biomimicry · adaptive façade · articulated membrane

LORICA

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LORICA is a modular façade system inspired by the articulated armour of the armadillo. Through a sequence of rigid segments guiding a textile membrane, the element expands, translates, and adapts between fixed edges, producing a responsive architectural skin. Its mechanism combines biomimetic logic with origami-based movement, allowing the façade to filter air, modulate light, provide shading, and adjust its environmental performance according to context.

Rather than acting as a static envelope, LORICA becomes an active threshold between protection, permeability, and atmospheric exchange.

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