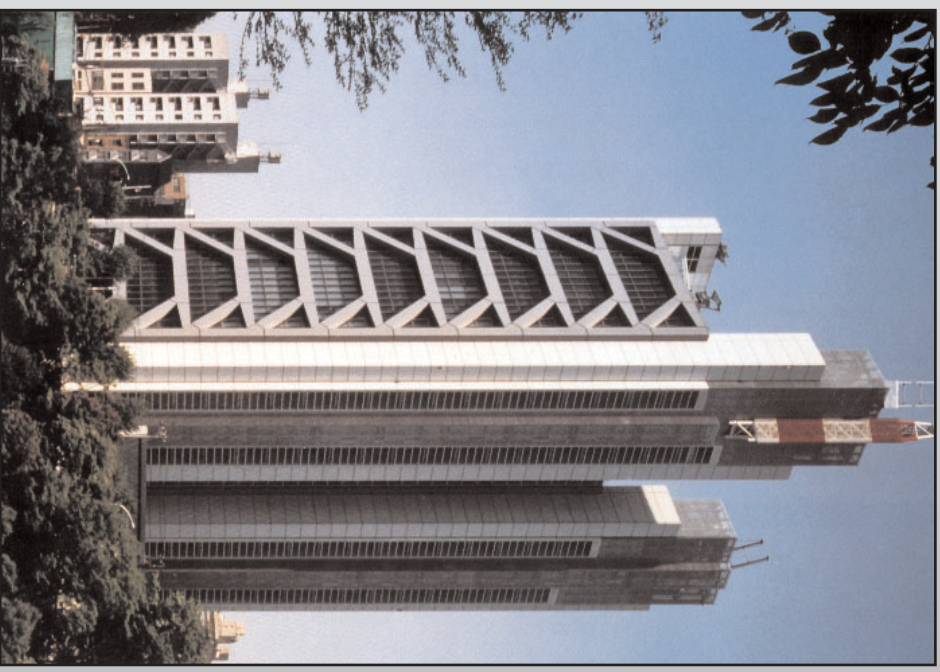
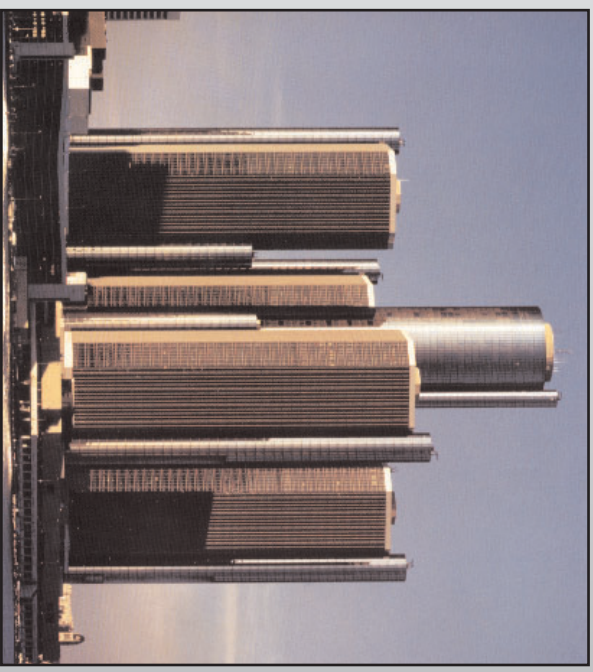
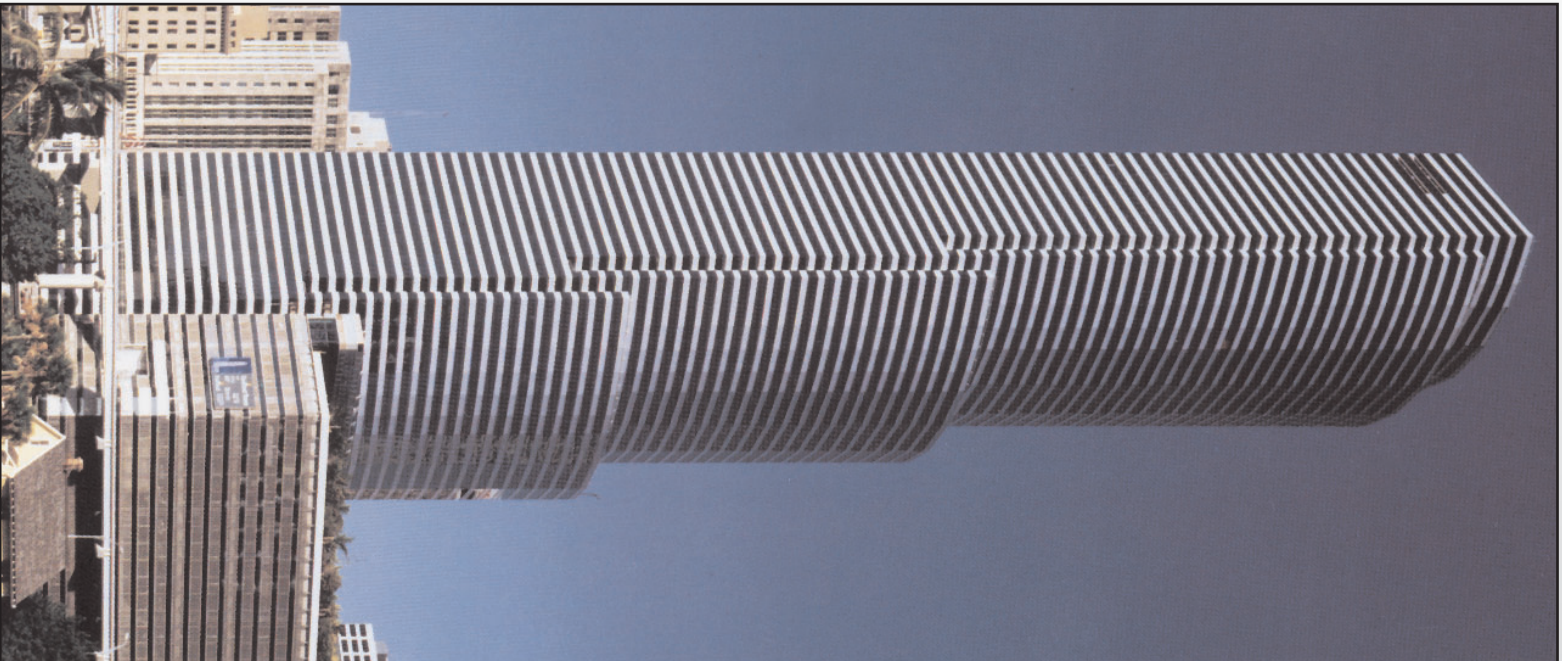


# Aluminum Composite Panels

Formacore Custom Curtain Walls





## Unique Composite Design Expands Your Options

### Noncombustible all-aluminum panels offer creative design freedom

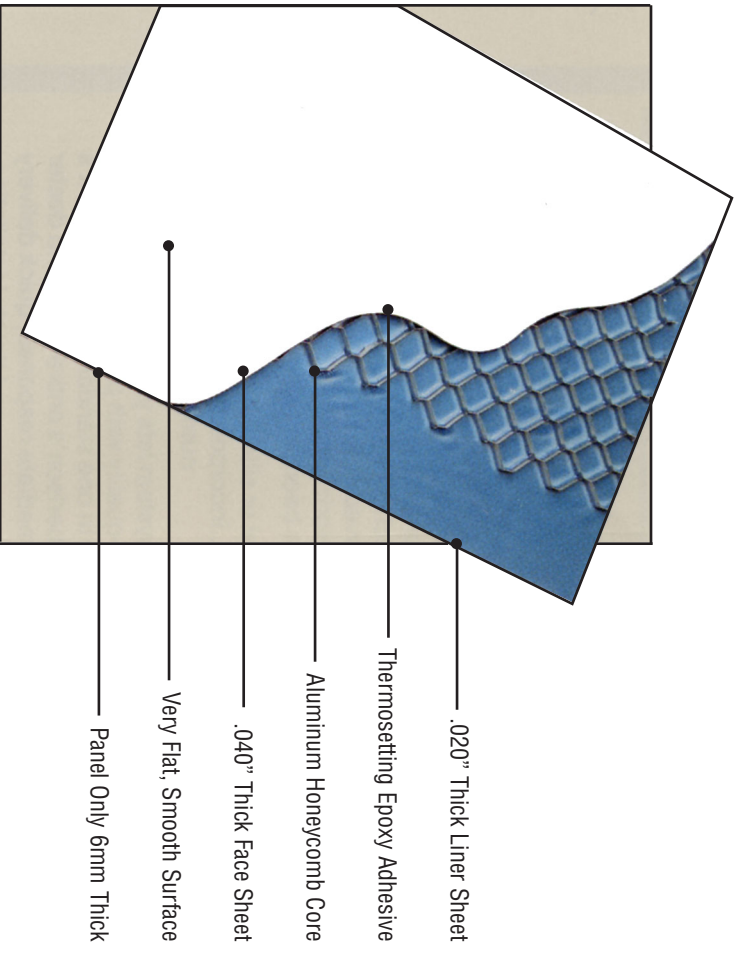
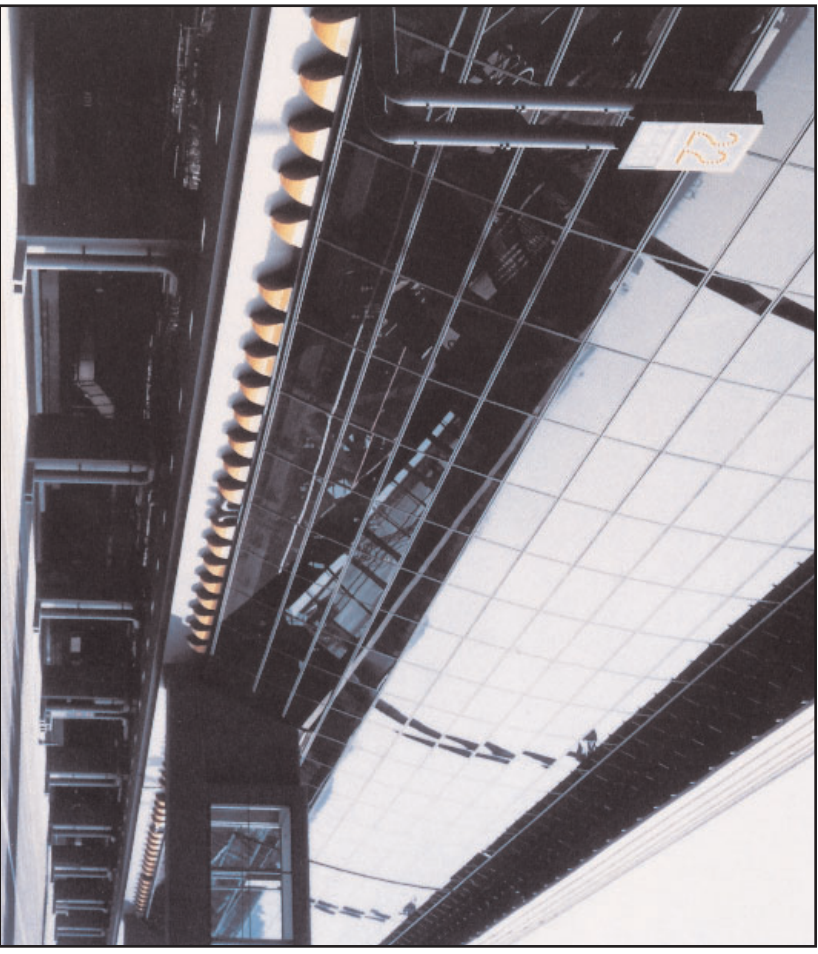
It's strong, lightweight, easily fabricated and extraordinarily flat, yet capable of smooth graceful curves.

And, its core, face and liner are noncombustible.

Today creative designers are demanding more from metal curtain wall systems as they seek ever-flatter, larger, more easily sculptured modules, while maintaining stringent fire code requirements.

The Formacore all-metal panel meets these challenges using a unique composite design featuring an aluminum honeycomb core bonded to an aluminum face and liner. The result is a very flat and even panel with excellent peel strength and outstanding fire performance characteristics that weighs just 1.0 lb/foot<sup>2</sup> (4.8kg/M<sup>2</sup>).

Available in a variety of panel edges, thicknesses and densities, it can interface anywhere in the curtain wall system... as a spandrel panel, for soffits or fascia... in conjunction with glazing.



MODULE DIMENSIONS			ALUMINUM COMPONENTS (Thickness)			AVAILABLE COLORS	JOINERY
WIDTH	LENGTH	THICKNESS	CORE	FACE	LINER		
49", 61" and up to 77"	up to 20'0"	6 mm (custom thicknesses available)	1/2" cell honeycomb	.040"	.020"	Five std. PVF <sub>2</sub> colors and custom colors	Custom extrusion



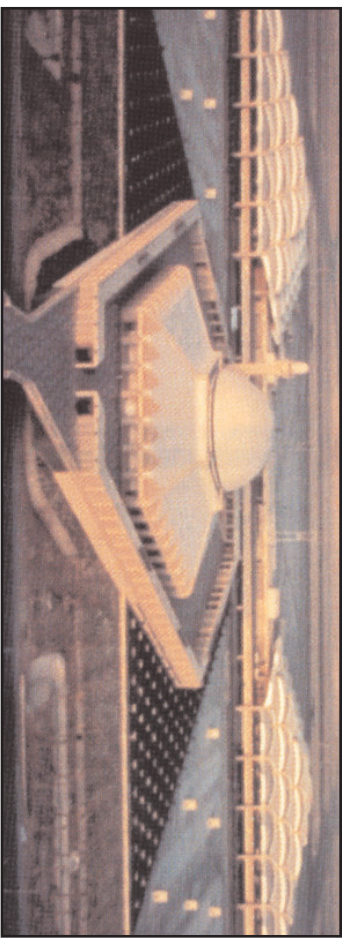
# FORMACORE – The All-Aluminum Composite Panel

## Test Results Assure The Product Quality

In environmental durability (bond strength) and accelerated aging test, Formacore panels withstood 1,000 hours of 100% relative humidity at 48°C (120°F) and maintained a minimum tensile strength of 300 psi (0.21 kg/mm<sup>2</sup>).

## Fire Safety and Flammability Testing

All of the principal components of the Formacore panel – its aluminum face, honeycomb core and aluminum liner – are inorganic. Because they are, they do not contribute in any way to the ignitability or flame propagation characteristics of the total wall assembly.



## Easily Fabricated To Your Design Criteria

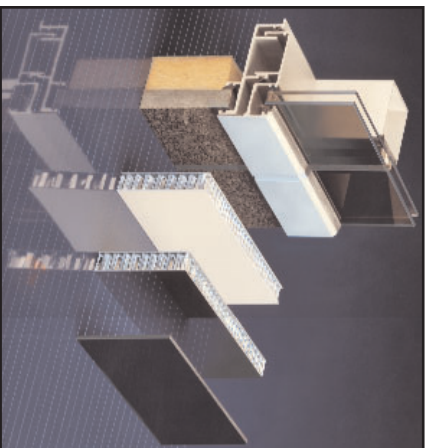
Complex bends... curves... rigid square corners... round column covers... sunshades soffits fascia... obtuse and oblique angles can all be fabricated simply and easily, using standard techniques.

Field cutting and drilling are also quick and easy, using conventional tools and methods.

## Building Code and Insurance Industry Acceptance

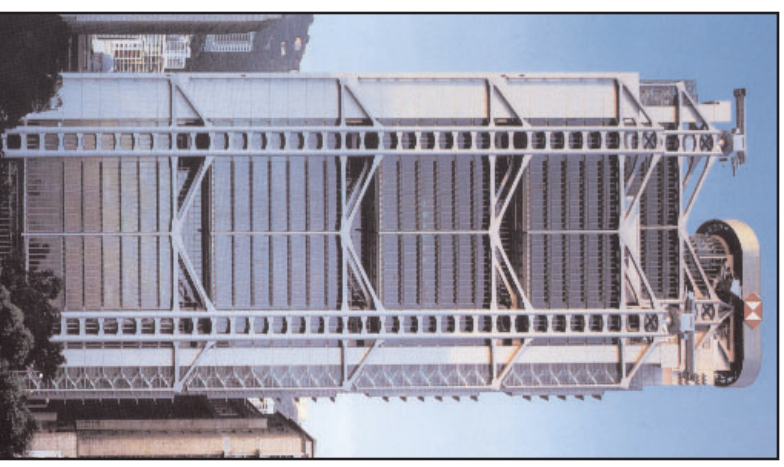
Because of the inorganic nature of the primary components, Formacore panels are readily acceptable under most building codes for use where noncombustible cladding is required. The all aluminum construction provides excellent surface burning characteristics in code mandated testing.

Formacore panels have been approved and used on projects throughout the world and are qualified for acceptance by the insurance industry for use where noncombustible facing materials are required.



## Highly Cost Effective

Not only is the Formacore panel performance equal to or better than composite panels with other cores, it's also very cost effective in most curtain wall designs, and is extremely safe in high-risk fire situations.

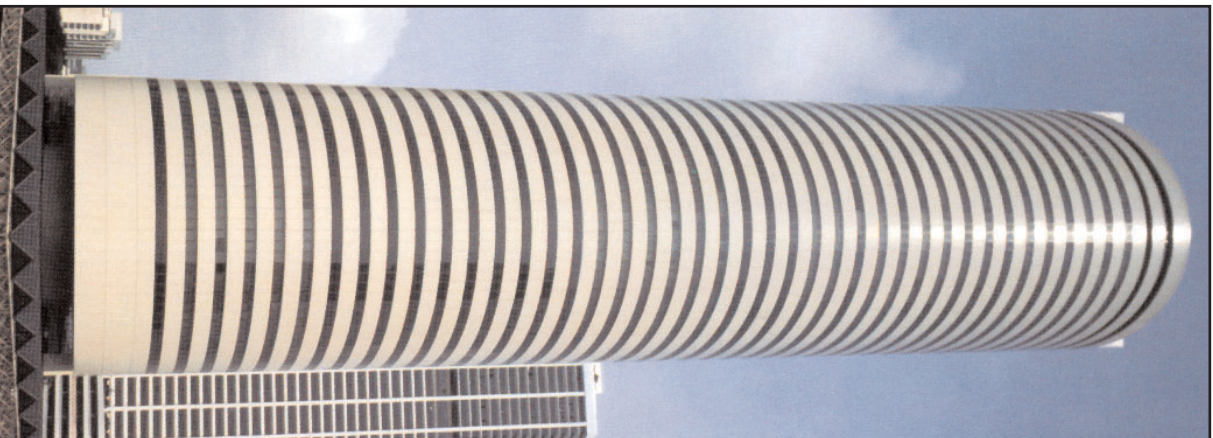


## Panel Performance

When tested in accordance with ASTM-E84 painted Formacore panels were rated at:

Flame Spread	Smoke Development
5	0

Potential heat of the Formacore panel is approximately 1600 BTUs/square foot, which is well below the 6,000 BTUs/square foot maximum permitted under both ICBO and SBCCI.





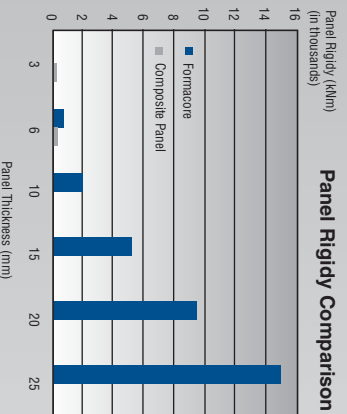
## A Palette of Colors in the Preferred Architectural Finish

A variety of custom colors ranging from subtle earth tones to sparkling “hi-tech” metallics can be matched to your design.

A nominal 1.2 mil (30 microns) coating system consisting of a Kynar® 500-based fluoropolymer (70%) PVF2 finish coat over a 0.2 mil (5 micron) primer is the standard finish applied to the exterior side of all Formacore panels. It provides excellent environmental durability and outstanding color fastness. The liner sheet of the panel is pretreated.

## Superior Rigidity

Formacore aluminum honeycomb core panels offer unsurpassed strength and design capabilities. Available in a variety of panel thicknesses, the panel can be designed without any need for stiffeners in order to meet rigid wind and hurricane load requirements and deflection loads.



## Technical Assistance

PortFab Corporation’s technical service staff is always available to help you successfully use our products – no matter when they were purchased. Technical representatives can provide comprehensive technical data, cite the most recent test results and recommend maintenance procedures, as well as refer you to appropriate industry and regulatory information and standards. Call us with your technical questions.

## Interior Panels

Formacore panels are easily fabricated and are ideal for innovative and artistic ceiling and wall claddings.

The aluminum panel combines excellent design for structural and sound absorption with a sleek and sophisticated appearance. The ceiling panels can be designed for acoustical performance, air flow cooling and stringent fire code requirements. The ability to interface with various ceiling grids make Formacore panels ideal for various applications including: acoustical panel, light diffuser, air diffuser, or shielding to attenuate EMV/RFI radiation.

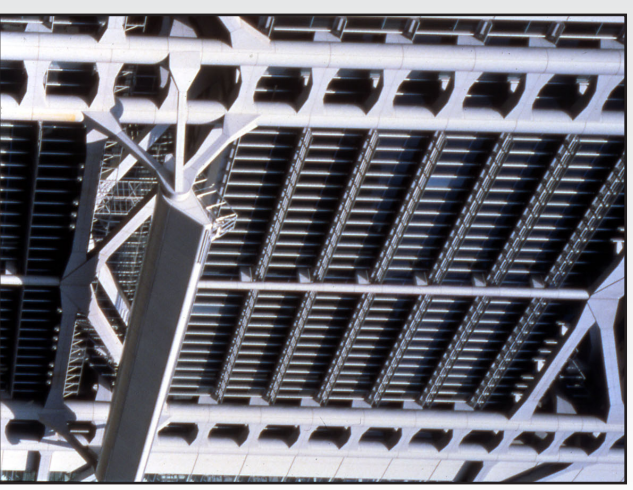
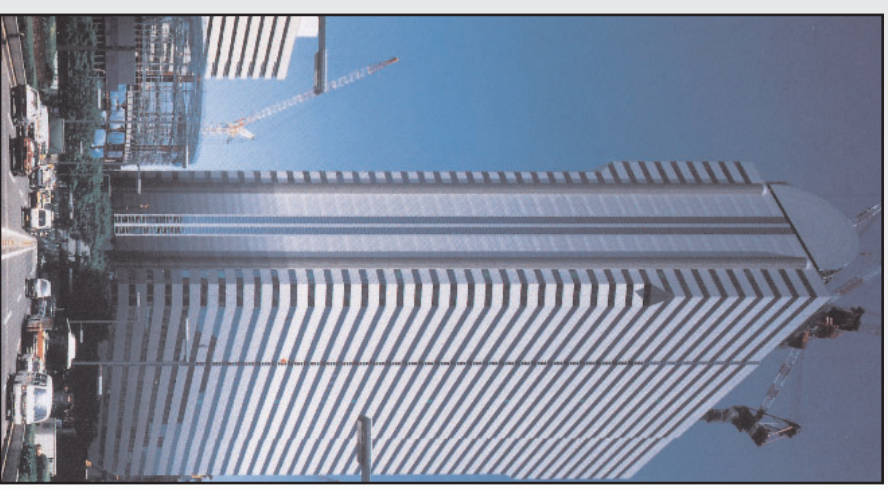
Wall cladding panels offer strength and flexibility for custom formed panels, columns, fascias, soffits, beam wraps and architectural features.

## Acoustical Performance

All of the principal components of the Formacore Acoustical Panels are designed either to absorb sound or to reflect or scatter sound in a special way. Resonant Sound Absorber panels can be designed to absorb selective sounds within a certain band of frequencies. Various patterns of perforated faced panels with foam or fiberglass battings within a honeycomb core are used to achieve acoustic absorption while minimizing panel weight and space.

## Air & Light Diffuser

Aluminum ceiling panels can act as a means of straightening and directing air in free atmosphere and ducts. Perforations on both sides of a ceiling panel provide a flow thru design for both air and lighting.



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