

Application: 6397

Archives Départementales de l'Isère

Started at: 3/26/2024 03:52 PM - Finalized at: 4/29/2024 08:53 AM

Page: Submitter Information
The submitter is the person entering the information on this project application. You may want to email estherbeery@concrete.org with your project name to ensure it has not been nominated by another individual. Please do NOT use all capital letters. View an award winning entry (https://www.concrete.org/portals/0/Files/PDF/EA_An_Award_Winning_Entry.pdf)
Submitter Last Name: Kon-sun-tack
Submitter First Name: Olivier
Submitter Phone Number: +33609741115
Submitter Email Address: konsuntack.olivier@gmail.com
Nomination: (Chapters/Partners may nominate one project per category) Yes
Local ACI Chapter/Partner Nominator ACI Paris Chapter
Official Chapter/Partner Nomination Seal Download File (https://aciexcellence.secure-platform.com/file/24645/eyJ0eXAI0iJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJtZWVpYUlkIjoyNDY0NSwiYWxsY3dOb3RTaWduZWRVcmwiOiJGYWxzZSIImInbm9DgLyLR9v5yOFbNsEtlugADklr5mU?ChapterNominatedSeal_Final%20%28002%29.jpg)
ACI Chapter/Partner Representative Name Francois TOUTLEMONDE
Chapter/Partner Representative Email francois.toutlemonde@univ-eiffel.fr
How did you hear about the ACI Excellence in Concrete Construction Awards? Local ACI Chapter or Partner
Page: Project Demographics
Information will be published as provided. Make sure the project name and all other details are accurate. Please do NOT use all capital letters.
Short Project Name (5 words or less): Archives Départementales de l'Isère
Category: Decorative
Date of Project Completion: 5/2/2022

Project Address:

12 Rue Georges Percé
Saint-Martin-d'Hères Isère 38400 FR

Project Address:**Project Size (Dimensions, Area, Span):**

6 floors with around 4800 m² floor space. Overall building : 90m long x 54 m wide x 25 m tall

Concrete Quantity - Volume Area Tonnage:

13.000 m³, 940 m³ for façade cladding

Construction Work Duration:

40 months

If applicable, how many stories is this structure

4-15 stories

Page: Project Team

The entire project team will be invited to the Awards Gala during the ACI Fall Convention. Please provide as much information as you can and **make sure company names are spelled correctly**. Information from this segment will be published as it is entered. Please do NOT use all capital letters. We will not publish all the information submitted.

(Owner) Company Name:

Département de l'Isère

(Owner) Company Website:

<https://www.isere.fr/>

(Owner or Representative) - First/Given Name:

Hélène

(Owner or Representative) - Last/Family Name:

Viallet

(Owner or Representative) - Email Address

helene.viallet@isere.fr

(Owner or Representative) - Assistant/Contact Person - Full Name:

Mathilde Le Roc'H Morgère

(Owner or Representative) : Assistant/Contact Person Email Address:

mathilde.le-roch-morgere@isere.fr

(Architect Firm) - Company Name:

Arche 5 - CR&ON and D3 Architectes

(Architect Firm) - Company Website:

<https://www.arche5.com/>

(Architect Firm Representative) - Personal Email Address:

jp.charon.archi@gmail.com

(Engineering Firm) - Company Name:

Artelia

(Engineering Firm) - Company Website:

<https://www.arteliagroup.com/fr/>

(Engineering Firm Representative) - Personal Email Address:

haridera.ramahandry@arteliagroup.com

(General Contractor) - Company Name:

Cuynat

(General Contractor) - Company Website:

<https://cuynat-construction.fr/>

(General Contractor Representative) - Personal Email Address:

samuele.mascia@cuynat.gcc.fr

(Concrete Contractor) - Company Name:

Cuynat

(Concrete Contractor) - Company Website

<https://cuynat-construction.fr/>

(Concrete Contractor Representative) - Personal Email Address:

samuele.mascia@cuynat.gcc.fr

(Concrete Supplier) - Company Name:

Vicat

(Concrete Supplier) - Company Website:

<https://www.vicat.fr/>

(Concrete Supplier Representative) - Personal Email Address:

pierrick.serres@vicat.fr

(Additional 1) Company Name:

D3 Architectes

(Additional 1) Service Provided:

Architect

(Additional 1) Company Website:

<https://www.d3architectes.fr/>

(Additional Company 1 Representative) - Personal Email Address:

contact@d3architectes.fr

(Additional Company 2) Name:

Solétanche Bachy

(Additional Company 2) Service Provided:

Reinforced concrete piles

(Additional Company 2) Website:

(Additional Company 2 Representative) - Personal Email Address:

(Additional Company 3) Name:

Studio Erick SAILLET

(Additional Company 3) Service Provided:

Site photos

(Additional Company 3) Website:

https://studio-ericksaillet.com/

(Additional Company 3 Representative) - Personal Email Address:

studioericksaillet@gmail.com

(Additional Company 4) Name:

(Additional Company 4) Service Provided:

(Additional Company 4) Website:

(Additional Company 4 Representative) - Personal Email Address:

(Additional Company 5) Name:

(Additional Company 5) Service Provided:

(Additional Company 5) Website:

(Additional Company 5 Representative) - Personal Email Address:

Others:

Page: Description of Project

Provide a detailed description of your project in 300 words or less. This information will be judged and used in print materials. Information will be published as entered.

Project Description

Located on the edge of Grenoble Alpes university campus, which combines modern architecture with large open spaces with trees, the new Archives Départementales de l'Isère building (Departmental archives of Isere) resonates with the surrounding Belledonne, Vercors and Chartreuse Mountain ranges.

The building designed by CR&ON and D3 architects, rises to a height of 25 meters and encompasses a 90-meter-long and 54-meter-wide footprint.

It was constructed to meet the need for a larger facility that is more suitable to house the archives than the existing one, which dates to 1958. It houses up to 70 linear kilometers of archive documents in 56 storerooms located within blind rooms specifically designed for fragile document protection. The building is also a cultural venue dedicated to research and knowledge, that welcomes the public, and aims to contribute to the development of the local community.

These two conflicting functions are represented by two architectural contradictions: the 'heavy and light' is observed in the four large, solid archive blocks situated above the recessed cladding of the office level, and the extensively glazed ground floor featuring V-shaped concrete columns. Meanwhile, the 'opaque and luminous' becomes apparent as you move along the central street towards the atrium at the core, which is lit from above and the sides through the glass-covered passageway.

The monolithic blocks that house the archives are clad by sandblasted concrete with colored layers resembling limestone mountains surrounding the Grenoble valley. These horizontal cast-in-place concrete striations, which mimics stacks of paper, alludes to the archives within the concrete enclosure.

The eight shades of the concrete cladding are the result of a skillful blend of grey concrete and three mass-tinted concretes, each with a different ochres, and sandblasting to reveal basaltic dark concrete aggregates.

Concrete, timber and glass provide three sensual and complementary material expression.

Page: Description of Concrete Usage within the Project

In 500 words or less, describe how the concrete was effectively utilized in the project, for example, to meet the end user requirements, to shorten the schedule, for sustainability, etc... Information will be judged and printed as entered.

Concrete Usage

For the Archives Départementales de l'Isère new building, concrete was certainly the most relevant material for several reasons. Beyond meeting the architectural intentions, concrete elements enable heavy load resistance, fire resistance, thermal inertia and durability.

Archive floors require high live loads (13 kN/m²) and 2-hour fire resistance which are achieved by the 10-meter span prestressed hollow core slabs and reinforced concrete walls. These walls are supported by C50/60 high-performance self-compacting concrete V-shaped columns providing a mostly open ground floor.

Beyond high loading and fire resistance requirements, the archive documents space require special, stable temperature and humidity conditions. In addition to dual flow air treatment, archive monolithic blocks benefit from hygrothermal stable conditions provided by the building envelope. The latter comprises an 18 cm exterior facing concrete cladding, a 20 cm thick insulation layer, a 20 cm interior nonbearing wall, a 90 cm air space – also used as a technical gallery – and a 28 cm reinforced concrete bearing wall. The archive monolithic blocks lower slabs are combined with a specific structural lightweight concrete double skin slab used for insulation purposes: the Defi Thermicat slab combines 25 MPa structural strength with low density ($d=1.4$) and thermal insulation ($\lambda=0.53$ W/m².K).

Particular care was taken with the cladding design throughout each stage of the project to obtain this amazing aesthetic result. Four different concrete mixes were specifically developed: a grey one and three shades of ochre.

15 test samples were carried out to determine ideal shades, aggregates and sandblasting method. Several prototypes were built – 3 during the detailed design phase and 5 during the construction phase– in order to define color requirements, concrete rheology, wood matrix installation and the layout of the formwork templates.

The contractor designed formwork with metal floor height formwork sheathing panels and inner wooden board matrices to create the façade striations. These wooden elements were 5 to 10 cm high and 12 to 27 mm thick.

The contractor had to put in place a specific layer by layer non-vibrated pouring process within the floor height formwork. Each layer, that ranged from 25 to 120 cm high, had to be poured on a single batch along the entire 50-meter-long block façade. The concrete supplier had to find a balanced solution between fluidity and plasticity to create concrete layers with a variable thickness and irregular molded striations, while taking into account exterior temperature variation during the year-long pouring sequence.

Sandblasting was carried out on the young concrete cladding wall right after formwork removal.

Every concrete element of the building incorporated local aggregates, including alluvial rolled aggregates from the Grésivaudan valley for walls and columns, supplied from a local quarry located 13 km from the construction site in the Isère River. Basaltic aggregates were added for façade cladding.

The project brought together the expertise of a local concrete supplier and a local contractor with locally sourced materials to produce a harmonious and emotive building for its end users.

Page: Sustainability

300 words or less (optional entry)

Provide a brief description regarding the project's sustainability.

Photo captions:

#1 The Archives Départementales de l'Isère four concrete monolithic blocks are located within Grenoble's university green campus and surrounded by the Chartreuse massif's limestone cliffs. © Erick SAILLET.

#2 Heavy and light: South entrance view, with one of the archive monolithic blocks, made of colored, stratified and sandblasted concrete cladding, suspended over the office recessed level and the ground floor canopy. © Dpt 38.

#3 Behind the trees, the Archives' North entrance view combines the canopy and concrete striations' horizontal lines, and the monolithic block vertical lines © Erick SAILLET.

#4 Opaque and luminous: In the glazed concrete atrium, natural zenithal light and lateral light showcase Philippe Cognée's work 'La Tour des mémoires' (The Tower of Memories). © Erick SAILLET.

#5: V-shaped columns in stained high-performance concrete (C50/60) support monolithic blocks heavy loads (13 kN/m² live loads for each of the five stories). They give space and rhythm to the central street. © Erick SAILLET.

6: Glazed façades between the 8-color-shades monolithic blocks bring light to the atrium and the corridor. They reflect the colors, the material, and the striations of the colored and sandblasted concrete cladding. © Erick SAILLET.

#7: Formwork view. The facade concrete is cast within wooden board matrixes installed inside the formwork panels. These matrixes layout were slightly changed between each level and each block. Each monolithic block façade design has a single control joint. This is made possible by the high reinforcement ratio. © CR&ON

#8 View on the technical gallery. On the left side is the bearing wall, on the right side is the future cladding wall connected to the slab thanks metallic point supports to reduce thermal bridges. The technical gallery provides hygrothermal regulation to the building and supports all MEP ducts, which are not allowed in archives rooms. © CR&ON.

Page: Photos and Video

Photographs and videos are used as part of the judging process and should depict current safety standards and proper use of personal protective equipment. Photographs should not contain descriptions and should be high resolution of at least 300 dpi. A minimum of four (4) photographs are required, with a **maximum** of eight (8) photographs.

In addition to the four (4) photographs, **ACI requests that you include a 1 - 2 minute video** showing the construction of the project. **No animations will be accepted.** Concrete and construction of concrete should be featured in some of the photos.

Photographs and footage will be used in promotional material and shown as a digital presentation at the Awards Gala.

PLEASE make photo names short if possible. It allows downloads on our end much faster, thanks!

Photo 1

Download File (https://aciexcellence.secure-platform.com/file/24647/eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJtZWRpYUlkJoyNDY0NywiYWxs3dOb3RTaWduZWRVcmwiOiJGYWxzZSIImInbm9_ExdG0JhisynM?Photo%201-%20DPT%2038.jpg)

Photo 2

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Photo 3

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Photo 4

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Photo 5 (optional)

Download File (https://aciexcellence.secure-platform.com/file/24651/eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJtZWRpYUlkJoyNDY1MSwiYWxs3dOb3RTaWduZWRVcmwiOiJGYWxzZSIImInbm9_Photo%205-%20Erick_Saillet.jpg)

Photo 6 (optional)

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Photo 7 (optional)

Download File (https://aciexcellence.secure-platform.com/file/24653/eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJtZWRpYUlkJoyNDY1MwWxs3dOb3RTaWduZWRVcmwiOiJGYWxzZSIImInbm9_Photo%207-%20CR%26ON.JPG)

Photo 8 (optional)

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Video/Timelapse (optional)

Download File (https://aciexcellence.secure-platform.com/file/24252/eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJtZWRpYUlkJoyNDI1MiwWxs3dOb3RTaWduZWRVcmwiOiJGYWxzZSIImInbm9_Timelapse%20ADI.mp4)

Video/Timelapse 1 (optional)

No File Uploaded

Video/Timelapse 2 (optional)

No File Uploaded

URL link to project (optional)

<https://archives.isere.fr/> (<https://archives.isere.fr/>)

Page: Award Recipient Information

The Project Owner and team will be notified if the project is a first or second place winner and invited to attend the Awards Gala, held during the ACI Fall Convention.

Page: Separate Waiver

Submitter grants the American Concrete Institute ("ACI") usage of all photographs, information, graphics, ideas, or other information submitted to ACI (the "Submission"). ACI will not be required to treat any Submission as confidential. ACI will be entitled to use the Submission for any commercial or other purpose whatsoever without compensation to you or any other person sending the Submission. You acknowledge that you are responsible for whatever material you submit, and you, not ACI have full responsibility for the message, including its legality, reliability, appropriateness, originality, and copyright. You further agree that the decision of ACI and the judges in the competition regarding any award, or the decision not to issue an award, is final and not subject to challenge. ACI will not be liable for any damages or injury caused by, including but not limited to, special or consequential damages that result from the Submission, even if there is negligence or ACI or an authorized ACI representative has been advised of the possibility of such damages, or both. The above limitation or exclusion may not apply to you to the extent that applicable law may not allow the limitation or exclusion of liability for incidental or consequential damages. This agreement and waiver shall be construed, interpreted and enforced according to Michigan law, without regarding to conflict of laws principles. Please note, you must agree to the separate waiver in order to submit your project.

Waiver Agreement

Yes, I agree to the terms and conditions

Signature of Applicant:

Olivier KON-SUN-TACK

Date Signed:

4/27/2024

Page: Thank you for participating!

Thank you for participating in this year's ACI Excellence in Concrete Construction Awards program! After you save and finalize your application, it will be officially submitted. Judges will review between May and July. Once all scores have been submitted, the submitter, the Chapter/International Partner, and Owner will be informed of the status of your project. **IMPORTANT DETAILS:** If your project is selected as a first or second place winner, the project team and the Chapter/International Partner will be invited to attend the Awards Gala, **November 4, 2024 in Philadelphia, PA, USA**. Please contact Esther Beery with any questions or would like to sponsor ExcellenceAwardsSponsorshipProspectus.pdf (concrete.org) (<https://www.concrete.org/portals/0/Files/PDF/ExcellenceAwardsSponsorshipProspectus.pdf>) the Gala via email at Esther.Beery@concrete.org