

# buildings

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## FIDUCIARY TRUST

What do you give  
the building that has  
everything? Page 40

# What do you give the building

**A good name:** Fiduciary Trust Building

**Prime location:** Boston's new financial district

**Committed developers:** In love with the project (forever)

**First-class tenants:** As determined and involved as the owners

**Intrepid designers:** A new geometry for a non-site

**Superior technology:** Advanced energy and safety systems



**POISED PROUDLY** atop a four-story pedestal, hexagonal skeleton of Fiduciary Trust Building rises midway between the new First National Bank of Boston and the new Federal Reserve Bank in the center of Boston's "new" financial center. A sharp departure in exterior design and stress dynamics, the 17-story building is a modified and refined form of the distinctive rendering shown to the prime tenants back in 1972.



**UNIQUE GEOMETRY** of the building, a hexagon with no two sides the same, creates a 15,000 sq. ft. floor offering both efficiency and a high ratio of perimeter to interior space. Shape and center-core design facilitate 50% more corner offices and virtually eliminated columns between exterior and core walls. Even non-productive space is less than 10%. Space plan was drawn for Scudder, Stevens & Clark by ISD Incorporated, interior designers engaged early in the development stages before the building envelope was finalized.

**VIEWING SCALE MODEL** are (l. to r.) co-developer Richard L. Friedman, president of Carpenter & Co.; prime tenant, Robert H. Gardiner, president of Fiduciary Trust Company of Boston; co-developer Norman B. Leventhal, president of The Beacon Companies, and Edward L. Emerson, representing Scudder, Stevens & Clark, also a prime tenant. Fiduciary Trust Building tenants are assured of the developers' sustained long-term interest in the property because the Beacon and Carpenter partnership is responsible for ownership and management as well as design and construction.



# that has everything?

Fiduciary Trust is one of the nicest new buildings around. And for good reason. The 17-story, \$16 million building was seven years in planning, encouraged and supported by the Boston Redevelopment Authority, who sees it as "nothing short of an architectural, engineering and development triumph."

The development equation was so powerful and the concept so convincing that two prime tenants held to their Letters of Intent for four years and were as committed as the developers to seeing the building happen.

Biggest thing going for the Fiduciary Trust Building is the development partnership of The Beacon Companies and Carpenter & Company, Inc. Two of Boston's established real estate firms, they are as involved in the design as the architects, who are cognizant of the advantages and like it that way.

## Front and center

Slated for completion early next year, the building marks a sharp departure in exterior design and stress dynamics, while incorporating the latest in energy and safety systems. A sophisticated erector set with a brand new geometry, it creates a distinct presence at the confluence of Federal, High, Summer and Purchase Streets, midway between The First National Bank and the new Federal Reserve Bank. According to local tradition, this puts the Fiduciary Trust Building right in the center of Boston's *new* financial district.

Under the name of "175 Federal Street Associates," the co-developers are responsible for not only the design, construction and marketing of the Fiduciary Trust Building, but its ownership and management as well, as-

suming tenants of sustained long-term interest in the property. Co-prime tenants, occupying 85,000 of the 200,000 sq. ft. of available office space, are two of the city's better-known financial institutions, the Fiduciary Trust Company of Boston and Scudder, Stevens & Clark. General Contractor is Beacon Construction Company, Inc.; leasing agent is Carpenter & Company, Inc.; and financing was arranged through the State Street Bank and Trust Company of Boston and the General Electric Pension Trust of Stamford, Conn. The architecturally innovative building was designed by The Architects Collaborative, Inc. (TAC) and engineered by LeMessurier Associates.

## Capitalizing on continuity

To grasp the building's significance requires a look at its development history.

When Carpenter & Company petitioned the Boston Redevelopment Authority in June, 1968 for consideration as redeveloper of the then-triangular site, the firm was partial owner of one of the buildings on the site. One of Boston's oldest (1898) surviving real estate firms, the Carpenter family had built, owned and managed many of the once-proud office buildings along Washington Street.

At the time, Carpenter was known locally for its brokerage and management work more than for real estate development. But since the late '60s, the firm has diversified into development and consulting and has been involved in over \$60 million worth of Boston-area development, including major shopping centers, hotels and office buildings.

Carpenter is, therefore, a marketing and management-oriented developer, an involvement that conceived a special medium-sized office building for the Summer, High and Federal

Streets site. President Richard Friedman felt the site was ideal for a building designed specifically for firms which did not need typical floors of 20,000 to 30,000 sq. ft.

## Out of site problems

The BRA master plan for the South Station Urban Renewal Area called for a low rise building. "Nobody really thought it would be possible to put up a taller building on that site," recalls BRA Director Joseph Berlandi.

It was a bold move, since street and traffic patterns remained to be defined by BRA and the site is in one of the oldest parts of Boston, with nearly 200 years of utility lines buried in a crisscross network, plus a section of the MBTA subway tunnel. Nor did the BRA 1968 plan indicate the current concept of the federally-financed \$110 million intermodal ground transportation complex scheduled to go up in the near future.

"The plan was sketchy at best; nor did it indicate in any detail the massive changes now taking place in that area. The Federal Reserve Bank, whose decision to relocate sparked expansion south of the financial district, had not yet announced its plans," says Friedman.

Carpenter & Company opted to proceed and engaged Architects Collaborative to come up with a working concept for the site. TAC advised Friedman it had an exceedingly difficult site, although a focal point both geographically and visually, and that no traditional geometry would satisfy the eventual solution. Various designs to fit the small site were produced over a span of two years until the decision was made to use a hexagonal prism resting on a narrow core and supported by perimeter columns.

## THE MEN BEHIND THE BUILDING

The scheme proved sufficiently dramatic to intrigue Robert Gardiner, president of the Fiduciary Trust Company, who had been considering new quarters but hadn't yet found a building he liked. He liked this one so well a Letter of Intent was obtained within a few weeks. At the same time, Scudder, Stevens & Clark signed a Letter of Intent to be the co-prime tenant. Armed with this endorsement and official BRA designation in late 1972, Carpenter teamed up with The Beacon Companies to form a joint development company.

Carpenter found a partner particularly well-suited to construct and develop this unique building. Beacon is one of Boston's leading investment/builders with some of the Northeast's most exciting building projects to its credit: The \$100 million Worcester Center; the 900-ft. long curved Center Plaza Building in Boston's Government Center; the \$20 million One Lincoln Center in Syracuse; and Wellesley Office Park in Wellesley, Mass.

Headed by Norman Leventhal, The Beacon Companies began as a general contractor and over the past three decades expanded into a diversified organization whose policy is to own and manage whatever it builds, assuring a quality product and feasible investment at all stages. Pemberton Management Co., Beacon's property management division, currently operates and maintains over 2.25 million sq. ft. of office/commercial space and more than 4,000 residential units.

A most important aspect of the merger was that Beacon's president, Norman Leventhal, has a deep, personal commitment to design excellence and is not wedded to conventional design, as evidenced by the company's past projects. TAC's senior partner in charge of the project, Norman Fletcher, was supportive of Carpenter's teaming up with Beacon. "As architects, we'd heard of Beacon's fine



**NORMAN LEVENTHAL**  
President of  
The Beacon Companies  
(co-developer)



**ROBERT J. PERRIELLO**  
Vice President of  
The Beacon Companies  
(responsible for  
Beacon's share of the  
development)

Q

How do you account for Beacon's use of very advanced design and technology in a firm with a reputation for cautious planning and steady growth?

A

If a design functions well, is economical to build, efficient to operate, and esthetically pleasing — that is good contemporary design. We usually use standard components, but find new ways of utilizing them. Our reputation for steady growth based on long-term investments is very consistent with using good design. We own and manage the properties we build, so we are very concerned about their longevity. We take into account many diverse factors when we start the process of design evolution — factors such as energy considerations, space requirements, special needs of tenants, site constraints and current technological methods. A design that successfully meets these diverse needs is a worthwhile long-term investment.

Q

What communication channels exist between your planning and construction people and building management and operating personnel?

A

Planning, construction, building management and operation are all handled by the same team. Management personnel are deeply involved at all pertinent stages of planning and design. Neither Beacon nor Carpenter normally sells projects they develop. Both firms are in this as long-term investors. Our management experience helps shape our decisions on all aspects of fixtures and materials for a building. From lavatories to lobby areas, we know what products and services will do the best job. We get a great deal of input from our building management personnel on design that works, on materials that have tenant appeal, plus ease of maintenance, and on performance records of products and equipment.

Q

How does Beacon Company establish realistic production goals and still balance its diverse activities?

A

Due to our extensive experience as investment builders, we generally have no difficulty setting realistic goals or balancing the various phases of development and construction. Beacon began as a general contractor over 30 years ago and has amassed a tremendous reservoir of construction experience and expertise. We believe that we are able to exercise more, not less, control by doing our own construction. We establish budgets and timetables for each phase of a project. We have personnel experienced in all areas of real estate development who are responsible for specific phases of one project and then move to another. We also have personnel assigned to each project with responsibility from initial feasibility through completion.

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reputation. But until then, we had never realized the extent to which they become involved in the design process."

At the request of the co-developers, the structural engineers, LeMessurier Associates, worked with Beacon Construction people to come up with a new structural approach which would reduce columns and produce a more versatile and economical floor plan. The final solution was to eliminate the columns around the outside of the building at the base, use the core of the building as a support and cantilever the main body of the tower from the core itself. A far cleaner exterior resulted and most important, construction could proceed without worrying about running into underground subway tunnels, utility conduits, or a street below the building's overhang.

Solving the structural problems of supporting the irregular hexagon has led to some of the more interesting aspects of the building. The shape was also tested by ISD Incorporated, interior designers working for the major tenants. They found that the distance from core to outside wall was sufficient to produce a highly workable system of offices, sub-offices and corridors (approximately 35'-0"). Two separate stairs at each end of the core are much safer, meeting the stiffer code requirement of one being completely smoke-proof with a separate vestibule. The core also has mechanical rooms for a heat pump retrieval of warm air for recycling at each floor.

In fact, it was the logic of the developers' final plans that enabled them to convince the BRA that such a mid-rise building made sense, not only esthetically but also economically. Observed a BRA official, "We were mindful of the fact that the lack of viable downtown space for the medium-sized firm resulted in many of them moving to the suburbs."

There were very pragmatic



**RICHARD FRIEDMAN**  
President of  
Carpenter & Co., Inc.  
(co-developer)

Q

How involved do Carpenter top officers get in design? Do you select an architect from past projects or one whose ideas are compatible with your goals for a specific building?

A

The Beacon-Carpenter relationship as joint developers on this project is noteworthy in that both of us are deeply concerned about good design. Our input to the architectural firm is extremely significant in terms of final results. The Architects' Collaborative was selected for the Fiduciary Trust Building because of their proven capability to work out complicated projects in an esthetically outstanding manner. Neither of us had used TAC previously, but we were very aware of their worldwide reputation and the high quality of their work.

Q

Do you assign a staff member to function as development liaison with the architect?

A

We don't designate one particular specialist to function with the architect's representative on the project. Carpenter is a marketing and management oriented developer and Beacon has remained small enough to insure that top management is at all times intimately involved with whatever the company develops. Instead, both firms have their people in marketing, management, construction and finance involved in frequent input sessions with the architects during the design process.

Q

Now that your tenacious seven-year commitment to this project in this location is vindicated, how would you assess your experience with the Boston Redevelopment Authority?

A

Redevelopment in any central city takes extraordinary time because of its complexities and the local and national approvals process — we knew that before we started. The BRA was very cooperative at all stages of this project. We had our normal points of debate, but they were most supportive and encouraging. The Authority understood what we were trying to do and had confidence that we could do it. Both development firms have had much prior experience with the BRA and a mutual regard had already been established when this project started. We at Carpenter had an unwavering commitment to this project because, to be candid, we simply fell in love with the building and committed ourselves to making it happen. The site was ideal for a medium-sized building designed specifically for firms which don't need typical floors of 20,000 to 30,000 sq. ft. and don't like the idea of becoming 'lost' in one of Boston's giant towers. In our marketing experience, we found that tenants of this type were being forced to adjust to buildings designed for large institutional users. We saw a real need for a strong-identity building with a smaller floor size.

## THE MEN BEHIND THE BUILDING

reasons for the design of the mechanical-electrical systems, just as there were for the structural elements. From the outset of the project — long before OPEC quadrupled prices and back when energy was cheap and plentiful — TAC wanted to design a "pure, prismatic glass building." But by late 1973, after Carpenter and Beacon had formed their joint venture, it became quite clear that erecting an all-glass building would not only be irresponsible but uneconomic. The prime tenants concurred, so TAC modified the exterior design so glass would account for only 36% of the exterior. The double-pane tinted windows start at desk height and rise to more than seven feet above the floor, and appear as continuous vision strips around the tower, sheathed in gray exposed-aggregate precast concrete.

"Utilizing double-pane glass and reducing the percentage of glass in the exterior allowed us to remain within our energy budget," says Norman Leventhal. "The energy issue is so important today that, in addition to our cost budget, we established a rigid energy consumption budget for the building."

The Fiduciary Trust Building is the first to be designed in Boston since the energy squeeze, so it operates on a true energy-saving HVAC system. The developers had strong convictions about proper HVAC design. Beacon's Leventhal points out that "most commercial buildings aren't air conditioned solely for occupant comfort, yet study after study demonstrates that worker productivity and efficiency increase significantly if the working environment is properly heated and air conditioned. With the average office tenant's payroll totalling \$50 to \$100 per sq. ft., even a 2% increase in productivity brings substantial savings."

That's why the developers constantly challenged the engineers, Cosentini Associates of New York, to design a system using existing technology and standard



**JOHN HALL**  
Executive  
Vice President of  
Carpenter & Co., Inc.  
(office marketing and  
management  
specialist)

Q  
What are the pluses and minuses of the current marketing situation you expect to encounter with the remaining leasable space?

A  
We have space you might describe as 'speculative,' but I am quite comfortable with it because we are marketing a technologically superior product with first-class financial service companies as prime tenants. We are also able to offer a location right at the core of Boston's new financial district. The only minus factor I can think of in the current office leasing market is the general economy, and that too is starting to change.

Q  
How was Carpenter able to hold two prime tenants to a Letter of Intent for four years?

A  
For several reasons: First, they were not pressed to vacate their present space; more importantly, the chief executives of Scudder, Stevens & Clark and the Fiduciary Trust Company recognized the building as a unique opportunity not available elsewhere. They are really more than our prime tenants. They were highly and continuously involved in every stage of the design process of this building. They have lived with it almost as long as we have.

### THE MEN IN THE BUILDING THAT HAS EVERYTHING



**ROBERT GARDINER**  
President of the  
Fiduciary Trust  
Company  
(co-prime tenant)

Q  
When did you decide to move from your previous quarters at 10 Post Office Square and why did you opt for the Carpenter proposal?

A  
In 1972, we had reached the conclusion our firm should move. We saw many new buildings and looked at a lot of proposals, none of which seemed right. Quite frankly, I couldn't see us becoming just another listing on some big building directory, and we had in mind a building of smaller scale and size than those being proffered. Thomas Horan, real estate expert and president of Meredith & Grew, was most bullish about the 175 Federal Street site and described it as 'the right building in the right place at the right time,' pointing out that the Federal Reserve had not made its relocation decision lightly.



**EDWARD EMERSON**  
Scudder, Stevens  
& Clark  
(co-prime tenant)

A  
When Scudder, Stevens & Clark moved their offices to 10 Post Office Square some 50 years ago, it was clearly *the* place to be. But with 'The First' moving to 100 Federal Street four years ago and with 'The Fed' slated to move into its new tower late this year, the traditional financial district has shifted south. We signed a Letter of Intent in November, 1972 and will continue to be within shouting distance of Boston's two biggest banking institutions.

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equipment and components that would not only save energy but give occupants year-round comfort and extensive controls.

After studying at least a half-dozen alternative HVAC systems, Beacon and Carpenter decided on the four-pipe fan coil perimeter system coupled with a heat recycling machine. Notes Friedman of the Carpenter firm, "We felt that even though initial capital cost was higher than other systems, we would derive significant annual operating savings as well as provide tenants with a superior HVAC system."

Recycling of energy has become critical because, as the developers point out, cost of electricity in Boston increased two and one-half times during the past three years. In the Fiduciary Trust Building, "free" interior heat is transferred by a double-bundle heat recovery machine which extracts that heat and transfers it to perimeter offices. During Fall, Winter and early Spring, the building's electric boiler will be required, at most, three to four days a year when outside temperature falls to 5°F. or less. Each floor of the building is divided into many zones, each of which can be individually controlled, and the system is designed to permit mechanical equipment on individual floors to be operated independently as the need occurs.

The building may also be Boston's safest in terms of life support systems. Fiduciary Trust is the only major downtown office building whose permit was issued after January 1, 1975, when Boston's new building code went into effect, with its new regulations relating to fire, smoke and earthquake. But the developers have gone beyond the minimum safety requirements. The building is completely sprinklered. Smoke detection, smoke control, electronic alarms and communication systems mark the new structure as a quality product with many extra features.

It's an exciting building, inside and out. □



**RICHARD ELLIS**  
Vice President of  
Beacon Construction  
Co., Inc. (project  
manager for Fiduciary  
Trust Building)



**NORMAN FLETCHER**  
Senior partner of  
The Architects  
Collaborative, Inc.

Q

How does Beacon manage to obtain uniformly excellent results and still keep costs in line?

A

We conduct extensive testing of all components used in any building. We make exterior mock-ups, both for esthetic reasons and for technological testing. We also keep very detailed records of both testing information and actual performance records of materials used on jobs over the years — all of which influences our selection of materials. In many cases, we not only test, we watch the manufacturing, fabricating, and composite assemblies of parts. We are very concerned about materials and how they fit together into a composite whole. Much time is also spent on quality control. We often use outside testing consultants for specific materials. On this building, the uniformity and texture of the precast is due to the proper aggregate — and a great deal of time was spent on getting just the right mixture. The steel on this job was subject to intense scrutiny at all testing stages, from the initial placing of the order through the final topping out of the last beam.

Q

What planning problems and site constraints did you encounter, and how were they resolved in conjunction with the co-developers?

A

When Dick Friedman got a glint in his eye about putting a building at the corner of Federal, High and Summer Streets, TAC was challenged but confused about the actual site. Essentially, it was a non-site with very little actual land to build on and one that had to be imagined on paper from the projected Urban Renewal plans. It was apparent that no traditional geometry would satisfy the eventual solution. Dick Friedman sought the support of The Beacon Companies to push the project and help with the development. As architects, we had heard of Beacon's fine reputation, but did not realize that they were deeply interested in the design and would play a continuing role in the decision-making process of the actual architectural design of the building. Norman Leventhal himself has insisted on a continuous and thorough examination of every important aspect of the building. Originally, the building was to be supported by columns around the perimeter, but as preliminary planning progressed, it became apparent these columns would interfere with numerous surrounding underground utility lines and transmit some of the building's weight onto the subsurface MBTA utility and subway tunnels flanking the site. Because of these constraints and because the developers were not totally satisfied with the asymmetry and esthetics of the proposed columns, the decision was made to dramatically alter the building by utilizing cantilevered trusses. We considered numerous alternate solutions, but eliminating perimeter columns and cantilevering the main body of the tower from the core enabled us to proceed with construction quickly with very few complications.

The Fiduciary Trust Building is a joint venture development  
of The Beacon Companies and Carpenter & Company, Inc.