



THE CATHEDRAL OF ST. JOSEPH  
HARTFORD, CONNECTICUT

AN INFORMATION PROSPECTUS FOR  
PRESS, RADIO, TELEVISION

His Excellency, Most Reverend Henry J. O'Brien  
Archbishop of Hartford

Right Reverend Monsignor John S. Kennedy  
Rector, The Cathedral of St. Joseph

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Architects

Eggers and Higgins  
100 East 42nd Street  
New York 17, New York

General Contractor

George A. Fuller Co., Inc.  
597 Madison Avenue  
New York 22, New York

Structural Engineers

Praeger-Kavanagh  
126 East 38th Street  
New York 16, New York

Mechanical Engineers

Syska & Hennessy, Inc.  
144 East 39th Street  
New York 16, New York

Lighting Consultant

Joseph T. Manucia & Associates  
26 Court Street  
Brooklyn, New York

Acoustic Consultant

Michael Kodaras  
Long Island City  
New York

THE CATHEDRAL OF ST. JOSEPH

Table of Dimensions

Exterior

Farmington Avenue Sidewalk:	85'-5" above sea level
Extreme Length:	285 feet (excluding steps)
Extreme Width:	157 feet
Extreme Height:	Sidewalk to top of Cross 281 feet
Central Facade:	50 feet wide, 131 feet high
Total Facade:	96 feet wide, 127 feet high
Tower:	50 feet wide, 256 feet high
Cross:	25 feet high

Interior

Narthex:	42 feet long, 21 feet wide, 16 feet high
Nave:	73 feet wide, 153 feet long
Nave Ceiling:	High point 108 feet, low point 97 feet
Sanctuary:	73 feet wide, 34 feet long
Ambulatories:	8 feet wide, 16 feet high
Ambulatory Wall to Opposite Wall:	88 feet
Blessed Sacrament Chapel:	26 feet wide, 85 feet long, 26 feet high
Chapel of Our Lady:	26 feet wide, 68 feet long, 26 feet high
Narthex Screen to Reredos:	231 feet
Choir Balcony:	46 feet long, 25 feet wide

Seating Capacity

Cathedral Nave	1,452 persons
Blessed Sacrament Chapel	170 persons
Madonna Chapel	<u>128 persons</u>
TOTAL	1,750 persons

## INTRODUCTION

The original St. Joseph Cathedral, located on Farmington Avenue, Hartford, Connecticut, was destroyed by fire on December 31, 1956. Only the old walls and towers remained and it was felt by many at the time that perhaps the beloved Cathedral might be restored.

His Excellency Most Reverend Henry J. O'Brien, Archbishop of Hartford, upon commissioning the architects for the project early in 1957, requested that a thorough examination be made of the structure to determine if it was as sound as it appeared. This was undertaken by a firm of structural engineers engaged by the architects who measured and photographed the entire structure from foundation to the tops of the towers.

On the basis of a very careful and complete report made in June 1957, Archbishop O'Brien reluctantly decided to raze the ramparts of the old cathedral and to call for the design of a new Cathedral.

## THE CATHEDRAL DESIGN

The architects for St. Joseph Cathedral, Eggers & Higgins of New York City, were commissioned by Archbishop O'Brien with but one instruction, namely that the Cathedral should be "contemporary with the times in which it is to be built". St. Joseph Cathedral as it stands today is a decidedly contemporary building which is completely air-conditioned and with no detail copied from any historic style. A slight relation to the past exists with the tremendous use of glass that recalls the

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glass areas of Sainte Chapelle in Paris and the great piers that support St. Joseph Cathedral may recall the buttresses of the Gothic period.

In plan the new Cathedral is the same width as the old. One great modification in plan was the elimination of columns in the nave so that almost every seat has a clear view of the altar and the sanctuary. The piers that support the building are outside the seating area and are pierced to form an ambulatory side aisle.

The only combustible materials in St. Joseph Cathedral are the pews and sanctuary stalls. The frame of the building is reinforced concrete. This includes the great piers and roof frames, the foundations, the floor, the choir balcony, the organ shelf and the great soaring tower. On the exterior, this frame is sheathed with Alabama limestone, rising from a base of Swenson Gray granite. This same granite is used for all the steps to the Cathedral from Farmington Avenue, both to the upper and lower churches. The extremely large glass windows as seen from the outside present a lace-like pattern and the cement which holds the glass in place is colored to match as nearly as possible, the Alabama limestone.

## THE WORKS OF ART

### A. The Cross

The cross atop of the spire of the Cathedral is 27 feet tall. Its tip is 281 feet above the sidewalk. Fabricated on a steel framework that extends down into the spire 13 feet it is welded to the framework of the Cathedral. The cross is faced with stainless steel. Bands of gold leafed metal accent and highlight the somewhat

tapered form. The cross was lifted into position by means of a 90 ton crane with a 290 foot boom, the largest crane available.

B. The Bronze Doors:

On the south front, and facing Farmington Avenue, the Cathedral's three main doors are cast bronze, in low relief, and weigh a total of 5-1/2 tons. They represent various aspects of the Universal Church of which St. Joseph, to whom the Cathedral is dedicated, is a patron. The Church Militant (left-hand door), the Church Purifying (right-hand door), and the Church Triumphant (central doors). The upper panel of the central pair of doors depicts the adoration of the Lamb. The bands at the sides of the central door bear symbols related to St. Joseph, the palm, the cedar of Lebanon, the lilies, the burning lamp, besides several angels encircling. On one side an angel with the monogram of Christ (symbol of Resurrection), and on the other side a peacock (symbol of Immortality). The doors were designed and executed by Enzo Assenza in the studios of the International Institute of Liturgical Art, Rome, Italy.

C. The Relief Panels:

The high-relief frieze over the main entrance doors depicts St. Joseph patron of the Universal Church. This work is 46 feet wide and 22 feet high and is the work of the sculptor Tommaso Peccini. It is carved in Italian travertine and the central figure of St. Joseph, with his arms outstretched to the peoples and civilizations of the World, is 23 feet tall. The sculptured work, in its entirety weighs 60 tons and is supported on a special structure that was designed into the building.

D. Interior:

The Narthex Screen which separates the narthex from the nave of the Cathedral is 16 feet high and 40 feet wide. It is etched glass and represents The Kingdom of God. It was designed and executed by Giovanni Hajnal.

E. The Glass Windows:

The two side walls (east and west) of the Cathedral nave are 187 feet long, and feature twenty-six stained glass windows, thirteen on each side. Each huge window measures 67 feet high and 13-1/2 feet in width. There is also a similarly scaled triple window over the choir that measures 28 x 61 feet, and ten smaller windows along the ambulatory aisles, each of which measures 3 x 13 feet. The 3/4" thick glass chips that give pattern and color to the windows are set in reinforced concrete. In considering the type of glass to be used much study and research was undertaken by the Architects. Major studios in the United States and Europe submitted designs as well as models for the entire ensemble of windows. Jean Barillet of Paris was awarded the contract and had to rent a special studio to execute the unprecedented commission.

Pierre Millous of Chartres was awarded the commission to execute the windows in the side chapels.

Giovanni Hajnal executed the windows in the lower church.

The twenty-six large windows on either side of the nave are arranged in thematic groupings, three windows to a group. On the right-hand (east) wall the theme of the first three windows is the Coming of Christ. The theme of the second

group of three windows: Christ in (or among) the Sinners. The third group: Christ as the Saviour of Mankind. The fourth: The Resurrection. The last (No. 13) window deals with the sacraments: Extreme Unction, Marriage, Penance. Each sacrament is symbolized rather than literally depicted.

The 15th, 16th, 17th windows (directly opposite the three Resurrection windows) depict the Sacrifice of The Cross. The next three (18th, 19th, 20th) deal with the Saviour and Nourishment (the Last Supper), numbers 21, 22 and 23, The Saviour and the Fortunes and Misfortunes of Life, and the last three (24, 25 and 26), The Saviour at Work. The central window over the choir and behind the organ shelf, depicts Christ the King.

The five windows on the west ambulatory aisle depict the Old Testament prophets: Daniel, Isaias, Elias, David, Moses. The five windows on the east ambulatory wall depicts Joseph, Melchisedech, Abraham, Noah and Adam. All of these windows were completed in the Paris studio of Barillet, brought to Hartford and in a shop adjacent to the Cathedral — several craftsmen in Barillet's employ, microscopically examined the window sections for possible fracture, made the necessary repairs and then built them in the Cathedral wall. The windows are fixed, no sections opening, and are completely waterproofed. The Cathedral is air-conditioned (see Air Curtain).

The windows in the side chapels, designed by Millous, were also fabricated in France and installed on the site. The nine windows in the Blessed Sacrament Chapel (over the confessionals) deal with parables and miracles related to the life of Christ. The nine windows in the Madonna (west) Chapel depict the principal episodes in the life of the Virgin Mary, from the Immaculate Conception through the Assumption, Coronation, and finally the 'Mediation'.

#### The Large Glass Windows (Jean Barillet, Paris, France)

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|--------|--|
| No. 1  | Right (east) side, nearest Narthex<br>The Star of Bethlehem<br>The Magi<br>The Shepherds           |
| No. 2  | Presentation in the Temple with Simeon and<br>the Angel  |
| No. 3  | Jesus in the Temple amongst the Doctors  |
| No. 4  | The Sinful Woman and her perfume vase<br>St. John the Baptist — John and Andrew                    |
| No. 5  | The Dove (symbol of baptism)<br>The Saviour  |
| No. 6  | Jesus cures the Paralytic<br>The Adulteress  |
| No. 7  | The Apostles listen to the word of Jesus   |
| No. 8  | Christ teaching on the mountain  |
| No. 9  | Confession of Peter and dation of keys<br>Christ teaching the boys and girls from Peter's<br>boat  |
| No. 10 | Peter and John<br>St. Magdalene before the Tomb<br>(on curving wall)                               |
| No. 11 | Christ in glory with the Resurrection's flag   |
| No. 12 | The Apostles in the Upper Room   |
| No. 13 | Confirmation: Seven tongues of fire<br>Baptism: Shell<br>Symbols of order: Chalice, Bishop's Mitre |

- (on curving wall, west side)
- No. 14 Extreme Unction: Lighted candle and oil stock  
The Marriage: Two crossed hands with a stole  
Symbol of Penance: Keys
- No. 15 The Moon  
St. John at the foot of Cross; behind him a  
soldier holding a reed
- No. 16 Jesus on the Cross and the Instruments of the  
Passion, Adam's Cranium
- No. 17 The Sun  
The Blessed Virgin at the foot of Cross, a soldier  
holding the lance
- No. 18 The Last Supper
- No. 19
- No. 20
- No. 21 Jesus cures Peter's mother-in-law  
Raising of Lazarus
- No. 22 The Christ
- No. 23 Wedding Feast at Cana
- No. 24 Wine Press  
The Woman who looks for her money in the house
- No. 25 St. John and the Christ in the carpenter's shop
- No. 26 The Miraculous Draft

Side Chapel Windows (Pierre Millous, Chartres, France)

The Sacred Heart Chapel (east side)

Good Shepherd (beginning at north end)  
Jesus Weeps over Jerusalem  
The Importunate Friend  
The Woman Healed  
The Good Samaritan  
Jesus in the Midst of Children  
The Prodigal Son  
Loaves and Fishes  
Lilies of the Field

### The Madonna Chapel (west side)

The Immaculate Conception (beginning at south end)  
The Betrothal of Mary and Joseph  
The Annunciation  
The Visitation  
The Flight into Egypt  
Pentecost  
Assumption  
Coronation  
Mediation

### F. The High Altar:

The focal point of the Cathedral interior is the High Altar which is 204 feet from the Narthex Screen doors. The altar is made of a beautiful, slightly gray veined white Italian marble simply called Bianco. The predella and steps are of Botticino (pale buff) marble. The mensa (altar) top is one solid block, twelve feet long and weighing approximately three tons. The mensa top is 40 inches above the predella floor. The Tabernacle was designed by Eggers and Higgins, and executed by the Summit Studio.

### G. The Baldachin:

The Baldachin over the Main Altar is 42 feet tall, and is made of cast and sheet aluminum. The unusual tripod form is symbolic of the Holy Trinity and the crown surmounting the Baldachin was designed by Eggers and Higgins and executed by Rambusch Studios.

### H. The Reredos:

The great apse ceramic represents the "Christ in Glory", inspired by the Apocalypse. The artist, Assenza, has interpreted the message of the seer as one of

victory and joy. The final triumph of good over evil, of eternity over time, of Christ over Satan. This modern rendering of the apocalyptic theme has been boldly abstracted into a composition with a 29 foot figure of Our Lord surrounded by angels with trumpets and symbols of the four gospels, religious figures, clouds and rays of light emitting the traditional four horsemen, the seven-headed dragon, the harlot of Babylon. The 40 x 80 foot ceramic is composed of 1,152 individual sections which were moulded and cast in Italy and assembled on the site. It is the largest ceramic mural in the World. It has an area of 3,340 square feet, is 40 feet wide and 82 feet in height, and designed on a curve the average depth of the ceramic sections is 10". It weighs approximately 18 tons. It has taken one year to assemble (arrived April 29th, 1961 from Italy).

#### I. The Ambulatory Chapels:

Each of the six ambulatory chapels is dedicated to a saint, whose image is designed in glass mosaic on the rear wall behind the altar. The altars are named for St. Theresa of Liseux, St. Francis of Assisi, St. Bridget of Ireland, St. Bernard, St. Ann, and St. Patrick. All of the altars are of different marbles but the steps to the chapel level and the floor borders are all French Rouge Antique.

The mosaics in six ambulatory chapels were executed by the painters Virgilio Guzzi and Marcello Mazzoli.

#### J. Stations of the Cross:

The Stations of the Cross were conceived and designed as an integral part of the fabric of the building. The 14 slabs of limestone were shipped to Italy where

they were carved by Giovanni Hajnal and shipped back and installed with the remainder of the limestone on the face of the piers that separate the large windows. The figures are sharply carved in a relatively abstract style.

#### K. The Communion Rail:

The Communion Rail in front of the Main Altar is 75 feet long. The two railings before the side altars are 25 feet long and the 22 sculptured bronze panels are the work of Antonio Biggi. The horizontal top and the supporting columns of the railing are of Perlato Italia marble.

#### L. The Pulpit:

On the right (Epistle) side of the nave, where the communion rail terminates at one of the piers, the octagonally shaped marble pulpit is decorated with a mosaic of St. Paul. The mosaic was executed by the artist Marcello Mazzoli.

#### M. The Cathedral Floor:

From the Sanctuary to the Narthex the floor of the Cathedral is terrazzo. The aisles are differentiated from the pew areas by the use of Venetian terrazzo in which large marble chips are used in place of the usual small chips.

The Sanctuary floor is paved with French Rouge Antique marble with steps and dividing strips of Bois Jourdan marble. The latter marble is used for the ambulatory floor, and the floors of Sanctuaries of the side chapels pick up the design and color used in the main Sanctuary.

#### N. The Cathedral Ceiling:

The ceiling of the Cathedral is designed as a series of shallow six-sided coffers made of perforated aluminum sheets over which, for acoustical reasons, has been installed a 4" blanket of fibre glass. In the center of each coffer there is a star made of satin finished aluminum and the main downlights that light the Cathedral are placed in the intersection of the arms of the star. At the low point along the outside walls the ceiling is 97 feet above the nave floor and the high point at the center is 108 feet.

#### O. The Organ:

Carefully related to the scale of the Cathedral interior as well as to the 'Christ the King' window forming a brilliant background for it, the organ is located in the traditional 'loft' above the narthex. The larger portion of the instrument is arranged on a gallery above the keyboard section. At either side of the gallery are the Swell organ, Choir organ and Solo organ, all of which are under expression at the control of the organist. The organist has at his command a tremendous palette of tonal color, which varies in power from an almost inaudible whisper to mighty full organ. More than 8,000 pipes are contained in the main organ and the small chapel organ. Concealed behind grilles in the sanctuary are two very soft ranks of pipes controlled from either console, which enable the organist to provide pitches to the clergy during the many musical elements of the liturgy.

The several divisions (Solo, Swell, Great, Choir, Positive and Pedal) each complete in itself, may be played individually or in any combination. These

divisions are controlled from a main console of four keyboards of 61 notes each and a pedalboard of 32 notes.

The longest visible pipe is 37 feet and 1-1/2 feet in diameter. The shortest pipe is 1 foot. There are hundreds of smaller pipes within the organ running down to the size of a lead pencil.

The choir gallery has been laid out to seat 130 persons.

The organ is the largest in the Connecticut area, according to its makers, Austin Organs, Inc. of Hartford.

#### The Architects

The firm of Eggers and Higgins, Architects, New York City is nationally known for the design of many buildings of ecclesiastical nature.

The firm was associated with John Russell Pope on the design and completion of the National Gallery of Art, Washington, D.C., and has successfully executed over 1,300 projects since 1936, ranging from modest single structures to large complexes containing many buildings of a variety of types. Among their well-known designs are Canada House, New York City, Mutual Benefit Life, Newark, N.J., many buildings on the Indiana University, Bloomington, Ind., campus, many schools, industrial buildings, laboratories, housing projects and hospitals all over the country.

Working under Mr. Theodore J. Young, FAIA, partner in Charge of Design, the Chief Designer of the St. Joseph Cathedral is Apollinaire Osadca, who was assisted in the design of many interior furnishings by Rudolph Sattler.

The Partner in Charge of the overall project, responsible for the liaison between Owner and Architect and coordination of design and construction, was Richard M. Pott, AIA, assisted by Robert L. Doutney, James White, James P. Lynch and a large part of the Eggers and Higgins staff of architects, draftsmen and consulting engineers.

#### The Engineers

The structural design was under the personal direction of Emil Praeger of the well-known New York firm of Praeger-Kavanagh, with Gerald Iffland and Stephen Eddy responsible for the office work and field work respectively.

The mechanical and electrical engineering was done by Syska & Hennessy, with John F. Hennessy and John F. Hennessy, Jr. directly responsible for the work of Mark Puleo and his staff of engineers.

#### The General Contractor

The tremendous job of constructing St. Joseph Cathedral was accomplished by the nationally known firm of George A. Fuller Company, Inc. Neil Horgan was the Vice President in charge, John J. King, general project manager (Harford Area), and Robert A. Jackson, Construction Superintendent.

#### Jean Barillet

Jean Barillet is one of the most famous stained glass artists in the world. Following World War II he was chosen by the French Commission of Historical

Monuments to restore damaged stained glass windows in the Saint Chapelle and the Cathedral of Notre Dame of Paris and the Cathedral of Beauvais. In cooperation with famous painters such as Leger, Bazaine and Manessier he has executed stained glass windows which have become a landmark in modern sacred art; the most well known are the windows of the Church of the Sacred Heart in Audincourt, the first major work using the chipped glass set in concrete technique.

The glass used in this type of installation is handmade potted glass  $\frac{3}{4}$  to 1 inch thick instead of the traditional antique glass which is about  $\frac{1}{8}$  inch thick. The design is worked out in a full scale cartoon, the heavy blacks representing the areas in which the concrete will appear. The colored glass is selected in accordance with the overall design and the thousands of individual pieces 'chipped' to create this tremendous glass mosaic. The glass covers an area of 22,837 square feet and is the largest stained glass commission ever awarded.

Each window (measuring over 13 feet wide and 65 feet tall) is divided into small panels or sections which were cast in Paris and shipped to Hartford. This type of glass, with its self-supporting frame is rainproof and requires no outside layer of protective glass.

#### The Institute of Liturgical Art

While located in Rome, Italy, the Institute of Liturgical Art is really international in character, its 'pool' of artists and craftsmen coming from all over the world. Specialists in ecclesiastical art, the Institute artists design and actually

execute everything from candlesticks to the gigantic Reredos that forms the curved wall behind the Main Altar. Entirely a coordinated work the many commissions entrusted to the Institute comprise an artistic 'whole'. The artists and sculptors represented include: Enzo Assenza, Tommaso Peccini, Giovanni Hajnal, Alcide Tico, Antonio Biggi, Oddo Aliventi, Virgilio Guzzi, Marcello Mazzoli, Giovanni Meloni, Eugenio de Courten, Giuseppe Persichetti, and the vestments for pontificals, solemn and Bishop's Masses, were executed by G. Gusi, Abbot.

### Rambusch

The Rambusch Studios, New York City, consists of a large staff of designers, craftsmen and lighting engineers. They have long been identified with ecclesiastical work and are well known for their design and fabrication of stained glass windows, sculptured figures and furnishings. Rambusch, in addition to developing and executing many of the Eggers and Higgins designs (such as the Baldachin), developed many of their own designs. The magnificent modern monstrance which is composed of almost 300 gold-plated metal sections, the painted Crucifix in the Bishop's Sacristy, the Sanctuary Bell and many other items. Robert Rambusch and Gleb Derujinsky created many of the individual works for Rambusch.

### The Lower Church

The lower church occupies the same general area as does the cathedral nave above. A series of shrines range along the east and west walls the length of the nave. The baptistry is located under the side chapel on the floor above. The shrines are in niches between the piers and on the wall behind the statue of each

saint enshrined is a stained glass window in which symbols and episodes associated with the saint are depicted. These windows, the windows in the baptistry and in the west chapel are the work of Giovanni Hajnal. The statues were carved by Alcide Tico. In the baptistry the baptismal screen glass was decorated by Giovanni Hajnal, and the baptismal font by Tommaso Peccini. The main altar and the side altars were designed by Eggers and Higgins.

### The Carillon

There are 12 cast bronze bells in the Cathedral belfry. The lightest bell, which is 1 ft. 9-3/4 inches in diameter weighs only 225 lbs., whereas the heaviest bell weighs 3,850 lbs. and is 4 ft. 6-3/4 inches in diameter. The twelve bells together weigh over 19,000 lbs. and were designed by the I. T. Verdin Company, Cincinnati, Ohio. The bells were cast in Holland.

### Lighting

More than 230 huge downlights in the Cathedral ceiling accommodate 750 and 1000 watt incandescent lamps and measure 26 inches across. Designed for a mounting height of from 95 to approximately 110 ft., each fixture has a unique system of three reflectors and two lenses for high degree light control. Light intensity and beam characteristics of each downlight can be adjusted for special lighting effects. These ceiling lights as well as the specially designed lighting in the Sanctuary, the Baldachin, and the lower church were designed by Joseph T. Manucia Associates, Brooklyn, N. Y.

## Air Conditioning

The Cathedral is zoned for individual area temperature control and while extremely complex in design is remarkably simple to operate. A control panel provides manual "Day-Night" or "Warm-Cool" switches so that any zone may be individually adjusted to the desired setting. A main switch is also provided so all zones may be simultaneously reset to day or night operation. The air conditioning system also serves as a supplement to the heating system.

Because of the extreme height and length of the nave interior the engineers designed an "umbrella" of air conditioning that is projected from grilles under the large windows and at a height of approximately 24 feet on both sides of the nave. This cool (or warm depending on the season) air projects in a wide arc across the nave reaching a maximum height in the center at a level of approximately 36 feet. The air then arcs downward toward floor and return air grilles along the pews on the side of the nave, to mechanical rooms where it is cleaned, and recirculated. The upper part of the Cathedral interior is heated (or cooled) only by the air that does not return to the grilles. This 'escape' air is drawn up through ceiling vents and circulated through the lighting system, then exhausted through vents on the roof of the Cathedral.

