

FRENCHKNIGHT

FK-001 / MANTLE

PROTOTYPE 01 / CORRECTED BUILD PACKET / BABY LOCK ALTAIR BLTA



Prototype goal

Build one physical garment that proves the FrenchKnight silhouette: an oversized washed-black streetwear hoodie whose left shoulder becomes a single substantial piece of soft armor carrying the FK crest.

AUTHORITY FOR THIS PACKET

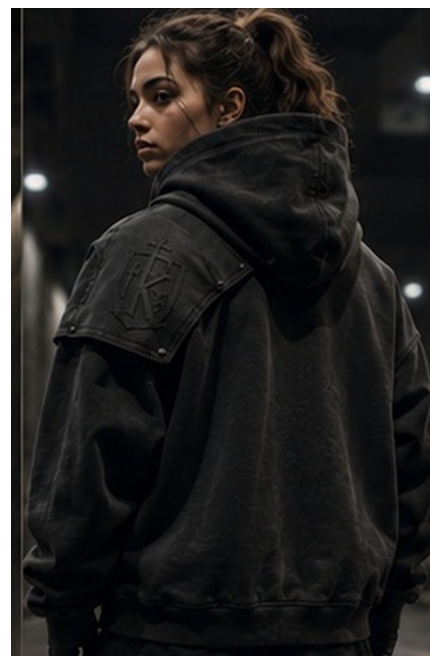
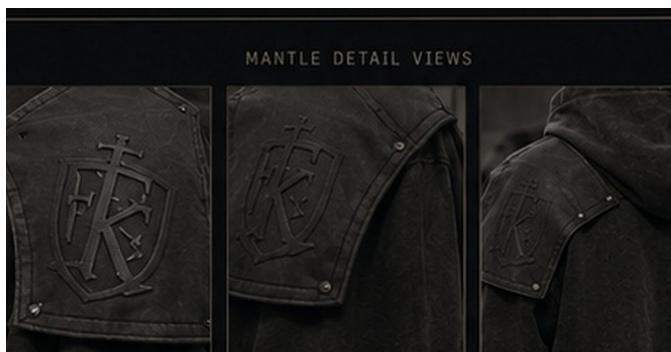
The corrected written specification controls construction. The approved visuals control mood, silhouette, and proportion. Any small text embedded inside earlier AI-generated design boards is reference only and must not override this packet.

DECISION HIERARCHY

- **1. Written build specification.** Use this packet for materials, construction, and what is actually locked.
- **2. Approved visual direction.** Use it for silhouette, streetwear character, shoulder mass, and overall feel.
- **3. On-body fitting.** Exact dimensions may change if the garment looks or moves better.
- **4. Production capture.** Preserve every final pattern, measurement, material, and attachment decision so a manufacturer can reproduce it.

What FK-001 should feel like

Streetwear first. Armor as construction. One asymmetric visual event.



LOCKED VISUAL RULES

- Oversized, dark, urban, contemporary silhouette; not polished luxury minimalism.
- One dominant Mantle on the left shoulder; no visible stack of many armor plates.
- The Mantle must sit on and over the shoulder, carry visible thickness, and alter the silhouette.
- The crest is discovered inside the Mantle; no large front or back graphics.
- The garment must work on both a woman and a man without separate gendered versions.
- Joan of Arc is subtext only: strength and gender ambiguity, never costume styling or explicit historical imagery.

ONE-SENTENCE TARGET

An oversized washed-black hoodie whose left shoulder transforms into a single thick, sculptural textile pauldron bearing the FrenchKnight crest.

Base garment + Mantle construction

Prototype 01 should prove form and manufacturability, not solve every future garment detail.

BASE GARMENT

ITEM	PROTOTYPE 01 REQUIREMENT
Color	Washed black or very dark charcoal; garment-dyed / worn-in character preferred.
Weight	Very heavyweight. 450 GSM+ preferred; an excellent 400–450 GSM blank is acceptable if silhouette and hood are right. 600 GSM is NOT required.
Fit	Oversized / boxy, dropped shoulder, generous sleeve, substantial hood.
Fabric	Cotton or cotton-rich fleece / French terry with convincing drape and density.
Graphics	None on chest or back. Existing visible blank branding should be absent or removable.

MANTLE ARCHITECTURE

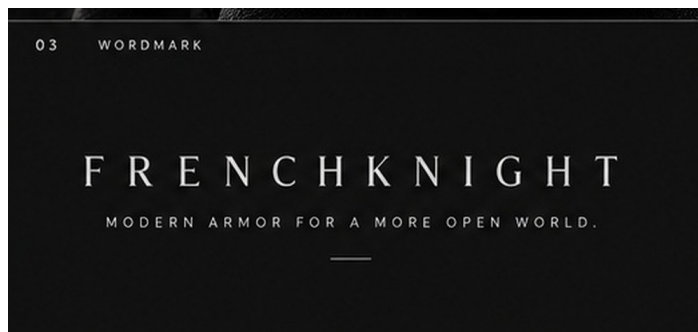
COMPONENT	ROLE
Hidden anchor / yoke	Mostly invisible structural support beginning near the left neckline. It distributes load and gives the outer Mantle secure attachment points.
Outer Mantle	One dominant shoulder piece. Begins close to the neck, curves over the shoulder crown, and hangs down the upper arm.
Outer shell	Dense black woven textile such as heavyweight cotton twill, duck/canvas, or similar. Do NOT default to sweatshirt fleece for the armor face.
Internal structure	Use the least structure that holds the form: medium interfacing, dense felt, thin foam, or light batting. Target subtle stiffness, not padding.
Backing	Soft black cotton/twill/jersey/fleece facing to keep the underside comfortable and finished.
Hardware	Optional only. Up to 2–4 small matte black/dark gunmetal fasteners if they serve real attachment or visual balance. The design must work without them.

STARTING PROPORTIONS — ADJUST ON BODY

MEASURE	STARTING TARGET
Mantle width across shoulder	Approx. 10–13 in, fitted to the blank and wearer.
Drop down upper arm	Approx. 5–7 in; end well before elbow.
Extension beyond natural shoulder	Approx. 0.5–1.5 in; enough to change silhouette without becoming a pad.
Apparent thickness	Approx. 1/8–1/4 in visual substance; internal stack can vary.
Inner + outer edge	Inner edge disappears into / under hood-neck area. Outer/lower edge may float slightly (roughly 1/4–3/4 in) to create shadow and armor-like depth.

Approved crest + application

The crest is the insignia. The garment construction is still the main event.

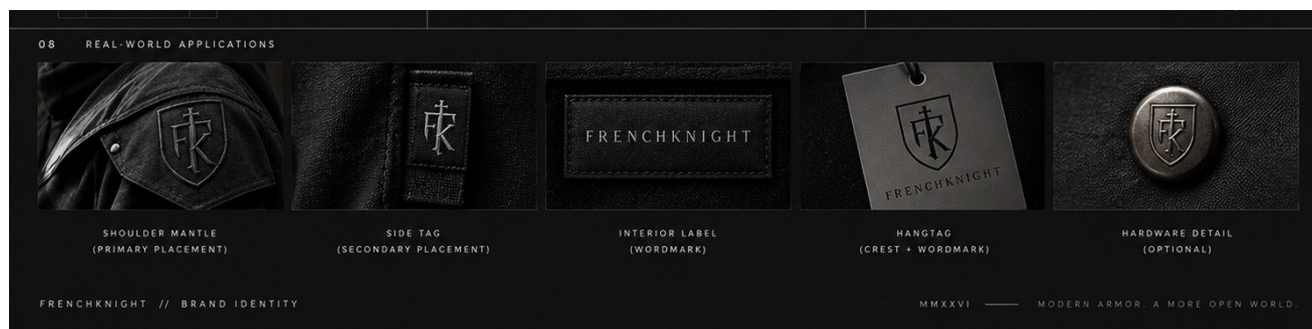


FK-001 CREST RULES

- Use the full narrow shielded FK crest on the left Mantle.
- Starting height: approximately 3.25–4.0 in. Adjust slightly to fit the final Mantle face.
- Preferred prototype treatment: raised tone-on-tone embroidery or clean appliqué. Dark charcoal / black-on-black is preferred over bright contrast.
- Embossing is optional, not required for Prototype 01.
- No FRENCHKNIGHT wordmark beneath the shoulder crest.
- Do not add crowns, swords, fleur-de-lis, banners, or extra heraldic decoration.

PRODUCTION ARTWORK NOTE

The approved logo study is the visual authority for the crest shape. Before final embroidery, the mark should be recreated as clean vector artwork and digitized for the actual machine/process. Do not trace a random crest variant from another generated image.



Approved identity family: full crest / standalone FK / FRENCHKNIGHT wordmark / tone-on-tone applications.

Build the shape before committing materials

Every irreversible step should follow an on-body check.

- 01 **Acquire + fit the blank** — Confirm oversized body, dropped shoulder, hood volume, and left shoulder seam location. Photograph the blank before modification.
- 02 **Cardstock / paper Mantle** — Cut one large Mantle shape. Pin/tape in place. Adjust neckline origin, shoulder extension, arm drop, front/back sweep.
- 03 **Cheap textile structure mockup** — Transfer to felt, scrap twill, muslin, or thin foam wrapped in scrap fabric. This is where thickness and curvature become visible.
- 04 **Mobility test** — Raise arm overhead, cross arms, sit, turn, put hood up/down. The Mantle must not drag hard on neckline or lock the shoulder.
- 05 **Finalize patterns** — Mark and preserve the hidden anchor/yoke and outer Mantle pattern. Add grain direction, seam allowance, attachment points, and orientation.
- 06 **Build final Mantle sandwich** — Outer woven shell + minimal internal structure + soft backing. Finish edges; add tonal perimeter topstitching if it strengthens the design.
- 07 Embroider the crest on the OUTER MANTLE FACE before adding foam/felt/interfacing, backing, or attaching the Mantle to the hoodie. Keep the embroidery stack within the Altair manual's material-thickness limit.
- 08 **Integrate + finish** — Hide the inner edge into/under the neckline/hood area. Attach securely while allowing a controlled free outer edge if it improves depth.
- 09 **Final dual-body fitting** — Test on a woman and a man. Do not create separate versions; adjust only if the same garment loses its intent on one body.
- 10 **Capture for production** — Measure everything, photograph inside/out, label patterns, record material sources and machine settings where useful.

STOP POINT

Before cutting the final Mantle textile, photograph the paper/felt mockup from front, left profile, left three-quarter, back, and with the arm raised. If the shoulder still reads like a patch instead of a form sitting over the body, revise it first.

Nancy — Prototype or checklist

A quick working checklist for the sewing table. Check items only after the garment passes the previous stage.

✓	STAGE	CHECK
☐	PREP	Base blank chosen; blank brand/model/size recorded.
☐	PREP	Baby Lock Altair (BLTA) confirmed. Plan crest embroidery on the flat outer Mantle face before the structural sandwich is assembled.
☐	PREP	Outer Mantle textile, internal structure, backing, thread, and optional hardware selected.
☐	MOCKUP	Paper Mantle pinned on a wearer and photographed from required angles.
☐	MOCKUP	Paper geometry revised until shoulder extension and arm drop feel correct.
☐	MOCKUP	Felt/foam/textile mockup built and mobility tested.
☐	PATTERN	Hidden anchor/yoke pattern saved and labeled.
☐	PATTERN	Outer Mantle pattern saved and labeled with orientation + final dimensions.
☐	FINAL	Mantle sandwich built; edge finish/topstitching approved.
☐	CREST	Full shield FK crest placed approximately 3.25–4 in tall on the outer Mantle face.
☐	FINAL	Inner Mantle edge visually disappears into/under hood-neck area.
☐	FINAL	Outer edge has intentional depth; not fully smashed flat unless fit requires it.
☐	FIT	No painful neckline pull, no arm restriction, no hood interference.
☐	FIT	Garment tested on both a woman and a man.
☐	CAPTURE	Final garment + inside attachment photographed; all measurements/materials recorded.

LOCKED VS. FLEXIBLE

Locked: left shoulder, one dominant Mantle, substantial thickness, integrated neckline origin, shielded FK crest, dark monochrome palette, oversized streetwear body, no large graphics. Flexible: exact geometry, exact textile, exact thickness, final attachment method, amount of floating edge, optional hardware, minor crest sizing.

Measurement + construction record

Fill this out after the final prototype is approved. This becomes the seed of the manufacturer handoff.

BASE BLANK BRAND / MODEL	BLANK SIZE
BLANK COLOR / WASH	BLANK FABRIC + STATED GSM
GARMENT CHEST WIDTH (PIT-TO-PIT)	BODY LENGTH
SHOULDER SEAM LOCATION / DROP	SLEEVE LENGTH
OUTER MANTLE TEXTILE	MANTLE TEXTILE SUPPLIER / SKU
INTERNAL STRUCTURE MATERIAL	BACKING MATERIAL
FINISHED MANTLE MAX WIDTH	MANTLE ARM DROP
SHOULDER EXTENSION BEYOND BODY	FINISHED APPARENT THICKNESS
INNER-EDGE INTEGRATION METHOD	PRIMARY ATTACHMENT POINTS
FLOATING EDGE AMOUNT	TOPSTITCH / SEAM NOTES
CREST FINISHED HEIGHT	CREST PROCESS + THREAD/MATERIAL
OPTIONAL HARDWARE TYPE / COUNT	PROTOTYPE MACHINE MAKE / MODEL / Baby Lock Altair (BLTA)

CONSTRUCTION NOTES / CHANGES FROM BRIEF

PATTERN FILE / PHOTO RECORD

- Label and retain: Hidden Anchor/Yoke pattern + Outer Mantle pattern.
- Photograph pattern pieces flat next to a ruler or cutting mat for scale.
- Photograph front/back of final Mantle before attachment.
- Photograph inside neckline/anchor construction after attachment.
- Record material source links/SKUs and any embroidery digitizing file used.

Prototype or pass / revise decision

The prototype is ready for manufacturing inquiry only when the garment works as clothing and as FrenchKnight.

TEST	PASS CONDITION
20-foot silhouette	The left/right asymmetry is visible before the crest is noticed.
10-foot architecture	The shoulder reads as intentional mass sitting on the body, not fabric decoration.
3-foot construction	Edges, texture, topstitching, crest, and integration reward close inspection.
Logo-covered test	Cover the crest. The garment still feels like FrenchKnight.
Movement test	Arm movement, sitting, turning, hood up/down all work without the Mantle becoming a prop.
Genderless fit test	The same FK-001 reads intentionally on both a woman and a man.
Streetwear test	The piece works with contemporary urban styling and does not drift into cosplay/tactical/superhero territory.

REQUIRED FINAL PHOTO SET

- Front, full body.
- Left three-quarter, full body — primary silhouette view.
- Left profile.
- Back and left three-quarter back.
- Hood up and hood down.
- Arm raised / crossed-arm mobility view.
- Mantle close-up: crest, edge, thickness, attachment.
- Interior attachment / neckline integration.
- Same garment on at least one woman and one man.

FINAL SIGN-OFF

PASS means: the single left-shoulder Mantle is strong enough to define FK-001, the garment remains unmistakably contemporary streetwear, and the design can now be documented for an outside production partner. If any of those conditions fail, revise the prototype before requesting a manufacturing quote.

PROTOTYPE STATUS

☐ PASS ☐ REVISE

DATE

NOTES / NEXT REVISION

Baby Lock Altair (BLTA)

Machine-specific guidance for FK-001 Prototype 01. These notes refine the crest and Mantle workflow; they do not change the approved FK-001 silhouette.

VERIFIED MACHINE FACT	FK-001 IMPLICATION
Machine	Baby Lock Altair, model BLTA - sewing + single-needle embroidery.
Embroidery field	Maximum 9.5 x 14 in. The 3.25-4 in FK crest is comfortably inside the available field.
Embroidery speed	Up to 1,050 stitches per minute. Speed is not the goal for Prototype 01; quality and registration are.
Import formats	.pes, .phc, .pec, and .dst are supported. Preserve the exact approved crest artwork and the final digitized stitch file.
Placement tools	IQ Intuition Positioning and on-screen editing can help place the crest on the irregular Mantle face after the final pattern is cut.
Applique	Automatic applique is supported, so applique remains a valid backup if raised embroidery does not give enough relief.

NON-NEGOTIABLE EMBROIDERY LIMIT

Baby Lock's Altair embroidery instructions caution against embroidering fabric thicker than 3 mm (about 1/8 in). Therefore, do NOT embroider through the finished Mantle sandwich. Embroider the crest on the outer shell while it is still a flat, stabilized textile layer; add felt/foam/interfacing and backing afterward.

FK CREST - ALTAIR WORKFLOW

- Finalize the paper/felt Mantle pattern and mark the intended crest center on-body.
- Cut the final OUTER Mantle face with enough extra handling area to hoop or float it securely.
- Stabilize the outer face appropriately for the chosen woven fabric. Test the exact fabric + stabilizer combination on scrap first.
- Use the approved FrenchKnight shield crest only. Digitize/import the production file; target approximately 3.25-4.0 in finished height.
- Use the Altair positioning tools to place the crest on the outer face. Keep it slightly forward/outboard so it reads in left three-quarter photography.
- Run a full test stitch on scrap. Check edge definition, puckering, thread sheen, fill density, and whether the small cross-like top remains clean.
- Embroider the final outer face BEFORE adding any structural foam/felt/interfacing or backing.
- Inspect the embroidery. Only after it passes should the Mantle sandwich be assembled and topstitched.
- Attach the finished Mantle to the hoodie using the approved hidden anchor/neckline strategy. Do not force an excessively thick seam stack through the machine.
- Record final crest file, finished size, thread, stabilizer, hoop/placement method, and any machine setting changes used on the successful sample.

MACHINE-SPECIFIC STOP CONDITIONS

- Needle deflection, repeated skipped stitches, or the machine struggling at a seam stack: stop and reduce/rebuild the stack rather than forcing it.
- Embroidery puckering or distorted shield geometry: revise stabilizer/digitizing/tension on scrap before touching the final Mantle face.
- Finished Mantle too thick to sew cleanly at the neckline: move volume away from the attachment seam or taper the internal structure near the anchor.
- Logo loses clarity at tone-on-tone contrast: adjust thread sheen/density or use a restrained applique solution; do not solve it with bright contrast color.

Machine facts verified against Baby Lock's official Altair (BLTA) product documentation and Altair embroidery instructions on September 4, 2026.