

FREE GUIDE

MATERIALS GUIDE

Leathers, engineered leathers, padding systems, linings and performance fabrics — what each one is for, and how to choose between them.

01 – SHELL MATERIALS

LEATHER

FULL GRAIN COWHIDE	Uppermost hide layer, grain intact. Strongest and most durable; develops a patina rather than cracking. Heavy. Competition gloves and flagship lines.
TOP GRAIN COWHIDE	Sanded for a uniform surface. Slightly more pliable, far more consistent across a production run. Training and sparring gloves.
BUFFALO	Coarse grain, exceptional tear strength, heaviest option. Bags, kick shields, thai pads.
GOAT	Light, supple, fine pebbled grain. Feel and dexterity over bulk strength. Lace-up competition gloves.

ENGINEERED LEATHER

JAPANESE MICROFIBER	Highest synthetic grade. Dense fibre, closest hand-feel to full grain, superior colour retention. Flagship synthetic lines.
PREMIUM MICROFIBER	Lighter than hide, dimensionally stable, will not stiffen or crack with sweat. The strongest all-round OEM choice.
MAYA HIDE	Reinforced engineered leather, treated against scuffing. Tougher than PU, cheaper than hide.
CARBON PU	Carbon-textured polyurethane, matte technical finish. Light, easy to clean, modern appearance.
PU	Cost-efficient, holds print and colour exceptionally well. Volume programmes, gym fleets, youth gear.

RULE OF THUMB If the product is struck, choose for durability. If the product is worn, choose for weight and breathability. If the product is sold on a shelf, choose for finish.

02 – PADDING SYSTEMS

HOW PADDING IS CHOSEN

Padding determines both how a product feels and how safe it is. Denser foam gives cleaner feedback on the bag; softer, layered foam protects a training partner. These are trade-offs, not upgrades.

GEL PADDING	Viscoelastic layer spreads peak impact across a wider area. Highest absorption. Set over a foam core. Premium gloves, head guards, chest protectors.
IMF (INJECTION MOULDED)	Single continuous moulded piece — no glued layers to separate. Padding profile stays identical for the life of the glove.
MULTI-LAYER FOAM	Two to four densities stacked: soft at the surface, firm at the core. Sparring gloves, head guards, body protectors.
LATEX FOAM	Naturally elastic, fast rebound, comfortable over long sessions.
HIGH-DENSITY FOAM	Dense, slow-rebounding. Clean feedback without shock to the knuckle. Bag gloves, focus mitts, thai pads.
EVA FOAM	Closed-cell, light, holds shape through hundreds of impacts. Shin guards, groin guards, joint pads.
HYBRID FOAM + HORSEHAIR	Horsehair core over foam base. Traditional strike character, restored protection.
HORSEHAIR	Traditional competition filling. Compresses hard, returns little. Authentic and deliberately less protective.

IMPORTANT

Absorption comparisons published by any manufacturer, including ours, are indicative — not certified laboratory grades. Ask for a physical sample and hit it.

03 — LININGS & FABRICS

INNER LININGS

- **Air mesh** — open-cell 3D mesh, most breathable option, moves air with each compression.
- **Antimicrobial tricot** — treated knit that inhibits odour bacteria. The answer to gear that smells after a month.
- **Moisture-wicking fabric** — capillary fibres pull sweat to the outer face where it evaporates.
- **Polyester mesh** — hard-wearing, resists abrasion from hand wraps, washes without pilling.
- **Satin** — low friction, lets a wrapped hand slide in easily. Traditional lace-up gloves.
- **Nylon** — tough, light, quick-drying, cost-effective base lining.

APPAREL FABRICS

RASH GUARDS	Polyester-spandex (80/20 or 88/12), four-way stretch, full-panel sublimation. Lycra blend for maximum recovery.
FIGHT SHORTS	4-way stretch for MMA; satin polyester for the traditional boxing and Muay Thai lustre.
TRAINING WEAR	Fleece, French terry, cotton-poly blends. Screen print, embroidery and woven labels.
HAND WRAPS	Cotton (rigid, professional), cotton-spandex (forgiving, self-wrapping), elastic polyester (gym fleets).

FREE SWATCHES

We send physical material swatches free before you commit to a sample. Photographs cannot communicate the difference between top grain and microfiber — your hands can. Request them at rainwolfsports.com/contact.