



EXTIRA[®]

TREATED EXTERIOR PANEL

Put Extira to Work on Your Next Project

Manufacturing process binds natural wood fibers with phenolic resins and zinc borate

- Sanded two sides for a smooth, unprimed surface
- Moisture, rot, and termite resistant
- No added urea formaldehyde; made from sustainable materials
- One piece solid substrate — not laminated
- Can be used for virtually any non-structural paint grade application, including exterior millwork, door and window parts, signage, garage doors and other architectural components
- Extira has a Class C fire rating; Flame spread 120; Smoke developed 95
- Due to their physical composition, Extira panels are not subject to the California Air Resource Board's Airborne Toxic Control Measure 93120 (ATCM). This measure enforces limits on formaldehyde emissions. If they were subject to the ATCM, Extira panels would meet the specification for the designation "ultra low formaldehyde emitter." Extira panels have demonstrated formaldehyde emissions equivalent to wood through repeated testing by the Composite Panel Association (CPA), a third party certifier for the ATCM rule.
- 5-year limited warranty

From the Makers of



Extira is a Revolutionary Product that Performs Better than Wood or MDF

| | Extira | Typical MDF |
|------------------------------|---|---|
| Composition | Wood, phenolic resins, zinc borate, water repellent and other ingredients. No added urea formaldehyde | Wood, urea formaldehyde resin that may emit formaldehyde |
| Manufacturing Process | Proprietary, patented steam injection technology using TEC™ manufacturing process | Pressed between hot platens. Open process, no steam injection |
| Benefits | Consistent density Moisture, rot and termite resistant Exterior performance | Not uniformly dense throughout No termite or rot protection MR MDF offers moisture resistance for interior use only |
| Warranty | 5 years | 30 days |
| Application | Exterior | Interior |

Extira is Stronger and Performs Longer

| | Extira 3/4" | Medex 3/4" | Norbord MR 3/4" | MR 50 Grade 110 per ANSI 208.2-2002 | Wood |
|--|---|--------------------------------------|-------------------|-------------------------------------|------------------------|
| Thickness Swell (TS) | 3.3% | 3% ² | 8.0% ³ | 5% max | NA |
| Advanced Bond Integrity (% strength retention) | 90% | Passes ² ASTM D1037-96 | 20% ⁴ | 50% min | NA |
| Termite Resistance (10 is the highest score) | 7.9 out of 10 (3 year exposure) ¹ | None | None | None | None, 0.0 ¹ |
| Rot Resistance (0 is the highest score) | 1.0 out of 5 (3 year exposure) ¹ | None | None | None | None, 5.0 ¹ |

¹ Independent testing per AWPA E-7 and AWPA E-16

² Published material by Medex

³ Published material by Norbord

⁴ Cycle Testing: Published by Norbord as immersion in water for 3 days, freezing in air at 10°F for 1 day, exposure to air at 158°F for 3 days.

Moisture resistant: As measured by ASTM D1037 for water absorption and thickness swelling

Rot resistant: As measured by AWPA E-16 Field Test for Evaluation of Wood Preservatives To Be Used Out of Ground Contact: Horizontal Lap-Joint Method

Termite resistant: As measured by AWPA E-7 Standard Method of Evaluating Wood Preservatives by Field Tests with Stakes

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Exтира Panels Provide Green Building Benefits

✓ No Added Urea Formaldehyde

- Exтира panels have no added urea formaldehyde. This is certified by Scientific Certification Systems, certificate number SCS-MC-01802. Emission levels of formaldehyde from Exтира panels are equivalent to trace levels found in the environment.

✓ Sustainable Materials

No old growth wood is used in the manufacture of Exтира panels. They are made from scrag wood that is of no commercial timber value and is the byproduct of other operations. Scrag wood is also detrimental to the overall vitality of the forest.

- All wood comes from an area within a 200 mile radius of the Towanda, PA production facility
- CMI uses 100% northern hardwoods which includes maple, beech, oak and other species

✓ Contribution to Industry Programs

Exтира panels can contribute towards the following point categories.

| USGBC® LEED® for Commercial Interiors and New Construction | | |
|--|---|----|
| MR 5.1 | 20% Manufactured Regionally (within 500 miles) | ✓* |
| MR 5.2 | 10% Extracted and Manufactured Regionally | ✓* |
| EQ 4.4 | Composite wood components that contain no added urea-formaldehyde resins. | ✓ |

**dependent on project site location*

| USGBC® LEED® for Homes | | |
|------------------------|------------------------|---|
| SS 5 | Non Toxic Pest Control | ✓ |

| NAHB – National Green Building Standard™ | | |
|--|--|---|
| 602.8 | Termite-resistant materials are used for the structural components and exterior claddings of walls, floors, roofs and exterior decks in geographical areas that have slight to moderate or greater subterranean termite infestation potential. | ✓ |
| 607.1 | Resource-Efficient Materials – Products used contain fewer materials to meet the same end-use requirements as conventional production, including but not limited to engineered wood or engineered steel products. | ✓ |
| 901.4 | No Added Urea Formaldehyde – 85 percent of countertops, permanent shelving, and other nonstructural products manufactured in accordance with the following: composite wood or agrifiber panel products contain no added urea formaldehyde. | ✓ |

| California Air Resources Board | | |
|--------------------------------|--|---|
| Phase 1 & 2 | Due to their physical composition, Exтира panels are not subject to the California Air Resources Board's 1 & 2 Airborne Toxic Control Measure 93120 (ATCM) | ✓ |



SCIENTIFIC CERTIFICATION SYSTEMS
SCS-MC-01802

Extira is the Best Alternative

| | | Extira | MDF | Plywood | MDO | PVC |
|----------------------------|---|--------|---------|---------|--------|---------------------------------|
| Price | \$ | \$\$ | \$ | \$ | \$\$ | \$\$\$\$ |
| Moisture Resistance |  | Good | Poor | Poor | Good | Best |
| Rot Resistance |  | Best | None | None | None | Best |
| Weathering ³ |  | Good | Poor | Poor | Good | Best |
| UV Resistance ³ |  | Good | Good | Best | Good | Poor ² |
| Warranty |  | 5-year | 30 Days | None | Varies | 5-year to Lifetime ¹ |
| Machineability |  | Good | Varies | Poor | Poor | Best |
| Paintability ³ |  | Best | Best | Good | Best | Poor |

¹ Non-transferrable

² PVC generally has trouble accepting darker shades of paint

³ Ratings reflect uncoated material ranking. Extira must be field finished before use

With Five Thicknesses and Three Panel Sizes, Extira Measures Up to Any Project



Choose from a variety of sizes and thicknesses

| Size (nominal) | Thickness (+/-0.005") | | | | |
|-----------------------|-----------------------|------|------|----|--------|
| | 1/2" | 5/8" | 3/4" | 1" | 1-1/4" |
| 4' x 8' (49" x 97") | ● | ● | ● | ● | ● |
| 4' x 16' (49" x 194") | ● | ● | ● | ● | ● |
| 2' x 16' (25" x 194") | ● | ● | ● | ● | ● |

Typical Properties of 3/4" Extira

| | | |
|--|------------------------------------|-------------------------|
| Termite Resistance (10 is the highest score) | 7.9 out of 10 (3 year exposure) | |
| Rot Resistance (0 is the highest score) | 1.0 (3 year exposure) | |
| Advanced Bond Integrity (% strength retention) | 90% | |
| Density | 47 lb/ft ³ | 0.753 g/cm ³ |
| MOR | 3550 psi | 24.5 MPa |
| MOE | 315 kpsi | 2172 MPa |
| Internal Bond | 92 psi | 634 kPa |
| Direct Screw Withdrawal | | |
| Face | 352 lbf | 160 kgf |
| Edge | 335 lbf | 152 kgf |
| 24-Hour Soak | | |
| % Thickness Swell | 3.3% | 3.3% |

Finishing Recommendations

Extira is a wood based composite panel that must be primed and painted before being exposed to the outdoors. Adhesives or laminates may be used to affix other materials to Extira. Because CMI makes wood composite panels and not adhesives, primers or other materials, CMI cannot guarantee the performance or compatibility of any material to Extira. CMI regularly tests materials at the CMI research and development testing laboratory and performs testing with the manufacturers of popular primers and adhesives. Visit www.extira.com for updates on compatible materials and techniques. Qualification of all materials and their end use are the responsibility of the end user. CMI has no liability for primers, paints, adhesives or any other treatment of Extira.