



UNIVERSIDADE DA BEIRA INTERIOR  
Engenharia

## **Church of the 21st-century**

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The content of this work is the sole responsibility of the author,  
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# **Abstract**

The research of this dissertation is focused on history of church buildings and examples of modern churches as an introduction for the designing process of the 21st-century church building in southern Poland, Kraków.

I would like to introduce the history of church buildings over the centuries and explain why understanding church history is so relevant while designing a modern church. Church history is a journey that brought us to where we are today. Christianity, unlike any other religion, is deeply rooted in history. In modern church buildings the expressive and symbolic value of architectural elements and forms have been rediscovered. This study is essential in order to understand what a church building is really about.

What is more, try to answer the question, what a church building stands for nowadays. I introduce some examples of modern churches in order to present different approaches of the symbolism and the vision for the designs. Studying the form, functions, materials, symbolism; has determined my vision for approaching the project - the Church of the 21st-century, placed in one of the most incredible Polish cities - Kraków.

## **Key-words**

Architecture, Design, Project, Church, Bible, God, Worship, Symbol, History

# Contents

Introduction	1
Chapter 1: RESEARCH	2
1.1. Understanding Church History .....	2
1.2. From House Church to a Modern Church .....	6
1.3. Modern Churches - Examples .....	13
1.3.1. Jubilee Church in Rome by Richard Meier .....	13
1.3.2. Church of Light in Ibaraki by Tadao Ando .....	15
1.3.3. Tampa Covenant Church by Alfonso Architects .....	17
1.3.4. Audacious Church in Manchester .....	18
1.4. Summary .....	19
Chapter 2: PROJECT	20
2.1. Localization .....	20
2.1.1 Poland in Europe .....	20
2.1.2 Kraków in Poland .....	21
2.2. Program .....	22
2.3. Characteristics of the Project .....	23
2.4. Symbolism .....	24
2.5. Inspirations .....	25
2.6. Idea .....	26
2.6.1 General Idea .....	26
2.6.2 Idea - Sketches .....	27
2.6.3 Idea - Functions .....	27

2.7.	Architectural Project .....	28
2.7.1	The Chosen Land .....	28
2.7.2	Urban Design .....	29
2.7.3	Plan .....	30
2.7.4	Sections .....	34
2.7.5	Elevations .....	35
2.7.6	Details .....	36
2.7.7	Materials .....	38
2.8.	Model .....	39
2.8.1	Hand Sketches .....	39
2.8.2	3d Model .....	40
2.8.3	Exterior .....	41
2.8.4	Interior .....	42
 <b>Conclusion</b>		 44
 <b>Bibliography</b>		 45
 <b>Annex</b>		 49

# List of Photos and Illustrations

<b>Photo 1:</b> Basilica of San Clemente, Rome, Italy	<b>6</b>
<b>Photo 2:</b> Santa Maria Maggiore, Rome, Italy	<b>7</b>
<b>Photo 3:</b> Corpus Christi, Aachen, Germany	<b>9</b>
<b>Photo 4:</b> Liverpool Metropolitan Cathedral, Liverpool, United Kingdom	<b>10</b>
<b>Photo 5:</b> Willow Creek Community Church in Chicago, USA	<b>11</b>
<b>Photo 6:</b> Hillsong Church, Sydney, Australia	<b>12</b>
<b>Photo 7:</b> Jubilee Church, Rome, Italy	<b>13</b>
<b>Photo 8:</b> Jubilee Church, Rome, Italy (Meier's drawings)	<b>14</b>
<b>Photo 9:</b> Church of Light, Ibaraki, Osaka, Japan	<b>15</b>
<b>Photo 10:</b> Tampa Covenant Church, Tampa, Florida, USA	<b>17</b>
<b>Photo 11:</b> Audacious Church (Central Campus), Manchester, United Kingdom	<b>18</b>
<b>Photo 12:</b> Poland in Europe - Localization (Map)	<b>20</b>
<b>Photo 13:</b> Kraków in Poland - Localization (Map)	<b>21</b>
<b>Photo 14:</b> Kraków - View of the Old Town	<b>21</b>
<b>Photo 15:</b> My Inspirations (Stained glass; The Cross; Ring Dome, Milan)	<b>25</b>
<b>Photo 16:</b> General Idea of the Project	<b>26</b>
<b>Photo 17:</b> General Idea of the Project - Sketches	<b>27</b>
<b>Photo 18:</b> General Idea of the Project - Main Functions	<b>27</b>
<b>Photo 19:</b> The Chosen Land	<b>28</b>
<b>Photo 20:</b> The Chosen Land - View from Monte Cassino St. & Jana Buthaka St.	<b>28</b>
<b>Photo 21:</b> The Chosen Land - Urban Analysis	<b>29</b>
<b>Photo 22:</b> The Chosen Land - Urban Design	<b>29</b>
<b>Photo 23:</b> Plan of the Church Building - Main Rooms	<b>30</b>
<b>Photo 24:</b> Plan of the Church Building - Technical Drawing	<b>33</b>

<b>Photo 25:</b> Section A-A	34
<b>Photo 26:</b> Section B-B	34
<b>Photo 27:</b> Section C-C	34
<b>Photo 28:</b> Front Elevation	35
<b>Photo 29:</b> Side Elevation (West)	35
<b>Photo 30:</b> Back Elevation	35
<b>Photo 31:</b> Side Elevation (East)	35
<b>Photo 32:</b> Foundation Isolations	36
<b>Photo 33:</b> Floor Isolations	36
<b>Photo 34:</b> Outside Wall Isolations with Elevation Panels	37
<b>Photo 35:</b> Inside Wall	37
<b>Photo 36:</b> The Church Building - Front View (Hand Sketch)	39
<b>Photo 37:</b> The Church Building - View (Hand Sketch)	39
<b>Photo 38:</b> The Church Building - Monochrome Model (Front and Back View)	40
<b>Photo 39:</b> The Church Building	40
<b>Photo 40:</b> The Church Building - Front/Side View	41
<b>Photo 41:</b> The Church Building - Front View	41
<b>Photo 42:</b> Main Auditorium - View from the Back	42
<b>Photo 43:</b> Main Auditorium - View from the Front	42
<b>Photo 44:</b> Prayer Room - View from the Door	43
<b>Photo 45:</b> Foyer - View from the Main Door	43

# List of Tables and Diagrams

<b>Table 1:</b> Main Phases of Church History - Timeline	<b>3</b>
<b>Table 2:</b> Comparison of the Chosen Church Building Analysis - Summary	<b>19</b>
<b>Table 3:</b> Rooms of the Church Building - Sizes & Floor Materials	<b>31</b>

# Introduction

One prominent French poet, Paul Valery, once said that there are houses '*silent*', '*talking*' and some that '*sing*'. Homes '*silent*' are simple gray buildings, which we do not pay attention to, we just pass them. We cannot therefore call them works of architecture. If, however, going down the street, we turn our attention to an object, it means that it '*speaks*' to us. Sometimes it will be nice in the proportions of solid, interesting overview of the different elements of a building or a detail, which is original and drew our attention. Such a structure can therefore be called a work of architecture. If, however, a building immediately draws our attention to its uncommon beauty, you can stay for hours on the street and stare at it, not sparing words of admiration, it means that the structure '*sing*' - and certainly it is an outstanding work of architecture.<sup>1</sup>

For centuries, church buildings have been '*singing*' to us; delighting with they're astonishing beauty and audacious designs. Through the research and careful study of the subject I want to introduce the 21st century church building that will be in line with the Church nowadays - not boring and uninteresting, but magnificent, alive and bold in its every aspect.

<sup>1</sup> Trzeciak, P. (1967) *1000 Tajemnic Architektury*, Warszawa: Nasza Księgarnia; translated from Polish into English by the author of the work, Katarzyna Szczerbowska

# Chapter 1: RESEARCH

## 1.1 Understanding Church History

Church History may seem irrelevant to 21st century Christianity. However, Christianity, unlike any other religion, is deeply rooted in history. The historical reality of the sacrifice of Jesus Christ, burial and resurrection is the cornerstone of the Christian faith. The Bible is not a fairy tale, but a divinely inspired historical record of God's plan of redemption for a hurting world. To study church history is to see the hand of God at work amongst the struggles, transgression and glory of man's ways.

Church history is vital to our understanding of the institution of the Christian church. Much is to be gleaned from the events between the time of the apostles and the present day.

In 1 Corinthians 10, the apostle Paul exhorts the Corinthian church to learn from the examples of Israel's past, so they don't make the same mistakes.

*'For I do not want you to be ignorant of the fact, that our ancestors were all under the cloud and that they all passed through the sea (...) They all ate the same spiritual food and drank the same spiritual drink; for they drank from the spiritual rock that accompanied them, and that rock was Christ. (...) Now these things occurred as examples to keep us from setting our hearts on evil things as they did. Do not be idolaters, as some of them were (...) We should not test Christ, as some of them did - and were killed by snakes. (...) So, if you think you are standing firm, be careful that you don't fall! (...) And God is faithful; he will not let you be tempted beyond what you can bear. But when you are tempted, he will also provide a way out so that you can endure it.'*<sup>2</sup>

Like the history of ancient Israel, the history of the Christian church is to be remembered and learned from. Nowadays, for instance, many who are skeptical of the Christian faith often associate Christianity with the violence and imperialism of the crusades. But taking a look at church history will show that the crusades happened at a time when the papacy was a political institution corrupted by power and greed. The crusades took advantage of Christianity, but had nothing to do with the underlying gospel of grace. Today, our culture is often confronted with new and bizarre religious philosophies, some of which present themselves under the banner of Christianity. Understanding Christian doctrine in light of church history helps us to separate fiction from the facts.

What is more, church history is exciting and essential in our life; it's full of examples of great men of God fighting for their faith, speaking with conviction for what they believe. It's a journey that brought us to where we are today.

<sup>2</sup> Bible - New International Version (NIV): 1 Corinthians 10:1-13

# Church History Timeline

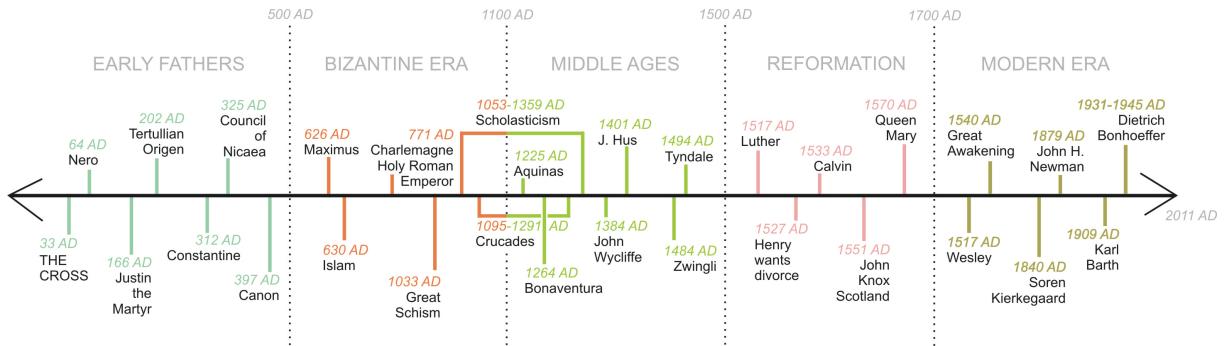


Table 1: Main Phases of Church History - Timeline

## Church History Phases - Summary

### PHASE 1 - Early Fathers

Early Fathers - Fathers of the Church: Justin Martyr, Tertullian, Origen of Alexandria - early and influential theologians, eminent Christian teachers and great bishops. Their scholarly works were used as a precedent for centuries to come.

The culture was structured and organized. It was a very educational time. Greco-Roman culture of spirituality was related heavily to philosophy and apologetics.

The church was starting to get structured and organized; it was establishing doctrine and writing the Canon at Nicaea. Great persecution, being scattered amongst the nation and speaking with conviction brought great growth.

### PHASE 2 - Byzantine Era

The culture: Barbarianism was on the rise across Europe but not at a level to defeat Roman Empire, though its authority was questioned on all sides. Europe was almost united under the rule of Charlemagne.

The church: Following on from the instigation and catalyst of the Constantine Church and State become more and more intertwined. Their close relationship births an era of great prosperity for the Church, but also great conflicts and tribulations. The rise of Islam begins to threaten the West birthing the crusades.

### **PHASE 3 - Middle Ages**

The culture: Barbaric tribes characterize culture in this era. Nomadic warrior people whose borders are constantly shifting. In this era of unsettled politics and monarchy there is little centralized power, as a result education and human advancement are limited, the dark ages. It is fertile soil for reformation.

The church: During the Middle Ages in Europe, the Church continued to hold power, with the popes claiming authority over all levels of life and living as kings. The Church finds itself in the position to greatly increase its influence in this period of Nomadic disorganized society. With the fall of Rome, it has become the most powerful organization in Europe and provides education and care for its people. Corruption and greed in the church leadership was commonplace. Combining these two elements points straight to the cause of reformation.

### **PHASE 4 - Reformation**

The culture: Culture is a lot more structured than previously. Monarchies and governments have been established and more firm borders instituted. The state in its newly organized form is attempting to wrestle back of the power which has now got. There is reform in art, literature, science, thinking, politics and religion.

The church: Reform is the central theme of this period of Church history. Luther posts his 95 theses on the door of the cathedral at Wittenberg; Henry brig about the split between the Catholic and the Anglican churches, and reform sweeps throughout the continent of Europe. Much more widely available Bible make Christianity more accessible than ever before.

#### **Martin Luther**

Martin Luther was a German living in XVI century. He was a priest and professor of theology who initiated the Reformation. He strongly disputed the claim that freedom from God's punishment of sin could be purchased with money.

He confronted indulgence salesman Johann Tetzel with his Ninety-Five Theses in 1517 on the door of the castle church. His refusal to retract all of his writings at the demand of pope and the roman emperor resulted in his excommunication and condemnation as an outlaw by the emperor.

Luther taught that salvation is not earned by good deeds but received only as a free gift of God's grace through faith in Jesus Christ as redeemer from sin. His theology challenged the authority of the pope of the Roman Catholic Church by teaching that the Bible is the only source of divinely revealed knowledge and claimed that all baptized Christians are the holy priesthood.

He poured out his energy in study, thinking, writing and translation the New Testament into German. His translation of the Bible into the language of the people (instead of Latin) made it more accessible, causing a tremendous impact on the church and on German culture. His hymns influenced the development of singing in churches. His teachings changed the world.

## **PHASE 5 - Modern Era**

The culture: Between 1700 and 2011 the culture takes massive leaps and bounds forward. Politics play a massive role in shaping culture; wars and revolutions massively shape thought. Philosophy and science attempt to replace religion and faith. The World Wars shape the World's political landscape; massive advances in technology make the world much smaller.

The church: With the Founding Fathers carrying the Christian faith to America and the Great Awakening, the Church prospers in the early Modern era. As the era develops, it is faced with an increasingly secularized society content to settle with the explanations of science and modern thought over the idea of Faith. Heroes of the faith continue to carry the Word of God against the persecution of the Nazi's and in the East against Communist dictators.

## 1.2 From House Church to Modern Church

A **Church Building** is a building or a structure which main purpose is to facilitate the meeting of the Church. Originally, Jewish Christians met in synagogues and in each other's homes. As Christianity grew and became more accepted by governments, rooms and, eventually, entire buildings were set aside for the explicit purpose of Christian worship.

Traditional church buildings are often in the shape of a cross and frequently have a tower or a dome. Nowadays though, modern church buildings have a variety of architectural styles and layouts; many buildings that were designed for other purposes have now been converted for church use, and, similarly, many original church buildings have been put to other uses.

From the first to the early fourth centuries most Christian communities worshipped in their **private homes**, often secretly. Some Roman churches, such as the *Basilica of San Clemente in Rome*, are built directly over the houses where early Christians worshipped. Other early Roman churches are built on the sites of Christian martyrdom or at the entrance to catacombs where Christians were buried.



Photo 1: Basilica of San Clemente, Rome, Italy

Christianity became a lawful and then the privileged religion of the Roman Empire with the victory of the Roman emperor Constantine in 312 AD. The faith, already spread around the Mediterranean, and strongly expressed itself in architecture. Christian building was made to correspond to civic and imperial forms, and so the **basilica** - a large rectangular meeting hall - became general in east and west, as the model for churches, with a nave and aisles and sometimes galleries and clerestories.

The first very large Christian churches were built in Rome and have their origins in the early 4th century - for example *Santa Maria Maggiore in Rome*.

Across Europe, the process by which church architecture developed and individual churches were designed and built was different in different regions, and sometimes differed from church to church in the same region and within the same historic period.

There were different factors that determined how a church was designed and built. First of all, the nature of the local community and its location within the city, town or village. Secondly, the character of the church was also very important - whether the church was an abbey church, a collegiate church; whether it had the patronage of a bishop or the ongoing patronage of a wealthy family. What is more, whether the church contained relics of a saint or other holy objects that were likely to draw pilgrimage.

Churches that have been built under the patronage of a bishop have generally employed a competent church architect and demonstrate in the design a refinement of style unlike that of the parochial builder.



Photo 2: *Santa Maria Maggiore, Rome, Italy*

Many parochial churches have had the patronage of wealthy local families; it may entail the design and construction of the entire building having been financed and influenced by a particular patron. On the other hand, the evidence of patronage may be apparent only in an accretion of chantry chapels, tombs, memorials, fittings, stained glass and other decorations.

Churches that contain famous relics or objects of veneration and have thus become pilgrimage churches are often very large and have been elevated to the status of basilica. However, many other churches enshrine the bodies or are associated with the lives of particular saints without having attracted continuing pilgrimage.

In the early 16th century Martin Luther and the **Reformation** brought a period of **radical change to church design**. Prior to the Reformation, translations of the Bible into local languages were extremely rare; in the West the authorized version was in Latin, the language of worship, law courts and scholarship.

Comparatively few works of literature were written in the vernacular until the advent of printing in the fifteenth century. Nevertheless, the denial of the right to produce Bibles in local languages was an instrument of control both papal and by princes so that access to the word became a hallmark of Reformation thinking and preaching more prominent. Pulpits had always been a feature of Western churches but they now came to replace the altar as the primary focus. However while the birth of Protestantism led to massive changes in the way that Christianity was practiced - and as a result - the design of churches, Catholic churches retained an emphasis on the symbolic.

According to Duncan Stroik, late in the Reformation period, there was a shift across all denominations to an emphasis on 'full and active participation'. In the Roman Catholic Church this was achieved through an emphasis on 'emotional exuberance', which meant that even those members of the congregation who were unfamiliar with the ceremony could still be deeply moved.

With the onset late 16th century, exquisite marble statues adorned the churches, and gold fittings combined with superb stained glass windows in a celebration of the faith. In contrast, in Protestant churches the altar and tabernacle were often removed, and a communion table and pulpit replaced the altar.

Despite the apparent disparity, both denominations sought to provide for fundamentally the same purpose: to allow the worshippers to feel close to God.

## Modernism

The main idea was that worship was a corporate activity and that the congregation should be in no way excluded from sight or participation to the rest of the church. Simple one-room plans are almost of the essence of modernity in architecture.

More central to the development of the process was Schloss Rothenfels in Germany which was remodeled in 1928 by Rudolf Schwartz. It was a large rectangular space, with solid white walls, deep windows and a stone pavement. It had no decoration. The only furniture consisted of a hundred little black cuboid moveable stools. For worship, an altar was set up and the faithful surrounded it on three sides.

*Corpus Christi in Aachen* was Schwartz's first parish church and adheres to the same principles, very much reminiscent of the Bauhaus movement of art. Externally it is a plan cube; the interior has white walls and colorless windows. In front of the altar were simple benches. Behind the altar was a great white void of a back wall, signifying the region of the invisible Father.



Photo 3: *Corpus Christi, Aachen, Germany*

Similar principles of simplicity and continuity of style throughout can be found in the United States, in particular at the Roman Catholic Abbey church of St. Procopius in Lisle, near Chicago.

A theological principle which resulted in change was the decree *Sacredanctum Concilium* of the Second Vatican Council issued in December 1963. This encouraged 'active participation' by the faithful in the celebration of the liturgy by the people, and required that new churches should be built with this in mind.

Subsequently, rubrics and instructions encouraged the use of a freestanding altar allowing the priest to face the people. The effect of these changes can be seen in such churches as the *Roman Catholic Metropolitan Cathedrals of Liverpool* and the Brasilia, both circular buildings with a free-standing altar.



Photo 4: Liverpool Metropolitan Cathedral, Liverpool, United Kingdom

Different principles and practical pressures produced other changes. Parish churches were inevitably built more modestly. Often shortage of finances, as well as a 'market place' theology suggested the building of multi-purpose churches, in which secular and sacred events might take place in the same space at different times. The emphasis on the unity of the liturgical action, was countered by a return to the idea of movement.

Three spaces, one for the baptism, one for the liturgy of the word and one for the celebration of the eucharist with a congregation standing around an altar, were promoted by Richard Giles in England and the United States. The congregation were to process from one place to another.

Such arrangements were less appropriate for large congregations than for small; for the former, proscenium arch arrangements with huge amphitheaters such as at *Willow Creek Community Church in Chicago* have been one answer.



Photo 5: Willow Creek Community Church in Chicago, USA

## Postmodernism

The Postmodern Movement in Architecture was formed in reaction to the ideals of modernism as a response to the perceived blandness, hostility, and Utopianism of the Modern movement. While rare in designs of Church architecture, there are nonetheless some notable examples as architects have begun to recover and renew historical styles and ‘cultural memory’ of Christian architecture.

The functional and formalized shapes and spaces of the modernist movement are replaced by unapologetically diverse aesthetics: styles collide, form is adopted for its own sake, and new ways of viewing familiar styles and space abound.

Perhaps most obviously, architects rediscovered the expressive and symbolic value of architectural elements and forms that had evolved through centuries of building - often maintaining meaning in literature, poetry and art - but which had been abandoned by the modern movement.

What is more, many of the churches nowadays, like *Hillsong Church*, use huge auditoriums, and even stadiums while gathering together for worship. They stand together in unity to experience God’s presence and Him moving within their lives.



Photo 6: Hillsong Church, Sydney, Australia

## 1.3 Modern Churches - Examples

### 1.3.1 JUBILEE CHURCH in Rome

by Richard Meier and Partners (2003)

Meier's building is a dramatic church and community center surrounded by 1970s apartment blocks, six miles to the east of Rome.

As Richard Meier describes it himself:

*'Light is the protagonist of our understanding and reading of space. Light is the means by which we are able to experience what we call sacred. Light is at the origins of this building... In the Jubilee Church, the three concrete shells define an enveloping atmosphere in which the light from the skylights above creates a luminous spatial experience, and the rays of sunlight serve as a mystical metaphor of the presence of God...' <sup>3</sup>*



Photo 7: Jubilee Church, Rome, Italy

<sup>3</sup> [www.richardmeier.com](http://www.richardmeier.com) [consulted on 20/04/2012 - 15:30]

*'Transparency and light cascade down from the skylit roof, literally invading the interior of the church also penetrating from below through a narrow slot opened at floor level. People in the atrium are enveloped with mystical light.'*<sup>4</sup>

The color palette and materials in the Jubilee church are restrained and beautiful: traditional Roman travertine; more recently-Roman smooth, white concrete, invented for the Olympic Stadium in Rome in 1960 and created by Italcementi; and light wood panelling and pews.

With the structure supported by the curved cantilever of the concrete-clad shells, reaching over towards the opposite 'spine' wall, the west (altar) and east (organ) walls are light glazing, surrounding the bright, white set pieces for the cross and organ respectively. Taking part in a prayer, you feel like celebrating in the presence of God thanks to the roof of the nave, the eastern and the western facade entirely made in glass. Despite all the glazing, the geometry is such that direct sun almost never comes into the church.

The work on natural lighting on the interior, which comes through the gaps between the solid elements and brightens the whole space: main source of diffused light is the glass roof between the shells, but in early morning and late afternoon the sunlight penetrates the entrance facade and the altar facade, giving spectacular atmospheric effects.

The whole design concept is based on the **contrast between cube and sphere**, and the clear division - or connection point - is the main space of the Church.

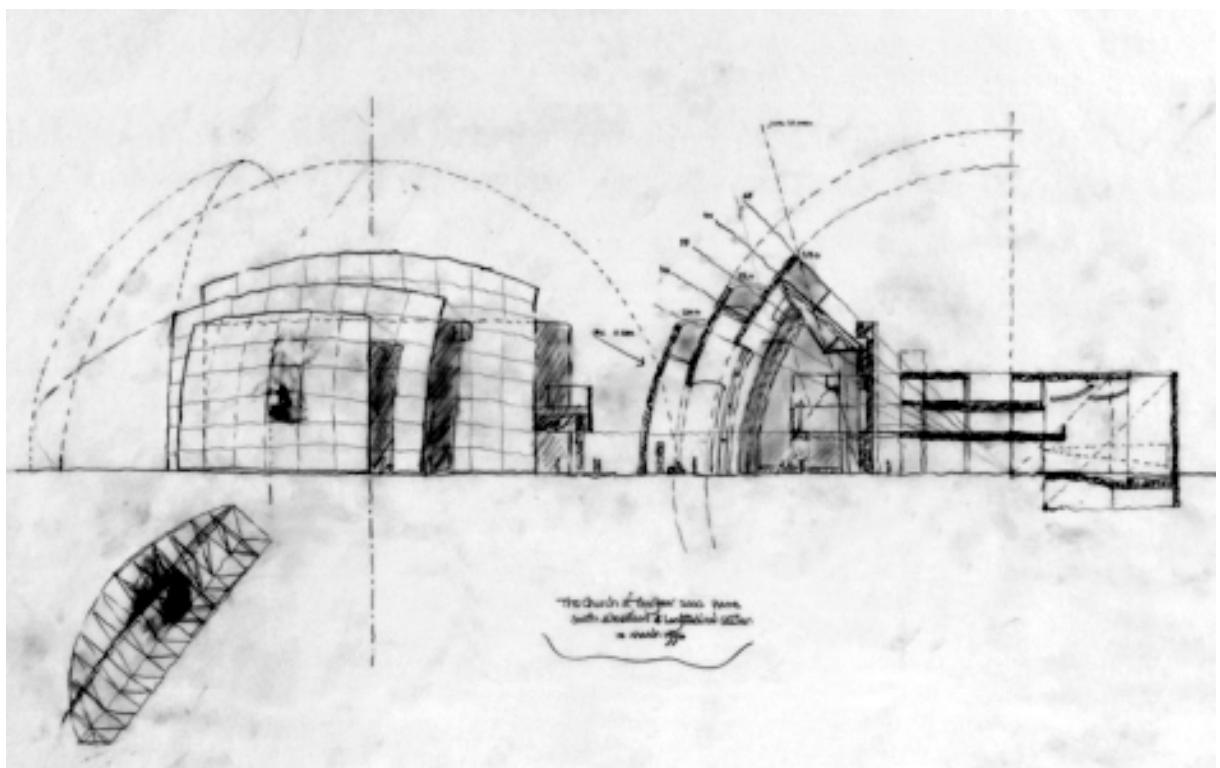


Photo 8: Jubilee Church, Rome, Italy (Meier's drawings)

<sup>4</sup> [www.richardmeier.com](http://www.richardmeier.com) [consulted on 20/04/2012 - 15:30]

### 1.3.2 CHURCH OF LIGHT in Ibaraki, Osaka

by Tadao Ando (1989; Sunday School addition 1999)

The church is located in a quiet residential neighborhood in the suburbs of Osaka. It is made of silky smooth concrete which sits modestly within its environment.

The communal church consists of two rectangular volumes that are both cut at a 15 degree angles by freestanding concrete walls. One indirectly enters the church by slipping between the two volumes, one that contains the Sunday school and the other that contains the worship hall. The church has an area of roughly 113 m<sup>2</sup> (about the same size as a small house).

The benches, along with the floor boards, are made of re-purposed scaffolding used in the construction. A cruciform is cut into the concrete behind the altar, and lit during the morning (as it is facing east).

Tadao Ando wanted to express the dual nature of existence in his project. The space of the chapel is defined by light, the strong **contrast between light and solid**.



*Photo 9: Church of Light, Ibaraki, Osaka, Japan*

In the chapel light enters from behind the altar from a cross cut in the concrete wall that extends vertically from floor to ceiling and horizontally from wall to wall, aligning perfectly with the joints in the concrete. At this intersection of light and solid the occupant is meant to become aware of the deep division between the spiritual and the secular within himself or herself.

One feature of the interior is its profound **emptiness**. Many who enter the church say they find it disturbing. The distinct void space and absolute quiet amounts to a sense of serenity.

For Tadao Ando the idea of 'emptiness' means something different. It is meant to transfer someone into the realm of the spiritual. The emptiness is meant to invade the occupant so there is room for the 'spiritual' to fill them.

The space of the chapel is defined by light, by the strong **contrast between light and shade**. In the chapel light enters from behind the altar, from a cruciform cut in the concrete wall that extends vertically from floor to ceiling and horizontally from wall to wall, aligning perfectly with the joints in the concrete.

From this cruciform shape an abstract and universal light seems to be floating on the concrete wall, its rays extending and receding over time with the movement of the sun. The darkness of the chapel is further accentuated by the dark and rough-textured wood of the floor planks and the pews which are built out of reused wood used during construction as scaffolding.

In contrast to the darkness of the chapel the interior of the Sunday school is built of lighter colored wood with a smooth surface. The volume of the Sunday school opens up to a double height space with a mezzanine level that contains a small kitchen, bench and table which are used for congregation gatherings.

The volume containing the Sunday school also has light that penetrates the space through the slicing of the volume by the freestanding concrete wall. The space comes alive not only with ever changing light but also through the voices of children singing, sounds of the piano, adults enjoying a meal of soba noodles after Sunday worship and laughter.

### 1.3.3 TAMPA COVENANT CHURCH in Florida

by Alfonso Architects

The program of the project included a new freestanding church building comprised of a worship sanctuary, administrative offices, and classrooms for an existing congregation of 450. In addition, the project required the renovation of two existing single level buildings, one from the 1960's and one from the 1990's, and a complete site redesign including parking, lighting and landscaping.

To establish an intimate church campus the architect designed a new exterior courtyard to act as a catalyst for community interaction, and as the physical nexus joining new and existing buildings. Integrative natural elements were used to manifest the congregation's theological sensitivities in terms of physicality of the space. The Fibonacci sequence of natural proportions was the underlying basis for the chancel area. The careful positioning of elements (chapel, walls and the cross) also harmonize with the ever widening spiral design.

The many architectural features of the project were derived from theological precedence while reflecting quantities of numerical biblical importance (like 3 olive trees, 12 office windows, 14 pendant lights, 7 candle boxes). Natural light, evidenced by the use of skylights and candlelight, as well as the focused use of wood and stone contribute to the important communion of human beings and their natural environment.



*Photo 10: Tampa Covenant Church, Tampa, Florida, USA*

### 1.3.4 AUDACIOUS CHURCH in Manchester

Audacious is a church in Manchester with 2 campuses (main in the city centre & east in Failsworth). The main campus was completed in 2011 through renovating an old seafood warehouse and transforming it into a modern church building.

Audacious Church is... truly audacious! They believe that everything they do in church should be fun, enthusiastic and actually have the potential to change one's life for the better.

The old warehouse have been divided into 3 main zones - admin (with the solid block of offices and sunday school facilities), main auditorium and connection area.

The main auditorium is a hall without windows with a big stage, where the Audacious Band leads people in worship every Sunday. The hall can facilitate up to 2000 people for a service. The stage operates with a modern sound and lighting equipment in order to provide mystical atmospheric effects and help people connect with God.

The connection area is designed for the church to build relationship and connect with each others. It has a special area with tables and a bar, where all those who are thirsty or just simply lovers of a good cup of coffee can get the preferable beverage or a snack after the service.



Photo 11: Audacious Church (Central Campus), Manchester, United Kingdom

## 1.4 Summary

CHURCH	Localization	Idea	Symbolism
<b>Jubilee Church</b> <i>(p. 13-14) - 1.3.1</i>	Suburbs, six miles to the east of Rome, Italy	Contrast between cube and sphere; natural lighting on the interior	clear division, or connection point, as the main space of the Church; mystical atmospheric effects
<b>Church Of Light</b> <i>(p. 15-16) - 1.3.2</i>	Quiet residential neighborhood in the suburbs of Osaka	contrast between light and shade; emptiness	space definition; transferring someone into the realm of the spiritual
<b>Tampa Covenant Church</b> <i>(p. 17) - 1.3.3</i>	Tampa, Florida, United States	numerical biblical importance, natural lighting on the interior, harmony	the Bible as the main source of inspiration; unique atmosphere
<b>1.3.4 Audacious Church</b> <i>(p. 18) - 1.3.4</i>	City Centre of Manchester, UK	big main auditorium without windows; with modern stage, lighting equipment	unity, mystical atmospheric effects

Table 2: Comparison of the Chosen Church Building Analysis - Summary

### Modern Church Buildings:

- styles collide
- the expressive and symbolic value of architectural elements and forms rediscovered
- creative
- magnificent, stunning, ‘singing’
- places designed to worship God
- usually with a solid offices block and a community services
- rooms for children and youth (called Sunday school/Power Breakfast)
- quite often with a coffee area or a space to build relationship after the church gathering
- based on contrasts (light/shade, light/solid, symbolic values etc)
- providing the unique mystical atmosphere in order to help people connect with God, ‘transferring them into the realm of the spiritual’

The most important thing we have to always have in mind is that christianity is all about **LOVE** - loving **GOD** and **PEOPLE** around us.

The Bible tells us there is only **ONE GOD** - but what kind of church we attend, how we experience Him and how our relationship looks like depends just on different perspectives. We were all created by one God and should be focusing on Him - not on any differences when it comes to denominations; remembering about being **UNITED** as **ONE CHURCH** of **ONE GOD** - as christians - the followers of Christ - the church the Apostles started after Jesus’s command to ‘*go and make disciples*’. <sup>5</sup>

<sup>5</sup> Bible - New International Version (NIV): Matthew 28:19

# Chapter 2: PROJECT

## 2.1 Localization

### Poland in Europe

Poland (Polish: Polska), officially the Republic of Poland is a country in Central Europe bordered by Germany to the west; the Czech Republic and Slovakia to the south; Ukraine, Belarus and Lithuania to the east; and the Baltic Sea and Kaliningrad Oblast, a Russian exclave, to the north.

Area: 322,575 sq km (124,547 sq miles, about size of New Mexico).

Poland has a population of over 38 million people.

The capital (and the largest city) is WARSAW.



Photo 12: Poland in Europe - Localization (Map)

## Kraków in Poland

Kraków (eng. Cracow) is the second largest (~756,000 inhabitants) and one of the oldest cities in Poland. Situated on the Vistula River (polish: Wisła) in the Lesser Poland region (southern Poland), the city dates back to the 7th century. Kraków has traditionally been one of the leading centers of Polish academic, cultural, and artistic life and is one of Poland's most important economic hubs.



Photo 13: Kraków in Poland - Localization (Map)

The metropolitan city of Kraków is known as **the city of churches**. The abundance of landmark, historic temples along with the plenitude of monasteries and convents earned the city a countrywide reputation as the ‘Northern Rome’ in the past. The churches of Kraków comprise over 120 places of worship of which over sixty were built in the 20th century.

Denominations include Roman Catholicism (48 Churches), Jehovah’s Witnesses (10 Kingdom Hall), Protestantism (8 Churches), Buddhism (5), Polish Orthodox Church (1 Church).



Photo 14: Kraków - View of the Old Town

## **2.2 Program**

### **Foyer / Lobby**

It is the entrance area adjacent to the main auditorium, with access to sanitary facilities and coffee area. In my project I decided to make it an open space with a lot of light, creating a welcoming atmosphere for all the visitors.

### **Main Auditorium**

The main auditorium is a room built to enable the church to get together in order to worship God and experience His presence together, in unity.

### **Sunday school**

Sunday school is an integral part of any protestant church building. It is created in order for the children and youth of the congregation to get the right teaching and spend the quality time with their peers. 1 room, separated into 2 sections (children and the youngest kids).

### **Coffee Area**

It is a place of fellowship, where people are able to connect with each other and grow in relationships as the church.

### **Resources Stand**

An area with a long table providing the christian resources (like Bibles, books, teachings, sermons, CDs).

### **Sanitary Facilities**

Three sanitary facilities; for ladies, men and for the disabled.

### **Prayer Room**

A room available for those in need to get some quiet time with God and focus on a prayer.

### **Office**

Pastor's office.

## 2.3 Characteristics of the Project

### Symbolism

Through the research of the symbolic meanings of different signs, in my project I've decided to focus to the square and circle symbolism. (->2.4 Symbolism)

### Simple shape

The design shows how plain geometry, layered definition of spaces and effects of light and shade, allow to create clear and comprehensible spaces.

### White form

*'White is the most wonderful color because within it you can see all the colors of the rainbow. The whiteness of white is never just white; it is almost always transformed by light and that which is changing; the sky, the clouds, the sun and the moon.'* - Richard Meier <sup>6</sup>

Through the construction and glass elements I want to create a unique atmosphere using the contrast between light and shade.

### Glass

Translucent materials give architects many possibilities to exploit the sensual interplay of light and the fascination of interior-exterior interaction; the glass allows light to enter into rooms and floors, illuminating enclosed spaces and framing an exterior view.

### Wooden Panels

Wood wall panels create a unique aesthetic value of any space. Its visual upside creates more people-friendly atmosphere of the design.

<sup>6</sup> [www.richardmeier.com](http://www.richardmeier.com) [consulted on 20/04/2012 - 15:30]

## 2.4 Symbolism

The **Square symbol** underscores the potential duality in everything and encourages balance; the square is comprised of straight lines, and those fixed lines invite a feeling of stasis, fixation and immutability; in fact, when I see squares, I always think of foundations (like homes, buildings or even plots of earth squared off for gardening);

The square itself stands for:

*stabilizing,*

*structure,*

*foundation,*

*basics,*

*community,*

*balance,*

*direction,*

*dependability,*

*integrity.*

The **Circle symbol** meaning is universal, sacred and divine; it represents the infinite nature of energy, and the inclusivity of the universe;

The circle itself stands for:

*inclusion,*

*wholeness,*

*focus,*

*unity,*

*perfection,*

*centering,*

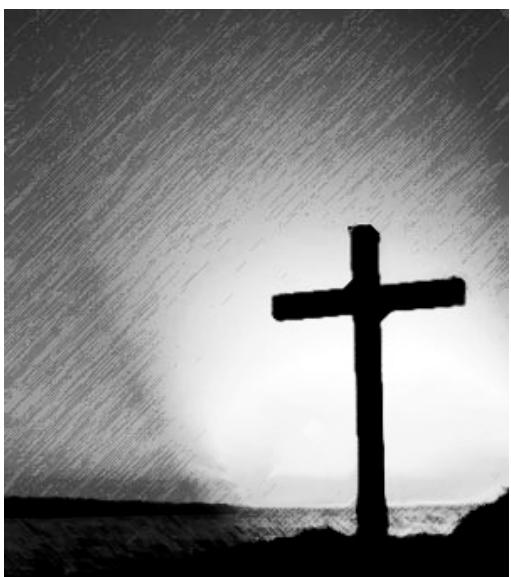
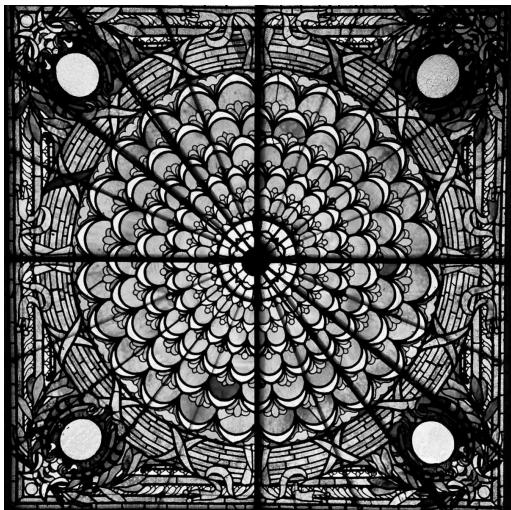
*revolution,*

*infinity,*

*completion;*

=> no better words to describe a modern church!

## 2.5 Inspirations



*Photo 15: My Inspirations (Up: Stained glass; Middle: The Cross; Down: Ring Dome, Milan)*

## 2.6 Idea

### 2.6.1 General Idea



*Photo 16: General Idea of the Project*

## 2.6.2 Idea - Sketches

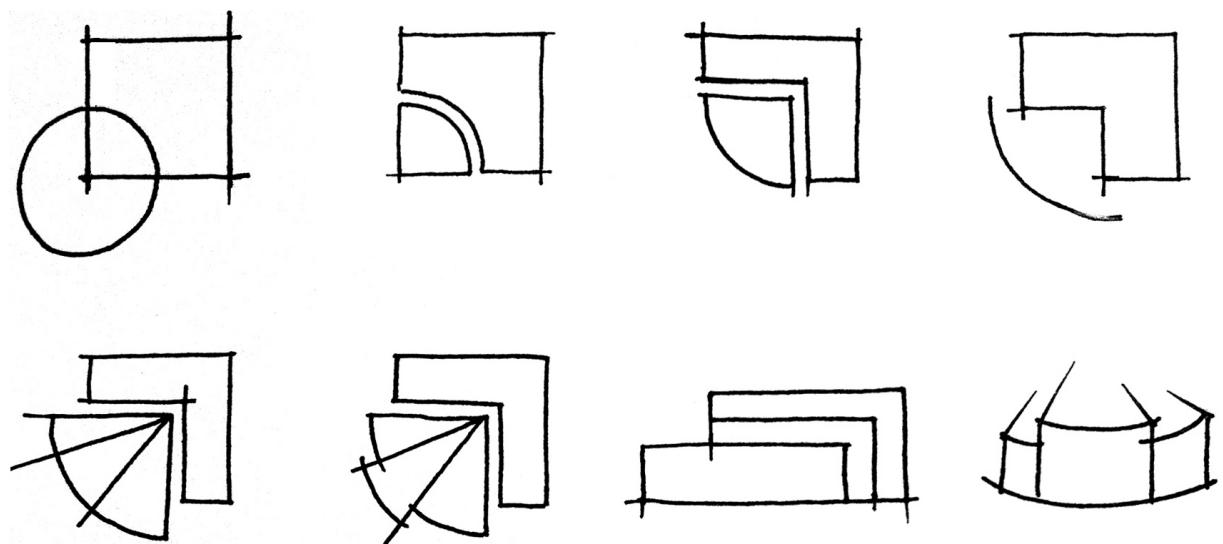


Photo 17: General Idea of the Project - Sketches

## 2.6.3 Idea - Functions



Photo 18: General Idea of the Project - Main Functions

## 2.7 Architectural Project

### 2.7.1 The Chosen Land

The chosen land for the project is the area by the Rondo Grunwaldzkie in Kraków, Poland.



*Photo 19: The Chosen Land*



*Photo 20: The Chosen Land - View from Monte Cassino St. & Jana Bułhaka St.*

## 2.7.2 Urban Analysis & Design

The area is placed right next to one of the main communication points in Kraków - Rondo Grunwaldzkie (Grunwaldzkie Roundabout), by one of the main streets of the city - Monte Cassino St. and Konopnickiej St. On the north-south direction there is Wisła River - the biggest in Poland; with the beautiful boulevards nearby. There is some multifamily housing in the close neighborhood and Park Inn Hotel on the west side.

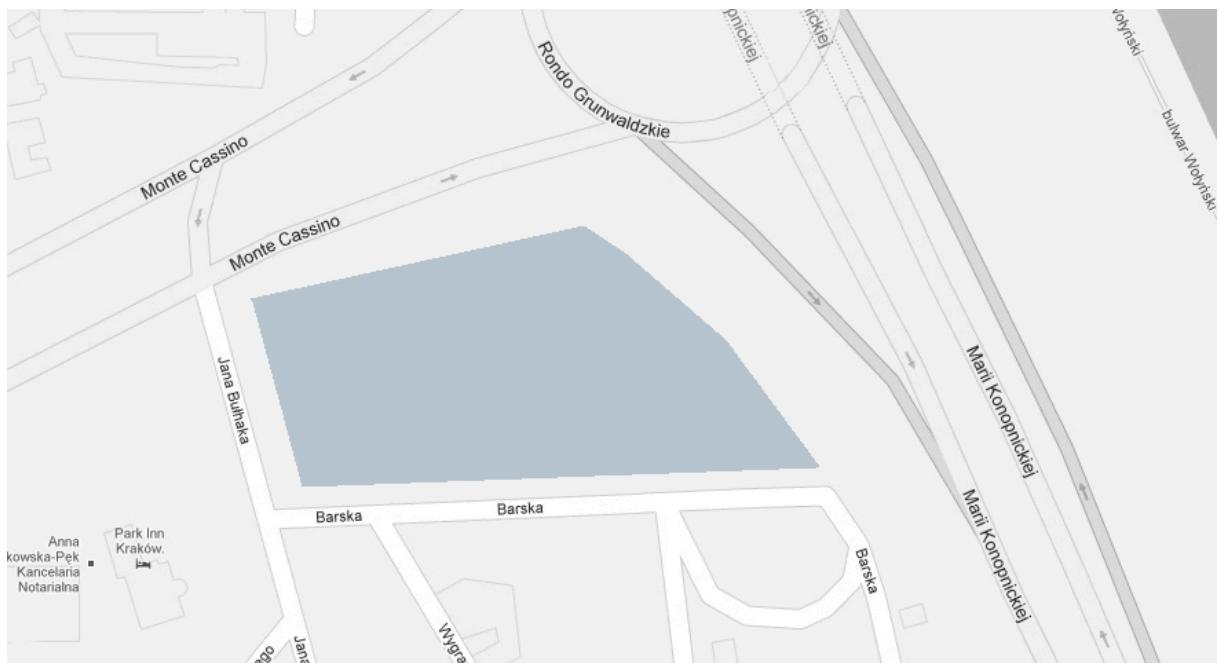


Photo 21: The Chosen Land - Urban Analysis

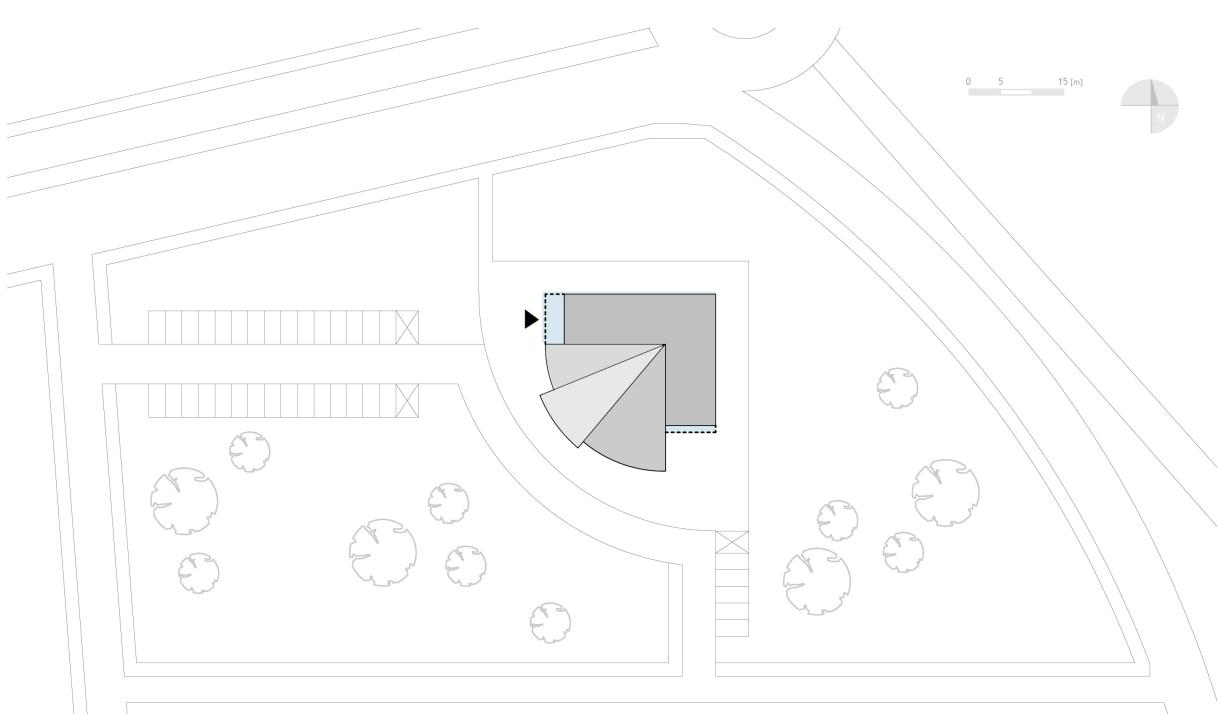


Photo 22: The Chosen Land - Urban Design

### 2.7.3 Plan

As I presented in one of the previous chapters (→ 2.6 Idea), my aim was to present a church which plan was to be a combination of a square and a circle (→ 2.4 Symbolism).

- 1 Foyer
- 2 Coffee Area
- 3 Sanitary Facilities
- 4 Sunday School
- 5 Prayer Rooms
- 6 Pastor's Office
- 7 Main Auditorium

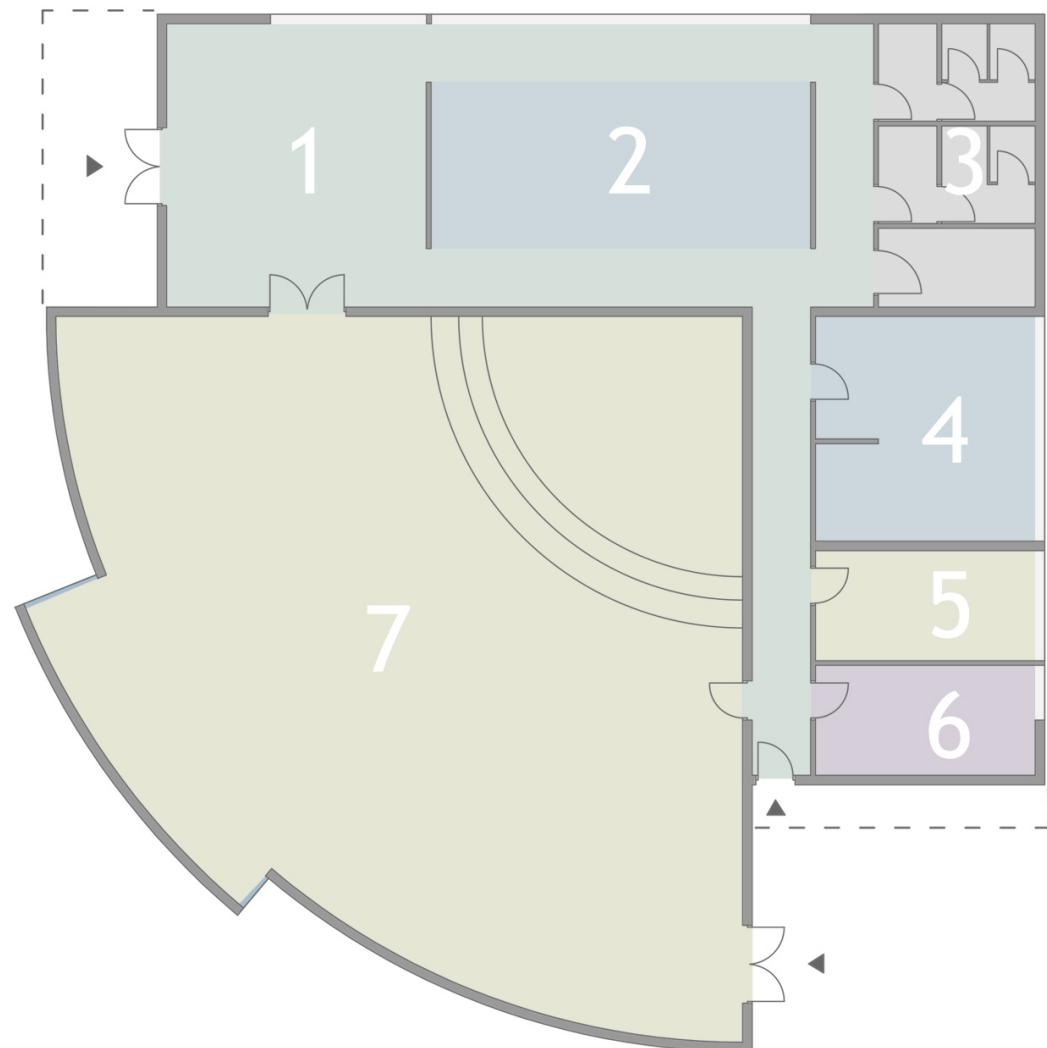


Photo 23: Plan of the Church Building - Main Rooms

The main entrance to the building is covered with the glass roof, providing a shelter for the people, at the same time bringing the feeling of lightness and delicacy. As you enter the building, you get into the **Foyer (1)** - the entrance area with the Resources stand on the left hand sight and the entrance to the **Main Auditorium (7)** on the right. It is an open space with a long horizontal window providing the light and wooden panels, in order to create more people-friendly atmosphere within the area. The Foyer is connected with the rest of the rooms with corridors (some of them are more open spaces - like by the coffee area, and some are more separated).

From the Foyer, you have access to the **Coffee Area (2)**, separated through two open walls, generating a more intimate space for the church to spend some time together after the service and connect with each other - to grow in relationships together, as the Church. The Coffee Area has tables with chairs for people to rest and a long table for some available snacks and drinks. Behind the second separation wall behind the Coffee Area, you have access to the **Sanitary Facilities (3)** - for women (3a), for men (3b) and for the disabled (3c).

The **Sunday School (4)** facility is a big room, partially separated by a short wall in order to create more intimate space while having more than one group of children/youth in there. It is a great for the younger part of the congregation to get the right teaching and spend some quality time with their peers, creating the atmosphere of joy.

Next, you have the **Prayer Room (5)**, which - as the name speaks for itself - is a room, available for those in need to get some quiet time with God and focus on a prayer. The **Pastor's Office (6)** is right next to the back entrance to the building, connected with the rest of the building by the long corridor, with the entrance to the **Main Auditorium (7)**.

No	Name	Size [m <sup>2</sup> ]	Floor
1	Foyer + Corridors	48,352 + 58,785	Wooden Panels
2	Coffee Area	41,426	Wooden Panels
3a	Sanitary Facilities for Women	10,500	Tiles
3b	Sanitary Facilities for Men	10,500	Tiles
3c	Sanitary Facilities for Disabled	8,484	Tiles
4	Sunday School	32,486	Carpet
5	Prayer Room	15,905	Carpet
6	Pastor's Office	15,905	Carpet
7	Main Auditorium	264,760	Panels
x	<b>TOTAL</b>	<b>507,103 [m<sup>2</sup>]</b>	x

Table 3: Rooms of the Church Building - Sizes & Floor Materials

## Main Auditorium (7) - Symbolism

The Bible gives us a very specific description of the Temple of God; within the Holy Place of the tabernacle, there was an inner room called the Most Holy Place. It was the most sacred room, a place no ordinary man could enter. It was God's special dwelling place in the midst of His people. A thick curtain separated the Most Holy Place from the Holy Place. This curtain was also known as the 'veil'.

The word 'veil' in Hebrew means a screen, divider or separator that hides. Essentially, the veil was shielding a holy God from sinful man. Whoever entered into the Holy of Holies was entering the very presence of God. In fact, anyone except the high priest who entered the Holy of Holies would die.

The picture of the veil was that of a barrier between man and God, showing man that the holiness of God could not be trifled with. The veil was a barrier to make sure that man could not carelessly and irreverently enter into God's awesome presence. So the presence of God remained shielded from man behind a thick curtain during the history of Israel. However, Jesus' sacrificial death on the cross changed that. When He died, the curtain in the Jerusalem temple was torn, from the top to the bottom.

*'And when Jesus had cried out again in a loud voice, he gave up his spirit. At that moment the curtain of the temple was torn in two from top to bottom.'*<sup>7</sup>

Only God could have carried out such an incredible feat because the veil was too high for human hands to have reached it, and too thick to have torn it. Furthermore, it was torn from top down, meaning this act must have come from above. As the veil was torn, the Holy of Holies was exposed. God's presence was now accessible to all. Shocking as this may have been to the priests ministering in the temple that day, it is indeed good news to all believers, because they know that Jesus' death has atoned for their sins and made them right before God. The torn veil illustrated Jesus' body broken for us, opening the way for us to God. As Jesus cried out '*It is finished!*'<sup>8</sup> on the cross, He was indeed proclaiming that God's redemptive plan was now complete. The ultimate offering had been sacrificed.

In my project I have decided to use this symbolism of the 'veil' - the separation of ordinary men from the presence of God - through presenting the main outside wall in the auditorium as 'broken and torn'. I moved the specific parts of it as a symbol of it not being massive and solid (bringing a feeling of separation), but using the glass elements, providing a feeling of lightness and no boundaries; so that all the people gathered in the church don't feel separated from the rest of the world when they want to worship God - but that He is everywhere and through the ultimate sacrifice of Jesus Christ on the cross, we all have access to Him and His presence, anywhere, not only within the room.

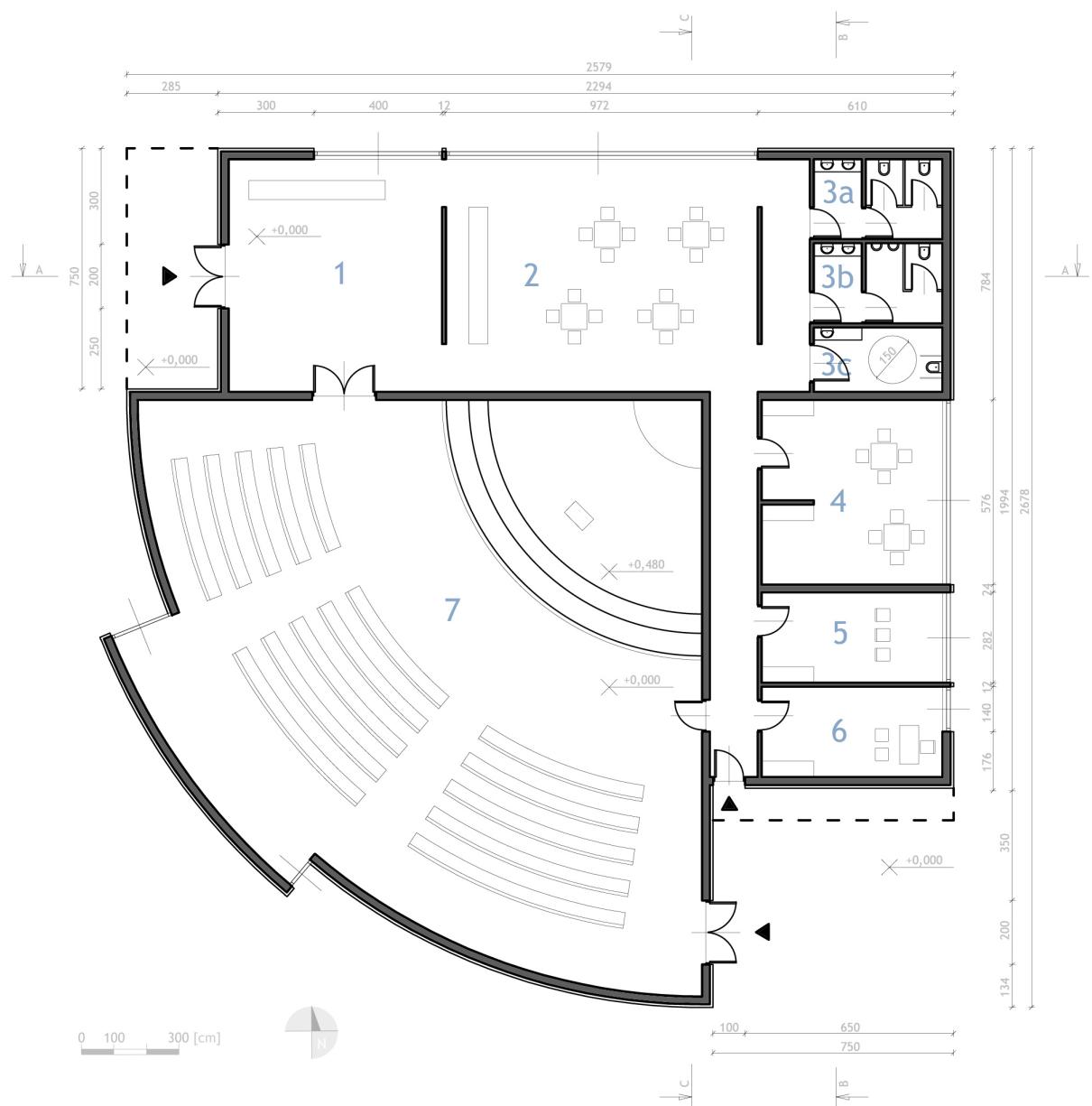
<sup>7</sup> Bible - New International Version (NIV): Matthew 27:50-51

<sup>8</sup> Bible - New International Version (NIV): John 19:30

I have also decided to use blue glass in the design in order to bring different shades of blue into the room; while blue color being the symbol of freedom and strength. Blue is also the color of loyalty, faith and protection.

The benches have been placed in an oval-shape in line with the altar and the main outside wall, not being strictly geometrical as usual, so that they bring the feeling of freedom within the room, where people can feel relaxed.

The main auditorium has access to it from the lobby for everyone; one door from the corridor by the altar, right next to the pastor's office for the pastor and the rest of the leaders to enter the room; and extra emergency door into the back car park of the church building.



*Photo 24: Plan of the Church Building - Technical Drawing*

## 2.7.4 Sections

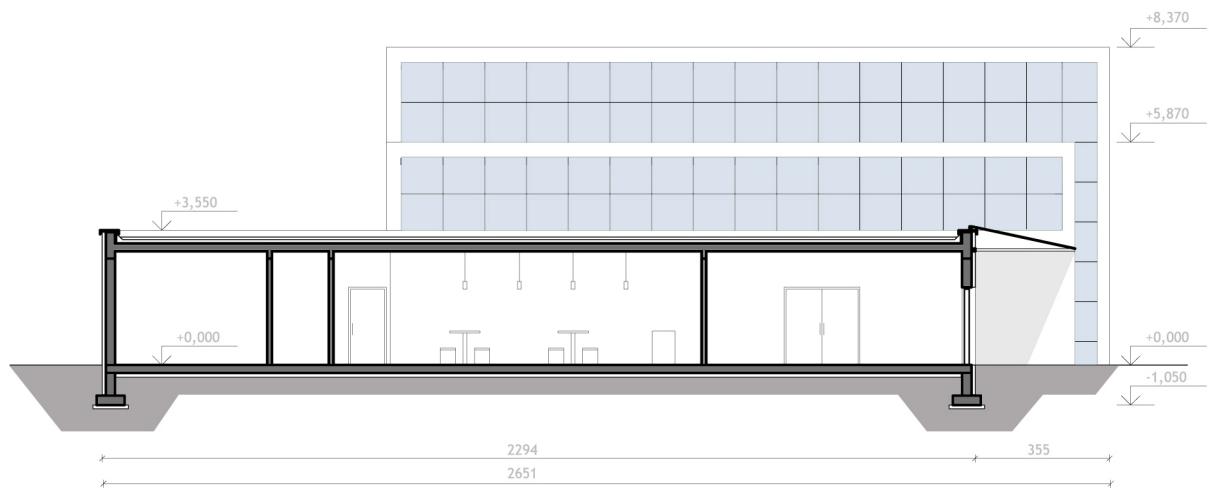


Photo 25: Section A-A

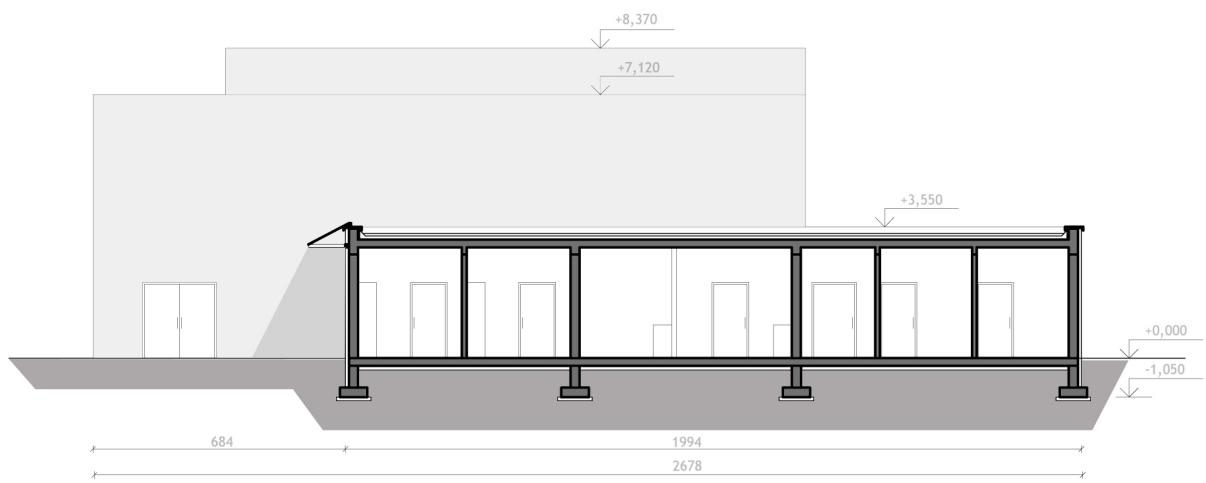


Photo 26: Section B-B

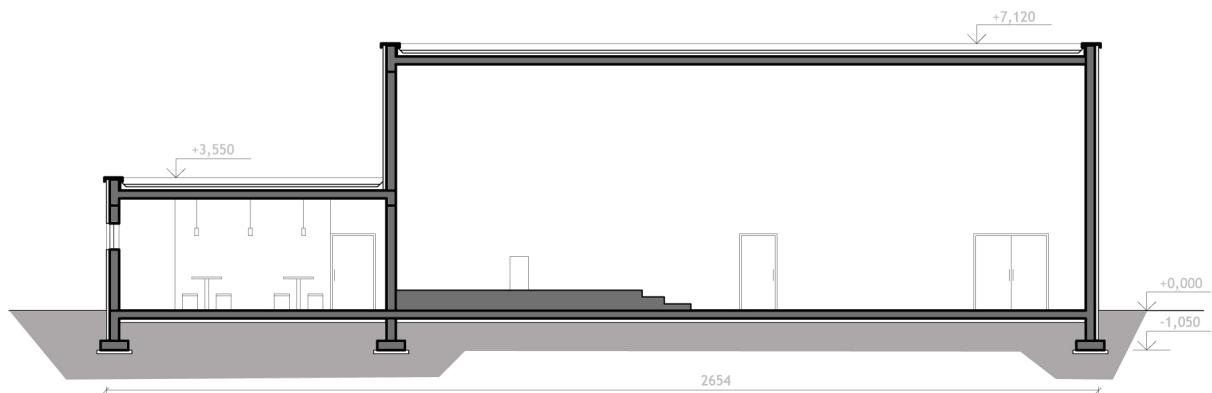
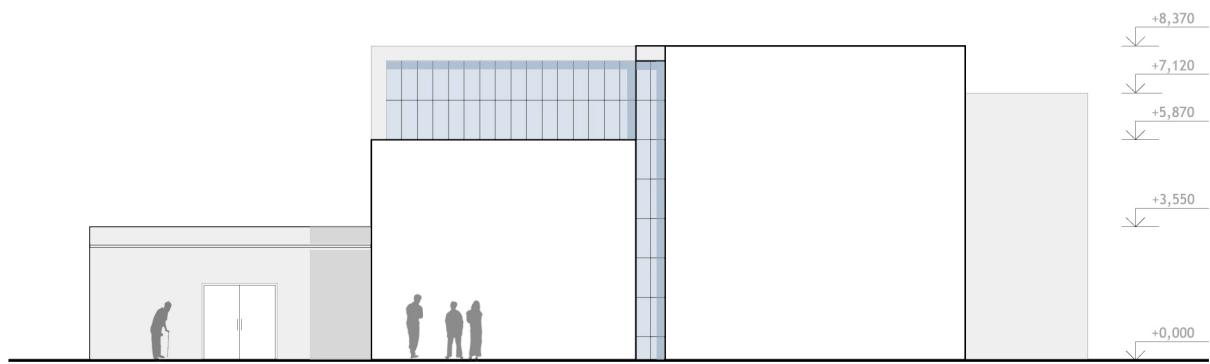
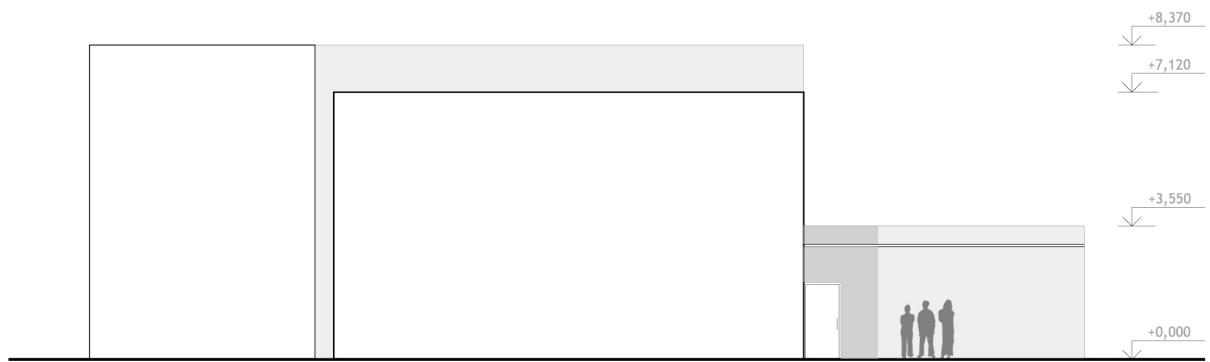


Photo 27: Section C-C

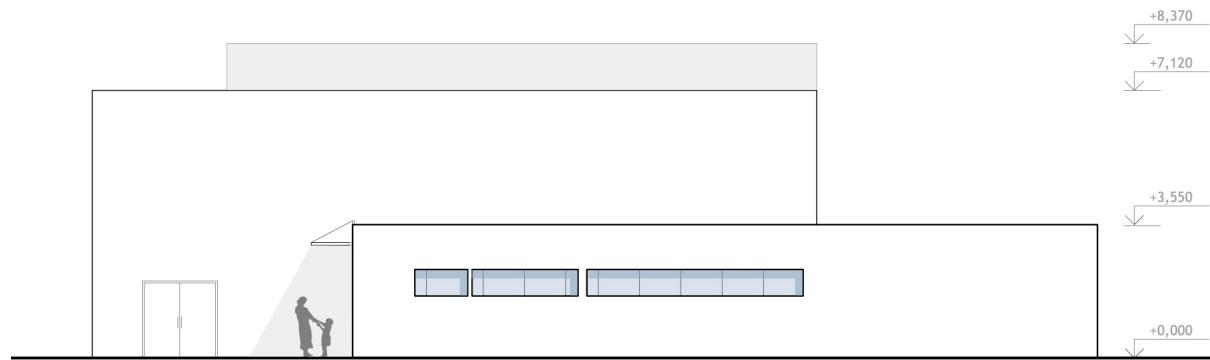
## 2.7.5 Elevations



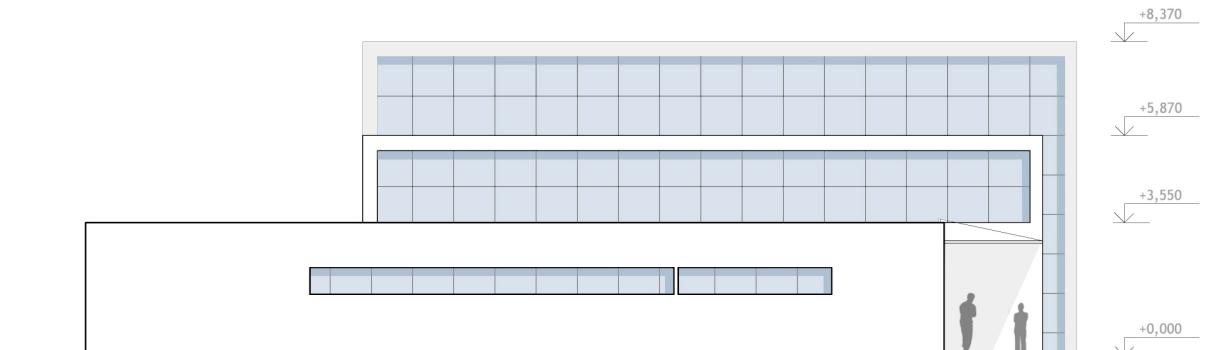
*Photo 28: Front Elevation*



*Photo 29: Side Elevation*



*Photo 30: Back Elevation*



*Photo 31: Side Elevation*

## 2.7.6 Details

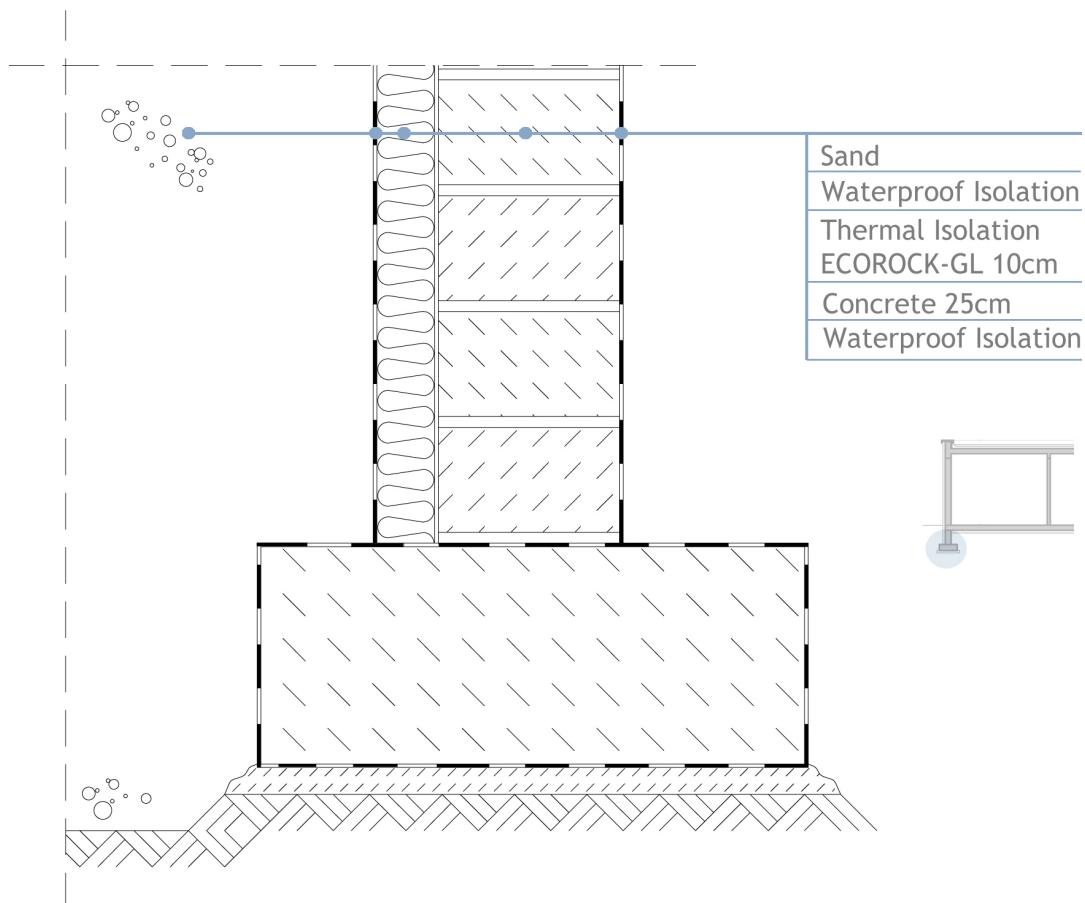


Photo 32: Foundation Isolations

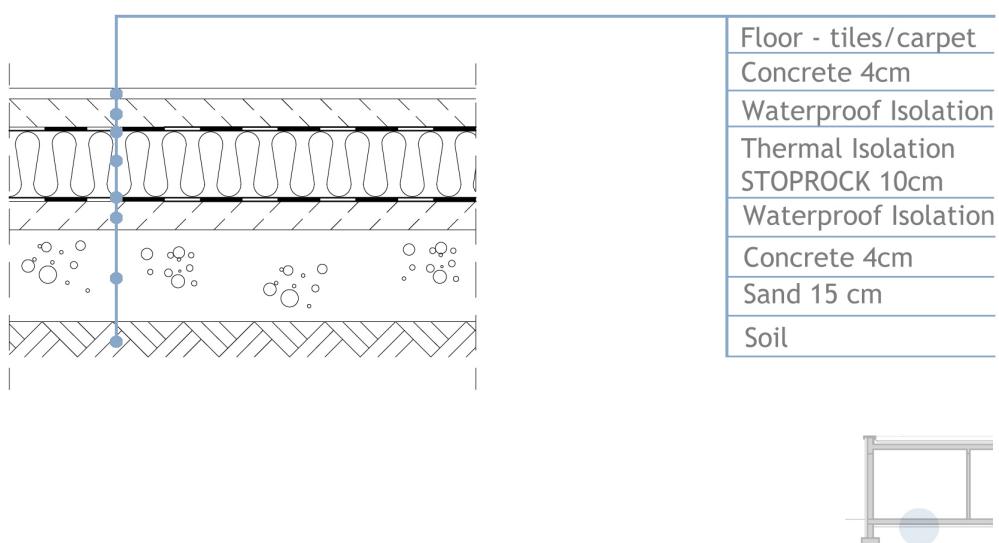


Photo 33: Floor Isolations

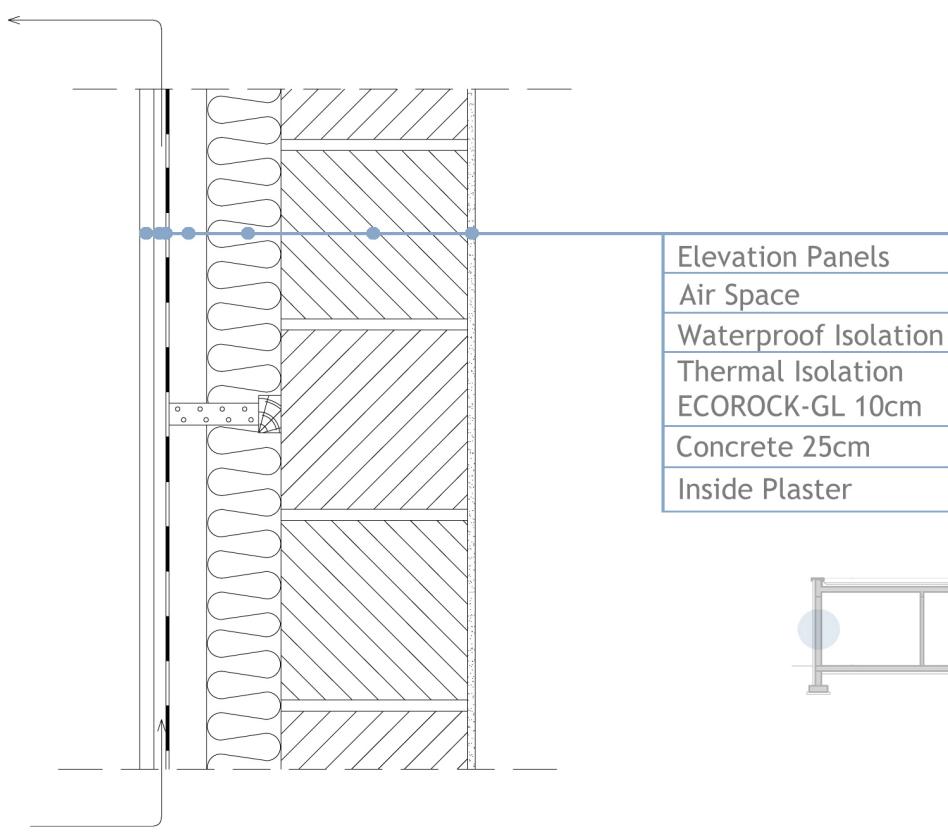


Photo 34: Outside Wall Isolations with the Elevation Panels

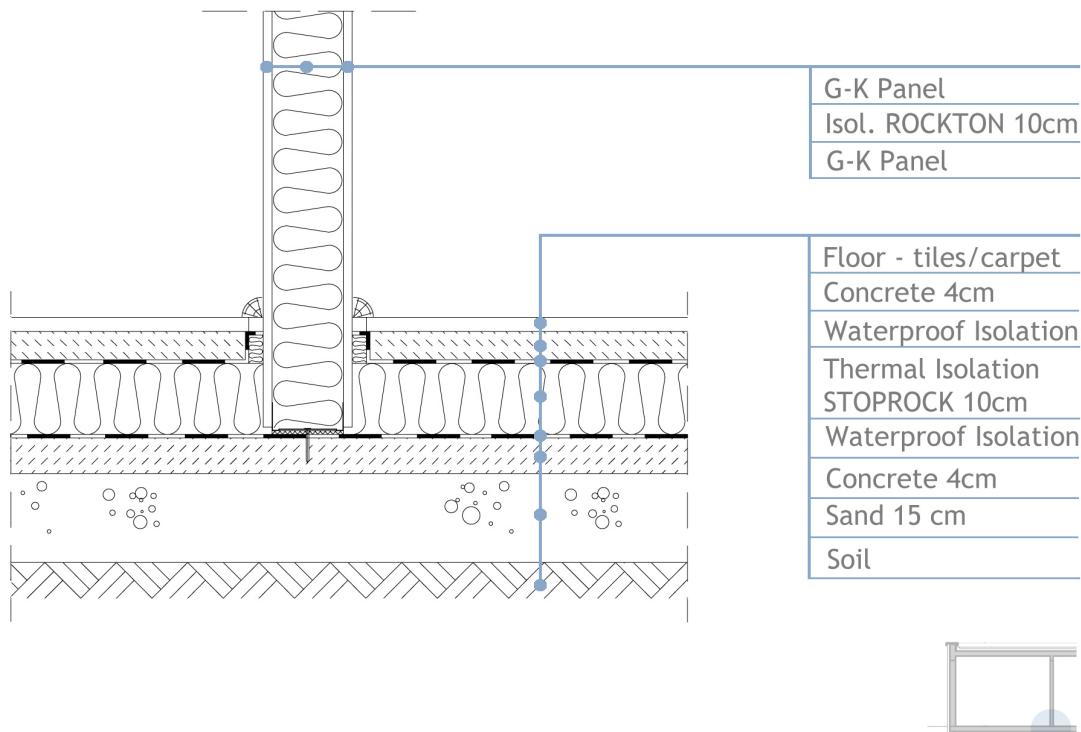


Photo 35: Inside Wall

## **2.7.7 Materials**

### **Exterior:**

All the exterior walls covered with white panels (60x60).

Window frames of aluminum, glass without thermal cut and double glazed in blue.

### **Interior:**

#### **- Walls:**

Walls covered with white paint; the separating walls covered with wooden panels (in the foyer and coffee area).

#### **- Floors:**

Descriptions of the floor materials separately in every room. (--> Table 3)

#### **- Ceilings:**

The ceilings will be executed in polished concrete in sight.

#### **- Doors:**

Solid doors in white with aluminum details.

#### **- Sanitary facilities:**

The sanitary facilities equipment will be white (the Company KOŁO) with wooden sink-shelves and cabins.

### **Installations:**

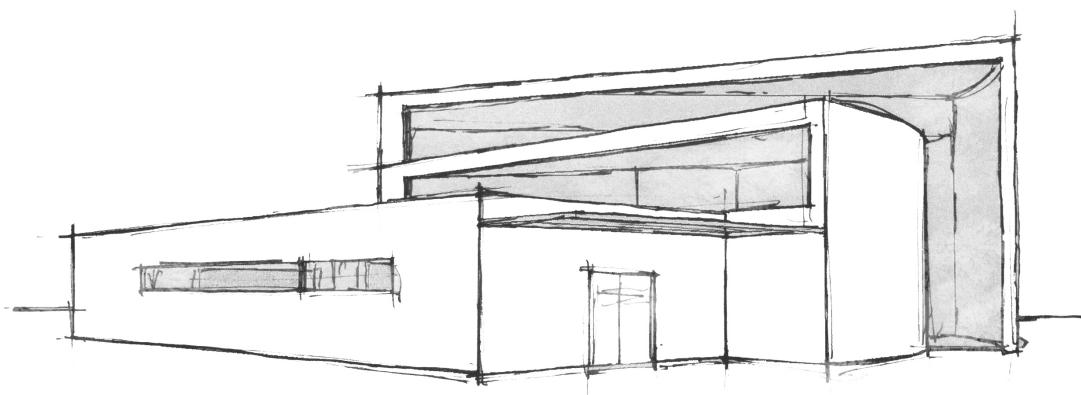
The building needs to have the following installations:

- Air conditioning (mechanical, in every room; in the auditorium by the main outside wall in the floor).
- Water - in the sanitary facilities.

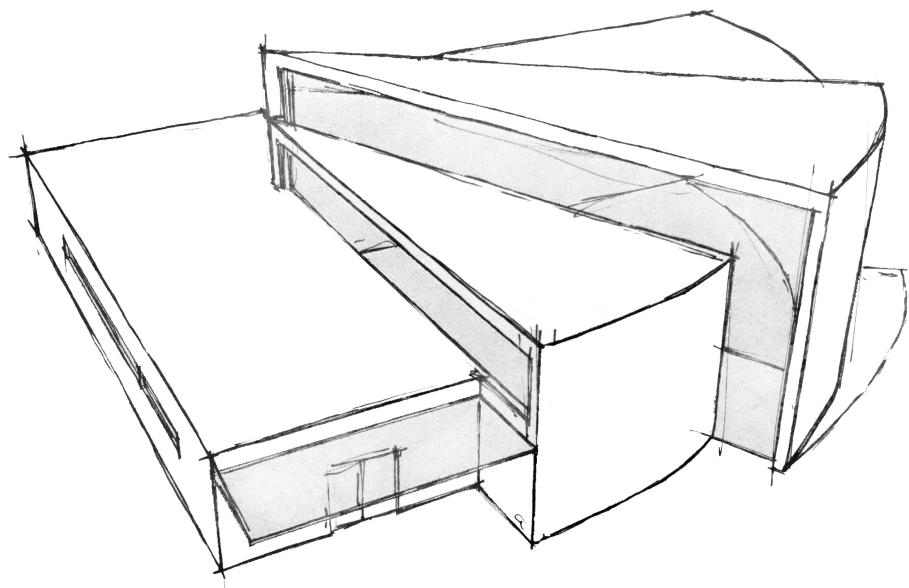
## 2.8 Model

**Church of the 21st-century - The Project:**

**2.8.1 Hand Sketches:**

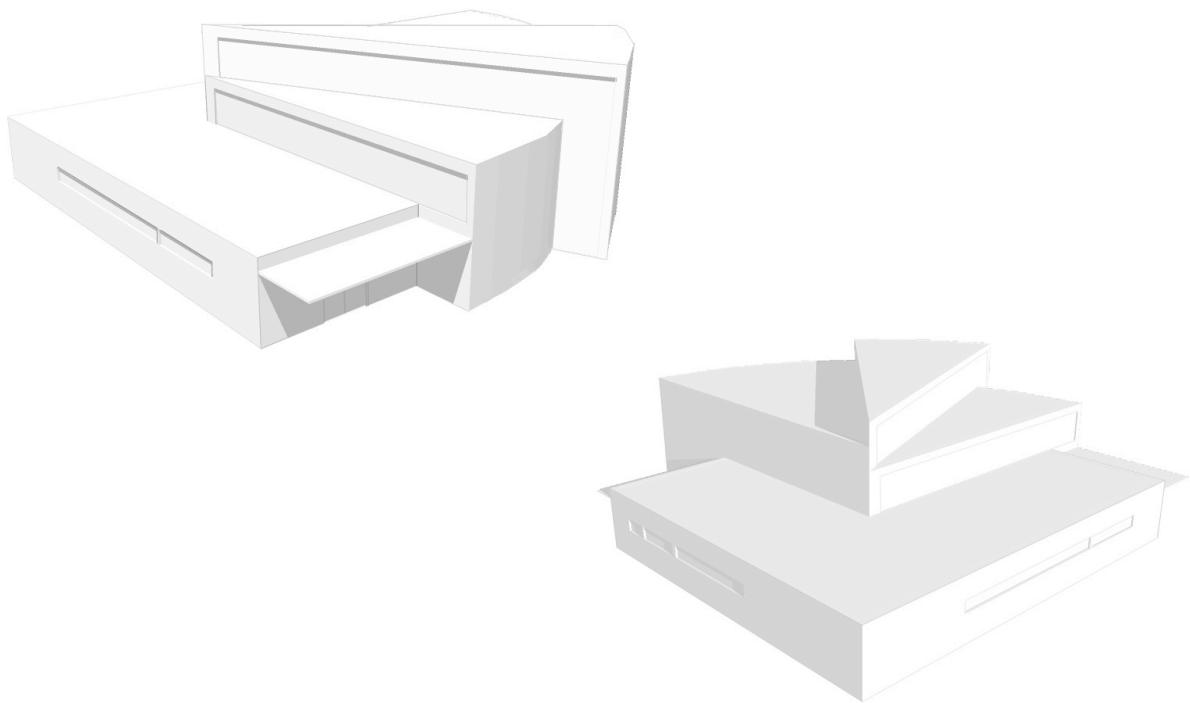


*Photo 36: The Church Building - Front View (Hand Sketch)*

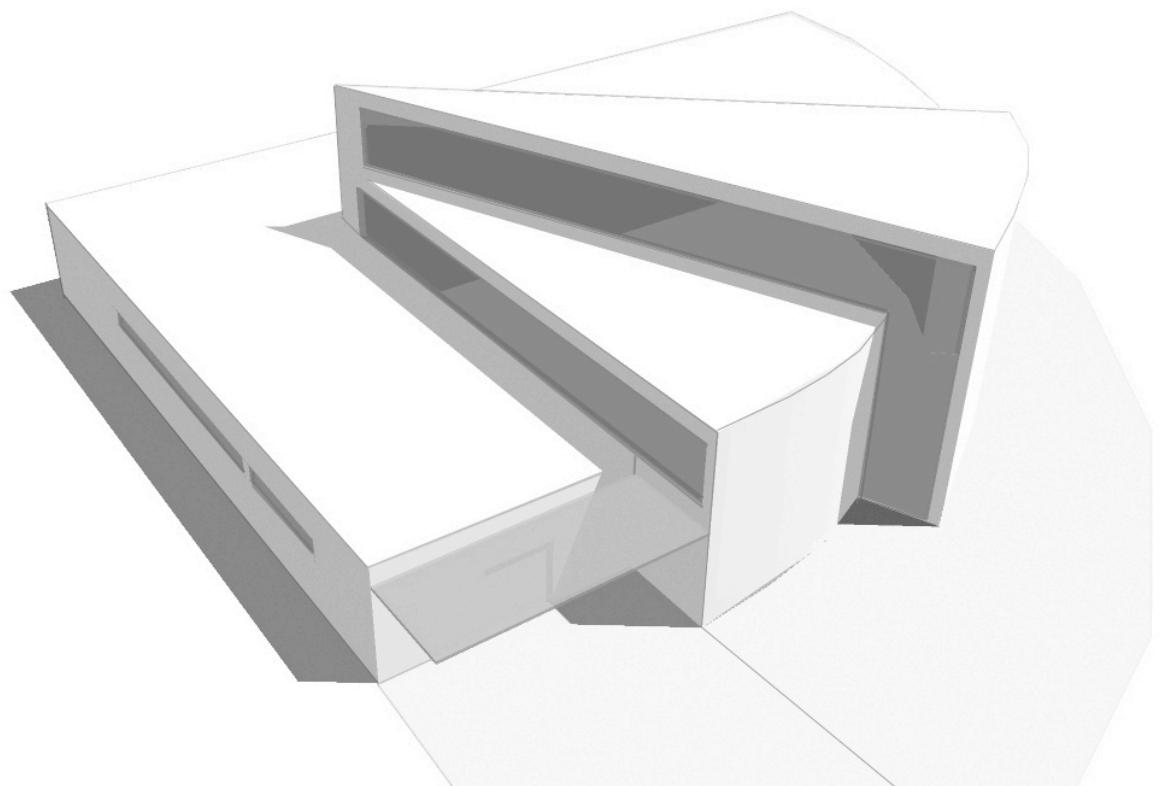


*Photo 37: The Church Building - View (Hand Sketch)*

## 2.8.2 3d Model:

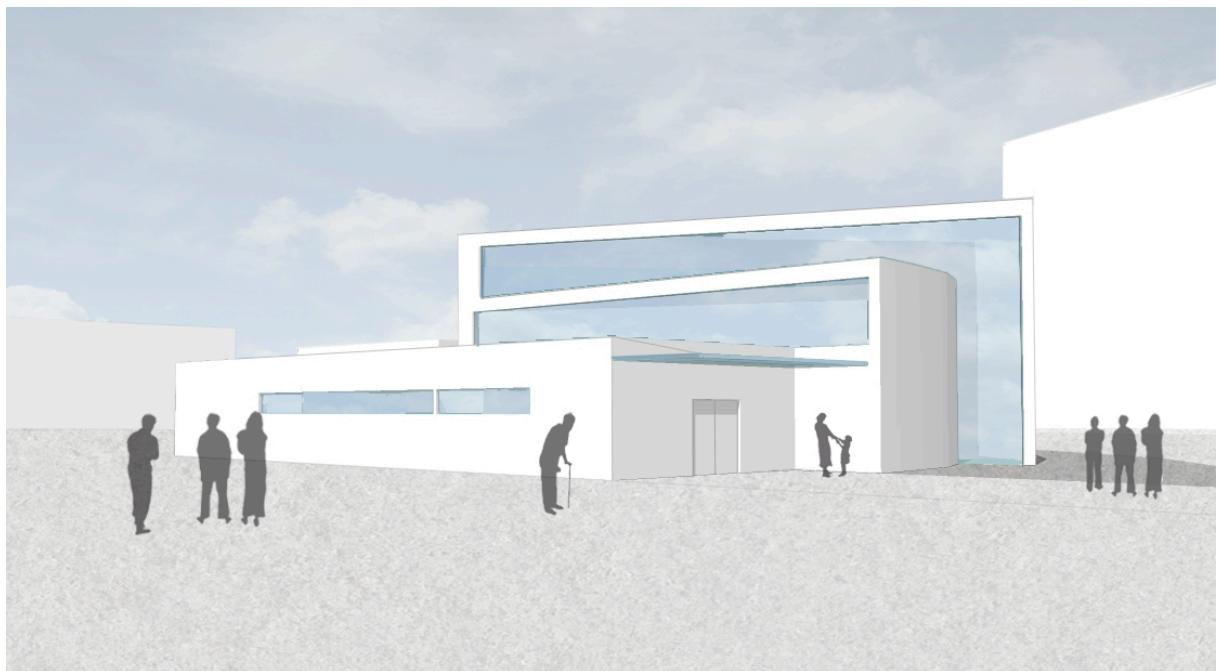


*Photo 38: The Church Building - Monochrome Model (Front and Back View)*

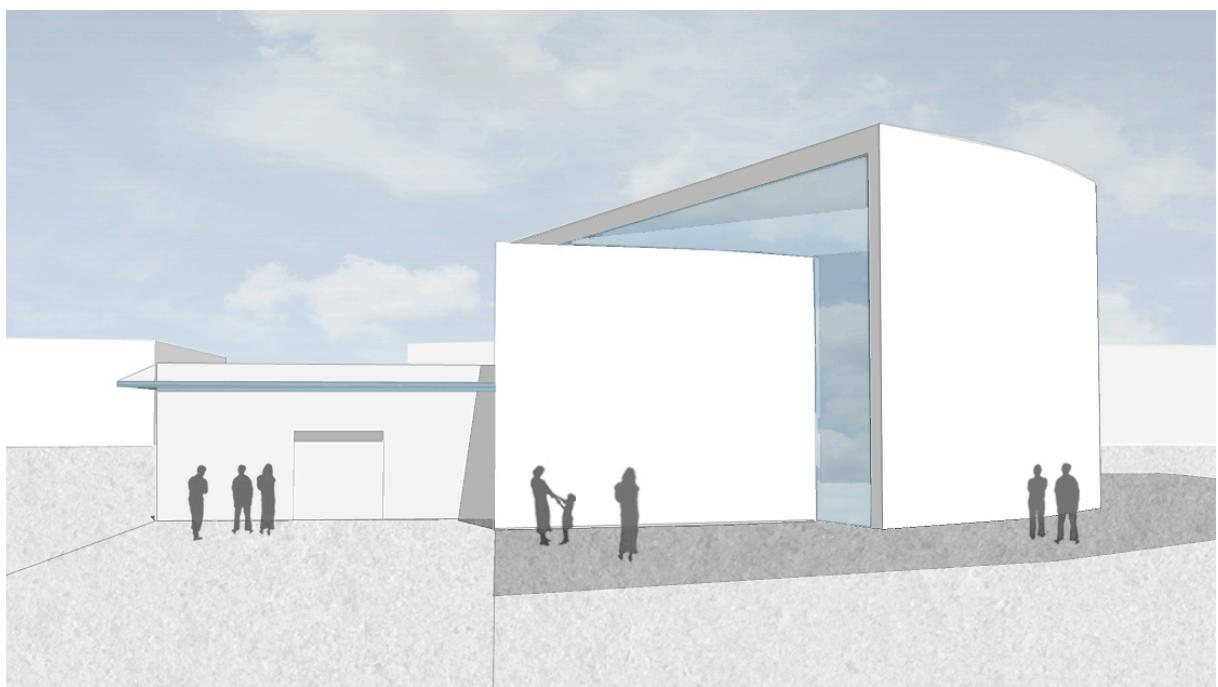


*Photo 39: The Church Building*

### **2.8.3 Exterior:**

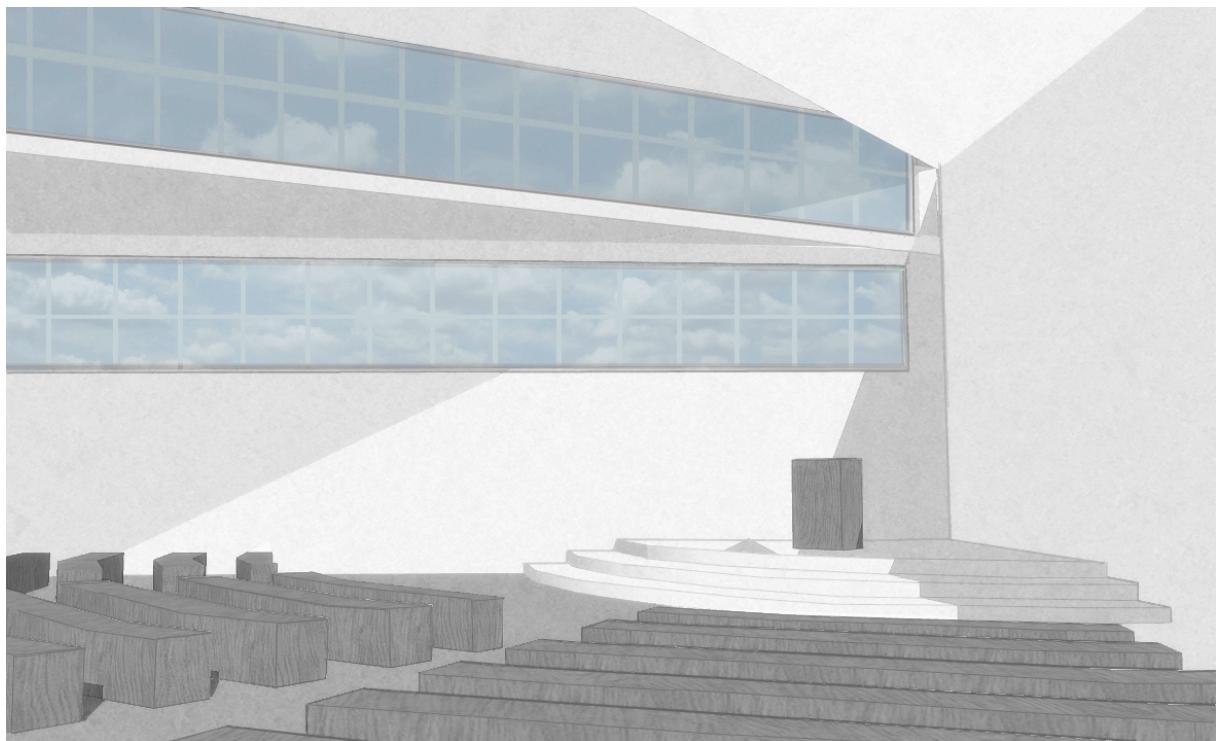


*Photo 40: The Church Building - Front/Side View*

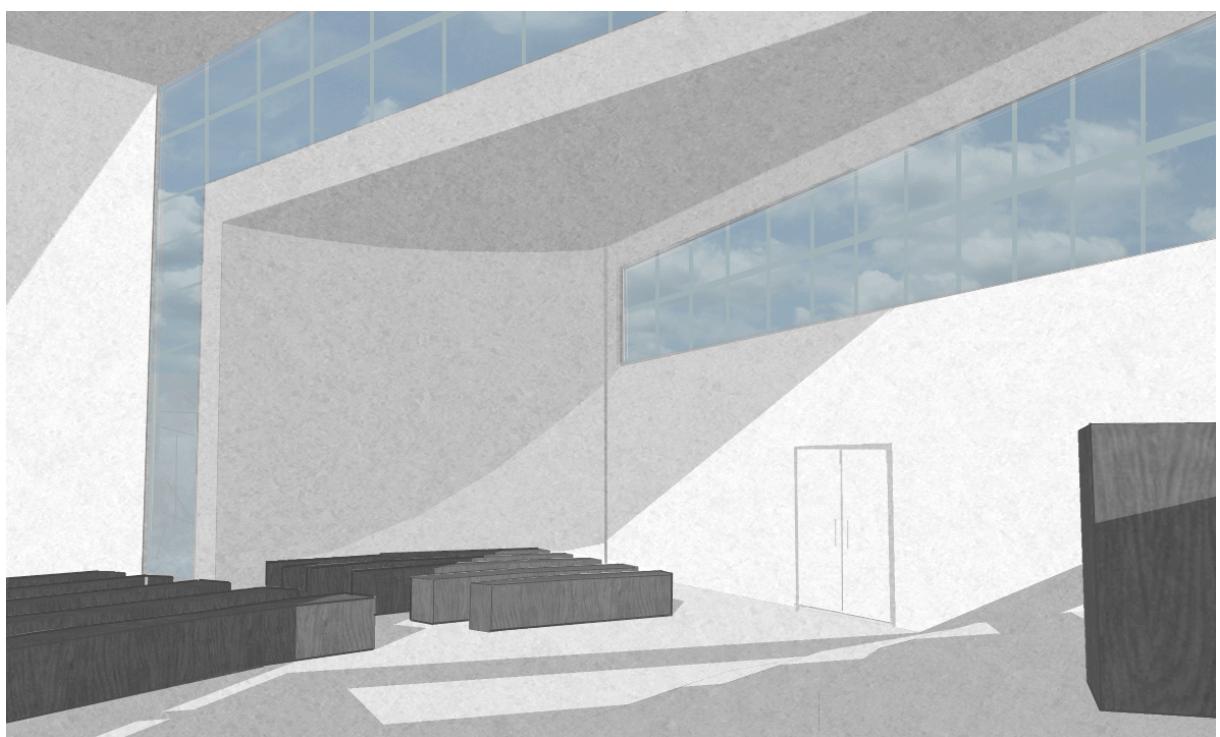


*Photo 41: The Church Building - Front View*

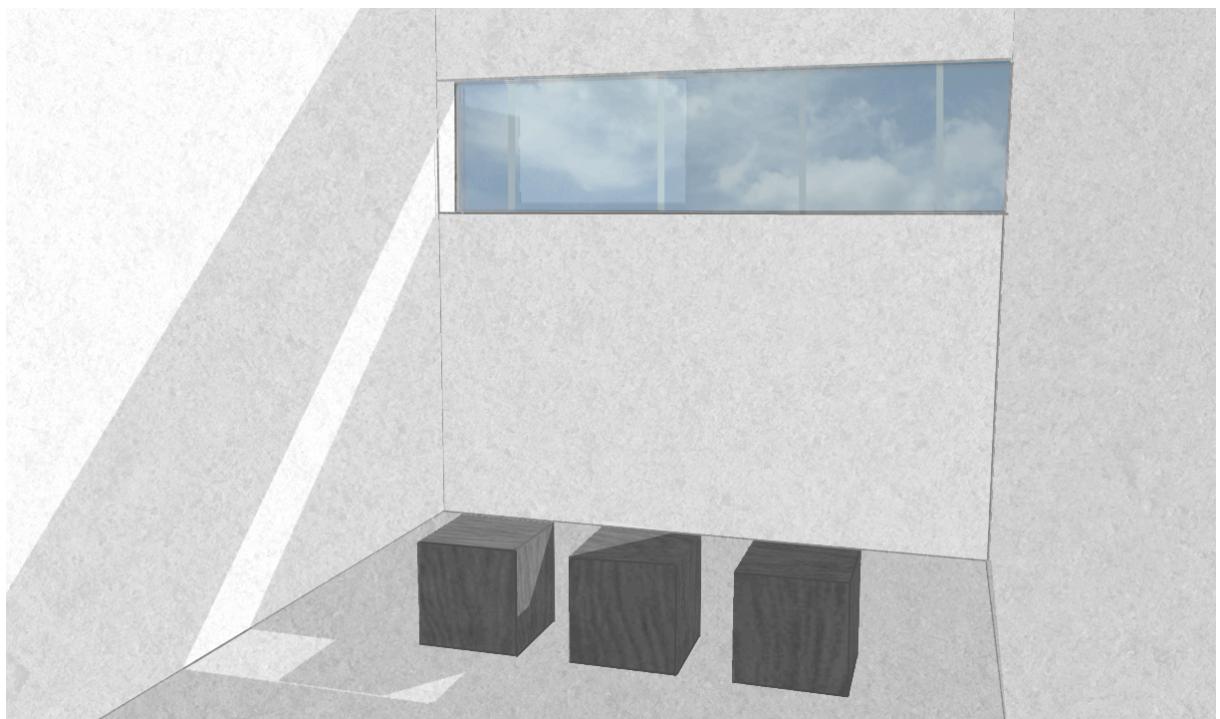
## **2.8.4 Interior:**



*Photo 42: Main Auditorium - View from the Back*



*Photo 43: Main Auditorium - View from the Front*



*Photo 44: Prayer Room - View from the Door*



*Photo 45: Foyer - View from the Main Door*

# Conclusion

The aim of this work has been to introduce a modern church building to people nowadays. For centuries church buildings have been delighting with they're astonishing beauty and bold designs. Through the research and the study of the subject I wanted to introduce my vision of the 21st-century Church in the Polish 'city of churches' - Kraków.

I also wanted to bring more revelation into the aspect of christian symbolism in architecture; to answer the question, what does the church building stand for nowadays and how it should be seen by people, not only the believers - magnificent, audacious, full of beauty and extraordinary symbolism; providing opportunities to connect with God in both levels - for oneself individual relationship with God, and for the church - standing before God as an army in worship.

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[www.hillsong.com](http://www.hillsong.com) [consulted on 25/04/12 - 16:50]

[www.audaciouschurch.com](http://www.audaciouschurch.com) [consulted on 20/05/12 - 14:50]

[www.andotadao.org](http://www.andotadao.org) [consulted on 21/04/12 - 16:20]

[www.tampacovenantchurch.org](http://www.tampacovenantchurch.org) [consulted on 15/05/12 - 13:50]

## List of Photos and Illustrations - Acknowledgements

All the pictures used in this work have been transformed by the author, Katarzyna Szczerbowska, for the design purposes and used from the following sources:

**Photo 1: Basilica of San Clemente, Rome, Italy**

source: <http://www.panoramio.com/photo/49278243>

**Photo 2: Santa Maria Maggiore, Rome, Italy**

source: <http://eng.archinform.net/projekte/7409.htm>

**Photo 3: Corpus Christi, Aachen, Germany**

source: <http://mofflinson.smugmug.com/Other>

**Photo 4: Liverpool Metropolitan Cathedral, Liverpool, United Kingdom**

source: [http://amydolphin.blogspot.pt/2010\\_11\\_01\\_archive.html](http://amydolphin.blogspot.pt/2010_11_01_archive.html)

**Photo 5: Willow Creek Community Church in Chicago, USA**

source: <http://blog.svconline.com/briefingroom/2009/04/14/danley-subwoofers-handle-the-low-end-for-willow-creek-church>

**Photo 6: Hillsong Church, Sydney, Australia**

source: <http://keringoh.wordpress.com/2010/07>

**Photo 7: Jubilee Church, Rome, Italy**

source: <http://www.artrabbit.com/uk/events/event&event=5999>

**Photo 8: Jubilee Church, Rome, Italy (Meier's Drawings)**

source: [http://www.e-architect.co.uk/exhibitions/richard\\_meier\\_exhibition.htm](http://www.e-architect.co.uk/exhibitions/richard_meier_exhibition.htm)

**Photo 9: Church of Light, Ibaraki, Osaka**

source: <http://www.greytheblog.com/2010/05/church-of-light.html>

**Photo 10: Tampa Covenant Church, Tampa, Florida, USA**

source: <http://www.designboom.com/weblog/cat/9/view/11845/alfonso-architects-tampa-covenant-church.html>

**Photo 11: Audacious Church (Central Campus), Manchester, United Kingdom**

source: <http://www.flickr.com/photos/paulbw/5997621516/sizes/l/in/photostream>

**Photo 12: Poland in Europe - Localization (Map)**

source: [http://upload.wikimedia.org/wikipedia/commons/7/74/Location\\_Poland\\_EU\\_Europe.png](http://upload.wikimedia.org/wikipedia/commons/7/74/Location_Poland_EU_Europe.png)

**Photo 13: Kraków in Poland - Localization (Map)**

source: [http://upload.wikimedia.org/wikipedia/commons/0/06/Poland\\_location\\_map.svg](http://upload.wikimedia.org/wikipedia/commons/0/06/Poland_location_map.svg)

**Photo 14: Kraków - the view of the Old Town**

source: [http://www.vedicclinic.com/assets/images/zakwaterowanie/Fotolia\\_8597277\\_S.jpg](http://www.vedicclinic.com/assets/images/zakwaterowanie/Fotolia_8597277_S.jpg)

**Photo 15: My Inspirations**

sources:

[http://3.bp.blogspot.com/\\_9CC3EjgnDts/TSOMBABCMyI/AAAAAAA3E/Vitf8HRitjg/s1600/SIW\\_WASH\\_LIBC\\_STAINED\\_GLASS.jpg](http://3.bp.blogspot.com/_9CC3EjgnDts/TSOMBABCMyI/AAAAAAA3E/Vitf8HRitjg/s1600/SIW_WASH_LIBC_STAINED_GLASS.jpg)

<http://christianlifeforgirls.webs.com/photos/The-Cross/sunset%20jesus%20cross.jpg>

<http://static.dezeen.com/uploads/2008/03/ring-dome-milan-sq.jpg>

**Photos 16-18:**

created by the author of the work, Katarzyna Szczerbowska

**Photos 19-21:**

source: [http://www.googlemap.com \(->Rondo Grunwaldzkie Kraków\)](http://www.googlemap.com (->Rondo Grunwaldzkie Kraków))

**Photos 22-45:**

created by the author of the work, Katarzyna Szczerbowska

## **List of Tables and Diagrams**

**Table 1-3:**

created by the author of the work, Katarzyna Szczerbowska

# **Annex**

## **Church of the 21st-century - Technical Drawings:**

Urban Design (Scale 1:500)

Plan (Scale 1:200)

Sections (Scale 1:200)

Elevations (Scale 1:200)

Details (Scale 1:10)