

## **Advancement in Energy Efficiency, Safety and Curb Appeal**

by Earl Rivard

The bitter cold of winter marks the time to rethink that garage door. This is the season when homeowners usually make efforts to seal up the biggest opening in the home.

It's also a popular time for garage door replacement. It's that time of year when weather has a distinct effect on the garage door business.

Steel isn't a good insulator, so to compensate; manufacturers double up the panels and fill the space between them with polystyrene or polyurethane insulation. Polyurethane insulates better than polystyrene, but it tends to break down after a period of time, whereas polystyrene lasts forever.

Polystyrene is a flat, sheet-like material, similar to a Styrofoam cup. Polyurethane is pumped into a door as a liquid, then expands and fills the space between the metal sides of the door. There are some synthetic problems with polyurethane. It can dry erratically, leaving unprotected spots in the door. That problem is detectable when a homeowner sees granulated polyurethane draining from the door. A polyurethane-lined door, however, can often have a better R-value than the rest of the garage.

Polystyrene has a lower R-value, the insulation rating system, and also is less expensive. Single polyurethane doors are rated around R-15 and cost more.

Insulation with polyurethane and polystyrene has made doors so efficient that there often is a 15- to 20-degree difference in a garage after new doors are installed. That can play a big role in heating costs.

While energy efficiency plays a big part in the selection of a garage door, safety is also a key consideration. Safety plays an increasingly important role in garage-door design. All new garage doors incorporate many new safety

technologies and innovations such as pinch-resistant door panels, easy-to-set torsion springs and advanced reversing mechanisms.

Garage doors are also more than just practical openings, they often make up the largest percentage of the front of the house and mean a great deal in the appearance of a property. It is, in fact, a home's fashion accessory.

The look of a garage door is important to accentuate the look of a house. Many people would never consider this to be the case because the garage is the traditionally overlooked and forgotten part of the house. But a garage door can draw attention away from the home's other exterior features. When two of these are these garage doors are placed side by side it seems to take up at least half of the house. Going on three it's easy to see how the house's otherwise beautiful look can be swallowed up—unless the doors are thought through carefully.

With houses getting bigger and more lavish, though, the best garage door is one that compliments the house without taking away from it. Because of this need we are now able to walk a street without seeing the same color and style of garage door twice.

One of the most popular features is the carriage house design which originally was made with large hinges on heavy wood that gave the doors a striking presence. Manufacturers are taking these old traditional styles and providing fresh design choices. To enhance appeal, manufacturers introduce "high-definition" lines that feature more complex designs that give the look of texture and create shadow lines.

These days, garage door manufacturers are up-to-date with the demands of the consumer, continually creating better looking and better functioning garage doors. So, no matter whether it's a remodel or new construction project, and no matter how far out the ideas are for a garage and garage

door design, there's probably one that can be found. Garage doors today are as efficient and aesthetically-pleasing as ever.