

PANELS DESIGNED FOR HUMIDITY AND MOISTURE

When looking for some of the best performing, moisture-resistant industrial panels for your industrial end use applications, Flakeboard has an MR option that's right for you. All our MR products deliver the flexibility, stability, durability and performance customers have come to expect from Flakeboard panels. If you are sourcing a moisture resistant substrate, we have a selection that addresses your kitchen, bath, laboratory cabinet and/or other high humidity environment needs.

MR choices from Flakeboard include:

- **Duraflake® MR** - this unique three-layer panel particleboard offers exceptionally smooth faces for a wide range of quality finishes for cabinets, fixtures and furniture components. Panels $\frac{9}{16}$ " and greater meet the AWI specification for premium countertop grades with a thickness swell value of 5% or less, and less than 10% for water absorption (ASTM D 1037 24-hour water submersion).
- **Duraflake® MZ** - a three layer engineered panel with exceptional physical and mechanical properties. Suitable for mezzanine deck applications requiring superior strength and excellent dimensional stability.
- **UltraPine® MR** - an economical particleboard offering made with the latest production technologies and automation tools to deliver versatility and superior mechanical properties.
- **Premier® MR** - a premium medium density fiberboard that offers excellent surface properties for deep detailed profiling of cabinets, fixtures and furniture components.

Grade	Duraflake® MR	Duraflake® MZ	UltraPine® MR	Premier® Plus MR - Bennettsville		
Thickness (in)*	$\frac{3}{8}$ - $1\frac{1}{8}$	$\frac{3}{8}$ - $1\frac{1}{8}$	$\frac{1}{4}$ - $1\frac{1}{8}$	$\frac{3}{8}$ - $1\frac{3}{16}$	$\frac{7}{8}$ - $1\frac{1}{8}$	$1\frac{3}{16}$ - 2
Density (pcf)	45 - 48	50 - 53	44	45	44	44
MOR (psi)	2,400	3,200	1,800 - 2,100	3,000	3,000	3,000
MOE (psi)	400,000	500,000	325,000	300,000	300,000	300,000
Internal Bond (psi)	80	150	85 - 100	140	120	110
Face Screw Hold (lb)	250	450	225 - 250	300	275	275
Edge Screw Hold (lb)	225	350	200 - 225	250	225	225
Linear Expansion (%)	0.20	0.20				
Thickness Swell** $\leq \frac{9}{16}$	0.030"	0.030"		0.030"	N/A	N/A
$\geq \frac{9}{16}$	$\leq 5\%$	$\leq 5\%$	$\leq 5\%$	5%	5%	5%
Thickness Tolerance (in)	+/- .005	+/- .005	+/- .005	+/- .005	+/- .005	+/- .005
Length and Width (in)	+/- $\frac{1}{16}$	+/- $\frac{1}{16}$		+/- $\frac{1}{16}$	+/- $\frac{1}{16}$	+/- $\frac{1}{16}$
Squareness (in)	+/- $\frac{1}{8}$	+/- $\frac{1}{8}$		+/- $\frac{1}{8}$	+/- $\frac{1}{8}$	+/- $\frac{1}{8}$
Hardness (lb)	500	500				

Grade	Premier® Plus MR - Eugene		Premier® Plus MR - Malvern		
Thickness (in)*	$\frac{3}{8}$ - $1\frac{3}{16}$	$\frac{7}{8}$ - $1\frac{1}{8}$	$\frac{3}{8}$ - $\frac{9}{16}$	$\frac{5}{8}$ - $1\frac{3}{16}$	$\frac{7}{8}$ - $1\frac{1}{8}$
Density (pcf)	46	45	46	46	45
MOR (psi)	3,500	3,000	3,500	3,500	3,000
MOE (psi)	350,000	300,000	350,000	350,000	300,000
Internal Bond (psi)	140	120	140	140	120
Face Screw Hold (lb)	325	300	325	325	300
Edge Screw Hold (lb)	250	225	N/A	250	225
Thickness Swell** $\leq \frac{9}{16}$	0.030"	N/A	0.030"	N/A	N/A
$\geq \frac{9}{16}$	5%	5%	5%	5%	5%
Thickness Tolerance (in)	+/- .005	+/- .005	+/- .005	+/- .005	+/- .005
Length and Width (in)	+/- $\frac{1}{16}$	+/- $\frac{1}{16}$	+/- $\frac{1}{16}$	+/- $\frac{1}{16}$	+/- $\frac{1}{16}$
Squareness (in)	+/- $\frac{1}{8}$	+/- $\frac{1}{8}$	+/- $\frac{1}{8}$	+/- $\frac{1}{8}$	+/- $\frac{1}{8}$

* Metric thickness available. ** According to ASTM D 1037 (24-hour water submersion). The above physical and mechanical properties are based on averages of normal production.

- Product suitability for a particular application is the responsibility of the fabricator or end user
- Complies with CPA EPPS 3-08 and CCR 93120.2 (California ARB Composite Wood ATCM Phase 2 Formaldehyde Emission Limits)
- Material Safety Data Sheets are available upon request
- All panels are approved for use in interior, non-structural applications
- Contains 100% Recycled/Recovered Wood Content
- Conforms to formaldehyde emission requirements for particleboard in ANSI A208.1-2009 and HUD 24 CFR Part 3280
- Conforms to formaldehyde emission requirements for MDF in ANSI A208.2-2009

CALIFORNIA PROPOSITION 65 REQUIREMENT

Warning: Drilling, sawing, sanding or machining wood products generates wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection.

