envel™

EXPERIENCE FACADE FREEDOM

envel COLORS / TEXTURES

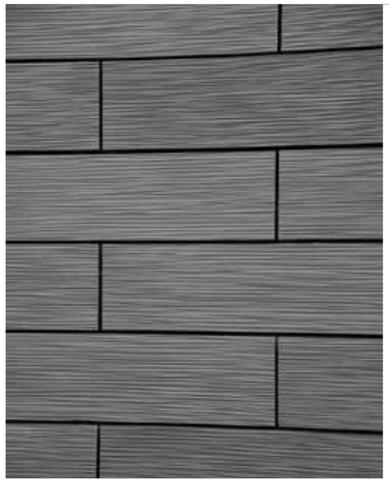
We offer the unique opportunity for designers to add depth, complexity and a defining appeal to their projects with a range of standard pattern and texture possibilities.

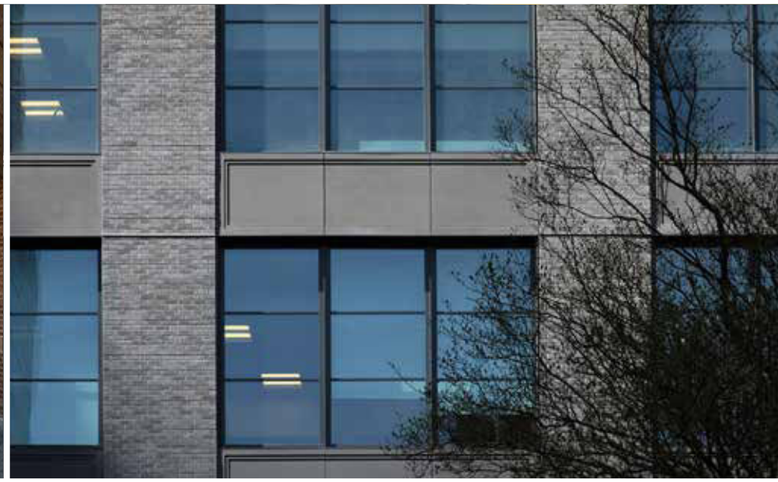
Our panels are available in a wide variety of UV-stable iron oxide body colors. We offer 12 preformulated colors shown above, but our ethos “Façade Freedom” means that we offer the ability to match the custom color you envision for your project; by submitting a Pantone U Number, we will custom match it to help create your vision.

envel FACADE FREEDOM

Envel offers comprehensive panel cladding systems that are produced using ultra-high performance concrete (UHPC). UHPC offers extremely low porosity and permeability, thereby attributing to the material's superior durability, ductility and strength.

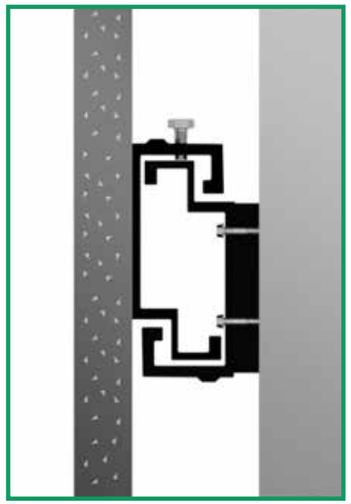
Panels can be cut to many different sizes, ranging from 12' x 6' down to 6" x 6'. Thicknesses of these panels are 5/8" and increase based on the chosen pattern or if there are more stringent loading requirements. Any panel that is smaller than 24" in one direction, is recommended to review the aspect ratio with the Envel team, to ensure ease of handling during install.





envel FASTENING SYSTEMS

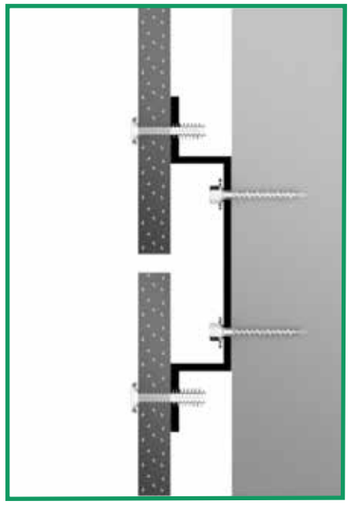
Hidden or Face-Fastened connectors have distinct benefits that may be more appropriate for certain types of projects; discover the features that make both types of fastening systems unique.



HIDDEN

Hidden fastening systems allow panel installation with no visible fasteners. This type of fastening offers enhanced seismic performance as well as greater ease of installation for larger and/or heavier panel formats. Hidden fastening is best used with larger panel sizes and/or those with deep patterns in order to maximize the visual effect.

Envel hidden fastening is compatible with most insulation framing systems on the market.



EXPOSED

Face fastened systems offer an economical alternative to hidden fastening systems. These systems are best used with shallow-relief surface textures and also are more adaptable to modification to accommodate field conditions and all insulation framing systems.

Face fastening can be inset or flush with the face of the panel, and color-matched fasteners are generally not visible at distances of 20' or greater.

PRODUCT PERFORMANCE & DURABILITY

Standard	Description	Performance
ASTM C39	Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens	18,000 psi
ASTM C496	Standard Test Method for Splitting Tensile Strength of Cylindrical Concrete Specimens	2,100 psi
ASTM C293	Standard Test Method for Flexural Strength of Concrete (3 point loading)	1,700 psi
ASTM C642	Standard Test Method for Density, Absorption, and Voids in Hardened Concrete	4.60%
ASTM C418	Standard Test Method for Abrasion Resistance of Concrete by Sandblasting	Abrasion Coeff. Loss .21 cm3/cm2
ASTM C531	Standard Test Method for Linear Shrinkage and Coeff. Of Thermal Expansion	5.71E-06
ASTM C666	Standard Test Method for Resistance ofConcrete to Rapid Freezing and Thawing (301 cycles)	Length Change% /.020 Mass Change% .04 Relative Dynamic Modulus 96%
ASTM C1185 Section 11	Water Tightness 1/2” Thick Panel	No Water Droplets Present
ASTM E84	Standard Test Method for Surface Burning Characteristics of Building Materials	Flame Spread 0 Smoke Dev. 0
ASTM E488	Freeze Thaw Conditioned Samples / Tensile & Shear Evaluation. 1/2” Thick Panel, 13mm Keil Anchor	Tensile 390# / Shear 800#
ASTM E330	Structural Wall Performance Test	Greater than 90 psf

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