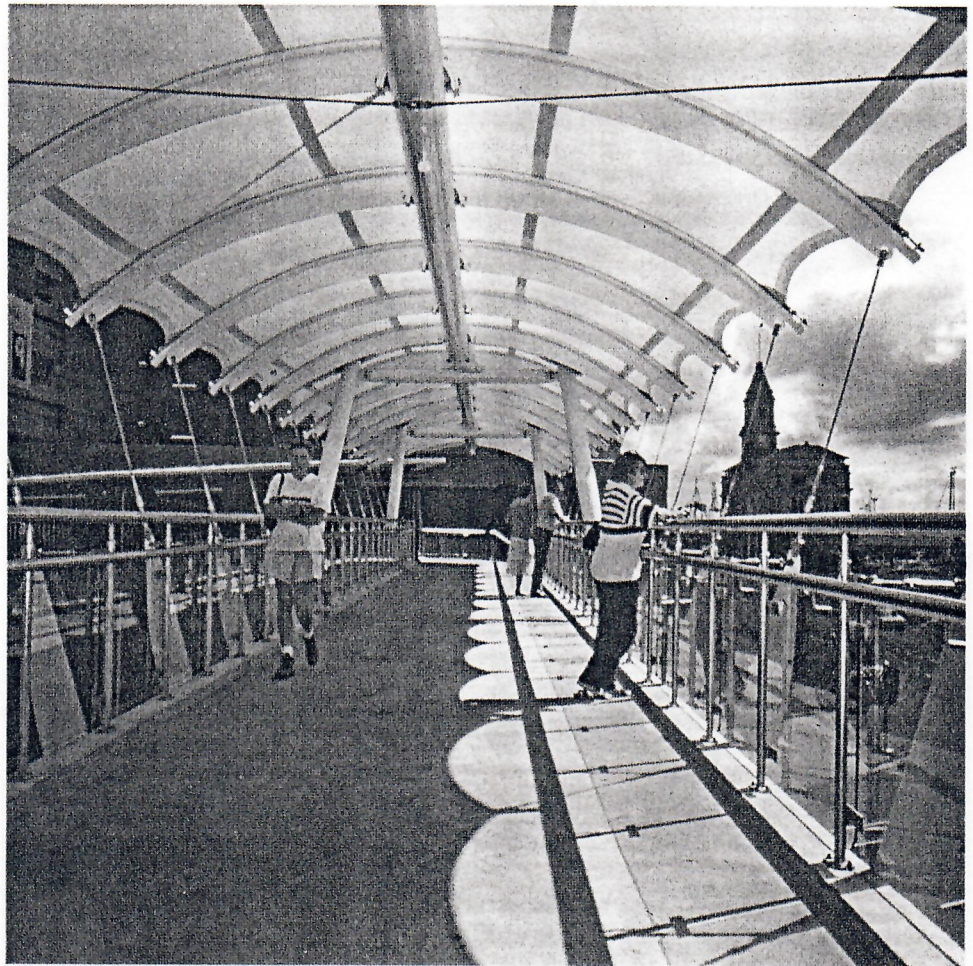


NAUTICAL CONNECTIONS

A pedestrian bridge's use of fabric thematically links the elements of a harborside renovation.

The Hobson Street pedestrian bridge (cover and opposite) connects a parking ramp to the refurbished Quayside Centre, a multi-use complex. The use of fabric, masts, and stainless steel handrails and yacht rigging (right) offers pedestrians the feel of strolling on a yacht deck, rather than simply crossing a busy thoroughfare.



Fabric structures often are described as sails or sail-like in design. But some of them have a greater connection to the sea than others. The Hobson Street pedestrian bridge in Auckland, New Zealand, is one of those.

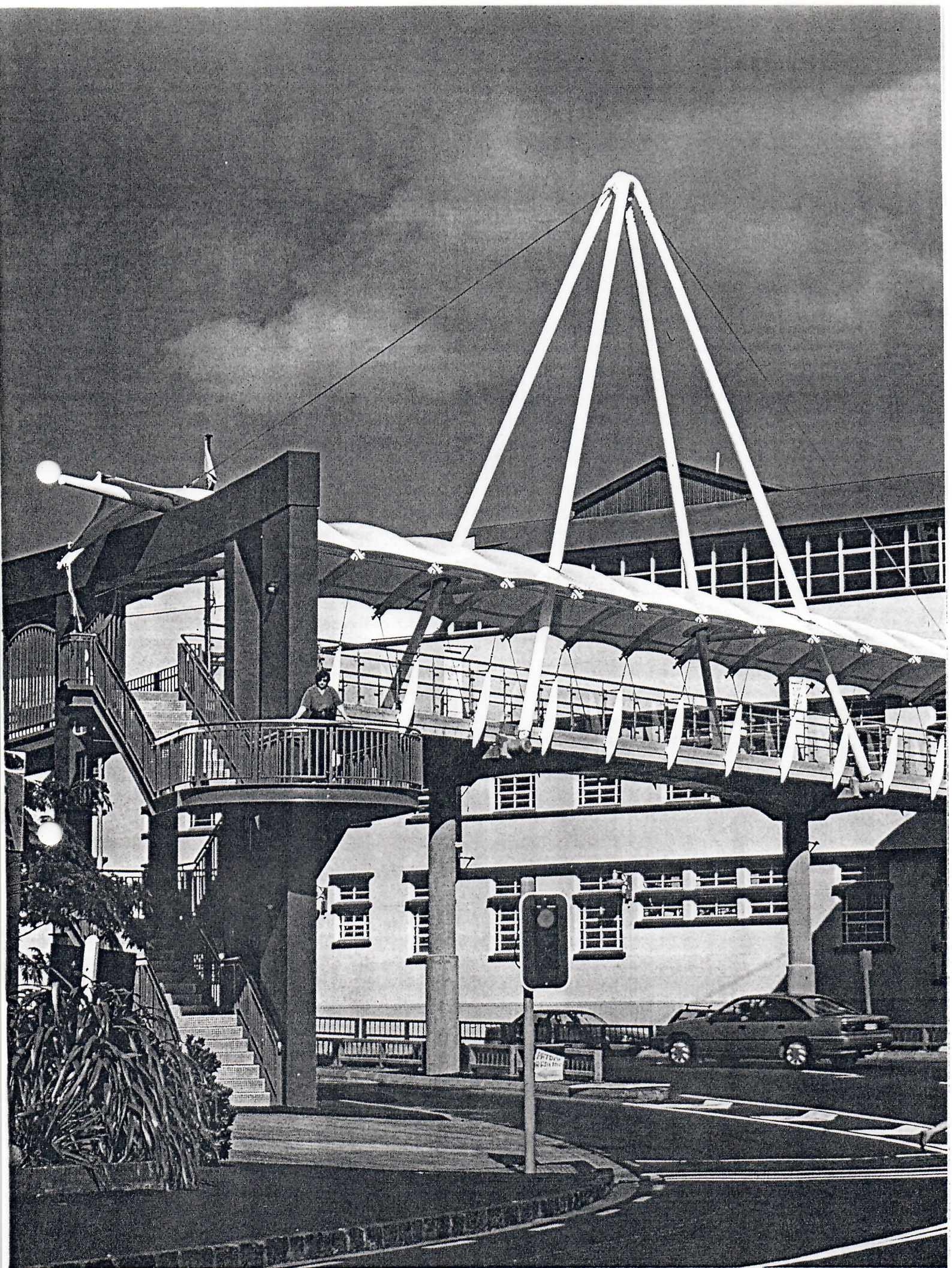
The fabric-covered bridge is part of the Viaduct Quay waterfront redevelopment project, which has included the opening of a maritime museum, renovation of what is now known as Quayside Centre, and the 35-meter bridge, which connects the Centre to a parking ramp on the east side of Lower Hobson Street.

Approval for the Viaduct Quay project came in June 1993. Plans allowed six months for

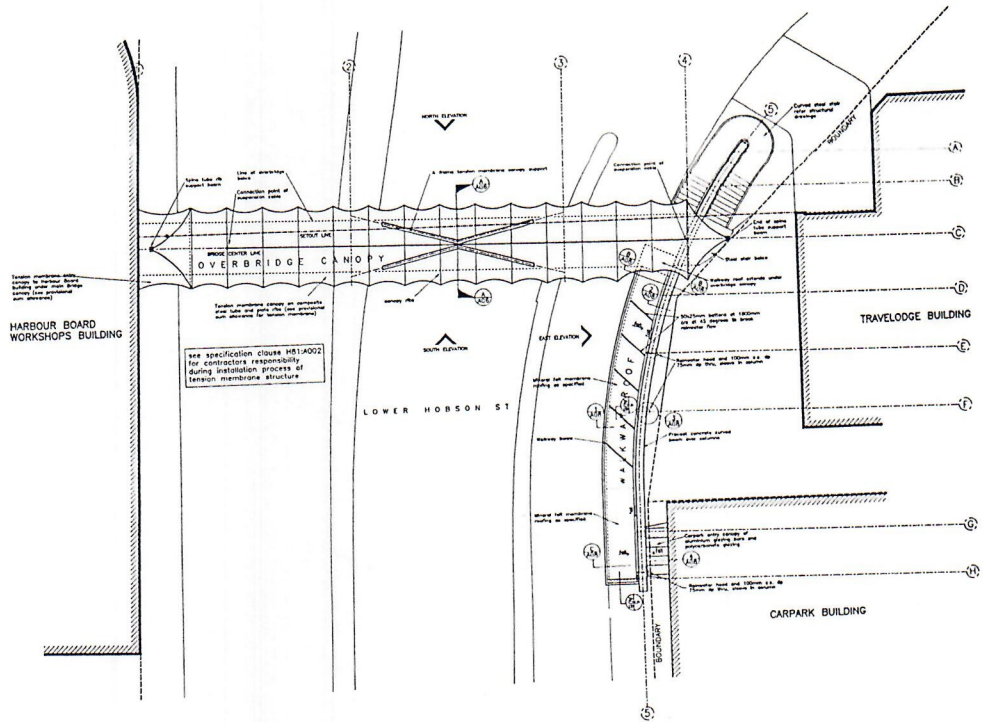
completion of the work to allow an opening before Christmas—and to occur well before the Whitbread Round the World yacht race's January arrival in Auckland as part of the race's course.

The \$6 million Viaduct Quay refurbishment was developed jointly by the Ports of Auckland, Auckland City Council, Turners and Growers, and Fletcher Challenge and is part of the Harbor's Edge redevelopment plan.

Quayside Centre, an Art Deco-style building next to the museum, formerly was the Ports Building. The redesign by Anderson Street Architects transformed the building into a



Plan of the pedestrian bridge.



Project: Hobson Street pedestrian bridge canopy, Auckland, New Zealand. **Client:** Auckland City Council. **Architects:** Neil Summers and Jeff Armstrong, Auckland City Development Consultancy. **Engineering consultant:** Wade Lester Consultants Pty. Ltd., Brisbane, Queensland, Australia. **Fabrication/ installation:** Structurflex Ltd., Auckland. **Contractor:** Woodland Construction Ltd. **Materials:** PVF- and PVC-coated polyester from Seaman Corp., Wooster, Ohio. **Photos/illustrations:** Photos by Joseph Cameron, Auckland. Blueprints courtesy of Neil Summers and Jeff Armstrong.

multi-use complex, which houses shops, an alfresco bar, a brewery, and numerous restaurants and entertainment facilities.

A pedestrian bridge to link the Centre to much-needed parking may have sounded

like a simple idea, but as Neil Summers, project architect with the Auckland City Development Consultancy, explains in Architecture NZ, that was not the case. Several conditions restricted the bridge design. Obviously, it could not present a haz-

AIR-TECH FABRIC STRUCTURES

Engineers & Constructors For:

- ◆ AIR SUPPORTED STRUCTURES
- ◆ TENSION FABRIC STRUCTURES
- ◆ STEEL FRAME STRUCTURES

*We Provide
The Following Services*

- SITE PLANNING
- CONCEPTUAL DESIGN
- STRESS ANALYSIS
- FABRIC & CABLE DESIGN
- STEEL FRAME DESIGN
- FABRICATION & ERECTION
- ANCHOR SYSTEM & FOUNDATION DESIGN
- FIELD SUPERVISION
By Professional Engineers

REGISTERED IN THE STATES OF
N.Y. • N.J. • PA. • S.C. • N.C. • T.X. • IN. • N.H.

1-800-528-7576
Fax: 201-808-8327

103 Rt. 46 West, Fairfield, NJ 07004

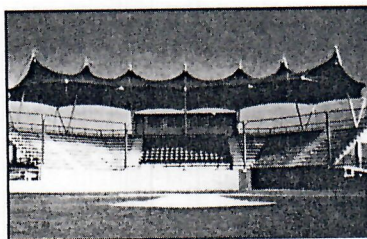
CIRCLE READER SERVICE #10

You Think It. We'll Make It Happen.



For over 20 years Thermo-flex has worked with owners, architects and engineers making their ideas a reality. The best designs are only as good as their fabrication. Our experienced staff takes pride in the superior quality of their work. We offer design assistance and construction supervision for any size project too. From awnings & canopies to tensile structures, we specialize in custom fabrications.

Call us about your project today!



For more information or advice
by phone or in person contact

Thermo-flex

SALES and DESIGN OFFICE

P.O. Box 1184 • Salina KS USA 67402-1184

PHONE (913) 827-7201

FAX (913) 827-9337

CIRCLE READER SERVICE #11

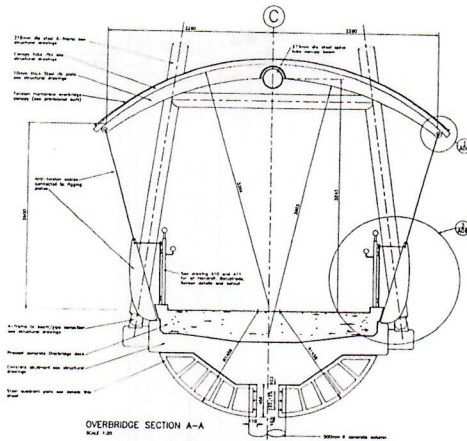
ard to the busy thoroughfare below. Only two narrow traffic islands and a curving footpath were available for anchorages. The site was 2½ meters wide at most. And high-voltage electrical wires transversed the space a half-meter below the bridge location.

In spite of these obstacles, the architects, who were also responsible for the design of the 10-meter area off the waterfront and road frontage upgrades onto Quay Street, designed a bridge that goes beyond practical to referential. The curving blue stairwell suggests a wave breaking off the bow of a gently rolling sloop. The A-frame masts outline the mainsail area, with the fabric canopy below as though reefed in.

A more direct connection literally appears in the connection hardware, which is yacht rigging hardware adapted to a landlocked application.

"The bold use of color, the sharpness of the white canopy and steelwork, and the sparkling stainless steel handrails and yacht rigging combine to make strong reference to Auckland's links with the sea," Summers concludes.

Foundation problems on the site ultimately delayed the bridge's completion—until one



A section of the pedestrian bridge.

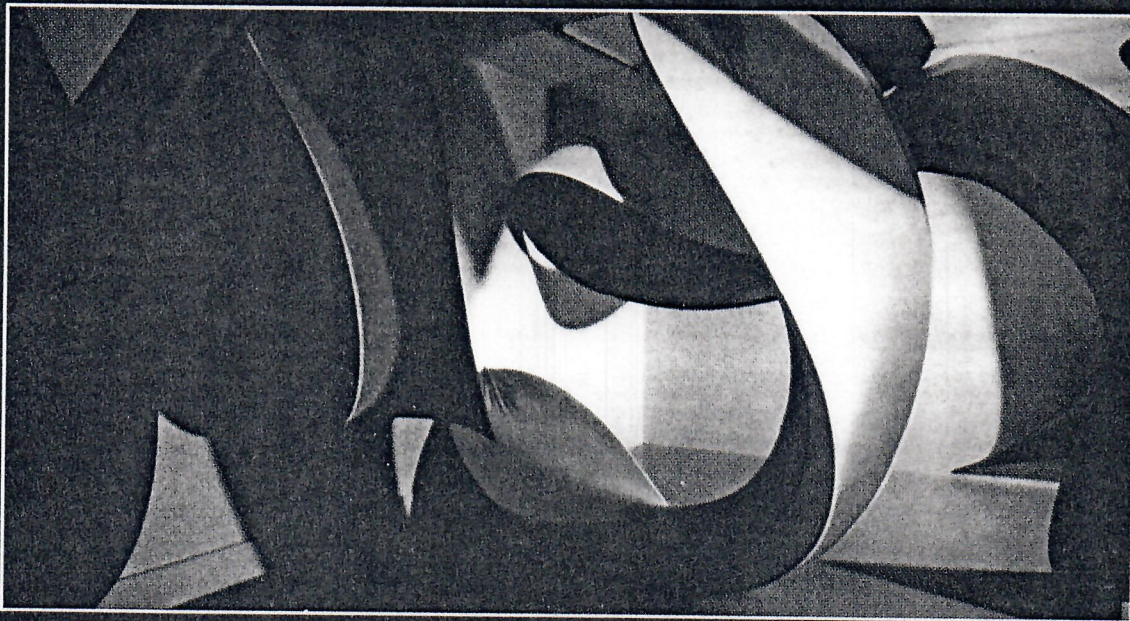
day before the Whitbread yachts' arrival. And as an article in *New Zealand Engineering News* explains, "The unpredictable wind shifts experienced around the site throughout the contract meant that once the decision to begin the erection procedure was made, there would only be a two-hour 'window of opportunity' to complete the operation to avoid having the canopy ending up in the harbor."

The installers managed to avoid that connection with the harbor, and the bridge was erected without problem before the fleet and tens of thousands of visitors arrived. **JMC**

References

Neil Summers, "Nautical Motif," *Architecture NZ*, May/June 1994, pp. 16-17.
 "Auckland's Maritime Summer," *Urban Design, PQ*.
 Vicki Holder, "Quay Moves," *H&B*, April/May 1994, pp. 56-59.
 "Auckland water front gets a facelift," *New Zealand Engineering News*, May 1994, p. 33.

Welcome to the material world.



Transformit tension fabric sculptures are the hot new way to turn any event into a work of art. From large spaces to small spaces, our structures can transform any environment—at a surprisingly affordable price. Whether your needs are inside or out, permanent or temporary, call 212 864-6656 today to discover a whole new world.



CIRCLE READER SERVICE #12