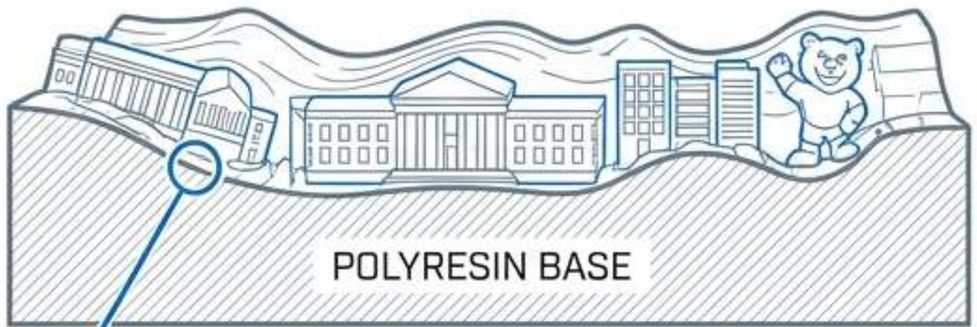
SPECIFICATION DOSSIER

Procuring Custom 3D Molded Polyresin Fridge Magnets

SKU Reference: ZPCM0007
Document Purpose: Blueprint & Purchasing Workflow
Scope: Component Assembly, Sampling, and Verification

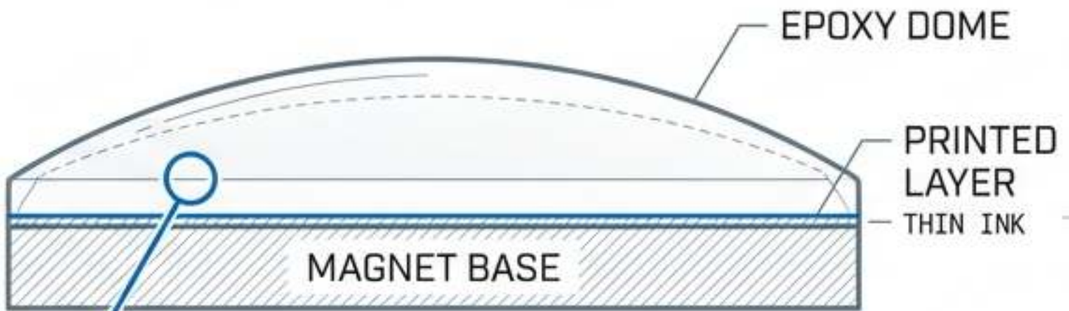
Molded contours define the product, not clear coatings over flat print

Molded Polyresin (ZPCM0007)



Structural Relief: The shape itself represents architectural or mascot features.

Epoxy-Domed Printed Magnet



Coated Print: A raised transparent coating over a flat 2D image.

Rule: These formats cannot be substituted without formal approval.
A molded miniature requires unique tooling and design simplification.

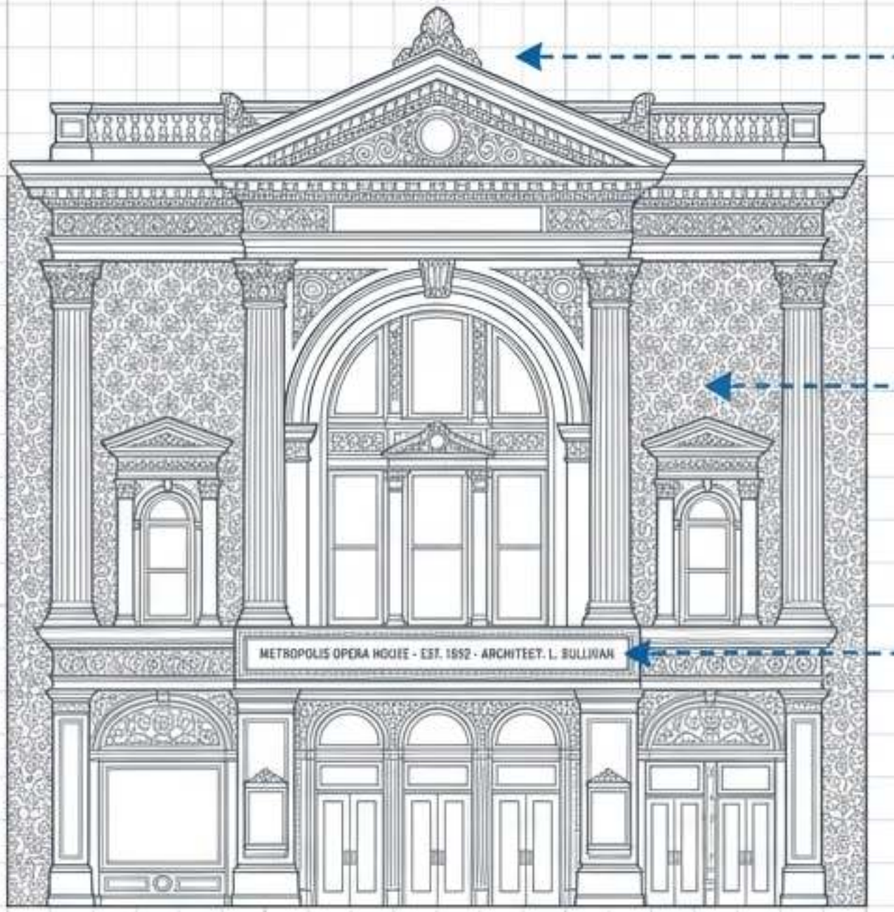
ZIGPAC

Diagnosing the correct material format for your purchasing priorities

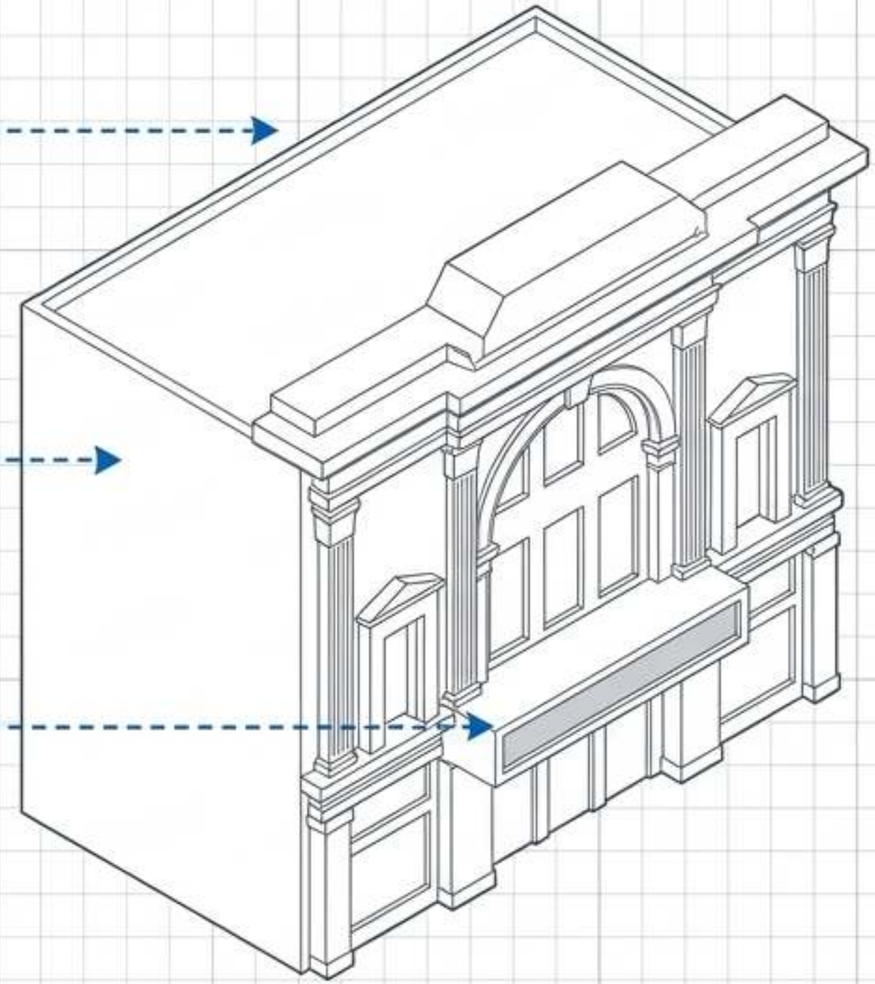
Material Format	Core Design Priority	The Key Buying Question
Molded Polyresin	Sculpted landmarks, characters, and dimensional souvenirs	Does the sample preserve recognizable detail, and is packaging appropriate?
Epoxy-domed	Printed image beneath a raised clear coating	Is the desired result a coated image rather than a molded miniature?
Soft PVC	Flexible molded shapes and graphic relief	Does the tactile finish suit the design and intended audience?
Printed Acrylic	Cut-out artwork with a rigid printed face	Are print appearance, edge treatment, and backing acceptable?
Metal	Metallic appearance, relief, engraving, or enamel	What finish, weight, tooling, and shipping requirements apply?
Wood	Visible grain and natural presentation	How will grain variation and moisture care be addressed?
Flexible Printed	Flat promotional graphics	Is a flat format more suitable than sculpted decoration?

ZIGPAC

Sculpted molding requires simplifying fine 2D details



1. Identify the focal point to remain dominant.
2. Acknowledge which secondary details must be simplified for mold extraction.
3. Confirm every required text element; small lettering can disappear in sculpted detail.

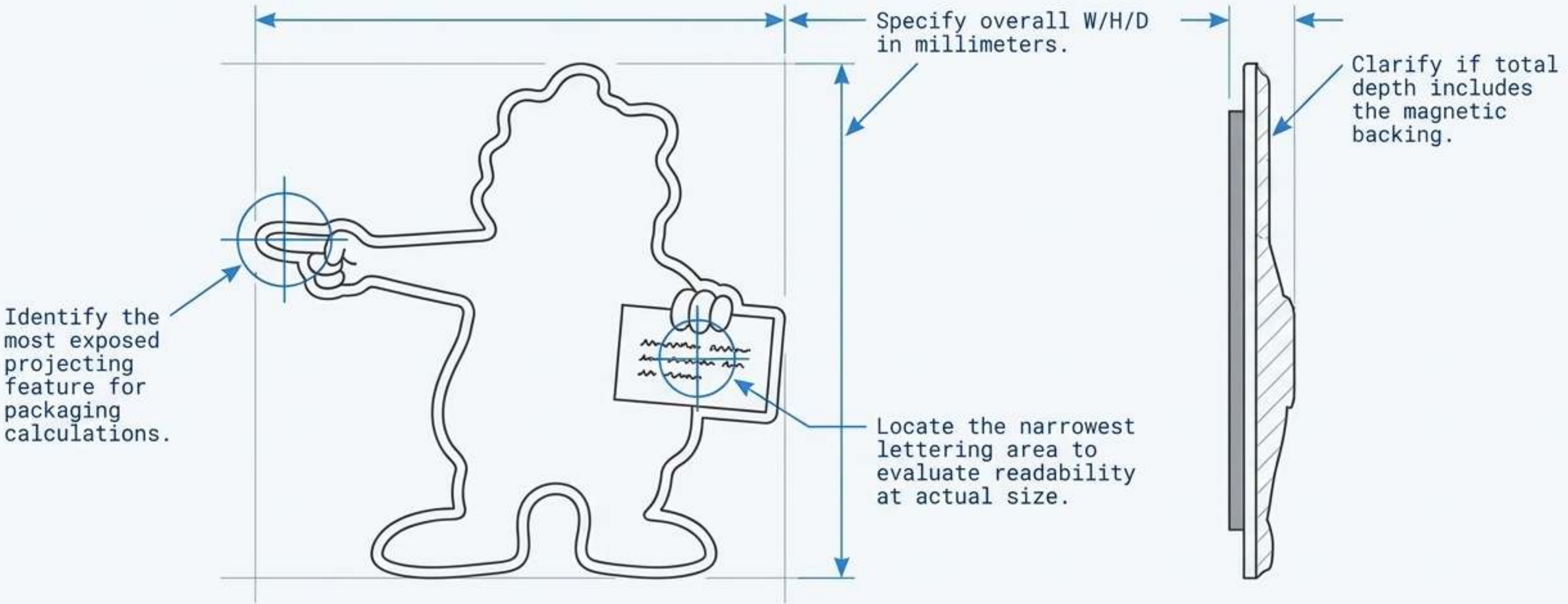


2D Source Concept

Molded Reality

ZIGPAC

Defining physical space requires mapping the narrowest and most exposed features



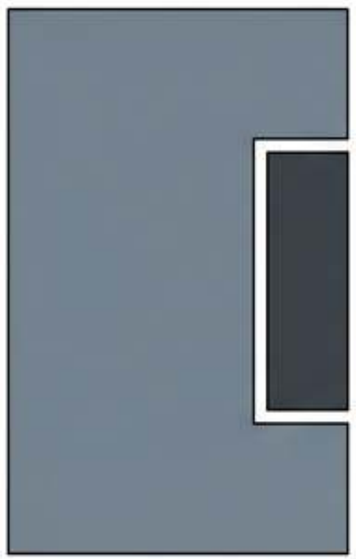
Assembly anatomy dictates magnetic retention and display stability

Surface-Bonded



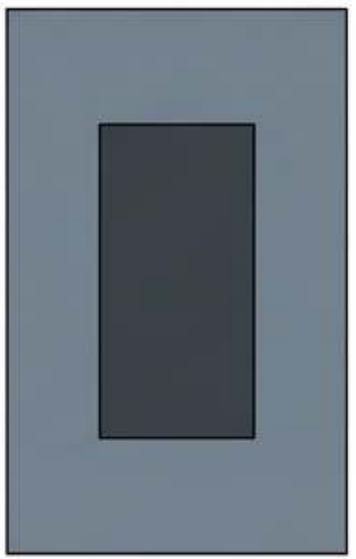
Maximum exposure; relies entirely on surface adhesive.

Recessed



Protected edges; flush contact with the display surface.

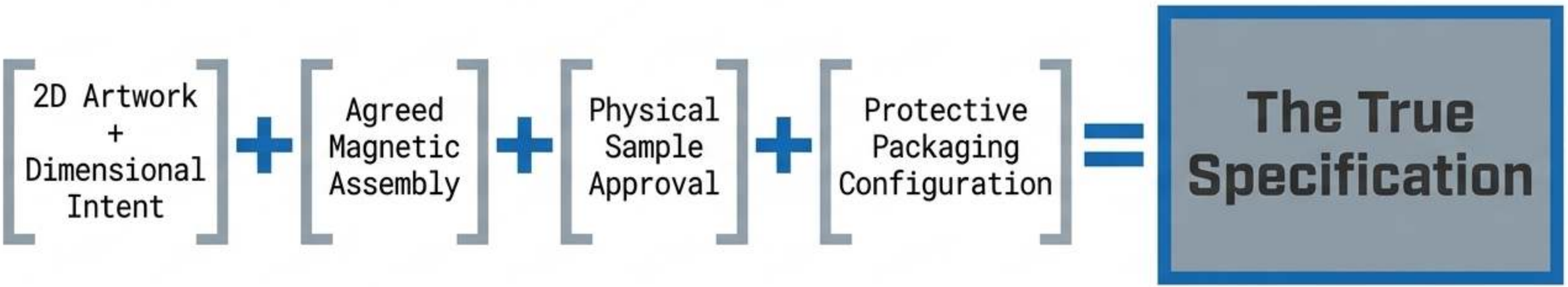
Embedded



Zero adhesive exposure; magnetic force must penetrate the resin layer.

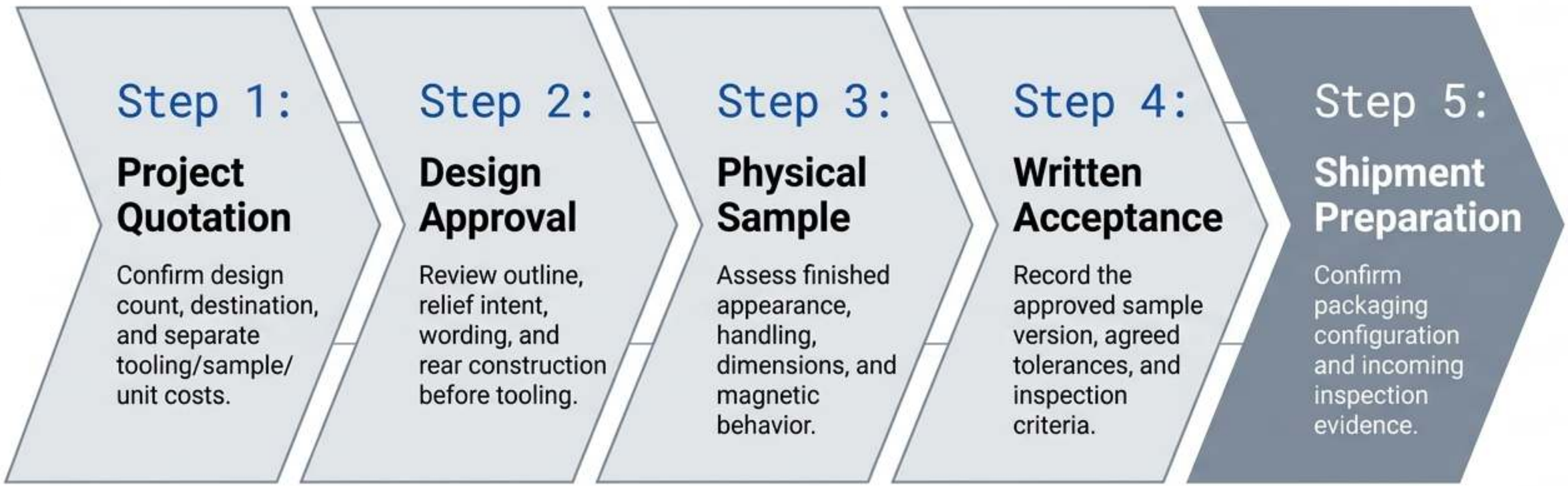
A supplier’s description of one assembly cannot be assumed for another. Investigate positioning, flush contact, and leverage. Excessive strength can stress the connection.

A rendering is not a specification



The purchasing problem starts when an attractive 2D rendering becomes the entire specification. Without physical sample validation, buyers risk delayed stock, rework, or structural failure. The physical sample is the ultimate contract.

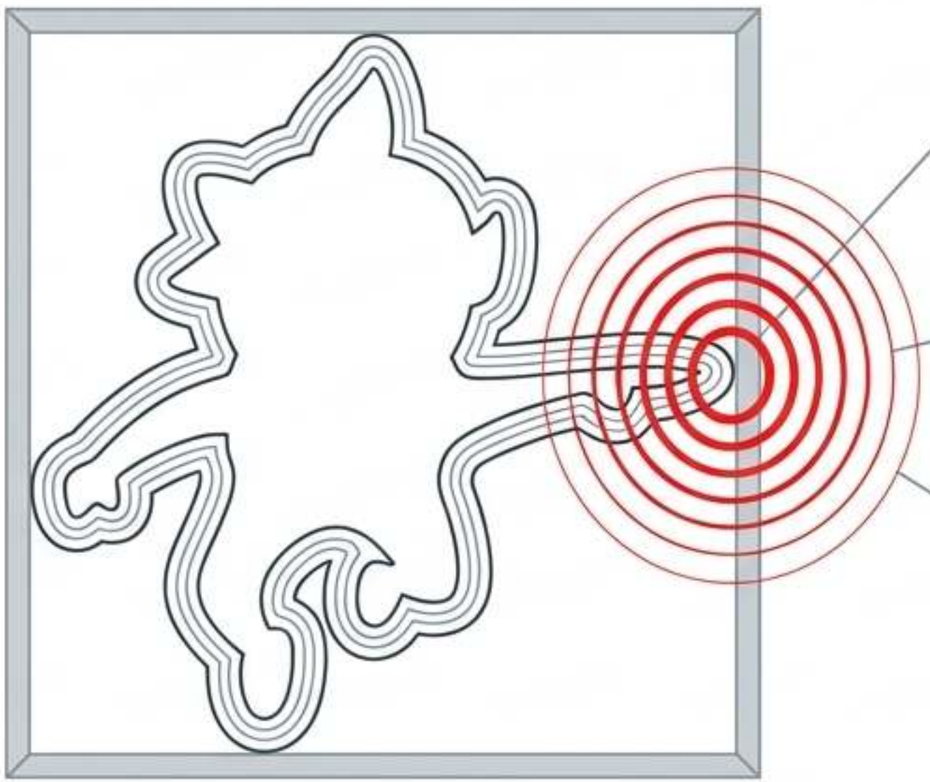
The sample-led purchasing pipeline



Structuring the physical sample inspection

	What to Examine	What to Record
Appearance	Lettering, color placement, chips, unwanted residue.	Approved reference photos and agreed limits.
Dimensions	Overall size, depth, rear profile.	Measured mm and finished mass in grams.
Stability	Sliding/movement on the intended surface.	Loading condition, orientation, and observation period.
Retention	Integrity between insert and decorative body.	Agreed test method for detachment limits.
Durability	Abrasion, moisture, light exposure.	Exact test conditions (do not accept unverified ‘waterproof’ claims).

Exposed contours dictate transit protection requirements



The Contact Point

Evaluate whether exposed contours can contact neighboring pieces.

Retail vs. Bulk

A retail backing card and a bulk protective pack require different shock absorption.

The System

Protective material around an individual piece does not prove a loaded carton will survive transit. Test the proposed pack.

Establishing boundaries for safety, care, and compliance



CPSC & Toy Safety

High-powered magnets pose severe ingestion risks (CPSC). Do not promote as a child-safe toy without destination-specific compliance testing. Age warnings do not substitute for assessment.



Surface Care

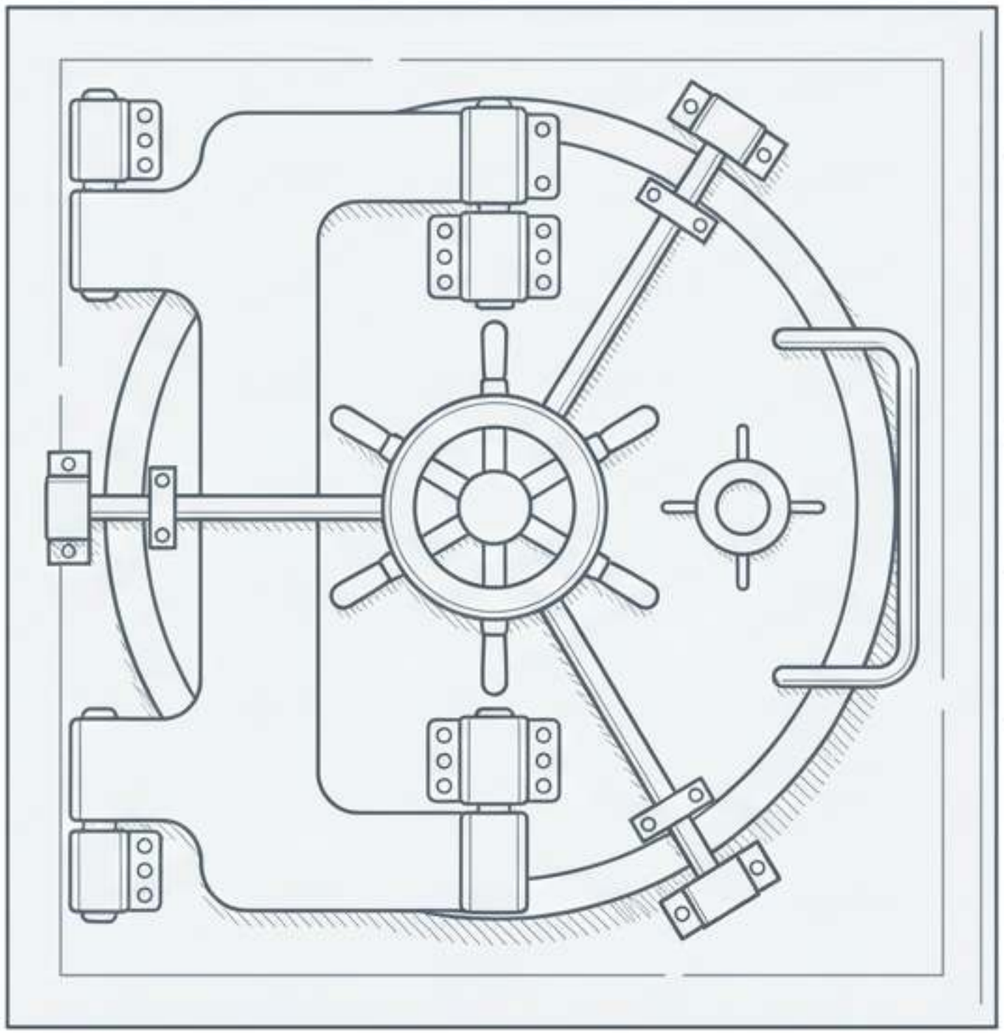
Specify indoor decorative use. No UV-stable or waterproof ratings are verified by default. Use a barely damp cloth; avoid solvents, soaking, and appliance heat.



Disposal Planning

Treat the assembled resin, coating, adhesive, and magnet as a mixed-material item. Do not assume household recycling routes apply.

Securing the commercial baseline for repeat production



Commercial Breakdown

Demand separate identification of **tooling, samples, testing, unit cost, and freight**. Advertised low unit prices often hide tooling fees.

Locking the Sample

Retain the **exact approved physical sample**. Reusing a product name is not enough to define the same order.

Managing Revisions

Establish upfront if a design change requires revised tooling charges or if sample revisions carry penalties.

The Final Rule

Use the **same artwork**, **packaging expectations**, and **testing requirements** across all supplier quotations to ensure a verified comparison.