





# **Use Extira Panels for a Variety of Exterior Applications**

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

- Sanded two sides (S2S) for a smooth, unprimed surface; meets caliper requirements of +/- 0.005".
- Easy to work with; can be carved, routed and machined.
- Resists moisture, rot, and termites. Twice as strong as MDF and engineered for exterior use.
- No added urea formaldehyde; made from sustainable materials.
- Can be used for any non-structural paint-grade application, including exterior millwork, door and window parts, signage, garage doors and architectural components.
- Class C fire rating; Flame spread 120; Smoke developed 95.
- 5-year limited warranty.









# Extira is a Revolutionary Product for Exterior Applications that Performs Better than Wood or MDF

|                          | Extira Panels  | Typical MDF  |
|--------------------------|--|--|
| Application              | Exterior   | Interior   |
| Composition              | Wood, phenolic resins, zinc borate, water<br>repellent and other ingredients<br>No added urea formaldehyde                 | Wood, urea formaldehyde resin<br>May emit formaldehyde   |
| Manufacturing<br>Process | Proprietary, patented steam injection technology using TEC <sup>™</sup> manufacturing process                              | Pressed between hot platens in an open press without steam injection   |
| Benefits                 | Consistent density - same density wherever it is cut<br>Resists moisture, rot and termite<br>Made for exterior performance | Not uniformly dense throughout<br>No termite or rot protection<br>MR MDF (moisture resistant MDF)<br>offers moisture resistance for interior<br>use only |
| Warranty                 | 5 years  | 30 days  |

## **Extira is Stronger and Performs Longer**

|   | Extira 3/4"                                     | Medex 3/4″                           | MR 50 Grade 110 per<br>ANSI 208.2-2002 | Wood                   |
|---|---|--------------------------------------|--|------------------------|
| Thickness Swell (TS)                              | 2.3%  | 3% <sup>2</sup>                      | 5% max                                 | NA                     |
| Advanced Bond Integrity<br>(% strength retention) | 90%   | Passes <sup>2</sup><br>ASTM D1037-96 | 50% min                                | NA                     |
| Termite Resistance<br>(10 is the highest score)   | 7.9 out of 10<br>(3 year exposure) <sup>1</sup> | None                                 | None                                   | None, 0.0 <sup>1</sup> |
| Rot Resistance<br>(0 is the highest score)        | 1.0 out of 5<br>(3 year exposure) <sup>1</sup>  | None                                 | None                                   | None, 5.0 <sup>1</sup> |

<sup>1</sup> Independent testing per AWPA E-7 and AWPA E-16 <sup>2</sup> Published material by Medex

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.





# **Environmentally Friendly Panel Product**

#### ✓ Sustainable Materials

- No old growth wood is used in the manufacture of Extira panels. They are made from wood that has no commercial timber value and is the byproduct of other operations. This leftover wood is also detrimental to the overall vitality of the forest.
  - All wood comes from an area within a 150 mile radius of the Towanda, PA production facility.
  - 100% northern hardwoods are used, which includes maple, beech, oak and other species.
- Extira panels are treated with zinc borate, an EPA-registered biocide and a naturally occurring earth chemical that is environmentally safe and ensures protection against termites.

#### ✓ No Added Urea Formaldehyde

- Extira panels have no added urea formaldehyde. This is certified by Scientific Certification Systems under certificate number SCS-MC-01802. They are manufactured with environmentally preferable phenolic resins.
- Through repeated testing by the Composite Panel Association (CPA), Extira panels have demonstrated formaldehyde emissions equivalent to background levels found in the environment.

#### ✓ CARB Compliant

• Extira panels are acknowledged by the California Air Resources Board's (CARB) Airborne Toxic Control Measure (ATCM) 93120 to utilize exempt status ultra-low emitting formaldehyde (ULEF) resins.

#### ✓ Contributes to Green Building Programs

 Extira panels contribute to industry green building programs such as LEED and the National Green Building Standard.









**NO ADDED UREA** 

FORMALDEHYDE

VIRONMENTAL



## **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 <sup>3</sup>    | Good   | Poor    | Poor    | Good   | Good                            |
| UV Resistance <sup>3</sup> | Good   | Good    | Best    | Good   | Poor <sup>2</sup>               |
| Warranty                   | 5-year | 30 Days | None    | Varies | 5-year to Lifetime <sup>1</sup> |
| Machineability             | Good   | Varies  | Poor    | Poor   | Varies                          |
| Paintability <sup>3</sup>  | Best   | Best    | Good    | Best   | Poor                            |

<sup>1</sup>Non-transferrable

<sup>2</sup> PVC generally has trouble accepting darker shades of paint

<sup>3</sup>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



### **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 JELD-WEN, inc. makes wood composite panels and not adhesives, primers or other materials, it cannot guarantee the performance or compatibility of any material to Extira. JELD-WEN, inc. regularly tests materials at the R&D lab and manufacturing location; also testing is done performs testing with 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. JELD-WEN, inc. has no liability for primers, paints, adhesives or any other treatment of Extira.

| 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″)                          | •                     | •    | •    | ٠  | •      |

#### Typical Properties of 3/4" Extira

| <b>Termite Resistance</b> 7.9 out of 10 |  |  |  |
|---|--|--|--|
| (3 year exposure)                       |  |  |  |
| 1.0                                     |  |  |  |
| (3 year exposure)                       |  |  |  |
| 90%                                     |  |  |  |
|   |  |  |  |
| 47 lb/ft <sup>3</sup>                   | 0.753 g/cm <sup>3</sup>  |  |  |
| 3187 psi                                | 22.0 N/mm <sup>2</sup>   |  |  |
| 280 kpsi                                | 1958 N/mm <sup>2</sup>   |  |  |
| 103 psi                                 | .71 N/mm²  |  |  |
|   |  |  |  |
| 374 lbs                                 | 1663 N   |  |  |
| 324 lbs                                 | 1441 N   |  |  |
|   |  |  |  |
| 2.6%                                    | 2.6%   |  |  |
|   | (3 year exp<br>1.0<br>(3 year exp<br>90%<br>47 lb/ft <sup>3</sup><br>3187 psi<br>280 kpsi<br>103 psi<br>374 lbs<br>324 lbs |  |  |







