# **Energy Efficiency**



COMMERCIAL | RESIDENTIAL



# The **Energy Efficiency Package** offers insulation to the aluminum frame as well as water resistance.

ArmRLite's Energy Efficiency Package is an upgrade option where all of the rails and stiles on our aluminum and glass overhead doors are injected with polyurthethane expanding foam thereby insulating the aluminum frame and simultaneously forming a water resistant feature. Insulating the rails and stiles will not eliminate water infiltration, however, it greatly reduces water infiltration as well as providing insulation benefits. For a fully insulated overhead door, insulated glass is needed as well as the Energy Efficiency Package. ArmRLite was the industry's first glass garage door manufacturer able to accommodate 1" insulated glass units into our door frame. Other insulated glass options include 7/16" and 5/18" insulated glass units.



PHOTO & INSTALLATION BY ADVANCED DOOR SALES

#### **Water Resistance**

Water resistance is created from the interior sealing of aluminum members during the manufacturing process, virtually sealing it from the inside-out. All rail and stile aluminum doors leak where rails and stiles are butted together. Insulating the rails and stiles will not eliminate water infiltration. You may still get water leakage in a driving rain and the product should never be power washed. What we have found is that by adding this option, it greatly reduces water infiltration. Architects and designers should consider these facts when using our product in finished spaces.

# **Energy Efficiency**



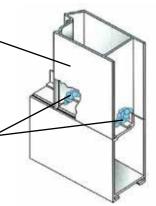
# **ENERGY EFFICIENT CONSTRUCTION METHOD**

## **Heli-Arc Welding Method**

Lengths of 6063-T6 alloy hollow aluminum extrusions are cut to size for rails and stiles. Stiles are then contour-milled and accurately joined to the rails by concealed heli-arc welds to produce flush, hairline joints and framework unequaled in strength and durability.

**1.** Strong four-sided tubular extrusions are used rather than weaker three-sided which can crumple under pressure.

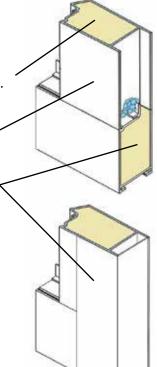
2. ArmRLite is the only glass garage door manufacturer that produces a welded frame. The most common construction method uses thru-bolts to hold sections together – which sag and separate over time, affecting curb appeal and reducing the performance life of the sections and door. Welds are permanent and outperform thru-bolted construction year after year! ArmRLite has used the same construction method starting with our first welded door in 1958. We can reproduce identical sections to replace impacted or damaged sections for all of our welded models – regardless of purchase date!



### **Energy Efficiency / Insulation Options**

All of ArmRLite's welded aluminum and glass models are available with our exclusive Energy Efficiency Package for maximum insulation and water resistance.

- **1.** After welding, polyurethane expanding foam is injected directly into the hollow four-sided extrusions. The foam expands and fills in every hollow space within the frame with insulation.
- **2.** All meeting members are completely sealed, making the frame both insulated and water resistant. This process does not eliminate water infiltration.
- **3.** Custom end caps are available as an upgrade to conceal any visible insulation in the end stiles against the track. Custom end caps are finished to match door frame, even if custom colors are used.



### **Insulated Glass**

ArmRLite's insulated glass units are available with or without Low-E coatings for added thermal performance. Insulated units can be clear, frosted, tinted, or customized for your specific project. Insulated glass is available in varying thicknesses including: 1",  $7_{16}$ " and  $5_{8}$ " thick overall insulated glass unit.

