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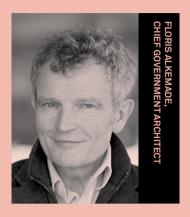
Churches are beacons in a world of change. In the Sublime beauty | Sublime sustainability competition, iconic churches and multidisciplinary design teams have joined forces to create sublime forms of sustainability. A combination of poetry and technology to adapt these buildings to changing uses.



Sublime beauty

Sublime sustainability

FOREWORD THE ASPIRATION





In the Netherlands, one percent of all buildings are monuments. We as a society have stated that we find this small group of buildings special.

Because of their beauty, scientific value or social importance. We agree to cherish the buildings.

That does not mean, however, that we want to freeze all those buildings in time. On the contrary: monuments are also constantly being adapted.

For the nine churches taking part in this competition alone, there are approximately one hundred metres of archives of building plans, drawings and photos. Change is therefore a constant. But we want to handle this change with care.

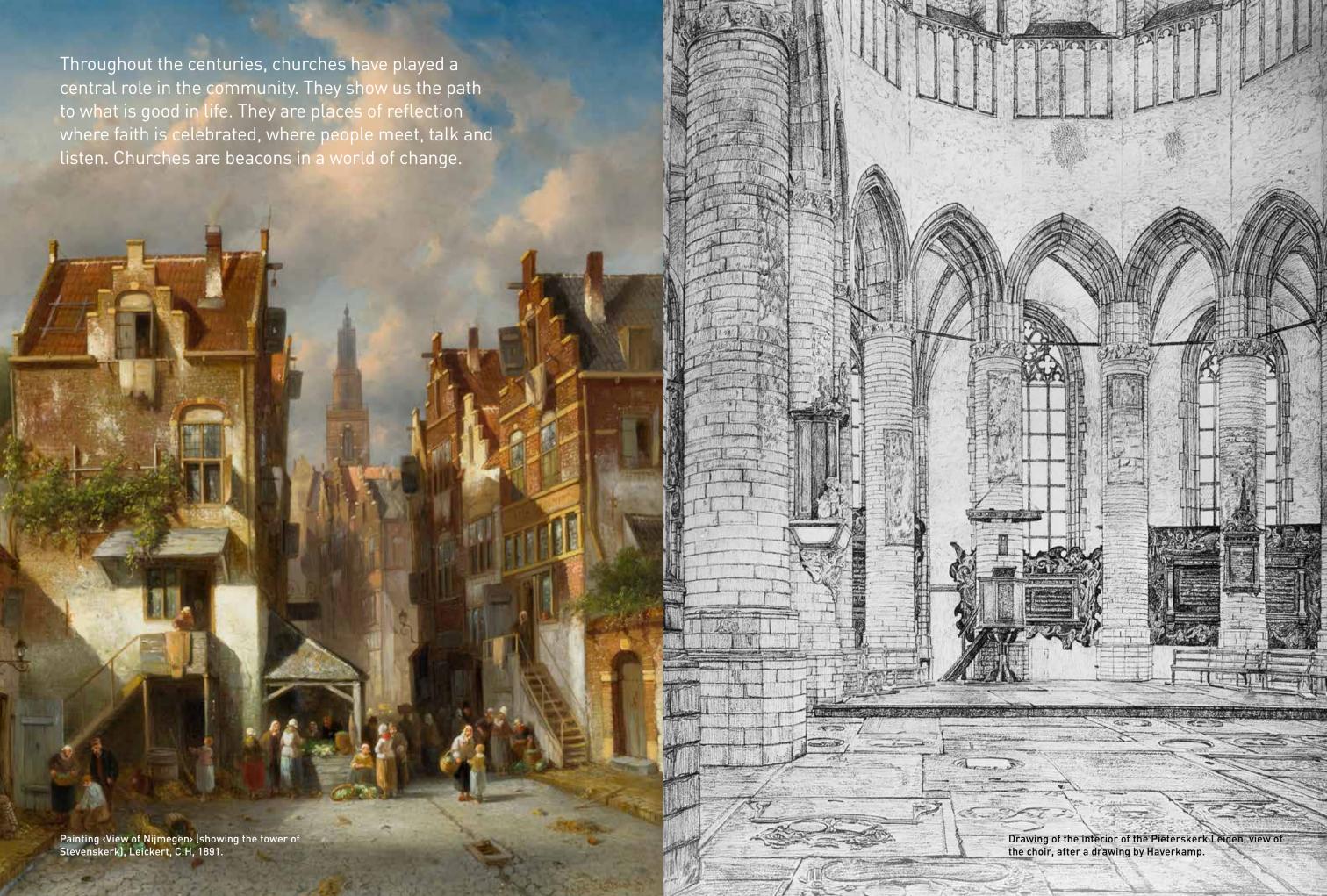
Sustainability is such a drastic change. Monument owners are also keen to make their buildings more sustainable. To make a contribution to climate change, and because it contributes to user comfort and utilisation. But the world of sustainability and the world of the monument do not always go hand in hand at present. In the case of sustainability, the focus is often on emissions, adaptation, efficiency and compensation.

When it comes to monuments, people tend to talk about identity, beauty craftsmanship and meaning.

The Sublime beauty | Sublime sustainability competition seeks to build a bridge between the two worlds by introducing a different way of thinking. By challenging interdisciplinary teams of designers and experts to put their imagination to work. By taking the special beauty of the monumental churches as a starting point, and at the same time looking for sustainability solutions that are also sublime in nature. After all, it is precisely the poetry of the buildings combined with the beauty of the technology that creates new opportunities. These solutions do not have to be slotted in or hidden away, but may be visible as interventions and add their own quality.

We hope that this approach will lead to actual sustainability among the nine participating churches. But even more so, to a different view of what the combination of a monument and sustainability is capable of. We hope that an aspiration for more has been awakened. For as the French writer Antoine de Saint Exupéry wrote: whoever wants to build a ship, do not call men and women together to give them orders, to explain every detail to them, to tell them where they can find everything. Instead, teach them to long for the vast endless sea.

Floris Alkemade, Chief Government Architect Susan Lammers, Managing Director Cultural Heritage Agency







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Nine iconic churches have joined forces to achieve sublime forms of sustainability. These church buildings each represent an exceptional and sublime architectural quality. They show what is possible when a community unites and brings out the best in itself. The Sublime beauty | Sublime sustainability competition has the same goal: to bring out the best that we have to offer as a community. But now in the light of the sustainability challenge.

The iconic church buildings turn out to have an equally extraordinary energy bill. This is not just a heavy financial burden for their operation that needs to be resolved. It is also a challenging task to investigate whether it is possible to achieve an exceptional form of sustainability. It calls for a combination of poetry and technology to adapt these church

buildings to changing usage requirements.

A development of knowledge and insights that could be significant for the whole of society, that is currently seeking a way forward in the need to make all aspects of our way of life more sustainable. How can we arrange our lives so that we do not leave a trail of destruction?

Courage, empathy and action

The poem 'The Hill We Climb' by Amanda Gorman ends with the lines: 'The new dawn blooms as we free it | For there is always light | If only we are brave enough to see it | If only we are brave enough to be it'.

Seen in this light, sustainability is also a task that calls for a combination of courage, empathy and action. The need for sustainability is felt and understood by the churches themselves, as part of our society. The guiding insight is that a church building stands for spiritual life in the broadest sense of the word.

The realisation, too, that the love and quality with which this place has been designed offers an example. From this point of view, a direction for the preservation of the building is emerging: it is not the church building that needs to be heated - it is not always necessary or sensible to heat or insulate the entirety of these large monumental buildings - it is primarily the people themselves who need to be heated. Based on this insight - with both a technical and a religious-cultural connotation - can other and more local heating methods be looked at in a completely different way, can other 'furnishings' be designed, or can part of the building be sheltered?

hree sustainability themes

The sustainability challenge in this competition is encapsulated in three themes: thinking about the use and comfort of the interior space, investigating energy connections that are possible with the environment, and establishing a connection with the environment as a social form of sustainability. Looking for an innovative way of thinking; focused, of course, on the specific characteristics and possibilities of the participating churches. But it is the explicit intention to arrive at insights that can also apply to hundreds of other churches and monuments in the Netherlands and beyond. The designs can serve as a motor for widely applicable and innovative forms of sustainability.

In the Sublime beauty | Sublime sustainability competition, design teams were asked to explore this combination of poetry and technology. Teams whose composition demonstrates that they have design, art or interior design skills, sustainability expertise and knowledge of the cultural aspects of these monuments.

The approac

The Sublime beauty | Sublime sustainability competition is a collaboration between the Cultural Heritage Agency (RCE) and the Chief Government Architect, with support from Architectuur Lokaal.

In preparation, De Groene Grachten consultants drew up an 'anamnesis' of each participating church building regarding the current and future use of the existing spaces and the associated energy consumption. Three of the churches are still in full religious use, the other six are mainly used for cultural purposes, although religious services are still held a few times a week in some of them. The invitation to take part attracted 37 submissions, from which nine interdisciplinary teams were selected to develop a vision on the three themes.

In the end, the jury asked three teams to translate their vision into concrete design sketches.

Theme: Interior climate

Team: Bureau Belén, De Groene Grachten, COUP BV in collaboration with Hylkema Erfgoed and Bartenbach. **Participating churches:** Pieterskerk Leiden, Stevenskerk Nijmegen, Grote Kerk Zwolle.

Theme: Energy connections

Team: ABT, Obscura, in collaboration with Lesia Topolnyk. Participating churches: Oude Kerk Amsterdam, Der Aa-kerk Groningen, Grote Kerk Naarden.

Theme: Connections with the environment

Team: Braaksma & Roos Architecten B.V, Inside Outside, Antea Group b.v Participating churches: Koepelkathedraal Sint Bavo Haarlem, Sint Jan Kathedraal Den Bosch, Domkerk Utrecht.



The jury

For the composition of the jury, the mirror image was sought of the expertise that the multidisciplinary teams possess: knowledge of design, sustainability and heritage.

Because nine iconic church buildings are involved, the jury was also supplemented with expertise in the field of the church and the church building.

The jury was responsible for selecting the teams, and also assisted the final three teams in their design process.

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ON THEIR
PARTICIPATION
IN SUBLIME
BEAUTY | SUBLIME
SUSTAINABILITY

'I was very curious about the ideas this competition would produce. Fortunately, it produced a wide variety of surprising concepts and solutions for the future of the iconic church and its city. It is great to see how the teams not only studied the architecture and the use of the building, but also its history and how it relates to its location in the past and present.'

Patty Wageman, director of the Old Groningen Churche Foundation and representative of the Great Churches Consultative Committee

Our task as RCE is to give the future a past and the past a future. This competition is about exactly that: providing a sustainable future for these iconic and historic buildings.'

Susan Lammers, Director Cultural Heritage Agency

from an energy point of view. And yet this competition was set up with the expectation that, when it comes to sustainability, we can learn much from the sublime and timeless qualities of these church buildings. Everything that emerges as a problem in these buildings is at the same time the key to new insights and developments that will also benefit other church buildings. And by extension, the insights we gain here can add a substantial new track to the pursuit of sustainability in the broadest sense of the word.

Floris Alkemade,
Chief government architect

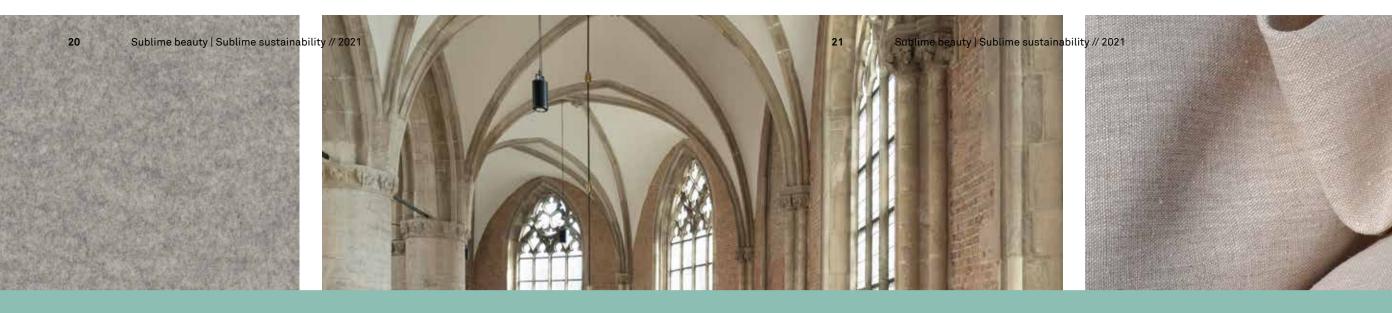
Peace, space and inspiration...
As a theologian and architect,
I know from experience how
centuries-old church buildings can
lift you out of your everyday turmoil.
They are oases in the city that can
be of great significance for future
generations.

Willem Jan de Hek, pastor Protestant Distric

'A church is a strange object in a city: usually in the middle, imposing and mostly empty. At least, so it seems. But a churc also houses centuries of history, graves, the hopes and sorrows of many individuals. Bringing back comfort, ensuring sustainability without violating the integrity of the church, a fantastic task.'

Laetitia Ouillet, chairperson of energy cooperativ De Windvogel





THEME 1 //
INTERIOR
CLIMATE:
ABOUT WARMTH
AND COMFORT

The key question for many churches is how to use the building more intensively, preferably in combination with reducing energy costs and increasing comfort.

What does this combination require against the background of the high cultural value of the churches?

For example, many churches now have to heat up for days before they can be used. And some are even (partly) closed during the winter months. They also suffer from draughts and cold spots along the windows, or they spend a lot of money on energy costs to keep the indoor climate pleasant. The design question was therefore whether it was possible to create designs that could intensify use and improve comfort.



Pieterskerk Leiden
Gross floor area
2.500 m²
Energy consumption
compared to average church
Gas 1.3 x church
Electricity 1.6 x church
Comfort The church is equipped
with underfloor heating,
radiators and convectors.
The indoor climate is good
because draught excluding
measures are taken.
Energy consumption is higher
than average.



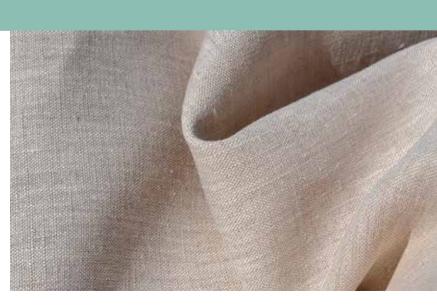
Stevenskerk Nijmegen
Gross floor area
2.500 m²
Energy consumption
compared to average church
Gas 0.9 x church
Electricity 0.5 x church
Comfort The church is closed
100 days a year due to poor
indoor climate. On colder days
the heating has to be turned u
well in advance and there is a
cold draught by the windows.
Work is already underway to
modernise the heating system
and insulate the side chapels
so that they can be used as
separate rooms.



Academiehuis
Grote Kerk Zwolle
Gross floor area
2.500 m²
Energy consumption
compared to average church
Gas 0.9 x church
Electricity 0.4 x church
Comfort In the summer, the
church has a pleasant indoo
climate.In the winter, it is
uncomfortable due to cold
and draughts. The Chancel
is therefore not hired out in
principle in the period from
October to March.







PIETERSKERK LEIDEN

22

Year of construction 1390-1570 | type of church Gothic crucuform basilica | Ownership/Management Pieterskerk Foundation Leiden | Average number of visitors 200,000

The Pieterskerk has a Romanesque predecessor from the 12th century. This church was consecrated in 1121 and therefore, in 2021, the Pieterskerk will be 900 years old. The city of Leiden owes its emblem of the keys to the patron saint Peter, who gave the Pieterskerk its name. The Pieterskerk is the oldest parish church in Leiden, closely linked to the university. It is located in the middle of the city, surrounded by other old buildings. The church is known for its Bach concerts such as the St. Matthew Passion and the Christmas Oratorio.

In addition, the church has strong international ties through the connection with the university and the Pilgrim Fathers.

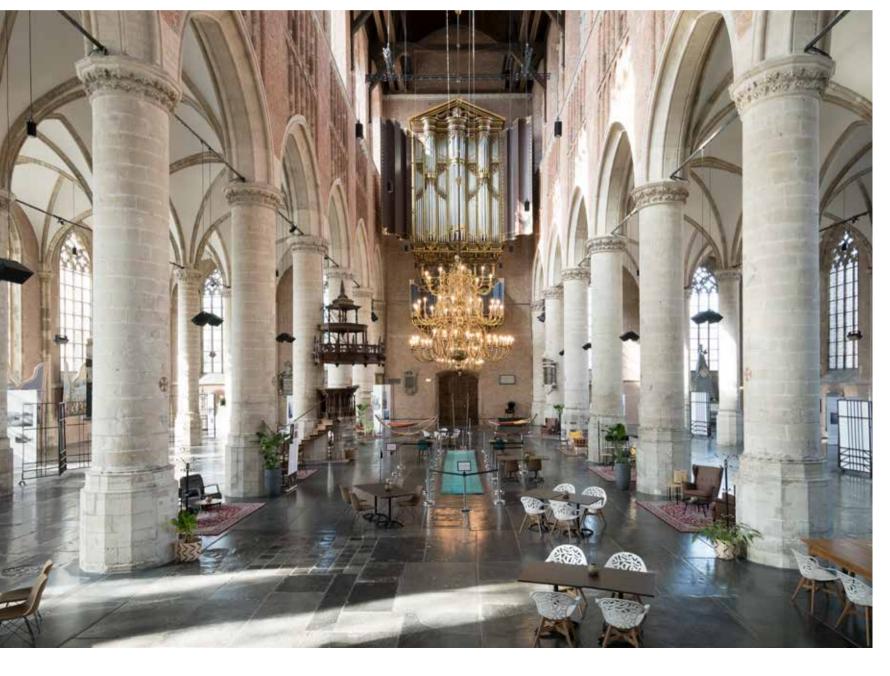
Use

23

The church is used intensively throughout the year. For a fee, visitors can tour the church and visit a permanent exhibition about the Pilgrim Fathers. In addition, the church is used as an event location for (cultural) activities approximately a hundred days a year.

Ambitions for the future

The Pieterskerk wants to move towards a hybrid situation so that the church can be used more intensively. On the one hand in its museum function, on the other hand as an event location. Energy consumption will have to be adjusted accordingly.



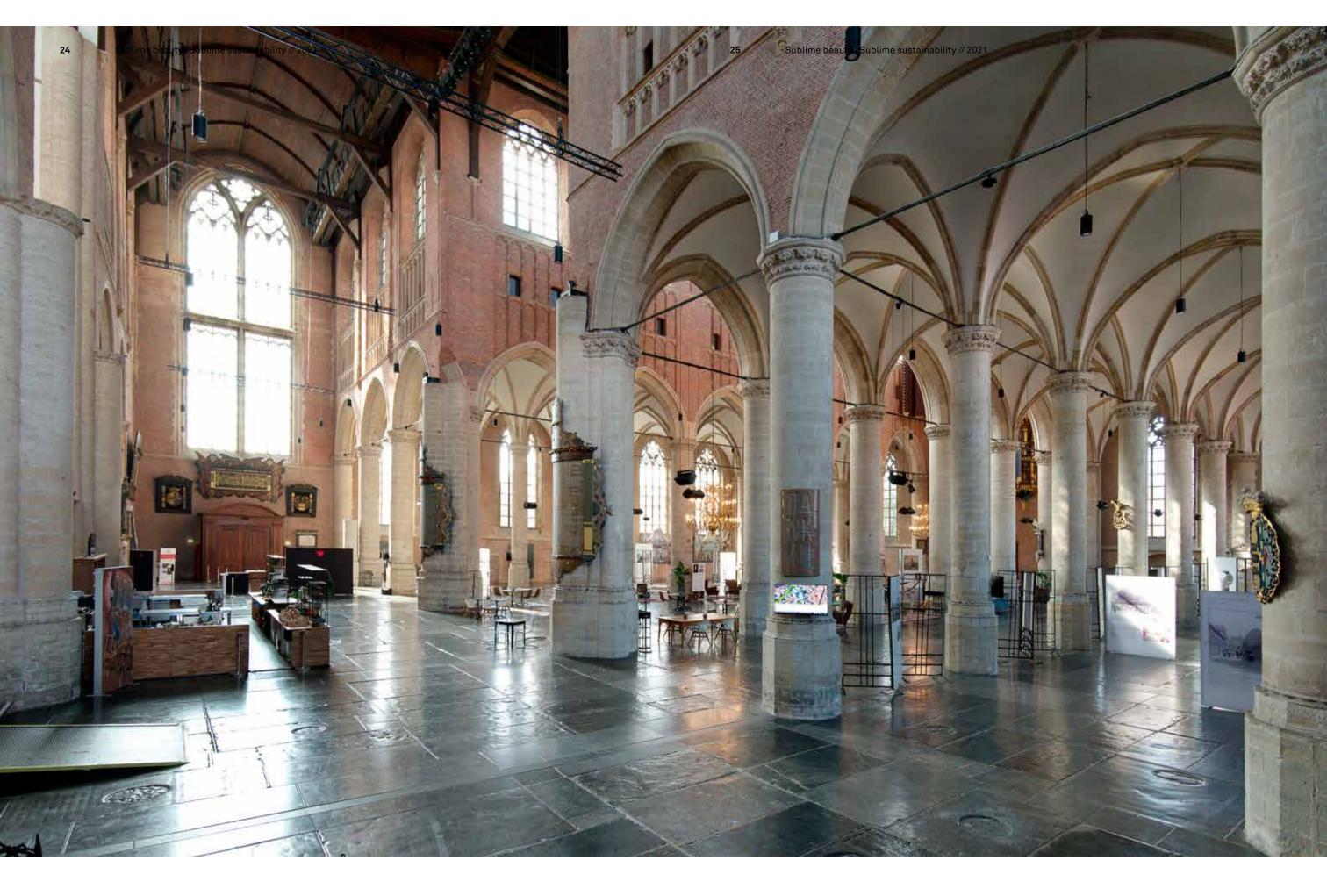






'I would like to give the Pieters Church a public place in the city. Even more than is already the case.'

Frieke Hurkmans, Pieterskerk Leiden



STEVENSKERK NIJMEGEN

Year of construction Mid-13th century | Type of church Late
Gothic cruciform basilica | Ownership/Management Stevenskerk
Foundation | Average number of visitors 132,000

The church is located in the oldest part and at the highest point of the city. It is surrounded by and somewhat hidden behind other old buildings. The church was damaged during bombing raids in the Second World War. In the years after the war, the church was thoroughly restored and reopened in 1969.

Use

The church is open all week from April to November for visitors. The church is also used for various events. A church service is held on Sunday morning.

Ambitions for the future

The Church's ambition is to tell and experience the story of the Church in connection with the story of the city. Cooperation is sought with other (cultural) institutions in the city. The aim is to be functional all year round.

'The church tells the story of the city. But like the city itself, it would be good if the church could be open all year round.'

Heleen Wijgers, Stevenskerk Nijmegen











ACADEMIEHUIS GROTE KERK ZWOLLE

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Year of construction 1406-1466 | Type of church Triple-aisled hall church | Ownership/management Academiehuis de Grote Kerk Foundation | Average number of visitors 150,000

The present church was built on the site of a smaller Romanesque church dating back to 1040. On 17 December 1682, the highest tower in the country at the time collapsed. In 1686, an eight-sided consistory hall was built in the place of the tower, so the church no longer has a tower. The Academy House is the largest national monument in the city and stands right in the centre. The church maintains close relations with the businesses and residents immediately surrounding it and can be seen

as an indoor piazza that connects the adjacent open piazzas.

Use

The church is open five days per week for a variety of activities. It also functions as a museum.

Ambitions for the future

The role as a *third place* for the city is developing strongly and is being given shape by, among other

things, a new layout. The ambition is to be a connecting place, a beacon in the city, cooperative and focused on crossovers where word, music and art are central. Hence the name Academy House: a place that connects, enriches and amazes.



'Thanks to its location, the Grote Kerk can become an important part of the urban fabric of the city.'

Coby Zandbergen, Academiehuis Grote Kerk Zwolle







Team 01 Food for thought

launch of the competition. All parties, each from their own field of work, had been confronted with the issue of how to increase the use of a church in a sustainable way. Through previous collaborative ventures, we immediately knew what we could expect from each other. We went through the various stages of the competition with great enthusiasm and pleasure. In order to reach a solution on the level of 'haute-couture with ready-to-wear potential'!

The following points made us a team that was both or the same page and complementary to each other throughout:

- We share the same values and feel it is an important mission, and we share a passion to contribute to finding a sustainable, valuable future for church buildings.
- All three are based on an integrated, multidisciplinar and co-creative approach.
- We go for an innovative and ambitious result.

- We have known each other for a long time and have experienced a good click in our collaboration.
- We complement each other: deep insight into opportunities and challenges of the church issue at the heart of COUP and De Groene Grachten; knowledge of building history from Hylkema; and poetry and imagination as Belén's trademark.
- We are experienced in designing for and in redeveloping churches.

City churches have traditionally been a focal point. The church was central and almost everyone was connected to it. Both in society and in the urban fabric, the church was a safe haven.

An inspirational place to come together, to care for each other and to reflect. Repurposed churches have lost their religious significance, but not their history. We see it, in a time of rapid change, as an opportunity to give new meaning to the emptiness that has arisen. To create a historic space of relative calm in today's busy, compact city. Where it is comfortable to spend some time and where we can think, reflect and ground ourselves.

FOOD for thought builds on three lines of inspiration.

- 1) We are passers-by in time. Generation after generation will want to use the church buildings in their own way. Like nomads, we set up our tents in the desert, passing through. We huddle together to get warm quickly. We have designed small-scale textile solutions. Flexible, light, simple, they do not detract from the sublime beauty of the buildings of the past, but rather enhance it.
- 2) The sublime beauty of paraments. Liturgical textile objects (paraments) made of wool, linen, velvet and gold cloth, often richly decorated with Christian symbols and images, completed church interiors with "movable beauty elements" for centuries. Garments such as cloaks and tunics were both functional (warm) and an enchanting part of religious celebrations. Which, together with the spatial experience, the organ music and songs, the stories depicted and told, took people to a different level. Lifted out of the mundane. By connecting to this past, we bring both a new beauty and a new meaning to the church, which today's church-goer can rejoice in.
- 3) Selective and targeted heating. Sometimes we want to use the whole church and sometimes only a part of it. By compartmentalising as closely as possible to the church users, it is possible to insulate and heat in a targeted and sustainable manner. >>

I found the contest format strong, besides the other team motives. Looking at it simultaneously from different perspectives really enriched our results and, I think, all the competition results. Inspiring to be able to make the churches really more accessible with our additions!

Heleen Agterhuis, COUP heritage transformation consultants and heritage developers

Heritage provides a basis for the future. Textiles are an ancient application and yet innovative. Working together on new ideas for old problems is particularly inspiring!

Reinoud Pince van der Aa, Hylkema Heritage, senior adviser

The design: poetry and technology

Our design consists of a series of modern 'paraments', with which we can offer the possibility of a flexible church creation: with regard to functions, numbers of persons (1-100+) and compartmentalisation for heating and lighting. Textiles as a medium between people and architecture, in the following forms:

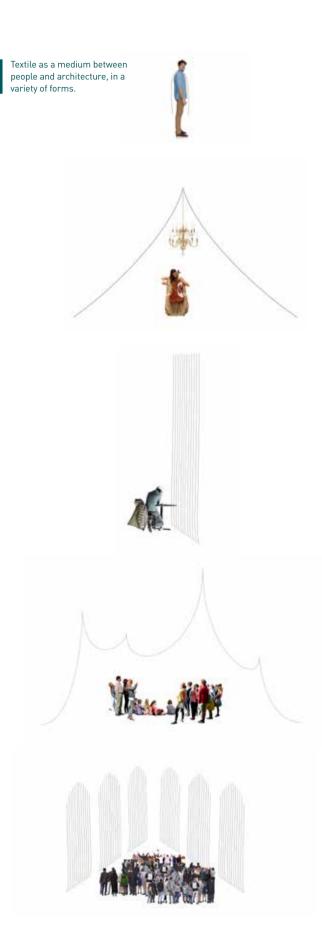
- chasuble (garment)
- small window tent
- small chandelier tent
- chapel curtain
- large tent
- part curtain

We apply materials and colours that can add value to the sustainable concept in their 'natural' colour expression in terms of both warmth and acoustics. Basic textiles that were traditionally common in the church: wool (warm and cushioning), velour (deep and falling), linen (sober and cool). And innovative textiles that can contribute something to the function and/or atmosphere of the church: mycelium (soft and earthy), mirror foil (spectacular and insulating), graphite textile (radiation-free and anonymous), FeatherSilk (shiny and moving). Environmental impact, flexibility and circularity are important considerations.

The new paraments play with the possibilities offered by the existing architecture, from the religious past, without affecting it. The verticality of the constructions, which is aimed at establishing a connection between the earthly, profane, and the religious, sacred, remains in full force. We are inspired by the specialised craftsmanship developed in religious architecture, where the visitor is physically and mentally immersed in another world. >>



Peter Oussoren, COUP heritage transformation advisers and heritage developers



Energy and warmth

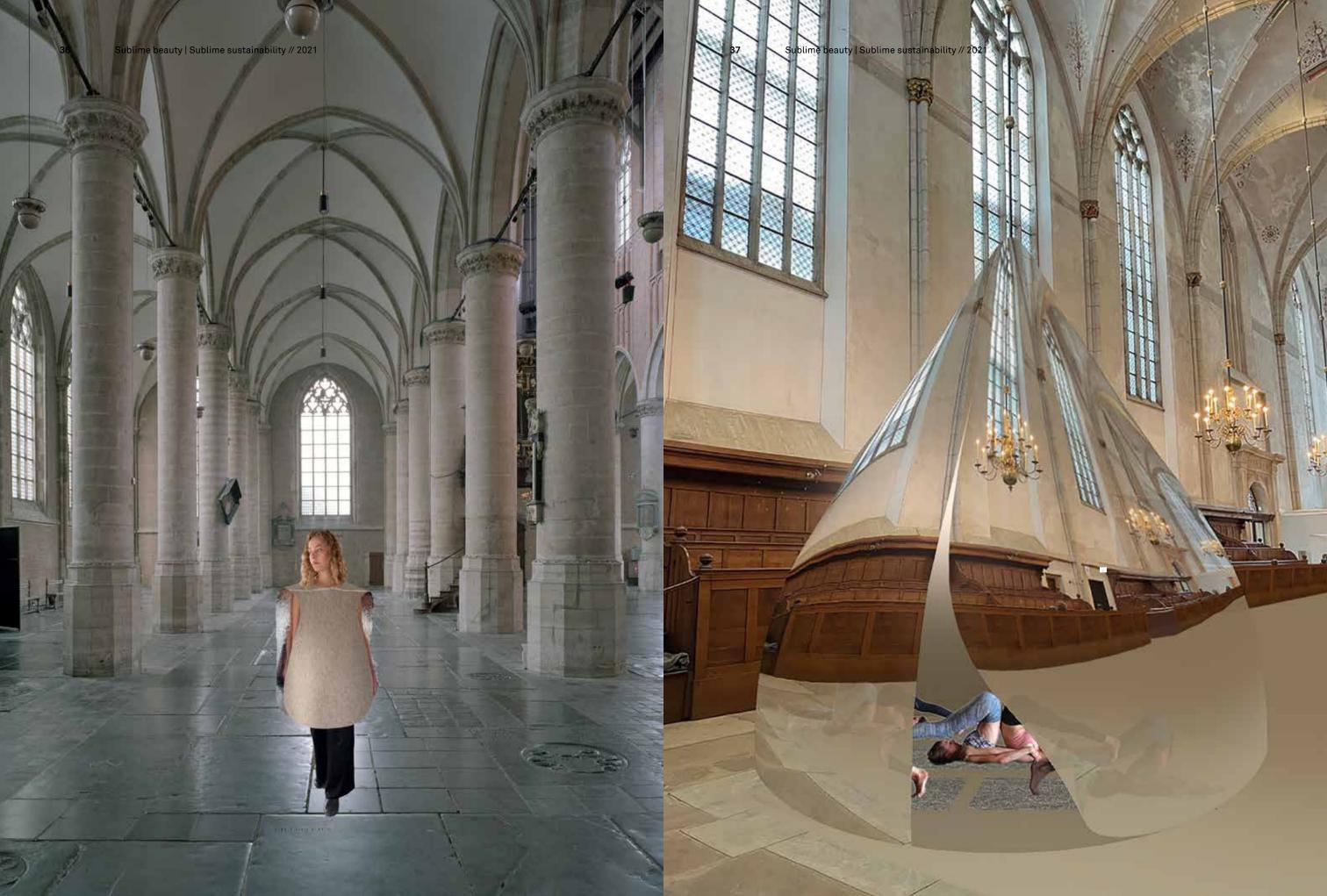
Compartmentalisation creates a more insulated space, which can be heated more effectively and feels more comfortable. After all, we, as walking heaters, lose more heat to cold stones than to textiles. This allows us to have a lower base temperature in the large room (max. 15 °C) or even keep the rest of the church hall unheated. In the latter case, savings of up to 50% can be made on gas bills (depending on frequency of use, structural condition, installation and climate). Calculations show that the savings potential is greatest with tent shapes (depending on the type of fabric and number of people in the tent). >>

Churches are buildings with a soul. Built up over many years. We find this very valuable and are keen to consider how we can enrich it even more through material and new interpretation.

Lenneke Langenhuijsen en Brecht Duijf, Belén, designers



The verticality, aimed at establishing a connection between the earthly and the sacred, remains present in all its glory.



It should be noted that in practice the net savings may be lower. This is because we are increasing the utilisation of the church. As a result, energy consumption increases proportionally. Relatively speaking, the aim is to reduce the heat demand per user. In other words, we want to attract more users and reduce energy consumption.

Experience value

The experiential value of church buildings also gains an extra dimension with the addition of modern paraments. We create contrasts; between stone and textile, hard and soft, uncompromising and flexible. These contrasts will stimulate visitors and prompt them to ask questions and reflect on the beautiful churches. At the same time, the textile forms leave the building and its sublime beauty visibly intact. As a result, there will be little emotional resistance from stakeholders in relation to the architecture, which is meant to be passed on from generation to generation.

Operation

Customised compartmentalisation makes it possible to heat in a targeted manner and to create comfort zones appropriate to the various functions. Due to the flexibility of this system, a church owner is not tied to one or a limited number of functions. This means a higher occupancy rate for the operation, which can lead to more income. >>

Many churches are struggling with this: the energy bill is rising while the occupation rate is falling. The competition was the perfect opportunity to dust off this issue. Together, we can make a difference!

Jill Vervoort, Jasper Vis, De Groene Grachten, sustainability advisers







Sublime applications

Academiehuis Grote Kerk Zwolle wants to be able to organise several small and medium-sized activities next to each other with chasubles, small chandeliers and sectional curtains, and thus be a vibrant meeting place throughout the week. Conservatory students can rehearse with an audience, screened by a partial curtain, while a yoga class takes place in the chandelier tent. The following day, there is a conference and the chandelier tents serve as breakout rooms.

The **Pieterskerk Leiden** focuses mainly on large events and may want to diversify after the corona period. The team sees opportunities and would like to experiment with a large tent above the choir as a pop-up café or study area.

Serene meditation rooms and a festive centrepiece for the 750th anniversary of the **Stevenskerk in Nijmegen** with small window tents and a sparkling chandelier tent made of mirror foil. In the Stevenskerk everyone is welcome to walk in or take part in an activity, the tents can be used as required. Are they not needed, or are they in the way? Then you fold them up or push them aside, where, even when not in use, they form a beautiful whole with the sublime architecture of the church. ||

Ideally, I see church buildings in the future as inclusive and multifaceted places of gathering. I hope that FOOD FOR THOUGHT contributes to this.

Dewi Kuen, COUP heritage transformation consultants and heritage developers



Due to the flexibility of the system, a church owner is not tied to one or a limited number of functions.





THEME 2 //
ENERGYCONNECTIONS:
ABOUT THE ART
OF CONNECTING

Can churches become a source of energy themselves of participate in a larger urban network of sustainability? In addition, churches have large roofs, which receive a lot of rainwater. Could that water be reused? A number of churches are close to a canal: are there interesting linking possibilities here? The specific design question here was: come up with design proposals that deal with the local generation of energy and/or the exchange of energy and/or the collection of water for the benefit of the immediate surroundings.



Der Aa-kerk Groningen Gross floor area 1,750 m² Energy consumption compared to average church

Electricity 0.5 x church

Comfort Both in the winter and nother summer it can be cold in the church, resulting in the church being used less in the winter. The draught lobbies have taken away part of the



Grote Kerk Naarden Gross floor area 2.000 m²

Energy consumption
compared to average church
Gas 1.3 y church

Comfort The combination of recently modernised air heating and underfloor heating mean that the church can successfull be heated. Because fresh air is also introduced, the interior climate can be described



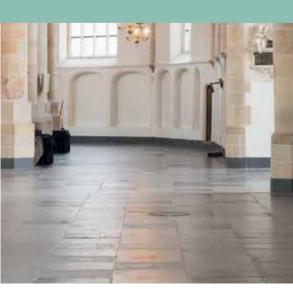
Oude Kerk Amsterdam Gross floor area

Energy consumption compared to average church

Comfort The church hall is unheated; the other areas are heated. There is leakage of hea between the large volume of th church and the side rooms and annexes The lighting system was replaced in 2019 with a new LED installation.







OUDE KERK AMSTERDAM

Year of construction 1306, expanded between 14th and 16th century | Type of church Aisleless church which has been expanded to a hall church with several naves | Ownership/management Oude Kerk Foundation | Average number of visitors 135,000

The Oude Kerk in Amsterdam stands for connection and controversy, tradition and renewal. The church has a reputation as an art venue where artists explore contemporary issues, and it presents part of the city's oldest history. By bringing together heritage and contemporary art, the Oude Kerk adds new pages to (art) history and engages people with diverse backgrounds and interests. The church is located in the middle of the red-light district, which is overrun by tourists, and is also in a protected cityscape with a Unesco label.

Use

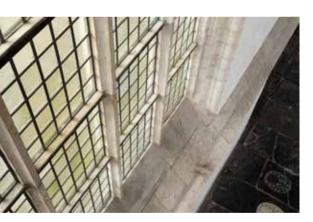
The church has a cultural function as a stage for contemporary art and music for local and (inter)national visitors. In addition, the church is a museum that can be visited every day. There is also a church service attended by the Oude Kerk congregation every Sunday.

Ambitions for the future

The foundation has two main pillars: maintaining the monument and making it accessible to the public by

means of art and heritage. The church still serves as a place of worship. There are a number of maintenance actions on the agenda that may lend themselves to a more sustainable approach. There is also a local initiative called Green Light District that activates and inspires the neighbourhood to become more sustainable, which may provide opportunities for connections at the neighbourhood level. There is also an ambition for the church to work on its own energy generation.



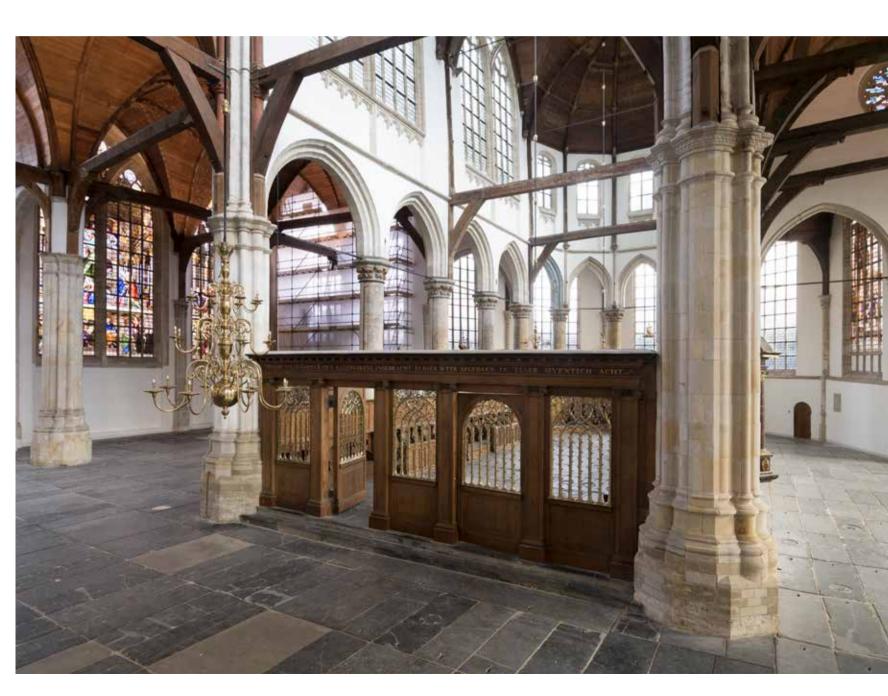






'Perhaps the amalgam of buildings on and around the church reflects our complex relationship with the city. However, it also demonstrates our connection to the city.'

Emma van Oudheusden, Oude Kerk Amsterdam



Year of construction 1425-1492 | Type of church Hall church |
Ownership/management Old Groningen Churches Foundstion

The church is situated in the middle of the city, making it a perfect meeting place. The sacristy was built around 1500. The upper floor and the extension were built in the 17th century. The consistory on the north side was built in 1950, replacing a wooden consistory from 1906. The church was restored at the beginning of the 21st century. The entrance was renewed and toilets and a room for catering were renovated.

Use

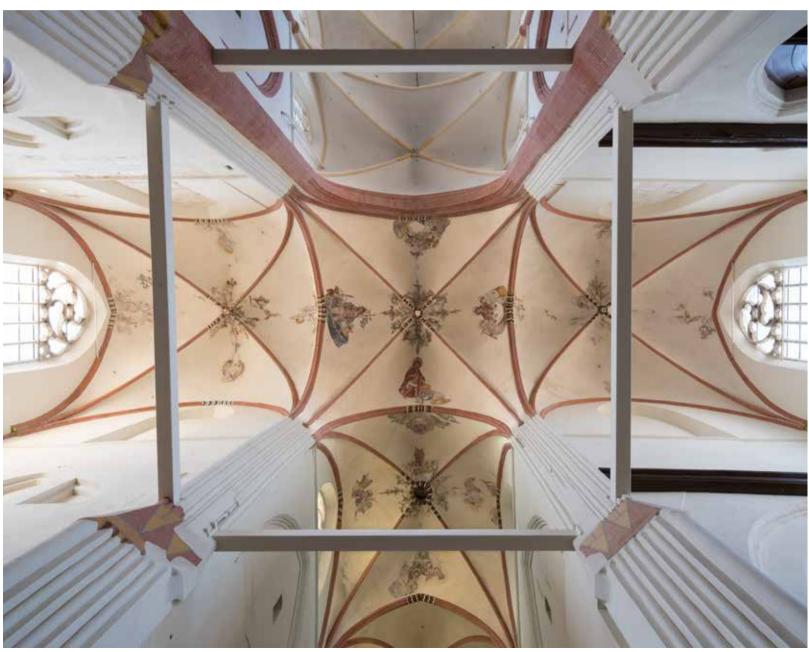
The church is currently rented out all year round for concerts, events and exhibitions, and, based on its unique history, it presents itself as a meeting place and centre for the arts.

Ambitions for the future

The Der Aa-kerk wishes to improve its utilisation considerably. At present, the space is rented out primarily for events such as concerts and short

exhibitions without any real connection to the character and story of the church. The wish is to move to own programming with permanent exhibitions and appropriate continuous use of the building. For this, the idea is to establish permanent catering facilities in the church and, where possible, to include the currently rented out annexes in the future plans. One of the sustainability questions is whether there are possibilities for linking to the surroundings, for example with regard to the collection of rainwater.





'From now on we are going to do more of the programming for the church ourselves. In doing so, the focus will be on connecting with the city.'

Patty Wageman, Der Aa-kerk Groningen



GROTE KERK NAARDEN

Year of construction 1455-1518, church tower is older | Type of church Late gothic basilica | Ownership/management Grote Kerk
Naarden Foundation | Average number of visitors 50-60,000

The Grote Kerk Naarden is located in the middle of the Naarden fortress with its characteristic star-shaped ramparts and pattern of moats. The church is built on the remains of its predecessor, of which only the tower remains. Next to the church are two lawns surrounded by many monumental buildings, some of which are owned by parties committed to the sustainable management of monuments. The wooden barrel vault of the church has exceptionally well-preserved 16th-century paintings, which were on display in 2021 and attracted many interested visitors. The church is also known for the performance of the St. Matthew Passion, where some members of the Cabinet make an appearance. This tradition was added to the National Inventory of Intangible Heritage on 15 September 2021. The building is known for its appearance and atmosphere. It is said that the church 'embraces' people, regardless of the size of the group of visitors.

Use

The church is open to visitors during the summer months. Since 2020, it has also been carrying out its own programming in the field of heritage and music. In addition, the church is rented out for business events and privately for weddings and funerals. On Sundays there are services attended by the Protestant Community of Naarden.

Ambitions for the future

The Grote Kerk Naarden would like to increase its level of use, whereby the church tells its own story through a semi-permanent heritage experience, in line with other heritage institutions in the region. Music remains a central programme line alongside heritage, with the church managing its own programming. The focus is on business rentals that suit the building. This is done in cooperation with other business event locations in the

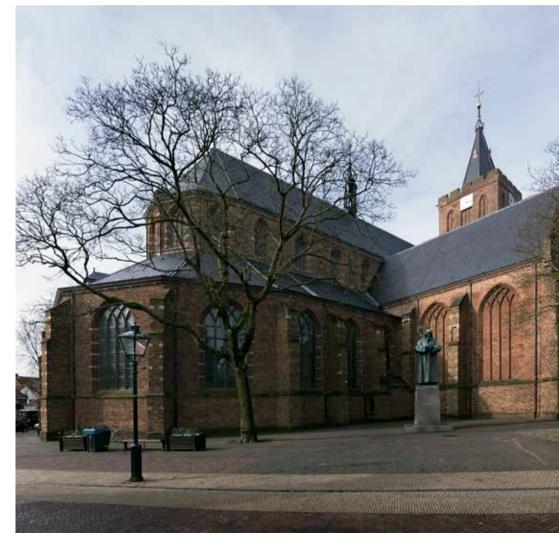
Gooi region. One question is whether and how heat generation can be made sustainable in relation to the growing wishes for its use. For example, are there opportunities for interaction with the monumental surroundings, or does the water from the surrounding moat offer possibilities?

'The Grote Kerk is called the beacon of Holland. For centuries, it has been a landmark and anchorage for many. We want to make those layers of meaning visible and accessible.'

Ellen Snoep, Grote Kerk Naarden









Team 02 de musica mundana

ABT is a renowned structural engineering company and is proud of its inventive solutions for the construction industry. Within its tasks as a structural, building physics or installation technology consultant, it tries to set new standards. ABT and the Oosterhoff Group would like to use their knowledge and experience as springboards for young creative talents. Talents both inside and outside their organisation.

For this task, ABT proposed to collaborate with Obscura, Katarzyna Nowak (artist) and her partner Jens Jorritsma (researcher). They have attracted the attention of ABT with their work which focuses on the characteristics of the interior space context. ABT also approached Lesia Topolnyk (researcher). What appeals to ABT in its work is the political and democratic significance of architecture, its multidisciplinary approach and its ability to grasp complex issues.

Within ABT, Angelique Kamsteeg was approached for experience with cultural heritage, Maria Sara di Maggio for her knowledge of building physics and installations and Di Fang for her knowledge of urban planning. Peter Mensinga advises the group on sustainability and climate strategy. This has led to cooperation between designers, esearchers, artists and specialists in the fields of cultural heritage, urban planning, sustainability and building physics and installations.

Increasing the sustainability of the iconic churches of the Netherlands requires solutions that go beyond the functional requirements to become more energy efficient. It calls for a dynamic design that responds to the wishes and ambitions of the church owners, its use, its monumental values and current social issues. In our vision for the competition Sublime beauty, Sublime sustainability, we depict the church as a metabolic resource. The church becomes a source of continuous exchange of flows that reach from its interior to the urban level, from outside to inside and vice versa. The church as a source of energy, water, temperature change, clean air, food, activities, recreation and inspiration. But also a source of social and local regeneration, a place for meeting and discovery.

We are pushing the limits of our imagination with this transformation. We ask ourselves the question: "What can we add to these monumental city churches so that they are an enrichment of sublime beauty and sublime sustainability that will give the churches a more central place in our society?"

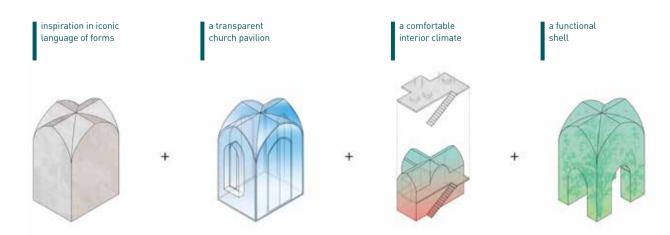
With this ideal image in mind, we visited the Grote Kerk in Naarden, the Der Aa-kerk in Groningen and the Oude Kerk in Amsterdam. During these visits, we were told about the history of the churches, the symbolic meanings, the restorations, the modernisation of the climate system, the wishes and ambitions of the churches. We were invited to visit the invisible parts of the churches. In Naarden, we saw the painted barrel vaults up close, in Groningen we walked over the massive barrel vaults and in Amsterdam we climbed on the roofs of the Oude Kerk.

To realise our ambitions in a way that respects and values the existing heritage, we see the need to expand the churches with a new volume. The concept of a conservatory on the south side of the church gives us the opportunity to make this a reality. A transparent space with its own distinctive climate, which contributes to the interior climate of the church, is a source of food and energy and is part of the water management system. A preliminary thermal calculation after the first visit to the churches yielded a volume with a facade of about 10 x 20 metres. Spatially, both in terms of the urban context and architecturally, this seems to fit well intuitively. With this, the contours of the Sublime Pavilion have been laid down.

The architecture and spatial language of the pavilion was examined for each church in the relationship between form, scale, perception and location in relation to the church(s). The genius loci, determined by history, architecture, immediate surroundings and cultural-historical values, require a unique interpretation. So we end up with three churches with three unique effects. >>

The assignment appeals to me enormously because it is a challenge to find a 'sublime solution' in making monumental churches sustainable. It is always a difficult task because there is no standard solution, but a balance must be struck between old and new/technology and aesthetics. It is essential that the churches meet today's standards, so that they can lead a new life in today's society. I am delighted to be able to do my bit.

Di Fang, design coordinator ABT



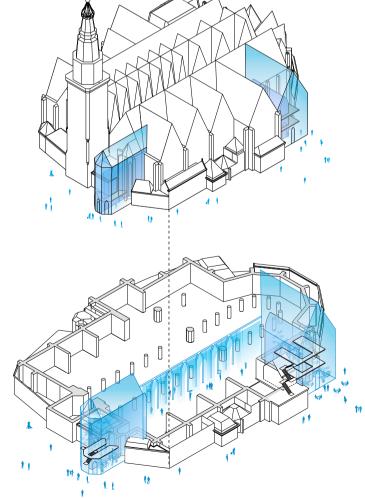
The mass and void forms, the visible and invisible parts of the church are part of the spatial concept. Characteristic architectural elements – such as the chapels, the church tower, or the side aisles – form the iconic shape language of the pavilion. This is interpreted in a contemporary way through the use of modern, transparent materials. The proportions respect the existing, creating a total harmonious ensemble between these elements. >>

A unique opportunity to interpret architecture from a distant era to demanding future climate needs for the contemporary audience. With personal fascination of mass and void forms, the language of the interventions was defined. Architectural sublime of the monument was recognized and expressed in a modern skin.

Katarzyna Nowak, architect, artist OBSCURA

Oude kerk, Amsterdam two pavilions, two new

The water curtain



The pavilion is built in layers with several floors. It consists of a transparent inner core (social space) surrounded by a transparent shell. The sleeve protects the core from extreme weather conditions. In summer, heat is harvested from this gap for cold days. In this climate space, plants grow for food and the air is purified. >>



Kick-off for cooperation between talents of ABT/ Oosterhoff and young talented architects, which was given the name Springplank. And again, a great challenge in terms of content to connect sustainability and beauty.

Peter Mensinga, climate designer/ sustainability-strategist ABT/Oosterhof

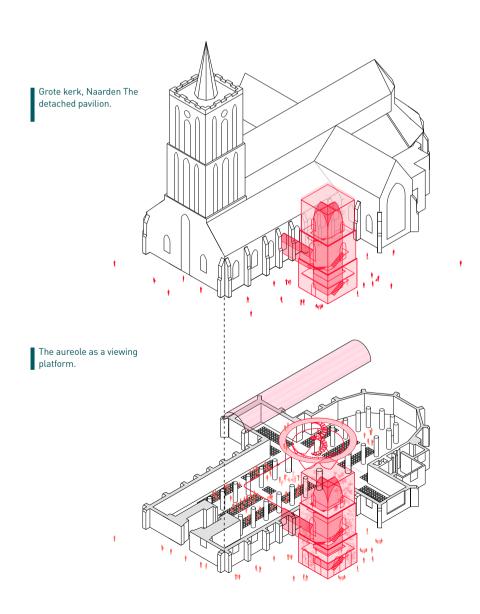


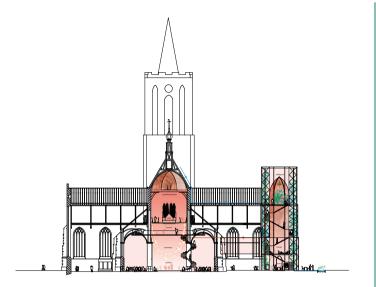
The mass and void forms, the visible and invisible parts of the church are part of the spatial concept.

The two transparent layers are built with innovative materials and techniques that help regulate comfort and energy production. Rainwater is collected and stored in or under the pavilion. Heat pumps and air-conditioning systems will also have a place in the pavilion. Building materials with a low ecological footprint (minimisation of materials and circular reuse) are used. The roofs of the churches will be fitted with a slate PV, indistinguishable from traditional slate, which will make the extension energy-neutral. The essence of the sublime pavilion is captured in this effect – and it is to be seen in all pavilions in all churches. >>

A personal fascination for translating natural processes into spectacular spatial experiences. And the chance to fantasise about a climate-conscious city in the light of current issues, with the role of a new type of social space at its centre.

Jens Jorritsma, designer, urban planner





It was such a brilliant challenge to undertake! The opportunity to explore the future identity of the churches, by bringing together the historical and social value of these monuments with the needs and responsibilities for a sustainable and climatesensible design.

Working in such a varied and

Working in such a varied and multiskilled team brought us to consider the many aspects and impacts of each design strategy implemented.

Maria Sara Di Maggio, building physics engineer ABT



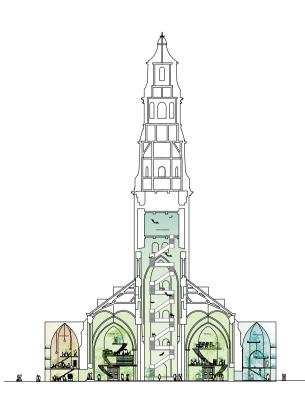
Inside the churches, flows and processes are made visible and tangible by means of an (art) installation. Inside the churches, these flows and processes are made visible and tangible by means of an (art) installation, a chandelier or new viewing platforms fed by the pavilion. Within this, the design is expressed in a new experience of the church where technology and poetry come together. It is a poetic manifestation of the relationship between the pavilion and the church, between technology and heritage, innovation and tradition. It is a manifestation of sublime beauty in sublime sustainability. >>

Der Aa-kerk, Groningen, pavilions as side aisles. Verbinding en beleving.

As a heritage architect, I am interested in how we value and give meaning to our built environment.

With this competition, we are asked to translate the sublime so that the church can acquire new meaning and hopefully once again play a central role in our society. It requires a balance between the existing and the new, tradition and innovation, technology and poetry, the visible and the invisible.

Angelique C. Kamsteeg, heritage architect ABT



The design of the sublime pavilion transforms the Oude Kerk in Amsterdam, the Grote Kerk in Naarden and the Der Aa Kerk in Groningen into a metabolic resource. A source through which there flows energy, water, food, fresh air, love, health, entertainment, friendship, family, communities, respect and recognition. With this design, we want to contribute to the creation of resilient and social cities where the church has a renewed, connecting role. |

I find the Sublime beauty,
Sublime sustainability assignment
fascinating as it addresses
urgent issues which make us
rethinking symbiosis between
sustainability and design
processes, allowing for the nonhuman-centered architecture.
It aims to transform former
churches into a seed that
responds to climate change and
bring together different believes,
including human- and bio-politics,
naturally embedding them
within the tissue of the city.

Lesia Topolnyk, architect | researcher StudioSpaceStation









THEME 3 //
CONNECTING
WITH THE
ENVIRONMENT:
ABOUT FLOWING
TRANSITIONS

At the same time, the obvious significance of the churches for the city seems to have diminished in recent decades. Could this be different? Are there solutions for making the building more visible, accessible and capable of being experienced? The specific design question was: come up with design proposals for improving the manifestation of the church as a natural, accessible and approachable part of the urban fabric.



Koepelkathedraal Sint Bavo Haarlem

Gross floor area

Energy consumption compared to average church

Electricity 0.8 x church

Comfort The church hall is
normally only heated for the
Sunday service. To achieve this,
the air heating is switched on as
early as Friday morning. There
is also underfloor heating unde
the pews. There are hardly any
draughts because the side
doors are hardly ever used and
the main entrance is equipped
with a draught excluder and a
revolving door.



Sint Janskathedraal Den Bosch

Gross floor area

Energy consumption compared to average church

Electricity 0.5 x church

Comfort Currently, the cathedra is largely unheated and there are draughts. Staff and visitors are prepared for this. There is no immediate desire to heat more in the near future. However consideration is being given to cooling the sacristy, which can become very hot in the summer so that this space can be used



Domkerk Utrecht

Gross floor area

2,700 m

Energy consumption compared to average church

Gas 0.9 x church
Electricity 0.4 x church
Comfort The temperature of
the church is maintained by
means of air heating, underflo
heating and radiators.
Nevertheless, it is difficult to o

and keep the church hall at a comfortable temperature durin events or the Sunday service.







62

Year of construction 1895-1930 | Type of church Five-aisled cruciform basilica | Ownership/management Kathedrale Basiliek Sint Bavo Foundation | Average number of visitors 40-50,000

The Koepelkathedraal, designed by J.TH.J. Cuypers is among the top five iconic churches worldwide built between 1850 and 1950. The other churches are the Sagrada Familia in Barcelona, the Sacré-Coeur in Paris, Westminster Cathedral in London and the Basilica of Koekelberg in Brussels. The architect deliberately left room in his design for artists to further embellish and complete the building over time. This process is still ongoing. In the meantime, more than fifty renowned Dutch artists have participated in the church building. Between 2005 and 2016, the cathedral underwent

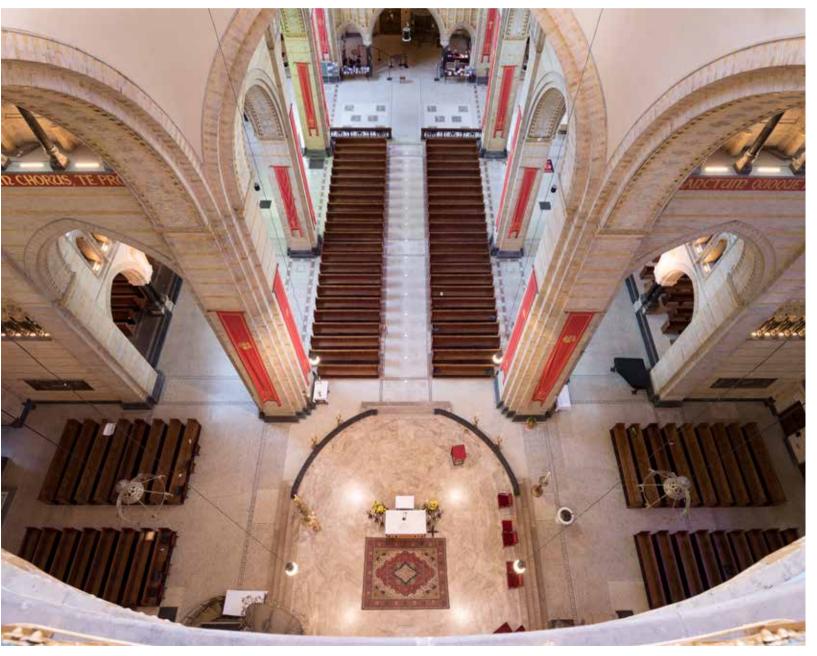
extensive restoration. An annex with sanitary facilities has been built on the north side.

Every day there are one or more celebrations. In addition, the cathedral is permanently open to the public as a museum. Major events are also organised several times a year.

Ambitions for the future

The foundation's main aim is to maintain the church complex. In addition, the aim is to increase the number of visitors by expanding the museum function. The church is located on the edge of the centre with the Leidsevaart as a barrier between the two. The findability/ accessibility from the city centre is therefore an issue. At the same time, there is a desire to reduce energy costs and to be able to carry out maintenance on the basis of a multi-year maintenance plan.



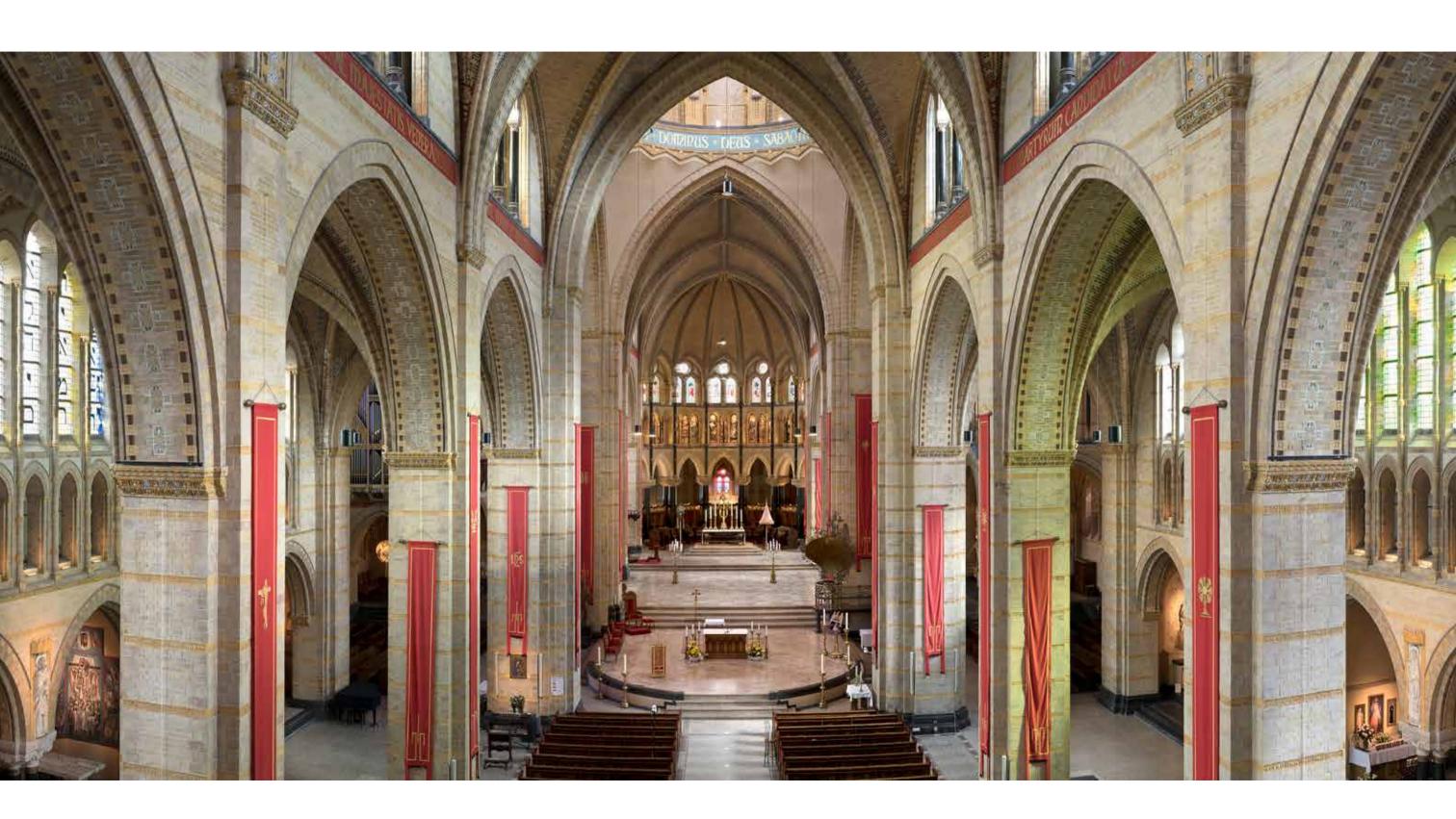






'An intuitive walk from the city centre enables the Koepelkathedraal to be discovered.

Anton Demmers, Koepelkathedraal Sint Bavo Haarlem



SINT JAN KATHEDRAAL DEN BOSCH

Year of construction 380-1517, the church tower dates from the 13th century | Type of church Gothic cathedral | Ownership/management Parochie Heilige Johannes evangelist | Average number of visitors 600,000-700,000

The church is situated in the middle of the city centre of Den Bosch, with De Parade on one side, a square in the heart of the city that is often used for events. Between 1584 and 1622, part of the church was rebuilt after a major fire. The building was constructed in phases, and from the 20th century onwards it has been treated in a mainly restorative manner. Napoleon Bonaparte returned the church to the Catholics in 1810 after it had been in the hands of Protestants for 180 years. It is not only the bishop's cathedral, but is also seen by the inhabitants of Den Bosch as the icon of their city. The statue of the Virgin Mary, De Soete Lieve Moeder, makes the cathedral a place of pilgrimage.

Use

There are two services daily in the cathedral. The church is also permanently open for viewing by parishioners, visitors and pilgrims.

Ambitions for the future

In its vision for 2030, the Church Council states that Sint Jan (church and parish) wants to be a warm, welcoming, open and hospitable faith community. A community of faith that wants to be part of the community around it – smaller and larger. The church council would like to strengthen the ties with the surrounding area and sees a connecting role for the cathedral in which openness and accessibility are centrally promoted. The church's construction team wants to explore the possibilities of making the monumental cathedral more sustainable (experimentally), for example, by using light in a different way and installing windows with photovoltaic cells. There are also plans to improve the direct accessibility of the cathedral.

'As a community of faith, we want to be part of the community around us. Spiritually, but also physically.'

Rutger Jans, Sint Jan Kathedraal Den Bosch









DOMKERK UTRECHT

Year of construction 1254 | Type of church Cruciform basilica | Ownership/management Protestant Congregation Utrecht | Average number of visitors 400,000-500,000 The Dom Church is located in the densely built-up city centre of Utrecht, for centuries the religious capital of the Netherlands. The church is located on the Dom Square, a square that owes its current form to the collapse of a large part of the Dom Church and the demolition of the Holy Cross Chapel and Saint Salvator's Church. The Domtoren, which stands apart from the church due to the collapse of the nave, is the iconic image of the city of Utrecht. The Dom cathedral is also special because the Reformation left clear traces here. This eventful history is tangible in many ways.



The church is open all year round for worshippers and visitors. In addition, the church is rented out some ten to fifteen times a year and exhibitions are held in the church hall. About two hundred volunteers are involved in opening the church.

Ambitions for the future

The Dom Church has an explicit wish to connect the church more to its surroundings. However, its own outdoor space is limited. Most of the surrounding land is owned by the municipality, and the Pandhof courtyard

belongs to the university. Because of its seclusion, visitors to Dom Square do not always experience the church as a special building where they are welcome. In the church, due to the limited number of separate rooms, it is not really possible to accommodate several groups at the same time. The shop and café of the Dom Church is not in a prominent position and is therefore not always found. Functional storage space is also required. All this with the challenge of preserving the sacred nature and monumentality of the cathedral. The wish is for that which characterises the church to remain visible: its architecture, its history (the collapsed nave) and the traces of the iconoclasm.



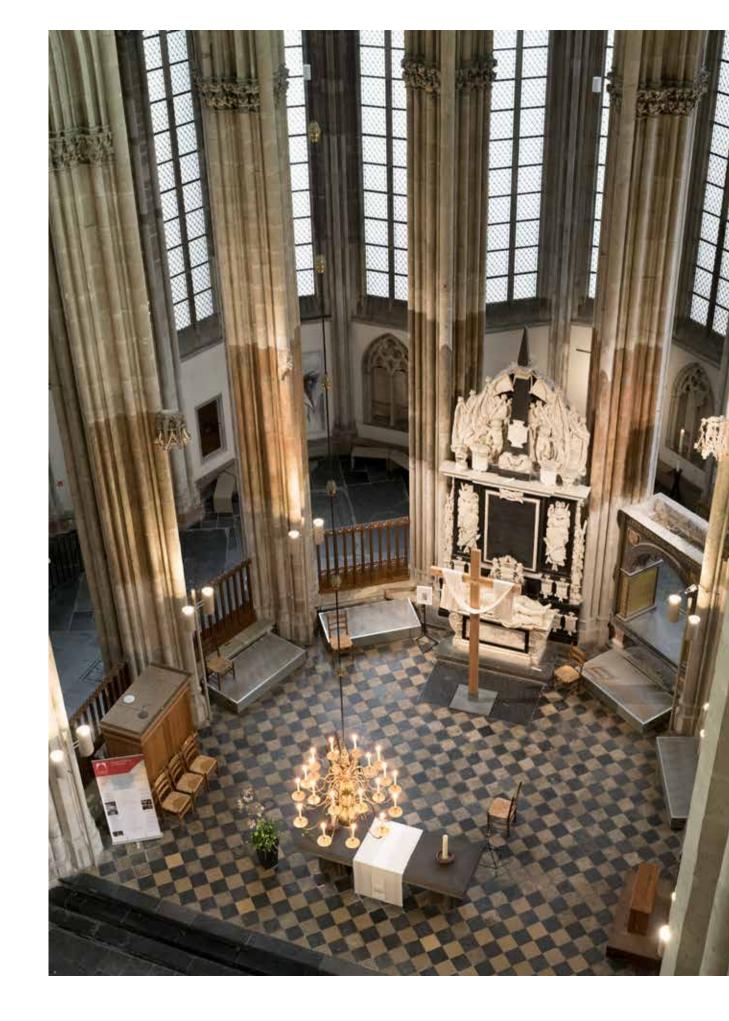




'Our church stands proudly on the Domplein. However, the thing we are seeking to achieve is flowing transitions towards the city.'

Frans Ritmeester, Domkerk Utrecht





Team 03 From enclosed icons to connecting palaces of the people

The collaboration of Inside Outside, Antea group and Braaksma & Roos Architectenbureau was evident in the call for a team of poetry, technology and beauty. The team has been strengthened with Johanna van Doorn for her cultural-historical knowledge and investigative attitude. The task appealed to us because the urgency and social relevance is very great. What can we do with these beautifully charged structures that have been cherished as icons in the Dutch landscape for decades, but in recent years have become detached from their context and lost their connecting power? We saw the potential in improving the connection of church and city, in the form of public gardens that resonate around the churches. This addition will result in an inclusive, sustainable and biodiverse area, from which both church and city will benefit greatly in the future. The role of the church as an open house thus takes on a new meaning, appropriate to today's society.



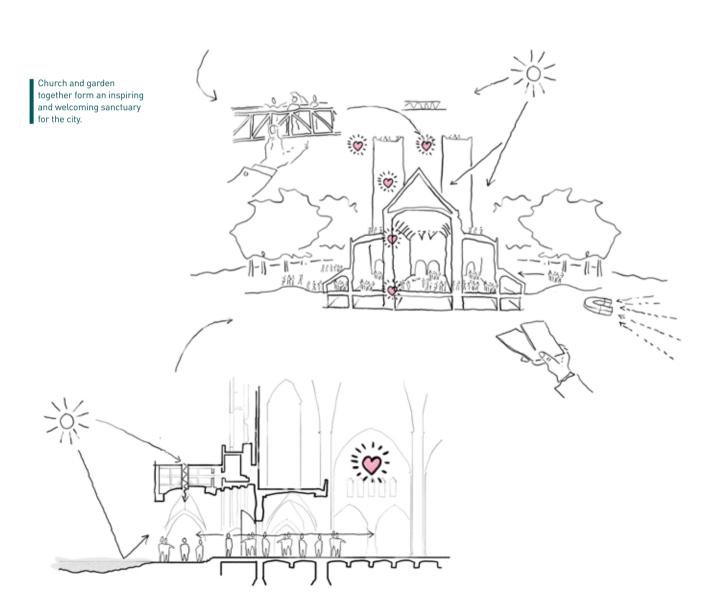
'A church without a garden is a church without roots.' With this statement, pioneer and pastor Westerbeek argues for the importance of congregations discovering and strengthening connections with their surroundings.

As hospitable spaces, church buildings have been part of a neighbourhood, a city and the public domain for centuries. Over time, this connection has faded. The church as a place for spirituality and gathering is no longer so obvious to everyone. The threshold is too high for many. By bringing the church outside in the form of a garden, that connection can be reshaped, as a safe and green meeting place for the city, the neighbourhood and the community, for rich and poor, for different generations and their visions of 'life'.

The outdoor space around the churches changes into a garden with meaning: a garden where the spatial and emotional experiences inside the church building continue. Meeting, relaxing and marvelling have their place here. Man, plant and animal can find their home here. Church and garden enter into a symbiosis and together form an inspiring and welcoming sanctuary for the city. The interior resonates in the garden. We learn from historic monastery gardens and build on the tradition of geometric and soothing landscape designs; colonnades of trees on permeable stabilisé; edible garden beds; biodiverse water gardens. >>

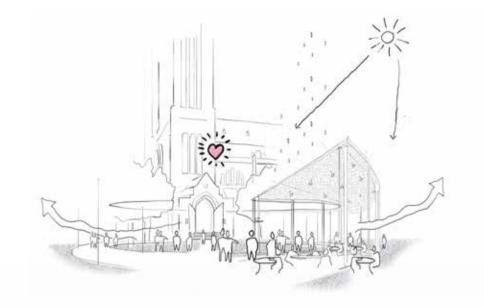
Inside Outside sees it as a unique opportunity to create a garden in the space around the churches that can contain everything the church stands for: the storyteller, the socially inclusive place, the soothing spiritual space. A green continuation of the historical stratification, of the educational content, of the ecosystem.

Aura Luz Melis, architect partner, Inside Outside



Making a unique object such as a church more sustainable is a challenge. The playing field between the need for sustainability and the need to safeguard historical elements makes it an interesting request. It also concerns the combination of iconic churches in the Netherlands. The request fits in well with Antea Group's expertise in the field of both sustainability

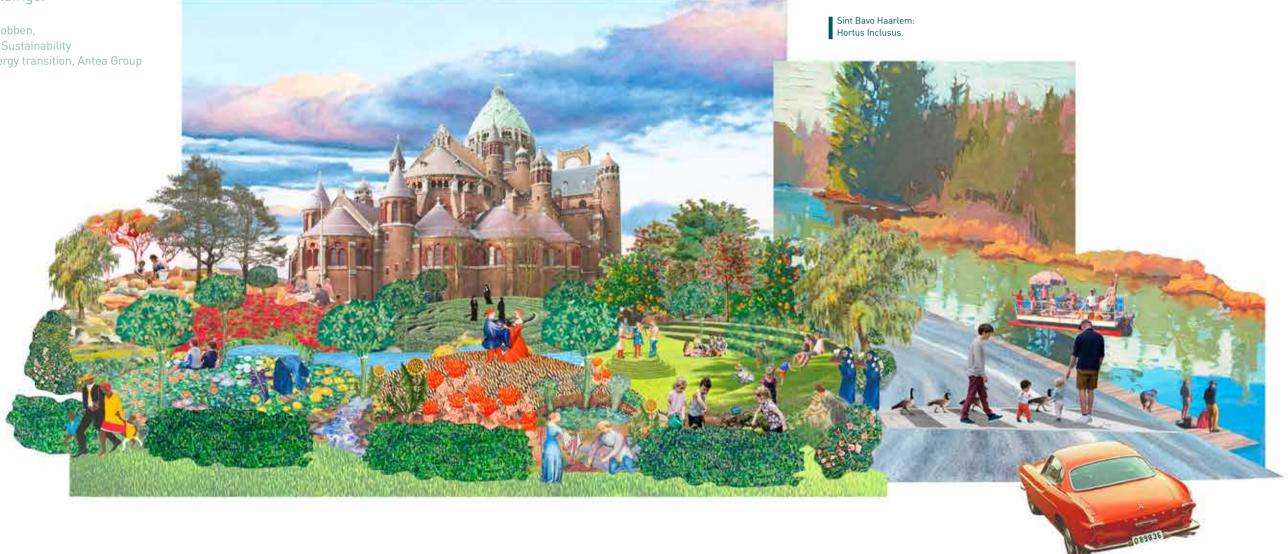
and the transformation of buildings. Hylke Robben, adviser Sustainability and Energy transition, Antea Group

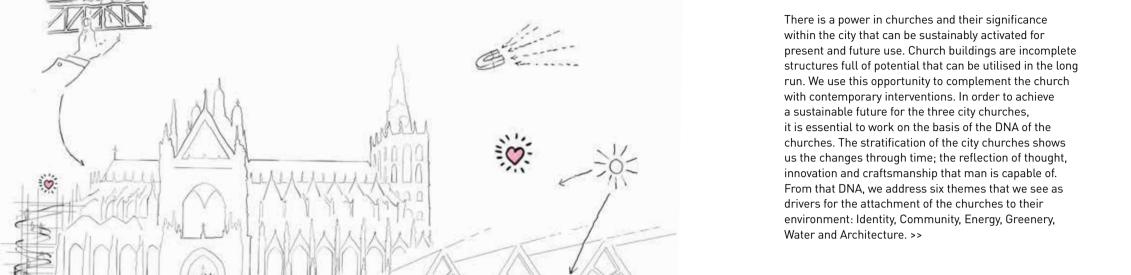


In refining our vision 'from enclosed icons to connecting people's palaces', we want to re-embed the three iconic city churches in their surroundings in a sublime, poetic and sustainable manner. We use the garden as a concrete place to take root and create the physical and social connection between the church and its surroundings. By returning to the intrinsic core values of the church as a welcoming place, public forum, spiritual place and storytelling centre, we transform the church and church garden into an open house for the city. >>

When designing based on a sustainable vision, "new" and "surprising" are often the yardsticks by which the process is judged. Here, I sometimes miss the subtle handling of history, craftsmanship and culture. A good design starts with a thorough DNA examination. This makes it possible to use the unique characteristics of a building for an optimal 'new' use. Everything comes together in this request.

Jip Vorstermans, designer, Braaksma & Roos Architectenbureau





Churches are a symbol of community, hope, ambition and craft. To be able to help these icons in their sustainable existence is a unique opportunity. In the course of the unravelling, we became even more enthusiastic through the experience of the sublime beauty.

Kristof Houben, architect partner, Braaksma & Roos Architectenbureau



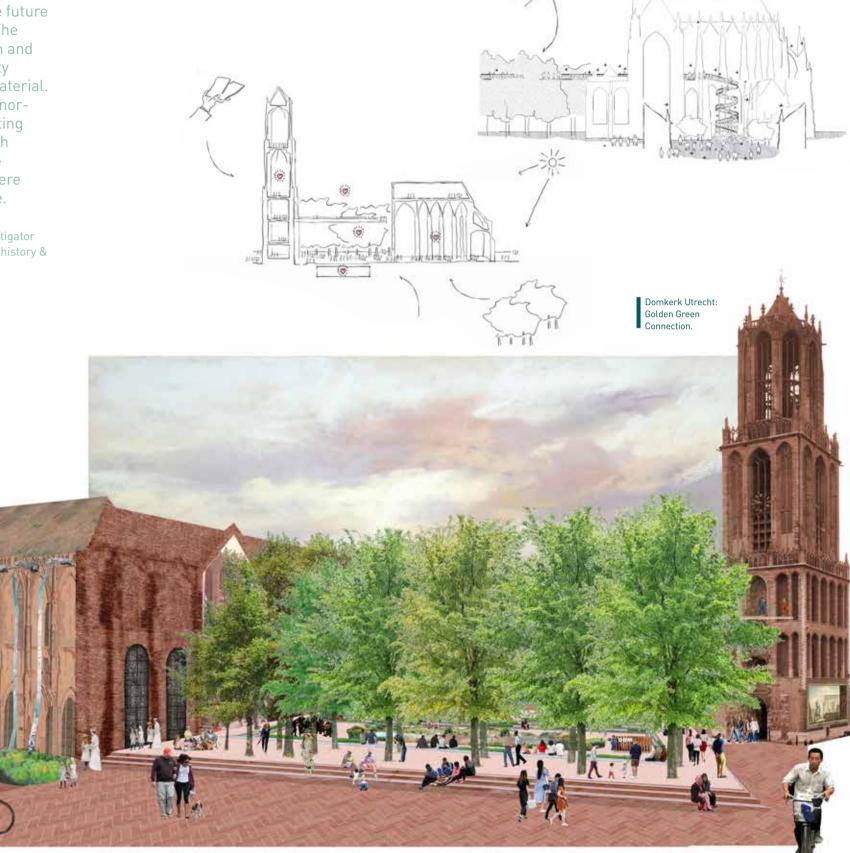
Our intention is to reflect the sublime character of the church in a fluid movement between inside and outside. The church is an 'agora', a public space. These prestigious spaces are *urban interiors*. The church resonates to the outside as a democratic continuation of the interior. We turn the Hortus Conclusus around and make the paradise garden always accessible to the city, as Hortus Inclusus. A biodiverse urban landscape as a geometric continuation of the monastery gardens, with water and greenery as the foundation for climate-adaptive and nature-inclusive solutions.

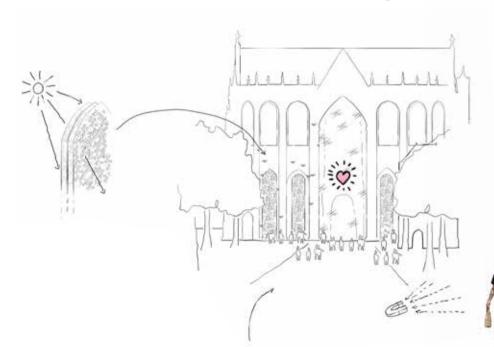
Helping churches, with their monumental buildings, to mean more for the enrichment of society and of creation is a wonderful professional challenge with a spiritual framework.

Sander Lagendijk, adviser construction, Antea Connecting history and the future is very close to my heart. The rich historical stratification and intrinsic values of these city churches rise above the material. The poetic approach and enormous challenge in translating the sublime beauty, the rich stories and meaning of the churches into the future were the deciding factors for me.

Johanna van Doorn, architect-investigator owner, Johanna van Doorn cultural history & spatial quality

The church resonates to the outside as a democratic continuation of the interior.





The design competition Sublime beauty | Sublime sustainability is an initiative of the Cultural Heritage Agency (the Future of Religious Heritage programme and the Heritage and Sustainability programme) and Atelier Rijksbouwmeester. The competition was designed and organised by these organisations together with Architectuur Lokaal. The anamneses, with quick scans of consumption and use of the participating churches, were prepared by the consultancy De Groene Grachten.





Acknowledgements

The competition would not have been possible without the constructive participation of the nine churches and a dedicated jury. Finally, all 37 initial contributors are also to be thanked for their entries. Although ultimately only three teams were selected to elaborate on their vision, all the entries showed creativity, innovative thinking and a great deal of commitment to both the subject of sustainability and to the monumental church buildings. Thank you all.

Colophor

The magazine Sublime beauty | Sublime sustainability was designed by graphic design agency En Publique. The photography is by Arjan Bronkhorst, unless otherwise indicated. The images of the six visions and three designs come from the participating teams. Production was in the hands of the State Service for Cultural Heritage.

Other information

Photos pages 6 to 11: Rijksdienst voor het Cultureel Erfgoed, Amersfoort/NK1869/VE-2563/NK2503/AO-070/AA5672



