

## Fleetwood Glossary

**Thermal Break:** Thermal breaking is a process of joining the exterior and interior aluminum with a nonconductive material to reduce condensation and the transfer of thermal energy. The two primary methods of thermal break are "strut" and "pour and de-bridge". Fleetwood products with a "-T" in the product series number are thermally broken (e.g., Series 3070-T).

Due to the inherent characteristics of thermally broken aluminum, a thorough review of product selection should occur based on the location of the home. See Making the Right Choices and Thermal Twisting.

**Strut:** A method of thermal break where two aluminum extrusions are joined with a hard, polyamide (plastic) strut.

**Pour and De-Bridge:** A method of thermal break where a single extrusion has polyurethane poured into a depression. The aluminum underneath the pour (known as the Bridge) is then cut away creating the break.

**Low Emissivity** (**Low-E**) **Glass:** Low-E glass is purposed to limit the amount of both ultraviolet light and infrared light that passes into the home. Low-E is a thin, transparent coating with a reflective quality that allows most natural light to enter, but reduces the damaging components of direct sunlight. There are two primary types of Low-E: "hard coat" and "soft coat".

'Hard Coat' Low-E Glass: The coating is applied to glass while it is still curing, allowing for a much stronger bond.

'Soft Coat' Low-E Glass: The coating is applied inside a vacuum chamber at room temperature after the glass is finished being produced.

**Insulated Glass (IG):** An IG unit is two or more lites of glass joined together by a spacer. This creates an insulating air space that reduces the transfer of energy into and out of a room. The airspace is sometimes filled with denser gas (e.g, argon) to further improve the insulating qualities.

**Laminated Glass:** Sometimes shortened into "lami", laminated glass is unique in its ability to hold together when shattered. This is made possible by the lites being bonded together using a plastic or vinyl interlayer. Laminated glass is also used in the automotive industry for its security qualities and sound insulation.

**Spacers:** Aluminum filled with a desiccant that is placed between lites of glass. This can also be a synthetic material (plastic) for better insulation.

**Heat Strengthened/Tempered Glass:** Rapid heating and cooling techniques during the glass manufacturing that increase the structure and safety of glass. Heat strengthening in laminated glass is known to cause quality concerns (distortion in view) and should be avoided.

**Energy Code:** New construction, renovations and additions must adhere to federal and sometimes state energy regulations in order for gain approval from a city's planning department. Energy code consultants can utilize "trade-offs" in most states to reduce the cost and need for reflective glass. See <u>Energy Code Trap</u>.

**House Envelope:** This terminology refers to a whole house package. Fleetwood builds custom products to fit every opening in your home. We strive to give you the uncompromised look, unity and quality of our product to help make your dream home a reality.

**Authorized Dealer:** A company that assists with designing, budgeting and ordering (and sometimes installation) of your custom Fleetwood products. Fleetwood has dealers covering most major markets in North America, but will also assist with ordering in areas without direct representation if needed. See Dealer Search.

**Dealer Drawings:** A detailed drawing that illustrates the design of the final product prior to placing an order.

**Thermal Twisting:** Twisting/bowing can occur when thermally broken aluminum is exposed to a <u>radical</u> change in temperature, causing the interior and exterior surfaces to expand at different rates. Since thermal break is designed for cold climates, this phenomenon typically only occurs in warmer climates when temperature changes are more extreme (e.g, sun hitting doors after a cold night). See <u>Thermal Twisting</u>.

**Finish:** This is the color choice applied to a mill aluminum extrusion. Fleetwood offers a variety of custom anodized and custom paint finishes in order to satisfy any design. See Finish Options.

**Wind Load:** The wind force put on a structure or window/door system. Fleetwood products can be certified to meet various wind load requirements, even those in hurricane zones.

**Casement:** A window that hinges from the left or right and swings out.

**Hopper:** A window that hinges from the bottom and opens inward from the top.

**Awning:** A window that hinges from the top and swings outward from the bottom.

**Dual-Point Lock (DPL):** A lever applied to folding doors like Fleetwood's <u>Series 3600-T</u>. The lever will shoot stainless steel bolts into the top and bottom tracks to secure a door in the closed position.

**Quality Control (QC):** Quality control is possibly the most important step in the manufacturing process for a luxury product like Fleetwood. The strict visual and physical inspection on all incoming components (e.g, glass or painted aluminum) ensures that the highest quality product arrives to be installed in the home.

**Fabrication:** Manufacturing process where a product is made to order from raw or semi-finished material. Fleetwood product are made custom to each order.

**Butt Joint:** A butt joint is where two materials come together and are then sealed at their meeting point. This is commonly done with glass to reduce the amount of framing in a corner window. Butt joints reduce the structure of a product and should be carefully reviewed.

**Head:** Framing at the top of a window/door.

**Jamb:** Framing at the two vertical sides of a window/door.

**Sill:** Framing at the bottom of a window/door. Commonly referred to as a "threshold" on doors.

**Fillers:** Aluminum cut to snap into the recesses of the jamb or head that are exposed, creating a clean and uniform look.

**Knocked Down (KD) Framing:** When a product is shipped unassembled and not glazed.

**Glazing:** The installation of glass into its aluminum frame.

**Inside Glazing**: The installation of glass into the frame from inside the home.

Outside Glazing: The installation of glass into the frame from outside the home (most common).

**Mullion:** A vertical extrusion that is used to affix similar framed windows or doors.

**Pocket Closer:** A cosmetic attached to the last panel in a pocketing door that closes off the pocket opening when the doors are closed.

**Storefront:** A common term for a large fixed window system. A non-load bearing system, meaning it is incapable of supporting a structure on its own. While the term storefront may suggest a retail store, Fleetwood's <u>Series 3800-T</u> window wall system offers a luxury, residential alternative to most commercial products. See <u>Series 3800-T</u> vs. Storefront.

Weep Hole: Small openings on the window/door sill that allow for the management of water evacuation.

**Single Hung:** Vertically sliding windows that have a bottom sash that slides up behind a fixed sash.

**Americans with Disabilities Act (ADA):** ADA is a common term in public access buildings that refers to mandated accessibility requirements for the handicapped. For example, minimum clearance for wheelchairs.

**American Society for Testing and Materials (ASTM):** The provider of standards and testing for water and air pressure requirements. Fleetwood tests for ASTM standards in its on-site testing chamber.

**Breather Tubes:** Aluminum tubes designed to equalize the pressure between the two sealed panes of insulated glass. Significant elevation changes during shipping will cause pressure imbalances that may damage the glass. These tubes are sealed after delivery.

**Capillary Tubes:** Similar to breather tubes, capillary tubes are stainless steel, smaller in diameter and are left open after installation to help the unit maintain a flat appearance over the course of time.

**Condensation:** The dictionary defines this as, "humid air coming in contact with a cold surface and forming water droplets".

**Galvanic Corrosion:** The chemical breakdown that occurs when two dissimilar alloys are bonded with an electrolyte (e.g, salt water). This natural occurrence is avoided when electrolytes are removed.

**Sill Pan:** A thin aluminum barrier placed between the framed opening and the product's sill during installation in order to further control moisture.

**Dual Glaze:** Insulated glass with two panes of glass and one air space.

**Triple Glaze:** Insulated glass with three panes of glass and two air spaces.

**Egress:** An emergency opening that allows ease of exit. Different building codes have a variety of requirements, but generally call for a minimum width and clearance.

**Interlocker:** The point on the end of each panel in a sliding door/window where the moving panel connects and seals to the previous panel. This can occur at many points in a run of multi-slide doors.

**Meeting Stile:** The point where two active panels on the same track meet and lock together.

**Lock Stile:** The end of a leading panel that will lock into the wall jamb when a door is fully closed.

True Divided Lite (TDL): A slim extruded bar used to physically separate two or more pieces of glass.

**Simulated Divided Lite (SDL):** An extruded bar placed on the glass surface without a separation in the glass. These are commonly referred to as "grids".

**Vent:** An operable window (e.g, casement or awning).

**Mill:** The raw form of an aluminum extrusion without a finish treatment.

**Flush Stack:** Having unequal glass in a sliding door system so the face of the panels will evenly overlap when fully opened. Having equal glass will cause uneven stacking.

**Sash:** Industry term for a framed window unit.

**Transom:** A window unit that is stacked above a door.

**U-Factor:** Also known as U-Value, this value is a tested rating of energy loss through an opening. Energy codes commonly call for a minimum U-Factor performance or compliance trade-offs to offset larger openings.

**Stile:** A vertical member of a window or door panel.

**Rail:** A horizontal member of a window or door panel.

**Sub-Sill Pan:** A custom pan system designed to set inside the finished floor, resulting in a "flush" transition and a reduced track footprint. The pan will capture water and reroute it to a desired draining point.

**Hidden Track:** The same concept as a sub-sill, but this track is minimal and offers an even cleaner transition. While these tracks do not have weather performance, some products integrate a draining system to offer the minimal look with water performance. See Series 4070-T.

**Multi-Slide Door:** A sliding glass door system made up of two or more active panels allowing for an endless variety of exploited views and indoor/outdoor living.

**Patio Door:** A traditional sliding glass door signified by its two panels, one fixed and one active, in a single frame.

**Block Frame:** Another way to describe this type of frame would be retrofit, because it does just that; fits directly into the pre-existing framed opening.

**Nail Fin:** The frame is fabricated with a protruding sheet of aluminum used to install the frame directly into the building's rough unfinished exterior. This allows for superior weathering and ease of installation.

**Rotogear:** A manual crank out operator that opens and closes a vent.

**Shop Drawings:** Drawings that a manufacturer creates to help the factory produce the product.

**Revit:** A software program used by architects and building professionals to create 3D models of buildings. Fleetwood creates files called Revit Families so designers can drop specific products into the program.

**Window Inserts:** Windows placed into the frame of another window. For example, placing a casement window into a large, fixed wall of windows. See <u>Series 3800-T</u> window inserts.

**Sightline Extenders:** An optional cosmetic extension on the final sliding panel leaving a pocket that creates a symmetrical look when the doors are closed.

**High Performance (HP) Parts:** Additional stiffeners that do not reduce glass, but greatly increase the structure of taller doors or doors in extreme weather environments (e.g, hurricane zones).

Raked: Windows with special geometry and angles such (e.g, a slanted 45-degree head).

**Side-Lite:** A fixed window adjacent to a door.

Glazing Blocks: Hidden rubber blocks set in the framing of a window to secure the glass from movement.

**Glass Stops:** The removable part on a window that allows for the installation or replacement of glass without removing/replacing the frame.