

ARCHITECTURAL SPECIFICATION & TECHNICAL MANUAL

INDICATIVE SPECIFICATION SHEET — FOR REFERENCE ONLY

Bespoke Marble Inlay, Medallions & Pietre Dure

Master Specification Guide for Architects, Interior Designers, Structural Engineers & Project Directors

Art Inlay fabricates custom waterjet marble inlay floors, radial medallions, Florentine pietre dure marquetry, and running perimeter borders at our dedicated Jiangmen atelier (founded 2008). Every commission is drawn 1:1 on the workshop floor, cut on multi-axis CNC waterjets to ± 0.1 mm tolerance, hand-lapped at the bench, and fully dry-assembled for client inspection before export crating.

01 · PHYSICAL, MECHANICAL & DIMENSIONAL DATA

INDICATIVE REFERENCE VALUES (ASTM / DIN / EN)

Dimensional Cutting Tolerance	± 0.1 mm across full figure (CNC 5-Axis Waterjet, ASTM C170 compliant)
Inlay Joint / Seam Width	0.3 – 0.5 mm (Marble Inlay) · 0.1 – 0.25 mm (Florentine Pietre Dure)
Standard Slab Thicknesses	18 mm or 20 mm solid natural stone · 20 mm lightweight aluminium honeycomb
Flatness & Lippage Calibration	± 0.2 mm across 2,000 mm straightedge (calibrated & honed prior to crating)
Compressive Strength (Marble)	≥ 110 MPa (ASTM C170) · Flexural Strength ≥ 12.5 MPa (ASTM C880)
Water Absorption & Sealing	$\leq 0.18\%$ by weight (ASTM C97) · Six-sided breathable fluoropolymer sealer
Slip Resistance Options	R9 (Mirror Polished) · R10 (Satin Honed) · R11 (Micro-Textured Wet Zone, DIN 51130)
Thermal & Radiant Floor Sync	Approved for hydronic and electric radiant heating/cooling slabs ($\leq 29^{\circ}\text{C}$ surface)
Export Crating Standard	ISPM-15 heat-treated fumigated timber A-frames with numbered CAD key map
Typical Production Lead Time	6–10 weeks ex-works Jiangmen after CAD & slab approval (CIF / DAP global)

02 · REFERENCE STONE & METAL PAIRINGS

Calacatta Oro & Nero Marquina

Classic high-contrast Italian white and Basque black marble for foyers & compass stars

Statuario Venato & Giallo Siena

Warm imperial gold and pure white marble for palatial reception halls & domes

Emperador Dark, Crema Marfil & Brass

Warm Iberian palette paired with 3 mm solid C28000 architectural brass inlays

Lapis Lazuli, Malachite & Mother of Pearl

Gem-grade hardstone marquetry on Belgian Black or Statuario carrier slabs

03 · ATELIER ENGINEERING & QA PROTOCOL

01 · Architectural Submittal & 1:1 Cartoon

Send DWG/DXF/PDF floor plans or a sketch. Within 3 working days we return an itemised quotation, material study, and full-scale 1:1 cut plan showing module joints and movement joint lines.

02 · Vein-Matched Slab Selection

Blocks and slabs are selected at our Jiangmen storehouse against your approved drawing, photographed under calibrated lighting, and submitted for architect sign-off before cutting.

03 · Multi-Axis Waterjet & Bench Lapping

Pieces are cut from the master CAD file to ± 0.1 mm, hand-fitted at the artisan bench, and bonded with UV-stable structural cycloaliphatic resin and fiberglass mesh backing.

04 · Pre-Shipment Dry-Assembly & Crating

The entire floor is assembled dry on our workshop floor, inspected, numbered against the setting plan, photographed in high resolution for your sign-off, and packed in ISPM-15 crates.

04 · ARCHITECTURAL SPECIFICATION & SITE INSTALLATION SUMMARY

CSI MASTERFORMAT SECTION

09 30 33 — Stone Tiling / Bespoke Architectural Stone Marquetry

RECOMMENDED SETTING ADHESIVE

White polymer-modified rapid-setting C2TES1/S2 cementitious or 100% solids epoxy (moisture-sensitive stone)

SUBSTRATE FLATNESS REQUIREMENT

± 2 mm over 2,000 mm (FF50 / FL35 minimum) prior to thin-set bed application

MOVEMENT & PERIMETER JOINTS

Provide 6–8 mm perimeter accommodation and carry structural slab joints directly through outer border lines

IMPORTANT NOTICE — FOR REFERENCE ONLY: All technical parameters, stone densities, and dimensional tolerances in this sheet are provided for preliminary architectural reference only. Because natural stone varies by quarry block, final project-specific engineering specifications, 1:1 CAD shop drawings, and physical slab submittals are issued for formal sign-off prior to fabrication.