The durability of cast iron closers

Door control is crucial in securely latching a door, but also meeting ADA requirements and preventing damage and injury caused by user or environmental abuse. It’s important to have a basic understanding of door control in order to specify the right type of product.

Door closers are made of cast iron or cast aluminum. While cast aluminum closers can be an alternative solution for some facilities and applications with budget constraints, cast iron closers are preferred by many institutions because of the material’s compatibility based on the high-grade steel components within the closer. Because closers are subject to millions of opening and closing cycles, this durability is extremely important in high-abuse, high-traffic areas.

The truth about cast iron specifications

Cast iron closers are twice as durable as cast aluminum closers, so they are a better choice for applications and buildings that have high traffic with wear and tear on the doors and hardware. Cast iron closers are designed to last for 25-30 years or the life of the building, which provides a lower total cost of ownership and minimizes the risk of malfunctioning or broken closers at a high-traffic opening.

One of the common errors with specifications is to list a cast aluminum closer as an equal to a cast iron closer—they are not equal. Cast aluminum products do not perform the same and are not similar when it comes to quality and durability. When writing closers into a specification, be sure to identify the best product—whether cast iron or cast aluminum—to meet the performance and durability requirements of the opening.

More than a cylinder, arm and fluid

The LCN team manufactures products to stand up to the test of time. High-traffic, high-abuse areas need a quality door closer to function properly and protect users. These include features such as:

- Double heat-treated pinions/full complement bearings to reduce wear and leaks
- Heavy-duty forged steel arms for increased door closer stability and control
- All-weather fluid to keep closer components working smoothly

LCN cast iron closers feature superior burst and yield strength, ensuring they are more robust and can withstand greater pressure than cast aluminum closers. In addition, cast iron closers feature natural graphite that self-lubricates parts, reducing wear. The robust wear also eliminates internal leaks and provides minimum porosity.
LCN products feature quality components for increased security, high performance and a long service life. Many codes and standards contain requirements for door closers. Door closers by LCN meet the following types of standards:

- ANSI/BHMA minimum industry standard cycle requirement
- ADA requirements
- UL Listed
- IBC and NFPA 101
- International Building Code limits
- BHMA Grade 1 commercial products
- Powder coating corrosion resistance surpasses 100 hours salt spray testing (four times the industry standard)

**LCN vs. the knockoffs**

High-traffic environments are where LCN's portfolio of heavy-duty closers is setting the standard for exceptional performance. As the long-time market leader in door control, the LCN brand has always maintained a reputation for excellent quality, dependable performance and superior customer service.

One question that comes up often is “How will I be able to tell the difference between a genuine LCN closer, and a knockoff imitation closer?” There are multiple ways to debunk a knockoff; below are just a few of the ways to verify you have an LCN closer:

- Double heat treated pinion journal
- Full complement bearing
- LCN® Fast™ Power Adjust patented green dial
- All weather fluid
- Forged steel main arms
- 150+ custom powder coating colors
- Special templates for unique applications

Not surprisingly, it all begins with what goes into them: premium materials that are engineered and manufactured to obsessively tight tolerances. What's more, LCN closers utilize several patented components and are assembled in the United States.

When writing closers into a specification, be sure to identify the best product—whether cast iron or cast aluminum—to meet the performance and durability requirements of the opening.

**People, process, product**

From its founding in the mid-1920s, LCN has been a respected name in its traditional line of cast iron door closers. Manufacturing and assembling our products in the United States means keeping jobs in our communities. Since moving from downtown Chicago to Princeton, Illinois, in 1950, LCN and the community have grown and prospered together. Allegion has invested heavily in the LCN product line, positioning the brand appropriately in the market. With a dedicated focus on people, processes and equipment for quality products, LCN continues to maintain its reputation for excellence. As a result, our commitment reaches the customer through quality, delivery and service.

Click here more information on door closers.

Contact an Allegion spec writer (or call 877-929-4350) today for assistance on your building projects.

**About Allegion**

Allegion (NYSE: ALLE) is a global pioneer in safety and security, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion produces a range of solutions for homes, businesses, schools and other institutions. Allegion is a $2 billion company, with products sold in almost 130 countries. For more, visit www.allegion.com.