



RENAISSANCE CENTER

Project: *Renaissance Center, Detroit, Michigan*

Architect/Engineer: *John Portman & Associates
Atlanta, Georgia*

Architectural Components Used: *Aluminum extrusions*

Component Manufacturer: *Cupples Products Division,
H. H. Robertson Co., St. Louis, Missouri*

Coating Supplier: *PPG Industries, Inc. (Duramar®)*

Coater: *Cupples Products Division, H. H. Robertson Co.*

Size of Job: *1 million sq. ft.*

Date of Erection: *1976*

Renaissance Center—one of the largest privately financed urban development projects in history—is Detroit's spectacular catalyst for the revival of its downtown area.

Renaissance Center is in every sense—and in every detail—a showcase architectural accomplishment.

The \$337 million project is a colossal and imaginative group of office buildings, shops and a hotel—the world's tallest—rising from the banks of the Detroit River.

Architect John Portman's initial plan included a central cylindrical 73-story reflecting-glass hotel surrounded by four octagonal 39-story office towers set on the corners of a four-level 14-acre podium. Future plans allow for the addition of a half-dozen or more lower buildings on the 33-acre site. The cluster is interconnected by enclosed walkways and a four-story pedestrian mall housing shops, restaurants and other retail outlets.

Color of Concrete

For the exteriors of the four glass and aluminum towers, all the extrusions—some one million square feet of coated surface—were finished in PPG Duranar®, a KYNAR 500®-based coating. The vertical mullions—12-inch deep extrusions—and the horizontal 8-inch deep fin-like extrusions that provide sun shade were coated in a light grey selected to approximate the color of concrete. Horizontal head and sill

member extrusions for glass openings were coated with a bronze color to match the bronze glass.

The exterior of the office towers is not a flat wall design, but a subtly textured facade of projecting extrusions—an effect achieved through construction. Cupples Products Division, H. H. Robertson Company, extruded and fabricated the aluminum, applied the Duranar® finish based on KYNAR 500, and erected and glazed the exterior wall.

Corrosion, Stain Resistance

The polyvinylidene fluoride based finish was selected over anodized aluminum for several reasons:

- To provide the particular color desired, and meet the architect's wish for a "natural look" not attainable in the limited number of anodic finishes.
- To avoid staining of the finish by concrete and fireproofing materials during construction.
- For weatherability, and corrosion and stain resistance. It was felt that the durable organic coating would be more easily cleaned and more tolerant to the pollutants that are inevitable in an urban industrial center like Detroit.

SPECIFICATIONS

Description and Basic Uses

KYNAR 500® is a fluorocarbon resin (polyvinylidene fluoride, PVDF) used by leading coating formulators as the basic vehicle in producing premium finishes for aluminum and galvanized steel. The liquid coating systems based on KYNAR 500 are factory applied and oven fused to the properly prepared substrates. These finishes exhibit excellent properties of appearance and color durability, abrasion resistance and flexibility. These premium finishes are typically applied to such architectural building components as metal siding, louvers, fascias, window walls, metal roofing, etc. Components may be postformed from coil coated stock, or spray coated after fabrication.

Availability

Representative color chips of finishes based on KYNAR 500 are available in the United States from these licensed formulators: DeSoto, Inc. (Fluropon®); E. I. DuPont de Nemours & Co. (Du-Lite®); Glidden (Nubelar®); and PPG Industries, Inc. (Duranar®). For a list of additional licensees in Europe please contact our offices in Rotterdam, Holland or Camberley, England. The names of other licensees worldwide can be obtained from Pennwalt's headquarters office in Philadelphia.

KYNAR 500® is a registered trademark of Pennwalt Corporation



PENNWALT CORPORATION, Plastics Department, Three Parkway, Philadelphia, PA. 19102, 215-587-7519
Wijnhaven 87b, Rotterdam Holland, 010-144077

Doman Road, Camberley, Surrey, GU15 3DN, England, Camberley 63383, Ext. 98

A Proven Record of Success

KYNAR 500-based finishes are specified by architects and engineers for a wide variety of applications in all types of construction.

