



Amorini

JOINERY COMPONENTS

MOCO BOARD

Technical Specification — Melamine Faced Particleboard

Document Ref	Version	Effective Date
MOCO-TS-01	A01	10 September 2024

This specification sets out the appearance, dimensional, and physical/chemical requirements for the melamine impregnated paper faced chipboard used in Amorini's Moco Board range. Content is reproduced from the manufacturer's quality standard, reformatted for Amorini use.

SECTION 1: SCOPE & REFERENCE STANDARDS

Purpose: To define the quality requirements for melamine impregnated paper faced chipboard used in the Moco Board range.

Scope: This standard specifies the quality requirements, inspection methods, and inspection rules for melamine impregnated paper faced chipboard.

Standard No.	Title
GB/T 15102-2017	Melamine impregnated paper faced fibreboard and particleboard
GB/T 28995-2012	Decorative paper for wood-based panels
JIS A 1460-2021	Formaldehyde emission test for building boards — Desiccator method
GB/T 39600-2021	Formaldehyde emission grading for wood-based panels and their products

SECTION 2: TERMINOLOGY — DEFECT DEFINITIONS

Term	Definition
Dry bloom	Opaque white spots present on the product surface.
Wet bloom	Foggy/misty traces present on the product surface.



Term	Definition
Paper misalignment	Missing paper caused by inaccurate positioning between impregnated paper and substrate.
Paper tear	Surface fracture marks caused by partial tearing of the impregnated paper.
Localised paper missing	Substrate exposure caused by impregnated paper damage.
Show-through	Substrate colour or defects visible due to light paper colour or insufficient coverage.
Edge chipping	Sawtooth defects on the surface layer caused during edge trimming.
Blister	Abnormal surface protrusion caused by trapped gas.
Bump	Abnormal surface protrusion caused by solid foreign matter.
Colour spot	Dot-like phenomena including black dots, white dots, and other off-colour spots.
Edge breakage	Damage and defects at board edges.
Corner breakage	Damage and defects at board corners.
Glue spot	Mottled glue residue from adhesive pooling in low areas of uneven substrate after hot pressing.
Delamination	Separation within substrate, within paper, or between paper and substrate.
Sticking mark	Localised whitening from misalignment with steel plate during pressing.

SECTION 3: APPEARANCE QUALITY REQUIREMENTS — PREMIUM GRADE

Defect	Front Surface	Back Surface
Colour spot	Not permitted	Not permitted
Dry bloom / Wet bloom	Not permitted	Not permitted
Stain	Not permitted	Not permitted
Surface scratch	Not permitted	Not permitted
Surface press mark	Not permitted	Not permitted
Show-through	Not permitted	Not permitted
Paper misalignment	Not permitted	Not permitted
Surface porosity	Not permitted	Not permitted
Colour mismatch	Obvious not permitted	Obvious not permitted
Gloss unevenness	Obvious not permitted	Obvious not permitted
Blister	Not permitted	Not permitted
Bump	Not permitted	Not permitted
Paper tear	Not permitted	Not permitted
Localised paper missing	Not permitted	Not permitted



Defect	Front Surface	Back Surface
Edge chipping	Not permitted	Not permitted

Notes: (1) Severe defects not listed that affect use or decorative effect (surface cracking, delamination, edge/corner damage within nominal dimensions) are not permitted for any grade. Edge chipping outside nominal dimensions is permissible. (2) Inspection: hold panel vertically at 90°, view from 1 m distance; no visible abnormality = “not obvious.”

SECTION 4: DIMENSIONAL REQUIREMENTS

Parameter	Requirement	Reference
Length deviation	$\leq \pm 2$ mm/m	GB/T 15102-2017
Width deviation	$\leq \pm 2$ mm/m	GB/T 15102-2017
Thickness deviation	$\leq \pm 0.3$ mm	GB/T 15102-2017
Squareness	≤ 2 mm/m	GB/T 15102-2017
Edge straightness	≤ 1 mm/m	GB/T 15102-2017

SECTION 5: PHYSICAL & CHEMICAL PROPERTIES

Category	Property	Unit	Requirement	Test Method
Mechanical	Static bending strength	MPa	≥ 15	GB/T 17657
Mechanical	Modulus of elasticity	MPa	$\geq 3,000$	GB/T 17657
Mechanical	Internal bond strength	MPa	≥ 0.35	GB/T 17657
Mechanical	Surface bond strength	MPa	≥ 1.0	GB/T 17657
Mechanical	Screw holding — face	N	$\geq 1,000$	GB/T 17657
Mechanical	Screw holding — edge	N	≥ 800	GB/T 17657
Physical	Density	kg/m ³	≥ 655	GB/T 17657
Physical	Moisture content	%	6–10	GB/T 17657
Physical	24h thickness swelling	%	≤ 6	GB/T 17657
Surface	Scratch resistance	N	≥ 1.5	GB/T 17657
Surface	Wear resistance	mg/100r	≤ 80	GB/T 17657
Emission	Formaldehyde — Desiccator method	mg/L	≤ 0.3	JIS A 1460
Emission	Formaldehyde — 1m ³ climate chamber	mg/m ³	≤ 0.025	GB/T 18580

Notes: 24h thickness swelling applies to the Chinese mainland testing method. Formaldehyde emission meets E0 grade (≤ 0.025 mg/m³ by 1m³ chamber method) per GB/T 39600-2021. Surface scratch resistance: ≥ 1.5 N with no continuous scratches exceeding 90% of the test area.



SECTION 6: INSPECTION METHODS

Visual Inspection: Inspectors shall have normal (or corrected) vision of 5.0. Each panel is inspected individually along its length, at a viewing distance of 0.5–1.5 m and viewing angle of 30°–90°.

Tool	Resolution / Specification
Micrometer	Resolution: 0.01 mm
Steel ruler	Resolution: 0.5 mm
Steel tape measure	Resolution: 1 mm
Film gauge	For surface defect comparison

SECTION 7: MANUFACTURER & DISTRIBUTOR

Manufacturer	Anhui Dimi New Materials Co., Ltd. No. 008 East, Shipai Avenue, Huaining County, Anqing City, Anhui Province, China
Australian Distributor	Amorini Australia Pty Ltd — ABN 55 109 941 755 28 Starr Avenue, North Plympton SA 5037 Contact: Mitch Bosley — mitchell.b@amorini.com.au

This document has been prepared in accordance with GB/T 15102–2017 and reproduces the manufacturer's quality standard (Doc No. DM-QC2024-01, Rev A01) for Amorini's Moco Board range. Figures and requirements are unaltered from the source document.