



SCARPA DESIGN

TRAINING & CONSULTING

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WHAT? THE TRAINING

Freehand sketching as a practical tool to stimulate the capacities of reflection, communication and synthesis in the world of construction and architecture. This training is aimed in particular for engineers, architects and designers, for its use in the design and construction site phases.

The specific approach of the proposed training has been developed and tested over several years of architectural practice within multidisciplinary teams, and combined with university teaching and scientific research.

WHY ? THE OBJECTIVES

The architectural project responds to complex interests (at once aesthetic, constructive, functional and economic) that often appear as opposed. It seems essential to find ways to forge links between the different fields of knowledge integrated into the current world of construction, with the aim of bringing together productivity and innovation and making companies more efficient.

Beyond technological means such as computers and the arrival of BIM, hand drawing is an efficient process to achieve this synthesis, without complex means and in all stages of the project. All it takes is a pencil and graphic and communicative intelligence to unblock urgent worksite situations, reduce the workload or better communicate an idea, without multiplying the hours of work and the necessary means. Hand drawing is thus considered a low-tech tool that allows a more direct translation of ideas. It brings together our logical and intuitive capacities and is a privileged tool to promote creativity. The freehand sketching advocated here differs from the drawing considered as a purely aesthetic means. Moreover, unlike academic drawing in Fine Arts which requires large learning phases, this method can be learned quickly, allowing to become operational almost immediately.

The objectives of this training are:

- **To adopt a daily practice of reflection and conception through drawing.**
- **To develop constructive intuitions.**
- **To acquire a sense of scale and proportion.**
- **To learn to synthesize and communicate through freehand sketching.**
- **To set up an operational methodology of graphic expression.**

HOW? THE CONTENT

The training includes thematic presentations with a practical approach (25% of the time) and guided work (75% of the time) in sessions of 90 minutes.

The specific content of the sessions is adapted to the needs of each company. These sessions can be individual or collective, up to a maximum of 10 people per group.

The training has been designed to allow immediate practical application of the knowledge acquired. In most cases, one session per week for seven weeks will achieve significant results:

1. Presentation and **basics**.
2. Drawing for **understanding (1)**.
3. Drawing for **understanding (2)**.
4. Drawing for **thinking (1)**.
5. Drawing for **thinking (2)**.
6. Drawing for **communication**.
7. Drawing for **innovation**.

WHO? ALEJANDRO SCARPA

I'm an architect and PhD in architecture.

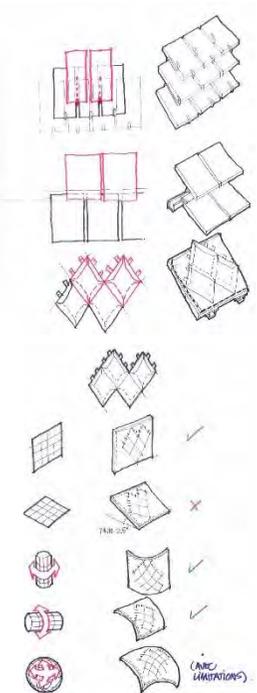
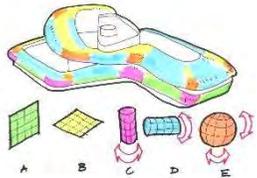
My professional background has allowed me to put forward a culture of drawing for thinking and communicating, as a common language between engineers and architects.

Some of the companies and institutions with which I have collaborated in this field:

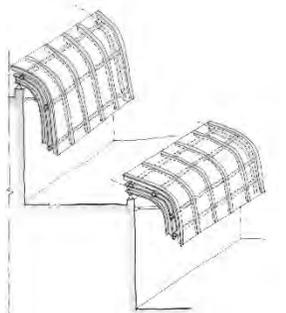
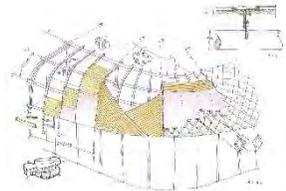
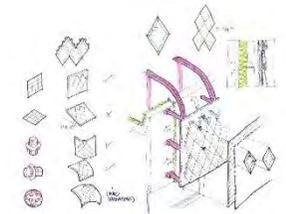
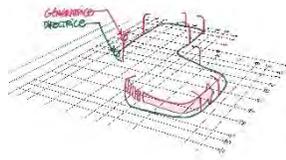
- **RPBW** Renzo Piano Building Workshop (IT)
- **T/E/S/S** Engineering consulting office (FR)
- **César Pelli & Associates** (US)
- **Architecture Studio** (FR)
- Scientific Committee of the **EGA review** (Expression Graphique in Architecture) (SP)
- **École Nationale des Ponts et Chaussées** (FR)
- **Universidad de Alcalá** (SP)
- **École Spéciale d'Architecture** (FR)
- **Università Federico II di Napoli** (IT)
- **Faculdade de Arquitetura e Urbanismo PUC-Campinas** (BR)

PROGRAM				
N°	TITLE	THEMATIC PRESENTATION (20')	GUIDED WORK (70')	BIBLIOGRAPHY
		Powerpoint presentation with a practical approach.	Practical exercises complementing the thematic presentation.	A reference book will be presented during the thematic presentation.
1	PRESENTATION	Presentation of the program of the sessions and basics.	Baselines. Parallel, paper turning, parallel at a distance, change of direction. Hatching. Construction axes. Simple volumes (cubes, cylinders).	<i>Drawing on the Right Side of the Brain.</i>
2	DRAWING FOR UNDESTANDING (1)	Basic drawing techniques. Use of markers of various thicknesses, pantone. Use of layers. Tricks.	Spatial vision games: discover the axonometry of simple objects from 2D views. Exercises to develop spatial vision.	<i>Sketching the basics.</i>
3	DRAWING FOR UNDESTANDING (2)	Descriptive geometry. Types and choice of representation systems. Drawing methods in axonometry. Axonometry vs. perspective.	Based on the technique learned in the previous session, participants must draw a simple object from its mains views. Participants learn how to draw with the correct proportions, how to align the drawings and how to maintain graphical homogeneity.	<i>Building construction illustrated.</i>
4	DRAWING FOR THINKING (1)	Most common graphic conventions in architectural drawings.	The participants have to draw a complex object in axonometric view from the 2D documentation, choosing the most appropriate point of view for a good understanding of the object.	<i>The details of modern architecture.</i>
5	DRAWING FOR THINKING (2)	Axonométrie éclatée. Exemples de cette méthode et l'intérêt de son utilisation.	Drawing in exploded axonometry, and various decision making concerning the represented object.	<i>Blah, Blah, Blah: What to do when words don't work.</i>
6	DRAWING FOR COMMUNICATION	Graphic conventions. Working with scale and intuitive methods to find out the size of objects and the scale of a given drawing.	Drawing as a team communication tool: the participants have to draw from a photo of an object in perspective, its representation in plan, lateral and frontal elevation. The drawings produced are exchanged between the participants, and without seeing the basic image, they must reproduce an axonometric image. The aim is to be able to make the way back and forth without losing or modifying the information.	<i>L'art du design / Design as art.</i>
7	LE DESSIN COMME OUTIL DE CONCEPTION	The sketchbook and its use. Examples of the creative methodologies of architects and designers confronted with the blank sheet of paper.	Design of a simple object with simple specifications (for exemple, a chair produced by laminated wooden boards that can be bent, giving simple rules for bending possibilities according to its thickness).	<i>The design of every day things</i>

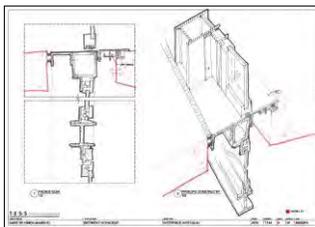
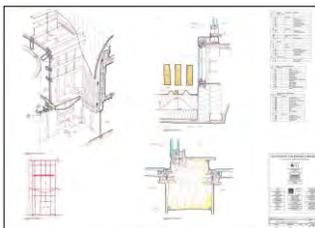
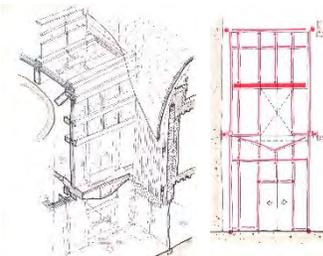
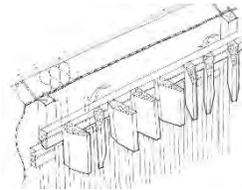
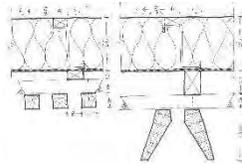
SCHEMATIC DESIGN



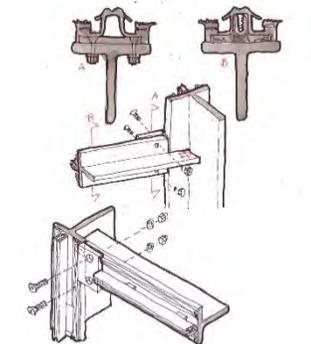
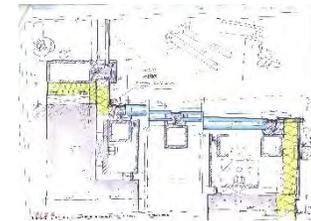
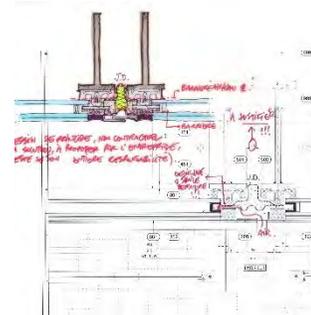
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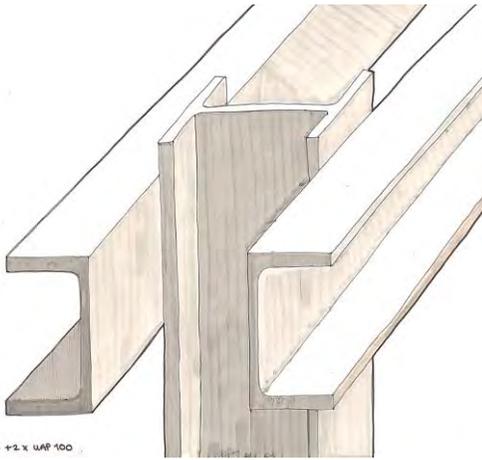


CONSTRUCTION DOCUMENTS

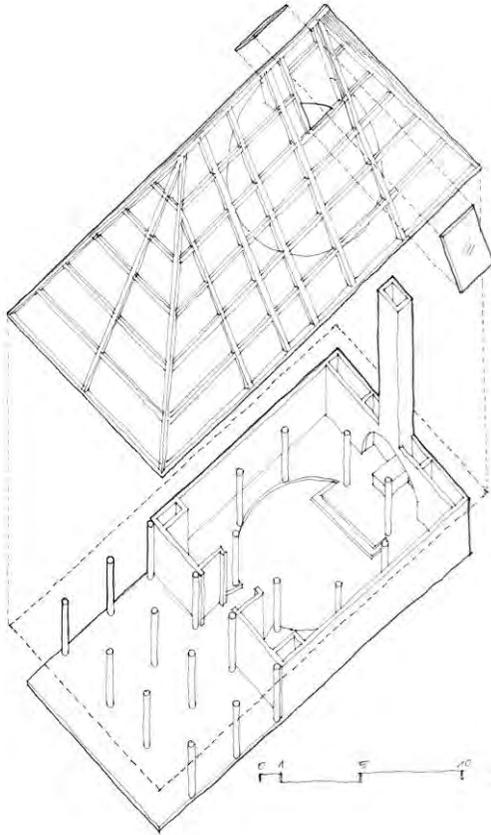


CONSTRUCTION SITE

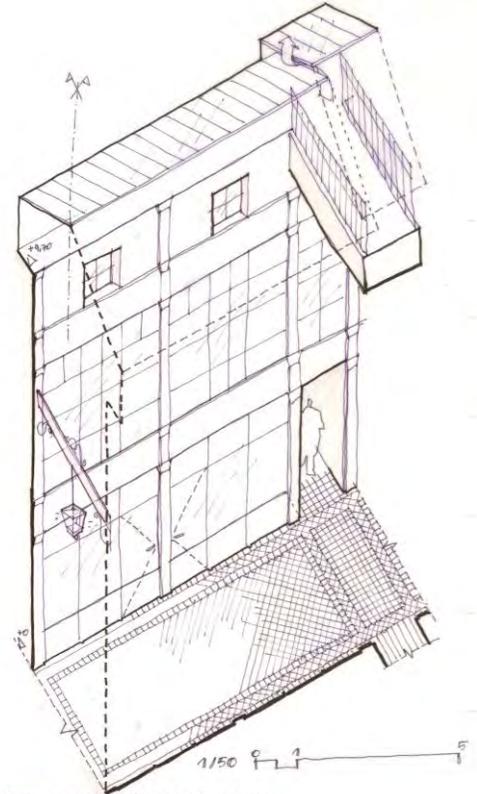
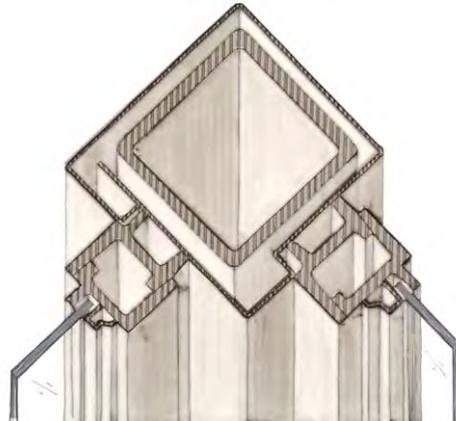
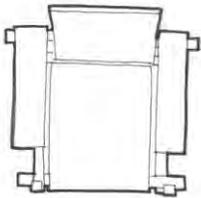
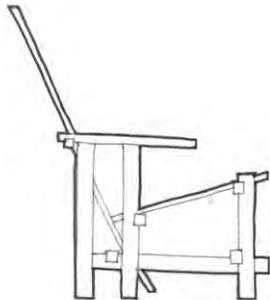
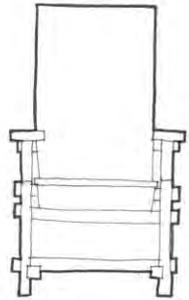
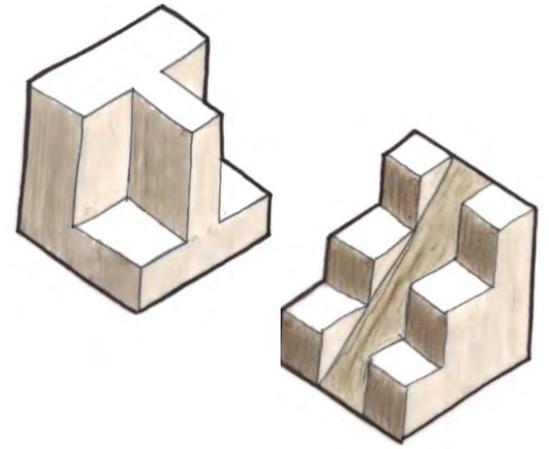




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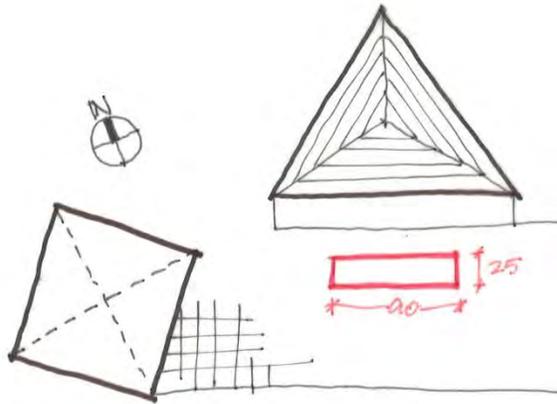
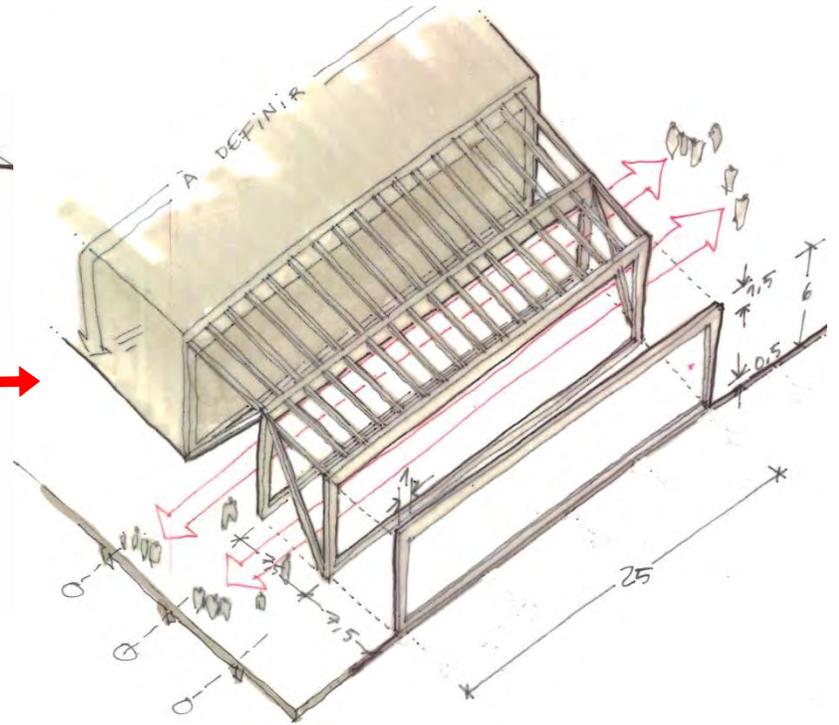
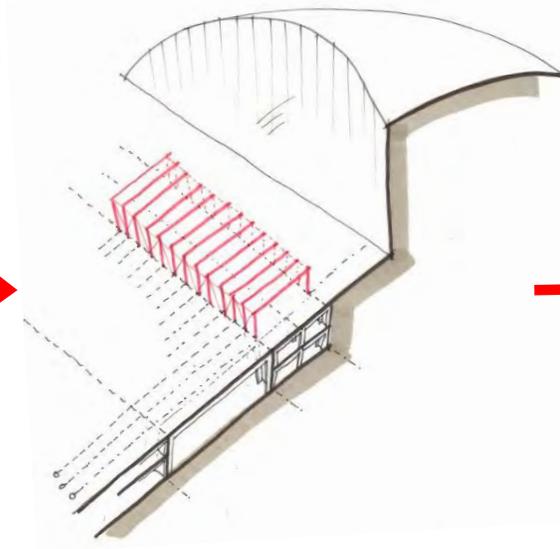
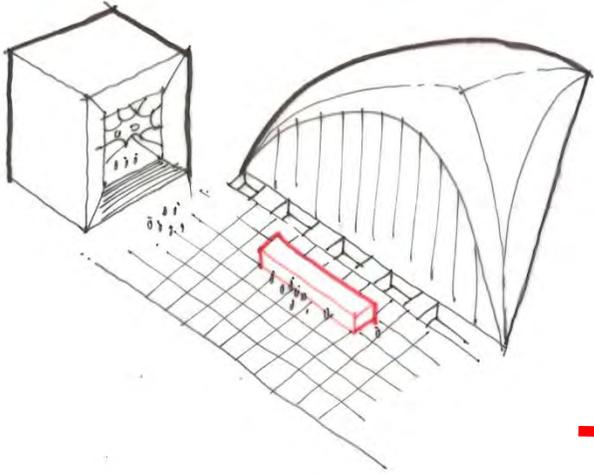
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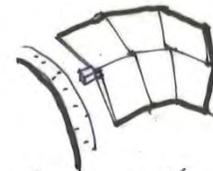
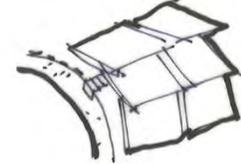
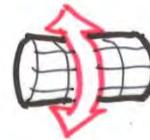
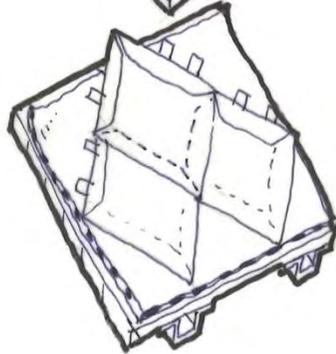
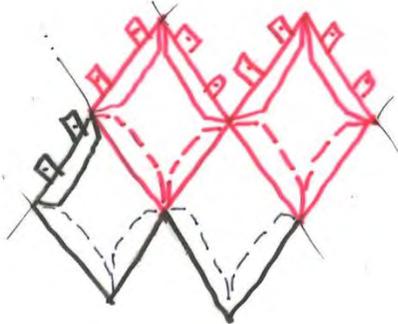
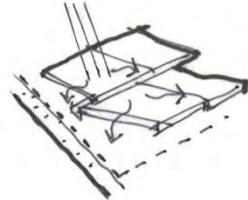
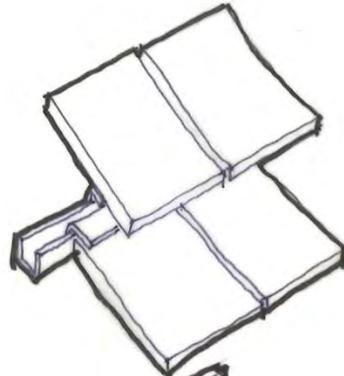
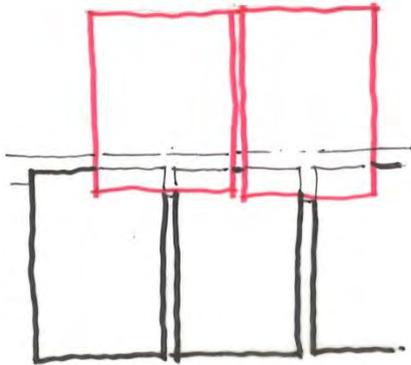
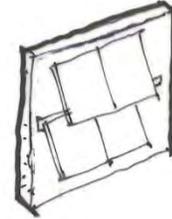
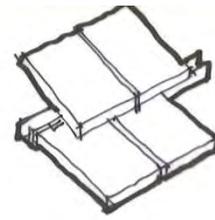
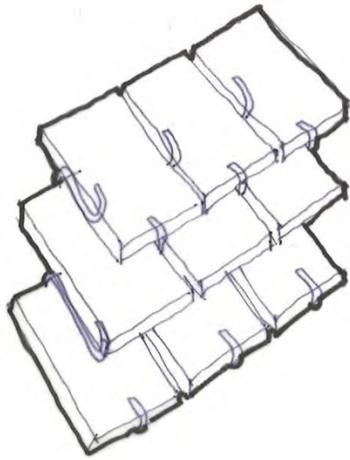
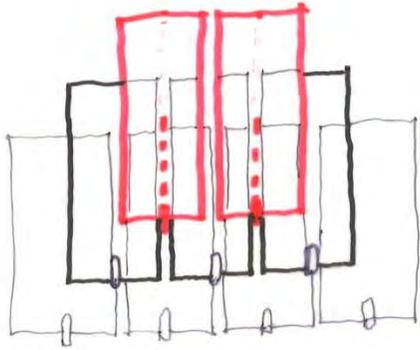


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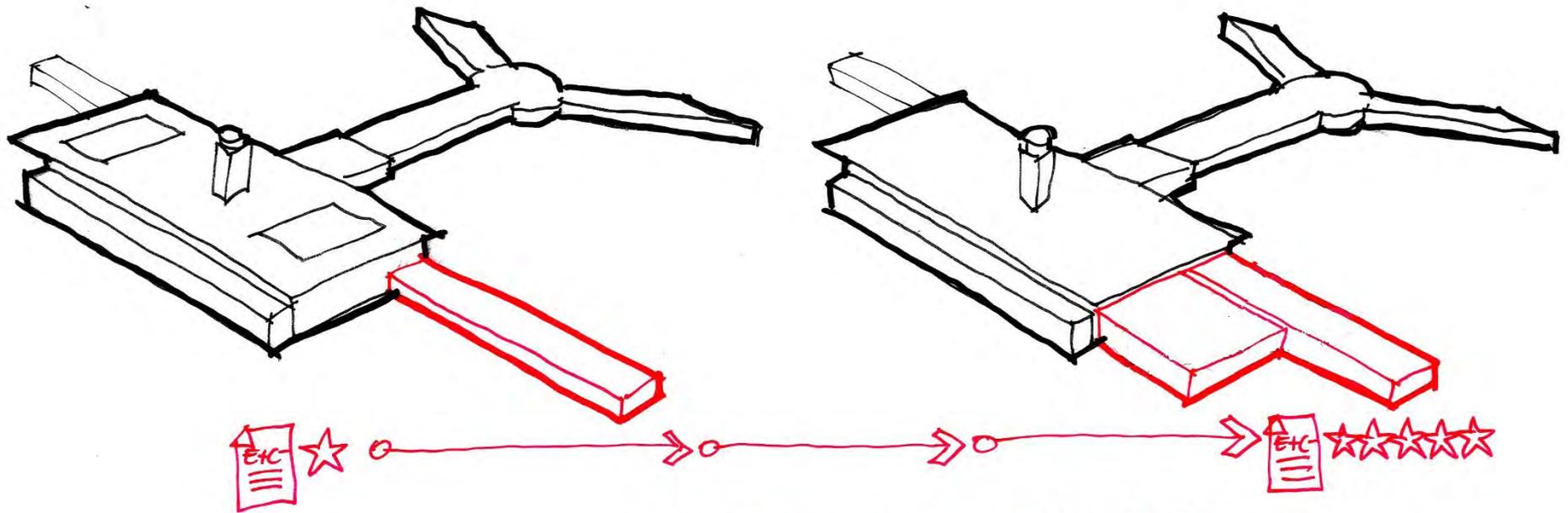
EXAMPLES

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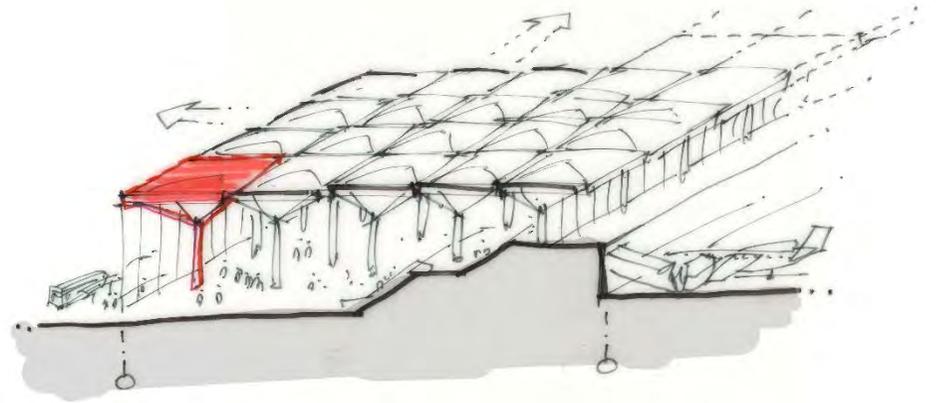
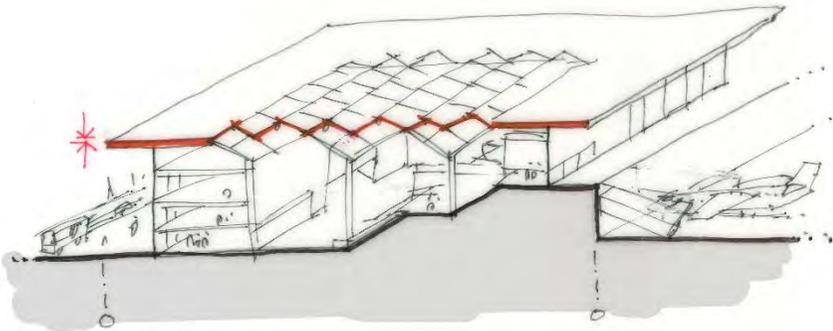
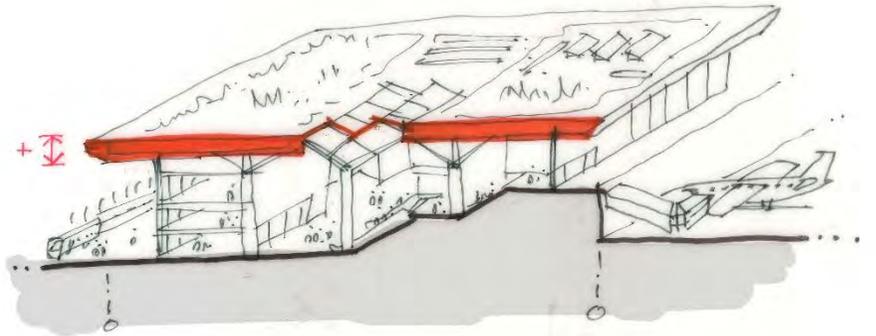
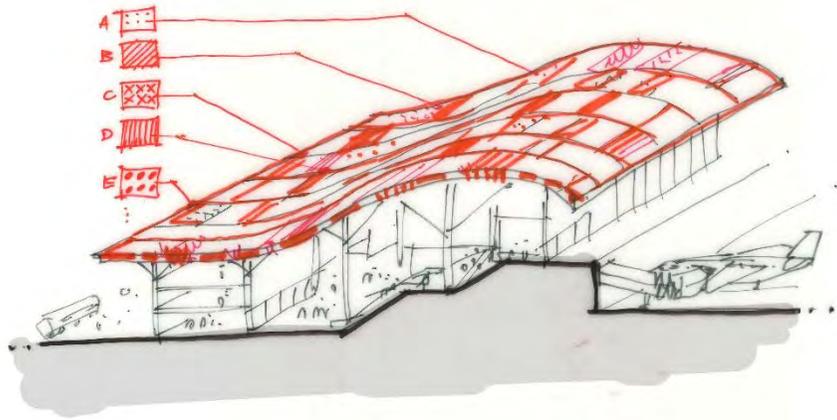


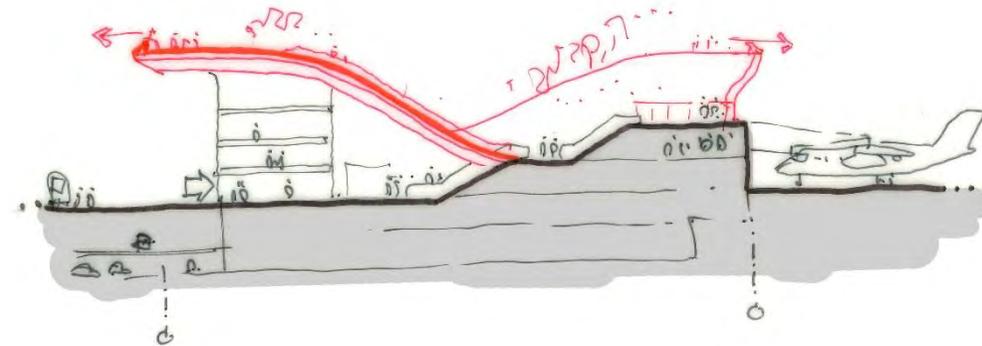
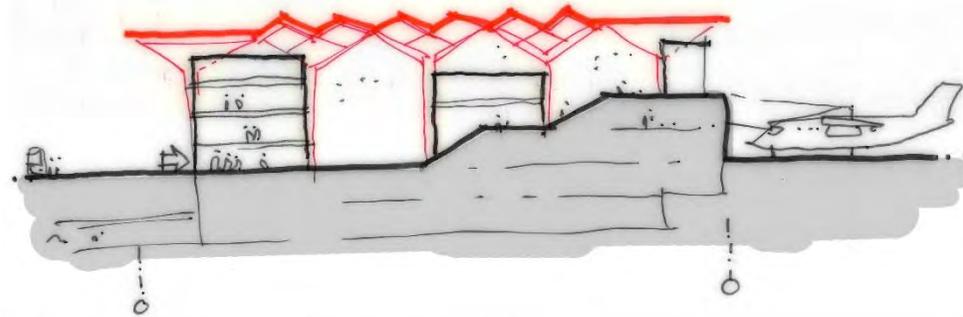
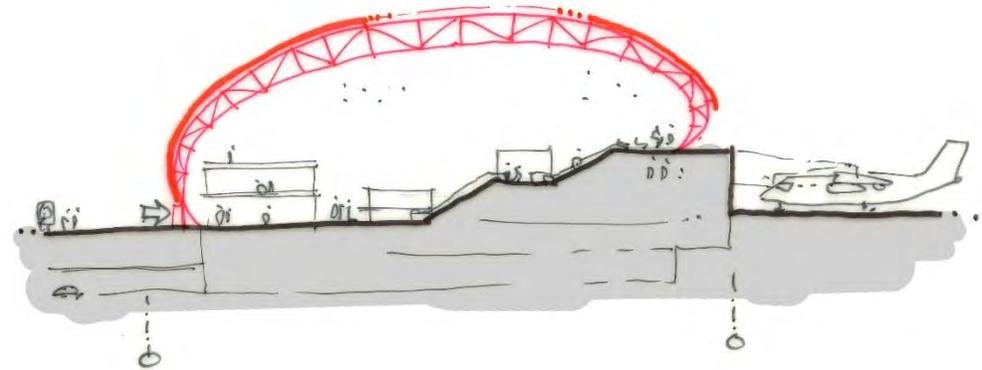
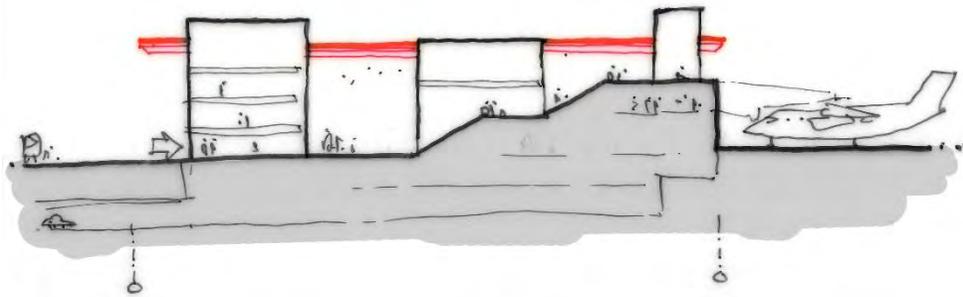


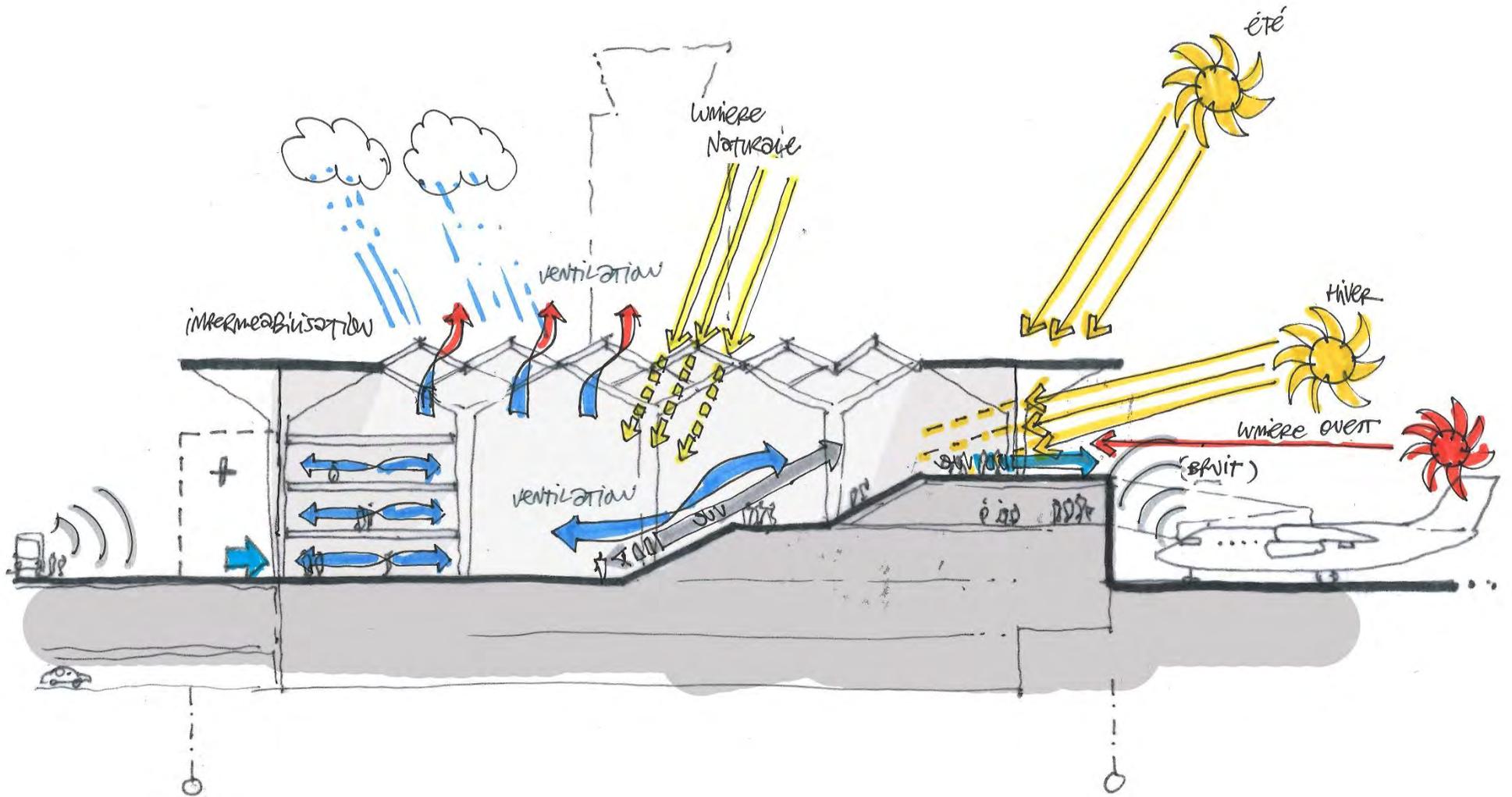
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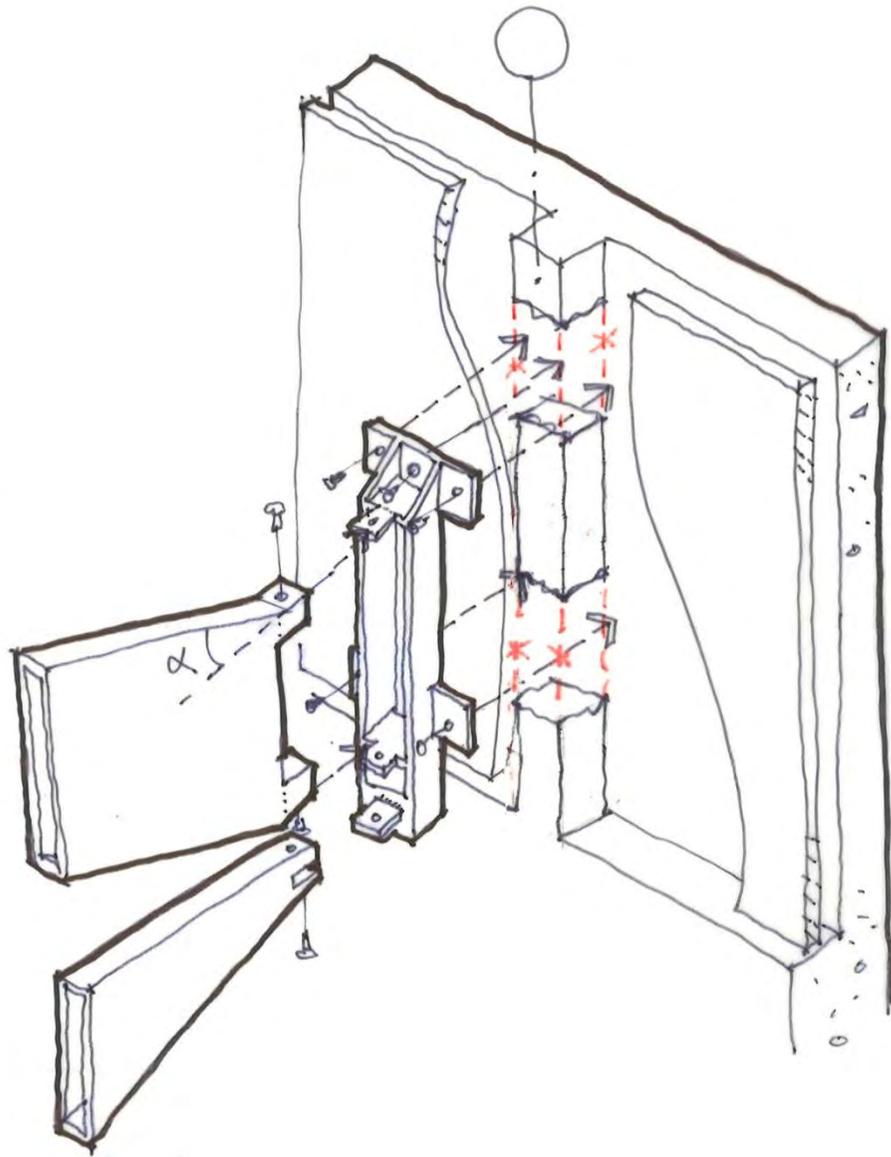


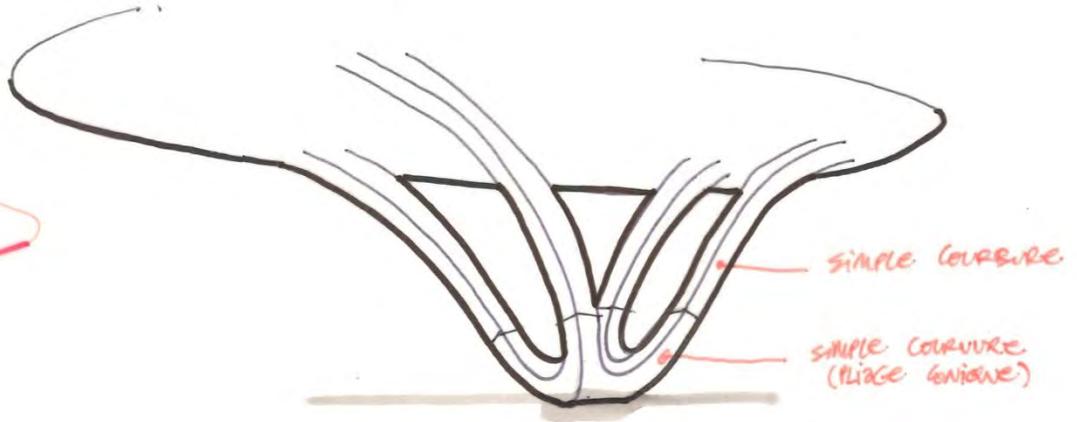
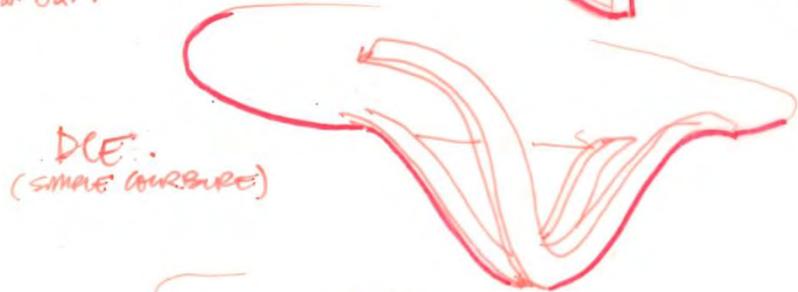
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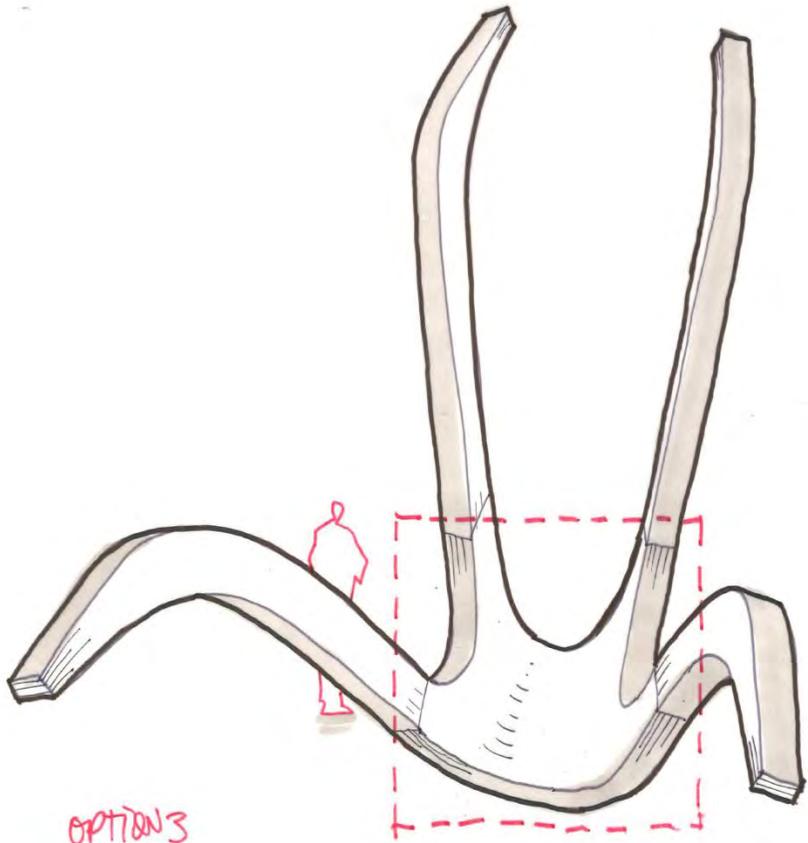




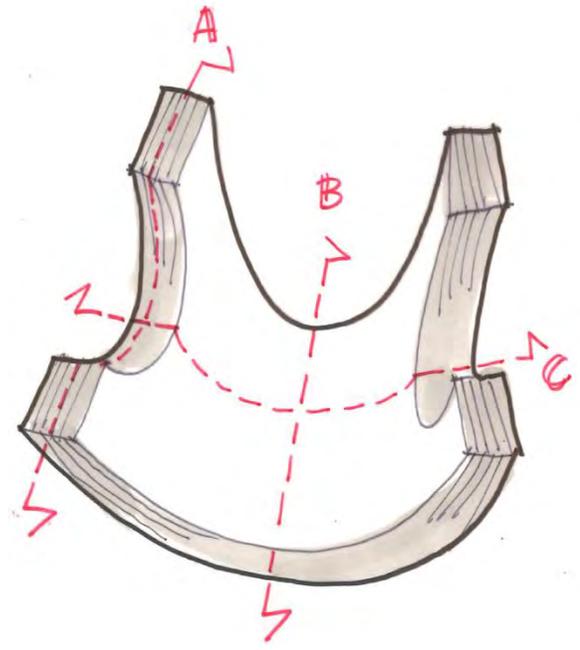




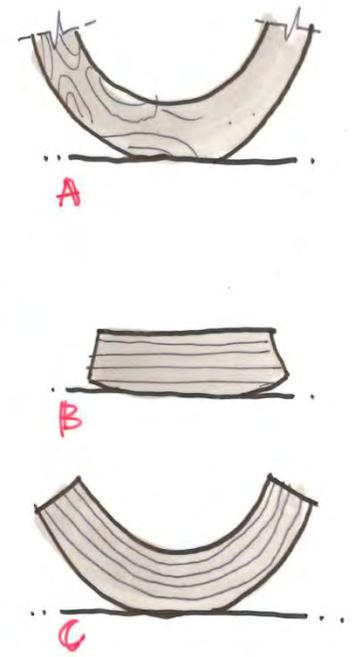


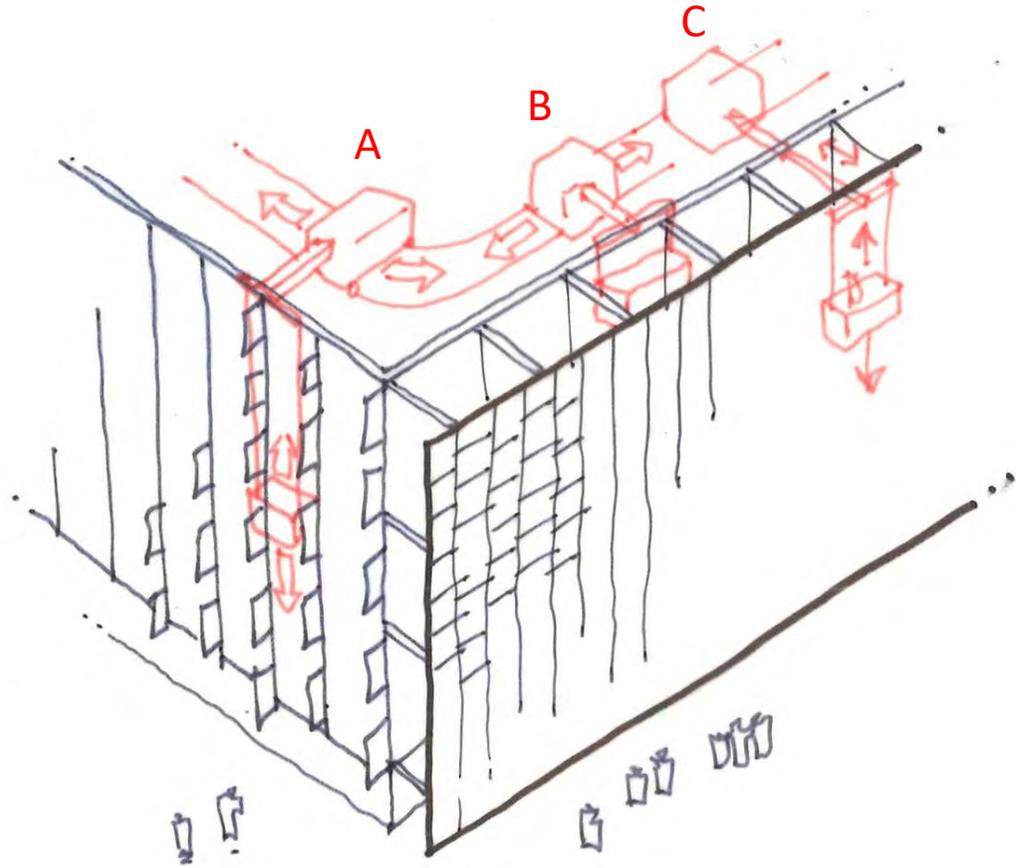
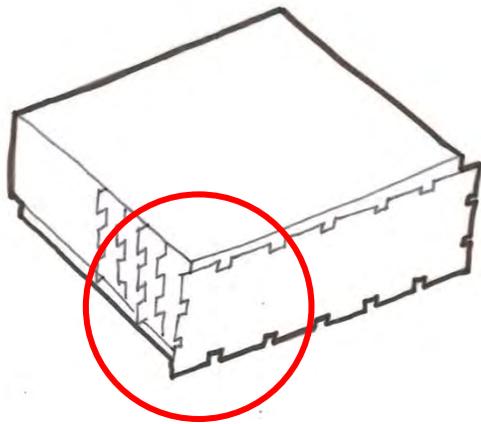


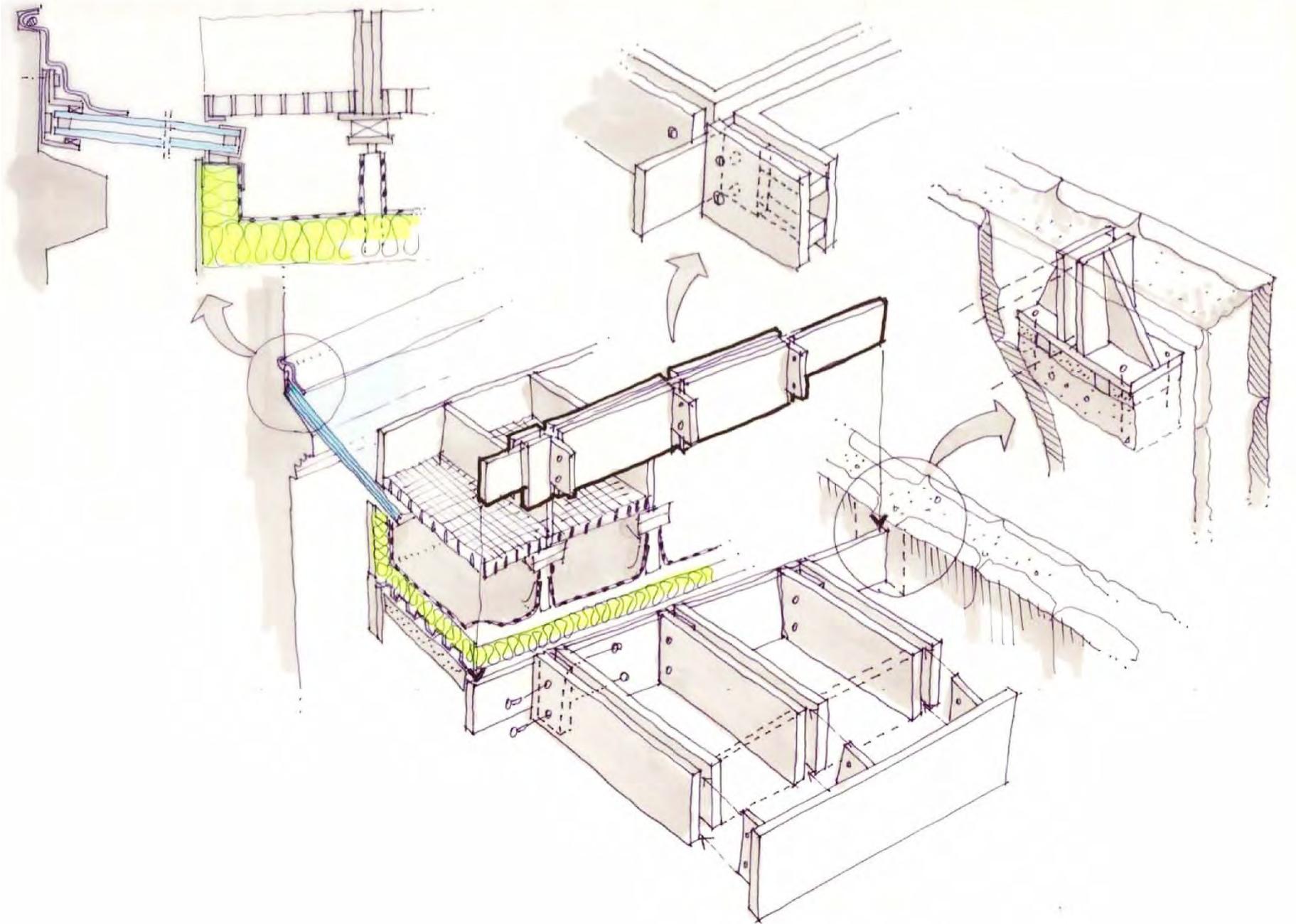
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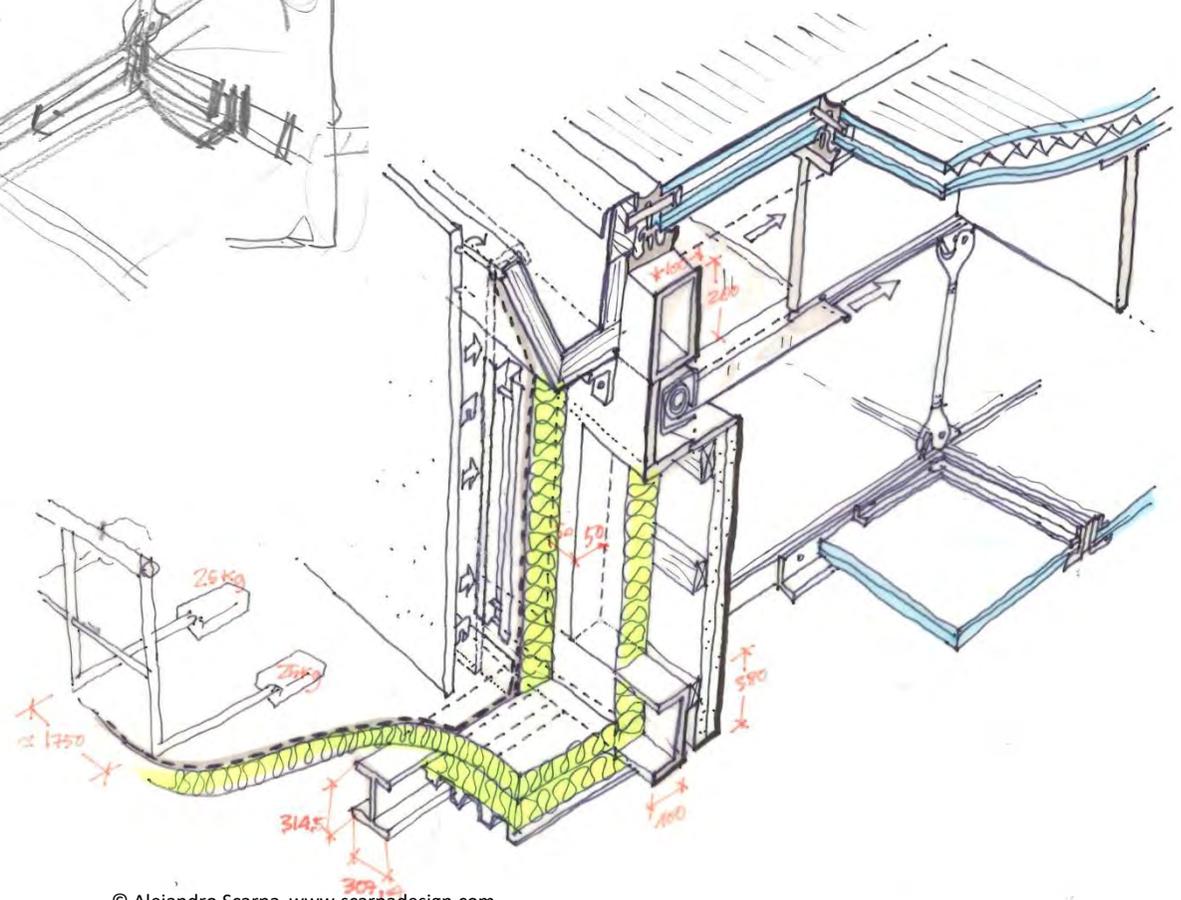
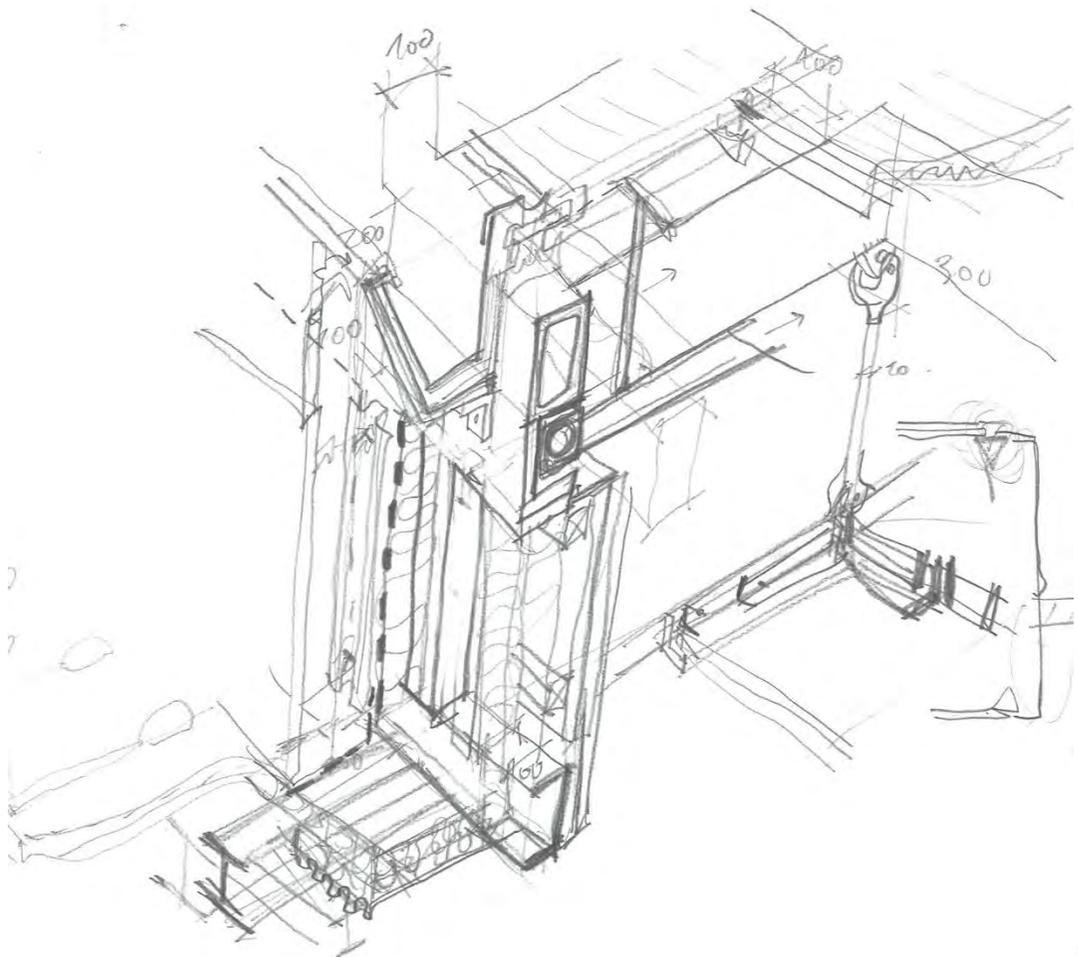


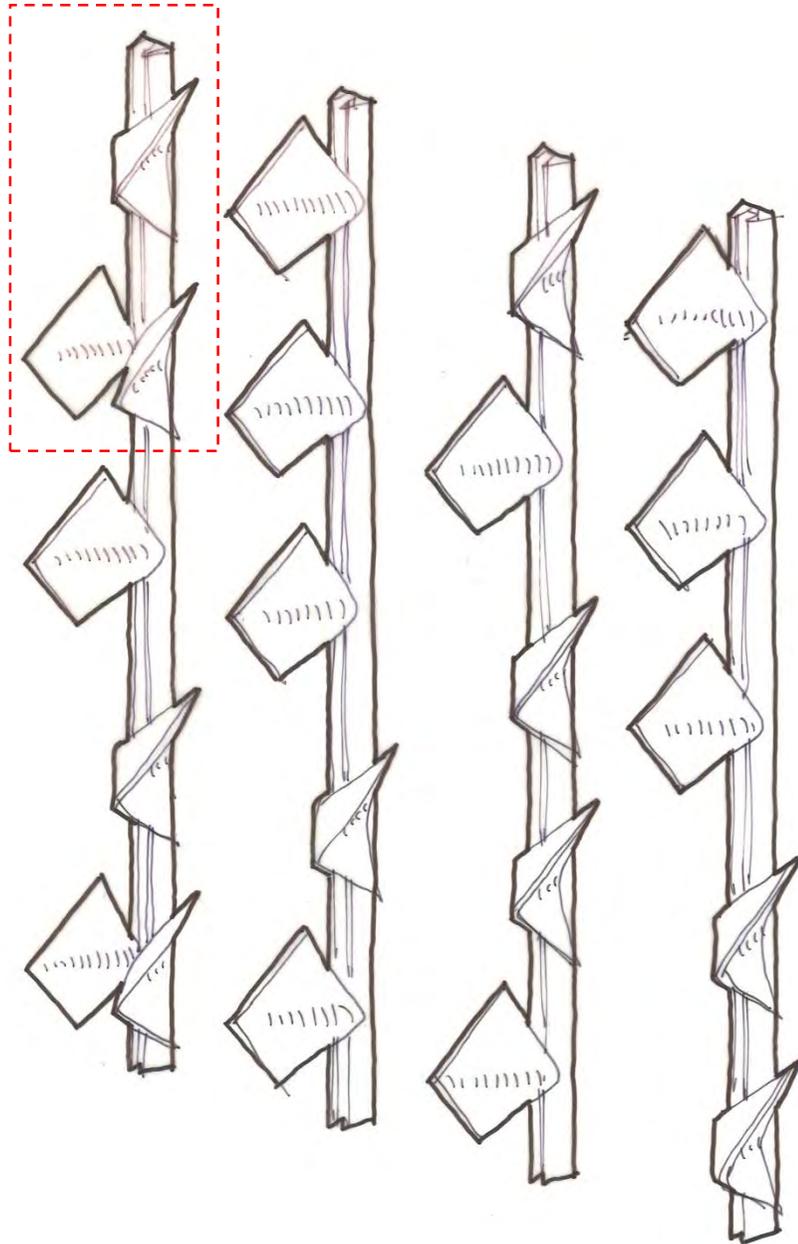
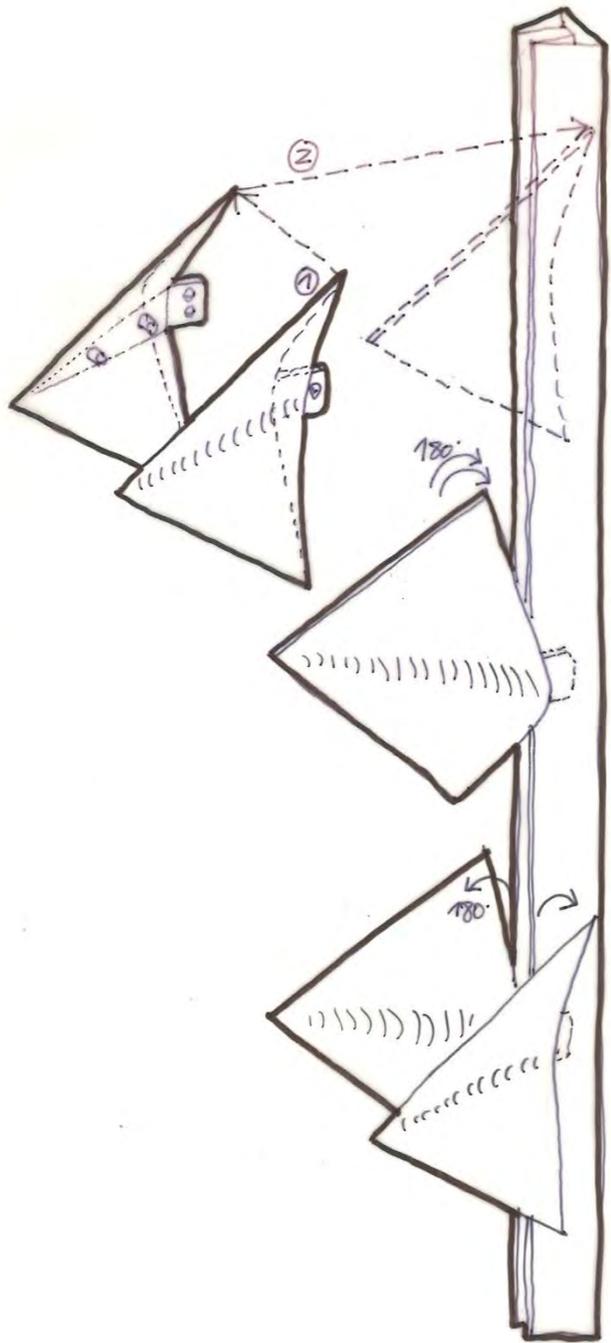
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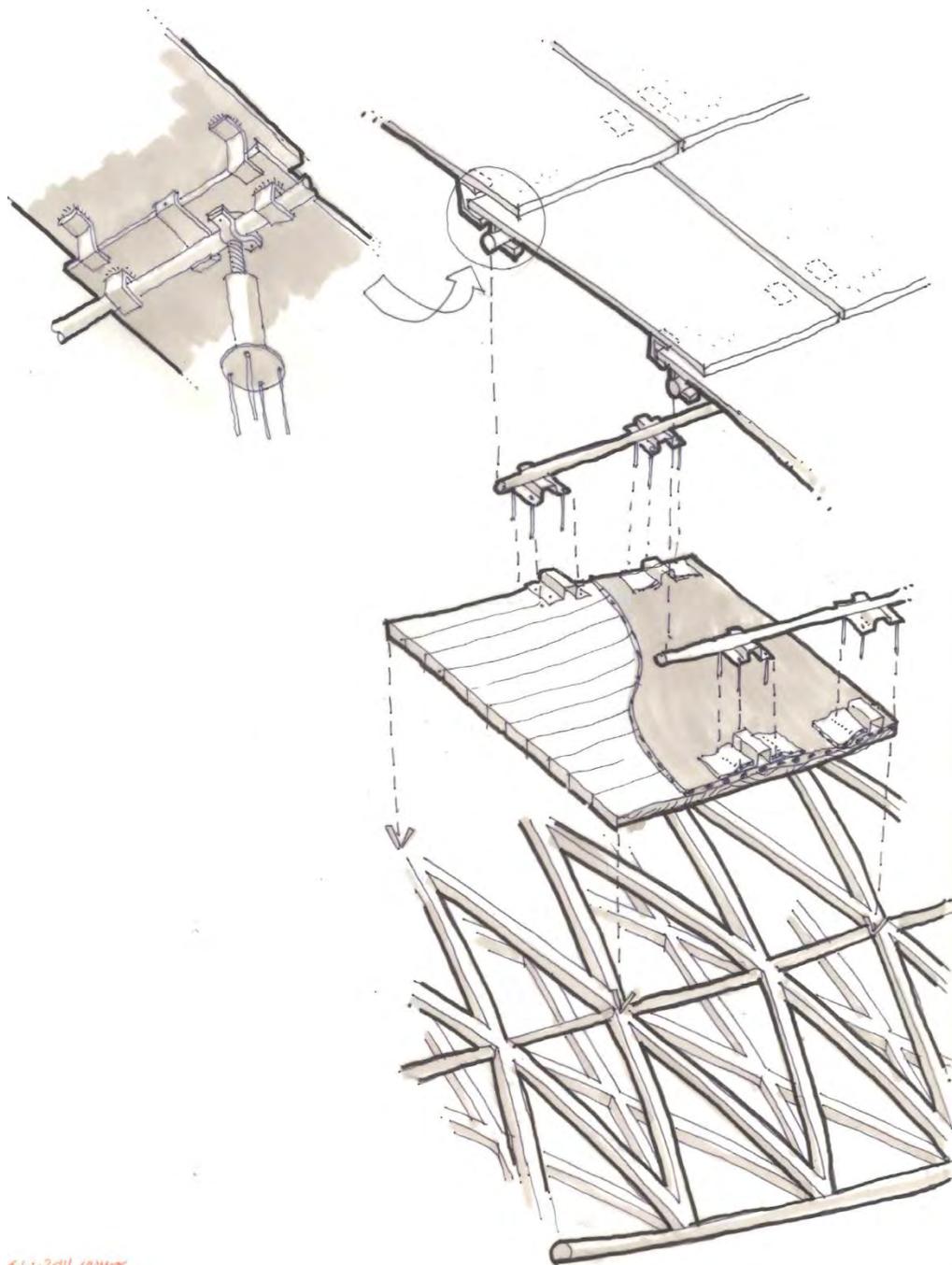




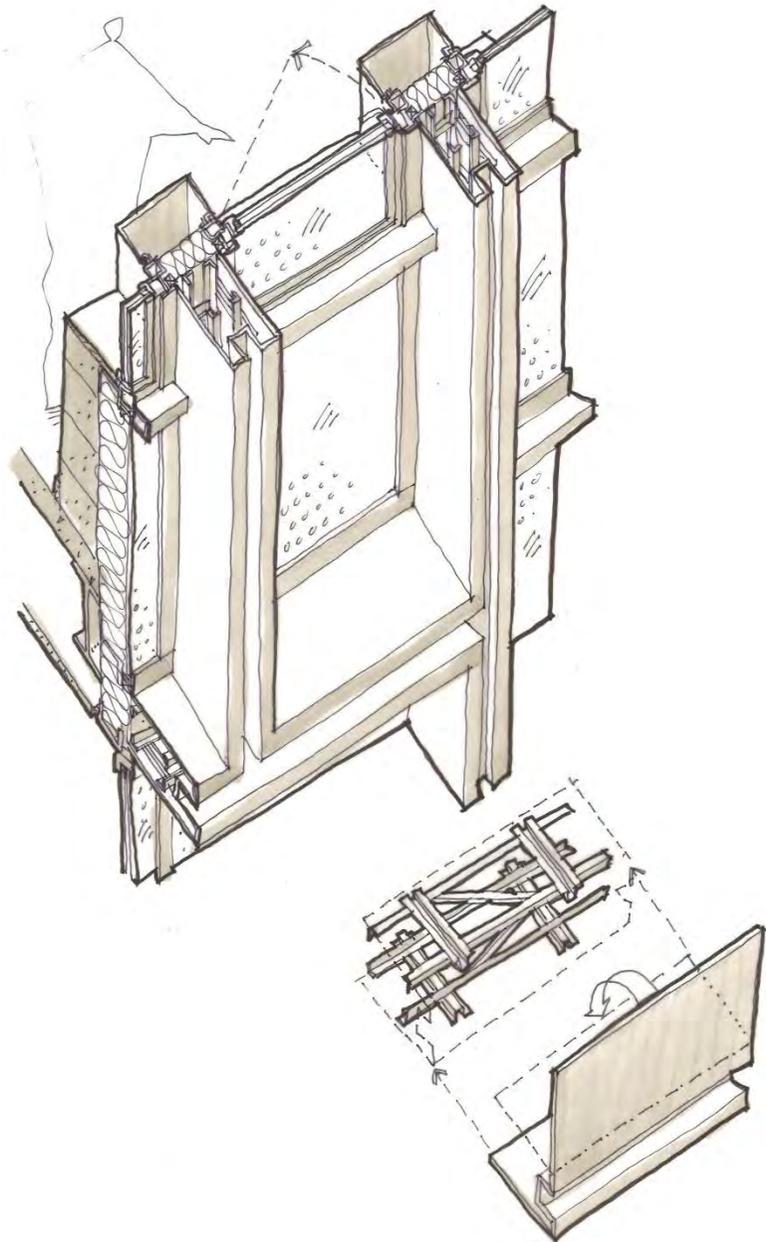


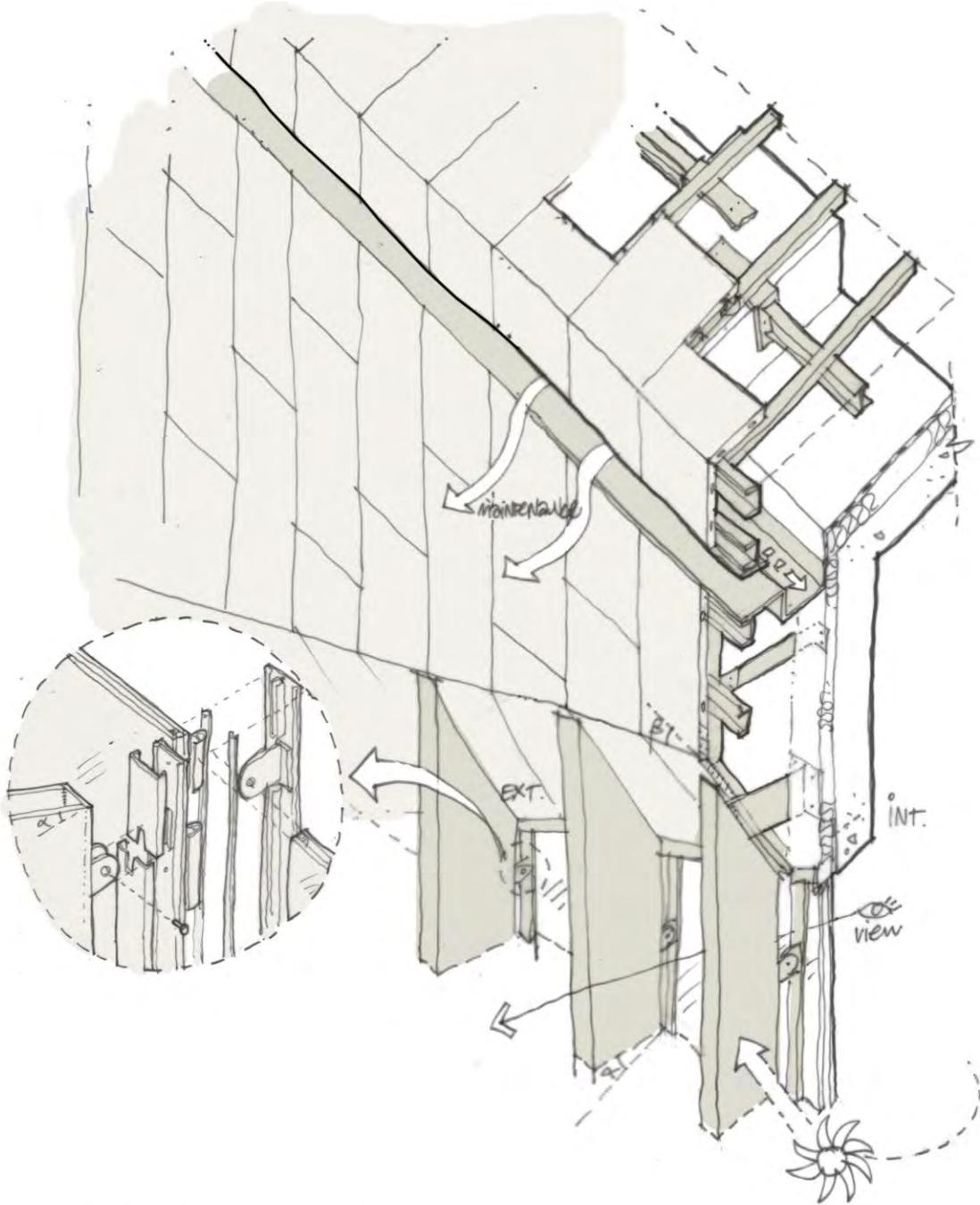


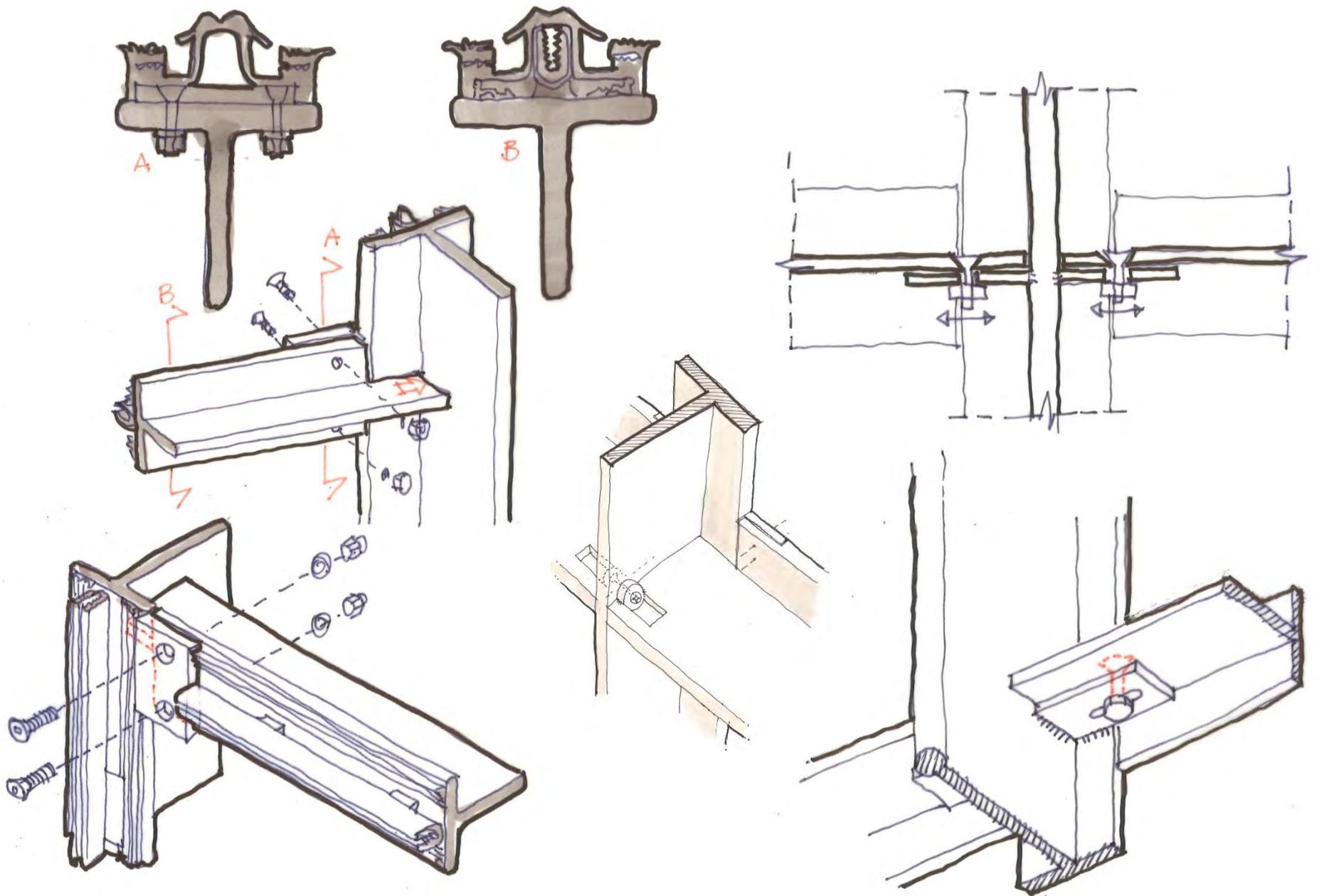


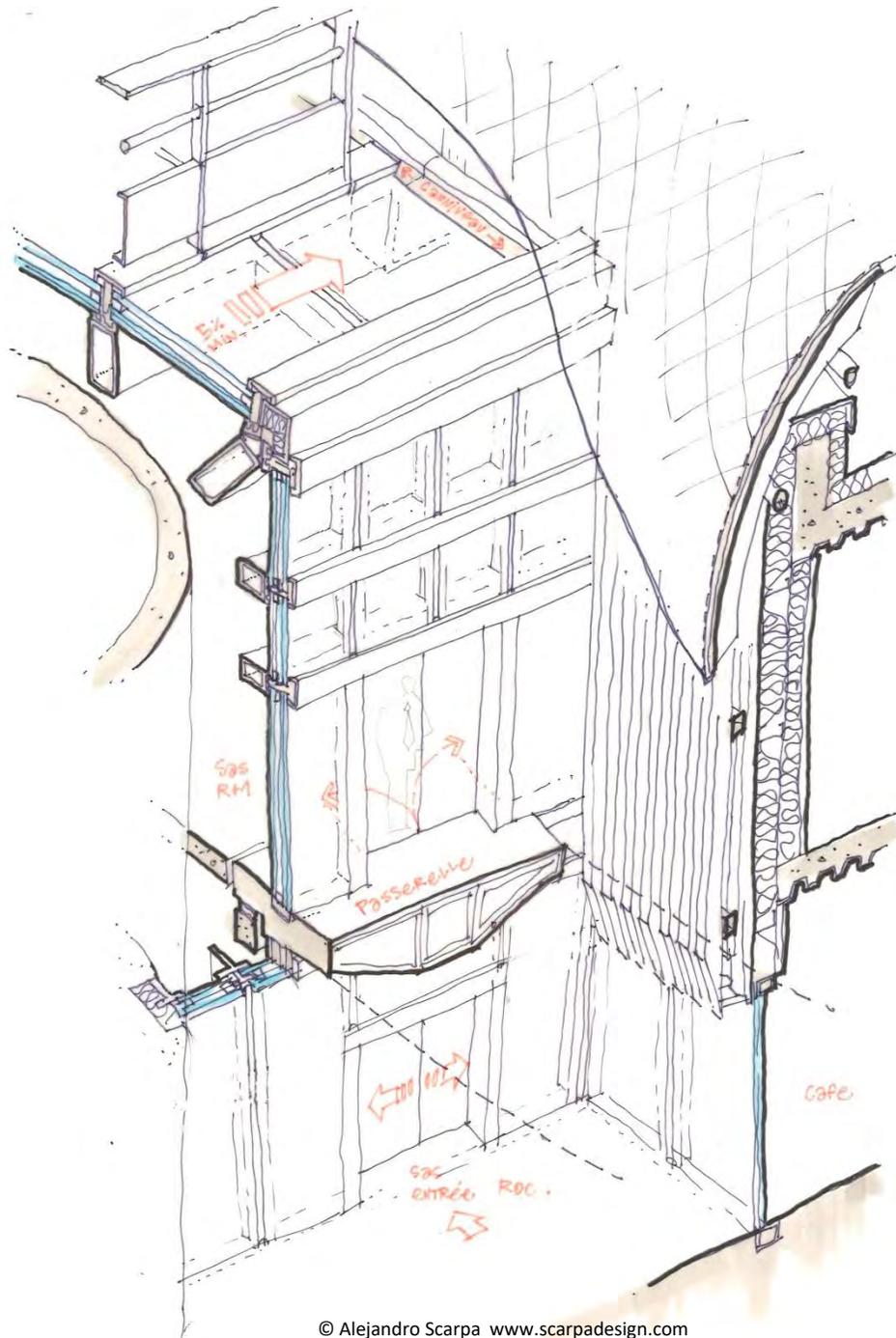


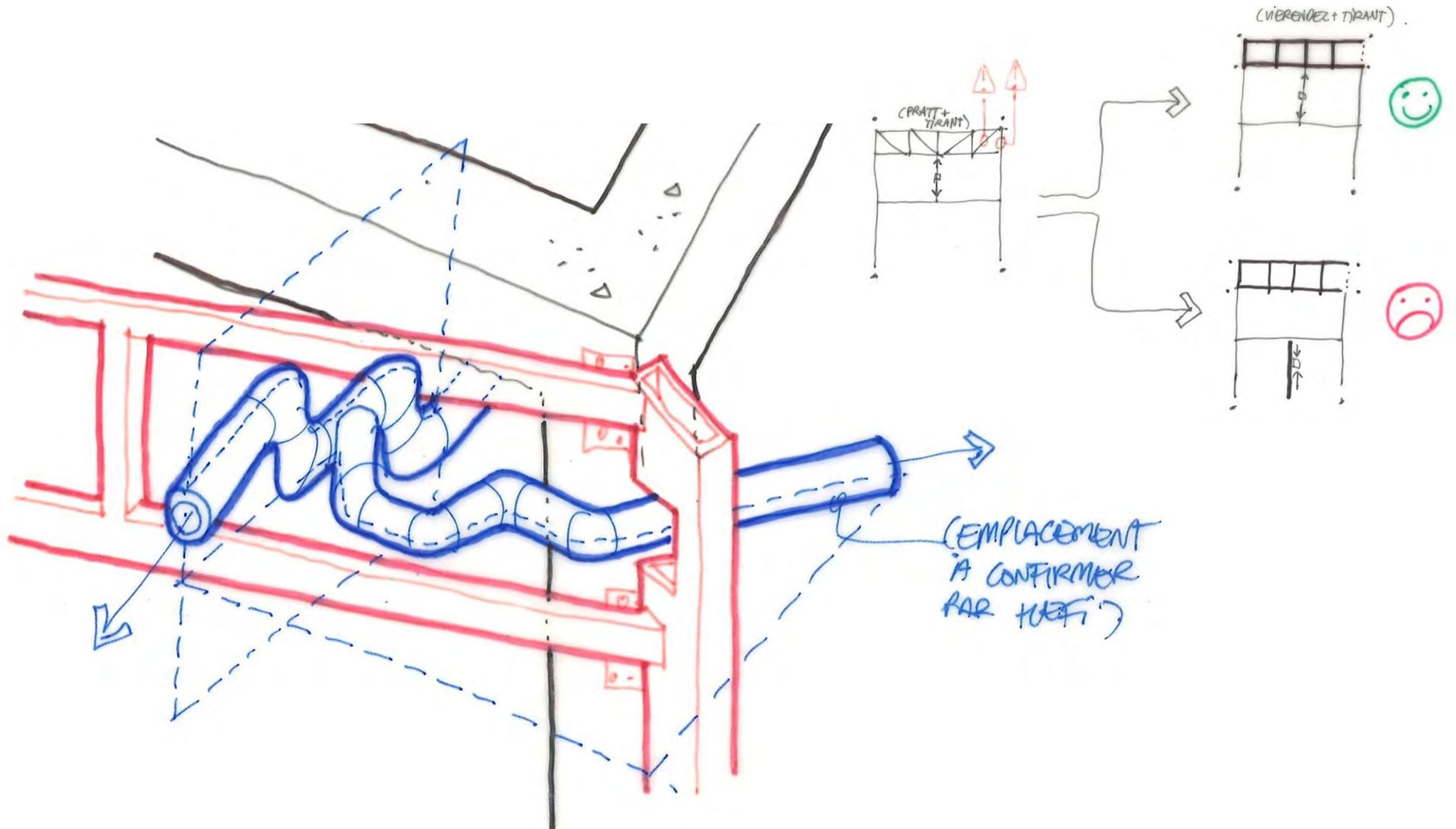
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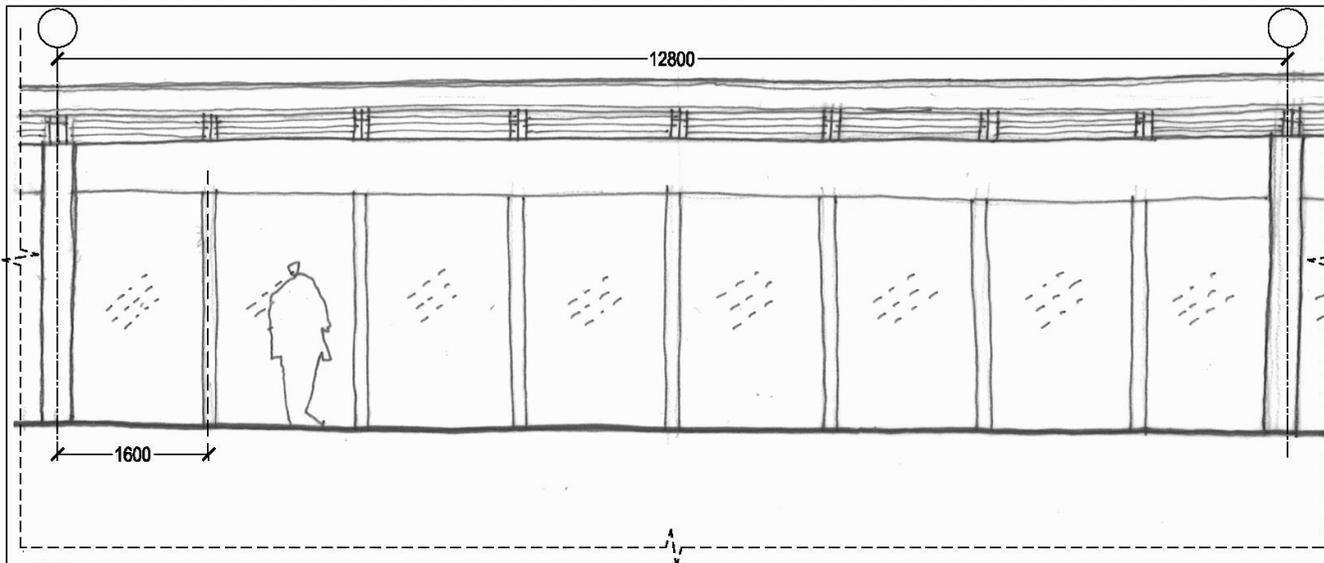




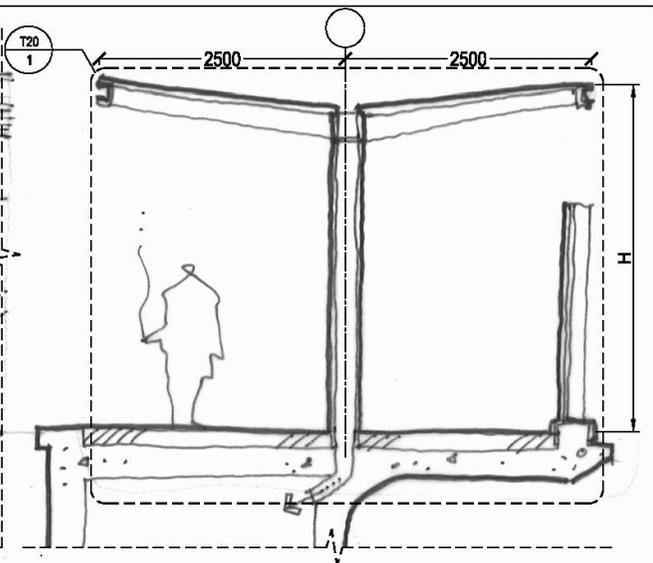




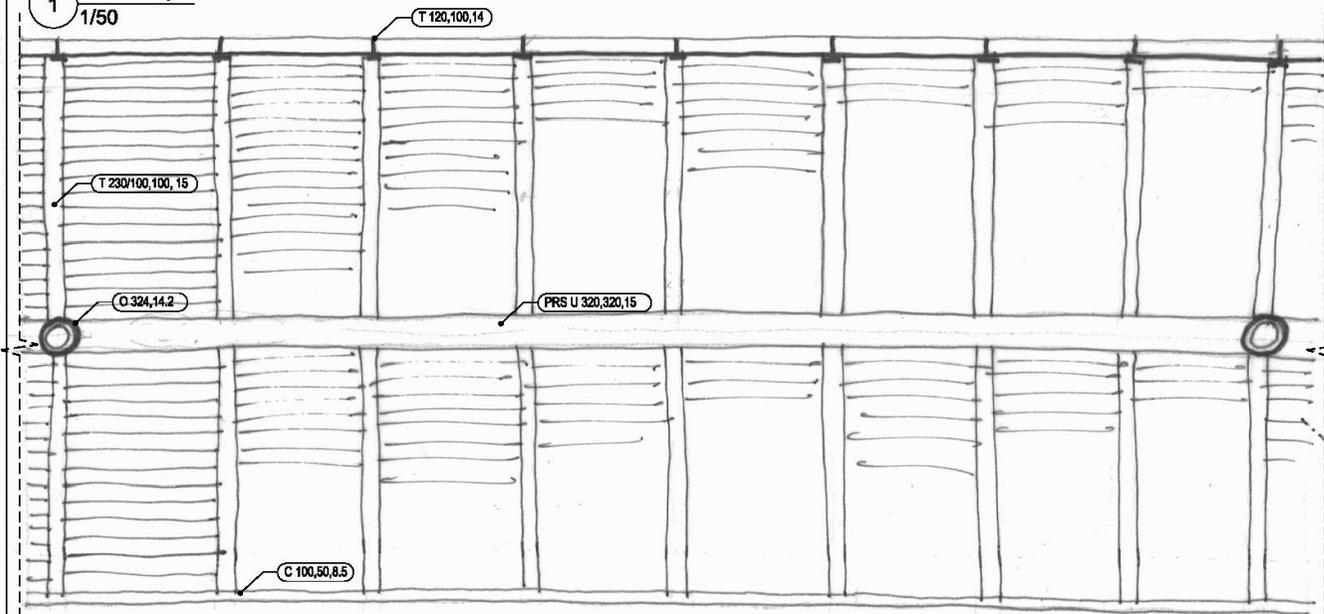




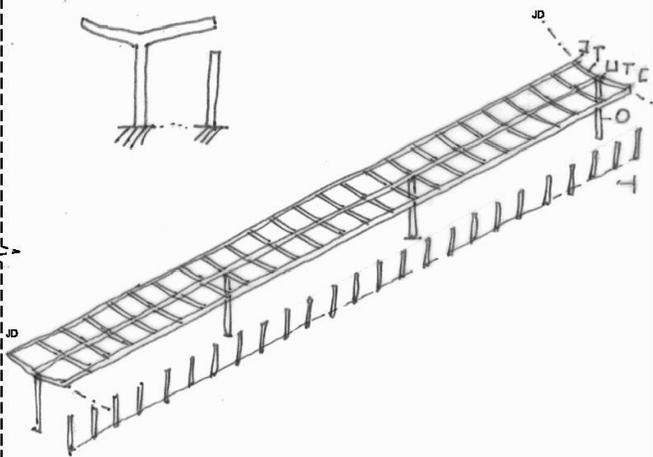
1 ELEVATION
1/50



2 COUPE
1/50



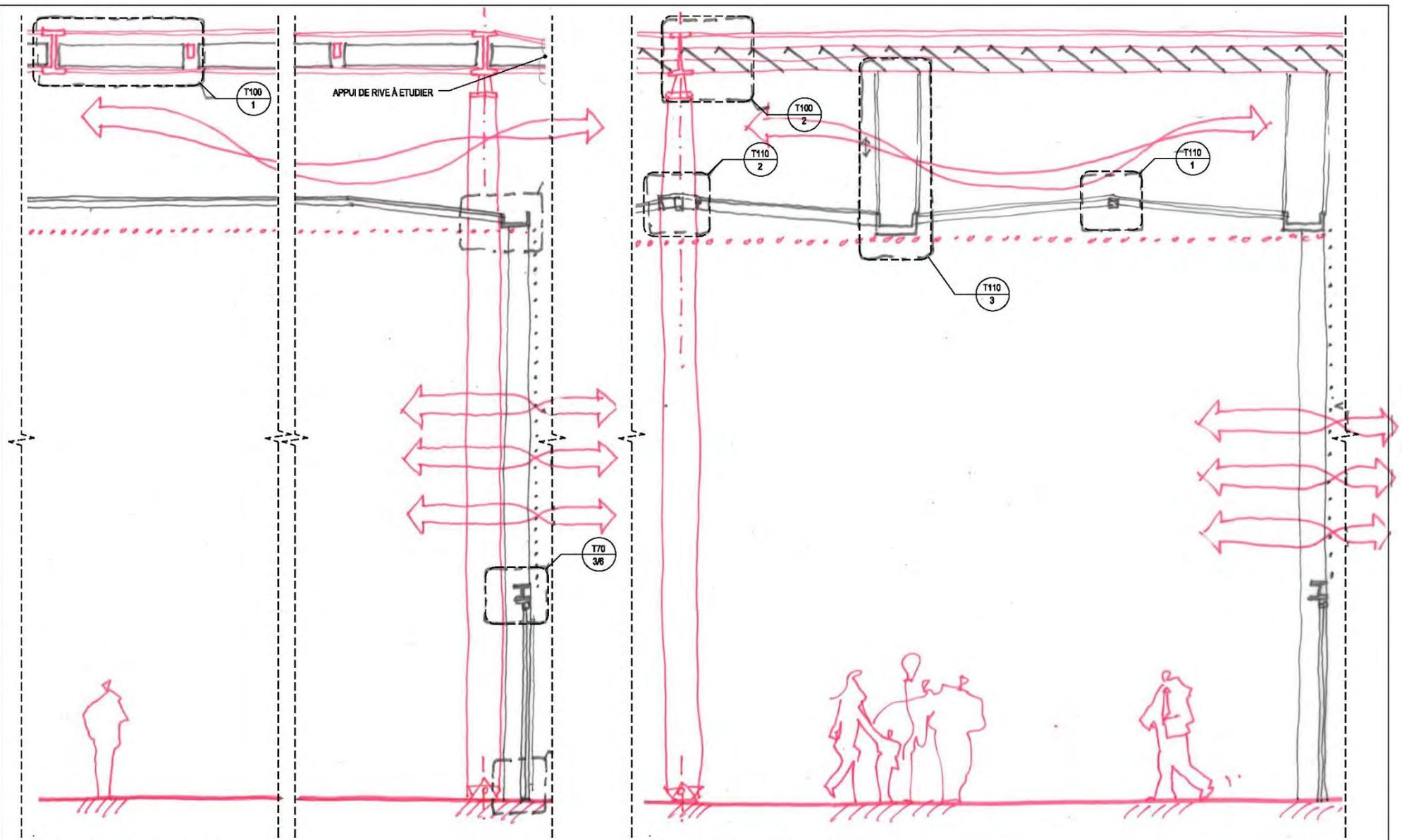
3 PLAN MIROITÉ
1/50



4 SCHEMA STRUCTUREL

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NOM DU PROJET	TITRE DU PLAN	SOUS-TITRE	PHASE	NUMERO	INDEX	EHELLE	DATE
	ABRIS QUAI	PLANS DE REPERAGE	APD	T10	0	1/50	29/02/2016



APPUI DE RIVE À ETUDIER

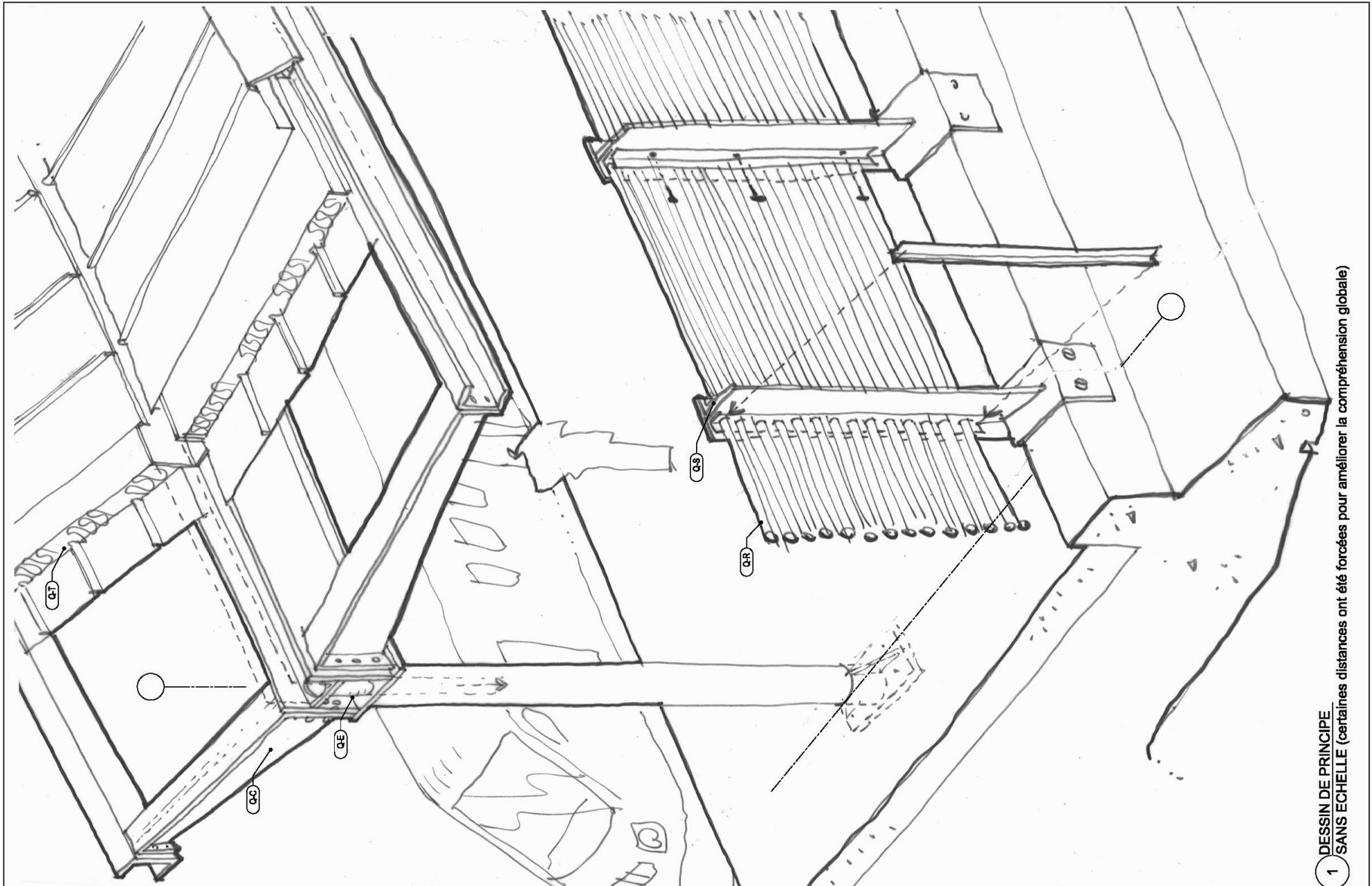
1 COUPE LONGITUDINALE
1/50

2 COUPE TRANSVERSALE
1/50

■ HORS LOT

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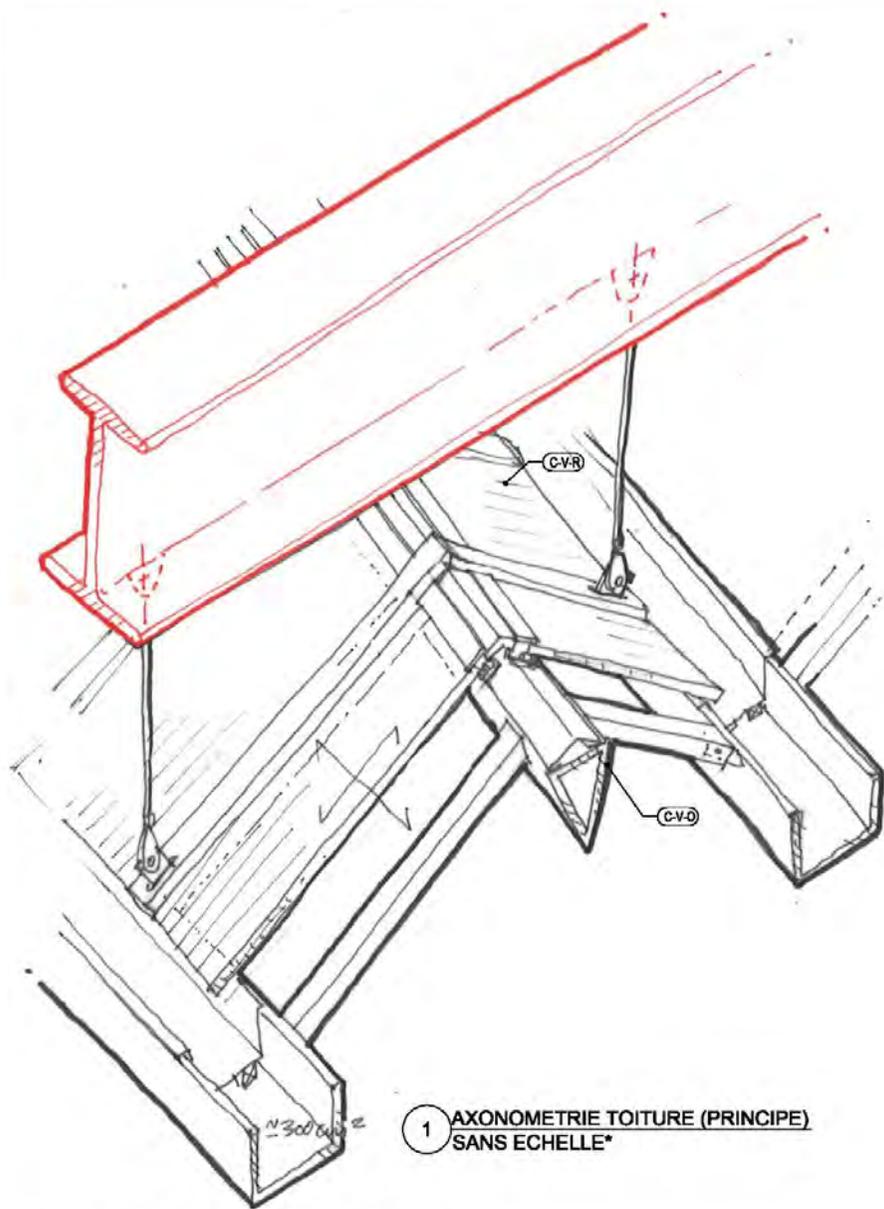
NOM DU PROJET	TITRE DU PLAN	SOUS-TITRE	PHASE	NUMERO	INDEX	EHELLE	DATE
	BÂTIMENT VOYAGEUR	COUPES GUIDES	APD	T60	0	1/50	29/02/2016



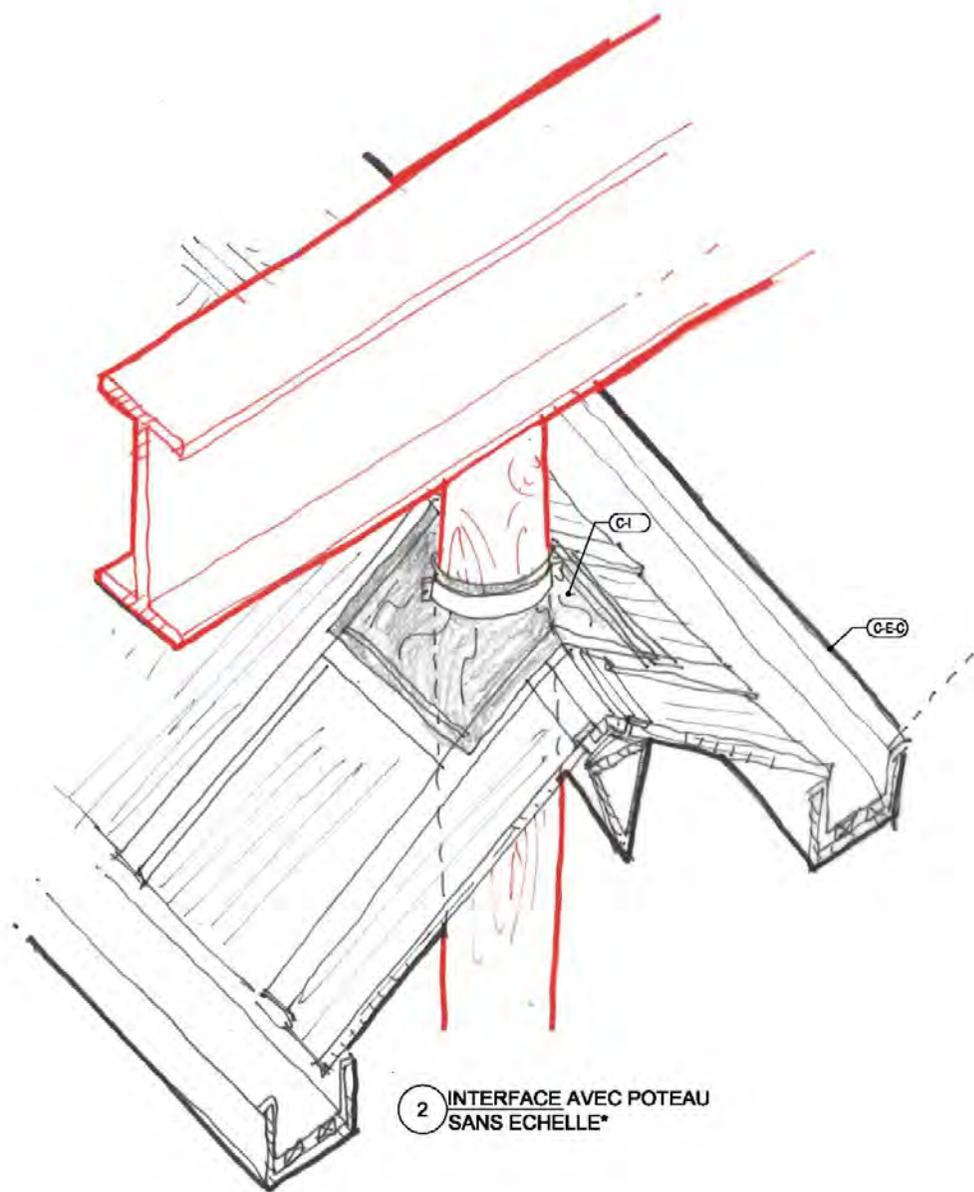
1 DESSIN DE PRINCIPE
/ SANS ECHELLE (certaines distances ont été forcées pour améliorer la compréhension globale)

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NOM DU PROJET	TITRE DU PLAN	SOUS-TITRE	PHASE	NUMERO	INDEX	ECHELLE	DATE
	ABRIS QUAI	PRINCIPE CONSTRUCTIF	APD	T40	0	SE	29/02/2016



1 AXONOMETRIE TOITURE (PRINCIPE)
SANS ECHELLE*



2 INTERFACE AVEC POTEAU
SANS ECHELLE*

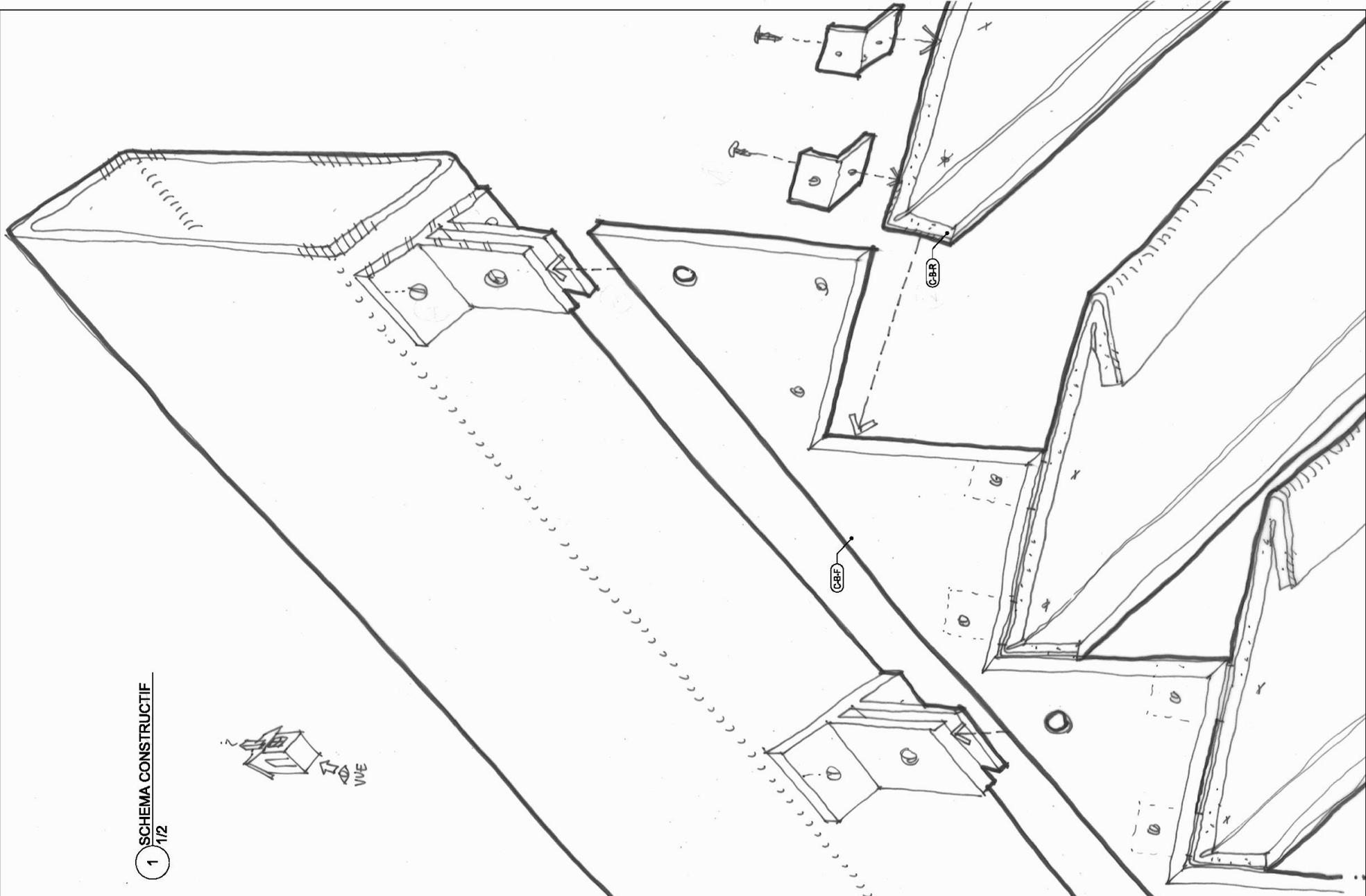


(* Certaines distances ont pu être forcées pour une meilleure compréhension globale)

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■ HORS LOT

NOM DU PROJET	TITRE DU PLAN	SOUS-TITRE	PHASE	NUMERO	INDEX	ECHELLE	DATE
	BÂTIMENT VOYAGEUR	PRINCIPE CONSTRUCTIF TOITURE	APD	T130	0	-	29/02/2016

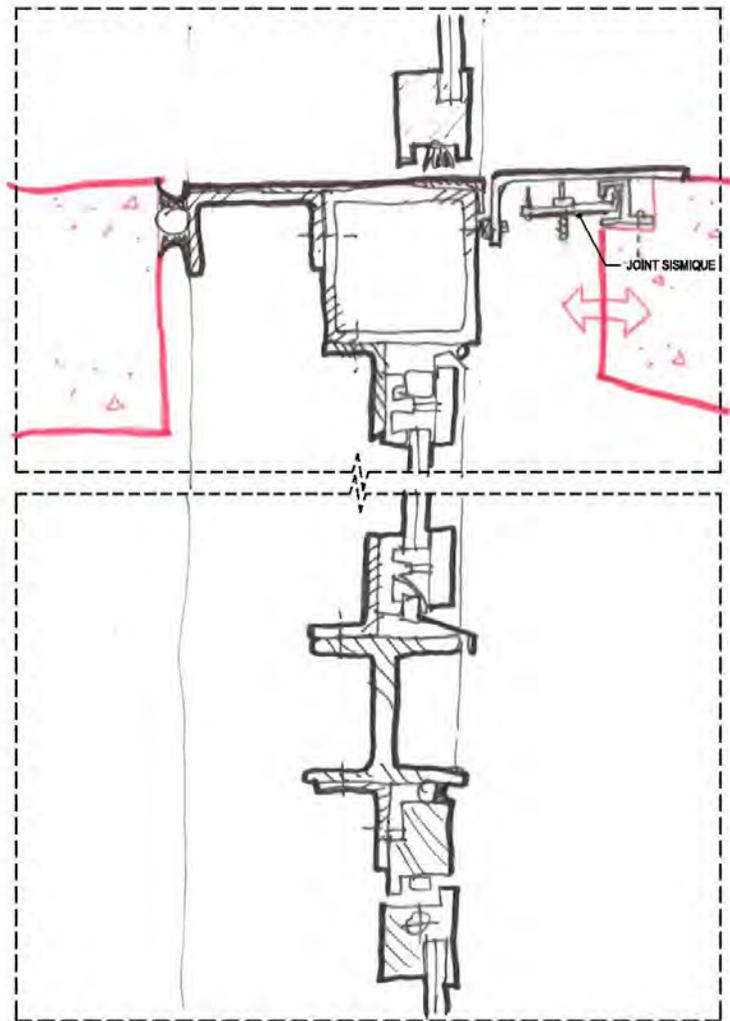


1 SCHEMA CONSTRUCTIF
1/2

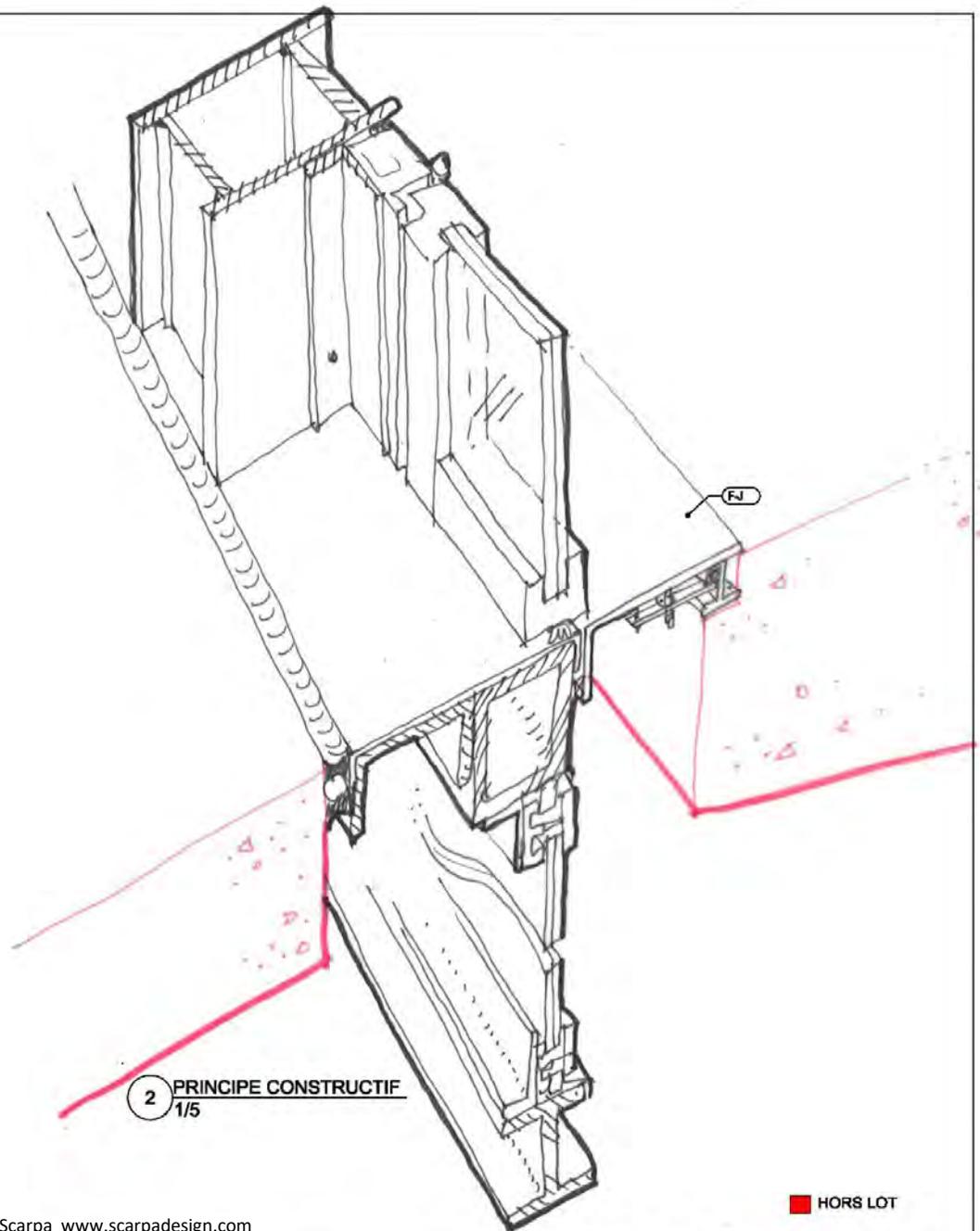


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NOM DU PROJET	TITRE DU PLAN	PHASE	NUMERO	INDEX	ECHELLE	DATE
BÂTIMENT VOYAGEUR	BRISE-SOLEIL : SCHEMA CONSTRUCTIF	APD	T110	0	1/2	29/02/2016



1 FACADE QUAI
1/5



2 PRINCIPE CONSTRUCTIF
1/5

■ HORS LOT

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NOM DU PROJET	TITRE DU PLAN	SOUS-TITRE	PHASE	NUMERO	INDEX	EHELLE	DATE
	BÂTIMENT VOYAGEUR	INTERFACE AVEC QUAI	APD	T140	0	1/5	29/02/2016