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# DEPOT. NEW STORAGE FACILITY AT THE MUSEUM BOIJMANS VAN BEUNINGEN IN ROTTERDAM

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Rotterdam has a totally different aspect than the majority of Dutch cities and little towns. Its carpet bombing by Nazi forces in May 1940 (this commemorated by Ossip Zadkine's dramatic monument) reduced the majority of its historic buildings to ashes. Today, it is an essentially modern city boasting a high-rise building cityscape, with new towers continuously emerging, and certainly a city not reluctant to architectural experiments. It is, therefore, not surprising that not so long ago an extraordinary museum building was raised in Rotterdam. It pertains to a noble museum founded in 1849, and called Museum Boijmans after the Utrecht collector Frans Boijmans (1767–1847), whose amassed pieces formed the backbone of the collection purchased by the city. The second component of the Museum's name was added in 1958 to commemorate Daniël George van Beuningen (1877–1955); the latter's collection, in turn, essentially boosted the institution's status. Varied and regularly increased, the Rotterdam Museum's collection ranks among the best and richest in the whole Netherlands. It is housed in a Modernist building of dark brick, enriched with a characteristic tower, a work by the architect Ad van der Steur from 1935,<sup>1</sup> located on the edge of the Museumpark, a small fragment of greenery next to the city centre around which institutions like the Kunsthal (a contemporary art museum), the Natuurhistorisch Museum Rotterdam, and the Het Nieuwe Instituut (an art and design centre), can be found. Almost adjacent to them is the

newly-raised building called simply the Depot, since it is the Museum's storage space.

The Depot was built out of necessity. Rotterdam is located close to the sea, on the banks of the New Meuse River, a tributary of the Rhine, very broad at this point. High water levels caused a continuous threat to the Museum's storages placed in their majority in spaces below the ground level, strictly speaking below the sea level. The lowest storey of the storage spaces at the Boijmans van Beuningen was at 6 m BSL. Every now and again, they suffered flooding, of which the most damaging to the collection happened in 1999 and 2013.

The easiest and the cheapest solution would be the collection's evacuation to ordinary storage facilities raised on the city outskirts, and that was the decision made initially by Rotterdam's City Council. However, Prof. Sjarel Ex, Museum Director, made efforts to leave the collection centrally, in the closest possible vicinity of the main Museum building. Bearing in mind the location, it could not be a simple wire-fenced storage facility; here, a need was for an elegant edifice befitting the city centre. The planned cost of such a facility exceeded the preliminary estimates approved by the municipal authorities as much as by 15 million EUR, and this money had to be found elsewhere. It was. The financing was secured by Martijn van der Vorm, a representative of one of the wealthiest Dutch families of former shipowners



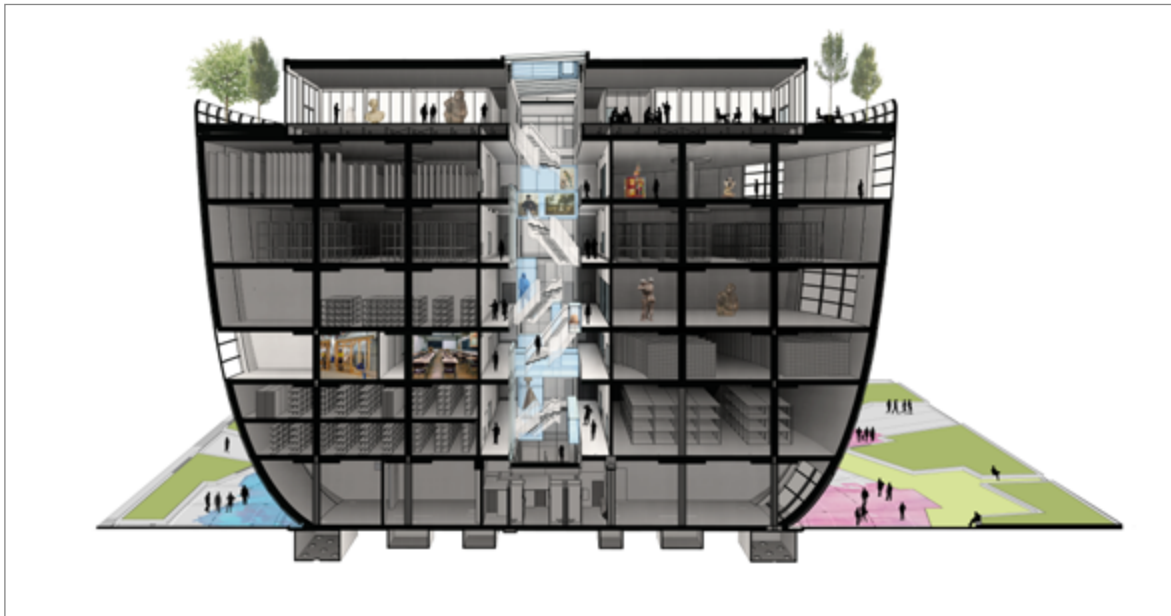
1. Depot, Rotterdam: general view, Photo Tomasz Zaucha, 2021

of the Transatlantic Holland-Amerika Lijn founded in 1873, operating in the harbours of Rotterdam and Amsterdam.<sup>2</sup>

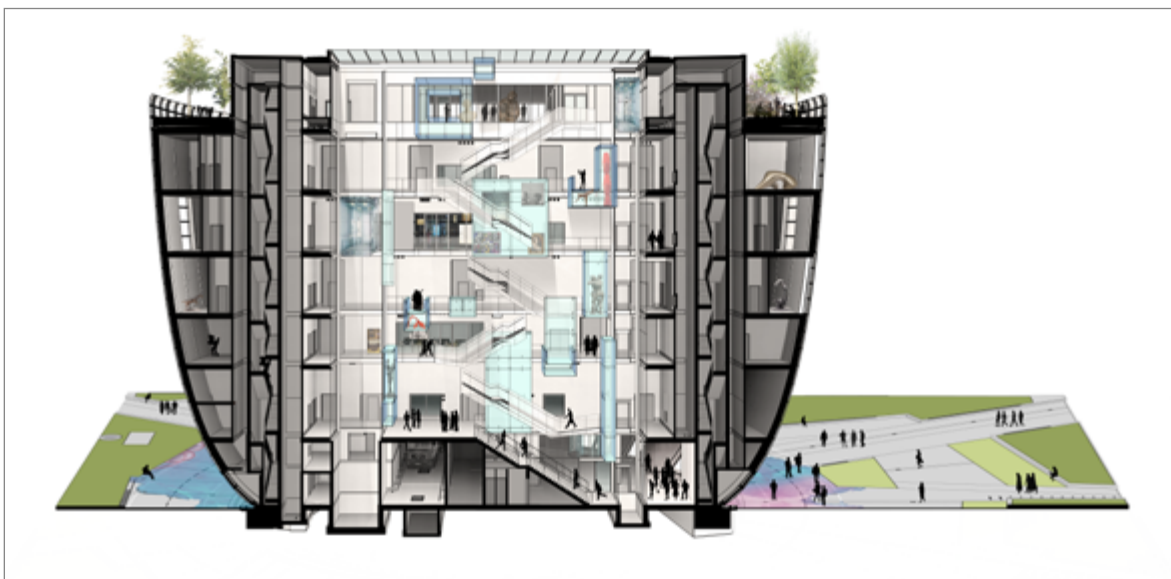
From the very beginning the designing was aimed at achieving a genuine form for the planned building. The first was that worked out in 2006 by Winy Massa, one of the founders of the MVRDV design studio in Rotterdam: it was a concept of a 'blue table', namely a flat building of 10 000-sq-m surface, raised 36 m above the Museumpark on four massive pylon legs. Fortunately, this Gulliver-like idea was rejected, and in 2013, Maas proposed another, although equally extraordinary design, of a huge silver bowl-shape facility, almost 40-metres high. The bowl is small at the base, thus occupying little land, and it grows wider towards the top, therefore increasing the cubic volume and usable surface amounting to 15 500 sq m. With their protuberances, mirror-clad walls reflect everything around, mainly the park, which reduces the potential impression that the enormous mass of the Depot dominates the area. Spherical, built on a circular plan, the edifice was neither easy to design nor to raise. The fact that the curvature is the most angled and the bottom of the building, causes that even such a simple element as a door, has to feature a very peculiar form: it is tightly fitted to the wall's shape, and opens like a door in a bus or a tramway: pulled outwards on a boom before the elevation face, it spreads apart to the sides, uncovering the entrance. The same system applies to great gates opening for lorries arriving for unloading. The mirror elevation surface is a masterpiece of engineering. Obtaining a homogeneous spherical surface required extremely precise designing, execution, and assembly of over 1 600 mirror panels of

the total surface of over 6 600 sq m. These which cover the scarce windows of the Depot function as one-way mirrors (on the outside they are distinguishable as being slightly darker). Naturally, the building complies with all the norms of energy efficiency, while a closed circuit has been applied to the water resources. The implementation of the design was launched in March 2017, with BAM Bouw en Techniek as the contractor. In May 2021, the building was ready, and the last preparation stage started: placing of all the collection within, namely over 150 000 exhibits transported from various storage locations (in 2019, the Museum stopped using the storage space in its nearby building). Thanks to meticulous logistics, the challenging operation (216 transportation loads) proceeded extremely smoothly.

The unusual edifice growing in Rotterdam's centre for several years, additionally of an untypical function, aroused general interest, not only among Rotterdam's residents.<sup>3</sup> Its opening held on 5 November 2021, attended by King Willem-Alexander, was quite a sensational event, and straight away, despite the challenging pandemic situation, the Depot began to receive visitors. Despite it being winter and regardless of all the unfavourable circumstances, the public flocked in huge crowds to visit the new attraction. The online booking system, applicable to all the museums in the Netherlands in order to reduce the number of visitors to the sanitary restrictions, was soon filled up for many days ahead. The turnout in the first three months, initially planned at 61.500 visitors, was substantially exceeded. Despite the lockdown caused by the Coronavirus Omicron variant (partial as of 28 November 2021, and full beginning on 19 December in



2. Depot, Rotterdam: cross section (BB), Museum Boijmans Van Beuningen, Rotterdam



3. Depot, Rotterdam: cross section (AA), Museum Boijmans Van Beuningen, Rotterdam

force until 25 January 2022), by the end of February 2022, the Depot had received 65 700 visitors. Such figures allow an optimistic prospect for Depot's operations and its capacity to attract visitors, this particularly important right now and in the coming years, since owing to a thorough renovation of the Museum Boijmans Van Beuningen's building its exhibitions will remain closed until 2028. Furthermore, this particular case has confirmed the principle that if the very museum building can enchant with its unusual and genuine form, it can turn into an equally strong magnet as the display itself. One could multiply examples in this respect, but let us only

mention the iconic Guggenheim Museum designed by Frank Gehry which has become Bilbao's landmark. The Depot will undoubtedly join the list of other architectural attractions of Rotterdam, like the set of cube houses designed by Piet Blom (1977), or the soaring shell of the Rotterdam Centraal (2014) Railway Station.

Although both structures: the main Museum building and the Depot are in a close vicinity (merely 40 m apart), the new storage facility has been designed as an entirely separate and independent edifice, with no connection whatsoever with the first of the two. An on-ground connecting



passage would require crossing the park, while an underground one is entirely out of the question, since the experience with the previous storage space in the basement caused that the Depot features no spaces underground. Founded on 276 stilts, it has all its floor area located above-ground. The building's functional structure is formed by seven storeys on a circular layout encircling a spacious central atrium that resembles a high shaft, crossing all the floors from the first one upwards. The higher it gets, the wider the building is, thus each next storey is more voluminous than the ones located below.

The smallest in perimeter, the ground floor has a double function: of public space and space for exhibit movement, namely packing and unpacking, acclimatization, and even quarantine. The first floor houses a storage space for smaller objects, mainly those made of organic and mixed materials. They are divided into two separate compartments: for small objects and large-size ones respectively. Other rooms placed here include offices, a photographic studio, a wood and metal conservation studio, as well as a climate control installation. Next to the several conservation studios and an educational room, the second floor houses, first of all, a large, semi-circular storage compartment of paintings, taking up almost half of the storey, and serving as home to about 2 500 paintings suspended on radial nets. Thanks to the rigorously controlled temperature and humidity, both paintings on canvas and panel paintings are amassed together. Owing to a slightly

larger surface, the next storey plays more varied functions. It is here that storage compartments for objects made of metal and plastic can be found, but first of all this floor is home to a print collection, boasting almost 90 000 specimens, with a cabinet for their study. Some rooms on this storey (third floor) are deposit storages in the strict meaning of the word, namely serving to commercially store art collections which do not belong to the Museum for a fee. Here, also a small display room can be found. The fourth floor provides vast spaces again: for displays and deposit storages, but among them there is an extensive room for large-size objects, sparsely built up with nets and shelves to allow passage to forklifts which facilitate moving around heavy objects. As a matter of fact, all the communication routes throughout the whole building allow for forklift circulation. In the small storage compartments on the next fifth floor with the particularly rigorously controlled climate photographic materials are kept in cold: the black-and-white at 16°C and the coloured ones at 8°C; they can be accessed through a temperature lock at 12°C. Here we can also find the storage of large-size paintings; however, almost half of this storey is taken by a semi-circular display hall which two charities founded by the van der Vorm family to promote art and culture: the De Verre Bergen and Droom en Daad Foundations can use jointly with the Museum

Finally, the last and the largest sixth storey (40 m in diameter), has been entirely dedicated to visitors. They can find a rooftop viewing terrace here, covered with birch trees



4. Depot, Rotterdam: painting's storage on the second floor, Photo Ossip van Duivenbode, 2021



5. Depot, Rotterdam: storage on the fourth floor, Photo Ossip van Duivenbode, 2021



6. Depot, Rotterdam: cityscape from the terrace, Photo Ossip van Duivenbode, 2021





7. Depot, Rotterdam: atrium, Photo Tomasz Zaucha, 2021

and high grass, with occasional benches amidst. The terrace offers a panoramic view of Rotterdam all around. The centre is taken by a pavilion on an isosceles cross layout housing the 'Renilde' Restaurant (commemorating Renilde Hammacher [1913–2014], curator of modern art in 1962–1978) and a multifunctional 'Coert' Hall (bearing the pet name of Conrad Ebbinge Wubben [1915–2014], Museum Director in 1945–1978).

All the above-described storeys-zones are, as we know, bonded by a spacious atrium spreading from the first to the last floor, and this is visually most impressive when seen from the inside. It constitutes a kind of a core of the whole structure, all the way across it. This huge space is

crisscrossed by diagonal flights of stairs suspended in the air. The architects' intention was to recreate the amazing impression of the stairs rendered in fantasy prints by Giambattista Piranesi from the *Carceri* series: they come down out of nowhere and run towards an unknown within empty monumental interiors. In this Rotterdam storage facility the stairs add to the picturesque quality of the atrium's vastness, and attenuate the ominous effect of the multi-storeyed depth. Furthermore, there are 13 large showcases<sup>4</sup> placed within the atrium at various heights and differently arranged, presenting some dozens of selected artworks.

The atrium features no windows, therefore in the lower parts it is dark, the darkness being dispersed gradually as we follow upwards to subsequent floors. Naturally, the stairs are not the only means of reaching higher levels. The designers have secured free vertical movement, since the atrium boasts three fully glazed lifts: to one side there is a freight lift dedicated to transporting museum exhibits; across, there are two passenger lifts performing different functions. One of them permits to reach any chosen floor, while the other serves to go directly to the building's top: to get to the viewing platform or the restaurant fast. It is, therefore, dedicated to those individuals who are not interested in Museum visiting, wishing only to enjoy the view of Rotterdam.

As can be seen from the above overview, the system of locating the collection essentially depends on the materials and sizes. Although it is emphasized that the stored pieces are 'uncurated', meaning that it was not factual issues that decided on their location, at the end of the day it respects curators' needs, if only for strictly practical reasons. Wooden sculptures are placed together, chairs are next to other chairs, glass pieces are all kept together, stoneware 'bearded-man jugs' (so-called Bellarmine jugs) are next to other Bartmann 'bearded man' jugs, etc. Thus, essentially the collection has been placed in compliance with typological or even chronological criteria.

The spherical shape of the building and the inclination of the perimeter walls forces the internal arrangement of the storage: it either has to be adjusted to architectural forms, like in the painting store compartment where the radial layout of nets has been introduced, or leaves out dead unused patches. The latter, however, is not much of a hindrance with the generously planned voluminous interior. Paradoxically, it is that vastness that can create problems. As much as the storey height of 6–7 m is optimal for large-size objects, for other collections it is far too high, and many historic pieces cannot be reached otherwise than from a forklift. This is a natural solution forced in a storage and logistic facility where palletized goods are loaded and unloaded only with the use of forklifts, however, when with respect to precious historic art pieces unhasty thoughtful manual handling by specially trained staff is of key importance, it is hard to describe the Depot's arrangement as facilitating work on the collection.

Moreover, it is hard to agree with the assurance that the Depot provides everybody interested access to all the 151 000 historic pieces amassed here, namely to the Museum's entire collection, although such was unquestionably the leitmotif of its creators. 'Can a store of a municipal art collection resemble more a public library? In which you can roam randomly among bookcases looking for one definite book, yet coming across a dozen of others that will arouse your interest?';<sup>5</sup>

asked Sjarel Ex, recalling the analogy and models of accessibility of the Enlightenment collections of the Teylers Museum in Haarlem and Sir John Soane's Museum in London. The answer to this question is not positive. The Depot indeed functions strictly following the principle of transparency: one can peep anywhere. The ground floor spaces for acclimatization as well as for packing and unpacking are separated from the entrance lobby with a glass wall only.

The interiors of conservation studios and offices can also be looked into through glass. Every storage compartment opens to the atrium with a large display case next to which examples of representative pieces have been placed. The visitor who wishes to see what is inside the store can press a button placed outside, and light up the dark interior for a moment. Apart from these so-called *visible magazines*, there are also *visitable magazines*: there, once an hour, a group of a dozen people at most can enter with a guide and a security guard for 11 minutes. During that guarded tour the visitors see different stores, and become acquainted with the overall rules of preserving and storing collections. The principle of transparency allowing the glimpses into inaccessible rooms and of getting to know their function is, obviously, attractive in itself, and many institutions allow that, e.g. The Broad Museum in Los Angeles where the exit from the exhibition leads us along the window allowing to peep into the storage spaces.<sup>6</sup> Almost every visitor stops there. Also the Museum Boijmans Van Beuningen has had the same experience. Within the main building, a print cabinet has been established; there the office and storage space are separated from the display space with a glass wall.<sup>7</sup> Such endeavours, however, do not really imply any essential change in the so-far manner of using the collection. The Depot is a state-of-the-art, albeit essentially traditional storage space.

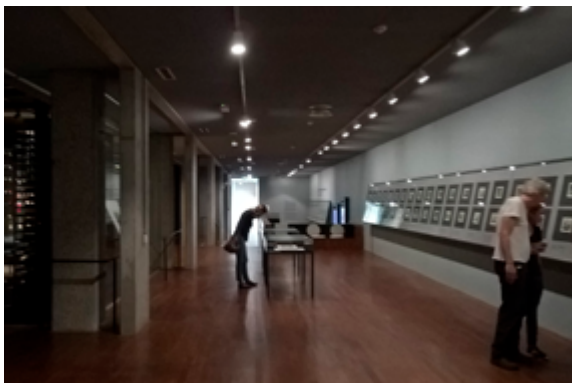


8. Depot, Rotterdam: display vitrine in the atrium, Photo Tomasz Zaucha, 2021



9. Depot, Rotterdam: suspending pictures on nets, Photo Aad Hoogendoorn, 2021





10. Museum Boijmans Van Beuningen, Rotterdam: print cabinet, Photo Tomasz Zaucha, 2018



11. Rijksmuseum, Amsterdam: Special Collections, Photo Tomasz Zaucha, 2021

The necessity to secure safe and appropriate conditions for storing art pieces which create the museum collection, yet do not form part of the exhibitions, is obviously very important, or maybe even of key significance. For this reason numerous museums worldwide, larger and smaller, initiate the raising of targeted buildings, most frequently located outside the city centre where they aggregate the collections previously frequently stored in random facilities, incidentally adapted for the purpose, and more often than not, too small. Such plans have been accomplished for the Museum of Cracow,<sup>8</sup> and a project to raise a large central storage facility for Warsaw museums has been launched, too.<sup>9</sup> The model solution is found in passive storages which thanks to thermic insulation and high airtightness limit the impact of exterior conditions on those in the storage environment, all the more so as they are spaces entirely closed to visitors and not featuring any regular staff workstations, this allowing to significantly reduce the air exchanges. More importantly, since it is not necessary to secure temperature comfort to people, in the cold seasons heating can be entirely reduced. Good insulation and the use of materials having the capacity to buffer sudden climate changes cause that the inside temperature only slowly follows the annual amplitude of temperature changes, in winter reaching merely several degrees Celsius above zero. This benefits the collection preservation on the one hand, while significantly reducing the energy intake on the other. Furthermore, passive storage facilities show no risk

of suffering from a sudden climate change which might be caused by HVAC breakdown or power cuts.<sup>10</sup>

Storing or preserving historic pieces, however, is not a goal in itself. It is only a means, since in reality the purpose to achieve is the collection accessibility and use. That is why many museums try various ways in order to extend that accessibility, and one of them is study displays, which essentially being exhibitions, in their layout, presentation manner, and firstly the number of exhibits, resemble more storages. The best example in this respect in the Netherlands is obviously the Amsterdam Rijksmuseum and its Special Collections, yet similar projects can be found in many museums and countries, also in Poland.<sup>11</sup> The demand for a full accessibility cannot really be implemented. To prove its utopian character let us recall that the greatest proportion in the collections of Polish museums is taken by archaeological pieces.<sup>12</sup> The storage of such a great number of items constitutes a challenge in itself.<sup>13</sup> On the other hand, making them available for public viewing in a form of a study display, even if this could be done, results pointless in view of the fragmentary character of this collection, most frequently composed of relics and destroyed objects, of their mere nature deprived of the display quality, boasting only the study value. Thus, compromises will always be necessary. They also cover conservation and technical aspects, since it is impossible to harmonize the policy of a systematic access of visitors to an open storage space with the model of a passive storage space in which the effective maintenance of certain climate conditions (e.g. keeping low temperature, limitation of air infiltration) excludes a regular presence of humans.<sup>14</sup> Each institution must thus adopt a strategy clearly defining the balance it intends to strike between benefitting from the collection and the methods securing its appropriate preservation, bearing in mind the sustainable consumption of resources, mainly of power.<sup>15</sup>

The Museum Boijmans van Beuningen adopted the strategy of opening up their storages, while not neglecting the issue of an effective collection preservation. The mass of the building is a homogenous shell, the mirror cladding forming merely an external layer. The interior walls feature porous materials, and the conducted test consisting in switching off HVAC for eight hours did not lead to fluctuations of either humidity or temperature over that time.<sup>16</sup> Window openings have been made merely in some rooms: only in those serving as working studios, and there are none in storage compartments, thus access of the outside air is significantly reduced, meeting the approved standards, this also resulting from a limited and rationed access of the public who can be entirely free and unrestricted in the atrium only.<sup>17</sup>

In Rotterdam the pressing threat to the collection was overcome, and thanks to bold and imaginative decisions the collection has been located in the city centre, almost next door to the Museum's main building, transforming the museum storage into a fantastic tourist attraction. Everyone who enters the Depot will leave the facility certain that the public collection is appropriately and carefully taken care of. They will have had the opportunity to see for themselves how sizeable and varied the collection is: what precious (and less precious) items it contains, how museum stores and conservation studios operate, what kind of work is done there. The Museum Boijmans van Beuningen brings it all out to the open and uncovers before the eyes of those who



wish to see it (and, indeed, great numbers of the public want to visit the Depot). Although this procedure does not entirely eliminate the tension that is born on the contact line between museum curators and society, and is expressed in the question: why do museum collect so many things if they do not display them? However, thanks to its transparency, it attenuates this tension significantly. Instead of full accessibility, it proposes a common-sense balance between what is always available, though not right away, in the

store, and what can be savoured in display rooms in a curated well-thought-out arrangement of the best and most precious pieces.

The Author would like to extend his gratitude to Dr Sandra Kisters, Marlies Potuijt, Sharon Cohen, André van Lonkhuijsen, and, last but not least, to Timow van der Spoelov of the Museum Boijmans Van Beuningen in Rotterdam for their assistance in organizing the visit to the Depot and the provided materials.

**Abstract:** In 2017–2021, the Museum Boijmans Van Beuningen in Rotterdam raised the Depot, its new storage facility. Located centrally, the Depot is surrounded by the park close to the main Museum building. A unique 40 m-high ovoid bowl-like shape is covered with mirrors reflecting everything around, and the facility is to house the Museum's entire collection (over 150 000 exhibits). Fully accessible to the public, the Depot features a rooftop city viewing platform and a restaurant. The costs and challenges implied by the construction of a storage facility located in the city centre, and in a park, substantially exceeded those of ordinary

facilities of the kind in city outskirts. However, owing to its bold and fascinating design, the Depot can undeniably become one of Rotterdam's architectural icons, turning into an unquestionable tourist attraction. At the same time, the Depot has provided the solution to the problem of the collection storage, previously amassed in underground rooms vulnerable to flooding due to the high water level. A skilful synthesis of the collection accessibility and modern storage functions, supported by an attractive location and an unusual architectural form make the Depot an extremely attractive solution for museum storage facilities.

**Keywords:** The Netherlands, Museum Boijmans Van Beuningen, museum, collection storage space, museum architecture, study collection.

## Endnotes

- <sup>1</sup> P. van der Coelen, 'History of the collection: acquisition and enhancement', in: *Depot Boijmans Van Beuningen*, ed. by S. Kisters, E. Postma, (Rotterdam 2021), pp. 88-92.
- <sup>2</sup> „Het hart van de stad krijgt er een kamer bij”. Interview met Sjarel Ex, directeur Museum Boijmans Van Beuningen', *Depot Journaal*, 1 (2018), 10-11.
- <sup>3</sup> N. Siegal, 'Museums throw open the storage rooms, letting in the public', *The New York Times*, 18 December 2019, <https://www.nytimes.com/2019/12/18/arts/design/museum-storage.html> [Accessed: 30 November 2021].
- <sup>4</sup> The dimensions of the largest: 602 x 500 x 498 cm; of the smallest: 224 x 160 x 155 cm.
- <sup>5</sup> S. Ex, 'Introduction', in: *Depot Boijmans Van Beuningen...*, p. 31.
- <sup>6</sup> A. Jasińska, A. Jasiński, 'Eli Broad and His Work: The Broad Museum in Los Angeles', *Muzealnictwo*, 62 (2021).
- <sup>7</sup> S. Kisters, 'The Collection within easy reach: the concept of an open Depot', in: *Depot Boijmans Van Beuningen...*, pp. 62-65.
- <sup>8</sup> B. Urbańska, 'Thesaurus Cracoviensis – Centrum Interpretacji Artefaktów – nowy oddział Muzeum Historycznego Miasta Krakowa', *Krzysztofory*, 33 (2015), 423-436.
- <sup>9</sup> J. Czap, 'Central Storage Facility for Museum Collections: a New Task for the National Institute for Museums and Public Collections', *Muzealnictwo*, 60 (2019).
- <sup>10</sup> B. Berska, Ł. Bratasz, R. Kozłowski, L. Krzemiński, 'Nowa siedziba Archiwum Narodowego w Krakowie. Założenia funkcjonalne i użytkowe oraz koncepcja magazynu zbiorów archiwalnych z pasywną regulacją klimatu', *Archeion*, 122 (2021), 102-110.
- <sup>11</sup> The Polish examples can be found in the 'Cracow at Hand's Reach' Exhibition at the National Museum in Cracow (2010; see W. Marcinkowski, T. Zaucha, 'An outline of the history of the collection of plaster casts at the National Museum in Krakow', in *Plaster Casts of the Works of Art. History of Collections, Conservation, Exhibition Practice. Materials from the Conference in the National Museum in Krakow, May 25, 2010*, ed. by W. Marcinkowski, T. Zaucha, Kraków 2010, pp. 99–100) or the storage gallery at the Museum of King John III's Palace at Wilanów (2017; see *Galeria Magazynowa w Markoniówce*, [https://www.wilanow-palac.pl/galeria\\_magazynowa\\_w\\_markoniowce.html](https://www.wilanow-palac.pl/galeria_magazynowa_w_markoniowce.html) [Accessed: 22 March 2022]).
- <sup>12</sup> *Statystyka muzeów. Muzea w 2018 roku*, ed. by K. Andrzejkiewicz, K. Żmijewska, (Warszawa 2019), p. 102, fig. 8.1.1.
- <sup>13</sup> M. Bugaj, *Magazyny archeologiczne w Polsce. Kwestia przechowywania zabytków archeologicznych, czyli Rzecz o stajniach Augiasza i kilka przykładów dobrych praktyk*, w: *Znaleziska archeologiczne. Problemy konserwacji, inwentaryzacji i przechowywania*, ed. by K. Zdeb, (Warszawa-Zielona Góra-Głogów-Legionowo 2018), pp. 103-113.
- <sup>14</sup> Norm PN-EN 16893:2018-03/Ap1: point 5.3.4.2. 'Conservation of cultural heritage. Specification related to location, construction, and modification of buildings or spaces assigned to the preservation and use of collections', pp. 16-17.
- <sup>15</sup> *Ibidem*, point 4.3.1., p. 11. Here also the power consumption for the communication with the storage if it is placed at a certain distance. *Ibidem*, point 4.1., p. 10.
- <sup>16</sup> According to the standards for passive storages the time for the non-automated maintaining of stable conditions should stand at least at 48 hours. *Ibidem*, point 5.3.4.1., p. 16.

<sup>17</sup> The volume of air changes fits the range of 0.9 up to 1.08 ACH (air changes per hour), with the median at 0.45. These are average values, since the process is regulated dynamically by an automated system which, depending on the conditions outdoors chooses the ventilation by the intake of fresh air or the recirculation, or adopts the mixed system. The air changes rate at 0.4 is considered good, though in passive storages ACH can even stand at 0.1. See L.R. Knudsen, S.R. Lundbye, 'Performance of Danish low-energy museum storage buildings', in *ICOM-CC 18<sup>th</sup> Triennial Conference Preprints, Copenhagen, 4-8 September 2017*, (Paris 2017), art. 1515, p. 5.

## Bibliography

Berska Barbara, Bratasz Łukasz, Kozłowski Roman, Krzemień Leszek, 'Nowa siedziba Archiwum Narodowego w Krakowie. Założenia funkcjonalne i użytkowe oraz koncepcja magazynu zbiorów archiwalnych z pasywną regulacją klimatu', *Archeion*, 122 (2021), 94-127.

Bugaj Michał, *Magazyny archeologiczne w Polsce. Kwestia przechowywania zabytków archeologicznych, czyli Rzecz o stajniach Augiasza i kilka przykładów dobrych praktyk*, w: *Znaleziska archeologiczne. Problemy konserwacji, inwentaryzacji i przechowywania*, ed. by Katarzyna Zdeb, (Warszawa-Zielona Góra-Głogów-Legionowo: Instytut Archeologii UKSW, Wydawnictwo Fundacji Archeologicznej, Muzeum Archeologiczno-Historyczne w Zielonej Górze, Muzeum Historyczne w Legionowie, 2018), pp. 103-113.

Coelen Peter van der, 'History of the collection: acquisition and enhancement', in: *Depot Boijmans Van Beuningen*, ed. by Sandra Kisters, Esmee Postma, (Rotterdam: Museum Boijmans Van Beuningen, 2021), pp. 88-107.

Czop Janusz, 'Central Storage Facility for Museum Collections: a New Task for the National Institute for Museums and Public Collections', *Muzealnictwo*, 60 (2019).

Ex Sjarel, 'Introduction', in *Depot Boijmans Van Beuningen*, ed. by Sandra Kisters, Esmee Postma, (Rotterdam: Museum Boijmans Van Beuningen, 2021), pp. 29-32.

*Galeria Magazynowa w Markoniówce*, [https://www.wilanow-palac.pl/galeria\\_magazynowa\\_w\\_markoniowce.html](https://www.wilanow-palac.pl/galeria_magazynowa_w_markoniowce.html) [Accessed: 22 February 2022].

'Het hart van de stad krijgt er een kamer bij'. Interview met Sjarel Ex, directeur Museum Boijmans Van Beuningen', *Depot Journaal*, 1 (2018), 10-11.

Jasińska Anna, Jasiński Artur, 'Eli Broad and His Work: The Broad Museum in Los Angeles', *Muzealnictwo*, 62 (2021).

Kisters Sandra, 'The Collection within easy reach: the concept of an open Depot', in: *Depot Boijmans Van Beuningen*, ed. by Sandra Kisters, Esmee Postma, (Rotterdam: Museum Boijmans Van Beuningen, 2021), 62-65.

Knudsen Lise Ræder, Lundbye Steen Rosenvinge, 'Performance of Danish low-energy museum storage buildings', in *ICOM-CC 18<sup>th</sup> Triennial Conference Preprints, Copenhagen, 4-8 September 2017*, Paris 2017, art. 1515.

Marcinkowski Wojciech, Zaucha Tomasz, 'An outline of the history of the collection of plaster casts at the National Museum in Krakow', in *Plaster Casts of the Works of Art. History of Collections, Conservation, Exhibition Practice. Materials from the Conference in the National Museum in Krakow, May 25, 2010*, ed. by Wojciech Marcinkowski, Tomasz Zaucha, (Kraków 2010), pp. 95-101.

Siegal Nina, 'Museums throw open the storage rooms, letting in the public', *The New York Times*, 18 December 2019, <https://www.nytimes.com/2019/12/18/arts/design/museum-storage.html> [Accessed: 30 November 2021].

*Statystyka muzeów. Muzea w 2018 roku*, ed. by Katarzyna Andrzejkiewicz, Katarzyna Żmijewska, (Warszawa: Narodowy Instytut Muzealnictwa i Ochrony Zbiorów, 2019).

Urbańska Bożena, 'Thesaurus Cracoviensis – Centrum Interpretacji Artefaktów – nowy oddział Muzeum Historycznego Miasta Krakowa', *Krzysztofor*, 3 (2015), 423-436.

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