

Fish Waste to Fish Leather

Circular Economy Meets Highend Luxury Retail and Fine Dining Experience on the River Thames.

This pioneering sustainable manufacturing project transforms London's fish waste into luxury leather products at a dynamic mixed-use facility on Kingston's historic waterfront. Serving as ICTYOS's luxury fish leather manufacturer's flagship, the building integrates industrial production with hospitality, retail, and ecological conservation.

Inspired by Zaha Hadid's sculptural designs, the flowing aluca bond roof emulates water movement and fish leather draping patterns, creating dramatic presence while channeling natural light and Thames views.

Fish waste from Billingsgate Market and London restaurants undergoes sustainable processing, with usable portions redirected to the on-site restaurant for complete resource utilization. Ground floor features fish nurseries using Thames water and riverside retail, with 90% of mature fish released for ecological restoration.

The first floor houses the state-of-the-art tannery and production facility with public viewing of manufacturing processes. The second floor features fine dining with scale-patterned tiles and organic lighting mimicking fish movements.

The reinstated dock system maintains historic Thames connections while supporting contemporary sustainable operations.



line a level Flor Plan



The reinstated dock system serves multiple functions that reinforce the building's role as both luxury destination and sustainable processing facility.

High-end visitors arriving by private boat can moor at external docks to access fine dining and premium experiences, while internal docks allow delivery boats from Billingsgate Market, fishmongers, and restaurants across London to offload fish waste directly into processing areas.

The existing public boat rental service on Kingston Riverside Walk is preserved, maintaining community Thames access alongside the building's diverse programming. Native Thames plantings throughout dock edges create naturalistic transitions that support local ecosystems while integrating the facility into the waterfront landscape.











1:10 Construction Detail







The Proposal | Final Exterior View

The building's exterior form creates a dramatic gesture that reimagines the site's historical relationship with the Thames while establishing new public connections to the waterfront.

The flowing roof structure emulates both the movement of water and the distinctive draping patterns of fish leather during its traditional manufacturing process, creating a sculptural canopy that speaks directly to the project's aquatic narrative.

By reinstating the original historical dock that once occupied this site, the design literally brings the river into the building through integrated water systems.

The ground floor retail spaces are strategically positioned along the riverside promenade to draw pedestrians into the architectural experience, while expansive glass facades dissolve barriers between interior and exterior environments, ensuring maximum public accessibility and community engagement.

Roof Plan



An Interior Circular Economy

The river ecology has been brought into the interior using local native river plants. The fish farm/Reservoir will contain fresh water from the river to host the native fish species.

Inspiration has been driven by looking at existing trout fish farms such as Arbury Fish Farm. Thus creating a circular space



The material selection reinforces sophisticated sensory experience through balanced textures and tones. Rich emerald velvet introduces **tactile luxury** and acoustic softness, contrasting with sculptural brass detailing that adds warmth and reflects lighting.

Consistent limestone provides neutral grounding, while transparent glass flooring sections offer direct views into fish nursery reservoirs below.

Timber veneer elements echo **organic warmth**, while visible nursery reservoirs create dynamic movement and biophilic connection, supporting both functional performance and atmospheric richness.













Where Movement Meets Function

The material selection reinforces the restaurant's aquatic identity through **sophisticated** textures and organic forms. Wavey limestone flooring creates flowing patterns that suggest water movement beneath diners' feet, whilst rich green velour seating provides luxurious comfort with **oceanic** colour references.

Warm timber veneer surfaces soften the space and complement the curved banquette seating that wraps around **intimate** dining areas.

The distinctive bar tile pattern creates scaled surfaces that shimmer like fish skin, whilst carefully selected furniture maintains the **flowing** aesthetic through **gentle curves** and natural materials that unite the entire dining experience.

Glass balustrade in low iron glass Inner staircase in Limestone Stone treads in natural Limestone Inner recessed handrail Stair edge in natural Limestone Handrail solid oak timber Slab

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Design Process | Fish Waste = Fish Leather Process



The material choices directly support ICTYOS's brand identity while meeting the harsh demands of industrial leather production.

Ictyos Fish Leather Colours