



Gerrit Rietveld Academie

Conservation Management Plan

A Living Monument to
Contemporary Art Education

Summary & Recommendations

Summary & Recommendations

WDJArchitecten

Introduction

This Conservation Management Plan, or CMP for short, is a management plan for the preservation of the Rietveld Academie building in which the significance of the building is central. It is an integral collaborative project, the result of internal and external research conducted around the building of the Gerrit Rietveld Academie, a creation of Gerrit Rietveld, built in 1966.

The CMP stems from the desire to record information and knowledge, to document it and make it accessible to future generations. On the one hand for a better understanding, especially for the direct users, on the other hand as a tool for the management and the formulation of a future vision for this special building, a living monument.

The immediate reason for this initiative was the approaching retirement of Erik Slothouber, who drew up the restoration plan in 2004. Another important motive was the need to think about the sustainability of the building, something that has become increasingly urgent as the world has changed.

A grant from the Getty Foundation under the "Keeping It Modern" program¹ made the preparation of this Conservation Management Plan financially feasible.

The Getty Grant made it possible to involve specialists with knowledge in the field of conservation of modern architecture and preservation in this project, something that would not have been possible with the academy's own budget for building maintenance. Obviously, the academy funds and investments are focused first and foremost on its main objective, the educational tasks of the academy. The CMP project is divided into four chapters, divided into two parts. The first part deals with the historical development and the relationship building and education. It is an examination of the background to its creation and use and provides the main input for the second part that addresses opportunities for conservation and preservation.

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A foreword for this first volume was written by Simon den Hartog, who led the academy for more than twenty-five years, from 1973 to 1999, and from that position carefully safeguarded the Rietveld legacy. The second foreword was written by Maaike Lauwaert, the new president of the Board of Trustees, who began her tenure in November of this year.

The first part is mainly composed by experts from within the academy, lecturers and members of the staff and deals in two chapters with the historical research and the relationship between the building and education.

The historical research, the history, the development through the years and the meaning of the building, the applied materials and colors, the outdoor space and the meaning of the Rietveld building within architecture and for the academy as a community.

The chapter on the relationship between the building and education is assembled by users of the building from their experience with the academy space as lecturers sometimes also as students.

The relationship between the building and art education, the function for which the building was specifically designed, is placed in the broader context of academy buildings at home and abroad. This is also examined from the perspective of the academy's educational vision, the Institutional Plan 2020-2025. From different perspectives, the contributions address the housing of education that must prepare future artists and designers for a sustainable and ecologically balanced professional practice, a practice in which the physical use of materials plays an important role. The education in this building will also have to deal with strongly changing climate conditions, for which it - and the campus as a whole - will have to be prepared, and educational content too will have to be looked for an appropriate approach

and vision necessary for a climate-proof future for art education without compromising its content and quality. An attempt has been made to illuminate the significance of the building and its spatial qualities also in this preservation and ecological restoration project from the point of view of the user group and developments in the visual arts.

In addition to the research findings, the first volume contains three quires with illustrations, one with a selection of drawings by Rietveld and his office and two quires with photographs by Ton Roelofsma and Kim Zwarts. The drawings, are a small selection of Rietveld's extensive archive, which is housed at the Centraal Museum Utrecht and Het Nieuwe Instituut in Rotterdam. The drawings represent the development of the Rietveld building and the conscientious manner in which the building was designed.

The photographs by Ton Roelofsma were taken in 1967, a year after the commissioning, commissioned by Van Dillen & Van Tricht Architects, who continued his firm after Rietveld's death. The photographs by Kim Zwarts date from 2008, shortly after the restoration and were commissioned by the Japanese publisher Toto for the Rietveld book by Kaya Oku. Over forty years after the building's completion, they still give a good impression of the original design, as with Ton Roelofsma's photographs but now with an extra dimension: color.

The photographs were applied to illustrate and substantiate the various studies but, in our opinion, also deserve attention as autonomous images and are an important source of information.

Woven throughout this first volume are the edited three-dimensional photo scans of Romina Koopman, now an alumna of the Academy's Photography Department. The assignment for this CMP involved a photographic reportage of the academy building from a current student perspective. The applied techniques add a new dimension to the photographic registration, and picture of the intensive use of the academy building in the turbulent practice of visual research.

The second part deals with the conservation and preservation of the building. In maintaining the building, planning the (daily) maintenance plays an important role. With the help of a multi-year maintenance plan (MJOP) the maintenance activities are planned for the coming years. In the Netherlands we are faced with the task of making existing buildings more sustainable in order to meet the requirements of the Paris Climate Agreement. In addition, the Rietveld Academy also has its own objective and ambition to become a sustainable organization that places as little burden on nature as possible, to further limit the use and emission of harmful substances and to reduce energy consumption. Since the curtain wall is made of uninsulated steel with single glass and the climate systems are traditional, this is a major challenge.

In addition, this volume includes a building history survey, a color survey, a floor finishes survey, a load-bearing structure analysis, a transformation framework, the creation of the database of available archival materials, and a study of CO² reduction for the campus. A separate bilingual (N/E) summary of this second volume has been prepared with recommendations.

The CMP will be anchored in the organization of the academy at board level. The recommendations that emerge from it will guide future decision making concerning the building as an example of art education. Maintenance and replacement interventions will be tested against the CMP based on the knowledge of the building's architectural historical significance. To ensure this, the position of "heritage custodian" has been created. This position, to be defined in more detail, will preferably be filled by someone from within the academy. Someone with knowledge of the functioning of the academy as an institute as well as knowledge of architecture and the ideas of Rietveld. From this position she/he will provide independent advice to the Executive Board and work closely with the Facilities Department.

When granting design assignments, the Rietveld Academy is committed to assigning them to students or alumni. For the graphic design of this CMP, the team chose Line Arngaard, an alumna of the Graphic Design department. For the font, the font Jungkages selected was a design developed in collaboration between Karel Martens and Jungmyung Lee. Jungmyung Lee currently teaches in the Graphic Design Department.

December 2022, Carla Boomkens, Jeroen Semeijn, Erik Slothouber

1. INTRODUCTION

A Conservation Management Plan (CMP) freely translated is a conservation management plan that focuses on the significance of the building. Several sub-studies were conducted for the preparation of the CMP.

1. Historical research

- Development and significance; Erik Slothouber
- Historic building survey; Suzanne Fischer
- Architectural Finishes Research; Rijksdienst voor het Cultureel Erfgoed
- Structural analysis; ABT
- Transformation framework; WDJ
- Database; Rietveld Academie Amsterdam

2. Vision of future education; Rietveld Academie Amsterdam

3. Facades and installation; WDJ, ABT en DGMR

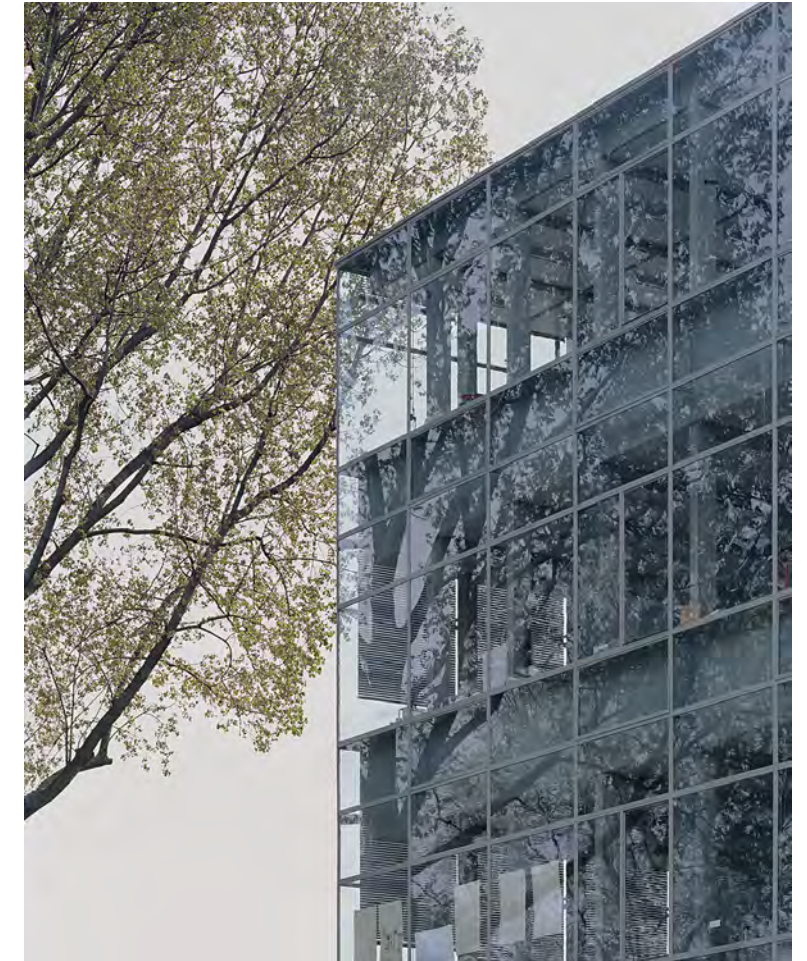
4. Maintenance; ABT

The individual sub-studies can be read in the sections "Historical research building and education" and "Conservation and preservation". It is advisable to read these parts in their entirety and also when detailed (background) information is needed when preparing for (maintenance) activities, to read the partial studies.

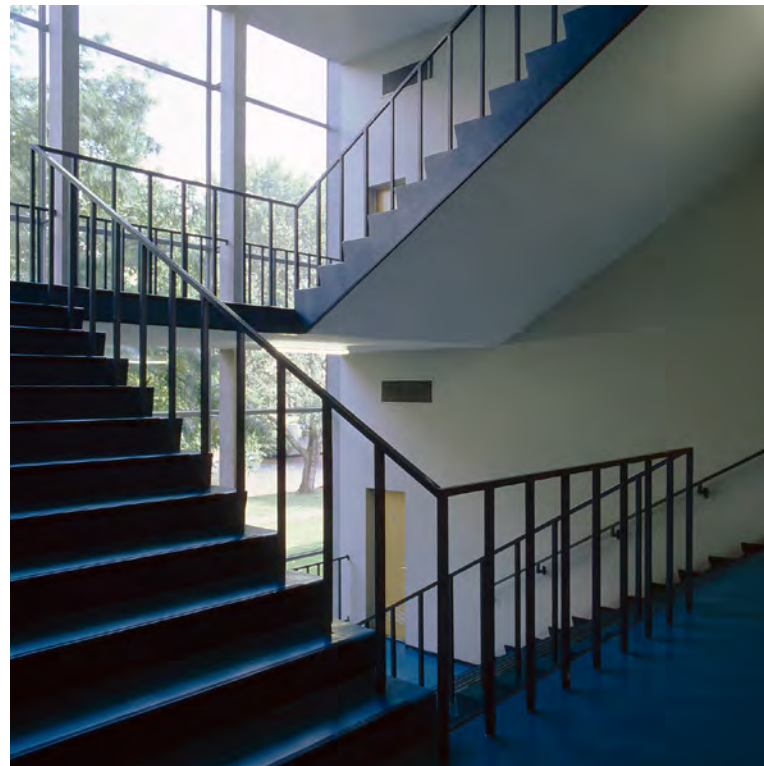
This summary section brings together the information from the various sub-studies. A brief description is given for each component, what the significance is, what the transformation potential is and what the recommendations are. Also included are the value maps from the Building History Survey.



1. Flat full-glazed curtain wall, photo Ton Roelofsma (1967)



2. Transparent corners, photo Kim Zwarts (2008)



3. The spacious central staircase with daylight, photo Kim Zwarts (2008)



4. Wide central corridor with transparent display walls and for orientation colored floor and wall surface at the end of the corridor, photo Kim Zwarts (2008)

2. ORGANIZATION AND POLICY

DESCRIPTION

The Gerrit Rietveld Academie is an independent university of applied sciences with approximately 850 students. The Rietveld Academie provides the bachelor's program Art & Design, which includes the various graduate programs. In addition, the academy offers two master's programs and a varying number of temporary master's programs. These are provided by the Sandberg Institute.

The daily management of the Academy is in the hands of the Board of Governors. The College works together with the Management Team; this consists of three directors for Bachelor's Education, Master's Education and Operations. In addition, the College is supported by a compact Staff Organization; this consists of a secretariat, policy staff and the departments of human resources, financial affairs, facilities and student affairs.

Education is distributed over three buildings, namely:

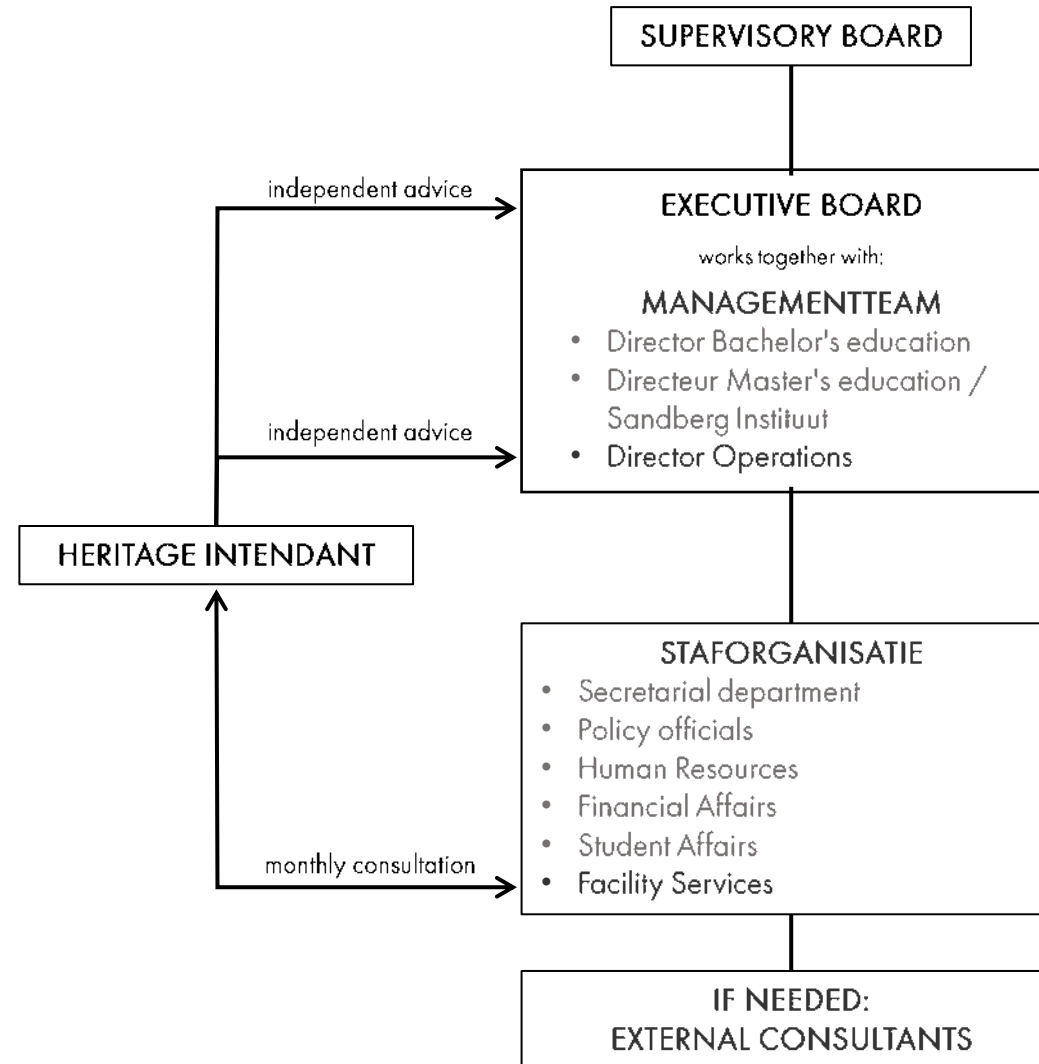
- Gerrit Rietveld (1966), municipal monument
- Benthem en Crouwel (2003)
- FedLev (2019)

Of these three buildings, the Gerrit Rietveld building occupies a special place, partly because it is a municipal monument, it has a special place in the oeuvre of Gerrit Th. Rietveld and it is still in quite original condition. Partly because of this, the use and maintenance of the building requires extra attention and policy to maintain it. Preserving" does not mean that the building must remain as it is now and that nothing must change. Rather, the CMP is meant to manage maintenance and changes in a responsible manner while maintaining the significance of the building.

RECOMMENDATION

To manage building maintenance and changes while maintaining the significance of the building, it is recommended that a "heritage manager" be appointed. The heritage manager:

- Has regular (monthly) meetings with facilities management to discuss planned maintenance work from the MYP and building modifications and to determine whether external consultants should be appointed for this work.
- Provides independent advice to the Board of Trustees and the Management Team/Director of Operations on work and modifications



5. Recommended organizational chart Gerrit Rietveld Academie

3. STATEMENT OF SIGNIFICANCE

GERRIT TH. RIETVELD

Gerrit Th. Rietveld is undoubtedly one of the most outstanding designers of the Modern Movement in the Netherlands. An important objective of the architectural avant-garde was to improve the quality of daily life by developing new and functional spatial arrangements, providing hygienic, well-lit and healthy living conditions for everyone.

The Gerrit Rietveld Academy in Amsterdam is the largest building realized by Gerrit Rietveld. More than fifty years after its opening, it is still in use by the educational institution that Rietveld commissioned in 1950 and changed its name to the Gerrit Rietveld Academy when the building opened in 1967.

THE BUILDING

The significance of the building consists of both intangible, and tangible items. The intangible subjects of significance are:

- the physical presence of the academy building as a whole; exterior and interior; main volume and workshops. As a whole, the architecture reflects the paradigm shift in art education at the time.

The material components of significance are:

- The fully glazed curtain wall (the first in the Netherlands) gives the building its unique transparent character.
- The flat facade in which the moving parts are barely visible in combination with the sharp detailing of the roof edge makes the facade work as an abstract surface.
- The composition of the transparent glass facade and the areas of white glazed brickwork at the gymnasium and workshops gives the facade a human scale.
- The three-dimensional dimension system of 2.10 meters in both the exterior and interior.
- The supporting structure as a design element; in the main volume the combination of in-situ reinforced concrete and prefabricated concrete elements and the steel supporting structure of the workshops.
- The spatial organization of the main volume of a wide central corridor with flexible classrooms on both sides.
- The transparent showcase between the central corridor and the classrooms.
- The flexibility of the interior of the main volume, which is at the basis of Rietveld's vision of the academy as an institution.
- The combination of the neutral colors in the classrooms and the color accents for orientation in the corridors on the floor and end walls.
- The presence of the outdoor space with two atmospheres and the relationship of the interior with the outdoor space. And the wall of black masonry as a separation between the two spheres.



6. Transparency in the interior, photo Ton van Rijn (1997), Collectie Stadsarchief Amsterdam nr.010122004580



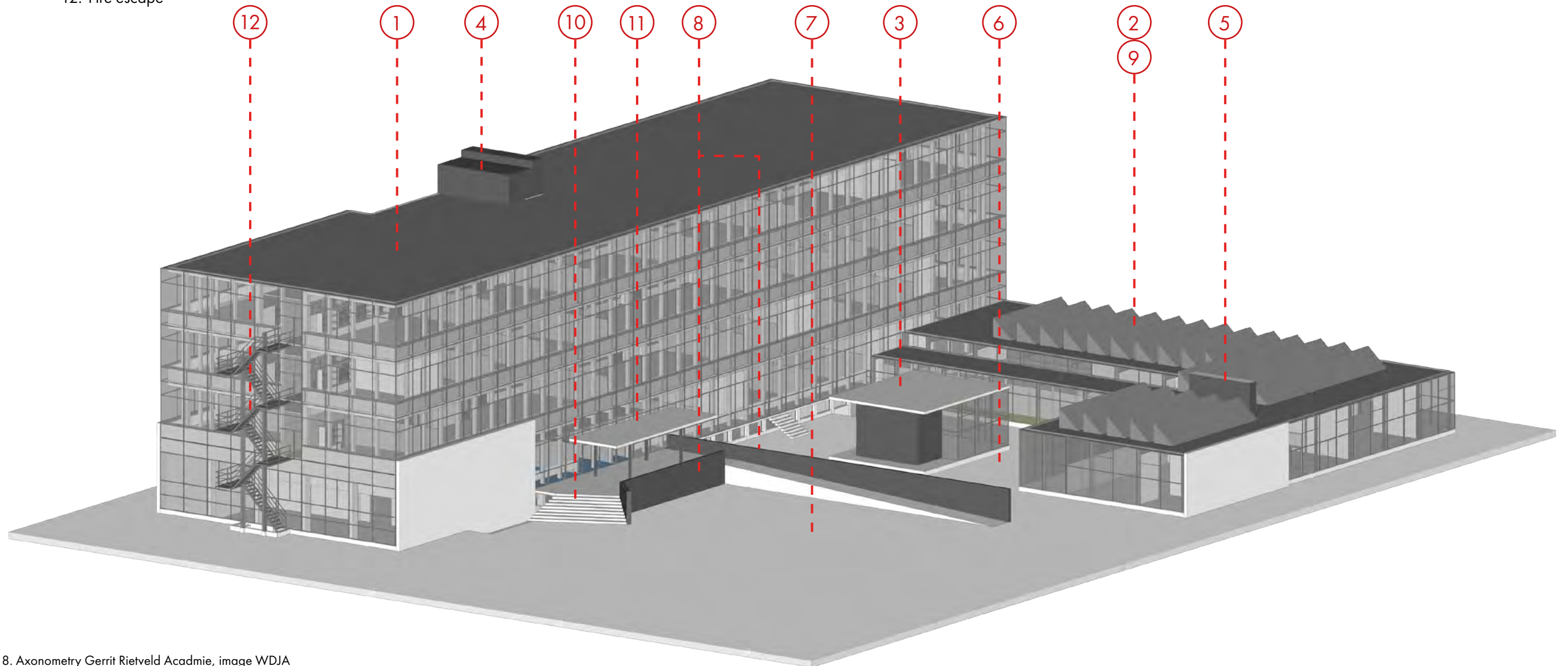
7. South facade Gerrit Rietveld Academie in 1967, photo Ton Roelofsma (1967)

4. OVERVIEW BUILDING PARTS

DESCRIPTION

The building consists of the following building sections:

1. Main volume
2. Workshops
3. Sculpture pavilion/ pavilion (the closed volume is a former transformer house)
4. Elevator building
5. Chimney
6. Work square
7. Flower terrace
8. Retaining wall
9. Shed roofs
10. Parapet
11. Canopy
12. Fire escape



8. Axonometry Gerrit Rietveld Academie, image WDJ

5. VALUE MAPS HISTORIC BUILDING SURVEY

DESCRIPTION

- As part of the CMP, a building history survey was conducted by Suzanne Fischer. This research is integral included in the section "Preservation and Preservation". The following sheets contain only the value maps from this study

RECOMMENDATION

- It is recommended to read the entire building history survey to have a complete overview.

LEGENDA

waardering beeldkwaliteit (bladzijden 52-53)



blauw:
de oorspronkelijke beeldkwaliteit, als in 1967, is intact



groen:
in grote lijnen is de oorspronkelijke beeldkwaliteit aanwezig, maar gewijzigde details hebben invloed op de beleving



geel:
verstoring van het beeld, vergeleken met het oorspronkelijke gebouw en de situatie in 1967

voor de Gerrit Rietveld Academie geldt: de hoogste bouwhistorische waarde hebben de delen uit de eerste bouwphase, de 'originele' of oorspronkelijke elementen

bouwhistorische waardenkaarten (bladzijden 54-69)



blauw:
elementen met hoge bouwhistorische waarde
origineel materiaal, of volledig gelijkwaardig vervangen
* origineel interieur-element of originele afwerking



groen:
elementen met enige bouwhistorische waarde
merkbaar gerepareerde of vervangen onderdelen, zonder grove aantasting van de beleving van het oorspronkelijke gebouw (met toelichting in waardenkaarten)



geel:
elementen zonder bouwhistorische waarde
later toegevoegd, gesloopt, vervangen, mogelijk storend





1967, uitsnede foto
Ton Roelofsma, coll.
AGRA, nr. 67-445-2

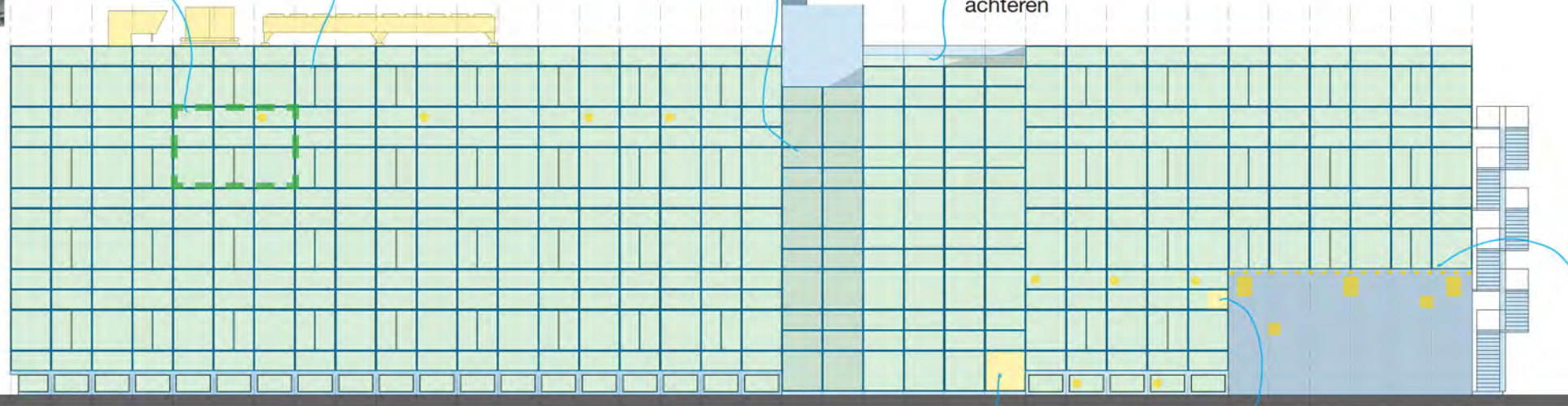
deze velden in 1967
met 'zwart' glas tbv
doka

deze gevel-travee
was open naar het
trappenhuis

ook oorspr. een
matglazen zone
tpv toiletten

bovenlichten
trappenhuis
liggen naar
achteren

noot: aan deze zijde geen luxaflex;
oorspronkelijk wel hier en daar
gordijnen



metselwerk
zichtbaar
hersteld



1967
de oorspronkelijke matglazen
zone tpv de toiletten; maar
iets wat daglicht reflecteerde
in de diepte is verdwenen

uitsnede foto Ton Roelofsma
coll. AGRA, nr. 67-448-2

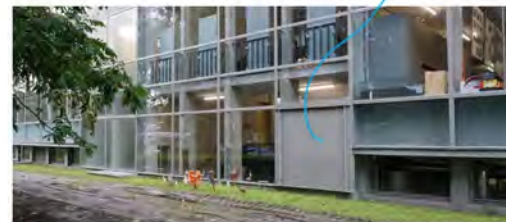
kanaalgevel (noord)



hier een witte
wand te zien;
vraagt veel
aandacht

op sommige plekken sluiten
witte scheidingswanden aan
op de gevel; storend!

oorspronkelijk was de
zuidgevel 'versierd' met
regelmatig geplaatste
ventilator-'knopen'



laaddeuren



ventilatie-rooster



drie zwarte boxen en twee
camera's op witte vlak



metselwerk
zichtbaar
hersteld

gevelbelettering van later datum

treden vernieuwd

oorspr. 5 bank-
jes met houten
planken-zitting
geheel originele
entree-luifel

hellingbaan
toegevoegd
(in 2003 ?)

gevel geblindeerd

dubbele deur en
koekoek

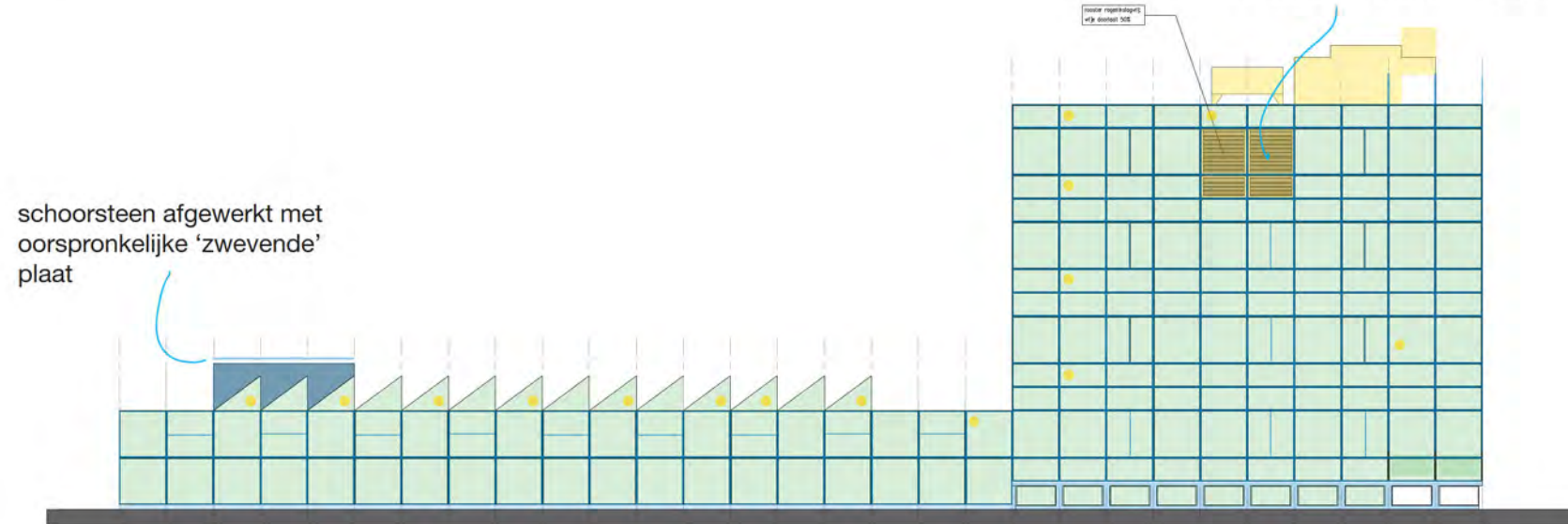


originele entree-luifel; ook plafond
en lichtarmaturen origineel
(luifel van buitenwerkplaats heeft
hetzelfde randdetail)

pleingevel (zuid)

langsgevels (tekening d.d. 2018, ABT werknr. 14718)
bouwhistorische waardenkaart

klimateeninstallatie op dak en roosters in gevel, d.d. 2003



zijgevel (oost)



de pui is plaatselijk geblinddeerd

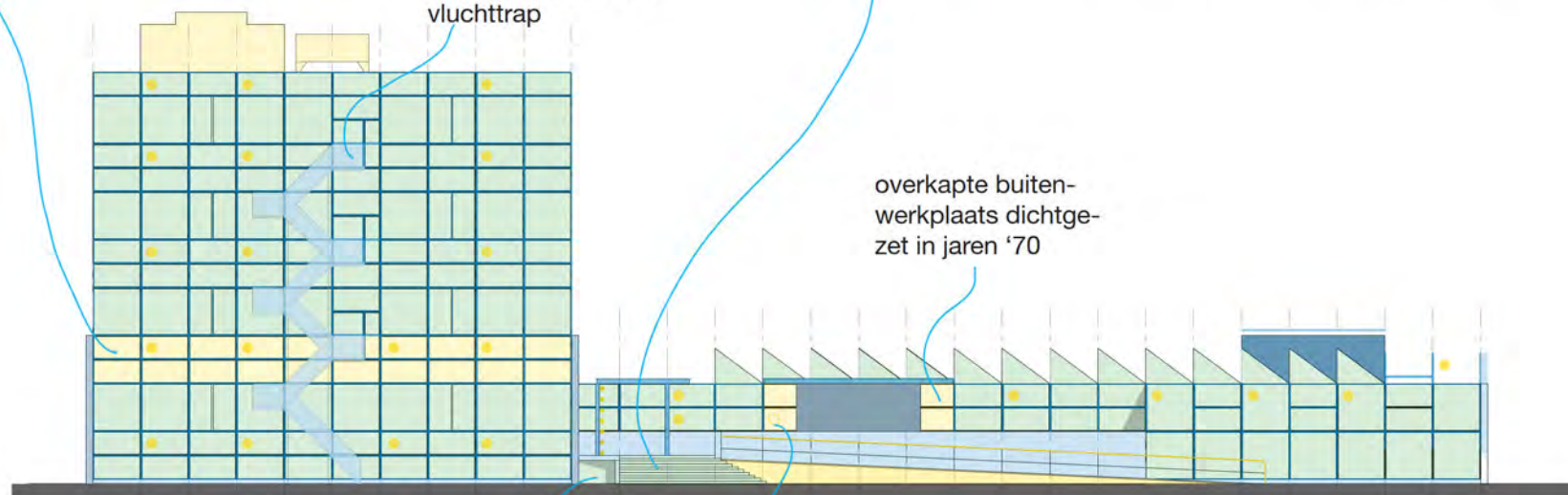


entreetrap opnieuw betegeld met zelfde materiaal.

souterraintrap met stalen trapneuzen en fietsgeulen

oorspronkelijke stalen buitentrap; nu alleen in gebruik als vluchttrap

overkapte buitenwerkplaats dichtgezet in jaren '70



zijgevel (west)

entree souterrain was beglaasd

op deze plek ventilator verdwenen uit achtergelegen laagbouw



er zijn diverse zaken bevestigd aan de kolommen bij de entree; hier is zelfs het H-profiel opgevuld

dwarsgevels (tekening d.d. 2018, ABT werknr. 14718)
bouwhistorische waardenkaart



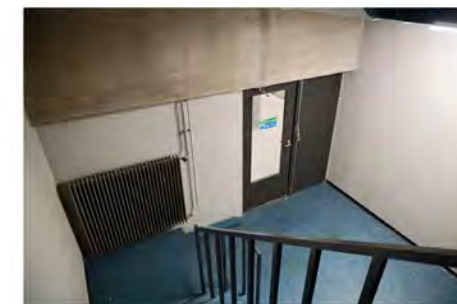
toegevoegde laaddeuren van trapbordes naar park singelzijde



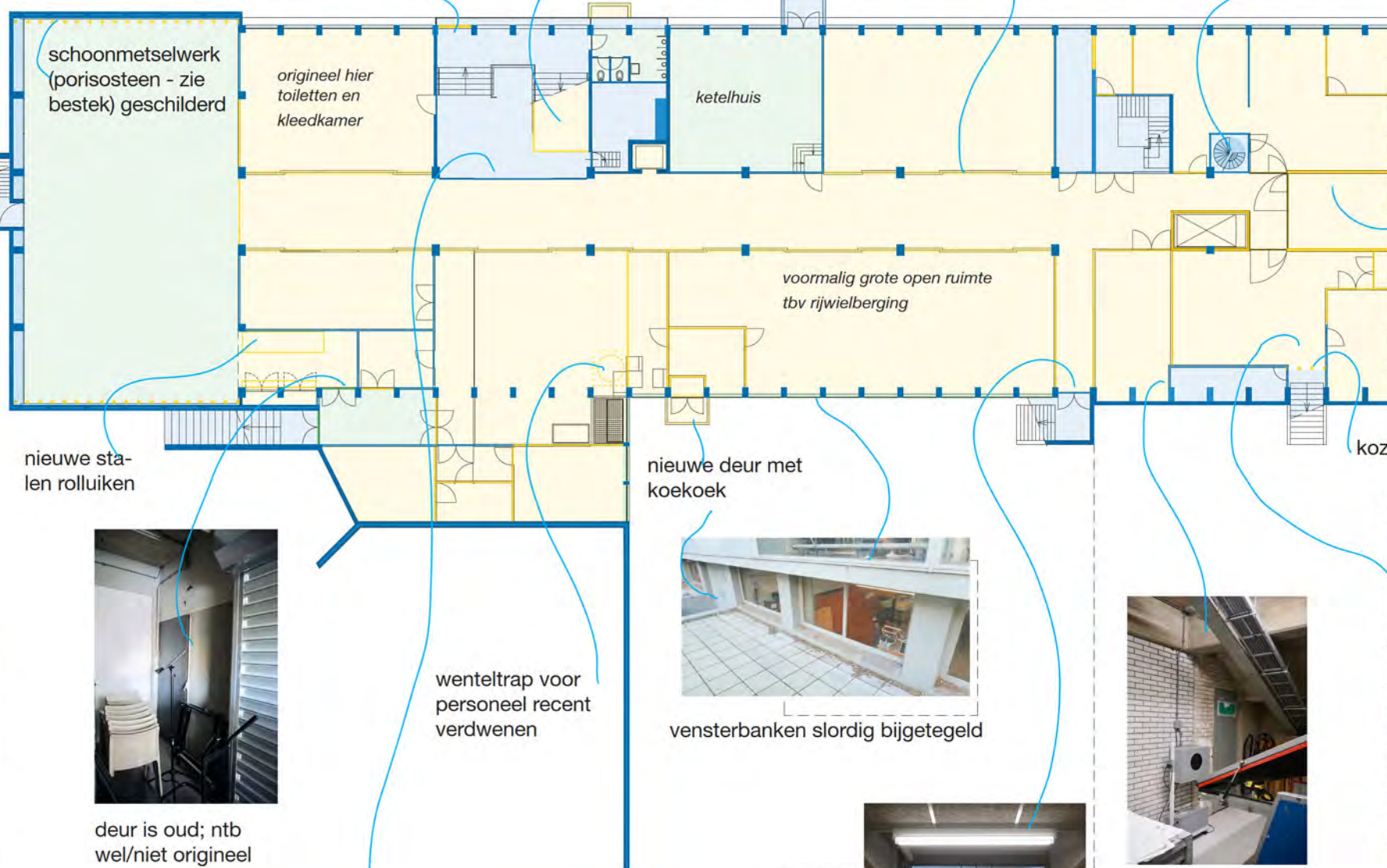
hok onder trap verrommelt de ruimte

origineel hier een gemetselde wand met deuren

wenteltrap origineel als verbinding afdeling binnenhuis met werkplaats



bodem trappenhuis met deur naar gang



nieuwe stalen rolluiken



kozijn zit er; deuren weg



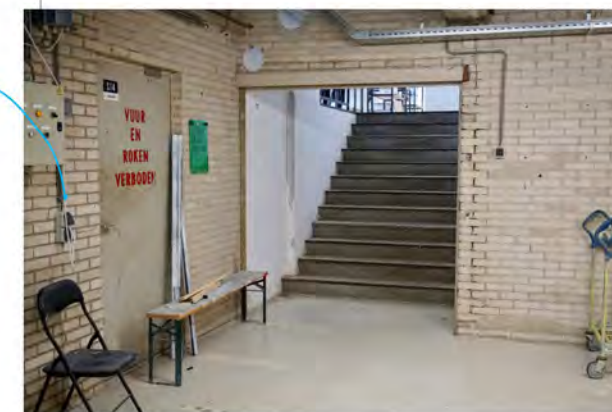
deur is oud; ntb wel/niet origineel



vensterbanken slordig bijgetegeld



originele deur smalle berging



originele trap naar werkplaatsvleugel. in muur links een originele deur in originele verf.

orig. pui volledig beglaasd; fietswielgeleiders nog op trap



hier nog de originele schuifpui



deuren naar trap naar buitenwerkplaats



kelder

bouwhistorische waardenkaart



huidige food-balie in de kantine



huidige entreebalie, met openslaande deuren



trappenhuis oorspr. in open verbinding met gevel



trap naar de buitenwerkplaats, tegenwoordig met aan weerszijden boompjes

schoonmetselwerk (porissteen - zie bestek) geschilderd

origineel alleen een kleine koffiebalië

toiletdeur verbreed

deur toegevoegd

* oorspronkelijke *Plasnao* vloer-afwerking bewaard (alleen op deze plek, nergens anders)

verplaatste wand

status dit wandje ntb

afgescheiden leraarkamer verdwenen



roosters luchtbehandeling gymzaal

vide gymzaal / aula

nieuwe deur
deur weg
trap weg



1971

de glasoven in de dichtgezette buitenwerkplaats (still uit Polygoonjournaal 21 juni 1971 coll. BeeldEnGeluid nr. HRE00015B0F)



wandpanelen met bovenlichten vervangen door opendraaiende deuren

traptreden vernieuwd

keermuur weggebroken

diverse oorspronkelijke functionele terrein-elementen verdwenen



trap met stalen trapneuzen

oorspronkelijke bielzen-vloer weg

hek weg



oorspr. betonnen bankjes met houten zitting (fragment foto Ton Roelofsma 445-3)



sculptuur Ben Guntenaar

hellingbaan loopt door 'personal space' van kunstwerk en verstoort beeld en routing van entreegebied



een paar oudere bankjes op het bordes, zónder houten zitting

overdekte werkplaats dichtgezet ca. 1970, met 'originele' puien; zijn deze ondertussen nog vervangen? (zie ABT tekening 2018)



begane grond

bouwhistorische waardenkaart



in 2008 toilet verbouwd tot 'verstopte' pantry (foto Kim Zwarts)

liften recent vervangen; nieuwe deuren en kozijn stordend aanwezig

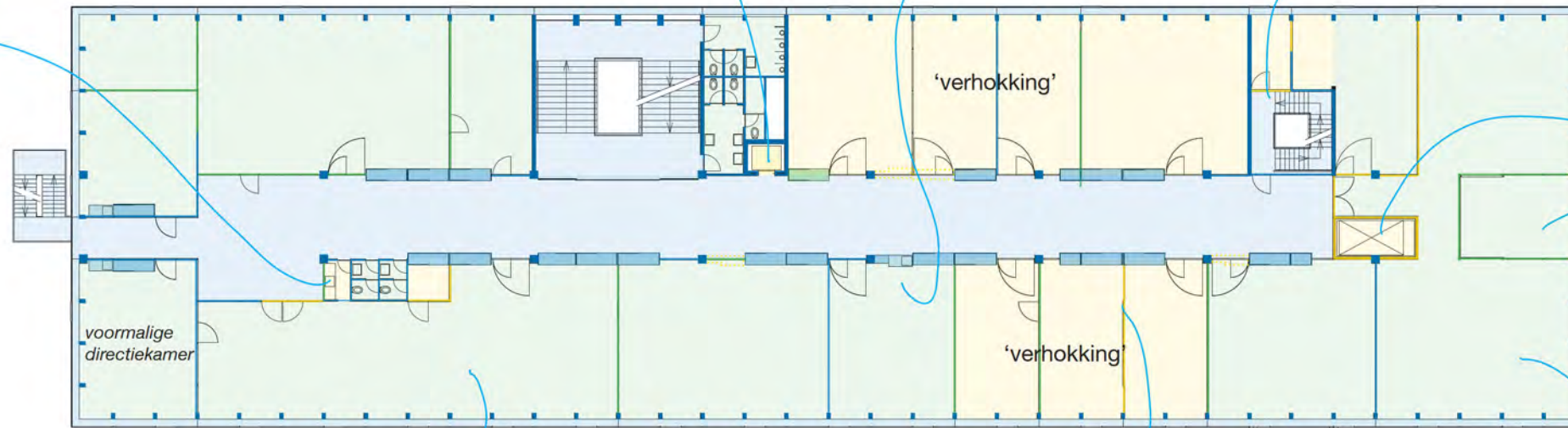


originele aanrechten in lokalen onbruikbaar gemaakt

trappenhuis oorspr. in open verbinding met gevel



metalen doos tbv nieuwe luchtbehandelingsinstallatie (sinds 2003)



voormalige 'lerarenkamer', verhuisd naar deze verdieping (ca. 2004, foto Kim Zwarts, coll. GRA)

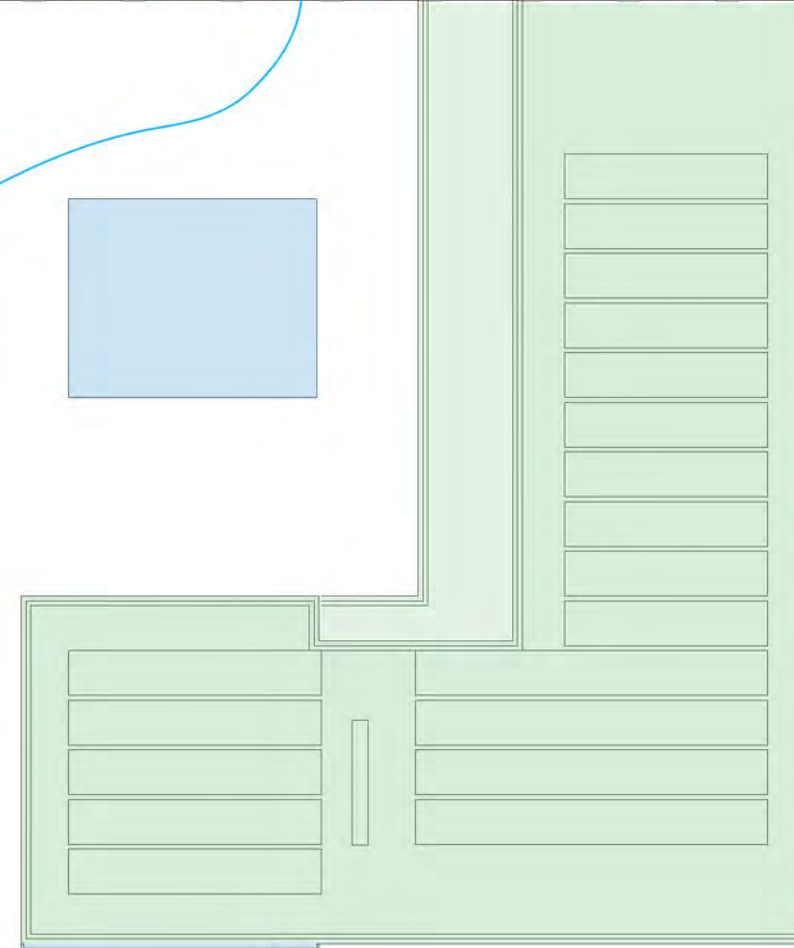


huidig interieurbeeld



zeer zichtbare kabelgoot

hier recent een pui verwijderd; duidelijke sporen hiervan vragen verkeerd soort aandacht (nb. deze wand aangegeven als schuifpui; evt. nader bekijken)



ruime ateliers



1e verdieping + dak laagbouw bouwhistorische waardenkaart



spoor van verwijderd aanrecht

voormalige doka-ruimtes waarbij ook gangpui geblindeerd was

wand hergebruikt/verplaatst

nieuwe computer-ruimte met nieuw type schuifwanden

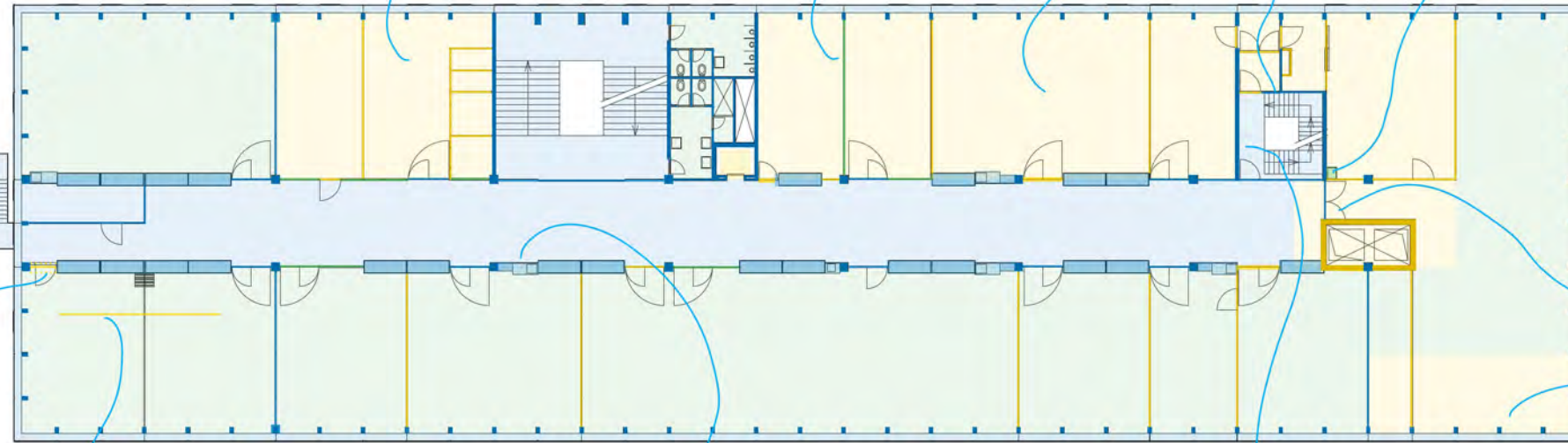


trappenhuis oorspr. in open verbinding met gevel

ntb: orig. wasbakje nog aanwezig?



zicht vanuit oostelijk trappenhuis in gang tweede verdieping



de verbinding van gang met het grote lokaal op de kop was origineel transparant en ruimtelijk

deze hoek was oorspr. opgedeeld in kleine ruimtes



witte draaibare? wand in onduidelijke positie



deze stoppenkastjes zitten op iedere verdieping op deze plek



hier is gerommeld met de wand; de kleurvlakken zijn niet in orde. (origineel waren de doorlopende plinten een lichter grijs dan de deuren!); bovenramen geblindeerd.



2005: nieuwe type schuifwanden in computerlokaal (foto Erik Slothouber)

2e verdieping bouwhistorische waardenkaart



lokaal tegen berging



open hoek

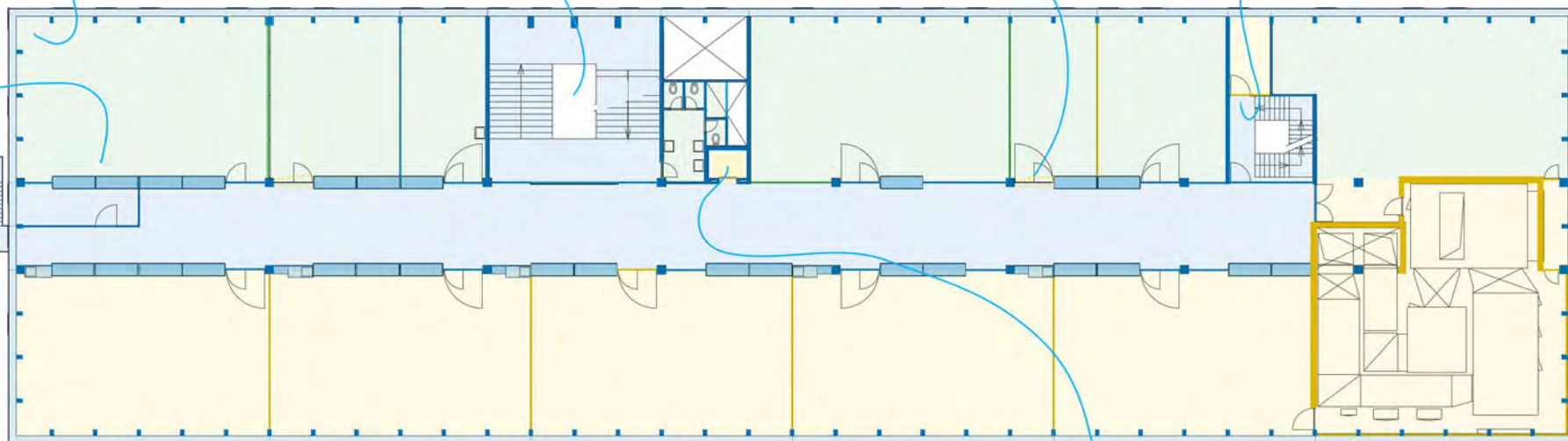
hijs-installatie
bovenin vide



verbouw-sporen



trappenhuis
oorspr. in
open ver-
binding met
gevel



klimaatinstallatieruimte op een plek die in de oorspronkelijke plattegrond een grote open ruimte was.



bovenste platform van de stalen buitentrap



derde verdieping in 2005 geheel opnieuw ingericht, met aan de zuidzijde een nieuw type gesloten en verplaatsbare scheidingswanden (foto Erik Slothouber)



2003

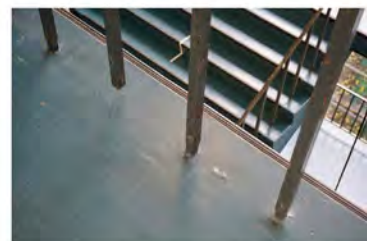
foto GRA



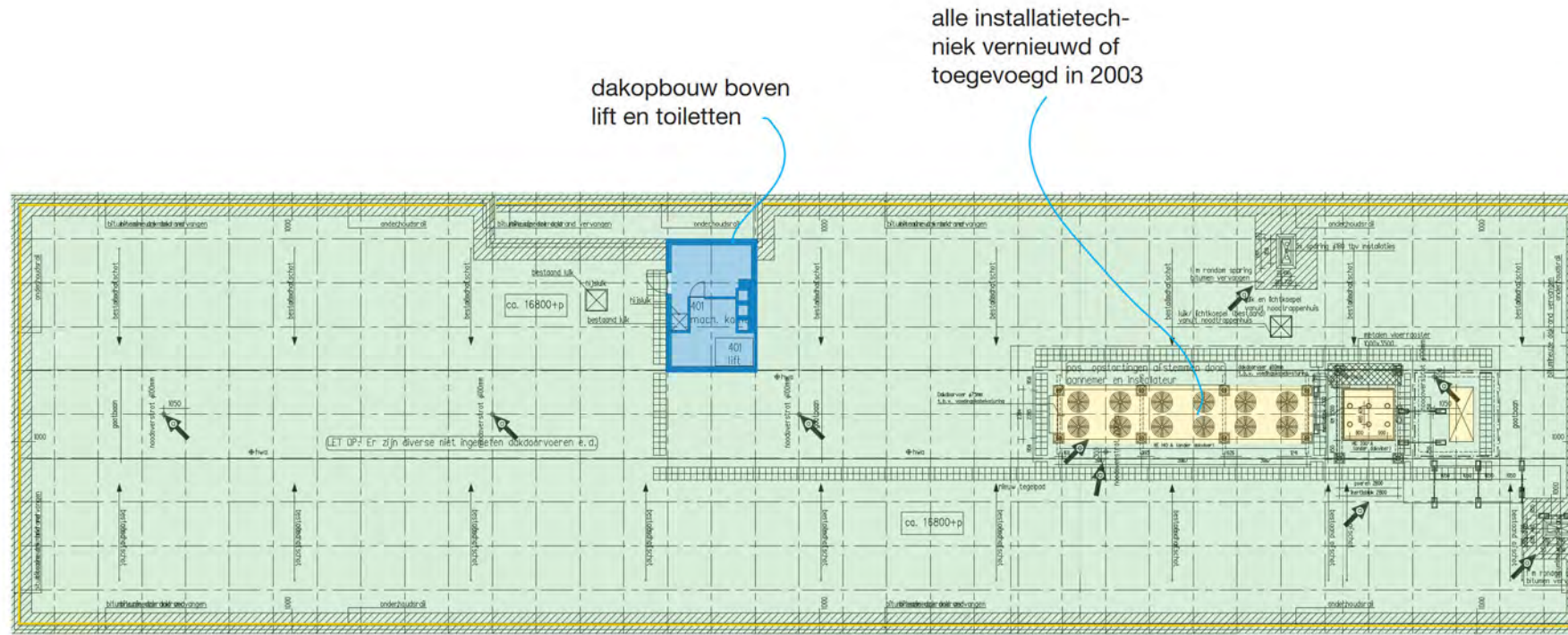
links een foto van een originele liftdeur en ombouw; rechts het huidige liftbeeld; geïnstalleerd ná de restauratie van 2003



bovenste balkon van het hoofdtrappenhuis, met naar binnen gezette bovenlichten



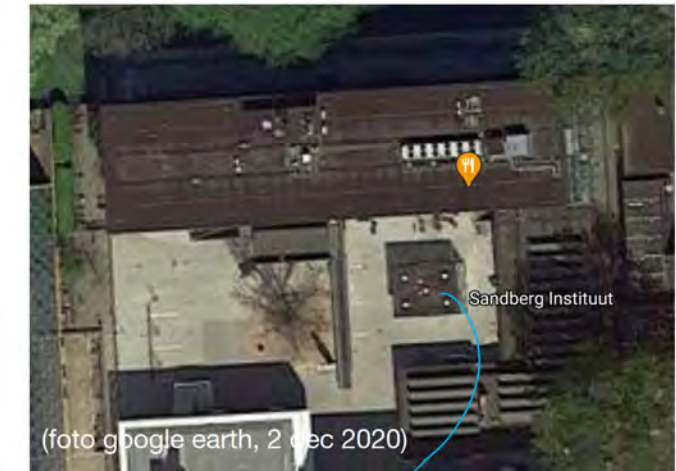
3e verdieping bouwhistorische waardenkaart



dakopbouw boven lift en toiletten

alle installatietechniek vernieuwd of toegevoegd in 2003

de bitumineuze dakbedekking is vervangen



(foto google earth, 2 dec 2020)

Sandberg Instituut

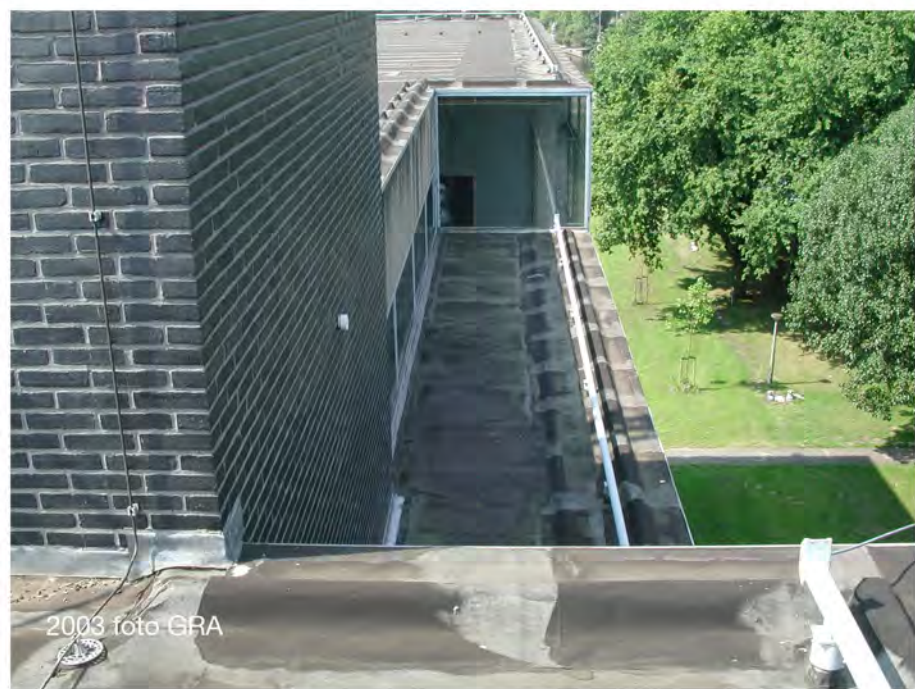
deze vijf 'stippen' nader te bekijken



2003 foto GFA

onderhoudsraail later geïnstalleerd

boven het hoofdtrappenhuis een hap uit het volume; let ook op het grote vierkante raam naar een lokaal



2003 foto GFA



1973

detail van luchtfoto Stadionbuurt, met het oorspronkelijke dak in beeld (augustus 1973, foto NN, archief Dienst Ruimtelijke Ordening, collectie SAA nr.B00000034426)

de dakrand steekt op deze foto licht af tegen het dakvlak; oorzaak eventueel nader te onderzoeken.

dak hoogbouw bouwhistorische waardenkaart

(tekening d.d. 13 jan. 2004, ABT werknr. 18104, tek. nr. W104)

6. LOAD BEARING STRUCTURE

DESCRIPTION

Rietveld sought sobriety and simplicity in his architecture. Among other things, he used the load bearing structure as a design element to achieve this. Through the transparency of the facade, the load bearing structure is part of the expression. Also, the construction is the most expressive physical translation of the dimensional system and gives structure to the spatial layout of the academy building. Therefore, the structure is not only functional, but also an essential part of the architecture

The supporting structure of the main volume consists of:

- The rigid structure of the center corridor (the concrete backbone) with in-situ concrete columns and girders along the full length of the building.
- In-situ concrete floors and the central staircase
- Precast concrete columns along the façade with precast prestressed string beams in the classrooms.

Unlike the main volume, the load-bearing structure of the workshops is constructed of steel columns and girders.

SIGINICANCE

- The interplay of in-situ concrete and precast elements is a physical translation of the interplay between the rigidity and flexibility of the interior.
- The precast elements express Rietveld's preference for prefabrication.
- The steel structure creates a clear distinction between workshops and main volume, shapes the industrial character and strengthens the relationship with the former sculpture pavilion.

TRANSFORMATION FRAMEWORK

- The supporting structure shapes and is integral to both the exterior and interior of the academy building. Therefore, the entire skeleton has limited transformation potential.
- The in-situ concrete spine has limited transformation potential. Rietveld deliberately chose to pour the spine into the work, the building derives its stability from this and it reflects the non-flexible nature of the center corridor.
- The precast columns along the facade and the precast beams in the classrooms also have limited transformation potential.
- The steel structure of the workshops has limited transformation potential.

RECOMMENDATION

- The load bearing structure is preferably retained and any new additions are preferably form-fitting, so that the importance of the structure as a form-fitting element is maintained.
- Additions or adjustments to the in-situ concrete structure are preferably also poured in-situ.
- Additions or adjustments to the prefabricated structure parts are preferably realized with prefabricated elements.
- Additions or adjustments to the steel structure parts are preferably realized with steel elements.



9. Construction of the concrete structure of the main volume, 1964-1966, GRA



10. Construction of the steel structure of the workshops, 1964-1966, GRA

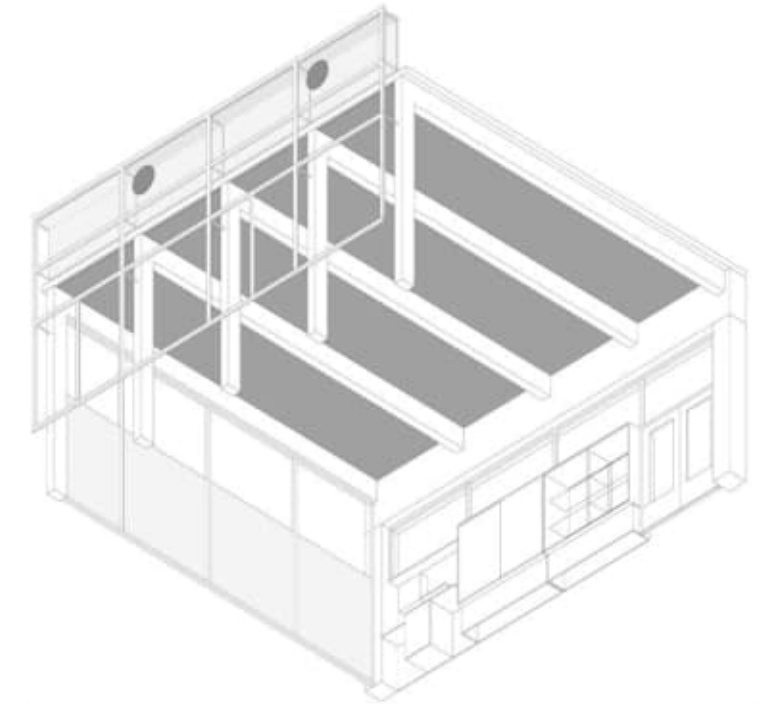
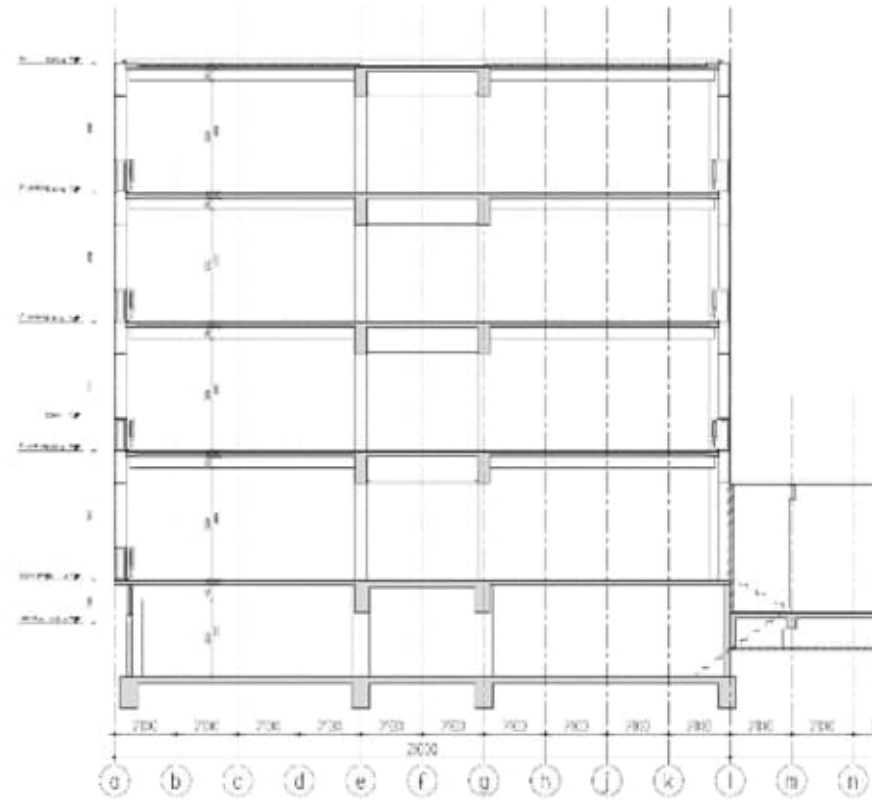
MAIN VOLUME

Dimensions main volume:

- Length: approx. 76 m
- Width: approx. 21 m
- Height: approx. 17 m
- Grid: 2,1 x 2,1 x 2,1 m

The load bearing structure consists of:

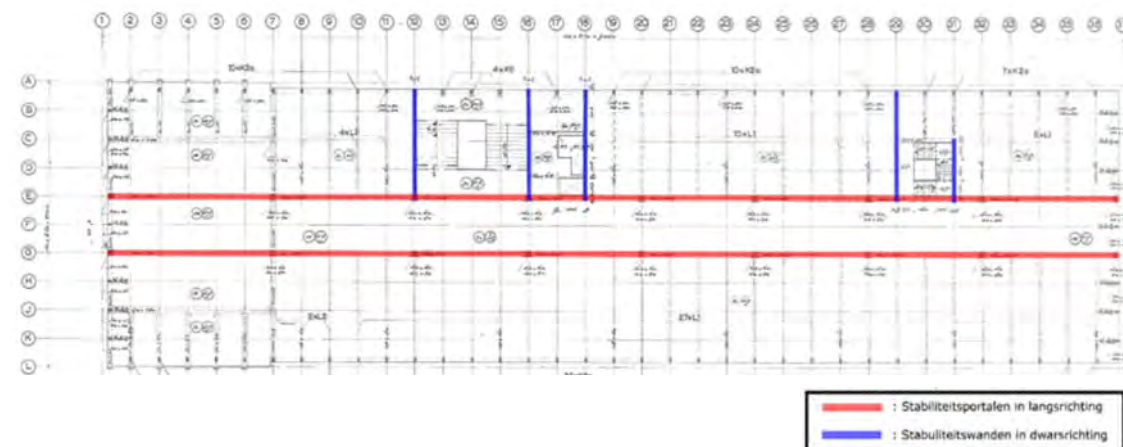
- Basement:
 - in-situ concrete
 - foundation 600 x 800mm (w x h); h.o.h. 4200 mm
 - wall and floor thickness 200 mm
- Corridor:
 - in-situ concrete
 - columns 400 x 500 mm
 - two beams in the longitudinal direction 500 x 1020 mm (w x h) with a span of 8400 and 10500 mm; centre-to-centre 4200 mm
 - floor thickness 150 mm
- Classrooms:
 - precast concrete
 - columns 180 x 300 mm
 - prestressed beams 180 x 500 mm (w x h) with span 8400 mm; centre-to-centre 2100 mm
 - floor thickness 100 mm
- Gymnasium:
 - two-story high
 - beams 400 x 1200 mm (w x h)
- Staircases:
 - composed of in-situ concrete
- Canopy:
 - steel structure; freestanding and wedged into foundation
 - columns and beam
 - wooden beam for the roof



11. Section and 3D of the main volume, image ABT



12. Principle beam system, image ABT



13. Stability provisions floors, image ABT

Materials used:

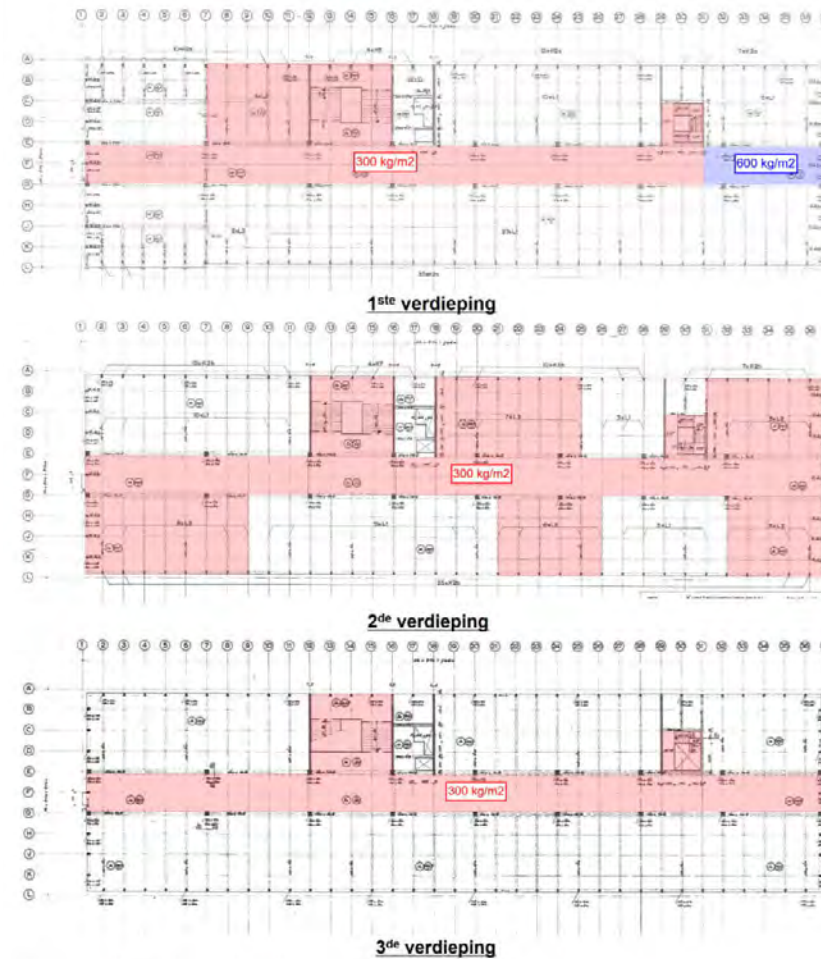
- In-situ concrete K225
 - rebar stirrups QR24
 - longitudinal reinforcement steel QR40
 - rebar reinforcement nets QR48
- Precast elements unknown material properties

Overview of imposed loads:

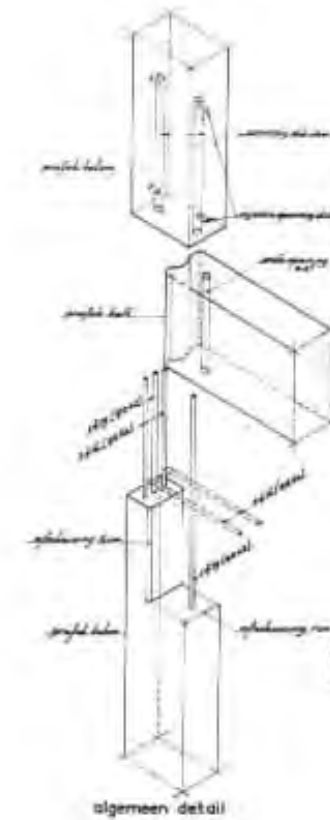
- Roof: 100 kg/m²
 - 2nd to 4rd floor: 200, 300 of 600 kg/m²
 - 1st floor: 400 kg/m²
 - Basement normal: 500 kg/m²; at centrale heating: 1000 kg/m²
- In general, on the 2nd to 4rd floor there is an imposed floor load of 200 kg/m². There are some floor areas with heavier imposed floor loads, namely the red areas 300 kg/m² and blue 600 kg/m².

Permanent loads on floors:

- Curtain wall: 60 kg/m²
- Roofing: 10 kg/m²
- Gravel: 20 kg/m²
- Roof sheets (80 mm Durisol): 75 kg/m²
- Floor screed: 70 kg/m²
- Ceiling classrooms: 10 kg/m²
- Ceiling hallway: 30 kg/m²
- Locker walls on "studs": 200 kg/m¹
- Partition walls on "beams": 180 kg/m¹



14. Different floor loads 2nd to 4th floor, image ABT



15. Detail connection precast beam and column

MAIN VOLUME: ASSESSMENT CAPACITY STRUCTURE

The assessment is based on the assumptions retained in the original calculation. Each intervention will have to be definitively considered separately with exact data. It should be noted that adjustments that affect the load or capacity of the precast beams and columns will be difficult to assess because no working drawings with reinforcement are available for these components. For all other components, making recesses in beams and floors is not entirely impossible, but should be assessed separately.

Roof:

The roof is calculated for an imposed load of 100 kg/m². Provided sufficient slope and emergency overflow facilities are provided, the snow load on the roof will be the normative imposed load. In accordance with the current standard, a minimum snow load of 56 kg/m² must be taken into account. A reserve is available for the installation of solar panels, for example. However, care must be taken to ensure that the load due to ballasting of the solar panel structure and any accumulation of snow due to obstructions formed by these panels does not exceed the maximum load.

However, the allowable load does not allow for the installation of a roof structure without taking drastic additional measures.

Storey floors:

The storey floors are generally calculated for an imposed load of 200 kg/m². This load is already lower than the imposed load to be used in accordance with the current standard for school buildings; = 250 kg/m². Therefore, there are no additional opportunities for special uses in these areas.

In the areas with additional load up to 300 kg/m² there are possibilities to allow slightly more load. However, this load is not sufficient to create gathering spaces for large crowds, other than classrooms, for example, because the current standard there prescribes an imposed load of 400 to 500 kg/m².

The calculated imposed load does give possibilities to also serve as office space, where the current standard prescribes an imposed load of 250kg/m².

First floor:

The first floor is calculated for an imposed load of 400kg/m². This load is more than sufficient for the function of classrooms, but also offers possibilities for meeting functions with tables or fixed seating. For large crowds without obstacles, it is too little.

Basement:

The basement is calculated in the area of the CV room for an imposed load of 1,000 kg/m². This provides sufficient space for the placement of the most common installations. The rest of the basement is calculated for an imposed load of 500 kg/m², which gives space for functions such as, for example, storage of goods and archive of limited size. In the large hall between axes 1 and 7, this makes it possible to admit large crowds without obstacles.

WORKSHOPS

Dimensions L-shaped workshops:

- Greatest length: approx. 40 m
- Greatest width: approx. 34 m
- Greatest height: approx. 5 m
- Grid: 2,1 x 2,1 x 2,1 m

The load bearing structure consists of:

- Steel structure
- Columns DIN16 profiles
- Main system of structure girders INP47.5; spacing 4200 mm. Designed as a portal frame.
- Secondary system girders INP200. The roof and skylights (shed roofs) rest on these

Materials used:

- In-situ concrete K225
 - rebar stirrups QR24
 - longitudinal reinforcement steel QR40
 - rebar reinforcement nets QR48
- Steel columns, beams, etc. Fe360n

Overview of imposed loads:

- Roof: 100 kg/m²
- 1st floor: 400 kg/m²

Permanent loads on floors:

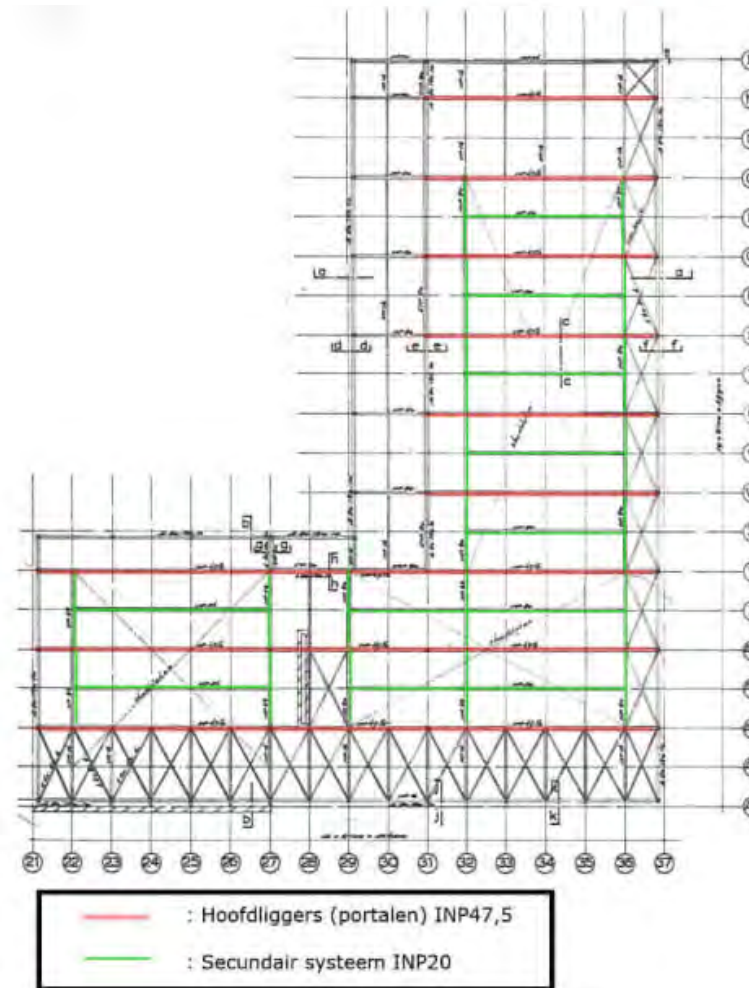
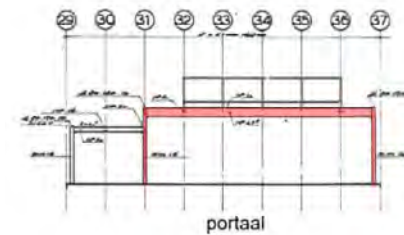
- Roofing: 10 kg/m²
- Gravel: 20 kg/m²
- Roof sheets (80 mm Durisol): 75 kg/m²
- Floor screed: 70 kg/m²

First floor:

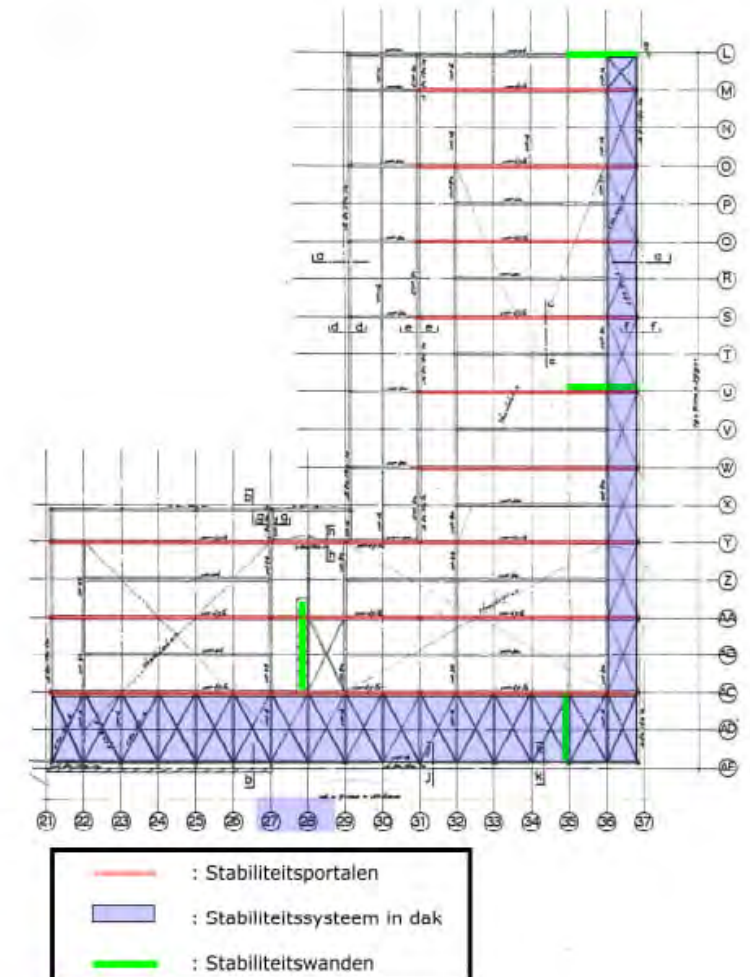
The first floor is calculated for an imposed load of 400 kg/m². This is sufficient for use as a workshop (industrial use), but also offers possibilities for meeting functions with tables or fixed seating. For large crowds without obstacles, it is too little.



16. Workshops, photo Ton Roelofsma (1967)



18. Principle beam system, image ABT



17. Stability provisions, image ABT

WORKSHOPS: ASSESSMENT CAPACITY STRUCTURE

The assessment is based on the assumptions retained in the original calculation. Each intervention will have to be definitively considered separately with exact data. For all components, making recesses in beams and floors is not completely impossible, but should be assessed separately.

Roof:

The roof is calculated for an imposed load of 100 kg/m². Due to the roof lights, in accordance with the current standard, a snow load that will be on average higher than this value must already be calculated. The installation of solar panels, for example, is therefore not automatically possible. This will require a detailed analysis.

PAVILION

Dimensions pavilion:

- Length: approx. 11m
- Width: approx. 8,6 m
- Height:: approx. 2,4 m

The load bearing structure consists of:

- Concrete roof, thickness 190 mm on
- Four concrete columns 250 x 250 mm
- Masonry walls, thickness 250mm.
- Foundation on precast piles 320 x 320 mm, which are directly under the columns and in the location of the ends of the structural walls of the installation pit.
- The first floor, thickness 150 mm
 - spans in 2 directions to a beam grid
 - concrete beams 250 x 600 mm
 - edge beams 200 x 800mm.
- Installation pit concrete walls and floor both, thickness 250mm

Materials used:

- In-situ concrete K225
 - rebar stirrups QR24
 - longitudinal reinforcement steel QR40
 - rebar reinforcement nets QR48

Overview of imposed loads:

- Roof: 100 kg/m²
- 1st floor: 400 kg/m²

Permanent loads on floors:

- Roofing: 10 kg/m²
- Gravel: 20 kg/m²
- Floor screed: 70 kg/m²

PAVILION: ASSESSMENT CAPACITY STRUCTURE

The assessment is based on the assumptions retained in the original calculation. Each intervention will have to be definitively considered separately with exact data. For all components, making recesses in beams and floors is not completely impossible, but should be assessed separately.

Roof:

The roof is calculated for an imposed load of 100 kg/m². In accordance with the current standard, a minimum snow load of 56 kg/m² must be taken into account. There is a reserve for the installation of solar panels, for example. However, care must be taken to ensure that the load due to the balancing of the solar panel construction and any accumulation of snow due to obstacles formed

by these panels does not exceed the maximum load.

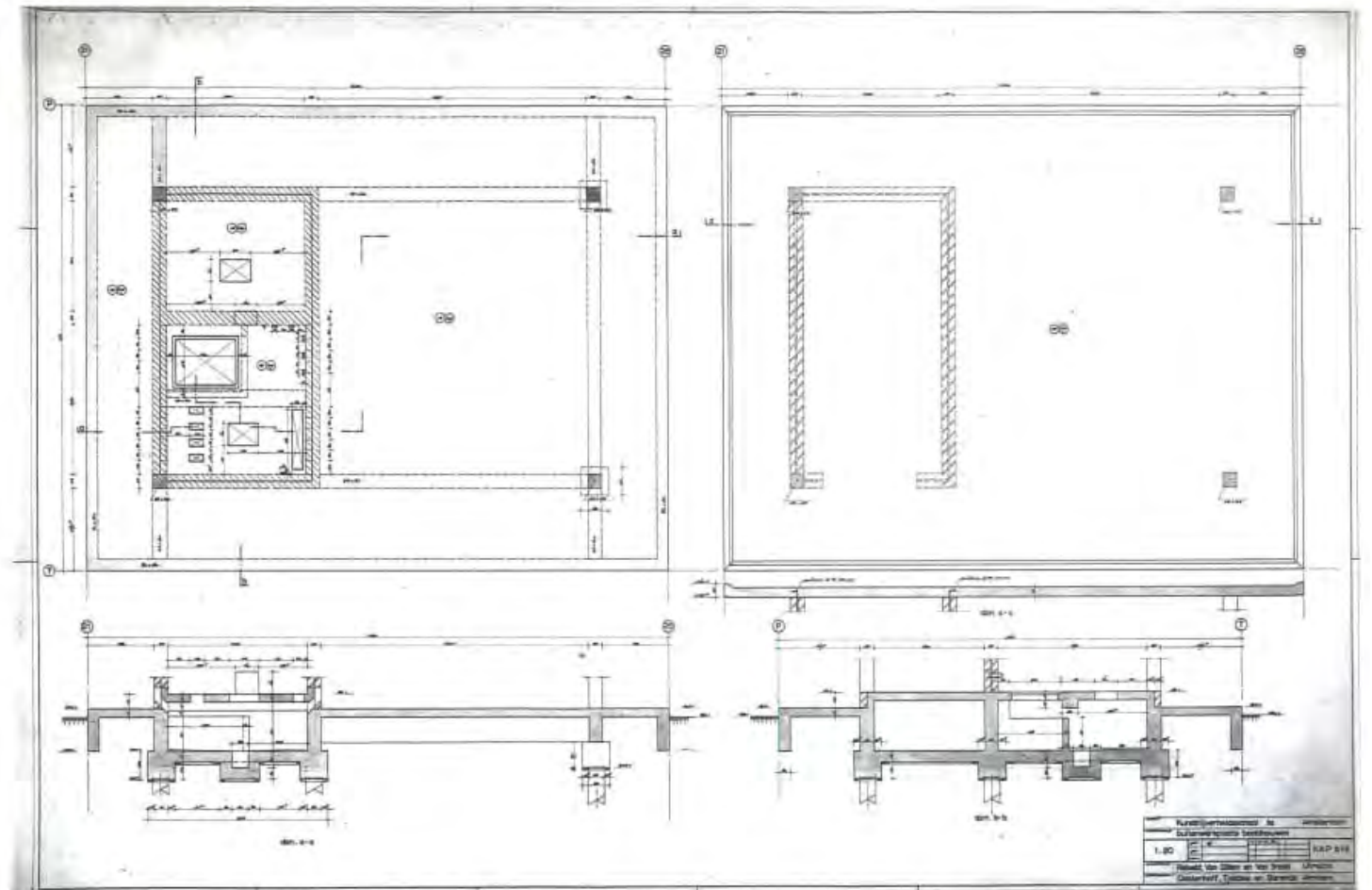
However, the allowable load does not allow for the installation of a roof structure without taking drastic additional measures.

First floor:

The first floor is calculated for an imposed load of 400 kg/m². This is sufficient for use as a workshop (industrial use), but also offers possibilities for meeting functions with tables or fixed seating areas. For large crowds without obstacles, it is too little.



19. Pavilion, photo Ton Roelofsma (1967)



20. Principle load bearing structure

7. (CURTAIN WALL)FACADE AND INSTALLATIONS

DESCRIPTION FACADE

- The original curtain wall is constructed of un-illuminated steel profiles (Baat company) with drawn, single glass, placed with the lines of the drawn glass horizontal.
- The dimensional system of the facades is based on the standard size of 2.10 meters.
- During the 2004 renovation, the glass was replaced in order to restore the steel facade profiles. And pulled single glass was put back cf. originally with the lines horizontal.
- Due to a changed ventilation principle, the white fans (the "buttons") lost their function and were removed during the 2004 renovation.
- In short, the steel façade profiles are still original and the glass is from 2004.
- The moving parts (horizontal pivot and sliding windows) lie flush in the facade and are barely visible when closed.
- The curtain wall is terminated by a thin eaves.

SIGINICANCE FACADE

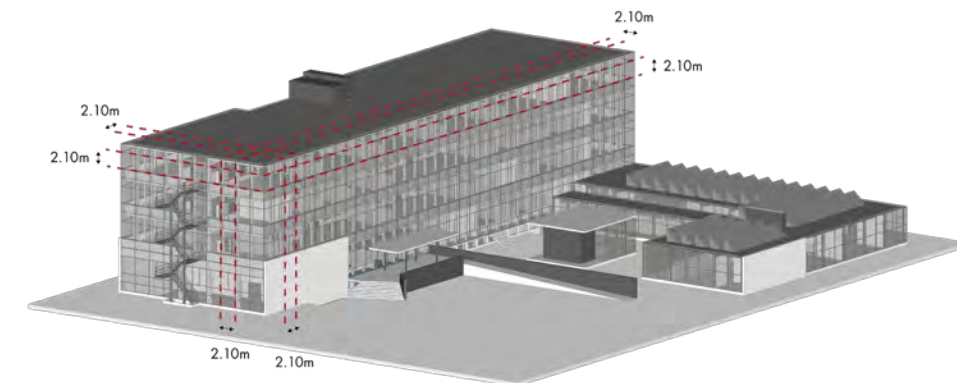
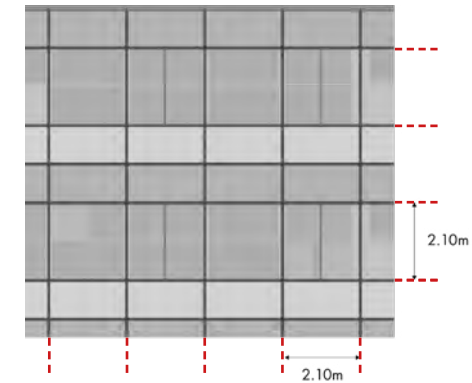
- It was the first all-glass curtain wall in the Netherlands
- The highly transparent facade is one of the most image-defining aspects.
- The distance between the curtain wall and the structure of the building enhances the transparency and the effect of the facade as a "fleece" around the building.
- The uninterrupted surface of the curtain wall is supplemented in the facade image by white glazed masonry surfaces at the location of the sports hall and workshops. The interplay between the surfaces is of great importance for the scale of the facade.
- The simplicity in materials, the industrial look of the materials and the lack of decorative elements are characteristic of the expression of the building
- The detailing of the horizontal pivot and sliding windows is characteristic of the simplicity of the building.
- The opening parts in the facade play an important role in the comfort of the classrooms and are often used
- The eaves detail of both the main volume, and the workshops, is of great architectural quality. Its slenderness and simplicity define the overall expression of the academy.

TRANSFORMATION FRAMEWORK FACADE

- Therefore, the physical presence of the curtain wall, the continuous plane, the distance between curtain wall and concrete structure and the high degree of transparency have limited transformation potential.
- The dimensional system has limited transformation potential.
- The interplay between the curtain wall and the white glazed masonry surfaces has limited transformational potential.
- The material simplicity of the building by applying bare concrete, glass, steel and brick has limited transformational potential. This does not mean that adding new elements in a different material is not possible, as long as the industrial simplicity is maintained.
- The glass has mixed transformation potential. However, if it is to be replaced, the original characteristics of the glass should be taken into account; the irregular reflection, color and transparency of the glass should remain as close to the original as possible.
- The windows to be opened and especially the simple detailing of these windows have limited transformation potential. The windows should be retained and preferably remain functional.
- The eaves detail of both the main volume and the workshops have limited transformation potential. The details are characteristic of the building and can only be modified with weighty arguments. Especially the set-back of the eaves detail is essential, it should not be visible from ground level.



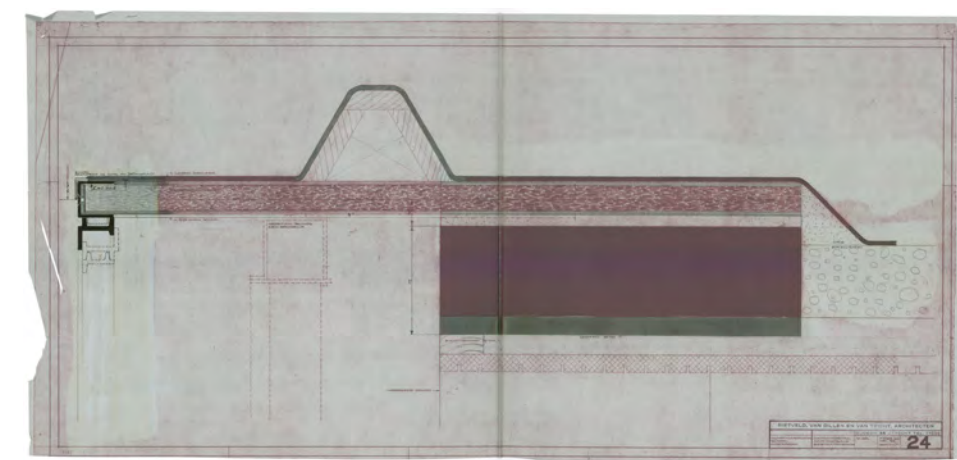
21. Transparent corner Gerrit Rietveld Academie, photo Kim Zwarts (2008)



24. Axonometry with grid system



22. Zuidgevel Gerrit Rietveld Academie in 1967, photo Ton Roelofsma (1967)



23. Original detail roof edge

DESCRIPTION INSTALLATIES

Originally, the rooms were heated by radiators along the facade. And ventilation was provided by supplying fresh lunchtime through the corridor (through the grilles under the display cases) and exhausted through the white ventilation grilles (the "buttons") in the facade.

During the 2004 renovation, this principle was changed and the ventilators in the facade lost their function and were removed. The current air conditioning systems consist of:

- Ventilation with heat recovery; inflow through the ceiling and central extraction through the corridor using negative pressure. The main supply ducts are located above the suspended ceiling in the center corridor.
- Heating by the original radiators along the facade. The water for the radiators is heated in the boiler room in the basement. In winter the ventilation air is pre-heated.
- Cooling in summer using cooled ventilation air.
- Blinds (Luxaflex) on the inside.
- The lighting consists of originally of fluorescent fixtures placed in the pattern of the structure. The fixtures were renewed in 2004

SIGNIFICANCE INSTALLATIES

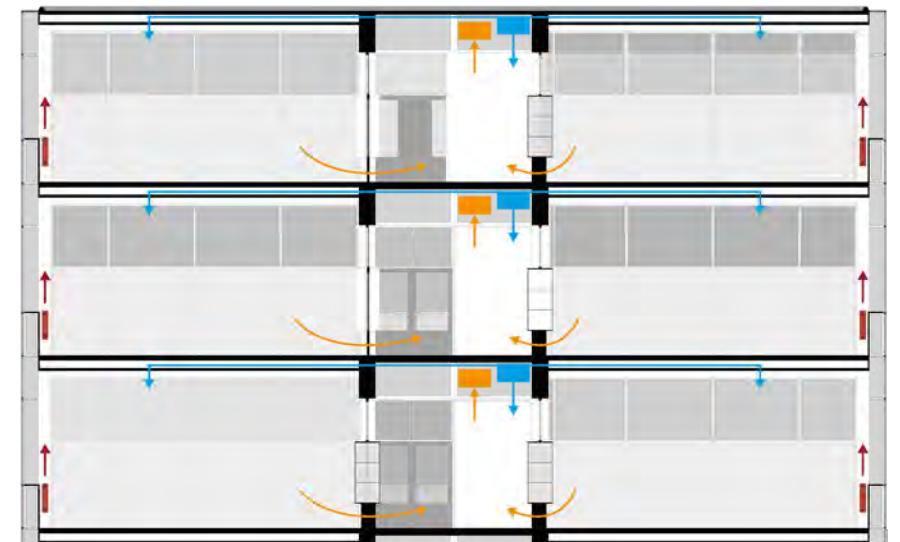
- The ventilation system was and 2004 completely replaced, including the infrastructure, and is therefore of low value
- The current radiators were also replaced in 2004, but in accordance with original. They are an example of the industrial look that Rietveld strived for in the interior and are therefore of high value.
- The blinds are not original, but they are in their original position. The principle is therefore also of high value.
- The middle corridor is still used as a central place in the building to transport air above the suspended ceiling. This principle is of high value because it is originally so and because this principle strengthens the character of the middle corridor as a central axis.
- Because of the transparent curtain wall and the transparent interior walls, especially at night, the lighting both in the exterior and in the interior defines the expression of the academy building. The fluorescent luminaires also reinforce the industrial character.

TRANSFORMATION FRAMEWORK INSTALLATIES

- The current ventilation principle is completely renewed and is reversed from the original. Therefore, the principle has a high transformation potential. The principle can be changed in the future if necessary.
- The principle of cooling has a high transformation potential. It is not original and therefore can be modified where necessary.
- The heating principle with radiators is still original and has limited transformation potential.
- The spatial fitting of the ducts in the center corridor, radiators and grilles has limited transformation potential. The position of these elements can only be changed with weighty arguments.
- The spatial integration of the ducts in the classrooms, the vertical shaft and the central air handling units has a high transformation potential.
- The radiators and grilles in the interior have limited transformation potential. They are the only ones that are still original. If, for technical reasons, they do need to be replaced, this is preferably done by equivalent products.
- All new additions to the air conditioning systems have mixed transformation potential. They are not original, but comply with the original industrial character.
- The fluorescent lighting and fixtures have mixed transformation potential. The fixtures are no longer original, but do meet the original visual quality. If new lighting is to be applied, then positioned on the pattern of the structure.



28. Wide center hallway with slatted ceiling photo Kim Zwarts (2008)



26. Ventilation and heating principle in cross section, image WDJJA



27. Radiators between the columns photo Kim Zwarts (2008)



25. Ruimtelijke inpassing installaties - radiatoren langs de gevel, kanalen boven plafond middengang, image WDJJA

RESEARCH OBJECTIVES

Meeting the Dutch climate agreement:

- 49% reduction in CO₂ emissions by 2030
- 95% reduction in CO₂ emissions in 2050

The study focused on modifications to the facade and the installations, because both have a direct influence on each other and the energy performance of the building. Therefore, they should be considered in conjunction.

RESULTS OF RESEARCH

The basis of the study was the Trias Energetica principle for improving a building's energy efficiency. This principle involves three steps:

1. Reducing energy use; this amounts to improving the building envelope (floor, facade and roof) as much as possible.
2. The use of renewable energy sources; for example, PV panels, heat pump, district heating.
3. Efficient use of fossil fuels; if fossil fuel is still needed, then use it as efficiently as possible.

The results of the step 1 study give reason to further investigate the following options for the facade:

- Option 2; double glazing (HR++ or vacuum) in the existing window frames and improving the crack sealing and keeping the blinds.
- Option 4; a second facade behind the existing curtain wall and insulate the parapet and retain the blinds.
- Option 5; replace curtain wall with insulated steel profiles with HR++ glass and keep the awning.
- Option A; replace current blinds with Solidscreen blinds.

Option A is not so much to improve the energy performance of the facade, but to reduce the heat load inside.

RECOMMENDATIONS

For step 1

When improving the building envelope, it is recommended that the roof and floor overhang of the first floor be insulated as best as possible while maintaining the characteristic minimalist detailing. In addition, it will be necessary to investigate whether and how the floor and walls of the basement can be insulated. An alternative is to leave the basement uninsulated and insulate the first floor drain on the underside.

As follow-up steps to arrive at a final choice for thermal improvement of the facade, the following steps are recommended:

- Investigate technical feasibility; can the existing profiles support double turf?
- Examine the technical condition of the current façade; what is the quality of the original profiles? Do they need to be restored?
- What is the best way to improve the crack sealing?
- Can the parts to be opened still be used?
- Further investigate the feasibility and impact for the use of the building; can the building remain partly in use? Or is temporary housing needed? How long will the implementation take?
- Financial feasibility study; what do the different variants cost, this should include any additional costs.
-

For step 2

In 2021, the firm Van Beek Ingenieurs B.V. was commissioned by the Rietveld Academy to conduct a CO₂ reduction study for the Ben-them and Crouwel and Rietveld buildings. This study shows that the requirements of the climate agreement can be met if the buildings are connected to district heating or if a heat and cold storage system is installed. The study also indicates that improving the isolation of the facade of the Rietveld building has a major effect on the building's heat demand.

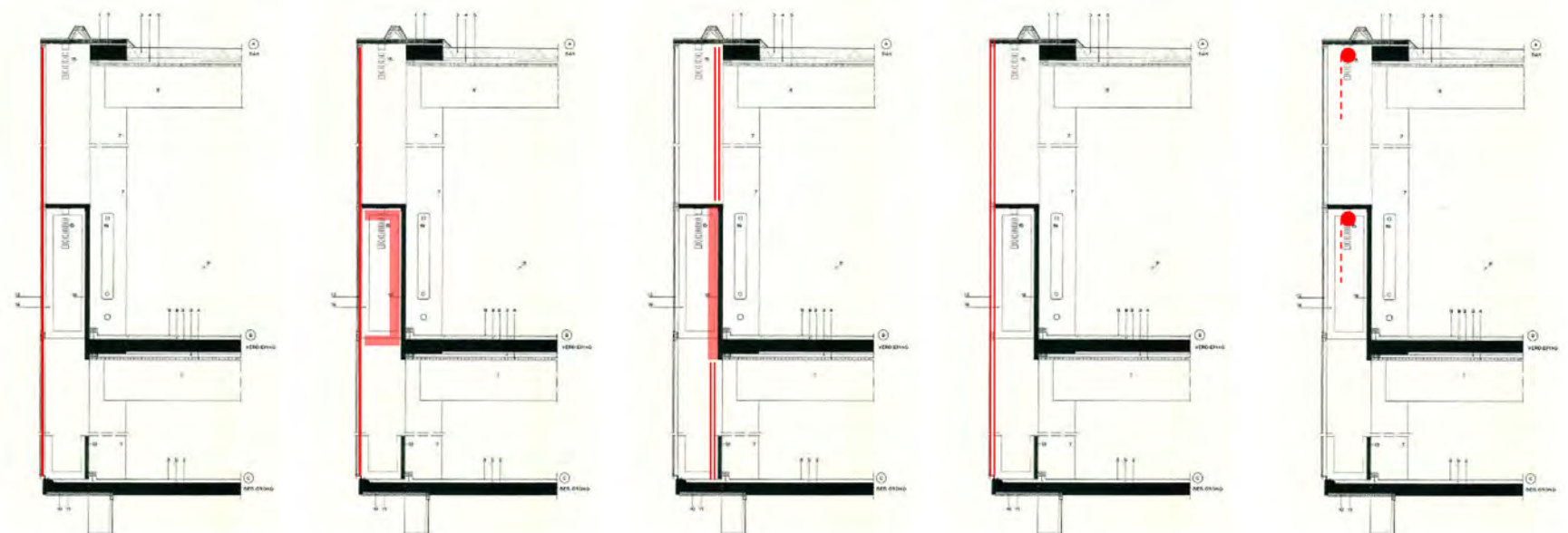
It is recommended to further investigate both options in combination with step 1.

In order to map out the above 2 steps so that the Executive Board can make a well-considered and widely supported choice, a team with the following expertise is needed:

- Director/head of facilities management Rietveld Academy
- Architect with experience in dealing with heritage
- Systems consultant
- Building physics consultant
- Advisor building technology and maintenance
- Building cost consultant
- Construction and phasing consultant

....

In addition, it is advisable to consult with the municipality's historic preservation department.



Option 2

Option 3

Option 4

Option 5

Option A

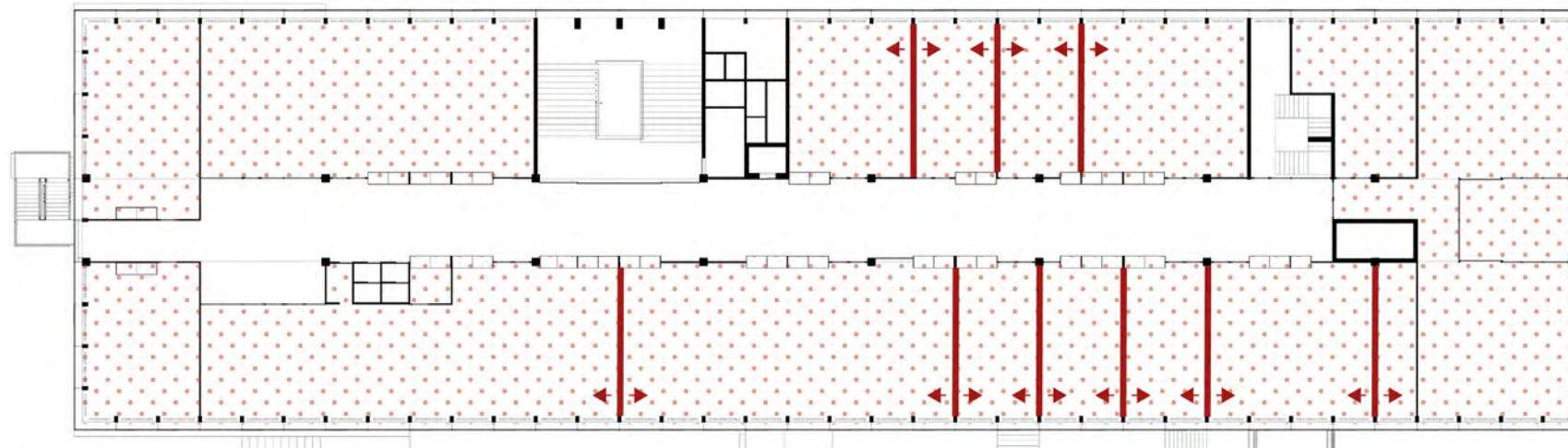
8. INTERIOR AND INTERIOR WALLS

DESCRIPTION

- The internal spatial organization consists of a wide central corridor with classrooms on either side.
- Constructively, functionally and spatially, the central corridor is the backbone of the building.
- The partition walls between the classrooms are movable.
- The interior is also designed on the rigid 2.1-m grid.
- The center corridor, stairwell, plumbing and common areas have a fixed place in the building.
- The bearing capacity of the concrete floor on the second and third floors is not the same everywhere; this may limit future flexibility.
- As in the exterior, transparency is an important aspect of the interior.
- In the design of the interior, no hierarchy has been established between spaces.

SIGNIFICANCE

- The internal spatial organization of a wide central corridor with classrooms on either side that can be flexibly partitioned is characteristic of the academy building.
- The flexibility of the interior underlies Rietveld's vision of the academy as "a living building" and is thus essential to the functioning of the building.
- The transparency in the interior is essential to the experience of the architecture and to the original vision of art education.
- The equivalence is part of the simplicity and distinct unity of design, without representative forms, that Rietveld sought.



29. Flexibiliteit van de plattegrond, image WDJJA

TRANSFORMATION FRAMEWORK

- The internal organization of the wide center corridor has limited transformative potential.
- The flexibility in the interior has limited transformational potential, as it is a distinctive part of Rietveld's design and vision.
- Therefore, the dimensions of the classrooms have high transformation potential. As part of the flexible interior layout, the width of the classrooms may be varied.
- The transparency therefore has limited transformation potential. Transparency should be maintained as much as possible.
- The equivalence of spaces has limited transformation potential.



30. Display case seen from the center corridor, photo Kim Zwart (2008)



31. Display case seen from a classroom, photo Kim Zwart (2008)

TENDENSES IN EDUCATION

- **STUDY SITUATION**

The situation of students and artists is incomparable to that at the time of design. The economic frame of mind has become more dominant, the marketing of education is underway, since the Bologna Declaration there has been talk of an increasingly competitive knowledge economy with an erosion of government services. The arts have become more self-sufficient, art subsidies are decreasing under pressure from populist tendencies. Pressure on students has increased due to student debt and problematic housing, among other things. The physical place of education has more functions than just study space.

- **PROVISIONS**

Digital techniques are an established part of visual research and experimentation and is no longer a separate category. Material-based practices merge with digital ones. Ideally, all departments should have equal facilities for digital and physical making processes. The distinction between "clean" and mess-ready is more normative for a space than specific digital equipment. It will be lighter and more portable. Charging points galore and blackout are needed proportionately everywhere. This makes future layout adjustments more flexible.

- **PROGRAMMING IN-BETWEEN SPACE: SECLUSION**

The need for seclusion is a new factor in the spatial task for art education. This applies equally to teachers and students. In addition to group work and gathering, digital communication requires another form of attention that has a spatial component. The personal and the public constantly intermingle. Compartmentalization to briefly withdraw from the public is not an unnecessary comfort, rather a form of sustaining employability. It requires nuance in spatial amenities, with more variants between group and private, and more places to land.

- **PROGRAMMING IN-BETWEEN SPACE: CROSS-DEPARTMENTAL**

Factors such as collaboration and meeting have become more important, and need space beyond that of departments. Explorations show that the building allows for changes in layout, but always at the expense of current functions. Choices for allocation of area and layout depend on policies on educational approaches. Given the limited total space available, all users will have to be willing to move along in finding suitable spatial solutions. In this way, the Rietveld building can also remain a Work of Space Art for future student generations with which they may disagree or agree, but give rise to a substantive conversation about the visual and sensory.

- **RESEARCH DEVELOPMENT**

Deploying outside expertise is an opportunity for the academy to link this to education. The preservation and conservation task of the Rietveld building is a suitable occasion for test assemblies,

in situ research and pilots. A dialogue between students and experts from various disciplines would add didactic value to the enterprise, innovation is intertwined with image and design. An art academy is a pre-eminent place for this. The workshops and the future Material Research Lectureship can play a guiding role in this.

- **SPACE MATERIAL FLOWS**

Waste is raw material. Bins for more precise waste separation will take up a lot of space, even more than is currently the case. Recycling stations for materials will take the place of waste containers if the academy wants to reuse its waste even more intensively. The amount of residual waste could thus be reduced even further, which in turn will take up space. Reuse requires careful sorting, storage, categorization. Many materials cannot be exposed to the weather when reused; covered storage thus competes for square footage. A recycling station has now been created in the publicly accessible Assembly Hall in the Fedlev Building, with digital access under development: the Wunderkammer.



afb.8.7 indicatieschets posities beschikbare kastnissen voor afzonderingsplekken 2021
 ■ circulatieruimte
 ■ kast opening gangzijde positie nisbank voor afzondering
 ■ kast opening lokaalzijde
 ■ vitrine

32. Indicative sketch position available closet niches for seclusion areas, image GRA

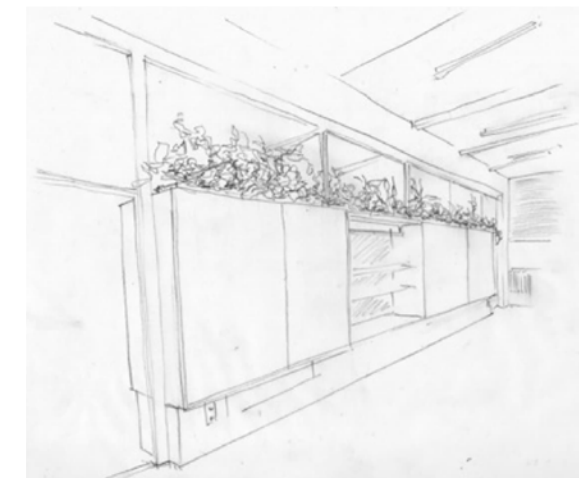
RECOMMENDATIONS

- The spatial properties of the Rietveld Building are valuable as an environment for art education. Despite the intention to offer a neutral environment to optimally support the students' work, the building has turned out to be not neutral, but a place of work and study that is distinctly appreciated by many. Careful handling of the existing finishes and space separating elements ensures that future generations can benefit from these same spatial characteristics. The measurement unit of 2.10 m, both in height and floor plan, and the principle of transparency above this height.
- Making the building and surrounding grounds more sustainable has the greatest urgency. For education, this means that adjustments in dealing with materials - origin, supply, use, disposal - can only be effective if this receives academy-wide attention. Making sustainability results visible feeds motivation to adjust necessary patterns of behavior. A dashboard with current data in a centrally visible place could be effective for this.
- The sustainability task is a new component in education, which will force pioneering work in collaborative combinations with workplace experts and facilities management, among others. Awareness of environmental factors is an educational process for all parties. But especially the student will under these conditions future professional practice
- The Rietveld building would accommodate changes in educational model spatially without having to give up its distinctive spatial characteristics. However, the other two buildings are indispensable as complements. Changing needs in space usage within the offered spatial structure and dimensional principles can be accommodated without having to compromise Rietveld's idea of space. The construction of additional technical facilities and installations are the biggest bottlenecks in the interior.
- The flexibility of the layout still offers opportunities to accommodate various functions in the building. The equivalence of the interiors makes the spaces interchangeable and suitable for variable use. Making the movable partitions even more flexible by a lighter and more durable materialization of the same design is a feasible possibility that could be tested on a small scale with a pilot.
- Digitalization in education has brought new space requirements. Smaller compartments will have to be added for general use, especially in the intermediate space. The increasing need for seclusion is an indirect consequence of digitization. Small-format consultation areas, whether for video calling or not, were not provided for in the original design, and will have to be subtly incorporated into the building. The design for these will be a delicate matter, and will have to be balanced in size and detail with the visual principles of the building.
- In addition to departmental workplaces, there is a growing need for non-departmental work, collaboration and meeting

forms. The degree of academy overhead - space designated for general use - is determined by a vision of education, and is reflected in the distribution quotas. The arguments for the allocation principles would be reviewed regularly to reassess the balance of shared and departmental space at set times. These reviews would need to be known academically, in order to give all parties an opportunity to contribute the views. The MR and Student Council could be an important voice in this, especially for student arguments. With subtle shifts in the distribution, the spatial properties of the building could be optimized, while accommodating new functions, such as those for seclusion.

- Before robust and difficult to reverse interventions are made in favor of general spaces, workshops or meeting/exchange spaces, their consequences must be carefully thought through on all fronts. It must be avoided that after the removal of e.g. a cabinet-vitrine wall or overhead light it is replaced by a makeshift solution within a short time. It is advisable to first investigate whether alternatives are possible elsewhere on campus.
- The precise design issues associated with cultural heritage preservation is a task that transcends a regular building and grounds management task. The task of the Facilities Management team becomes more complex and sophisticated with added design tasks for solutions that are visually sensitive within the heritage value. Constructive dialogue at regular intervals, where all factors are weighed and different expertise is heard in equality can strengthen the education and building. Streamlining this can thus become a model for educational institutions facing a similar task.
- The expertise to be recruited for future-proofing the building should also be linked to education, in order to build a grounding in the processes of change together. After all, preservation and careful maintenance of the Rietveld building is also a sustainability choice. It makes didactic sense if advancing insights are shared more broadly; after all, the academy is an educational institution. This can be done incidentally or on a project basis (lectures, workshops), but also provide an internship opportunity for students. If interventions for preservation and conservation are involved in education, this increases the willingness, out of understanding, to help care for the building.
- Functional shading as a facility for art education is a challenging task in this building. With roller shutters in guide profiles on the concrete columns, the studio now has a hermetic crack-proof blackout on the facade side, and black-painted overhead lights on the corridor side. It is a demountable feature and does not affect the building, and could be used in other areas if the need arose.
- Establishing a green space management agenda. Favorable spots in the building should be determined with the help of experts, specific knowledge is needed for this. Users of non-general areas should also be involved in this. Due to the intensive use of the building, space is limited. A few readily deployable lines of thought:

- the windowsill in the stairwell to the basement
- the cafeteria: the addition of large plant volumes could be a first step toward meeting the demand for greenery without altering the building or the furniture.
- the tops of the cabinet and display case walls between the corridor and classrooms
- between or at the columns in the facade
- Other wall and floor space is scarce. High suspension requires additional installations for watering. This involves more permanent interventions in the building that would have to be done cautiously. Trial arrangements with measurements should show whether this reduces energy use. Well-being and improving indoor climate is less easy to prove. If additional planting as a climate adaptation supports the conditions of future education, investments in care and maintenance make sense. As long as the interventions are reversible, this could be implemented immediately.



33. Impression green strip cabinet- showcase wall, image GRA

9. MATERIALS AND COLORS

DESCRIPTION

The interior color scheme is based on shades of gray with some accent colors. The students' work determines the color and atmosphere of the academy building as Rietveld envisioned it.

The concrete structure and masonry in the interior were not originally painted, even though Rietveld intended to do so. Due to budget cuts, this was ultimately not carried out. Today, the masonry in the former gymnasium and the concrete structure in the basement and those on the third floor, among others, are painted in a shade of gray. The unpainted surfaces and parts originally contributed to the neutrality of the interior and the industrial character of the building.

The building's neutral atmosphere does not mean that no color was used. At the end of the middle corridor and at the end of the corridor in the workshops, Rietveld applied for orientation a colored wall surface that differed per floor. There are no color accents on the walls in the classrooms; this is in keeping with the original situation.

SIGNIFICANCE

- The simplicity in materials, the industrial look of the materials and the lack of decorative elements are characteristic of the building's expression
- The neutral interior is important to Rietveld's vision of the atmosphere and functioning of the building; the neutral interior would be given color by the students' work.
- The use of color on the floors and walls of the (middle) hallways and stairs is for orientation..

TRANSFORMATION FRAMEWORK

- This original neutrality is still present and defines the interior. Therefore, the neutral color scheme has limited transformation potential.
- Painting on the originally unpainted concrete and masonry has a high transformation potential.
- The use of color for orientation has limited transformative potential.
- The use of color on floor surfaces in the hallways and classrooms has limited transformational potential.

RECOMMENDATIONS

General:

- The paintwork on the originally unpainted concrete and masonry preferably and if possible should be removed.
- The removed color areas on the walls are preferably brought back.
- The use of color planes in the classrooms and workshops is undesirable.
- The original design of one color floor plane per room is essential
- Spaces that have acquired an educational function over time can be finished in the materials and colors of the original neutral classrooms.
- Keep one space in the building completely original or bring it back to the original so that the original finish can always be seen.
- Have the statement of materials and colors completed by a specialized consulting firm.

Maintain floors:

- The specific recommendation for the maintenance of the materials can be found as a summary in chapter Maintenance in this document. More background information on materials and colors can be found in the reports:
 - Kleurenonderzoek Gerrit Rietveld Academie Amsterdam, Mariël Polman (Rijksdienst voor het Cultureel Erfgoed) en Sanje Pander (Onderzoek en restauratie van historische binnenruimten), november 2022
 - Gerrit Rietveld Academy, linoleum and Paint layers, Rijksdienst voor het Cultureel Erfgoed, 1 april 2022

PAINT CODES

The original paint color codes are:

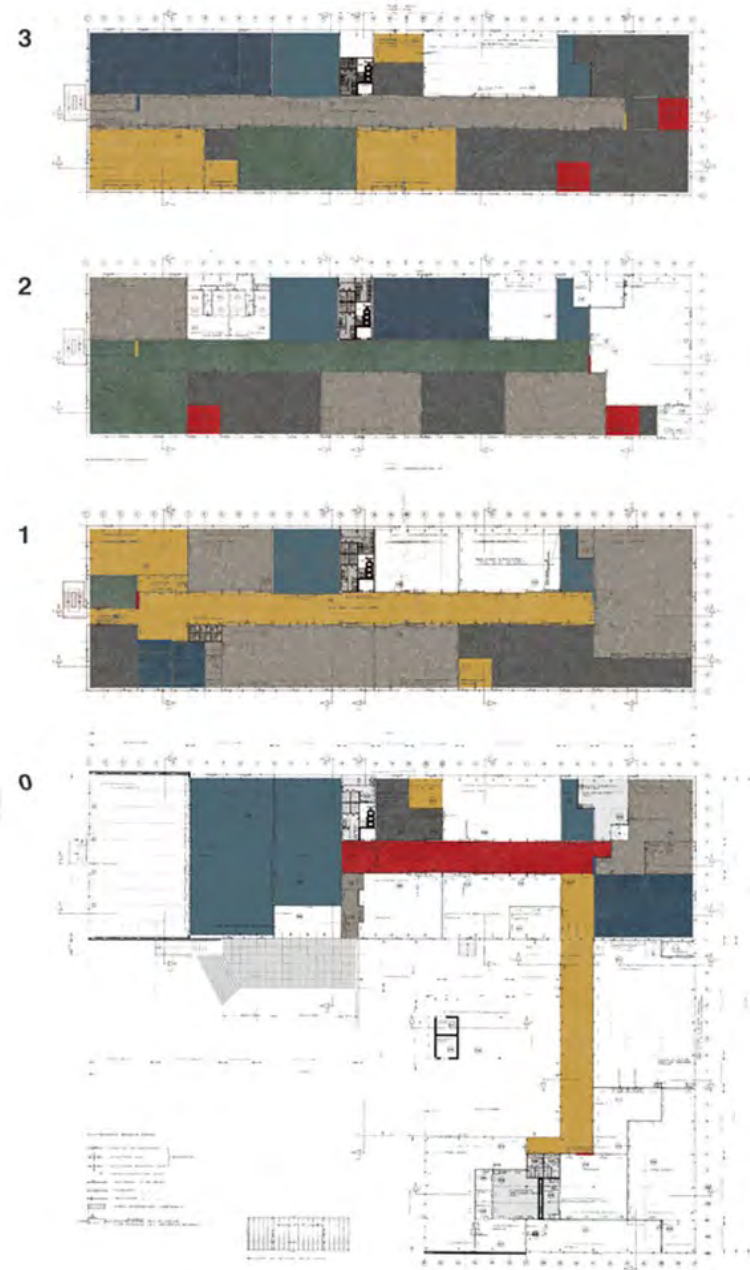
- White n.t.b.
- White-gray Sikkens D 24-1
- Light grey Sikkens D 24-2
- Mid-gray Sikkens D 25-3
- Dark grey Sikkens D 24-8
- Light yellow Sikkens D 29-3
- Dark yellow Sikkens D 29.4
- Blue Pieter Schoen 191
- Red Pieter Schoen 660

Sikkens is currently working on a protocol so that these colors can be ordered again. For the middle gray (a common color in the interior of the classrooms, for example) there will also be a paint color that is more economical.

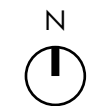


34. Color ranges Sikkens en Pieter Schoen, image Mariël Polman en Santje Pander

FLOOR SURFACES: ORIGINAL COLORS



35. Floor plans with marmoleum, cork linoleum and plasnalo floor finishes



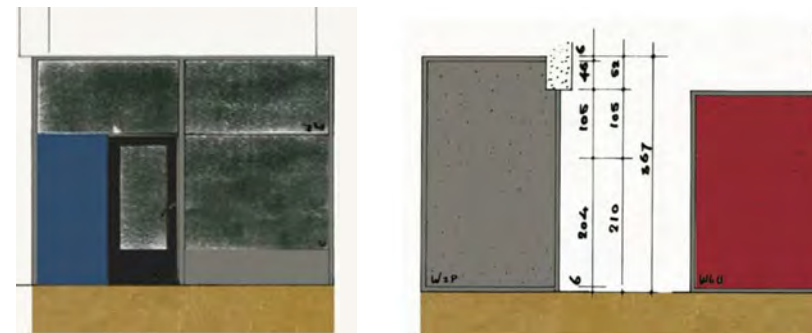
END WALLS CORRIDORS: ORIGINAL COLORS



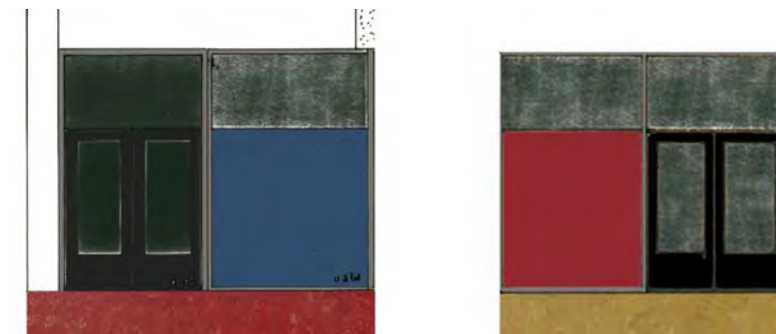
4th floor: center corridor main building east and west



3rd floor: center corridor main building east and west

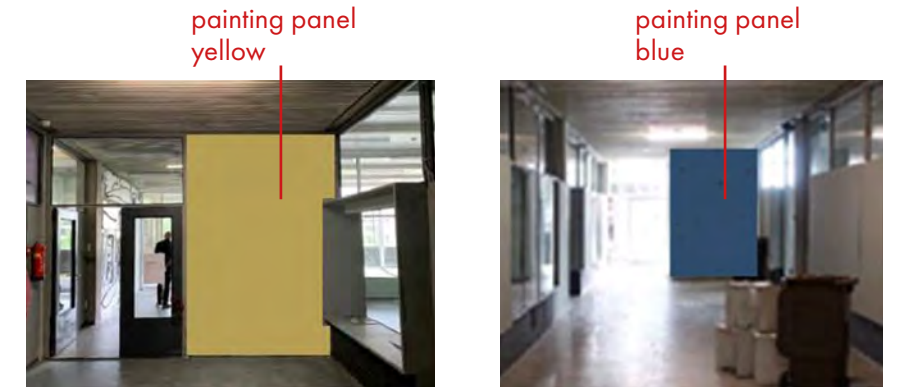


2nd floor: center corridor main building east and west

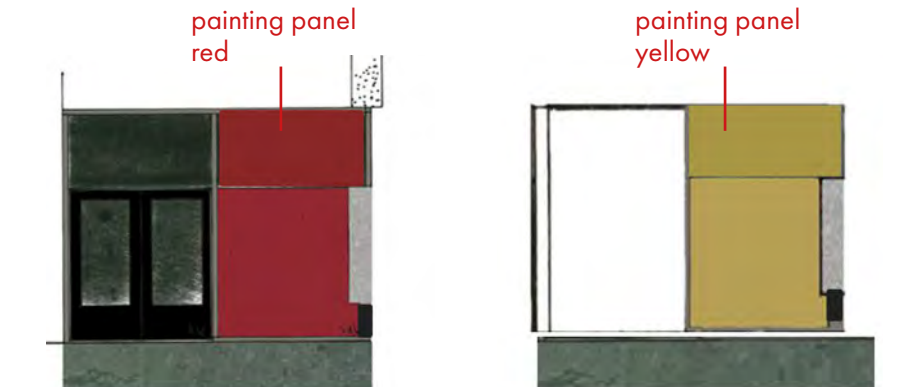


ground floor: center corridor main building east and workshops south

ADVICE CMP COLORS



4th floor: center corridor main building east and west



3rd floor: center corridor main building east and west



2nd floor: center corridor main building east and west



first floor: center corridor main building east and workshops south

MATERIAAL- EN KLEURENSTAAT

Included herein is only the information described in the Kleurenonderzoek Gerrit Rietveld Academie Amsterdam, Mariël Polman (RCE) en Sanje Pander (Onderzoek en restauratie van historische binnenruimten), nov. 2022

ONDERDEEL	GEBOUWDEEL	OORSPRONKELIJK	ADVIES CMP
EXTERIEUR			
GEVEL		materiaal	kleur
Betonnen elementen	hoofdvolume, werkplaatsen, paviljoen	Beton, schoonwerk	grijs
Vliesgevel incl. deuren en ramen	hoofdvolume, werkplaatsen	Staal, geschilderd Enkelglas, getrokken, horizontale belijning	middengrijs Sikkens D 25-3
Dichte vlakken	hoofdvolume, werkplaatsen	Metselwerk, geglazuurd	wit
Dakranden	liftopbouw, schoorsteen, paviljoen, keermuur	Metselwerk, geglazuurd	zwart
	luifel, paviljoen	Staal, geschilderd	middengrijs Sikkens D 25-3
DRAAGCONSTRUCTIE		materiaal	kleur
Kolommen	luifel, brandtrap, paviljoen	Staal, geschilderd	donker grijs Sikkens D 24-8
PLAFONDAFWERKING		materiaal	kleur
Luifel	hoofdvolume, paviljoen		wit
TRAPPEN		materiaal	kleur
Bordestrap	entree hoofdvolume	Alta kwartsiet (Noorwegen)	grijs
Brandtrap	hoofdvolume		
kolommen, trapboom treden, bordessen leuning, hekwerk		Staal, geschilderd	donker grijs Sikkens D 24-8
Hekwerk	algemeen	Staal, geschilderd	donker grijs Sikkens D 24-8
BUITENWANDOPENINGEN		materiaal	kleur
Deuren	paviljoen (vm trafohuisje)		donkergrijs
INTERIEUR			
DRAAGCONSTRUCTIE		materiaal	kleur
Draagconstructie	hoofdvolume	Beton, schoonwerk	grijs
souterrain en 3e verdieping	werkplaatsen	Staal	
BINNENWANDAFWERKING		materiaal	kleur
Centrale trappenhuis	hoofdvolume		lichtgrijs Sikkens D 24-2
Noodtrappenhuis	hoofdvolume	pleisterwerk plaatmateriaal	lichtgrijs Sikkens D 24-2 middengrijs Sikkens D 25-3
Overige gepleisterde wanden	hoofdvolume, werkplaatsen		lichtgrijs Sikkens D 24-2
Wandopvullingen	algemeen	kalkzandsteen, schoonwerk	zoveel mogelijk schoonwerk handhaven, indien het overgeschilderd moet worden, dan: lichtgrijs Sikkens D 25-2
Flexibele wanden lokalen	hoofdvolume, werkplaatsen		
frame		Staal	middengrijs Sikkens D 25-3
vlakken		Plaatmateriaal	middengrijs Sikkens D 25-3
bovenlichten		Glas	
Vitrinekasten	hoofdvolume		
dichte delen			Spatwerk, meerkleurige structuur; eerste laag middengrijs D 25-3 tweede laag witgrijs of lichtgrijs D 24-1 of D 24-2
plinten			Plaatmateriaal, geschilderd donkergrijs Sikkens D 24-8
Kopse wanden gangen			
begane grond, oost	hoofdvolume	Plaatmateriaal, geschilderd	blauw Pieter Schoen 191
begane grond, zuid	werkplaatsen	Plaatmateriaal, geschilderd	rood Pieter Schoen 660
1e verdieping, oost	hoofdvolume	Plaatmateriaal, geschilderd	blauw Pieter Schoen 191
1e verdieping, west (evenwijdig noordgevel)	hoofdvolume	Plaatmateriaal, geschilderd	rood Pieter Schoen 660
1e verdieping, west (evenwijdige zuidgevel)	hoofdvolume	Plaatmateriaal, geschilderd	blauw Pieter Schoen 191
2e verdieping, oost	hoofdvolume	Plaatmateriaal, geschilderd	rood Pieter Schoen 660
2e verdieping, west	hoofdvolume	Plaatmateriaal, geschilderd	geel Sikkens D 29-3
3e verdieping, oost	hoofdvolume	Plaatmateriaal, geschilderd	geel Sikkens D 29-3
3e verdieping, west	hoofdvolume	Plaatmateriaal, geschilderd	blauw Pieter Schoen 191
Gymzaal	hoofdvolume	Poriso wanden, schoonwerk Panelen	rood middengrijs D 25-3

MATERIAAL- EN KLEURENSTAAT

Included herein is only the information described in the Kleurenonderzoek Gerrit Rietveld Academie Amsterdam, Mariël Polman (RCE) en Sanje Pander (Onderzoek en restauratie van historische binnenruimten), nov. 2022

ONDERDEEL	GEBOUWDEEL	OORSPRONKELIJK	ADVIES CMP
Borstewering algemeen bekleding vensterbank, bovenzijde	hoofdvolume	Plaatmateriaal, Procel, geschilderd Linoleum	middengrijs D 25-3 lichtgrijs
Toiletten		Wandtegels	lichtgrijs
VLOERAFWERKING		materiaal	kleur
Hal	hoofdvolume	Plasnalo (naadloos kunsthars)	blauw
Centrale garderobe	hoofdvolume	Plasnalo (naadloos kunsthars)	blauw
Gangen			
souterrain	hoofdvolume	Vermoedelijk cementdekvloer	grijs
begane grond	hoofdvolume	Marmoleum	rood
begane grond	werkplaatsen	Marmoleum	geel
1e verdieping	hoofdvolume	Marmoleum	geel
2e verdieping	hoofdvolume	Marmoleum	groen
3e verdieping	hoofdvolume	Marmoleum	grijs
Lokalen	hoofdvolume, werkplaatsen	Marmoleum Marmoleum Marmoleum Marmoleum Marmoleum Dubletta Dubbel hardgebakken tegels	lichtgrijs donkergrijs rood blauw geel groen grijs, blauw, rood en zwart blauw
Gymzaal, toestellenberging en kleedruimte	hoofdvolume	Kurklinoleum	donkerblauw
Bergingen	hoofdvolume, werkplaatsen		
Toiletten	hoofdvolume, werkplaatsen	Dubbel hardgebakken tegels	zandkleurig
PLAFONDAFWERKING		materiaal	kleur
Souterrain	hoofdvolume	Beton, schoonwerk	
Lokalen	hoofdvolume		wit
Middengang	hoofdvolume	Houten lamellen	wit
TRAPPEN		materiaal	kleur
Centrale trap	hoofdvolume	Plasnalo (naadloos kunsthars) Geschilderd Staal	blauw wit donkergrijs Sikkens D 24-8
Noodtrap	hoofdvolume	Plasnalo (naadloos kunsthars) Staal	blauw donkergrijs Sikkens D 24-8
BINNENWANDOPENINGEN		materiaal	kleur
(Glas)deuren lokalen	hoofdvolume, werkplaatsen		
kozijn		Hout	middengrijs Sikkens D 25-3
deur		Hout	donkergrijs Sikkens D 24-8
Brandpuien trappenhuisen	hoofdvolume	Staal	middengrijs Sikkens D 25-3
Toiletdeuren centraal trappenhuis	hoofdvolume		
kozijn		Staal	witgrijs Sikkens D 24-1
deur		Hout	donkergeel Sikkens D 29-4
1e verdieping middengang	hoofdvolume		
kozijn		Staal	witgrijs Sikkens D 24-1
deur		Hout	donkergeel Sikkens D 29-4
In noodtrappenhuis naar ruimten	hoofdvolume		
kozijn			middengrijs Sikkens D 25-3
deur			donkergrijs Sikkens D 24-8
In souterrain	hoofdvolume		
kozijn			lichtgrijs Sikkens D 25-3
deur			donkergrijs Sikkens D 24-8
Vouwwanden, kantine	hoofdvolume		
INSTALLATIES		materiaal	kleur
Radiatoren	algemeen		middengrijs D 25-3

10. OUTDOOR SPACE

DESCRIPTION

Both spatially and functionally, the building and outdoor space are designed as an extension of each other and both used for education. The original design is by Mien Ruys and designed with two different atmospheres:

- The Flower Terrace for drawing education
- The Workplace for sculpture education.

These are separated by a low wall of black glazed masonry; originally, sleek benches stood along this.

The greenbelt was originally already a distinctive part of the Flower Terrace. Surrounded by plane trees and the planting areas with low shrubs.

The workshops embrace the Workplace. The pavilion in the middle of the plaza was designed as an open, covered outdoor space, for teaching. The pavilion, made of steel, was the likeness of the canopy in front of the entrance. Around it were blown pedestals, on which art could be displayed.

Today, the outdoor space is used to a lesser extent for education. The Flower Terrace has been part of the Garden Department. However, the layout has become more petrified. The sycamores and planting beds have been removed. To the south of the terrace is now the Fedlev building and to the west is a new row of trees and a row of low shrubs with bicycle parking spaces behind them. The same goes for the Workplace, where the greenbelts have been removed. And is now used to house larger events and exhibitions. However, the difference in atmosphere between the two outdoor spaces has been preserved. A ramp was placed along the wall between the two gardens to improve accessibility. This partially changed the routing to the main entrance. The pavilion was closed to create a space general education, events and for the purpose of large artworks.

SIGNIFICANCE

General

- Indoor and outdoor spaces are thus still each other's extensions.
- The contrast between the "green" character the flower terrace and the petrified character of the work square is essential.
- Architecturally, the outdoor spaces and the building are linked by applying the same size system, materials and color scheme.
- The two spheres are separated by a wall of black glazed masonry.

Flower terrace

- Has a green character due to the garden

Work square

- Does the terrace have a paved character.

TRANSFORMATION FRAMEWORK

General

- The connection between the indoor and outdoor space has limited transformation potential.
- The contrast between the two characters has limited transformation potential.
- The color and material palette is still maintained and has limited transformational potential.

Flower terrace

- The flower terrace has mixed transformation potential, as much has changed over the years.
- The low wall of glazed black masonry and the greenery are the only elements that still refer to the original design and use. They therefore have limited transformation potential.

Work square

- The petrified atmosphere and the equal level between square, workshops and sculpture pavilion are of great importance, because they are characteristic of the coherence between both atmospheres of the outdoor space and the coherence between square and architecture. Therefore, these elements have limited transformation potential.
- The curtain wall in the pavilion has a high transformation potential.
- The current layout around the pavilion has high transformation potential. Preferably, the original layout is restored, although this has little value if the site is not used for education.

RECOMMENDATIONS

- maintain the two different atmospheres of outdoor space.
- involve the outdoor areas more in education.
- if possible in the use and while maintaining the two atmospheres. pave the outdoor space less so that rainwater can be drained away.
- When redesigning the outdoor space, take the original design as a starting point and inspiration.
- Keep the outdoor space as free as possible from cars and garbage containers. Place the containers out of sight as much as possible.
- The moment the ramp is no longer needed, it is recommended to remove it.
- Keep the sculpture of Ben Guntenaar



36. Current design of flower terrace photo Carla Boomkens (22-06-2010), Gerriit Rietveld Academie Amsterdam



37. Current Work square, photo WDJJA



38. Masonry wall between Flower terrace and Work square, photo WDJJA



39. Design outdoor space Mien Ruys, archief WURL-SpecialCollectionsnr. 47.1582.006-GA--20201125-FT3A1362, Bewerkt WDJ A



40. Original furnishing flower terrace photo J.M. Arsath (15-10-1969), Collectie Stadsarchief Amsterdam nr.010122003263



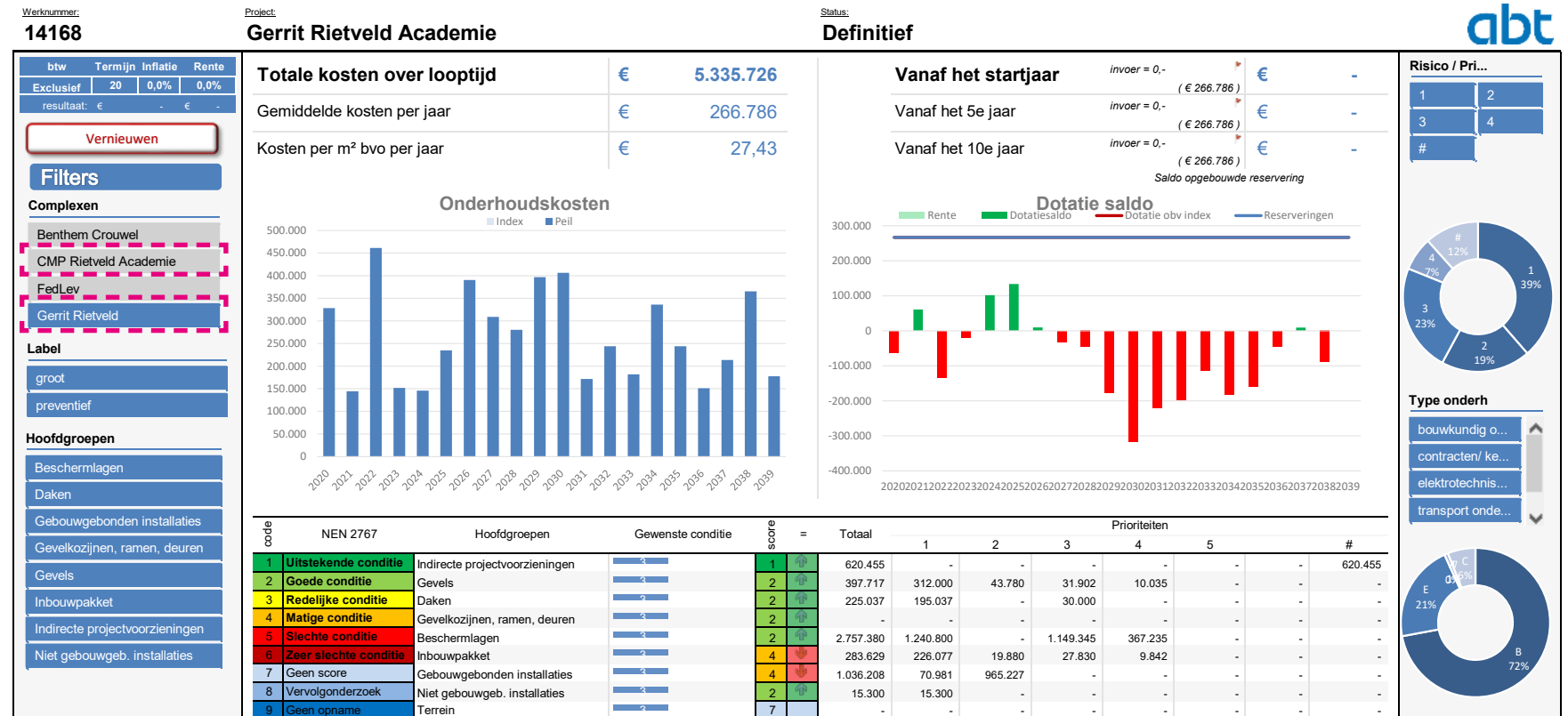
41. Original work square, photo Ton Roelofsma (1967)

11. MAINTENANCE

DESCRIPTION

A Conservation Management Plan (CMP) is a conservation management plan that focuses on the significance of the building. An important part of conservation is the (daily) maintenance of the building. To manage this maintenance, the Academy already works with a multi-year maintenance plan (MJOP). An MJOP is a long-term plan for performing necessary maintenance on a building, facilities and grounds. The advantage is that you know when certain maintenance work is due, that you can include a reservation for this in the budget and that timely preparations can be made. This last point is especially important for a monument, because some work requires more preparation and preliminary research than standard maintenance work, and is to avoid rushing into decisions.

Because a finite operating period is not an issue for monumental buildings as a matter of policy, maintenance will focus on a long-term future perspective. Preservation beyond the operating period customary for real estate - i.e., life extension - always plays a role with monuments, even with work of a maintenance nature.



42. Screenshot of the MJOP dashboard prepared by ABT

WORKING METHOD

In practice, setting up the MJOP/CMP can be divided into six steps. So from the initiation phase to aftercare.

- MJOP/CMP based on the NEN 2767 and heritage indicators
 - the registration of the current condition of the buildings including the heritage indicators, the building installations and grounds.
 - The actions and finances to keep the buildings, building installations and grounds in the desired condition over a period of 20 years.
 - determining the urgencies of the aspects.
 - understanding the resources and action over time required to maintain the buildings' performance.
 - a preliminary plan for conservation.
 - steering through the aspects and priorities.
- Alignment
 - The difference between the current condition and the desired condition generates the resource demand. The available resources are compared with the requested resources.
 - Alignment can take place by adjusting the ambition (upwards or downwards).
 - Alignment can take place by adjusting available resources (up or down).
 - Strategic choices can be made.
 - Economies of scale can be sought, for example through clustering and cooperation with the other buildings belonging to

- the Rietveld Academy in Amsterdam.
 - There can be phased (to save or other reasons)
- Realization plan
 - Adopt realization plan after CMP, c.q. update is ready. 'Annual plan from the CMP' is (rigid), namely implementation in the 1st year. Smarter to look beyond 1 year of implementation. Expand the scope! This should include the strategy from the policy:
 - what do I still want with the buildings,
 - for how long,
 - what major interventions in or on the buildings or installations are imminent?
 - Is it still up to date?
 - Once these considerations have been determined, make the work to be done SMART!
 - Specific,
 - Measurable,
 - Acceptable,
 - Realistic,
 - Time-bound.
 - Create a "starting document."
- Construction Preparation
 - Make sure the work to be done is laid out as projects (from a certain scale, of course).
 - Formulate the work, create specifications or statement of work.

- Execution
 - Create an execution schedule (so that the work can be aligned with the "core" business).
 - Limit disruption to the business process.
 - Assess who will perform the work: own service or outsource.
 - Assignment, document, including those assignments that will be performed by in-house service.
- Execution
 - Ensure that the budgeted quality is realized. Management, supervision, quality checks.
 - Think about warranty obligations of the contractor.
 - Make a complete process file: guarantees, suppliers, revision, finances. Also if own department performs work.
- Aftercare
 - Deliver and document it.
 - Close a project.
 - Link relevant issues back in the CMP/project file: money, quality, guarantees, mutations.
 - Provide updates and indexations: otherwise the initial investment quickly loses its reliability.
 - Also evaluate with third parties / consultant.

RECOMMENDATIONS

General:

- It is recommended that a condition measurement of the building be carried out once every three years in an objective manner and in accordance with NEN 2767.
- The MJOP and CMP will have to be updated on a regular basis by the Rietveld Academie itself or by advisors who have an affinity with monumental buildings.
- It is recommended that a digital model of the Rietveld Academie be used to gain quick insight into the original design and changes to it. Through, HBIM, Heritage Building Information Modeling, all information about the Academy's historic design can be brought together, making the historic design more insightful and allowing building managers to quickly and easily document changes.

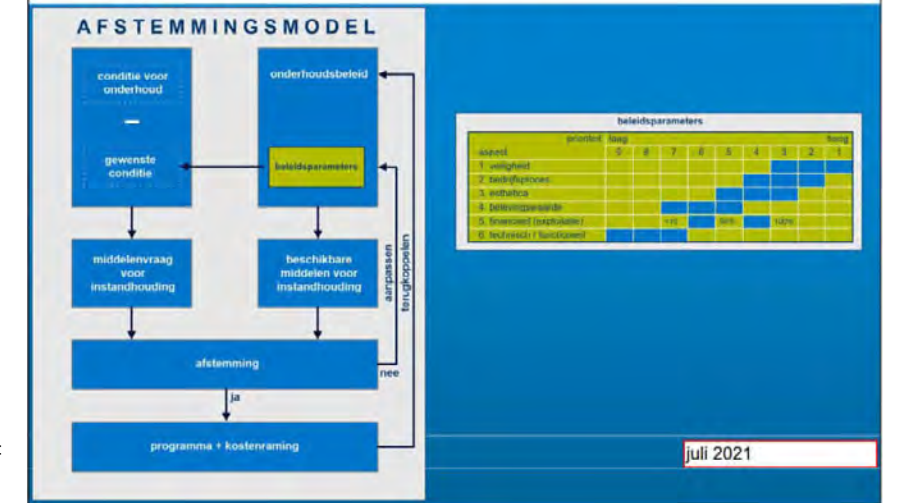
Painting:

- For painting, it is recommended that care be taken to restore all color areas at annual maintenance. The medium gray color D-25-3 listens extremely closely and was redeveloped in collaboration with Sikkens in 2022.

Flooring:

- Since use is the main reason for high floor loads, it is recommended that measures be drawn up in collaboration with teachers and students that will prevent many damages. These include putting caps under furniture every six months, moving heavy objects on blankets and doggies, and putting down floor protection when painting
- It is recommended to maintain the floors with a polyurethane coating, instead of the current polymer coating, because it is more wear-resistant and therefore does not need to be applied as often. And in addition, the polyurethane coating is less environmentally harmful.
- When replacing the Plasnalo floor, it is recommended to keep the color of the floor in the area between 007 and 008 (on the north facade, former emergency stairwell).
- When the complete linoleum floors are replaced, to select new matching linoleum designs, it is recommended to use the factory samples as a reference point.
- It is also recommended to keep extra material of each design, as Forbo changes the collection every 4-5 years. This can be used to replace the linoleum in case of major damage and minor renovations. It is best to store the extra material in the dark at as much constant and low temperature as possible.

Afstemming en beleid



43. Reconciliation model belonging to step2 of the "working method" prepared by ABT

Werknummer: 14168			Meerjarenonderhoudsprognose op basis van NEN 2767:2011												Gerrit Rietveld A Definitief												Status: abt	
Complex	Code	NL-SfB	Regel	Element	Conditie		Prijs/Et	Onderh.	Bewerking	Relevante informatie	Gebuwsplitsing	Hoeveelheid	Eenh.	Onderhoudspercentage	Hoeveelheid	Eenh.	Prijs per eenheid exclusief btw	btw %	Cyclus normal	Prijs conditiescore Exclussief btw	Cyclus werkelijk	Startjaar	Stopjaar	Totaal over 20 jaar				
					Score	Gewenst																						
Gerrit Rietveld	57	Luchtbehandeling	398	afzuigbox; keuken	4	3	2	W	vervangen; kanaalventilator		preventief	1	st	100%	1	st	4.500,00	21%	15	4.500	15	2029	2100	4.500				
Gerrit Rietveld	57	Luchtbehandeling	399	dakafzuigventilator; hoge dak	4	3	2	W	vervangen		preventief	2	st	100%	2	st	2.300,00	21%	15	4.600	15	2025	2100	4.600				
Gerrit Rietveld	57	Luchtbehandeling	400	dakafzuigventilator; hoge dak	4	3	2	W	vervangen		preventief	2	st	100%	2	st	2.300,00	21%	15	4.600	15	2023	2100	9.200				
Gerrit Rietveld	57	Luchtbehandeling	401	luchtkanalen inclusief appendages; algemeen	4	3	2	W	herstellen/vervangen corrosie/beschermplaat ontbrekt		preventief	1	pst	100%	1	pst	5.000,00	21%	100	5.000	100	2041	2100	0				
Gerrit Rietveld	57	Luchtbehandeling	402	luchtbehandelingskast VD+KB+WTW verd 3	4	3	2	W	vervangen van isolatie		preventief	1	pst	100%	1	pst	8.500,00	21%	100	8.500	100	2025	2100	8.500				
Gerrit Rietveld	57	Luchtbehandeling	403	luchtbehandelingskast VD+KB+WTW verd 3	4	3	2	W	revisie		preventief	1	st	100%	1	st	9.000,00	21%	6	9.000	6	2022	2100	27.000				
Gerrit Rietveld	57	Luchtbehandeling	404	VAV box; algemeen	4	3	2	W	vervangen regeling		groot	12	st	100%	12	st	950,00	21%	15	11.400	15	2041	2100	0				
Gerrit Rietveld	57	Luchtbehandeling	405	dakafzuigventilator; lage dak	4	3	2	W	vervangen		groot	5	st	100%	5	st	2.300,00	21%	15	11.500	15	2027	2100	11.500				
Gerrit Rietveld	57	Luchtbehandeling	406	VAV box; algemeen	4	3	2	W	vervangen		groot	12	st	100%	12	st	2.500,00	21%	15	30.000	15	2039	2100	30.000				
Gerrit Rietveld	57	Luchtbehandeling	407	luchtbehandelingskast VD+KB+WTW verd 3	4	3	2	W	vervangen		groot	1	st	100%	1	st	105.000,00	21%	30	105.000	30	2041	2100	0				
Gerrit Rietveld	57	Luchtbehandeling	408	luchtkanalen inclusief appendages; algemeen	4	3	2	W	vervangen; luchtkanaal		groot	2.020	m2	100%	2.020	m2	90,00	21%	30	181.800	30	2041	2100	0				
Gerrit Rietveld	58	Regeling klimaat en sanitair	409	frequentieregelaar; verd 3	4	3	2	W	herstellen defecte tijdelais		preventief	1	pst	100%	1	pst	450,00	21%	100	450	100	2020	2100	450				
Gerrit Rietveld	58	Regeling klimaat en sanitair	410	luchtklep motoren; verd 3	4	3	2	W	vervangen		preventief	3	st	100%	3	st	450,00	21%	15	1.350	15	2022	2100	2.700				
Gerrit Rietveld	58	Regeling klimaat en sanitair	411	frequentieregelaar; verd 3	4	3	2	W	vervangen		groot	1	st	100%	1	st	18.000,00	21%	15	18.000	15	2031	2100	18.000				
Gerrit Rietveld	58	Regeling klimaat en sanitair	412	regelkast RKAC 2; verd 3	4	3	2	W	vervangen (vervangende onderdelen niet meer verkrijgbaar)		groot	1	pst	100%	1	pst	20.000,00	21%	30	20.000	30	2035	2100	20.000				
Gerrit Rietveld	58	Regeling klimaat en sanitair	413	regelkast RKAC 2; stookruimte	4	3	2	W	vervangen (vervangende onderdelen niet meer verkrijgbaar)		groot	1	pst	100%	1	pst	20.000,00	21%	20	20.000	20	2035	2100	20.000				
Gerrit Rietveld	58	Regeling klimaat en sanitair	414	frequentieregelaar; verd 3	4	3	2	W	vervangen		groot	1	st	100%	1	st	24.000,00	21%	15	24.000	15	2038	2100	24.000				
Gerrit Rietveld	61	Centrale elektrotechn. voorzien.	415	contract EJ Installaties, Hoofd en verdeelrichtr	3	3	2	C	onderhoudscontract		preventief	1	pst	100%	1	pst	2.500,00	21%	1	2.500	1	2020	2100	50.000				
Gerrit Rietveld	63	Verlichting	416	noodverlichtingsarmaturen	3	3	2	E	vervangen door LED		groot	9.725	bvo	50%	4.863	bvo	80,00	21%	10	389.000	10	2041	2100	0				
Gerrit Rietveld	65	Beveiliging	417	brandblus, brandslanghaspels	3	3	2	W	slang vervangen		preventief	15	st	100%	15	st	180,00	21%	30	2.700	30	2020	2100	2.700				
Gerrit Rietveld	65	Beveiliging	418	brandblus, brandblussers	3	3	2	W	vervangen		preventief	22	st	100%	22	st	150,00	21%	15	3.300	15	2020	2100	6.600				
Gerrit Rietveld	65	Beveiliging	419	brandmeldcentrale	3	3	2	W	vervangen		preventief	1	st	100%	1	st	4.500,00	21%	15	4.500	15	2041	2100	0				
Gerrit Rietveld	65	Beveiliging	420	brandblus, brandslanghaspels	3	3	2	W	geheel vervangen		preventief	15	st	100%	15	st	400,00	21%	30	6.000	30	2035	2100	6.000				
Gerrit Rietveld	66	Transport	421	afkuring	3	3	2	C	afkuring conform wet- en regelgeving		preventief	1	st	100%	1	st	200,00	21%	1	200	1	2020	2100	4.000				
Gerrit Rietveld	66	Transport	422	personeel	3	3	2	T	sarvice en onderhoud		preventief	1	pst	100%	1	pst	1.500,00	21%	1	1.500	1	2020	2100	30.000				
Gerrit Rietveld	66	Transport	423	personeel	3	3	2	T	vervangen		groot	1	pst	100%	1	pst	11.050,00	21%	30	11.050	30	2030	2100	11.050				
Gerrit Rietveld	66	Transport	424	lft. 5 stopplaatsen	3	3	2	T	vervangen		groot	1	st	100%	1	st	45.000,00	21%	40	45.000	40	2041	2100	0				
CMP Rietveld Academie	47	Dakafwerkingen	425	betonnen constructie hoogbouw	3	3	2	B	dakranddetail hoofdgebouw	Doc... Pag...	preventief	1	pst	100%	1	pst	21%	0	0	0	0	2100	0	0				
CMP Rietveld Academie	47	Dakafwerkingen	426	staalconstructie laagbouw	3	3	2	B	dakranddetail hoofdgebouw	Doc... Pag...	preventief	1	pst	100%	1	pst	21%	0	0	0	0	2100	0	0				
CMP Rietveld Academie	47	Dakafwerkingen	427	staalconstructie laagbouw	3	3	2	B	dakranddetail werkplaats	Doc... Pag...	preventief	1	pst	100%	1	pst	21%	0	0	0	0	2100	0	0				
CMP Rietveld Academie	72	Vaste gebruiksvoorzieningen	428	vitriines en kasten - schilderwerk textuurverf	3	3	2	B	nieuwe laag	Doc... Pag...	preventief	256	m2	100%	256	m2	21%	15	0	0	15	2025	2100	0				
CMP Rietveld Academie	72	Vaste gebruiksvoorzieningen	429	vitriines en kasten - lichtrooster gaas	3	3	2	B	vervangen	Doc... Pag...	preventief	st	100%	0	st	21%	0	0	0	0	2100	0	0					
CMP Rietveld Academie	72	Vaste gebruiksvoorzieningen	430	vitriines en kasten - lichtrooster strips	3	3	2	B	vervangen	Doc... Pag...	preventief	st	100%	0	st	21%	0	0	0	0	2100	0	0					
CMP Rietveld Academie	72	Vaste gebruiksvoorzieningen	431	vitriines en kasten - lichtarmatuur	3	3	2	B	vervangen	Doc... Pag...	preventief	st	100%	0	st	21%	0	0	0	0	2100	0	0					
CMP Rietveld Academie	21	Buitenwanden	432	radiatoren; schilderwerk	3	3	2	B	nieuwe laag	Doc... Pag...	preventief	1	pst	100%	1	pst	21%	15	0	0	15	2100	0	0				
CMP Rietveld Academie	21	Buitenwanden	433	vensterbank	3	3	2	B	vervangen	Doc... Pag...	preventief	st	100%	0	st	21%	100	0	100	0	2100	0	0					
CMP Rietveld Academie	22	Binnenwanden	434	ruimtescheidende systeemwanden	3	3	2	B	schilderwerk, nieuwe laag	Doc... Pag...	preventief	m2	100%	0	m2	21%	15	0	0	15	2100	0	0					
CMP Rietveld Academie	22	Binnenwanden	435	ruimtescheidende systeemwanden	3	3	2	B	vervangen	Doc... Pag...	preventief	m2	100%	0	m2	21%	100	0	100	0	2100	0	0					
CMP Rietveld Academie	72	Vaste gebruiksvoorzieningen	436	brievbus	3	3	2	B	vervangen	Doc... Pag...	preventief	1	st	100%	1	st	21%	30	0	30	2030	2100	0					
CMP Rietveld Academie	82	Losse gebruiksinventaris	437	zonwering luxaflex	3	3	2	B	vervangen	Doc... Pag...	preventief	1	pst	100%	1	pst	21%	0	0	0	0	2100	0	0				
CMP Rietveld Academie	90	Terrein	438	tuin	3	3	2	B	Zie FedLev, hier in of niet?	Doc... Pag...	preventief	1	pst	100%	1	pst	21%	15	0	0	0	2027	2100	0				
CMP Rietveld Academie	21	Buitenwanden	439	metselwerk	3	3	2	B	herstel voegwerk	Doc... Pag...	preventief	397	m2	100%	397	m2	21%	15	0	15	2027	2100	0					
CMP Rietveld Academie	46	Beschermlagen	440	metselwerk	3	3	2	B	schilderwerk	Doc... Pag...	preventief	397	m2	100%	397	m2	21%	25	0	25	2032	2100	0					
CMP Rietveld Academie	31	Buitenwandopeningen	441	vliesgevel, staal roosters	3	3	2	B	vervangen roosters	Doc... Pag...	preventief	13	m2	100%	13	m2	21%	5	0	5	2032	2100	0					
CMP Rietveld Academie	31	Buitenwandopeningen	442	vliesgevel, staal	4	3	2	B	herstellen hang & sluitwerk schuldelen	Doc... Pag...	preventief	114	st	100%	114	st	21%	5	0	5	2026	2100	0					
CMP Rietveld Academie	31	Buitenwandopeningen	443	vliesgevel, staal	3	3	2	B	herstellen hang & sluitwerk taatsramen e.d.	Doc... Pag...	preventief	149	st	100%	149	st	21%	1	0	1	2021	2100	0					
CMP Rietveld Academie	31	Buitenwandopeningen	444	vliesgevel, staal	3	3	2	B	vervangen glas, opgaaf beheerder	Doc... Pag...	preventief	12	st	100%	12	st	21%	15	0	15	2020	2100	0					
CMP Rietveld Academie	31	Buitenwandopeningen	445	vliesgevel, staal	3	3	2	B	schilderwerk	Doc... Pag...	preventief	5.170	m2	100%	5.170	m2	21%	4	0	4	2022	2100	0					
CMP Rietveld Academie	31	Buitenwandopeningen	446	vliesgevel kitvoegen	3	3	2	B	vervangen kitvoegen	Doc... Pag...	preventief	6.300	m2	100%	6.300	m2	21%	40	0	40	2027	2100	0					
CMP																												

Interieur Rietveldacademie		voor de facilitaire diensten	
DOEL	Het in aanvaardbare conditie terugbrengen of houden van vloeren en afwerkingen		
HOE	Door medewerkers facilitaire diensten te wijzen op / informeren over goed beheer en behoud		
	<p>Let op! Linoleum beschadigt bij:</p> <ul style="list-style-type: none"> > verschuiven van kasten etc. Til objecten op of gebruik een kleed of verhuiskarretje. > puntbelasting. Voorkom puntbelasting door meubilair, scherpe objecten, naaldhakken etc. > puntbelasting. Plaats dopjes of viltjes onder poten van stoelen en meubilair > binnenlopen van zand, steentjes etc. Plaats matten en houd deze schoon en droog > Kaalgelopen delen linoleum kunnen een extra beschermlaag krijgen. > Camoufler diepe krassen met viltstift op kleur en een plaatselijk beschermlaag. <p>Richtlijnen bij reinigen:</p> <ul style="list-style-type: none"> > Eerst droog (stofzuigen, vegen), dan nat, niet te nat. Dweilen hoeft niet dagelijks. > Voor het linoleum kunnen het beste PH neutrale reinigers gebruikt worden. > Bij vitrines en kasten is het niet nodig om dagelijks de horizontale delen nat te reinigen > gemorste koffie of andere dranken. Maak direct schoon met lauw water. > gemorste verf, inkt etc. Maak direct schoon met schone doek en PH neutrale reiniger. <p>Richtlijnen bij herstel schilderwerk in gangen, trappenhuisen, entrees</p> <ul style="list-style-type: none"> > Richt een berging in voor verfmaterialen en kleurcodes/kleurstalen gekoppeld aan ruimten. > Maak een ruimteboek met daarin per onderdeel het afgesproken verftype en kleurcode. > Schilder trappenhuisen, gangen, entree in afgesproken verftype en kleurcode. > Voorkom dat er bij het schilderen van wanden verf op vitrines of kasten komt. <p>Houd rekening met de bijzondere spattechniek op kasten en vitrines</p> <ul style="list-style-type: none"> > Schilder geen vitrines of kasten. Bijzondere spattechniek is moeilijk vervangbaar. > Voorkom dat er bij het schilderen van wanden verf op vitrines of kasten komt. > Bij vitrines en kasten is het niet nodig om dagelijks de horizontale delen nat te reinigen 		
WANNEER	Dagelijks reguliere schoonmaak, eind van het academiejaar, na exposities		
WIE	Facilitaire diensten		

45. Maintenance advice from "Eindrapport Kleuronderzoek GRA_DEF november 2022", Mariël Polman (Rijksdienst voor het Cultureel Erfgoed) en Santje Pander (Onderzoek en restauratie van historische binnenruimten)

Interieur Rietveldacademie		voor de hoofddocenten	
DOEL	Het in aanvaardbare conditie terugbrengen of houden van vloeren en afwerkingen		
HOE	Door studenten mede verantwoordelijk te maken voor goed beheer en behoud		
	<p>Let op! Linoleum verontreinigt bij:</p> <ul style="list-style-type: none"> > gemorste koffie of andere dranken. Maak direct schoon met lauw water. > gemorste verf, inkt etc. Maak direct schoon met schone doek en PH neutrale reiniger. <p>Let op! Linoleum beschadigt bij:</p> <ul style="list-style-type: none"> > verschuiven van kasten etc. Til objecten op of gebruik een kleed of verhuiskarretje. > puntbelasting. Voorkom puntbelasting door meubilair, scherpe objecten, naaldhakken etc. <p>Richtlijnen bij herstel schilderwerk (met name wanden in lokalen)</p> <ul style="list-style-type: none"> > Richt een berging in voor verfmaterialen en kleurcodes/kleurstalen gekoppeld aan ruimten. > Maak een ruimteboek met daarin per onderdeel het afgesproken verftype en kleurcode. > Schilder na exposities of eind van academiejaar de wanden etc. in juiste kleur of kleurcode. > Voorkom dat er bij het schilderen van wanden verf op vitrines of kasten komt. <p>Houd rekening met de bijzondere spattechniek op kasten en vitrines</p> <ul style="list-style-type: none"> > Schilder geen vitrines of kasten. Bijzondere spattechniek is moeilijk vervangbaar. > Voorkom dat er bij het schilderen van wanden verf op vitrines of kasten komt. 		
WANNEER	Aan begin en eind van het academiejaar, bij het inrichten en opruimen van exposities		
WIE	hoofddocenten		

12. DATABASE

DESCRIPTION

With a view to compiling the Conservation Management Plan (CMP) and the Historic Structure Report (HSR), the Gerrit Rietveld Academie wishes to make the archival material relating to the construction, development and restoration of the Gerrit Rietveld Building digitally accessible in a database that is yet to be created.

The database will then form part of the CMP with the aim of preserving all relevant information about the Gerrit Rietveld building, securing it, making it digitally accessible and making it available for the purpose of conservation, adaptation, maintenance and preservation of the building in its original function.

The archive material consists of various forms: text documents, drawings, sketches, photographs but also other visual material and objects.

At present the material is partly physically and partly digitally available, but not yet unlocked in such a way that it is quickly and easily accessible. The goal of the database to be created is to provide this.

A Digital Asset Management system (DAM system) is currently being implemented at the academy.

PRECONDITIONS DATABASE

- First, we consider four topics from an archival perspective, in order to arrive at the most important preconditions that the design of the database must meet.
The function of archives, this involves:
 - supporting business operations
 - preserving, managing and making information available in its own archiving system, automated or otherwise
 - as a source of knowledge for research
- The importance of the archive material to be made accessible; this involves:
 - the archive material is indispensable for the preservation of the building, daily maintenance and adjustments to the building in the future
 - important primary source of information
- Accessibility and accessability, it involves:
 - sustainable accessibility
 - Information will have to be archived in such a way that:
 1. the right information, can be found at the right time,
 2. it is available,
 3. is readable,
 4. is interpretable, that is, the user must be able to interpret the meaning of the information found within the context in which it was created, and finally

5. the reliability and authenticity of the information is guaranteed, i.e.: a user must be able to trust that the information found is complete and correct but also that this information has not changed in content after the moment of archiving.

- Not all information can or may (yet) be viewed by everyone and must be restricted in openness, due to laws and regulations regarding privacy, public accessibility and copyright, for example.
- Accessibility refers to findability and availability but also to the management of information.
- The purpose of the database and the intended user
 - Starting from the purpose of the database to be realized and the intended users, the question is whether within this context a classical archival inventory as primary access is sufficient. Developments in the digital field in recent decades have made it possible for some time now to digitize archives and to offer the classic inventory in digitized form and to make archives directly available via the Internet. The development of the international standard ISAD(G) by the International Council on Archives has made it possible for archival institutions to do this in a uniform way.
 - the successful finding of a specific document in a digital inventory depends as much on the quality of the content description of the constituents and the parent units of description as it does with the paper inventory.
 - In contrast, the archival material related to the Rietveld building is also still primarily necessary for business operations.
 - In view of this use, efficient and document-oriented searching will be an important requirement. It is expected that there will be a need to be able to search for characteristics and descriptions that do not fit or occur in a classic archival inventory. This requires a more fine-grained way of accessing information than the classic inventory can provide. A document management system that can unlock information down to the document level is therefore a better choice in this respect.

RECOMMENDATIONS

- With further design, the DAM system can also be used as a document management system to access other types of information.
- The DAM system provides for the technical management of the digital objects and administrative management with regard to intellectual property, provenance, reuse and accountability for management activities such as the application of retention periods and selection lists.
- Now that the archival materials needed to compile the CMP will be made digitally accessible, this project would be a good pilot for setting up the DAM system for the purpose of making archival materials digitally accessible.
- In line with this, a pilot also offers the possibility to link up with the new international description standard for making archives accessible, Records in Context. This description standard assumes a new approach to the organization of archival metadata intended for the archival sector and is based on the principles of Linked Data and the semantic web. It does not assume a hierarchical starting point but a multidimensional and relational form of archival description. The multi-dimensional starting point thus fits better with the non-hierarchical way digital born archive is archived in current document management systems
- Therefore, in order for the DAM system to be used as a database for making archival material digitally accessible, a number of additional preconditions will have to be taken into account for further design of the DAM system, namely:
 1. it must enable document-oriented access.
 2. it must offer the possibility of opening up archival material that has not (yet) been digitized.
 3. it should be able to be accessed and metadated in such a way that it fits within the larger picture of the operational management work processes. Authorizations must be set up in such a way that the inclusion and management of the metadata and the information can only be done by authorized employees.
 5. the DAM system and the image database provide for different ways of searching, such as searching by free search terms, searching with filters, and searching by specific field with extended search, where the search results are displayed in a list or in a grid view.

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Gerrit Rietveld Academie, Conservation Management Plan, Een levend monument voor eigentijds kunstonderwijs
-Behoud en verduurzaming-

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