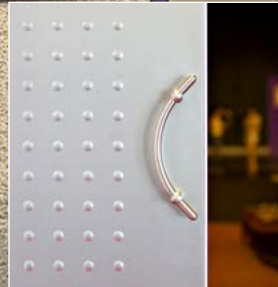




STAINLESS STEEL & FUSED METAL® DOORS

PRODUCT DATA





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Forms+Surfaces' **Stainless Steel & Fused Metal Doors** combine our legendary design and material palette with a full range of UL® fire labeling options. Expertly crafted from stainless steel and other durable materials, doors are offered in three distinctive configurations and a wealth of metals, finishes and patterns. A beautiful and affordable alternative to generic fire doors, Stainless Steel & Fused Metal Doors from Forms+Surfaces provide the performance ratings modern projects require without sacrificing design.

FACING MATERIAL OPTIONS

| MATERIALS | FINISHES | PATTERNS |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Stainless Steel - our flagship material. The strength, beauty, versatility and maintenance ease of stainless steel make it the ideal door skin material for just about any application or architectural design.</p> <p>Fused Metal® - our exclusive line of colored stainless steel is produced in an advanced manufacturing process and offers the durability and low maintenance of stainless steel with a range of color options that includes Fused Bronze, Fused Graphite, Fused Nickel Bronze, Fused Nickel Silver and Fused White Gold.</p> | <p>Stainless Steel & Fused Metal Doors may be specified in a rich variety of distinctive finishes. High-durability options—such as our exclusive Sandstone, Seastone, and Linen finishes—create a work-hardened surface that provides even greater resistance to abrasion and wear.</p> | <p>Patterns are applied designs that add visual interest and expanded customization potential to Architectural Metal Doors. From a functional standpoint, patterns pick up where metals and finishes leave off. Depending on the intended design and application, patterns can be applied as single-tool embossures, full-sheet pressings or as etched designs using our environmentally responsible Eco-Etch physical etching process.</p> |

DOOR SIZE OPTIONS

Stainless Steel & Fused Metal Doors are available in the twelve standard sizes shown below:

| | | | | | |
|-------------|-------------|--------------|-------------|--------------|--------------|
| 3'0" x 6'8" | 3'0" x 7'0" | 3'0" x 8'0" | 3'0" x 9'0" | 3'0" x 10'0" | 3'6" x 7'0" |
| 3'6" x 8'0" | 3'6" x 9'0" | 3'6" x 10'0" | 4'0" x 8'0" | 4'0" x 9'0" | 4'0" x 10'0" |

Dimensions shown above are nominal finished opening sizes. Custom door sizes are available by special order. Standard door thickness is 1-13/16". Custom door thickness may vary depending on door's proportions.

GLAZING OPTIONS

A wide variety of glass lites can be specified for both fire-rated and non-rated doors. Fire-rated doors use UL listed lite kits; the particular fire rating required will determine the glazing type and maximum size (see chart on page six). Non-rated doors offer far more flexibility in glazing types, sizes, frame detailing and positioning on the door. Please call for more information on glazing options.

RELATED PRODUCTS

| DOOR PULLS | DOOR FRAMES | ELEVATOR DOOR SKINS |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Forms+Surfaces manufactures a collection of door pulls widely recognized as the international benchmark for design, craftsmanship and performance. The perfect accompaniment to Stainless Steel & Fused Metal Doors, our pulls are crafted in Stainless Steel and Bronze in a range of beautiful finishes. For details, please refer to our website at www.forms-surfaces.com.</p> | <p>Forms+Surfaces offers a complete range of single wall and double wall door frames in Stainless Steel and Fused Metal. Frames can be specified with or without fire rating. Please refer to the Door Frames Product Data Sheet for additional information.</p> | <p>Forms+Surfaces' Elevator Door Skins are available in many of the same patterns, colors and finishes that are offered in doors. Please see the Stainless Steel & Fused Metal Elevator Door Skins Product Data Sheet on our website for additional information.</p> |
| LEVELe WALL SYSTEM | LEVELe COLUMN SYSTEM | ELEVATOR INTERIORS |
| <p>Our LEVELe Wall System can be incorporated in matching colors, patterns and finishes in areas surrounding doors.</p> | <p>Our LEVELe Column System can be incorporated in matching colors, finishes and patterns in areas surrounding doors.</p> | <p>Our LEVELe and LEVELc Elevator Interiors can be specified in matching colors, finishes and patterns to your doors.</p> |

HOW TO SPECIFY

Design Guides are available for non-rated and fire-rated versions of each standard Stainless Steel & Fused Metal Door configuration to lead you through the specification process in a simple, checkbox format. The Design Guide captures all the information needed to generate a quote: dimensions, finishes, patterns, hardware preparations and other options. To get started, just give us a call or visit us online at www.forms-surfaces.com.



STAINLESS STEEL & FUSED METAL® DOORS

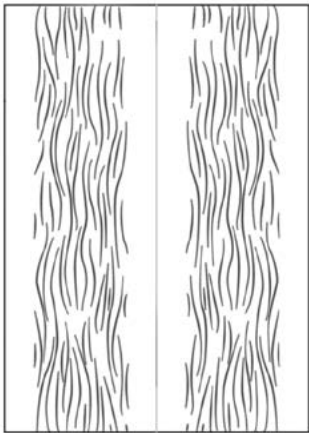
PRODUCT DATA

IMPRESSION DOORS

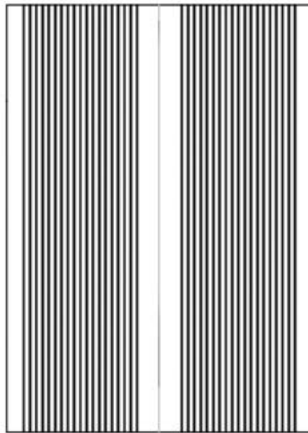
Forms+Surfaces proprietary manufacturing capabilities include large-scale stamping equipment that can apply unique, full-press patterns across an entire door face using a single tool. The result is a series of beautiful, high-relief door designs that add visual impact, enhanced durability and a rich, tactile feel.

Some Impression patterns are also available in other materials such as our exclusive Bonded Metal® composite. The same patterns can likewise be specified for other products that use our Stainless Steel & Fused Metals including elevator interiors, elevator door skins, wall panels, column covers and litter and recycling receptacles. Impression doors can be specified in the available patterns below in any of our Stainless Steel or Fused Metal Finishes. Please refer to the Stainless Steel and Fused Metal Product Data Sheets for additional details and finish swatches.

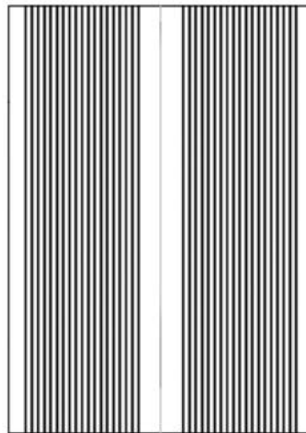
IMPRESSION PATTERNS



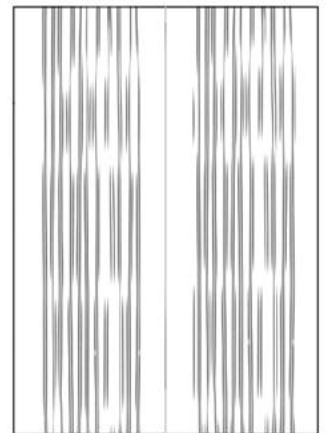
CHAMPAGNE
PRE101D



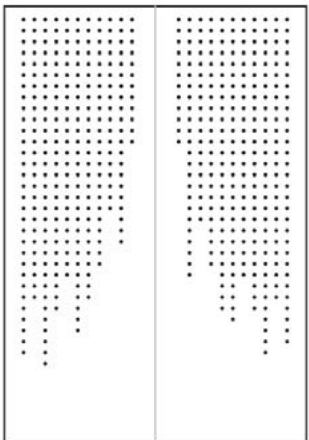
DALLAS
PRE102D



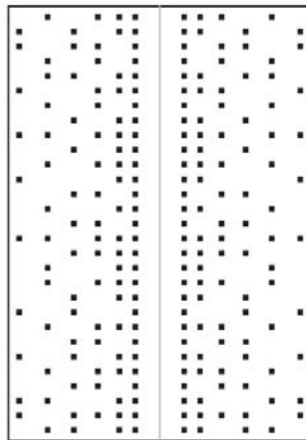
DENVER
PRE106D



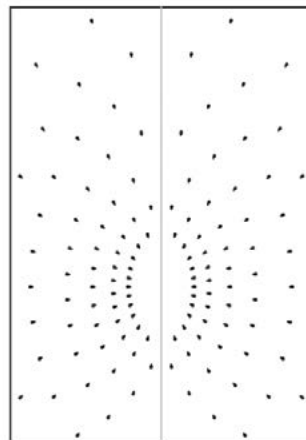
KALAHARI
PRE103D



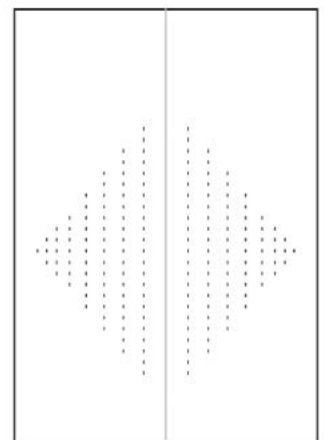
CIRCLE
EMB401D



SQUARE
EMB402D



TEARDROP
EMB403D



TECH
EMB404D



STAINLESS STEEL & FUSED METAL® DOORS

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ECO-ETCH® DOORS

Beautiful etched designs are applied to Stainless Steel & Fused Metal Doors using our advanced photolithographic bead-blasting system instead of acids or other harmful chemicals. Advantages of our Eco-Etch process include:

| SIZE | SPEED | CONSISTENCY | ECOLOGICALLY RESPONSIBLE |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The largest physical etching system in North America, our equipment can handle materials up to two meters wide by six meters long. | The physical etching process can be completed in a fraction of the time required for traditional chemical etching. | Our proprietary computer-controlled system ensures an even blast pressure and a consistent finish, even on the largest surfaces. | Because our Eco-Etch is physically applied, it does not require etching acid or other harmful chemicals and no toxic waste is generated. The beads used in the process are contained within a closed chamber; used beads are recycled and returned to the process for reuse. |

All standard and custom Eco-Etch patterns are available in Stainless Steel, Fused Bronze, Fused Graphite, Fused Nickel Silver and Fused White Gold with Seastone, Satin or Mirror finish.

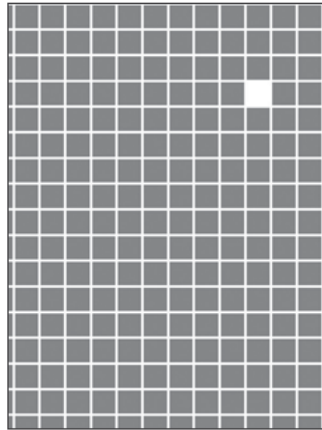
STANDARD PATTERNS

Several full door and allover standard Eco-Etch patterns are available for specification. Please see the Stainless Steel and Fused Metal Product Data Sheets for more detailed information.

FULL DOOR ECO-ETCH PATTERNS



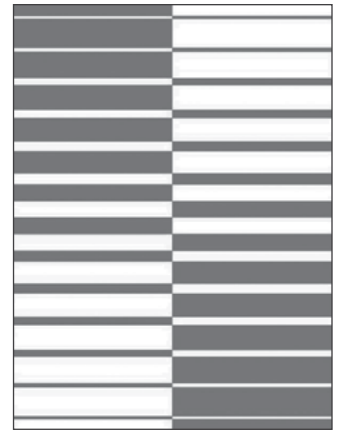
ECO202D



ECO204D



ECO205D



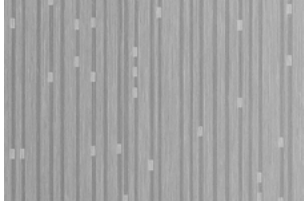
ECO208D



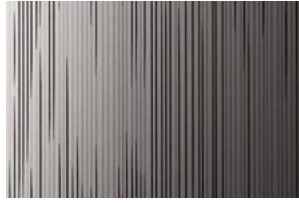
STAINLESS STEEL & FUSED METAL® DOORS

PRODUCT DATA

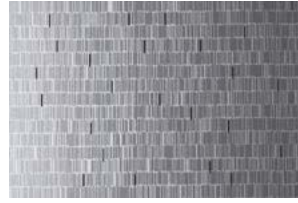
ALLOVER ECO-ETCH PATTERNS



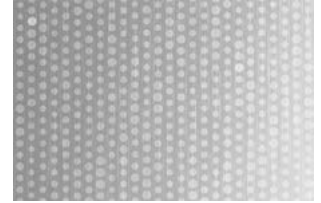
CITY LIGHTS



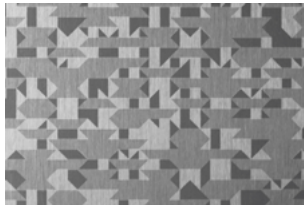
CURRENT



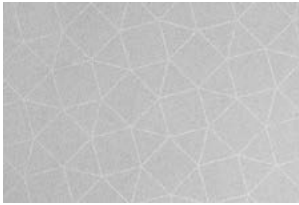
DASH



FLICKER



GLACIER



MICA



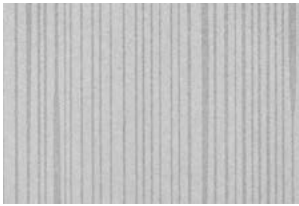
REEDS



SEAGRASS



SEQUENCE



SILKWORM



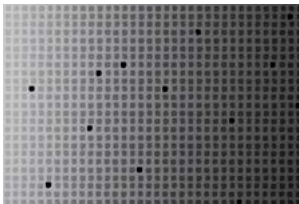
STRIPE



STACKS



THATCH



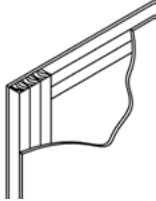
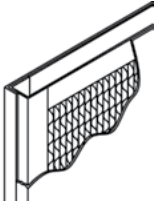
TRACE



STAINLESS STEEL & FUSED METAL® DOORS

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DOOR CORE OPTIONS

| CONSTRUCTION | WOOD CORE DOOR | STEEL CORE DOOR |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Stainless Steel & Fused Metal facings are laminated under pressure to both sides of wood or steel cores. Wood cores combine a particleboard center section with a solid wood perimeter. Steel cores combine a resin impregnated honeycomb paper or polystyrene center with a steel frame and skin. |  |  |
| NON-RATED | FIRE-RATED | |
| Non-rated cores are made of wood and are intended for interior or sheltered exterior use. The core consists of a particleboard center section with a solid wood perimeter. The heft and solidity of the wood core make it ideal for applications where a substantial feel and dent resistance are desirable. Wood core Stainless Steel & Fused Metal Doors cannot be fire rated. | Fire-rated cores are made of metal and are suitable for interior or exterior applications. Standard metal core doors have an internal welded channel frame and polystyrene core construction. Depending on door size, application and the required fire rating, special core materials such as, temperature rise coreboard or steel stiffeners with fiberglass or mineral wool insulation, may also be specified. | |

UL® FIRE RATING OPTIONS

Stainless Steel & Fused Metal Doors are available with the following UL fire endurance ratings. Maximum glazing sizes shown are based on the use of UL labeled fire-rated ceramic glazing:

| FIRE RATING | MAXIMUM GLAZING SIZES |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 Hour | 100 sq. inches maximum visible lite, 12" maximum width; 33" maximum height. One lite per door. Glazing in 3 hour doors is subject to approval by the authority having jurisdiction. |
| 1-1/2 Hour | 2034 sq. inches maximum visible lite, 36" maximum width; 56.5" maximum height. |
| 1 Hour | 3204 sq. inches visible lite, 36" maximum width; 89" maximum height. |
| 3/4 Hour | 3204 sq. inches visible lite, 36" maximum width; 89" maximum height. Quantity of lites per door may vary. |
| 20 Minute | 3204 sq. inches visible lite, 36" maximum width; 89" maximum length. Door may have multiple lites. Usage is subject to approval by the authority having jurisdiction. |

TEMPERATURE RISE RATINGS

A temperature rise rating (TRR) can be offered in addition to a fire protection rating. The TRR indicates a maximum rise above ambient temperature developed on the unexposed face of the door at the 30 minute point of a fire test. Stainless Steel & Fused Metal Doors are available with temperature rise ratings down to 250° F. Local building codes dictate the level of protection required for openings in specific locations.

NEUTRAL AND POSITIVE PRESSURE RATINGS

All of Forms+Surfaces fire-rated Stainless Steel & Fused Metal Doors conform to UL 10B for neutral pressure and UL 10C for positive pressure.

CONFORMANCE TO LOCAL REGULATIONS

While Forms+Surfaces performance-rated doors are designed to conform to generally accepted national standards, specific codes and regulations can vary from locality to locality as determined by the authority having jurisdiction. It is the architect's/specifier's responsibility to understand and to specify doors, frames and related hardware in accordance with all applicable local codes and regulations.



STAINLESS STEEL & FUSED METAL® DOORS

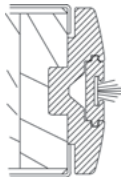
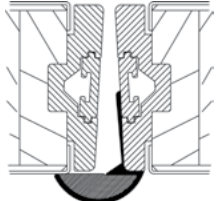
PRODUCT DATA

HARDWARE PREP OPTIONS

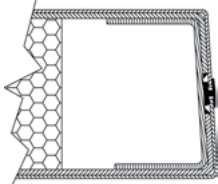

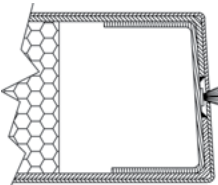

Stainless Steel & Fused Metal Doors can be factory-prepared to receive virtually any required hardware. Forms+Surfaces offers suggested prep or prep-and-supply hardware packages for both residential and commercial doors and for both rated and non-rated applications. Because hardware requirements can vary significantly depending on project-specific needs, the buying party is responsible for verifying conformity with any applicable codes, plans, specifications and functionality requirements. Hardware products installed on rated doors must carry their own appropriate ratings. For a complete list of suggested hardware prep or prep-and-supply packages, please refer to the design guide for your chosen configuration.

DOOR EDGES, ASTRAGALS AND WEATHER-STRIPPING OPTIONS

Non-Rated Doors

| EXTRUDED ALUMINUM EDGES AND ASTRAGALS | EXTRUDED ALUMINUM EDGE WITH RADIUSED PROFILE SHOWN WITH WEATHERSTRIPPING | EXTRUDED ALUMINUM EDGES WITH BEVELED PROFILES SHOWN WITH SMOOTH TRIM STRIPS AND ASTRAGAL |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> Non-rated Stainless Steel & Fused Metal Doors use an attractive anodized aluminum extruded edge detail on both the hinge and latch sides. Radiused and beveled profiles are available to accommodate a wide range of door swing and hardware configurations. Edges can be specified in your choice of Clear or Black anodized finishes. A matching reversible trim strip that slides into the edge can be fitted with weather-stripping or can be reversed to present a smooth appearance for applications where weather-stripping is not required. A half-round astragal in matching extruded aluminum is available as an option. Extruded aluminum edges and astragals are not available on fire-rated doors. |  |  |

Fire-Rated Doors

| TRIM EDGES | TRIM EDGE SHOWN WITH SMOOTH BLACK PLASTIC TRIM STRIP | TRIM EDGES SHOWN WITH SMOOTH BLACK PLASTIC TRIM STRIPS AND ASTRAGAL | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|
| <ul style="list-style-type: none"> Front and rear faces of fire-rated doors are returned to the edges separated by a slight reveal. This reveal forms a channel which, depending on the application, is fitted with either a smooth black UHMW polyethylene trim strip or weather-stripping. Door edges are beveled. Astragals formed from Stainless Steel or Fused Metal are available as an option or may be required for some fire ratings. Because of the returns required, doors specified with the trim edge are limited to a maximum actual face width of 46.25". |  |  | |
| |  |  | |