



# MANUFACTURER'S SPECIFICATIONS FOR U.S. WELBUILT EXTERIOR MOULDINGS

## PRODUCT PRESENTATION

Ready to install using traditional techniques and tools, Outwater Industries' new series of premium quality, U.S. manufactured polystyrene U.S. Welbuilt Exterior Mouldings are absolutely cost competitive with overseas manufactured exterior mouldings, and are offered in popular profiles in a wide variety of styles and sizes essential for renovating ordinary, unembellished houses into majestic, beautiful homes.

Guaranteed to enhance the value of any new construction or renovation project, with the usually high material and labor costs recognized when accenting with millwork manufactured from other types of media. Outwater's architecturally accurate U.S. Welbuilt Exterior Mouldings offer other advantages as well, making their selection for use even more desirable.

Comprising high-density UV stabilized polystyrene, which is thoroughly resistant to moisture and insects as well as adverse climate and weather conditions, Outwater's U.S. Welbuilt Exterior Mouldings not only provide superior dimensional stability and insulation characteristics to wood moulding, because they will not split, crack, splinter, or rot. They can be used without follow-up maintenance in applications that would not have been otherwise possible.

Offered in bright white in 16-foot lengths, which can be readily cut for UPS shipping, Outwater's U.S. Welbuilt Exterior Mouldings can be painted the same day as installation with paint if desired.

## USES AND APPLICATIONS

If you have ever worked with wood in any capacity in the past, then you will appreciate working with U.S. Welbuilt Exterior Mouldings minus any of the characteristic abnormalities often encountered when working with wood.

- U.S. Welbuilt Exterior Mouldings can be used in contact with masonry
- U.S. Welbuilt Exterior Mouldings can be used in direct contact with moisture
- U.S. Welbuilt Exterior Mouldings do not require painting
- U.S. Welbuilt Exterior Mouldings resist insects
- U.S. Welbuilt Exterior Mouldings resist rot
- U.S. Welbuilt Exterior Mouldings are weather resistant

## EMPIRICAL TESTING DATA

If painting is desired, use 100% acrylic latex or latex with urethane additive with a light reflective value (LRV) equal to or greater than 55 units. If you are unsure of your paint's LRV, please consult your paint dealer for further information.

U.S. Welbuilt Exterior Mouldings have been subjected to stringent testing and are deemed to conform to or exceed the following empirical test methods in one or more of the following requirements (All tests and evaluations are conducted in accordance with ASTM):

ASTM D6117 Method A: Nail Pullout/Screw Pullout  
ASTM D2240: Shore Hardness  
ASTM D635: Flammability  
ASTM D256: Notched Izod Impact  
ASTM D570: 24 Hour Water Absorption  
ASTM D638: Tensile Properties  
ASTM D648: Heat Deflection Temperature  
ASTM D696/D6341: Coefficient of Thermal Expansion by Dilatometer  
ASTM D790: Flexural Properties  
ASTM D792: Density/Specific Gravity  
ASTM D1622: Density of Rigid Cellular Plastics  
ASTM D5420: Gardner Impact  
ASTM G155 Cycle 1  
ASTM D638: Tensile Properties after Xenon Arc  
ASTM E308: Color Analysis before and after Xenon Arc  
ASTM D2457, D523: Gloss before and after Xenon Arc  
ASTM D3345: Resistance to Termites  
ASTM G21: Resistance to Fungi  
ASTM D6109-05 Method A: Flexural Properties  
ASTM D7032-08, Section 4.7: Freeze Thaw Resistance  
ASTM D6109, Section A: Freeze Thaw Resistance  
ASTM D1761-06a: Fastener Withdrawal  
ASTM D5559-08: Coating Adhesion

#### **Testing and Evaluation Methods, where applicable:**

##### **ASTM D790: Flexural Properties: Standard test methods for flexural properties of unreinforced and reinforced product and related products:**

The test was conducted in accordance with the protocol established by the ASTM. The load span of two supports was 16 times the depth of the specimen. The specimen was loaded using the one-third point loading method at the specified crosshead rate calculated in accordance with formula (1) until it was broken. The maximum load rupture, the flexural strength (Modulus of Rupture, the secant modulus (at 1% strain) and the maximum midspan deflection rate were reported.

##### **ASTM D7032-08: Standard specification for establishing performance ratings for wood-plastic composite boards and related products:**

The test was conducted in accordance with ASTM D7032-08, Section 4.7. A minimum of five specimens were subjected to the following exposure cycle. Test specimens were submerged underwater for a period of 24 hours. The specimens were then placed in a freezer at  $-29 \pm 2$  C for 24 hours. After being subjected to freezing, the specimens were then returned to room temperature for a period of 24 hours. The above procedure was then repeated two more times, for a total of three cycles of water submission, freezing and thawing. A minimum of five unexposed specimens were tested for flexural properties in accordance with ASTM D6109.

**ASTM D1761-06a: Standard test methods for mechanical fasteners in wood and related products:**

The test was conducted in accordance with ASTM D1761-06. Nails were driven completely through the specimens, 13mm of the shank portion to remain above the surface. And then the nail was withdrawn at a uniform load on the specimen-holding machine. Apply the load throughout the test at a uniform rate of platen separation of 2.54mm/min.

**ASTM D638-08: Standard test methods for tensile properties of plastics:**

The test was conducted in accordance with ASTM D638-08. The specimens were prepared of Type III in accordance with Section 6. The specimen was loaded at the speed of 5mm/min until it was broken.

**ASTM D3359-08: Standard test methods for measuring adhesion by tape test:**

The test was conducted in accordance with ASTM D3359-08, Method A. An x-cut is made directly through the film to the substrate. Pressure sensitive tape is then applied over the cut and then removed, and adhesion is assessed qualitatively on the 0 to 5 scale.

## **CODES AND CERTIFICATION**

U.S. Welbuilt Exterior Mouldings are guaranteed to be free from defects in materials and workmanship for a period of one year that result in warping, rotting, corroding, flaking, peeling, blistering or having abnormal discoloration of the surfaces.

If in the event of a defect, the warranty, which is determined at the sole discretion of the manufacturer, is limited to the replacement of defective material only without any other expressed or implied warranties.