insulation technology



America's Favorite Garage Doors®



Warmer. Quieter. Stronger.

Garage doors featuring Intellicore[®] insulation technology represent the ultimate smart choice for homeowners.

Clopay's Intellicore[®] insulation is a proprietary polyurethane foam that is injected into a garage door, expanding to fill the entire structure. The result is a door with incredible strength and durability.

Its dense insulation also produces a quieter door, while its industry-leading R-values (up to 20.4) provide year-round comfort and improved energy efficiency. Made in the U.S.A.

Smart, indeed.

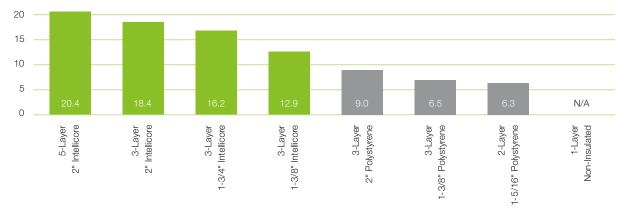


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In the insulation industry, one of the most common units used to measure thermal transfer is **R-value**. R-value measures **thermal resistance**, or the ability of heat to transfer from hot to cold through materials (such as insulation in garage doors). The higher the R-value, the better the insulation can withstand heat transfer. Intellicore insulated doors provide some of the highest R-values in the garage door industry (up to 20.4) and therefore better insulate the garage and surrounding living space.

R-value Comparisons – Intellicore® Insulation and Polystyrene Models

Calculated door section R-value is in accordance with DASMA TDS-163.





WARMER or COOLER

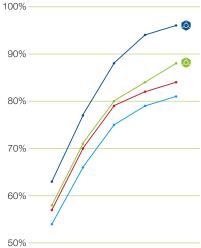
COMFORT IN EVERY CLIMATE

Because of the significant insulating properties of Intellicore insulation, every climate will benefit from keeping the garage and living space **warmer in winter and cooler in summer.** In addition to comfort, having more moderate temperatures allows appliances located in the garage to perform more efficiently, while reduce the chances of pipes freezing in the cold or stored liquids drying out from excessive heat.





% Improvement vs. non-insulated door over hours of time in garage heated with space heater



2:00 3:00 4:00 5:00 6:00



A QUIETER HOME IS A HAPPIER HOME

The dense, sound-absorbing nature of Intellicore insulated doors provides quieter operation which translates to a more peaceful living space. Simply stated, quiet operation is a hallmark of a quality door. Early morning and late night door operation won't disturb sleeping babies or pets, not to mention your neighbors.

We performed a decibel test to analyze the differences in sound when a basketball hits a garage door at a consistent speed. The non-insulated door came in at 96 decibels, while the Intellicore insulated door produced a more desirable 80 decibels. Though 16 decibels doesn't seem like a lot, the decibel scale is logarithmic (not linear) which means our **Intellicore[®] insulation doors are actually three times quieter** to your ear's perception!

Overall Volume of Sound 96 dB 90 gets (dB) 80 dB Intellicore Non-insulated 70

CONDITIONS

- An Intellicore insulated door and non-insulated door hit in the middle with a basketball.
- A decibel meter was used to record the results.

PRODUCTS TESTED & RESULTS

- ▲ Intellicore Insulated Door = 80 dB
- Non-Insulated Door = 96 dB





STRONGER

BUILT FOR THE TOUGHEST NEIGHBORHOODS



Our engineers exhaustively tested Intellicore insulated garage door sections and found them to be nearly **twice as strong** as a polystyrene door section of the same thickness. This enhanced rigidity provides a greater resistance to everyday wear and tear (like that troublemaker from down the street that dented your last door). Broadly speaking, a Clopay door with Intellicore[®] insulation technology will look better and last longer when faced with the challenges the neighborhood throws at it.



CONDITIONS

- Intellicore and polystyrene insulated door sections suspended from outer edges.
- Weight applied incrementally to center of door section until structural failure.

PRODUCTS TESTED & RESULTS

🔕 2" Intellicore = 220 lbs. max

🔵 2" Polystyrene = 120 lbs. max



Intellicore[®] Insulation Availability Chart

Garage Door	Туре	Models	Style	Layers	Thickness	R-value*
Canyon Ridge®	Carriage House	All Models	Carriage House	5 Layers	2"	20.4
Canyon Ridge®	Carriage House	All Models	Carriage House	4 Layers	2"	18.4
Canyon Ridge®	Chevron	All Models	Carriage House	5 Layers	2"	20.4
Canyon Ridge®	Louver	All Models	Plantation Shutter	5 Layers	2"	18.4 - 20.4
Canyon Ridge®	Modern – Plank	All Models	Contemporary	4 Layers	2"	20.4
Canyon Ridge®	Modern – Metal (Aluminum) Inlay	All Models	Contemporary	4 Layers	2"	18.4
Canyon Ridge®	Modern – Full-View Design	All Models	Contemporary	4 Layers	2"	6.3
Coachman®	Premium	All CGU Models	Carriage House	4 Layers	2"	18.4
Gallery [®] Steel	Premium	GD2SU, GD2LU	Carriage House	3 Layers	2"	18.4
Gallery [®] Steel	Premium	GD1SU, GD1LU	Carriage House	3 Layers	1-3/8"	12.9
Bridgeport [™] Steel	Premium	BD2NU, BD2EU	Narrow and Extended Recessed	3 Layers	2"	18.4
Bridgeport [™] Steel	Premium	BD1NU, BD1EU	Narrow and Extended Recessed	3 Layers	1-3/8"	12.9
Modern Steel™	Premium	9202, 9201, 9208	Modern Flush	3 Layers	2"	18.4
Modern Steel [™]	Premium	9205, 9209	Modern Grooved	3 Layers	2"	18.4
Modern Steel [™]	Premium	9132, 9131, 9138	Modern Flush	3 Layers	1-3/8"	12.9
Modern Steel [™]	Premium	9139	Modern Grooved	3 Layers	1-3/8"	12.9
Classic [™] Steel	Premium	9200, 9203	Short and Long Elegant	3 Layers	2"	18.4
Classic [™] Steel	Premium	9130, 9133	Short and Long Elegant	3 Layers	1-3/8"	12.9

*Calculated door section R-value is in accordance with DASMA TDS-163.



Visit <u>clopaydoor.com</u> or call **1-800-2CLOPAY (225-6729)** for more information on Clopay, America's Favorite Garage Doors.

