

Agro

MELAMINE FACED
COLLECTION



Agro is a leading manufacturer and distributor of Fiberboard under the "Agro" brand, serving both domestic and international markets.

A – Abundance: Sourced from plantations of over a million farmers, ensuring a reliable supply.

G – Get Along: Continuously developing products, enhancing business potential, and fostering mutual growth.

R – Rightfully: Honest and fair, attentive to every step, always providing care and consultation.

O – Optimum : Committed to delivering the best products and services to our valued customers.

Our spirit is driven by courage, challenge, and innovation. We are dedicated to inventing and creating better solutions to enhance design quality and elevate the lifestyle of professionals.



Invent for
Better





#SHINE YOUR SPACE

architecture
MODERN ART



**WOOD
GRAIN**



AGRO 48 NEO OAK

AGRO 10
VANILLA



AGRO 11
BEECH



AGRO 13
CAPPUCHINO



AGRO 21
HARVEST



AGRO 48
NEO OAK



AGRO 47
TERRA



|  EDGE
BANDING



AGRO 35
BRUNETTE

|  EDGE
BANDING



AGRO 07
TECTONA

|  EDGE
BANDING



AGRO 49
MORAINER



|  EDGE
BANDING



AGRO 51
SIENNA



|  EDGE
BANDING







AGRO 49 MORAINER

AGRO 06
SMOKY



AGRO 15
CHESTNUT



AGRO 18
SUGAR PINE



AGRO 19
SANDERS



AGRO 32
CORNWALL OAK |  EDGE BANDING



AGRO 33
FOGGY





AGRO 32 CORNWALL OAK

FABRIC & MARBLE



AGRO 36 MARBLE



AGRO 27
LACE

|  EDGE
BANDING



AGRO 30
LEATHER





AGRO 36
MARBLE



AGRO 37
DOLOMITE



SOLID



AGRO 45 MOCHA



AGRO 01
WHITE



AGRO 02
LIGHT GREY



AGRO 03
BLACK



AGRO 31
DARK GREY



AGRO 46
OLIVE



|  EDGE
BANDING



AGRO 45
MOCHA



|  EDGE
BANDING





#FRIENDSHIP SURFACE

SURFACE

MATT



STIPPLE



WOOD GRAIN



BRUSH

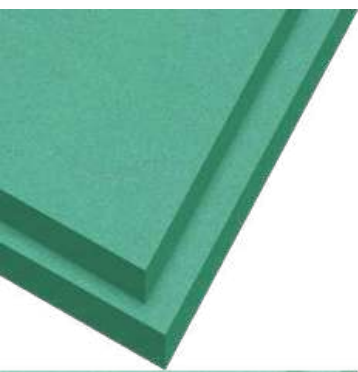


NATURAL GRAIN



LARGE GRAIN



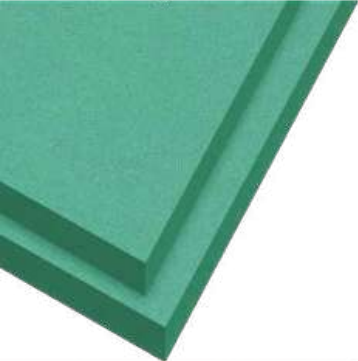


Agro HMR EPA (V313)

Agro HMR EPA (V313) boards are certified to meet CARB P2/EPA standards, delivering ultra-low formaldehyde emissions of less than 0.11 ppm. Classified as a low-VOCs material – cleaner indoor air, enhances living safety, and reflects a commitment to environmentally responsible design.

Standard Size : 4 x 8 ft (1230x2450 mm.)

Thickness : 6, 9, 15, 18 mm.



Agro HMR E2 (V313)

Agro HMR E2 (V313) boards Materials for built-in work in homes, condos, and hotels, highly resistant to moisture, meeting V313 standards.

Standard Size : 4 x 8 ft (1230x2450 mm.)

Thickness : 4, 6, 9, 15, 18, 25 mm.

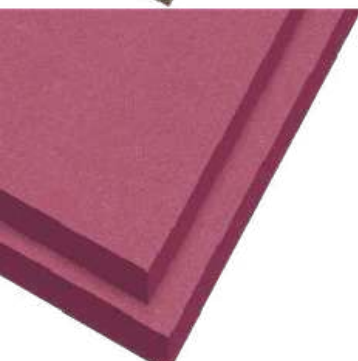


Agro MDF Classic

Original medium density fiber board - Versatile Material for Booths & Furniture – Multiple Thickness Options

Standard Size : 4 x 8 ft (1230x2450 mm.)

Thickness : 5.5, 9, 12, 15, 16, 18, 25 mm.



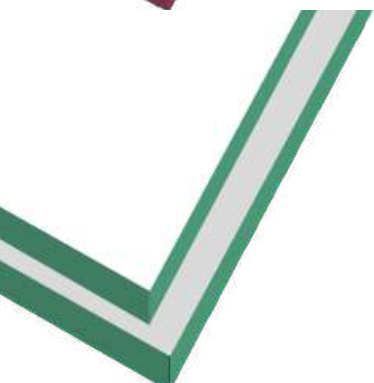
Agro FR E84-A

Agro FR E84-A board with fire-retardant properties and low smoke generation, certified to ASTM E84 Class A for surface burning characteristics of building materials. It meets CARB P2 / EPA standards, with formaldehyde emissions below 0.11 ppm. for Public Buildings.

Standard Size : 4 x 8 ft (1230x2450 mm.)

Thickness : 6, 9, 12, 15 mm.

*Made to order



Agro Melamine

Suitable for built-in interior applications, offering scratch resistance, chemical & acid resistance, water resistance, heat resistance, and easy maintenance.

Standard Size : 4 x 8 ft (1230x2450 mm.)

Thickness : 4, 6, 9, 15, 18, 25 mm.

**PRODUCT****Application**

	Router Profile	Painting	Laminating & Melamine	Moisture Resistance	Fire Retardant
HMR EPA, E2(V313)	🌿🌿🌿🌿🌿	🌿🌿🌿🌿🌿	🌿🌿🌿🌿🌿	🌿🌿🌿🌿🌿	🌿🌿
MDF CLASSIC	🌿🌿	🌿🌿	🌿🌿🌿🌿	🌿	🌿
FR E84-A	🌿🌿🌿	🌿🌿🌿	🌿🌿🌿🌿	🌿🌿	🌿🌿🌿🌿🌿

Installation and Application Guide for Melamine-Faced Boards**1. Wall Decoration and Panel Installation**

- When fastening melamine-faced boards with screws, always pre-drill pilot holes that are slightly smaller than the screw diameter. This prevents cracking or surface damage, as the melamine layer is hard and brittle.
- Do not use hand-driven nails, as hammering can cause chipping or cracking of the melamine surface due to impact force.
- For framed wall applications, ensure that the framing grid spacing does not exceed 40 × 40 cm or 40 × 60 cm. Secure the boards to the frame using a pneumatic nail gun to achieve a firm and even installation.
- When joining panels, use grooved joints or leave a 2–3 mm expansion gap between sheets to allow for natural expansion and contraction of the boards.
- Maintain a 5–10 mm clearance above the floor to protect against moisture or water seepage, which can lead to staining, water marks, swelling, or edge delamination.

2. Cutting & Routing

- Adjust the saw blade height according to the thickness of the board to be cut.
- Use a carbide-tipped saw blade with at least 84 teeth for clean and accurate cuts.
- To prevent edge chipping, use a scoring blade or perform a pre-cut pass before the final cut.
- When using a circular saw, select a blade with 100 teeth or more to achieve smooth cutting results.
- Melamine-faced boards can be routed easily using a standard handheld router.
- Ensure the board is firmly clamped and properly aligned before operation.
- Use a template or straight guide to achieve the desired size, depth, and precision when cutting grooves or shaping edges.

3. Tall Cabinet Doors

- For cabinet doors exceeding 2.4 meters in height, it is recommended to reinforce the door with a frame or use frame-and-core construction.
- This reinforcement helps prevent warping or bowing caused by the door's weight or long-term use.

4. Edge Banding

- For maximum durability, use hot-melt adhesive with an edge-banding machine.
- If edge banding is applied manually, use contact adhesive for PVC edge strips.
- The overall bonding strength and uniformity depend on the craftsman's skill and the consistency of glue application.

5. Cleaning and Maintenance

- Clean melamine-faced boards using a mild wood-surface cleaner.
- Wipe the surface with a soft, slightly damp cloth, followed by a dry cloth to remove any residue.
- Avoid using acidic, alkaline, or abrasive cleaners, as they may damage or discolor the melamine finish.

PHYSICAL PROPERTIES OF AGRO HMR V313 E2 and EPA

PROPERTIES	TEST METHOD	UNIT	RANGE OF NORMAL THICKNESS (mm)						
			2.6	4	6	9	12	15-18	25
DENSITY	EN 323	Kg/m3	830 - 890	800 - 860		760 - 820		740 - 780	730 - 770
SWELLING IN THICKNESS (AFTER 24 hr. SOAKING)	EN 317	%	≤ 25		≤ 18	≤ 12	≤ 10	≤ 8	≤ 7
INTERNAL BONDING	EN 319	N/mm2	≥ 12			≥ 1.0	≥ 0.80		
MODULUS OF RUPTURE	EN 310	N/mm2	≥ 40			≥ 38			≥ 35
MODULUS OF ELASTICITY	EN 310	N/mm2	≥ 2900				≥ 2700	≥ 2600	≥ 2500
SCREW HOLDING FACE	EN 320	N/mm2	N/A					≥ 1000	
SCREW HOLDING EDGE	EN 320	N/mm2	N/A					≥ 800	
MOISTURE CONTENT	EN 322	%	4 - 11						
THICKNESS TOLERANCE	EN 324-1	mm	+ 0.2						
WIDTH & LENGTH TOLERANCE	EN 324-1	mm	± 2.0						
STANDARD SIZE		mm	1230 × 2450						

OPTION 1 (REFERENCE BY EN622-5)

INTERNAL BONDING AFTER CYCLIC TEST (V313)	EN 321, EN 319		≥ 0.35			≥ 0.3	≥ 0.25	≥ 0.2	≥ 0.15
SWELLING IN THICKNESS AFTER CYCLIC TEST (V313)	EN 321, EN 317		≤ 40		≤ 25	≤ 19	≤ 16	≤ 15	

FORMALDEHYDE CONTENT

E1 CLASS	ISO 12460-5	mg/100g oven dry board	≤ 8						
E2 CLASS			≤ 30						

FORMALDEHYDE CONTENT FOR EPA TSCA TITLE VI (ENVIRONMENTAL PROTECTION AGENCY)*

THIN BOARD (< 8.0 mm)	ASTM D6007	ppm.	≤ 0.13						
THICK BOARD (> 8.0 mm)			≤ 0.11						

PHYSICAL PROPERTIES OF Agro MDF Classic

PROPERTIES	TEST METHOD	UNIT	RANGE OF NORMAL THICKNESS (mm)					
			2.5 - 4	> 4 - 6	> 6 - 9	> 9 - 12	> 12 - 19	> 19 - 25
DENSITY	EN 323	Kg/m3	780 - 860	740 - 830	670 - 750	660 - 740	660 - 730	660 - 730
SWELLING IN THICKNESS (AFTER 24 hr. SOAKING)	EN 317	%	≤ 35	≤ 30	≤ 17	≤ 15	≤ 12	≤ 10
INTERNAL BONDING	EN 319	N/mm2	≥ 0.65			≥ 0.60	≥ 0.55	
MODULUS OF RUPTURE	EN 310	N/mm2	≥ 26			≥ 25	≥ 23	≥ 21
MODULUS OF ELASTICITY	EN 310	N/mm2	≥ 2700			≥ 2500	≥ 2400	≥ 2300
SCREW HOLDING FACE	EN 320	N/mm2	N/A					≥ 950
SCREW HOLDING EDGE	EN 320	N/mm2	N/A					≥ 650
MOISTURE CONTENT	EN 322	%	4 - 11					
THICKNESS TOLERANCE	EN 324-1	mm	+ 0.2					
WIDTH & LENGTH TOLERANCE	EN 324-1	mm	± 2.0					
STANDARD SIZE		mm	1230 x 2450					

FORMALDEHYDE CONTENT

E1 CLASS	ISO 12460-5	mg/100g oven dry board	≤ 8						
E2 CLASS			≤ 30						

FORMALDEHYDE CONTENT FOR EPA TSCA TITLE VI / CARB P2

THIN BOARD (< 8.0 mm)	ASTM D6007	ppm.	≤ 0.13						
THICK BOARD (> 8.0 mm)			≤ 0.11						

PHYSICAL PROPERTIES OF Agro FR E84-A

PROPERTIES	TEST METHOD	UNIT	RANGE OF NORMAL THICKNESS (mm)			
			6	9	12	15 - 18
DENSITY	EN 323	Kg/m3	820 - 910		780 - 870	760 - 850
SWELLING IN THICKNESS (AFTER 24 hr. SOAKING)	EN 317	%	≤ 23	≤ 17	≤ 15	≤ 9
INTERNAL BONDING	EN 319	N/mm2	≥ 0.75	≥ 0.7		≥ 0.65
MODULUS OF RUPTURE	EN 310	N/mm2	≥ 26		≥ 25	≥ 23
MODULUS OF ELASTICITY	EN 310	N/mm2	≥ 2700		≥ 2500	≥ 2400
SCREW HOLDING FACE	EN 320	N/mm2	N/A			≥ 1000
SCREW HOLDING EDGE	EN 320	N/mm2	N/A			≥ 700
MOISTURE CONTENT	EN 322	%	4 - 11			
THICKNESS TOLERANCE	EN 324-1	mm	+ 0.2			
WIDTH & LENGTH TOLERANCE	EN 324-1	mm	± 2.0			
STANDARD SIZE		mm	1230 x 2450			
FIRE RESISTANCE PROPERTY	TEST METHOD	UNIT	TEST RESULTS			
FIRE CLASSIFICATION	EN 13501-1	-	B-s1,d0			
SINGLE-FLAME SOURCE TEST/ IGNITABILITY TEST	EN 11925	-	Pass			
SINGLE BURNING ITEM	EN 13823		Pass			
SURFACE SPREAD OF FLAME	BS 476-7	-	Class 1			
FIRE RESISTANCE OF PARTITIONS	BS476 Part 22	min	51			
SMOKE INDEX	ASTM E84 - 23	-	Class A			
INDOOR AIR QUALITY	TEST METHOD	UNIT	TEST RESULTS			
CARB P2/ EPA	ISO 12460-5	mg/100g oven dry board	≤ 5.5			
	ASTMD6007	ppm.	≤ 0.13	≤ 0.11		

PHYSICAL PROPERTIES OF MELAMINE SURFACE



RESISTANCE TO ABRASION
Test Standard EN 14322,
EN 14323: Class 1



RESISTANCE TO CRACKING
Test Standard EN 14322,
EN 14323: Rating 4



RESISTANCE TO WATER STEAM
Test Standard EN 14322,
EN 14323: Rating 4



RESISTANCE TO BURNING
Test Standard EN 14322,
EN 14323: Rating 4



RESISTANCE TO STAINING
Test Standard EN 14322,
EN 14323: Rating 4



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