Doorglass Framing Systems Provide Specific Solutions for Key Performance Issues
The long-term performance of an exterior door with a glass insert is dependent upon the doorglass framing system. Just as every building and remodeling project is different, so are specialized doorglass framing systems. Quality frames are both durable and flexible to meet distinct market needs. They are manufactured with high-performance resin, which requires less long-term maintenance, and they are engineered for quick installation for a variety of door applications. This white paper describes the features and benefits of the unique ODL, Inc., doorglass framing systems for exterior steel and fiberglass doors, including easy installation, energy efficiency, tested performance, quality assurance and value-driven manufacturing.

For nearly 70 years, ODL has been manufacturing top-rated doorglass framing systems. The company has grown from a small company in Zeeland, Mich., to an industry leader with manufacturing locations in the U.S., Mexico, Canada, Europe and Asia and distribution centers around the globe. ODL doorglass frames rival the competition, particularly in the area of sealant performance and include patented features.

ODL DOORGLASS FRAMING OVERVIEW

The key elements of a high-performance framing system typically include:

EASY INSTALLATION

Builders, contractors, remodelers and door installers can rest assured that investing in a quality doorglass framing system upfront will save time and money in the long run because of the ease of installation and long-term exterior door frame performance.

Installing an ODL doorglass frame is as easy as 1-2-3.
ENERGY EFFICIENCY

Another benefit of ODL doorglass frames is energy efficiency. Heating and cooling costs are typically a home's largest energy expense and when air leaks out of a home, it can drive up costs and waste money.

One of the leading causes of air leakage is windows and doors, which makes purchasing an airtight framing system important for energy savings.

Air tightness is tested using the American Society for Testing Materials (ASTM) E-283 procedure, which measures the rate of air leakage through exterior windows and doors. ODL doorglass frames are rated A3, which is the best, and most energy efficient air tightness score that a product can receive. The frames are tested to meet the minimum industry requirement set by the Canadian Standards Association, which they far exceed.

QUALITY ASSURANCE

ODL frames are certified by the National Accreditation & Management Institute, Inc., (NAMI) Quality Assurance Program, which deals specifically with fenestration and building envelope products. Inspections are performed in accordance with the International Standards Organization/International Electrotechnical Commission (ISO/IEC) 17020 guidelines for organizations performing inspections.

PROVEN PERFORMANCE

Rigorous third party testing also assures that product performance meets design intent. ODL frames are tested to meet the North American Fenestration Standard (NAFS) for windows, doors and skylights, including structural integrity, resistance to water penetration, air leakage and forced entry. NAFS stems from the fenestration industry’s desire to offer customers a single, unified performance specification. ODL products not only meet this standard, but they surpass it due to state-of-the-art manufacturing.

One of the most unique design elements of ODL frames is the dry sealant systems, which use foam rather than messy liquid caulk. Traditional caulk (pictured below) moves before it solidifies and can squeeze out onto the face of the doorglass, creating a sticky mess for installers. It can also soften in extreme heat and ooze onto the glass, creating an oily residue that turns brown over time with dirt build up. ODL sealant systems (pictured below) eliminate this problem—both the foam tape system and the foam gasket system provide tight compression seals for frames and can be reused if necessary. The dry sealant systems are extreme-weather tested to withstand the damaging effects of rain and wind. ODL is the only manufacturer in the industry that offers these cutting-edge sealant systems in doorglass.
MANUFACTURING

ODL understands the importance of material selection in the manufacturing of high-quality products, and for doorglass framing. That means choosing the right resin to prevent unwanted cracking, warping and deformation. Material selection is driven by a combination of factors, including cost targets and performance requirements. ODL offers several frame material options (pictured below) and a variety of different frame profiles to choose from.

Graining and texturing are particularly important in ODL's manufacturing process. Special injection molding tools are used to ensure the frames match the finishing details of the home. The tools are trialed in-house for optimal paint and stain adhesion, texture and appearance. After testing, the grain pattern is permanently molded into the tool and the tool is then used to produce ODL framing systems in regular production.

FRAME PROFILES

ODL doorglass frames are available in several constructions, each tailored to meet a specific market need, ranging from value-driven products to frames engineered for stylistic and architectural purposes.
STANDARD

ODL's best-selling doorglass framing system, the Standard frame (pictured right), is designed to meet basic market needs at an economical price point. The frame is color-fast and appropriate for high-heat environments.

It's available in FIBERPRO® oak and HP® WHITE, and comes with profiled screw covers (pictured left).

EVOLVE®

The EVOLVE frame (pictured below) is designed to provide an enhanced product with superior rigidity. It includes auto-aligning screw hole plugs and precision-designed foam tape with specially designed adhesive, which eliminates bothersome squeeze out and oozing wet seals. The frame is engineered with increased rib height and added screw locations to correct problematic warping, scalloping (waviness between screw bosses) and corner flaring.

Auto-aligning keyed screw hole plugs (pictured right) provide easy installation, improved assembly and heightened appearance. The plugs sit flush with the frame profile for a seamless look.

The frame maintains a flush, no-gap seal against the door and glass and it has been extreme weather tested by a certified third party, ensuring the flush, dependable seal withstands air and water filtration.

EVOLVE is available in ODL's popular maintenance-free HP WHITE and FIBERPRO oak materials.
CRAFTSMAN

The Craftsman framing system (pictured right) is designed with architectural style in mind. The broad, flat-profile frame is designed to blend with the finishing details of the home.

Dome or pyramid Craftsman screw covers (pictured left) help accent the finishing touches. The frame is available in a range of materials, including FIBERMATE® Mahogany, FIBERMATE® Oak and textured HP WHITE.

MODERN

Like Craftsman, the Modern low-profile frame (pictured left) is designed to blend with architecture from the 1920’s to today and offers an aesthetic solution for various framing needs. The frame is extruded from PVC for a clean, minimalist look. Flat screw hole covers (pictured above right) add to the simple, geometric design.

TriSYS®

The TriSYS three-frame system (pictured right) is a further improvement in frame technology, providing superior paint and stain adhesion and high heat resistance. Its extreme-weather tested dry-glaze seal eliminates messy squeeze out and the pin alignment system ensures rapid and accurate alignment of frames. Performance of the frame has been improved with the addition of a silicone gasket around the clip system to aid in thermal performance in extreme temperatures.

TriSYS is one of the most innovative products on the market with concealed screws and quick assembly. Users simply screw together the first two pieces and snap on the third. It's designed to fit steel and fiberglass doors with standard glass and door cut-out sizes, and comes in FIBERMATE Mahogany, FIBERMATE Oak and FIBERMATE WHITE.
SEVERE WEATHER

The Severe Weather framing system (pictured right) is designed for security and engineered for strength. The sturdy powder-coated aluminum frame is built to withstand a category four hurricane and is suitable for coastal regions and other high-wind areas. The frame also meets missile impact code requirements, which require the frame to withstand a 2 by 4 inch piece of wood fired from a cannon at 90 mph. Additionally, the frame materials are tested to ensure compliance with the International Building Codes self ignition fire testing, which means the frames will not self-ignite unless they exceed 650 degrees.

The frame’s mechanically fastened corners prevent flex and add strength to the door. The narrow aluminum extrusion provides another layer of protection, while maintaining its shape in HVHZ areas. The Severe Weather frame is equipped with profiled screw covers (pictured above left).

ODL SOLUTIONS

ODL doorglass framing systems are constructed to meet a variety of needs, from cost to visual appeal and even severe weather. ODL constantly assesses the market to determine what installers need and how to meet those needs as efficiently and effectively as possible.
FEEDBACK FROM THE FIELD

Builders, contractors, remodelers and door installers say ODL doorglass framing systems are ideal solutions for homes. Here’s why:

“The ODL EVOLVE frame performs above expectations from an energy standpoint. The dual glazing is very effective and the couture of the frame is easy to maintain. Our customers enjoy the quality and beauty of the product on both front and back door applications. ODL is known for its commitment to innovation and technology—this commitment, in addition to ODL’s service and quality are second to none.” – Robert Rosales, El & El Wood Products, Chino, S.C., about the EVOLVE framing system

“ODL has designed a frame to overcome all the problems we’ve had over the years with the assembly of doors. It also holds paint better than anything we’ve used so far.” – Fran Lomonaco, president, Guida Door & Window, Boothwyn, Pa., about the TriSYS framing system

“The aluminum frame for ODL impact inserts does not require Dow 995 [structural sealant] and saves time and headaches in production.” – Jesse Godwin, vice president of marketing, Builders Hardware Inc., Tampa, Fla., about the Severe Weather framing system

“It’s a better-looking frame, it’s a more durable frame, it has more flexibility in the field and it gets better performance ratings than other frames.” – Jim Bounds, president, DMC, Lancaster, Pa., about the TriSYS framing system

“I like the material and the appearance and my guys in the shop say they are easy to install.” – Jeff Whaley, BFS, North Charleston, S.C., about the Standard framing system

“Using the TriSYS frame system has solved many of the issues that have faced the industry since inserted doorlights first came into use. Better heat resistance, a better sealing system and, overall, a better appearance.” – Paul Bohmbach, president, Albany Door Company, Bedford Park, Ill., about the TriSYS framing system

ODL’s research and development team is constantly generating new innovations in design, assembly and materials based on market trends and customer needs. As environmental concerns play an increasingly significant role in home purchasing decisions, ODL continues to develop energy efficient doorglass framing products to help homeowners minimize costs and maximize the value of their homes.

For more information about ODL products, visit www.odl.com.

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