**: minimum 24″ × 36″ flat surface, well-lit, with at least one wall outlet
- **Ventilation**: open window or fume extractor for soldering
- **Static control**: anti-static wrist strap recommended; avoid carpeted surfaces
- **Storage**: small parts organizer (egg crate or compartment box) for hardware
- **LiPo storage**: fireproof LiPo bag or steel ammo can, kept away from main work area

Critical safety standards

CRITICAL · LiPo Battery Safety

Lithium-polymer batteries store significant energy. A puffed, punctured, or short-circuited LiPo can vent flame within seconds. Charge in a fireproof LiPo bag or ammo can. Never leave charging batteries unattended. Store at storage voltage (3.8V/cell) when not in use. Dispose of damaged packs at a battery recycling center, never in household trash.

WARNING · Soldering Safety

Soldering irons reach 350°C+. Work in a ventilated area — leaded or unleaded solder fumes contain rosin flux compounds that should not be inhaled. Use safety glasses; flux occasionally pops. Keep a wet sponge or brass tip cleaner at the bench.

WARNING · Props Off the Bench

Never bench-test motors with propellers installed. A loose prop at full throttle is a projectile. Props go on only after final QC and immediately before flight.

4. Tools & Equipment

Required tools

TOOL	SPECIFICATION / EXAMPLE	EST. COST
3D printer	Any consumer FDM with 200×200mm bed (Bambu A1, Ender 3 V3, Prusa Mini)	$200–500
Soldering iron	60W with temperature control, fine and chisel tips (Hakko FX-888D, Pinecil)	$30–100
Solder	60/40 leaded rosin core, 0.6mm — easiest for beginners	$15
Hex driver set	1.5mm, 2.0mm, 2.5mm L-keys or screwdriver bits	$10
Phillips screwdriver	PH0 size for small electronics	$5
Side cutters	Flush-cut, fine tip	$10
Wire strippers	AWG 16–28 capable	$10
Helping hands	Clamp arms with magnifier (optional but recommended)	$15
Multimeter	Continuity, voltage; any basic DMM	$20
Heat gun	For heat-shrink tubing; hair dryer is insufficient	$20
LiPo charger	4S-capable balance charger (HOTA D6, ISDT 608)	$60–120
Computer (Windows/Mac/Linux)	USB-A or USB-C; for firmware flashing and calibration	—

Recommended consumables

- **Heat shrink tubing**: 2mm, 3mm, 5mm assortment
- **Isopropyl alcohol**: 90%+ for cleaning flux residue
- **Loctite 243** (medium-strength threadlocker): for motor bolts
- **Double-sided foam tape**: for mounting flight controller (3M VHB type)
- **Cable ties**: 100mm small, for harness management
- **Anti-static bags**: for storing electronics during build pauses

Optional but high-leverage

- **Digital calipers** ($25): verify printed-part dimensions
- **Torque-limiting hex driver** ($35): consistent motor bolt torque
- **Smoke-stopper or fuse plug** ($15): protects electronics during first power-on
- **Bench power supply** ($50): safer than LiPo for early bench testing

5. Bill of Materials

Per-unit BOM. Approved suppliers list is maintained on the Aedes Builder Portal — always source from approved suppliers to ensure component compatibility and warranty coverage.

COMPONENT	SPECIFICATION	EST. COST
Frame filament	PLA, ~200g per frame, any approved brand	$4
M3 hardware kit	16× M3×8 socket cap, 16× M3 nylock, 4× M3×30 standoff	$5
Motors (×4)	2207 1750kv brushless, 4S-rated, with bullet leads	$80
Propellers	5-inch tri-blade × 8 (4 install + 4 spares)	$8
4-in-1 ESC	35A continuous, BLHeli32 or AM32, 30.5×30.5 mount	$25
Flight controller	F4 or F405 stack, 30.5×30.5 mount, integrated OSD	$30
GPS / compass module	u-blox M10 or equivalent, with integrated mast	$20
Radio receiver	ELRS 915 MHz, T-antenna	$15
Servo (payload release)	9g micro servo, JR connector	$4
Battery	4S 2200mAh LiPo, 30C+, XT60 connector	$25
Inline thermal fuse	85°C cutoff, in series with battery positive	$2
Wire & connectors	16AWG silicone × 1m, XT60 male, capacitor 35V/470µF	$5
TOTAL	**(per unit, excluding payload)**	**~$223**

WARNING · Counterfeit components are common in the FPV market.
Always source motors, ESCs, and FCs from the approved supplier list. Counterfeit motors fail unpredictably and counterfeit ESCs can short under load. The $5 you save buying gray-market parts is not worth the airframe loss.

6. 3D Printing the Frame

Files you need

Download the current Disposable Aedes MD print package from the Aedes Builder Portal. It contains:

- `MD_Frame_v1.0.stl` — single-print monocoque (frame + integrated arms)
- `MD_Frame_v1.0.3mf` — pre-sliced project for Bambu Studio / PrusaSlicer / Cura with Aedes profile
- `MD_PayloadBay_v1.0.stl` — belly bay (separate part)
- `MD_GPSMast_v1.0.stl` — GPS module standoff
- `MD_BatteryStrap_v1.0.stl` — TPU battery retention (optional, requires TPU print)

Recommended print settings

PARAMETER	VALUE	NOTE
Material	PLA or PLA+	PLA acceptable for single-use
Layer height	0.2 mm	Balance speed / strength
Wall count	3 perimeters	Minimum for arm strength
Top / bottom layers	4 / 4	Solid surfaces
Infill density	15%	Single-use; do not increase
Infill pattern	Gyroid	Best strength/weight
Print temperature	210°C	Adjust ±5°C per filament brand
Bed temperature	60°C	PLA standard
Print speed (outer wall)	60 mm/s	Slower = better surface
Print speed (infill)	120 mm/s	Speed up where strength is solid
Cooling fan	100% after layer 3	Critical for PLA bridge quality
Supports	Tree, only for motor mount overhangs	Use Aedes 3MF profile
Print orientation	Flat on build plate, arms in X pattern	Layer lines run across arms
Estimated print time	3–4 hours	Bambu A1 / P1S class

> **TIP · Use the supplied Aedes 3MF profile**
> The pre-sliced 3MF file contains validated settings for Bambu and Prusa printers. If your printer is supported, use the 3MF directly — it eliminates configuration errors. The STL file is provided for builders using non-supported printers who need to slice manually.

Material selection

PLA is the approved baseline for the Disposable Aedes MD. It is cheap, prints reliably on any FDM printer, and its limitations (low heat resistance, brittleness) are acceptable when the airframe lifetime is one flight. Approved PLA brands: Polymaker PolyMax, Hatchbox, Overture, eSun PLA+.

Do not substitute: ABS, PETG, or PA-CF for this build. These materials are appropriate for the multi-use AR-7 but add cost and complexity without benefit on a single-use platform.

7. Print Quality Inspection

Before assembly, every printed frame must pass visual and dimensional inspection. A flawed frame fails at the worst possible moment.

Visual inspection checklist

- ☐ No layer separation along arms (most critical failure mode)
- ☐ No warping at base — frame sits flat on a level surface
- ☐ Motor mount holes are clean and round (no elephant's foot, no stringing)
- ☐ Top surface is smooth — no missed layers, no zits, no holes
- ☐ Payload bay opening is unobstructed
- ☐ FC mounting holes accept M3 standoffs without forcing
- ☐ Print weight: 195–215 g (verify with kitchen scale; outside this range = wrong settings)

Dimensional check (calipers required)

- ☐ Motor-to-motor diagonal: 250 mm ± 1 mm
- ☐ Motor mount hole spacing: 16 mm × 16 mm pattern
- ☐ FC mount hole spacing: 30.5 mm × 30.5 mm
- ☐ Arm thickness at root: 8 mm minimum

> **CRITICAL · Reject any frame that fails visual inspection**
> A frame with layer separation will fail in flight. Do not attempt to glue, fill, or repair a flawed print. The cost of reprinting is $4 in PLA and 3 hours of unattended printer time. The cost of an in-flight arm failure is the entire mission.

8. Electronics Sub-Assembly

This phase produces the integrated electronics stack independent of the frame. Expect 60–90 minutes for a first build, 30–45 minutes once experienced. Sub-assembly can be batched — produce 3–5 stacks in a session, then integrate them into frames as prints complete.

STEP 1 · Prepare workspace and components

Lay out all electronics on an anti-static mat. Verify against the BOM that all parts are present and undamaged. Open packaging only as needed.

- Inspect ESC and FC for shipping damage or solder bridge factory defects
- Verify motor leads are pre-tinned (most modern motors ship this way)
- Have all consumables in reach: solder, flux, heat shrink, side cutters

STEP 2 · Tin the ESC motor pads

Apply a small dot of solder to each of the 12 motor pads (4 motors × 3 phases). Tinning makes the next step dramatically faster and produces cleaner joints.

- Iron temperature: 350°C (660°F)
- Apply iron to pad for 1 second, then introduce solder. Pad should accept solder cleanly without flooding
- If solder beads up and rolls off, the pad needs flux — apply rosin pen and retry

STEP 3 · Solder motors to ESC

Trim each motor lead to fit the frame route, strip 2 mm of insulation, tin the wire, then heat-bond to the tinned ESC pad. Order does not matter at this stage — direction is set in firmware later.

- Cut all three leads of one motor to the same length to keep harness clean
- Use heat shrink only after all three phases of a single motor are confirmed solid
- Keep heat application under 3 seconds per joint to avoid lifting pads

> **TIP · Motor lead routing matters more than you think**
>
> Route all three phases of one motor as a tight bundle, not as three independent strands. Bundled phases produce cleaner gyro signal and reduce the risk of a single phase rubbing against a moving part.

STEP 4 · Mount FC onto ESC stack

The flight controller stacks above the ESC using 4× M3 standoffs and the supplied vibration-isolation grommets. The stack is the heart of the platform.

- Insert grommets into FC mount holes before stacking
- Connect ESC-to-FC ribbon cable in the orientation indicated by silkscreen arrows
- Tighten standoffs finger-tight only at this stage — final torque comes after frame integration

STEP 5 · Connect GPS, receiver, and servo

All three peripherals connect to the FC via JST-SH or solder pads, depending on FC model.

- **GPS**: TX, RX, 5V, GND to UART4 (or as labeled in Aedes config). Compass uses I2C SCL/SDA
- **ELRS receiver**: TX, RX, 5V, GND to UART2 (or as labeled). Use the Aedes-supplied JST cable
- **Servo**: signal to AUX1 servo output, 5V/GND to BEC pads

STEP 6 · Smoke-stopper test

Before connecting a real LiPo, perform a smoke test using a current-limited supply or smoke-stopper. This catches reversed wiring, solder bridges, and component damage before they cost you a $30 FC.

- Connect smoke-stopper or bench supply set to 16V, 1A limit
- Apply power; FC LED should illuminate, ESC should beep its initialization sequence
- Verify no smoke, no excessive heat, no current spike
- If smoke or heat: disconnect immediately and inspect for shorts

NOTE · What success looks like at this stage

After Step 6, you have a working electronics stack: FC powers up, ESC initializes, GPS LED searches for satellites, ELRS receiver shows its bind-mode pattern. You're ready to integrate into the frame.

9. Frame Integration

This phase mounts the electronics stack into the printed frame and produces a complete, configurable airframe. Expect 30–45 minutes.

STEP 7 · Install motors on frame

Each motor mounts to the frame with 4× M3×8 socket-cap bolts threaded directly into the printed motor mount.

- Apply one drop of medium-strength threadlocker (Loctite 243) to each bolt
- Hand-tighten in cross pattern (1, 3, 2, 4) to seat motor flat
- Final torque: 2.0 N·m (snug + 1/8 turn with hex driver)
- Verify motor spins freely after mounting — no rubbing, no resistance

CRITICAL · Do not over-torque motor bolts.

Over-torquing strips the printed plastic threads and creates a loose motor mount that will fail. Snug + 1/8 turn is the target. If you have a torque-limiting driver, set it to 2.0 N·m. Stripped mount = scrap the frame and reprint.

STEP 8 · Install electronics stack

The FC/ESC stack mounts in the central electronics bay using the printed M3 standoffs.

- Route motor leads through the frame channels before installing the stack
- Seat the stack flat into the bay; no flex, no twist
- Tighten 4× corner bolts evenly to avoid stressing the PCBs
- Verify that all motor leads reach their respective ESC pads without tension

STEP 9 · Mount GPS module and antennas

GPS mounts on the printed mast at the rear of the frame, away from power wiring (which produces magnetic interference).

- Insert GPS module into mast, secure with 2× M3×6 screws
- Route GPS cable along the top spine of the frame
- Mount ELRS antenna at 90° to GPS to minimize interference
- Confirm cable strain relief at every transition point

STEP 10 · Install payload bay and servo

The payload bay snaps into the underside of the frame; the servo actuates the release latch.

- Press the bay into the frame until you hear/feel the snap engage at all 4 corners
- Mount servo with 2× M2×4 screws
- Connect servo arm to the latch lever using the supplied linkage rod
- Manually actuate the latch to verify smooth motion

STEP 11 · Install battery retention

The battery sits in the top tray secured by a positive-lock strap. Friction alone is not acceptable.

- Install the printed battery cradle (or TPU cradle if produced)
- Route the hook-and-loop strap through the frame slots
- Test fit a battery — strap should produce visible compression when fastened
- Verify battery cannot slide out under firm hand pressure

10. Firmware & Configuration

The Disposable Aedes MD runs ArduPilot firmware in autonomous Auto mode. This phase loads firmware, applies the Aedes reference configuration, and calibrates sensors. Expect 25–35 minutes.

Software you need

- **Mission Planner** (Windows) or **QGroundControl** (cross-platform) — ground station software
- **Aedes MD reference parameter file** (`MD_v1.0.param`) — pre-tuned configuration
- **ELRS Configurator** — for receiver binding

STEP 12 · Connect FC to computer

Plug the USB cable into the FC. The drone enumerates as a serial device.

- First connection on Windows: install STM32 VCP drivers if prompted
- In Mission Planner, select correct COM port; set baud rate to 115200
- Click Connect — telemetry should populate within 5 seconds

STEP 13 · Flash ArduPilot firmware

If the FC ships with a different firmware (e.g., Betaflight), flash ArduPilot Copter (latest stable).

- Use Mission Planner > Initial Setup > Install Firmware
- Select frame type: Quad X
- Wait for flash to complete; FC will reboot automatically
- Reconnect after reboot to verify firmware version

STEP 14 · Load Aedes MD reference parameters

Apply the pre-validated parameter file. This sets PIDs, mission profile, failsafe behavior, and payload servo configuration in one step.

- Mission Planner > Config > Full Parameter List > Load from file
- Select `MD_v1.0.param`
- Click Write Params; reboot when prompted
- Verify load: random check of 5 parameters against the values listed in the parameter file documentation

STEP 15 · Sensor calibration

Calibrate accelerometer, compass, and ESCs. Each calibration takes 2–5 minutes.

- **Accelerometer**: place drone on level surface, run Calibrate Accel, follow on-screen orientation prompts
- **Compass**: hold drone away from metal objects, rotate through all 6 axes when prompted
- **ESC**: with props OFF, run Calibrate ESCs to set throttle endpoints

> **CRITICAL · Props off for ESC calibration. Always.**
> ESC calibration runs the throttle from 0% to 100%. Propellers spinning at full throttle on a bench-tested drone with no flight constraints will move violently. Removing props is not optional. Verify visually before applying power.

STEP 16 · Bind ELRS receiver

Pair the receiver to your ground station transmitter using the ELRS bind procedure.

- Power up the drone with receiver in bind mode (3-second power cycle)
- Initiate bind on transmitter (Lua script or web UI)

- Confirm bind: receiver LED transitions from blinking to solid
- Verify telemetry: receiver should report RSSI, link quality, and battery voltage

STEP 17 · Motor direction test (PROPS OFF)

Verify that each motor spins in the correct direction. Wrong direction = drone flips on takeoff.

- In Mission Planner, run Motor Test > Test all motors at 5% throttle
- Verify rotation per ArduPilot Quad X convention (refer to parameter documentation)
- If a motor spins wrong direction: do not re-solder phases; flip in BLHeli configurator instead
- Test failsafe: turn off transmitter — motors should disarm within 1 second

11. Bench Test Protocol

Final pre-flight verification. Every unit must complete this protocol before being signed off as deliverable.

Power-on self-test

- ☐ All four motors initialize with consistent beep sequence
- ☐ FC LED transitions from boot pattern to armed-pattern within 30 seconds
- ☐ GPS lock achieved (3D fix, ≥8 satellites) within 90 seconds outdoors
- ☐ ELRS link reports RSSI ≥ -60 dBm at 1m range
- ☐ Battery voltage reads within 0.1V of multimeter measurement

Servo and payload release test

- ☐ Servo travels full range when commanded via AUX channel
- ☐ Payload latch releases within 0.5 seconds of command
- ☐ Latch returns to locked position when commanded back
- ☐ Repeat release test 5 times consecutively without missed actuation

Failsafe verification

- ☐ Loss of radio link → drone disarms (motors stop) within 1 second
- ☐ Low battery → audible warning at 14.0V (4S configured threshold)
- ☐ GPS loss in flight → drone enters Land mode (verify in simulation)
- ☐ Geofence breach → drone returns to launch point (verify in simulation)

Brief motor run-up (props OFF)

- ☐ Arm drone via transmitter switch
- ☐ Increase throttle to 25% for 5 seconds — listen for unusual noise, vibration
- ☐ Increase to 50% for 5 seconds — same checks
- ☐ Disarm; verify motors spin down smoothly with no grinding
- ☐ Touch each motor — should be warm, not hot (>60°C indicates problem)

12. Handoff QC Checklist

Final inspection before the unit leaves your bench. Every box must be checked. A unit that fails any item is not ready for handoff.

Mechanical

- ☐ All M3 motor bolts torqued and threadlocked
- ☐ All electronics stack bolts torqued
- ☐ GPS mast secure and undamaged
- ☐ Antennas oriented per spec (ELRS T-antenna vertical)
- ☐ Payload bay snap-fit engaged at all 4 corners
- ☐ Battery retention strap functional and tight
- ☐ No loose wires; all harnesses cable-tied

Electrical

- ☐ Smoke test passed
- ☐ Power-on self-test passed
- ☐ All sensor calibrations complete
- ☐ ESC calibration complete
- ☐ Receiver bound and link verified
- ☐ Failsafe tested and confirmed

Documentation

- ☐ Serial number assigned and recorded
- ☐ Build photographs taken (frame, electronics, complete unit) — minimum 4 photos
- ☐ Parameter file backup saved to Aedes Builder Portal
- ☐ Builder sign-off form completed and signed
- ☐ Non-weaponization affirmation signed
- ☐ Unit tagged with build date and builder ID

13. Packaging & Shipping

Standard packaging

- Drone wrapped in anti-static bag, then bubble wrap
- Battery shipped separately per IATA / DOT lithium battery rules
- Propellers in original packaging, included in box
- QC sign-off form printed and included
- USB cable for end-user reconfiguration included
- Box: 12″ × 12″ × 6″ corrugated, USPS flat rate medium fits standard build

WARNING · Lithium batteries are regulated for shipment.

LiPo batteries fall under UN 3480 (separately packed) or UN 3481 (packed with equipment). Builders shipping units must comply with IATA Lithium Battery Guidance and carrier-specific requirements. The Aedes Builder Portal provides shipping label templates and carrier compatibility tables. Do not ship a battery installed in the drone.

14. Troubleshooting Common Issues

SYMPTOM	LIKELY CAUSE / FIX	DIFFICULTY
FC won't power on (no LED)	Check XT60 polarity; verify ESC BEC is providing 5V; inspect for solder bridge on FC power rail	Easy
FC powers on, motors won't spin	ESC not calibrated; ESC-to-FC ribbon cable reversed; motor direction incorrect in firmware	Easy
Motor spins wrong direction	Reverse in BLHeli configurator (do not re-solder)	Easy
GPS won't acquire lock	Move outdoors away from buildings; verify GPS connection to FC; check for compass interference from wiring	Medium
Receiver won't bind	Confirm transmitter on correct frequency; verify wiring on UART2; flash latest ELRS firmware	Medium
Drone vibrates excessively at hover	Bent propeller; loose motor; FC not vibration-isolated; layer separation in arm	Medium
Failsafe doesn't trigger on link loss	Failsafe parameter not configured; ELRS receiver not reporting link quality to FC	Medium
Battery drains rapidly	Short in motor leads; capacitor failure; counterfeit battery	Hard
Smoke on power-up	Disconnect IMMEDIATELY. Reverse polarity, ESC short, or component failure. Do not reapply power until cause is identified	Critical

NOTE · When in doubt, ask the network

The Aedes Builder Portal hosts a community forum and an experienced-builder response channel. Most build issues have been encountered before. Posting clear photos and a

description gets a working answer within hours during business days.

Compliance & Builder Sign-Off

Non-Weaponization Affirmation

By signing this document, the builder affirms the following under the Aedes Network Builder Agreement:

- The platform was built per these instructions and the published reference specification
- No modifications were made to enable weapons integration, weapons delivery, or prohibited applications
- The platform is configured exclusively for non-weaponized missions: ISR, communications, mapping, logistics, sensor deployment, or search and rescue
- The builder will report any third-party request to weaponize, modify for weapons use, or remove safety features to Aedes Compliance

Regulatory Compliance

The builder confirms understanding of the following regulatory framework:

- Operation in the United States is subject to FAA Part 107 commercial drone rules
- BVLOS, autonomous, and night operations require appropriate FAA waivers
- Remote ID broadcast is required for most operating environments
- International deployment is subject to ITAR, EAR, and host-nation regulations

Builder Sign-Off Form

Complete and retain a copy with each unit. Submit a digital copy to the Aedes Builder Portal.

Builder Name	
Aedes Builder ID	
Build Cell / Location	
Unit Serial Number	
Build Start Date	
Build Completion Date	
Total Build Hours	
QC Inspector (if separate)	
Photos Submitted (Y/N)	
Builder Signature	
Date	