JANSEN CAMPUS: BUILDING A VISION

JANSEN CAMPUS—打造更寬闊的視野

建築背景

Jansen Campus位於萊茵河谷地的歐貝里特(Oberriet)，該地是全瑞士數一數二工業化的區域，委託建造Jansen Campus的Jansen AG已有近百年的歷史，現在卻由衝勁十足的年輕團隊負責經營，十年來積極的向國際市場擴張版圖。

這座新建築試圖透過全新的型式，激發營運、研究及全體職員積極且豐富的創造力，在設計與建築結構的每一個階段，都隱藏著對人文關懷的持續投入。公司也全力支持如此創新的發想，一同面對建築上的挑戰，來滿足所有使用需求，這個計畫是名符其實雙方合作的結果。過去，Jansen AG擁有與許多建築師合作的經驗，發展出豐富的解決問題的方法，由於十分喜歡這座新建築，進一步積極應用他們的經驗與專業在Jansen Campus上。

建築師在思考這座新建物時，必須先以「迷你的都市化」的角度思考這個區域，以人文的尺度包含此區現存的工業設施建物，這樣的前提影響了一系列的空間構成，形成公共廣場般的氛圍，給予這個地方更多的潛在發展機會。建築名稱所使用的「CAMPUS」，源於「Campus für Innovation und Technik」，期望促進製作、分享、學習、研究的動力。

從三年前開始，計畫從概念雛型逐漸實現，展現瑞士引以為傲的設計、技術、結構、經濟水準，延續地區的特色。Jansen承諾生產到運作的永續性，既是企業倫理也是技術上的挑戰，提高能源使用效率，減少環境污染，因此使Jansen Campus達到嚴格的Minergie環保標準。在不使費用增加的情況下，提高建築使用者的生活品質與競爭力，例如利用地下水為空調散熱，並運用公司過去的研究經驗將熱能重複利用。

1. 融入地景的傾斜屋頂。 2. 建築物穿廊。 1. Sloping roof 2. Veranda

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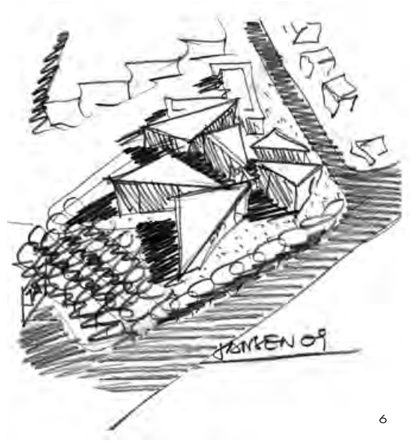
3. 4. 建築外觀。 5. 建築線條與鄰近住宅呼應。6. 設計草稿。 7. 自然光透過大量開窗進入室內。
3.4. Facade 5. Architecture with residential area 6. sketch 7. Natural light teeming through the generous openings

JANSEN CAMPUS—所在地與未來間的橋樑

Jansen Campus位於複合工業區的最北邊，將這座新建築嵌入這個特別的位置，與小尺度的住宅區相接，聯結兩種不同的都市尺度，同時作為工業區域的門面，一方面也融入住宅區。並將建築量體分割為不同大小的四個區域，每處量體的面積，約為接近周圍住宅尺度的200平方公尺。

新的建築如何在都市空間的尺度中找到平衡，這類過去優先處理的議題已獲得解決，現在，問題轉變為建築的存在應展現什麼樣的個性，在觀察所在地的脈絡、地表的起伏、現存的建築與當地的氛圍中尋找答案。

歐貝里特擁有瑞士其他地方常見的建築景觀，具有典型的「房屋風景」，放眼可見大小各異的斜式屋頂，形成相當愉快舒適的視覺效果與空間平衡感，這些遍布的屋頂所產生的光影遊戲，呈現了建築所在地的個性。事實上，往往被當作主角的建築外觀在這裡失去它的重要性，反而被視為屋頂風景的輔助角色，Jansen Campus也透過幾何造型的運用延續城市中的「斜面遊戲」。



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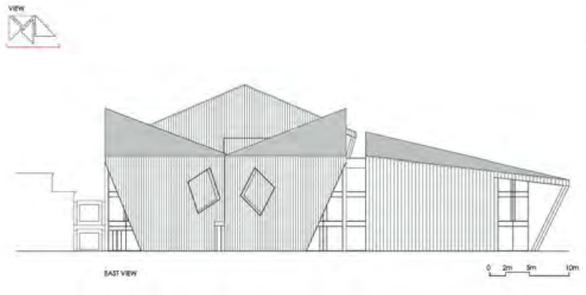

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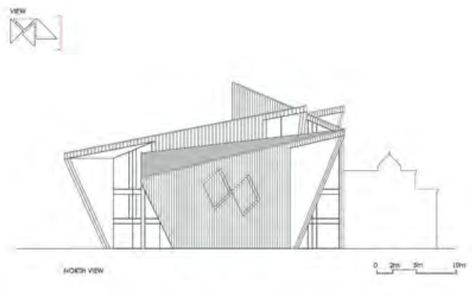

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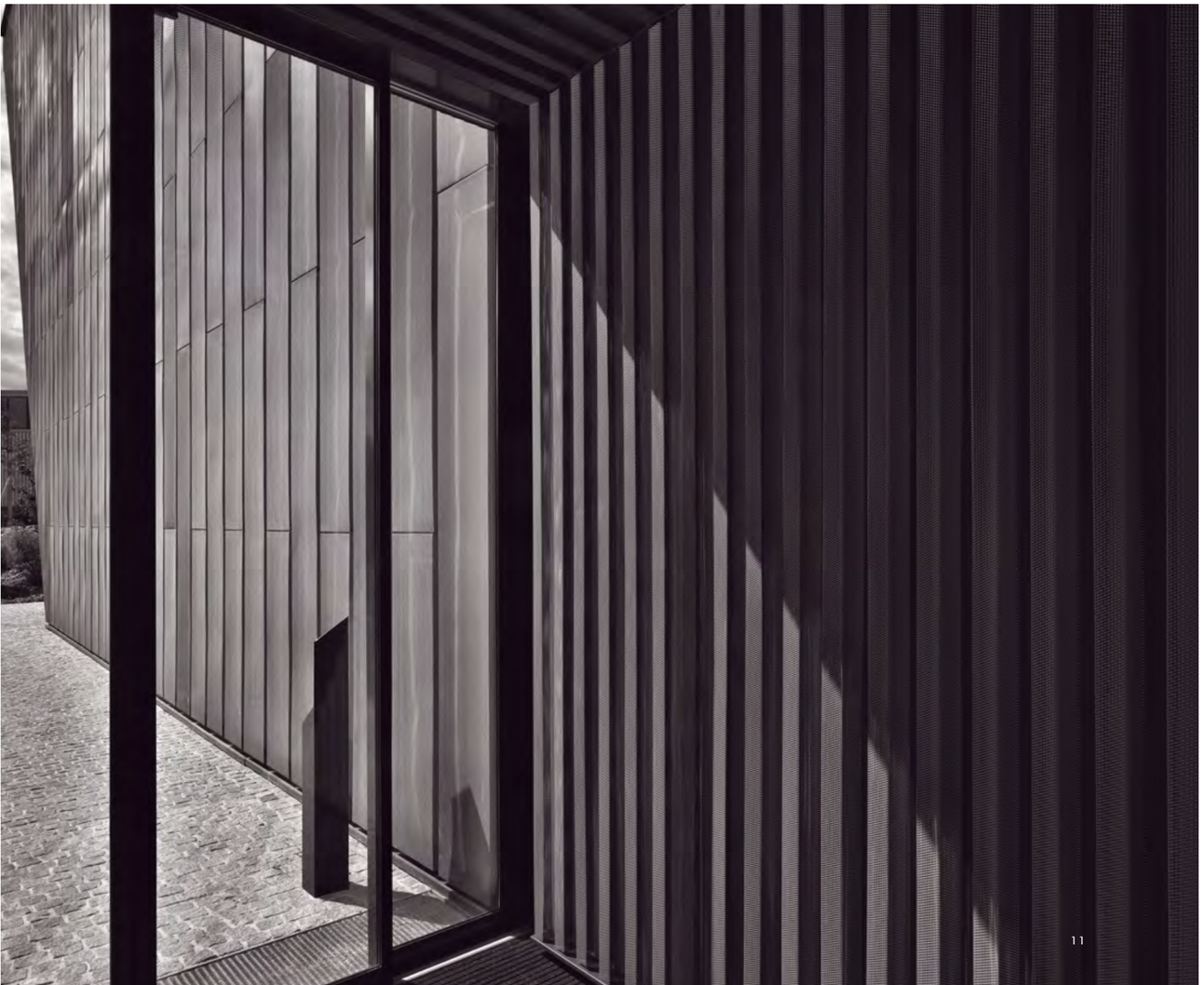
8.9. 立面圖。 10. 剖面圖。 11. 自然光透過大量開窗進入室內。12. 融入地景的建築造型。
8.9. Section 10. Elevation 11. Natural light teeming through the generous openings 12. Architecture with landscape



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建築的三角型幾何造型，反映出對整個建築環境的解讀，這樣的幾何也在量體的立面中被發現，四個三角型量體對內尊重使用的功能性，對外則建立了與周圍環境的關聯性，呼應這個城市屋頂風景的「斜面遊戲」。在平視與俯視中，可看到建築的最高立面面對著工業區，而最低立面則以親切的姿態向住宅的居住者們打招呼。這四個建築量體的組織方式，也避免了存有階級感的傳統配置，突顯公司強調集體創意的特質。

室內則呈現清晰的流動感，宛如城市中街道的延伸，局限的與鬆散的空間系統往每個方向伸展，素色的灰泥牆面明顯的進行了去物質化，內部空間光線透過大量的開窗傾瀉在室內，將參觀者與地景融為一體，並將戶外的自然美景轉化為室內風景。外在環境被具體呈現在建築中，成為周圍環境延伸出的一個新的有機地景，建築帶有透視法的效果，使空間看起來更加寬闊，並在設計時將「綠色區塊(green areas)」帶入建築，周圍種植的高矮樹種隨著季節變換色彩，使內外空間更加和諧共存。

Jansen Campus也透過創新材料與技術經驗的結合，在材質研發方面獲得關注，有些材料與技術還是第一次使用在建築結構上。比方說由Jansen所研究製造的半結構牆，不須要使用任何的機械裝置，便能固定那些反射光線的、光滑的、具透光性的外牆材料。為了打造傾斜的屋頂，在水泥鑄塊中加入特殊的纖維材質，使灌入的水泥能確實附著在金屬的強化物上，以及Jansen參與研發的創新光能系統(TABS)，與建築結構融為一體，使藏於水泥構造中的空調系統確保所有空間享有的空調品質。

建築外表被初次作為外牆材料的暗色Rheinzink網眼板覆蓋，使外牆的色調呼應周圍環境的木造房子，讓建築看起來輕盈，並營造出獨特的光影效果，時時刻刻呈現不同的面貌，使材質、光線、環境相互對話。網眼板的密度、嵌板尺寸大小、與防風層間的距離等，透過模組式的設計以及牢固的嵌合，增加建築的表現力道，也使參觀者獲得開心愉悅的經驗。而且，Jansen Campus的建築材料全取自於方圓數公里內，是企業所展現的社會責任，承諾永續發展並為節能努力。

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INTERNAL FUNCTIONS 室內功能

為了聯結起平日的工作生活，公共空間被置於主電梯與樓梯附近，個人的工作空間則與主要動線保持距離，在牆圍起的三角型空間中保持自然流暢的運用彈性與更多的可能性，並由三種尺寸的格柵規劃出機能各異的區域。

公共場域的機能以一樓的接待處為起始，延伸出會議室、用餐區、餐廳等區塊，一樓還擁有如股匯市中心設有的「事件控制中心」，作為公司整體運作的心臟，能及時反映公司上下的所有狀況。二樓則稱為「Kreativbereich」，是工作區域，也是對所有人開放的交流空間，員工十分喜歡這樣的規劃。三樓為自由配置的辦公區，四樓則是大型會議室與全景露台。須要隱私的個人辦公空間被分散在一個上升的螺旋動線上，最北邊的建築容納公司的營運團隊，南邊則是品管及行政部門，地下室約1000平方公尺的面積，規劃為檔案保存、電機室與科技系統的區域。翻譯」Ara

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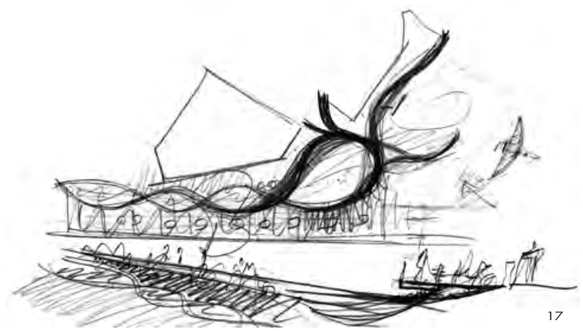
13. 特殊的牆面材料帶來未有的空間經驗。 14. 融入地景的建築造型。15. 與建築呼應的三角型景觀切割。16. 建築北面。17.18. 設計草稿。
13. Rheinzink mesh 14. Architecture with landscape 15. Triangle-cutting landscape 16. Northern façade 17.18. sketch



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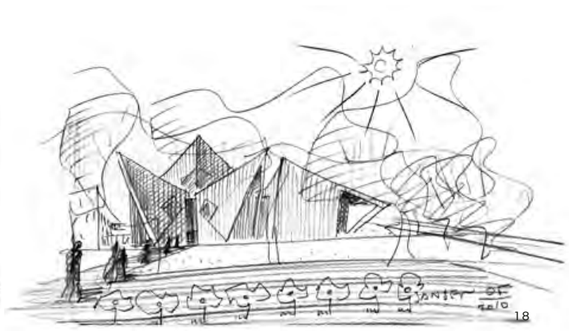

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19. 接待區。20.開放的交流空間。 21.此案的空間速寫草稿成為牆上重點。22. 特殊的牆面材料帶來未有的空間經驗。
19. Receotion 20. Workplace and informal meeting space 21. The sketch wall 22. Rheinzink mesh

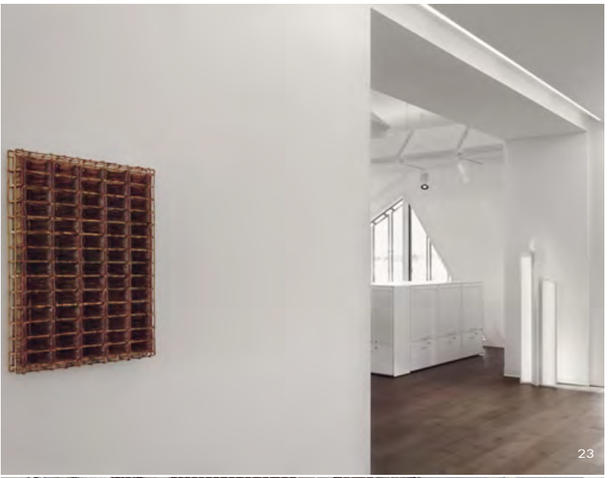
BACKGROUND

The new Jansen Campus lies in the village of Oberriet, in the Rhine valley, one of the most industrialised areas of Switzerland. The company is currently run by a dynamic young team and though in existence for almost a hundred years, the last ten years have seen a particularly rapid expansion into international markets.

The motivation behind the construction of the new building has been to create a space that would have a positive and productive effect on the creativity of the executives, researchers and employees of the company. Throughout all the phases of design and construction, there has been an underlying and continuous concern in investing in human. This innovative social approach has been consistently supported throughout the project by the company and the challenge to deliver such a building has been met with great satisfaction by all involved. The project is the result of a genuine collaboration between Jansen and the design team. Having worked with architects for many years, developing and tailoring solutions, the clients have a great appreciation of architecture and were keen to apply their experience and expertise to finding solutions for their new building.

The new building was preceded by sort of mini urbanisation of the Jansen site, resulting from the necessary expansion of existing industrial structures and which then allowed for the creation of spaces on a human scale within the existing fabric. This has led to the formation of a series of spaces that evoke the atmosphere of public squares. Given the site's potential for further development, the project has adopted the name 'CAMPUS- Campus für Innovation und Technik' - evoking a place of production, sharing, learning and research.

The project began three years ago with a concept design and has become a reality that has taken on regional importance, representative of genuine Swiss quality, design, craftsmanship, construction and economy. Jansen is committed to the sustainable management of its production and logistics and in keeping with the company's ethic and technical excellence in this field, the building meets the exacting Minergie standards, with efficient energy use and the reduction of environmental pollution ensuring the enhanced quality of life for the users of the building and a competitiveness in maintenance costs. The building for example uses ground water for the heating and cooling and runs on a heat recovery system, drawing attention to the company's experience in energy efficiency and production of photovoltaic elements.



JANSEN CAMPUS- A BRIDGE BETWEEN THE DNA OF A PLACE AND ITS FUTURE

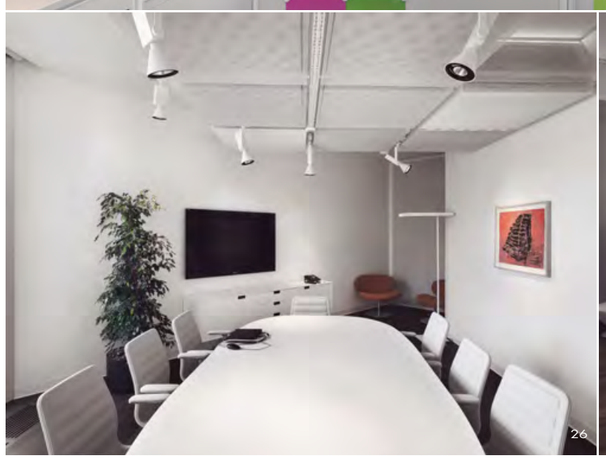
The site for the construction of the new Jansen Campus lies at the north end of the industrial complex and is bordered by the small scaled residential expansion of the village. This particular site allows the new building to insert itself as the link between two different urban scales- at once acting as the face of the industrial area while also reducing to the scale of the village. This reduction in scale has been achieved by fragmenting the mass of the building into four. Each of the four volumes has a floor area of circa 200sqm, a size approaching that of the surrounding residential buildings.

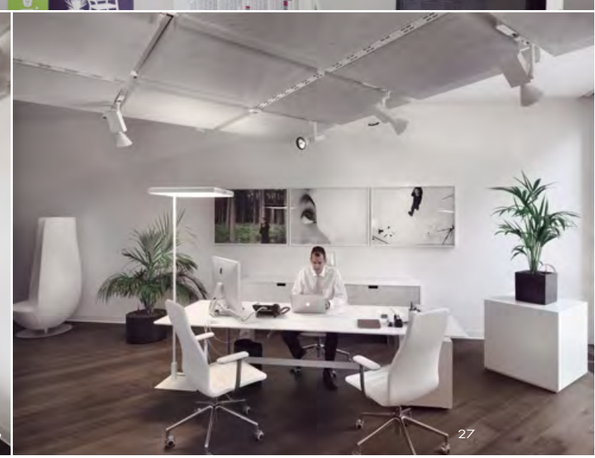
Once the primary issue was resolved, that of how the architecture of the new building would find a balance in terms of scale within the urban space, the question moved to what kind of character the new presence would express and looked to the context, the fold of the land, the existing fabric and the sense of place for answers.

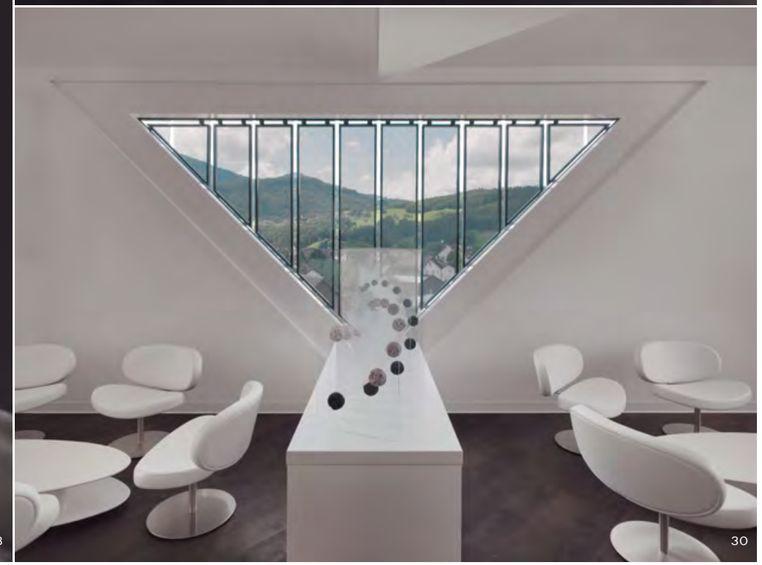
Oberriet, like many other built landscapes in Switzerland, is typified by a multitude of different sized inclined planes, sloping in different directions, that, quite remarkably achieve a very pleasant visual and spatial balance. It is the sloping roofs and their game of shadows and reflections throughout the day that characterise the built space of this place. In fact, at a perceptive level, the facades of the buildings lose their importance, assuming the supportive roles of the great inclined plans. The new geometry of the Jansen Campus has been generated by this complexity of the 'games of planes'.

In plan, the building follows a triangular geometry and, reflecting the reading of the built space, this geometry is again found in the elevation of the volumes. The four triangular shaped volumes, with respect to their internal functions, are modelled with their relationship to the surrounding landscape in mind. As such they reflect the 'game of planes' of the village, both in elevation and in their roofscape, where the highest parts face its industrial family, the lower parts sloping down to greet its residential neighbours. In order to emphasise the idea of collectivity and to underline the social principles of the company, the four volumes are organised in such a way as to avoid a classical composition of hierarchical spaces.

23. 25.27.辦公空間。 24. 樓梯間。 26. 會議空間。
23.25.27. Office 24. Stairs 26. Meeting space







28.30. 董事會議空間。29. 會議空間。
28.30. Boardroom 29. Meeting space

The internal landscape is articulated as a fluid space, almost as if it were formed by an extension of the urban streets of the village, a system of solids and voids expanding in all directions. The apparent mass of the new building is dematerialised internally, flooded with natural light teeming through the generous openings and grand slicing overhangs that project the users out to the landscape. The building also draws from the extraordinary beauty of its natural surroundings and recreates part of this external atmosphere within its own internal landscape.
Outside of the areas that have been specified for the production activities and logistics of the company, a new organic landscape has been created as an extension of the surrounding environment. The design of these "green areas" is influenced by our perception of space, considering both the external and internal views of the building. Taking into account the perspective views, the spaces appear to expand and dilate. This spatial perception works in tandem with the scale of the building, the types of trees and shrubs planted and the changing of the colours with the seasons.
The new Jansen Campus is also characterised by research, carried out during the design, on innovative materials and technological solutions- some used for the first time in construction. For example the semi structural facade, produced by Jansen, is a new system produced in such a way as to guarantee a continuity of the reflective, glazed and transparent elements of the building, without the need for external support mechanisms.
In order to build the sloping roofs of the building, a system of adding fibres to the concrete casting was developed. By doing this, this guaranteed that the poured cement would adhere to the metal reinforcements. An innovative radiant system (TABS), partly produced by Jansen, based on thermal mass principles, has also been integrated into the structure; heating and cooling circuits have been installed directly into the concrete structure forming the floors and ceilings, ensuring the quality conditioning of all spaces.
The facade is clad in a dark pre-patinated perforated Rheinzink mesh. This particular finish gives the material a colouring that evokes the density of the tones of the wooden buildings of the surrounding area. Used for the first time as an external cladding, this "skin" has the particular quality of making the building seem "light". The facade shimmers with reflections and shadows, changing throughout the day, with the changing of the hour and the light of the day; a constant dialogue between the material, light, the environment and the elements. It is hard to find the same conditions twice! The density of the mesh, the dimensions of the panels, the distance of the fixings from the wind protection layer- all contribute to giving an appearance of three-dimensionality to the facade. The modular design and the tight stretched mesh play a role in the scale of the building and make it interesting and pleasurable for approaching visitors.
The Jansen Campus, both internally and externally was almost entirely built using resources available within a few kilometres of the site. This fact highlights the entrepreneurial strength of the region, the commitment to sustainability principles and the focus of efforts towards effective energy savings.

INTERNAL FUNCTIONS

In order to allow for the fluid flow of daily working life, spaces intended for collective use have been placed adjacent to the main lifts and stair while the more intimate working spaces lie further along from this circulation. The structural functions of the building are assumed by the perimeter walls of the triangles, allow for a free plan internally with a high degree of flexibility and possibility of future divisions. Currently the spaces are organised about a three-dimensional grid that corresponds to the company's functional structure.

The public functions are distributed from a reception zone on the ground floor. Rooms for meetings, business lunches and a restaurant all lead off this area. Also on the ground floor, beside the reception is an office known as "Mission Control" representing the operational heart of the company and acts almost like the stock market floor, where all information regarding the operations of the company is processed here in real time. On the first floor there is a space named "Kreativbereich", a workplace and informal meeting space open to all, much appreciated by the employees, a teaching room with foyer and other meetings rooms. An open plan office for the communications section is located on the second floor, and on the third is the boardroom with a panoramic terrace.

Individual offices and more intimate working spaces requiring more privacy are distributed along a spiral, with their area increasing as the spiral rises. The northern-most triangular block houses the operations wing of the company across two floors and on the upper floors are the offices of the directors responsible for this sector. The south triangle houses quality control and the executives responsible on the second floor. In the basement there are ca. 1000sqm reserved for the archives, mechanical rooms and technological systems. Text by Davide Macullo Architects

設計」Davide Macullo Architects – Lugano TI
名稱」Jansen Campus
位置」瑞士，歐貝里特(Oberriet)
功能」辦公空間
樓層」地下一層，地上四層
建築面積」1,100平方公尺
樓地板面積」3,300平方公尺
計畫開始日期」2008.07
施工時間」2010.05-2012.05
材料」主材料：強化水泥
外部：暗色Rheinzink網眼板、暗色Rheinzink嵌板
內部：灰泥、木地板、石
攝影者」Pino Musi

31.建築外觀。32.基地平面圖。33.立面圖。
31. Façade 32. Siteplan 33.Section

JANSEN CAMPUS AT OBERRIET, SG, SWITZERLAND
Project」 Jansen Campus
Location」 Oberriet, SG, Switzerland
Function」 Office building
Client」 Jansen AG
Project start date」 July 2008
Construction start date」 May 2010
Completion date」 May 2012
Certification」 Minergie Label
Site area」 3'705㎡
Building area」 1'100㎡
Total floor area」 3'300㎡
Basement floor area」 900㎡
Above ground floor area」 2'400㎡
Volume」 15'800m³
Storeys」 1 level basement, 4 levels above ground
Materials」 Main structure:reinforced concrete
Finish, exterior」 Facade:Dark pre-patinated Rheinzink expandet mesh, Wind protection layer
Cantilevered wallls and overhangs:Reinforced concrete,painted white
Windows:Jansen Viss SG, structural glazing
Sloping roof:Rheinzink dark pre-patinated panels
Flat roof:Prefabricated concrete elements ,Gravel
Finish, interior」
Walls:Plaster
Ceilings:Plaster
Floors:Wood parquet,Stone
Client」 Jansen AG - Oberriet SG
Architect」 Davide Macullo Architects -Lugano TI
Principal」 Davide Macullo
Project architect」 Lorenza Tallarini
Design collaborators」 Ah Lom Kim,Aileen Forbes-Munnelly,Karen Abernethy,Michele Alberio,Samuela Pfund
Contractor」 Architekten: rlc AG-Rheineck SG
Landscape architect」 Davide Macullo Architects - Lugano TI
Interior design」 Davide Macullo Architects- Lugano TI
Structural engineer」 WIli AG Ingegnieure - St Gallen SG
Building engineer, acoustics」 Baumann Akustik und Bauphysik AG - Dietfurt SG
System engineer and coordination」 Amstein und Walthert AG - St Gallen SG
Lighting engineer」 Caduff Lichtplanung - Dietikon ZH
Photo credits」 Pino Musi

建築師簡介
Davide Macullo建築師事務所為一間國際設計工作室，成立於2000年，並於瑞士盧加諾和義大利米蘭設有據點。近期作品包括瑞士北部的廣告公司總部、盧加諾湖畔的複合式住宅、希臘克里特島海濱住宅、南韓濟州島的住宅及博物館、及米蘭的都市規劃，許多建築作品獲邀參加中國、德國、義大利的相關競賽。

STUDIO PROFILE
Davide Macullo Architects is an international design studio founded in 2000 and based in Lugano in southern Switzerland and in Vimercate, Milan, Italy.
The studio was founded in 2000 and since then has grown steadily. Current projects include a new commercial headquarters project in northern Switzerland, a residential complex on Lake Lugano, several houses in the Alps surrounding Lugano, a beachfront property on the island of Crete in Greece, hotels in Nafplion and Lagonissi, Greece, a house and museum on Jeju island, South Korea and a dozen residential, commercial and masterplan projects in Milan. They have also recently been invited to participate in competitions in China, Italy and Germany.

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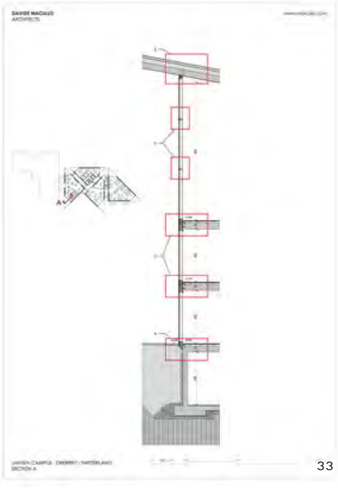
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