

THE GARAGE DOOR INDUSTRY-EXPLAINED

By Roy Bardowell, CDDC

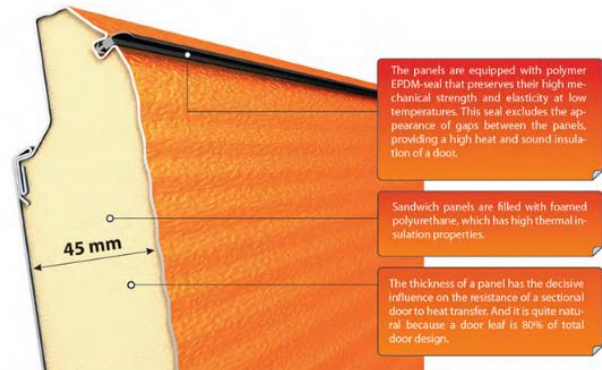
Since my stroke in 2014, I have met dozens of medical professionals over the last 6 years. During conversation, I am often asked “What Do I Do?” When I tell them, I am an engineer in garage door automation; they seem confused. Most are aware of garage doors, but many are oblivious there is an industry involved in many aspects of garage doors.

In this article I intend on tackling the many aspects of garage doors and the automation of these doors. First & foremost; there is the garage door itself, which comes in many forms:



The most common garage door type sold is the residential garage door (pictured above) only because there are millions of homes in the USA and Canada combined. Some homes have more than one garage door, which also adds to the greater residential total. I estimate the North American and European sales of garage doors are nearly equal. Residential garage doors are mostly sectional type doors meaning the door is made of multiple sections linked by hinges and move up and down as one unit through steel tracks. Most residential garage doors are made up of two sheets of steel with a foam core. The foam core can be styrene or Poly-Urethane

type. The foam acts as a binding agent that holds the inside and outside steel panels bonded. A small portion of residential garage doors are one-piece doors, mostly found in California.



This foam bond is what turns two floppy steel sheets into a strong stable durable board. The foam is not only the binding agent that keeps a door section stable and solid, but also serves as insulation to keep your garage warm and toasty on cold winter nights. The process of bonding two steel sheets by a foam core is the basis for most steel insulated garage doors. The exception is steel roll-up doors likely found in Storage Depots. These simple rollup doors (aka continuous sheet door) have found a good home in Australia, New Zealand and sporadic locations in Europe.

Second most popular door is commercial garage doors which are also produced in many forms for the many types of commercial buildings.



Commercial steel garage doors also use the very popular foam core to bond the outside and inside steel panels which in turn produces a stronger board which is required in Commercial or Industrial garage door applications. Commercial Doors are also produced as roll-up type doors also. When you get into commercial roll-up type doors, the types outnumber many others in the field of commercial doors. If I take a step backwards to the continuous steel type; this type can be made with and without insulation and is a less expensive version of the rolling steel curtain door.



Rolling steel curtain doors are typically made from multiple steel slats that are interlocked together. The interlocking permits the multiple slats to be rolled around a barrel or pipe which is common in most rolling doors.



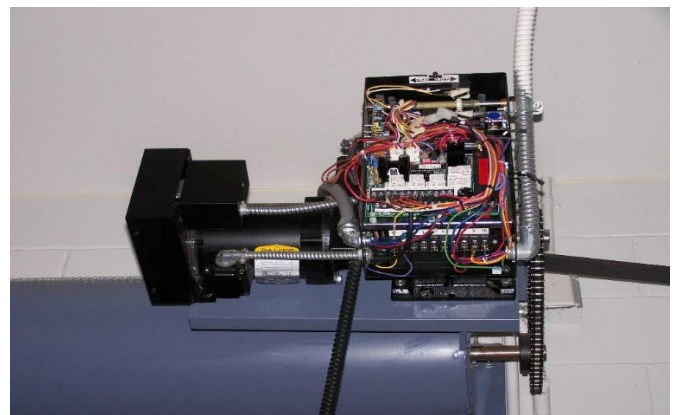
By interlocking more slats, a door can be made into nearly any height. By utilizing heavier steel slats, a manufacturer can produce a fire rated door. With rolling steel fire doors, the way they are automated is very

important. If a fire occurs, a fire or smoke detector must signal the operator to close the rolling steel door. Once the rolling steel door is closed, it is presumed the fire will not spread into another area of a building resulting in lives and property saved.

To ensure a fire door is reliable the fire door must be drop tested every year.



Commercial door operators can connect to the barrel with gears and chain.



By rotating the barrel, a slat door or grill type door can be lifted upward or dropped down. Another popular rolling product is the security grill; aka rolling gate.



This product can be used for security or when ventilation is desired. The most common place where rolling gates are found is in malls in front of store fronts, but is heavily used in parking structures also.



Rolling Aluminum Grille For Parking

In this article, I will refrain from going too deep into the many ways to automate a door, because the full explanation would be too long. For that, I will follow up with another document in the Summer of 2020. Look for other documents explaining our Industry in the coming months

In closing, let me remind everyone; JUNE is garage door SAFETY MONTH!

June is the time for manufacturers who produce motorized door openers to remind homeowners your garage door could be unsafe and must be periodically maintained TO OPERATE WITH THE UTMOST SAFETY.

Roy Bardowell, CDDC, served as Operations Manager at Guardian Access & Door Hardware until 2014. He has been in the door and operator industry since 1973 and is known as one of the industry's most experienced operator technicians and trainers. Roy received the IDEA Commitment to Excellence award in 2008 and IDA's Jerry R. Reynolds Volunteer Service Award in 2017. Contact him at roythedoorman@gmail.com