

TECHNICAL MANUAL

WS



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Introduction

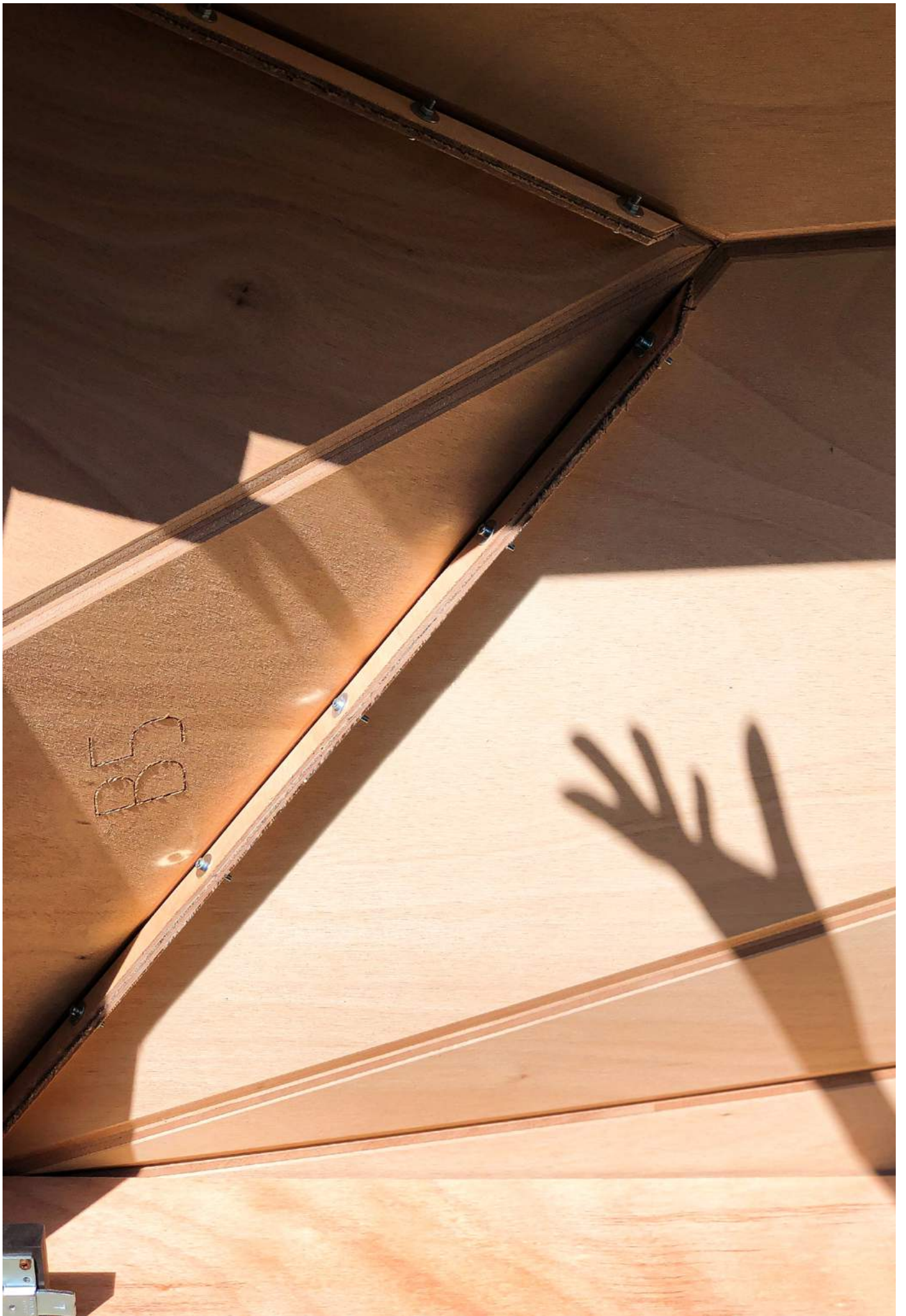
GENERAL INFORMATION ON THE WOOD—SKIN TECHNICAL MANUAL

- The information in this manual is intended for architects, designers and specifiers to assist in the design and selection of the most appropriate WOOD—SKIN system for ceiling and wall coverings, counters and any other custom product intended for interior use, e.g. restoration and leisure spaces, foyers and lobbies, conference rooms, auditoriums, retail, homes etc.
- This manual, specifically in its second part, is aimed to assist general contractors, installers, and any other personnel involved in the installation of WOOD—SKIN interior systems.
- WOOD—SKIN® is a technological system that can be tailored entirely in terms of geometry, material composition, installation method and performance.
- The classification, assembly and installation methods and details described in this manual are based on realised projects and demonstrate best practices in design and application of the WOOD—SKIN® technological system.
- Installation methods and technical details could be combined and adjusted across the various products to realise in the most efficient way possible the requirements of any design brief.
- This manual refers to the three main typologies of WOOD—SKIN surfaces - Mesh Panels, Fold Panels and Tailor Made Services.
- Partial or complete customisations are possible upon request and after evaluation of a preliminary design project by the WOOD—SKIN design and technical teams. All changes from the assembly, installation and technical details described in this manual are discussed priorly with the leading architect, designer and/or general contractor.

VALIDITY AND FIELD OF APPLICATION

- This installation manual is valid as an application guideline and does not represent a complete reference to existing standards or codes. Descriptions and details refer only to WOOD—SKIN products. It defines dimensions, limits and design requirements for ceilings, walls and counters intended for interior application
- Given the vast versatility of the WOOD—SKIN® technological system, this manual does not cover all the possible typologies of systems integration and surface design but rather focuses on a selection of typically applied solutions of WOOD—SKIN surfaces
- This installation manual however has no validity for the following applications:
 1. Accessible ceilings and their supporting structure;
 2. Ceilings with dynamic and/or static load effects.

For more information regarding specific design, structural or installation requirements and regulations, please contact us at: info@wood-skin.com



Part 1

DESIGN,
INSTALLATION
& TECHNICAL DETAILS

1 Pre-installation requirements

1.1 PRE-EXISTING CONDITIONS

In the typical scenarios for installing Wood-Skin on ceilings, walls, etc. certain pre-installation conditions must be ensured. These include the pre-installation of jigs in plywood, reinforcements in the eventuality the existing ceiling/wall do not provide the needed required load-bearing capacity. In addition, this section of the installation manual provides information about the required scaffolding and tools needed.

NOTES

The Wood-Skin team evaluates the structure to which the surfaces are attached
Supporting structure might be needed - plywood, steel reinforcement etc.
If there is no possibility for installing supporting structure, Wood-Skin might refuse the project

Wood-Skin is not load-bearing, fixers must work from an independent support system

ADDITIONAL LOADS:

The installation of additional loads is not contemplated in the systems documented here. The substructure is to be attached by appropriate means to structural components. Additional loads (lights, ventilation elements among other things) are to be attached separately whenever possible. The substructure as well as the top layer must not be walked on. For special applications, a reinforcement of the system construction is feasible for additional loads. The direct consultation of WOOD-SKIN is a mandatory prerequisite for this. The determination of corresponding additional loads and their definition in writing shall be done by the customer. For all types of installations, the

1.2 SCAFFOLDING



Parametric Surface, Dubai – 2018



2 Design guidelines

2.1 DESIGNING WITH WOOD—SKIN

WOOD—SKIN® technology

WOOD—SKIN surfaces are made from a highly resistant textile core sandwiched between sheets of hard material. Once material is removed with precision from both sides a textile hinge is formed which allows the surfaces to assume a range of programmed threedimensional forms. The three main groups of products described in detail in this manual - Mesh Panels, Fold Panels and Tailor Made Services - are born from this unique technological system.

Most common applications

Currently intended mainly for application in interiors, exterior solutions can be developed upon request and in careful consideration to the material selection based on the local environmental conditions. WOOD—SKIN is a system that allows the easy creation and installation of 3D surfaces otherwise expensive and difficult to build. Due to the high degree of flexibility and customisation, the system can respond to any spatial complexity and creative decisions. Standardised panels/ components in large quantities can also be developed thanks to the mass customisation logic of production.

WOOD—SKIN geometries

Geometry plays a crucial role in the design with WOOD—SKIN® technology. Mesh Panels, Fold Panels and Tailor Made surfaces are part of the same technological system but each offers a unique geometrical expression. Thanks to the large number of hinges, Mesh Sheets create fluid surfaces with non-defined three-dimensionality. With Tailor Made Service it is possible to materialise almost any three-dimensional geometry defined by the designer and/or client.

Technical details for design and installation

The following section describes the most typical technical and installation details related to the Wood-Skin technology. The details are based on projects developed and realised by Wood-Skin throughout various parts of the world.

This part of the manual provides detailed technical information for the different Mesh Sheets and Tailor Made surfaces. The versatility of Wood-Skin® technology allows for the same products to be installed as ceiling, walls, counters or canopies. These can be realised as suspended systems using aircraft cables or directly attached to the structure using custom cut jigs. Additional customisations, like doors and inspection openings, integration of other materials (e.g. plexiglass), of light fixtures and sprinklers, are also described.

Each section contains a section drawing with the most relevant technical details, a visual reference of the realised project and an isometric drawing describing essential installation steps.

Despite this manual including the most common cases for installing woodskin, some projects require specific customisations. Our team’s know-how helps us to carefully examine each design brief and provide the designers, architects and general contractors with the most appropriate assembly information and installation details.

FOLD AND MESH PANELS

We provide designers with two new online tools:

Standard Panel Composer

This tool allows you to combine, juxtapose and orient the panels to create a preview of your composition. For the finish, you can then choose among the laminates, metals and veneers in the collection and proceed with the order directly online.

Custom Panel Configurator

This more advanced digital tool enables you to intuitively model the form and aesthetic characteristics of the panels at will, thanks to the use of parametric multiple-choice-selectors. The configurator allows you to push beyond the logic of the standard product and adapt the Fold Panels to your creative needs, obtaining truly unique results.

1 — MODEL

Choose a pattern among our standard sizes and then change it with the parametric selector

2 — MATERIAL

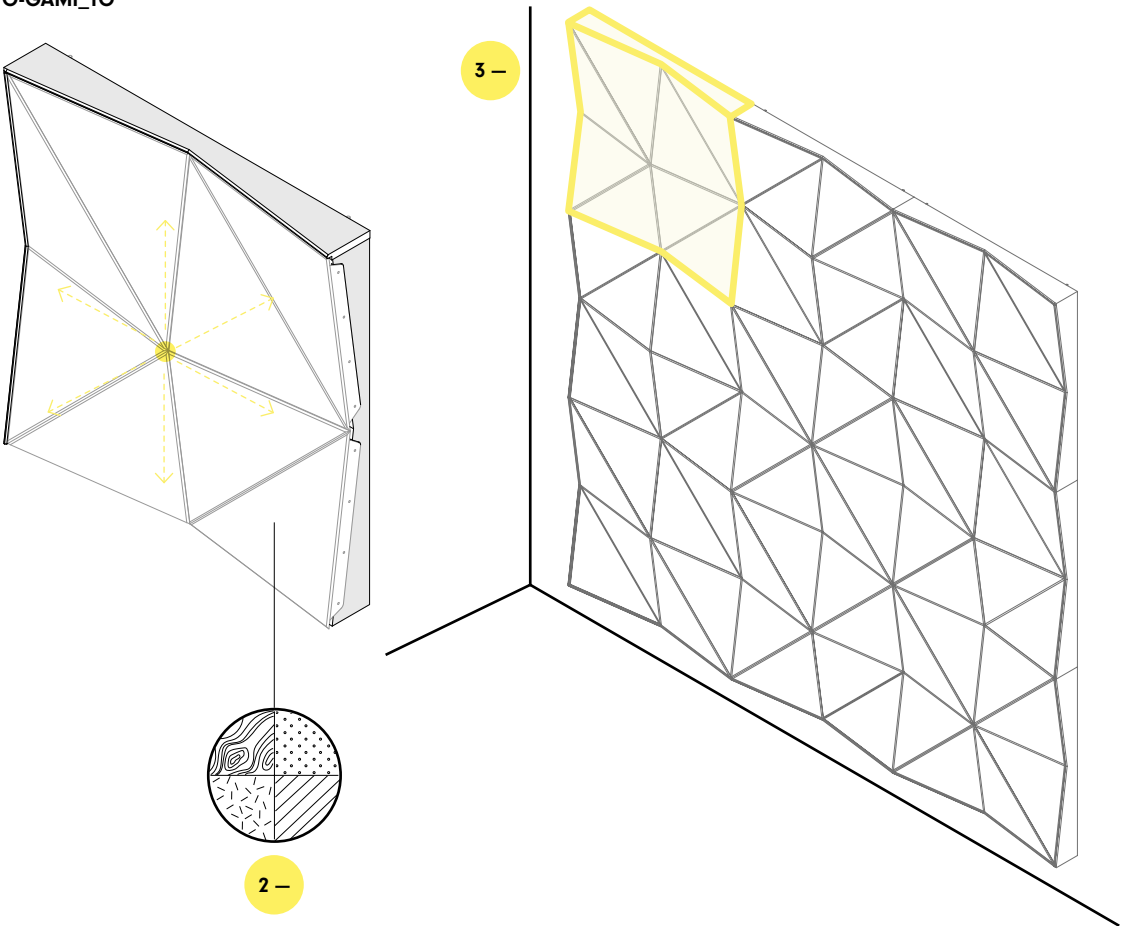
Choose and set the material you prefer

3 — NUMBER OF PANELS

Insert wall or ceiling measurements and the number of panels you want

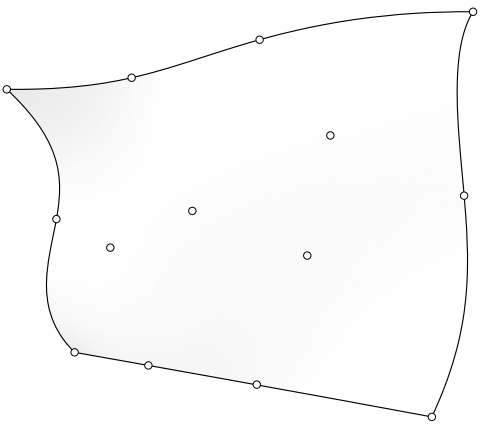
1 —

O-GAMI_TO

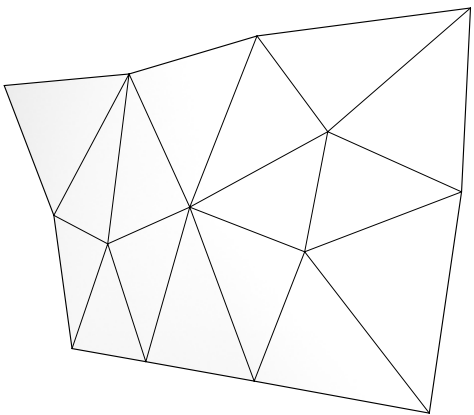


TAILOR MADE SURFACES

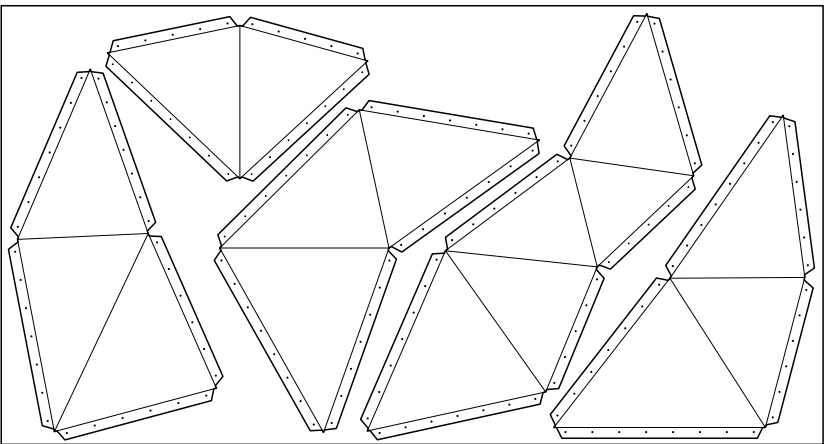
1. DESIGN OF THE 3D SURFACE



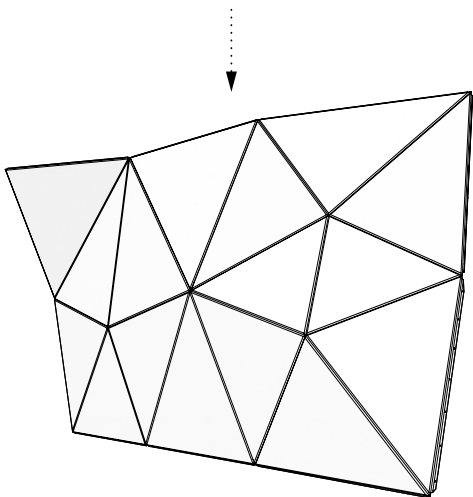
2. TESSELLATION AND ENGINEERING



3. PRODUCTION



4. INSTALLATION



2.2 MESH PANELS

The Mesh Panels are inspired by the natural realm, fully tracing existing organic forms and integrating them with the varied world of architecture.

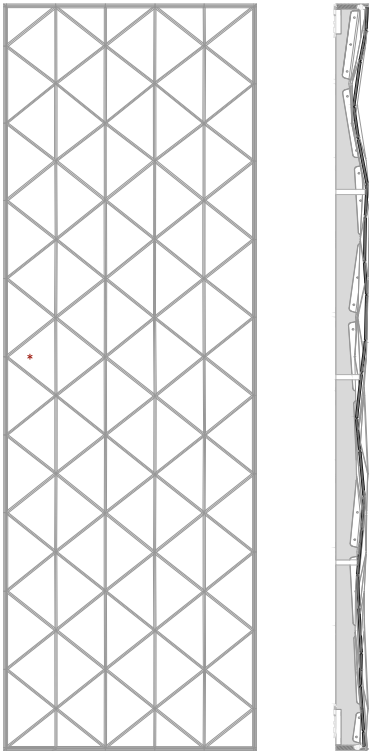
Mesh Panels are the ultimate example of the possibility of the WOOD—SKIN process, where the 3D surface is locked in shape by a quick-assembly frame that can be then hung to the wall. The meticulous selection of sustainable materials for the new Mesh Panel includes paperstone, print, metallic and non-metallic laminates, as well as Alpi (an ultra-thin and lightweight material), available in a variety of colors and infinite shapes with elegant finishes.

The multi-adaptability of Mesh Panels, guaranteed by their free-form properties, allows them to be composed in several combinations depending on the space they will enrich.

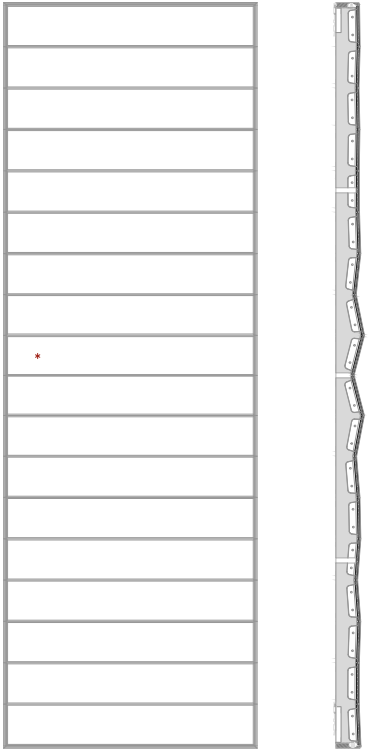
Mesh Panels photo shooting, Italy — 2021



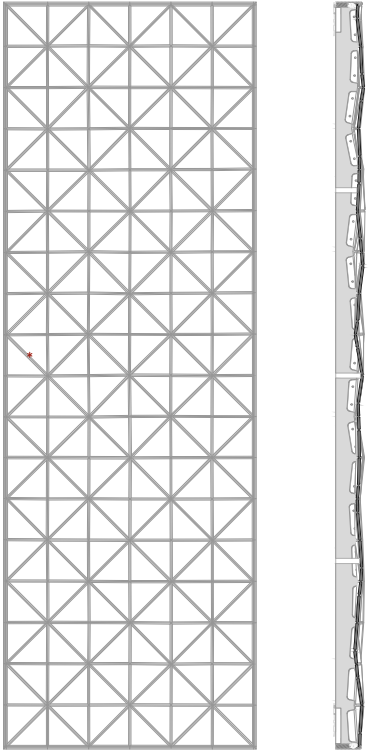
AVAILABLE PATTERNS



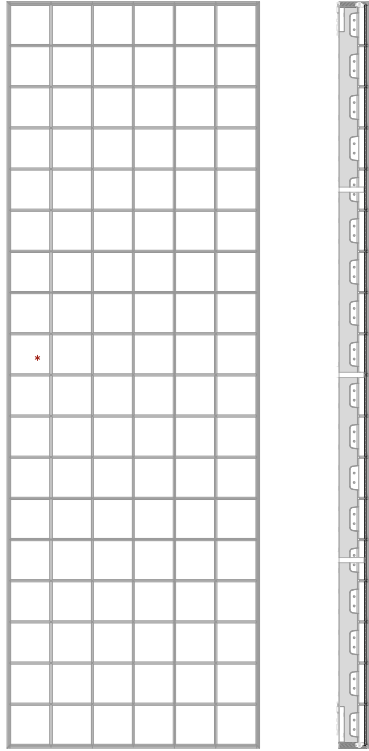
CLASSIC A
Pattern size: 17cm
Panel standard dimensions:
270x90cm / 210x90cm



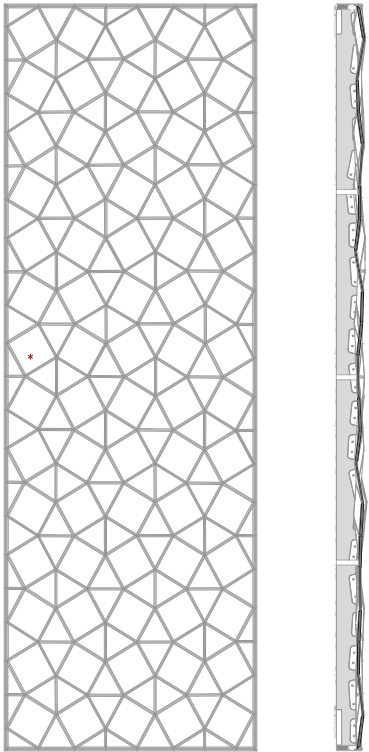
BASIC A
Pattern size: 15cm
Panel standard dimensions:
270x90cm / 210x90cm



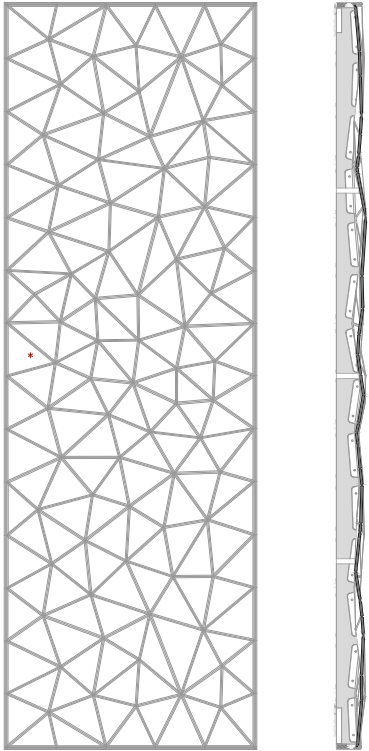
CLASSIC C
Pattern size: 15cm
Panel standard dimensions:
270x90cm / 210x90cm



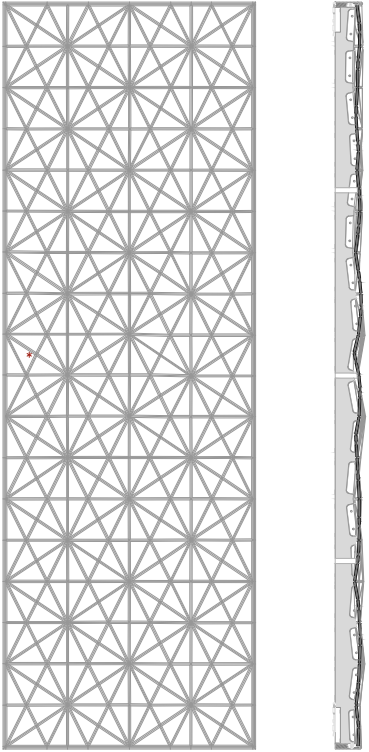
BASIC B
Pattern size: 15cm
Panel standard dimensions:
270x90cm / 210x90cm



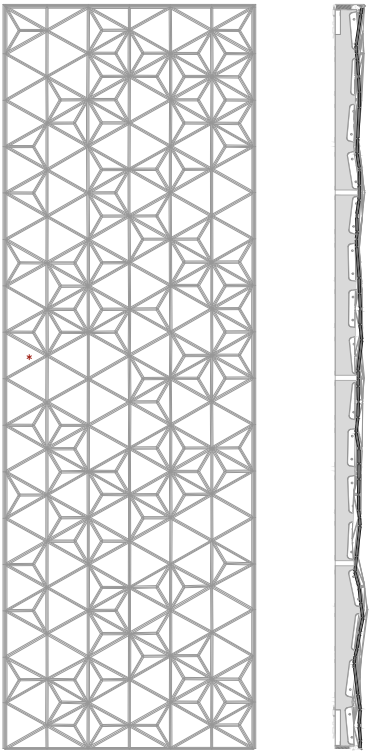
CLASSIC D
Pattern size
Triangle: 16cm / Square: 14cm
Panel standard dimensions:
270x90cm / 210x90cm



DIGITAL
Pattern size: 18cm
Panel standard dimensions:
270x90cm / 210x90cm

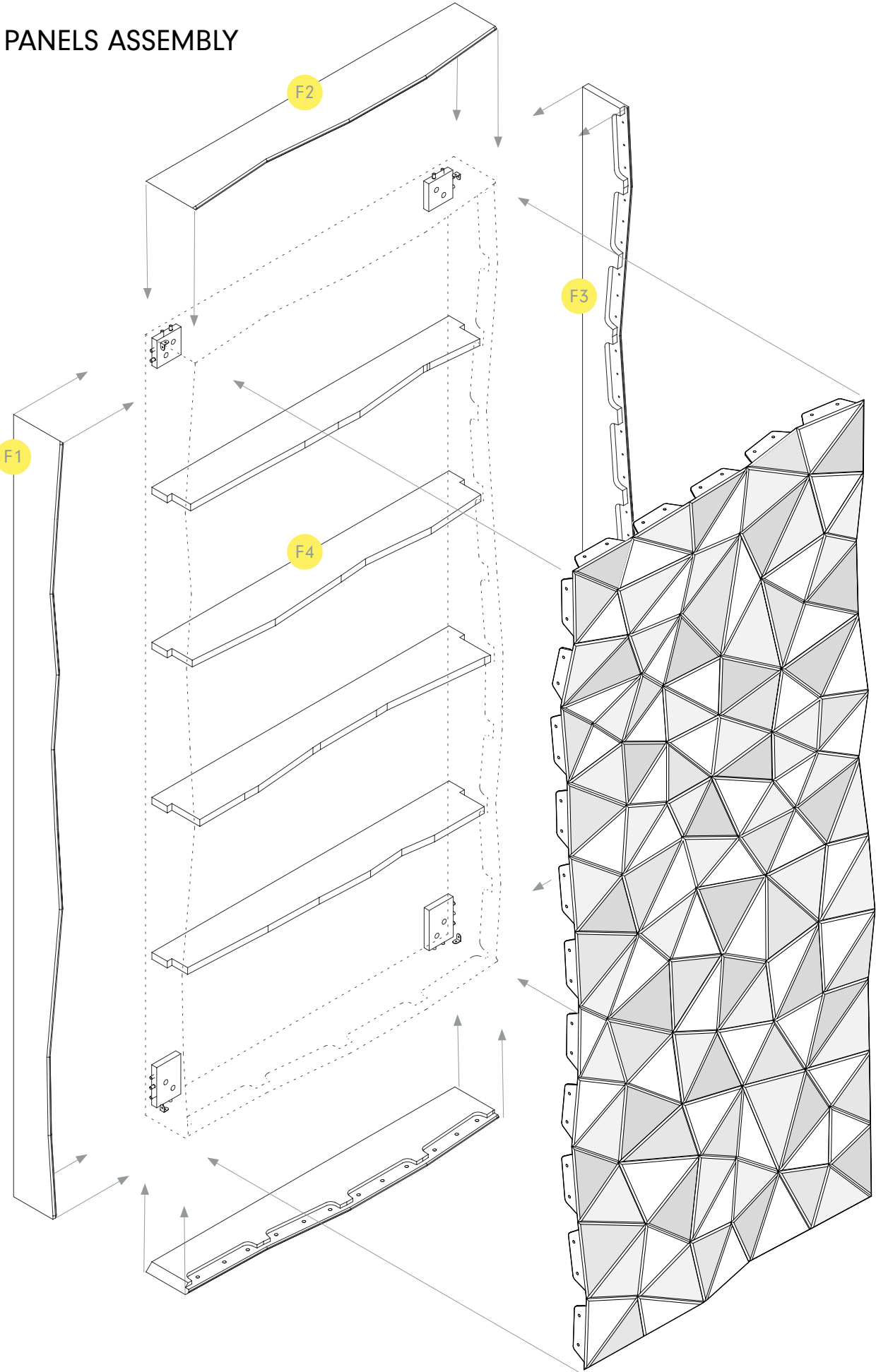


DECOR A
Pattern size: 15cm
Panel standard dimensions:
270x90cm / 210x90cm

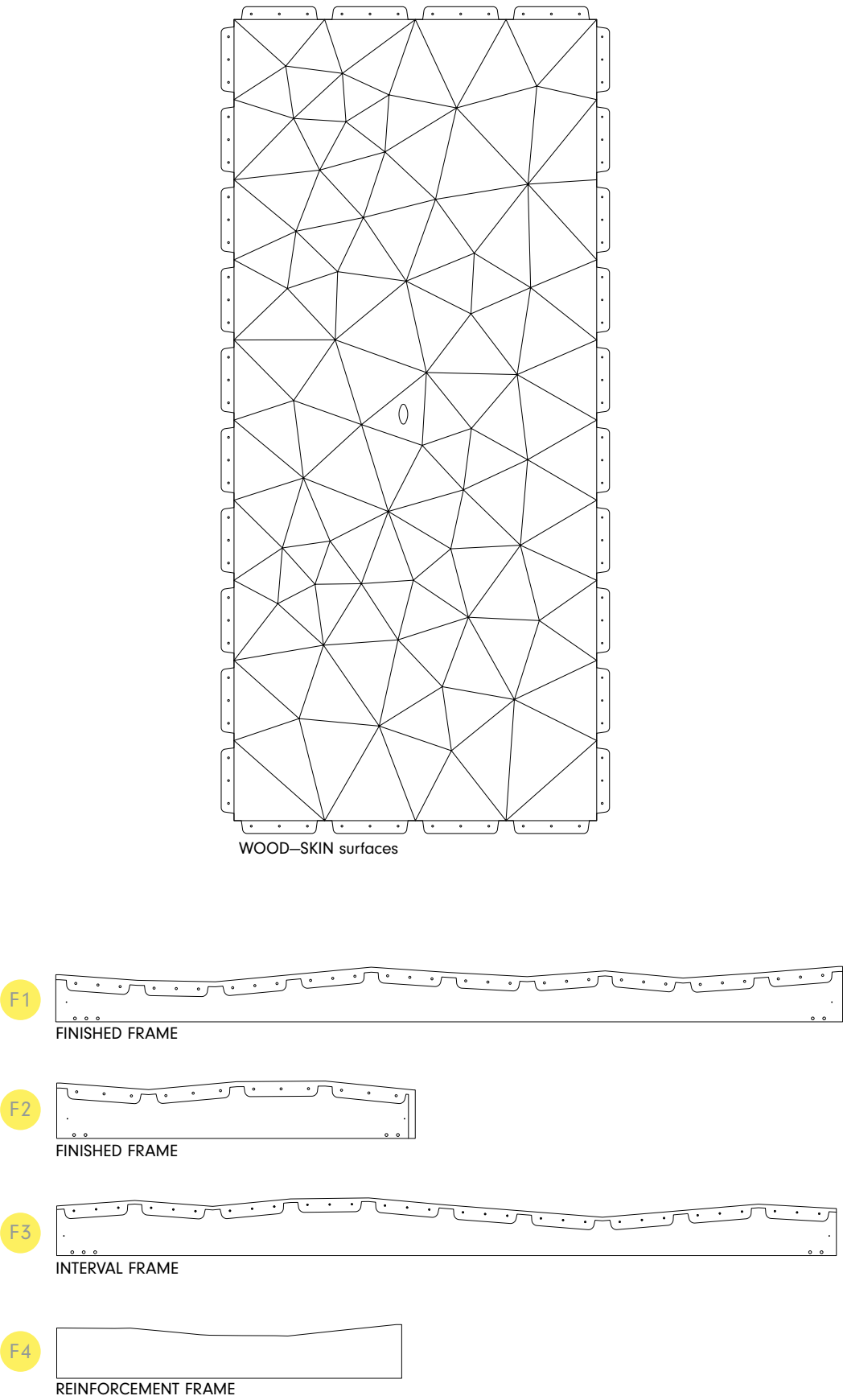


DECOR B
Pattern size: 17cm
Panel standard dimensions:
270x90cm / 210x90cm

PANELS ASSEMBLY

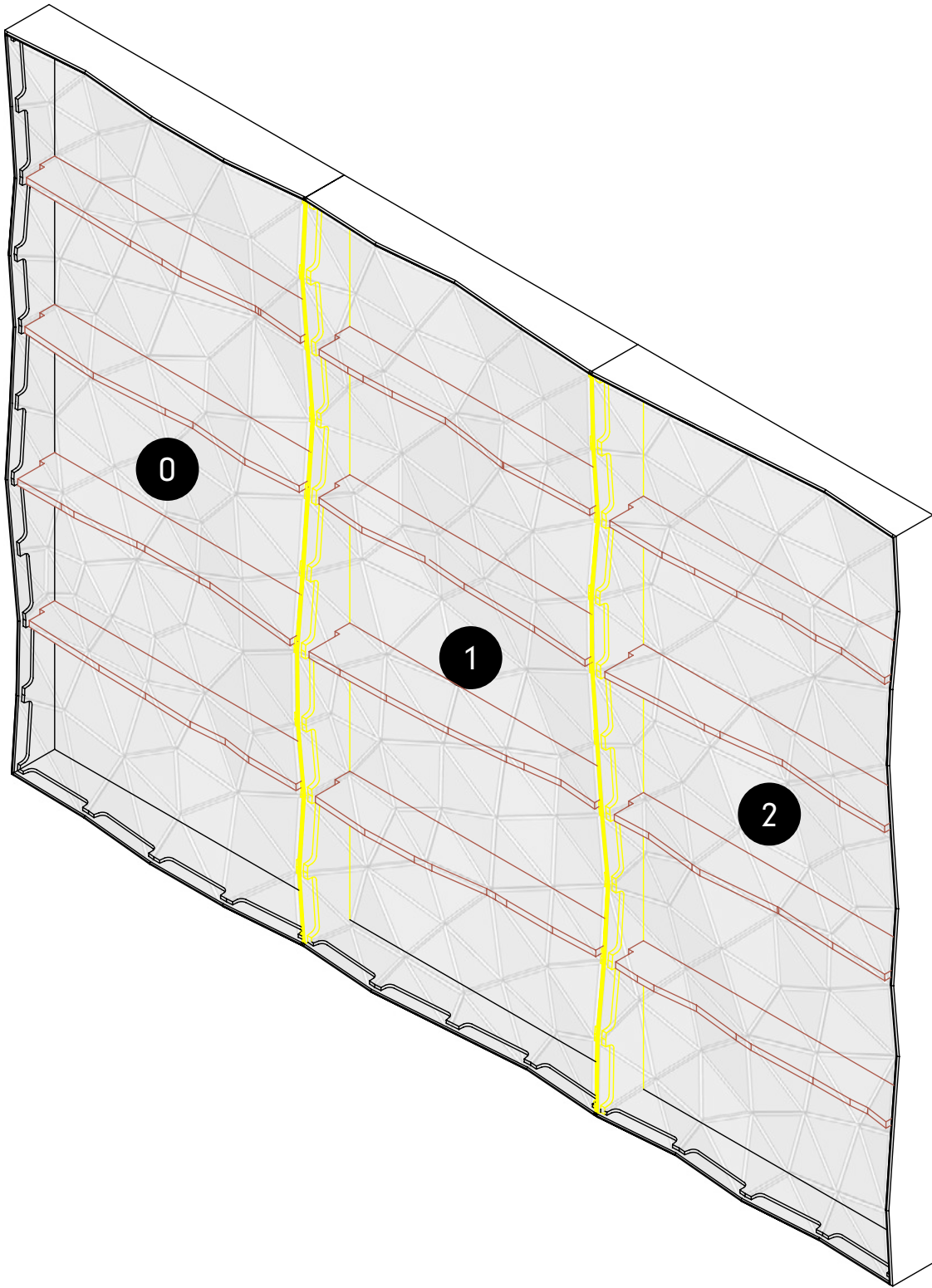
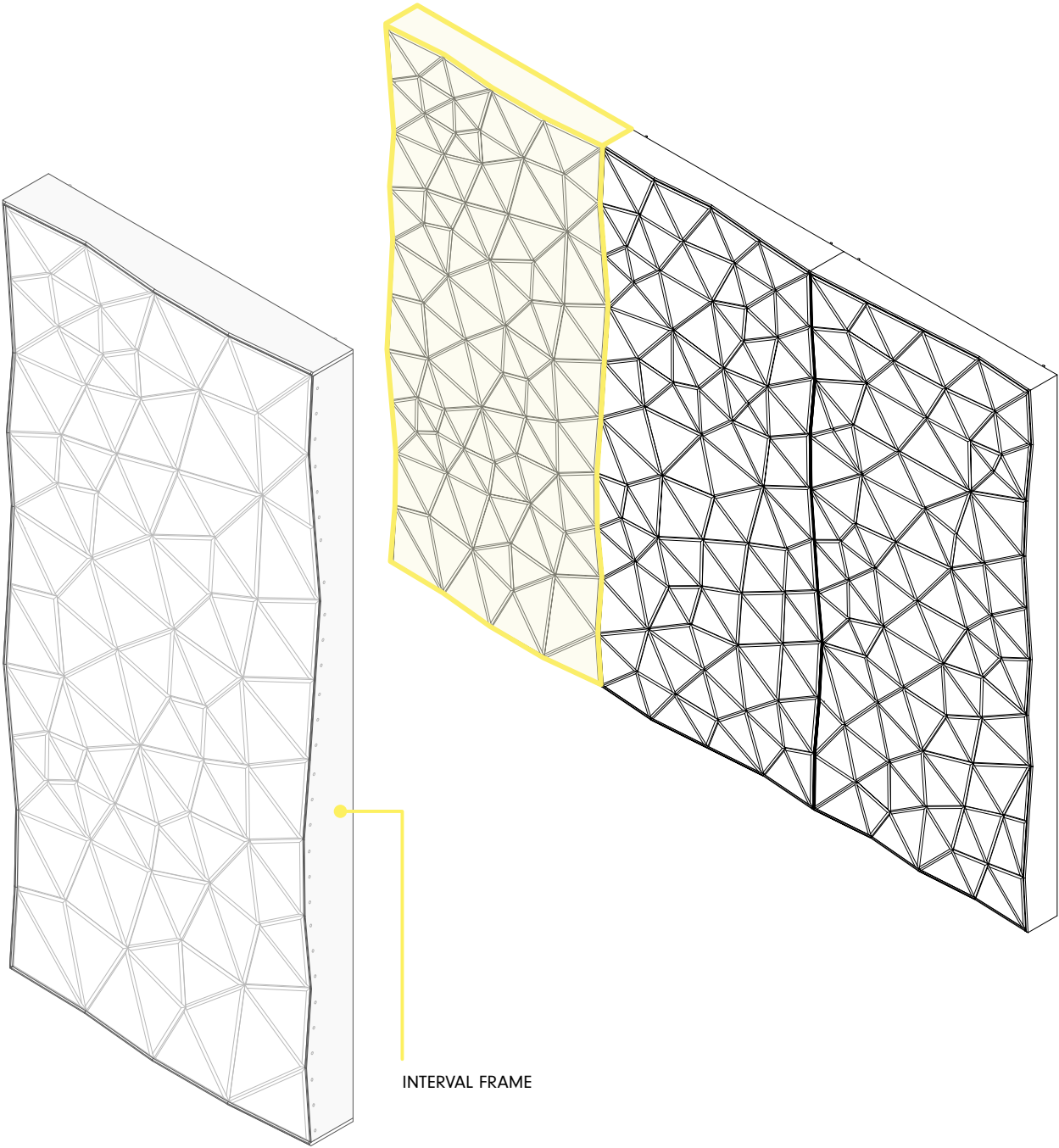


PIECES AND FRAMES



CONSTRAINTS

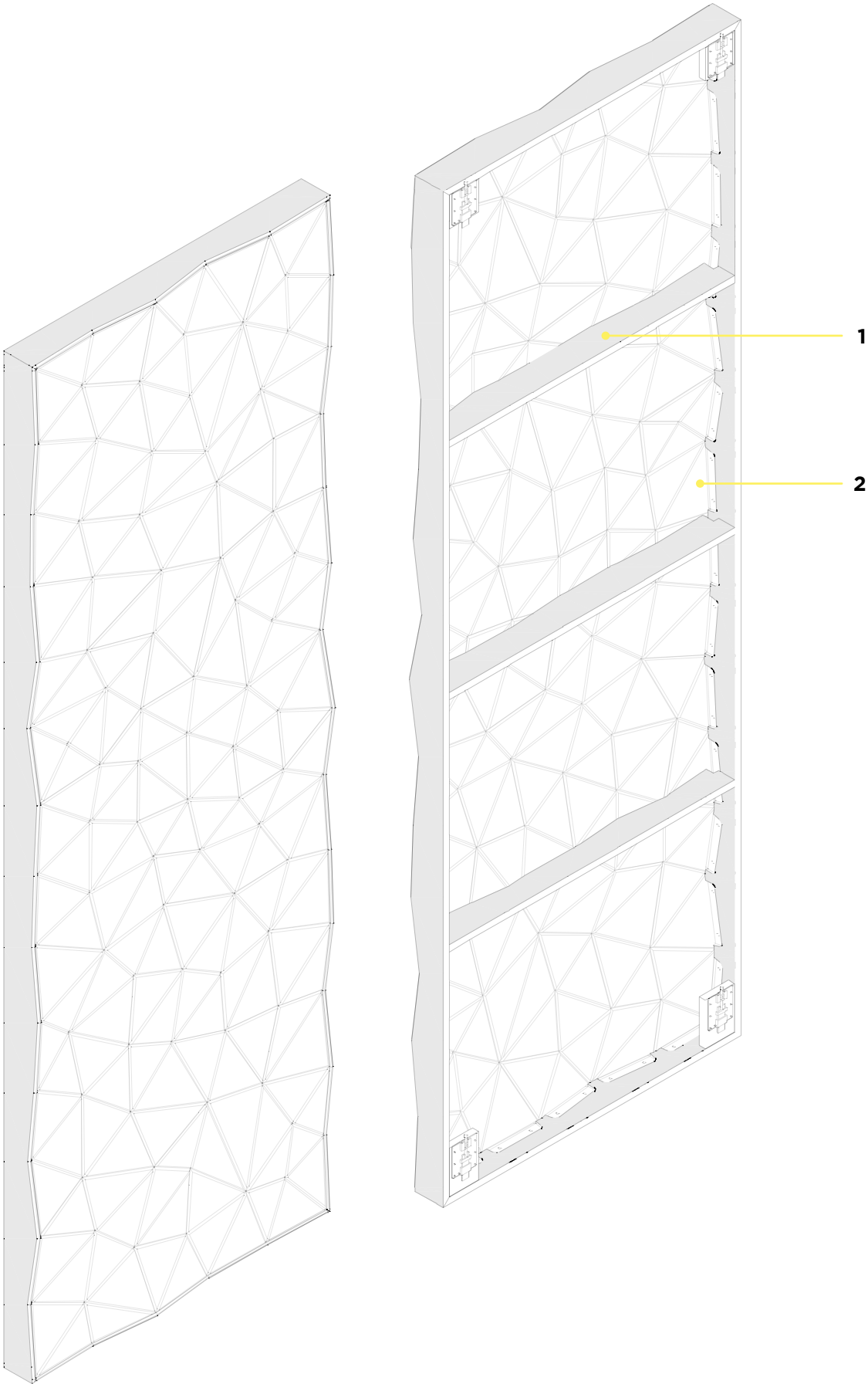
Due to the final shape of the panel and the installation process, W-S panels need a small gap-space on the top (in order to be hanged on the back structure) of 5cm/2inches. Each panel is numbered based on the position it has in the final surface. This point is crucial in order to have the final finished-frame for the entire surface and avoid it for each single panel. This will reduce the final cost and the gap between the panels in order to achieve an almost seamless surface. The inner panels are enclosed inside a technical frame called 'Interval frame'.

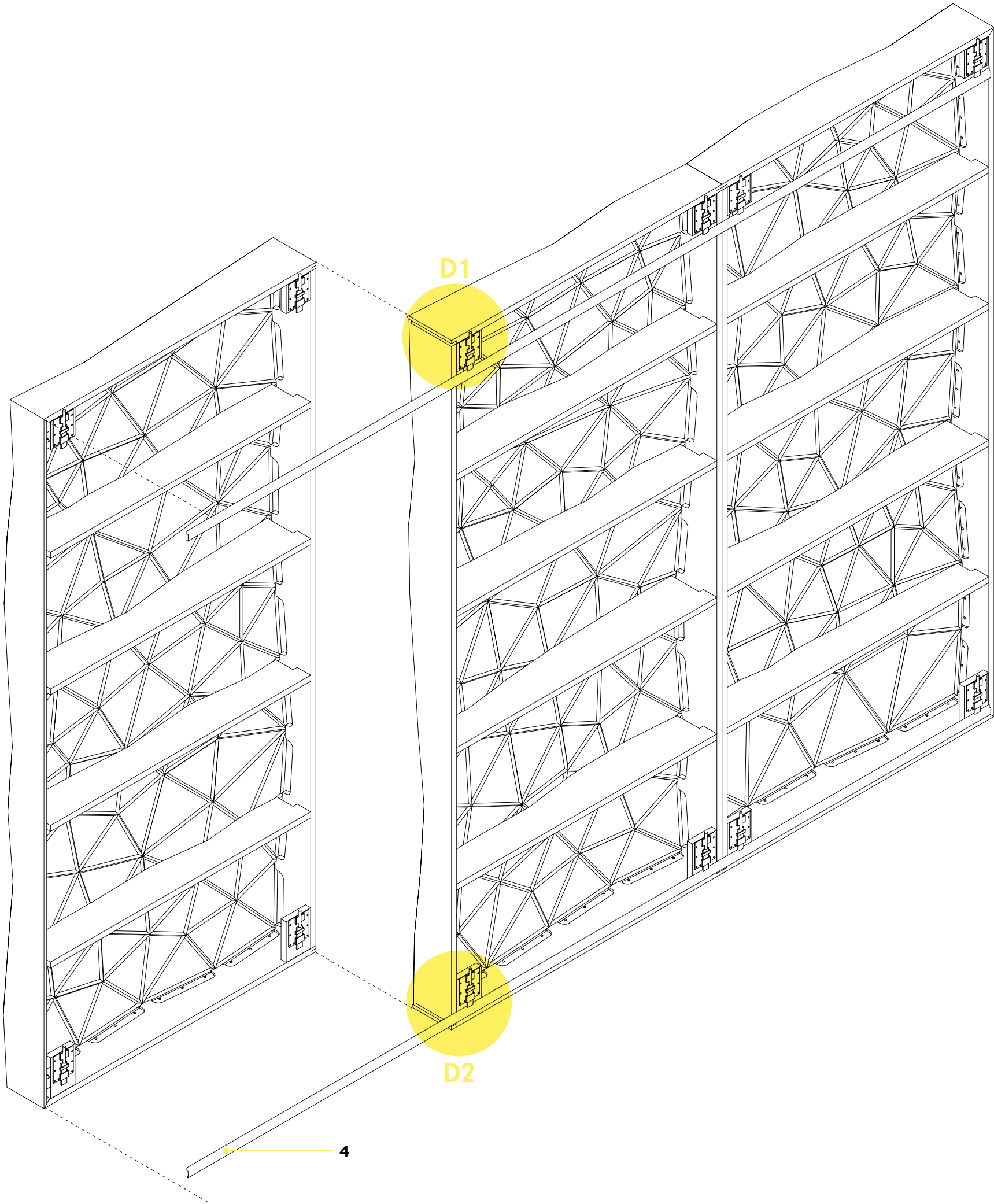


WALL INSTALLATION
Standard composition

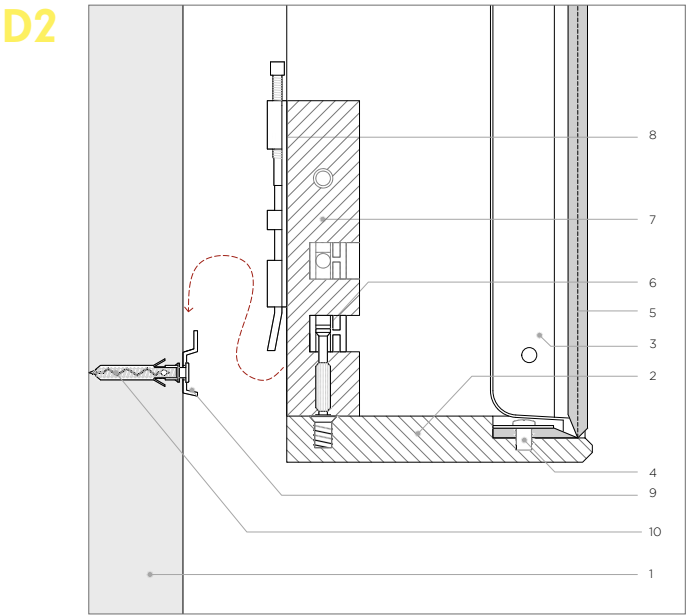
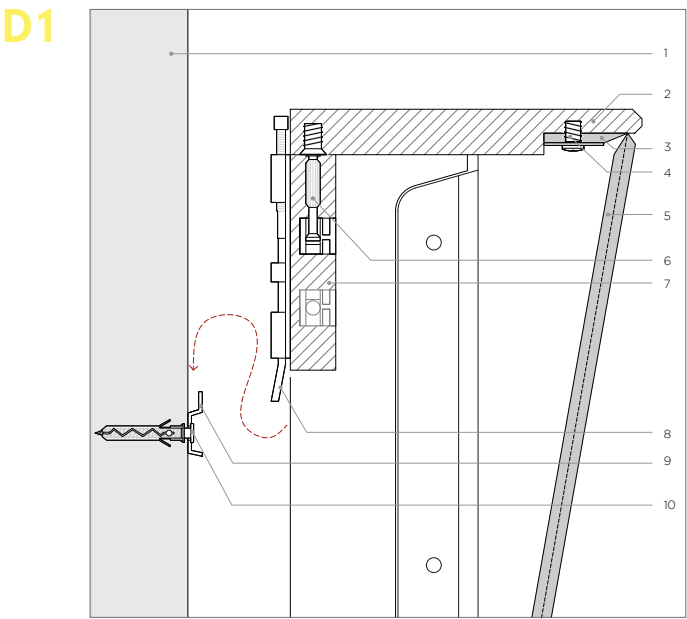


The installation of Mesh Panels must begin with the frame. The wooden frames are specific to each panel and the pieces are marked with specific letters, which indicate their position once the frame is assembled (T - Upper L - Left R - Right B - Lower A, B - Reinforcement frame) **1**. Once the frame is completed, place the W-S surface and fix the wooden flaps to the jigs **2**. Once the panel is ready, hang it to the wall/ceiling brackets **3**.





DETAILS



- 1- Existing wall
- 2- Finished frame
- 3- W-S flap
- 4- Euro screw
- 5- W-S sandwich
- 6- Cam lock fastener
- 7- Wooden block
- 8- Hanging bracket
- 9- Hanging bar
- 10- Fixing hardware

2.3 FOLD PANELS

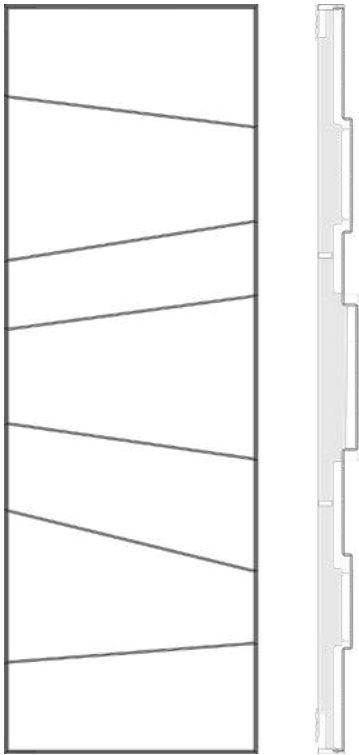
Fold Panels are 3D boards with compelling geometries, built inside square or rectangular modules. The Fold Panel concept is uniquely suited to transform a space with the colors and configurations that best fit the project's overall vision of the architect. A robust frame sustains the weight of the panels and facilitates the installation on walls and ceilings. The most important part of this new family is an online configurator: the user has the possibility to change parameters of the standard panel directly online, changing dimensions, shape, materials, download the file and use it inside his project.

Propelled by the optimization of sustainable materials, the simple design of our Fold Panels establishes a comfortable atmosphere for the user, facilitating any preference through a tailored approach.

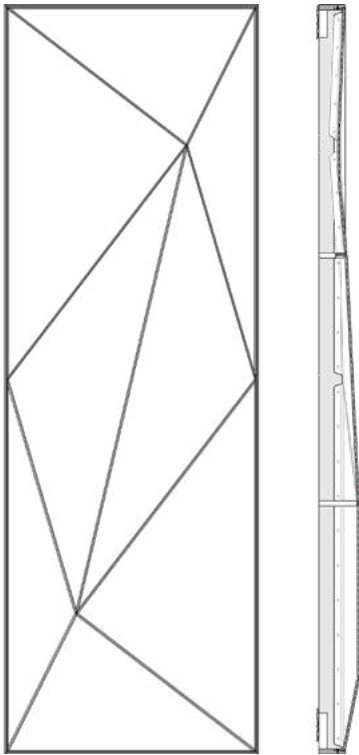
The Fold panels system is composed of three different lines: A-gami, O-gami and U-gami. More than ever, these make it possible to create unique three-dimensional coverings with a wide range of material finishes and quick, easy assembly.



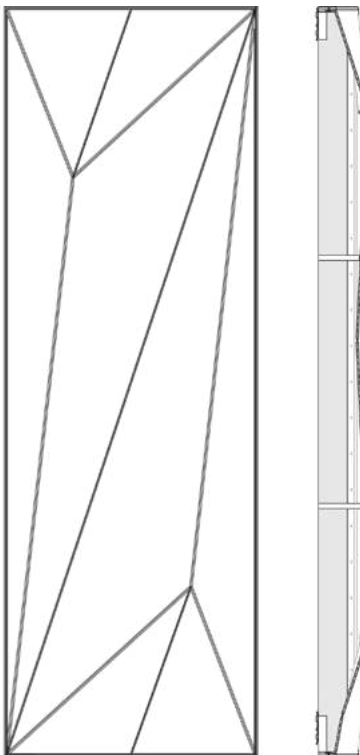
AVAILABLE PATTERNS



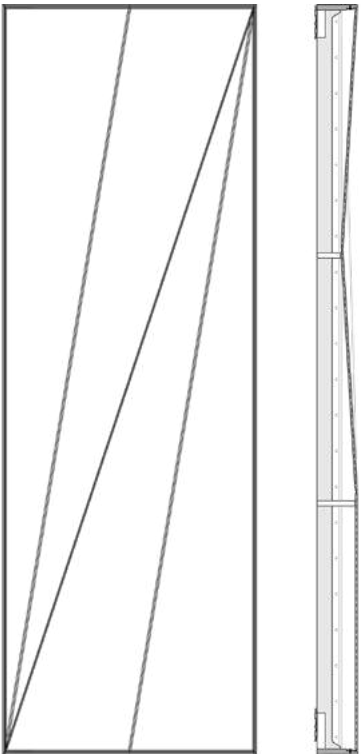
A-GAMI_SA
Panel standard dimensions:
270x90cm / 210x90cm



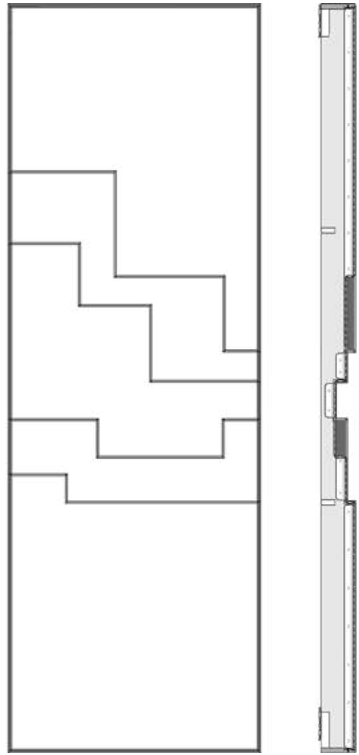
O-GAMI_NO
Panel standard dimensions:
270x90cm / 210x90cm



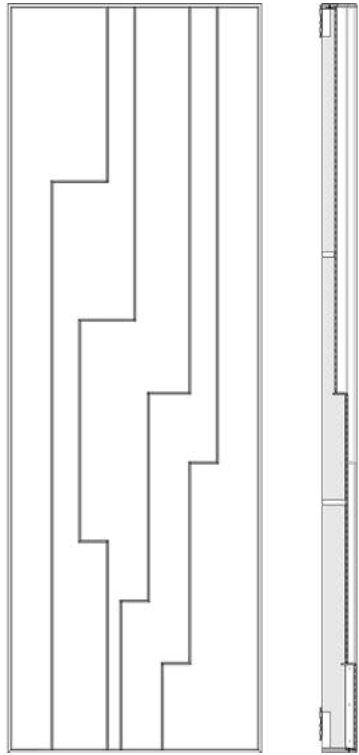
O-GAMI_SO
Panel standard dimensions:
270x90cm / 210x90cm



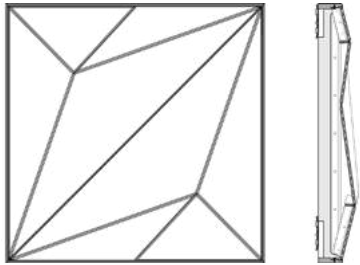
O-GAMI_DO
Panel standard dimensions:
270x90cm / 210x90cm



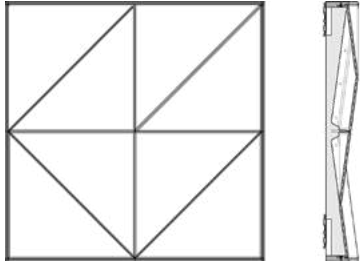
U-GAMI_YU
Panel standard dimensions:
270x90cm / 210x90cm



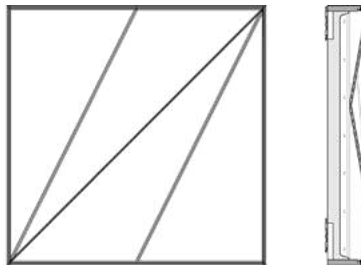
U-GAMI_FU
Panel standard dimensions:
270x90cm / 210x90cm



O-GAMI_SO
Panel standard dimensions:
90x90cm

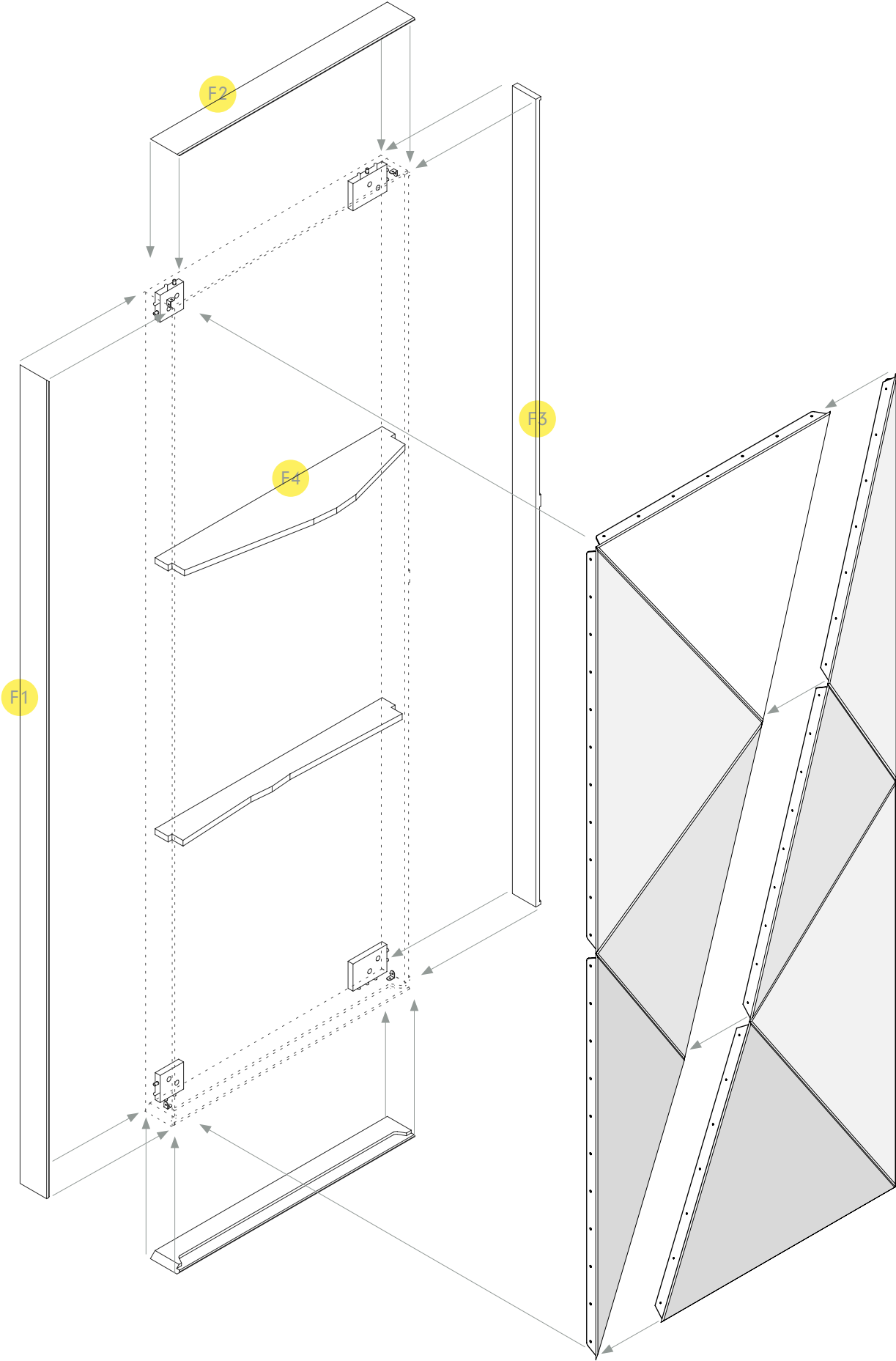


O-GAMI_TO
Panel standard dimensions:
90x90cm

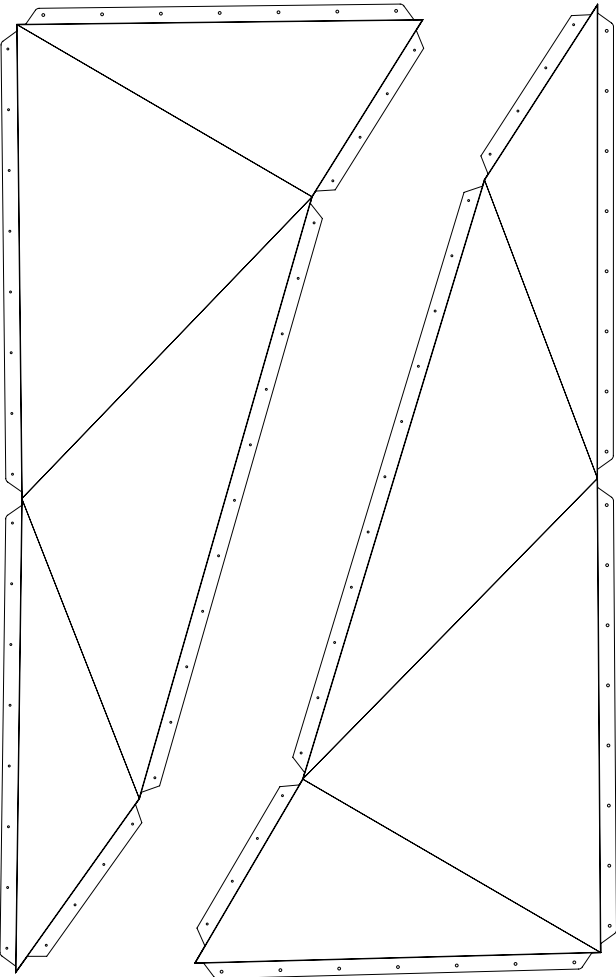


O-GAMI_DO
Panel standard dimensions:
90x90cm

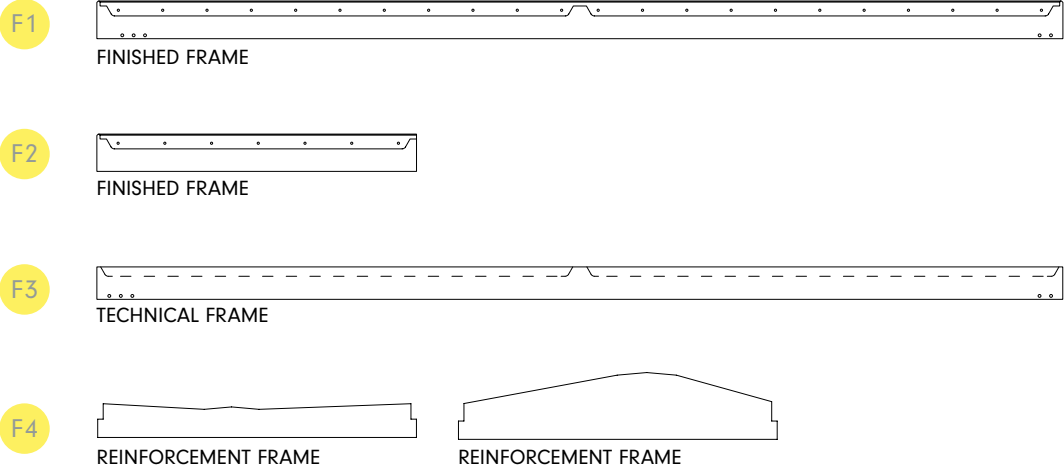
PANELS ASSEMBLY



PIECES AND FRAMES

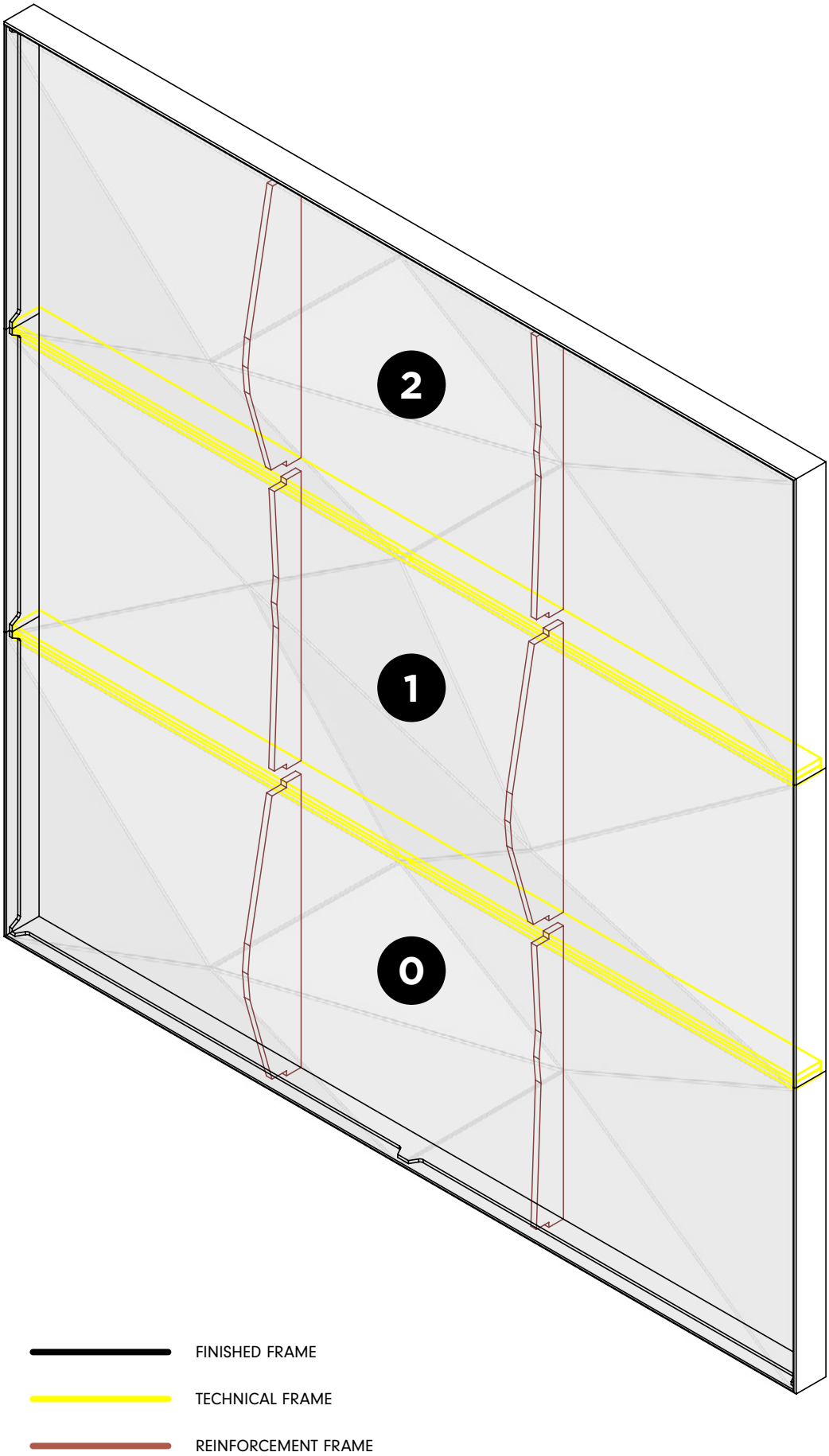
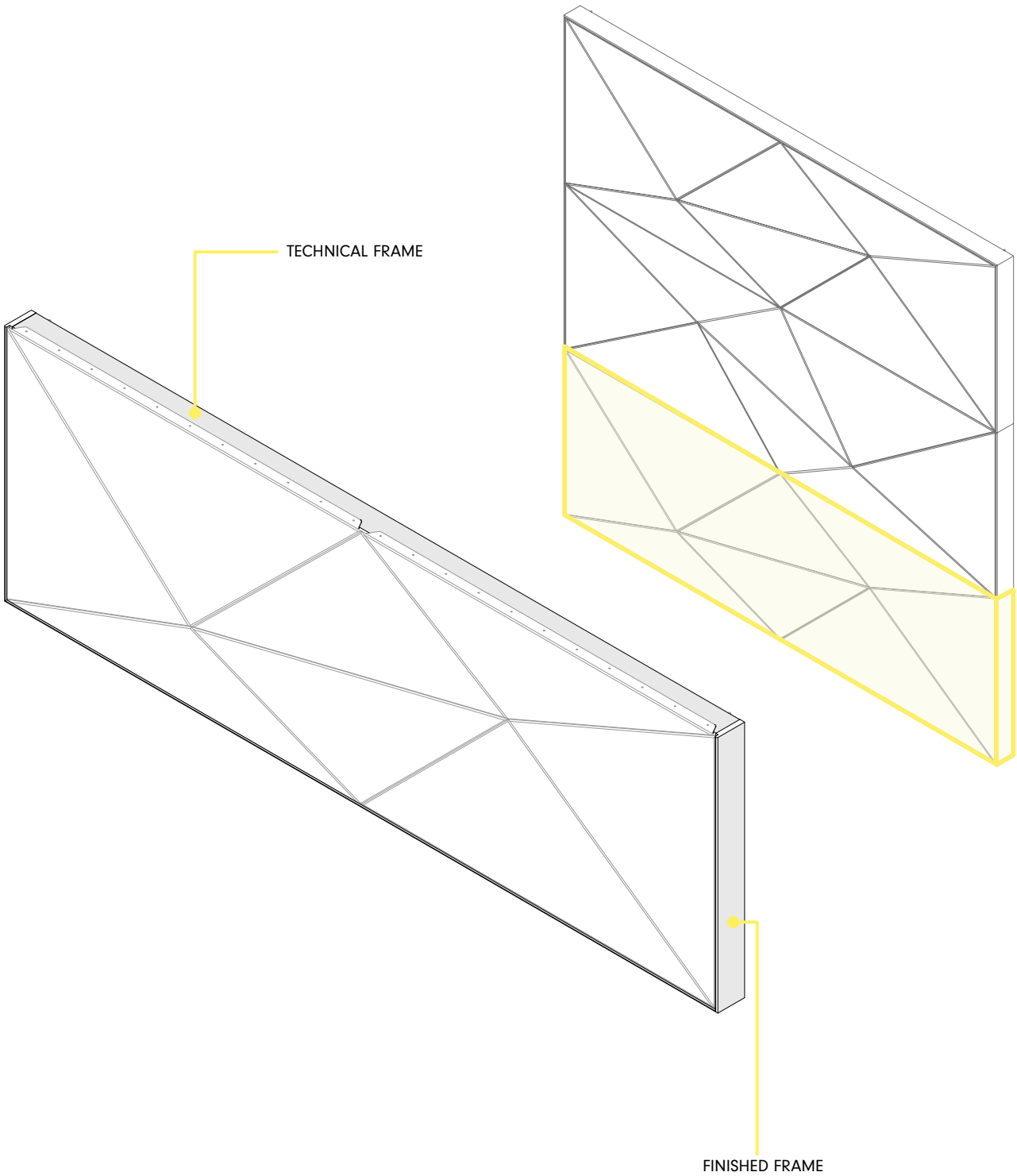


WOOD-SKIN SURFACE



CONSTRAINTS

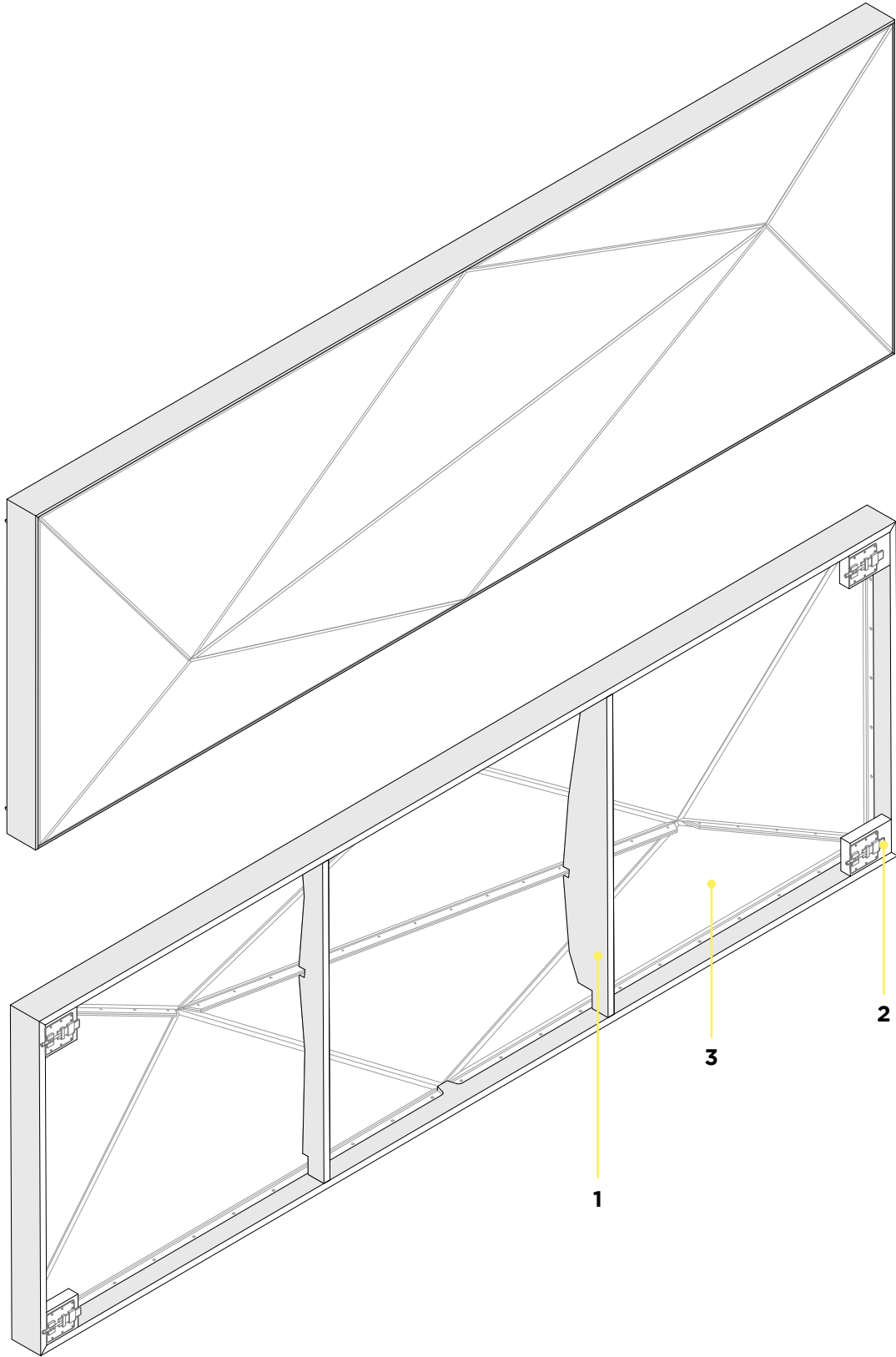
Due to the final shape of the panel and the assembly process, W-S panels need a small gap-space on the top (in order to be hanged on the back structure) of 5cm/2inches. Each panel is numbered according to its position on the final composition. The position of each panel is essential to ensure that there is one final frame for the entire composition and to avoid having each panel individually "framed". This will reduce the final cost and the space between panels to achieve an almost seamless surface. The interior panels are enclosed within a technical frame called an 'interval frame'.



WALL INSTALLATION



The installation of Fold Panels must begin with the frame. The wooden frames are specific to each panel and the pieces are marked with specific letters, which indicate their position once the frame is assembled (T - Upper L - Left R - Right B - Lower A, B - Reinforcement frame) **1**. Once the frame is complete, the wooden blocks must be fixed in the 4 corners and the wall/ceiling fixing plates screwed onto them **2**. At this point join together the W-S surface pieces (if necessary) and fixed the wooden flaps of the surface to the jigs **3**. Once the panel is ready, fix it to the wall/ceiling brackets **4**.



NAME: Dräger

CLIENT: Dräger

DESIGN: APIUC Architetti Associati and
Matteo Lomaglio

LOCATION: Milan - Italy

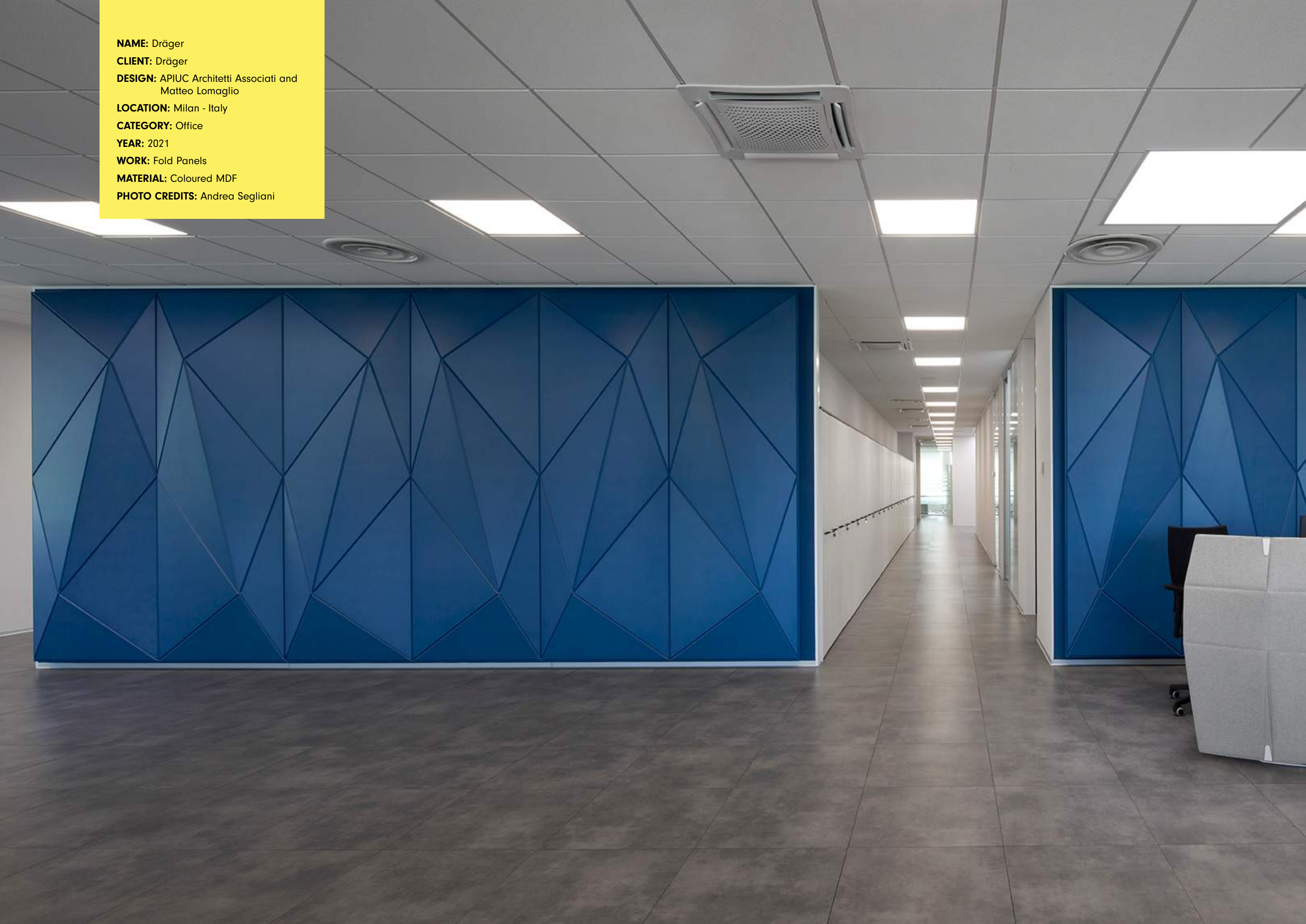
CATEGORY: Office

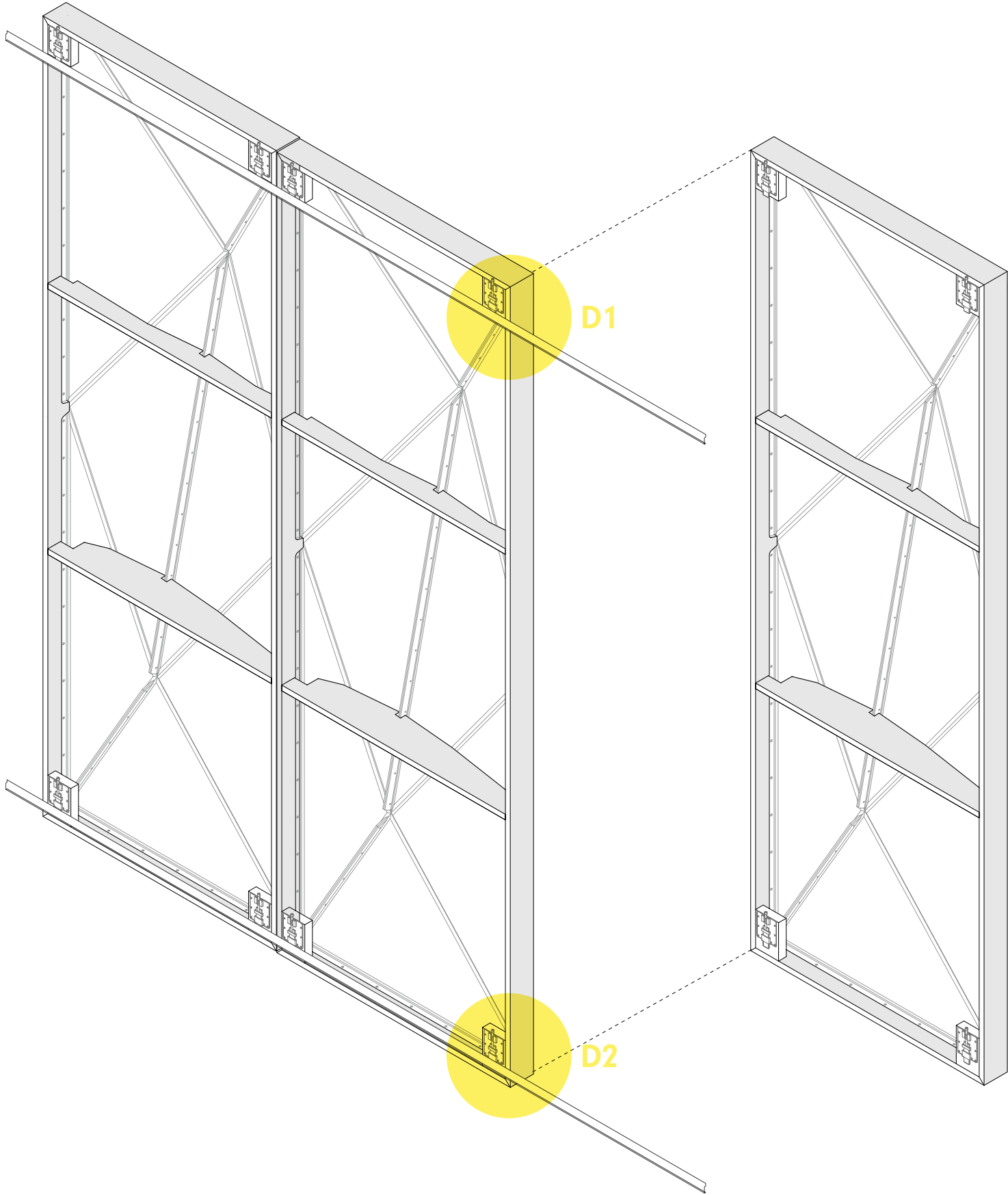
YEAR: 2021

WORK: Fold Panels

MATERIAL: Coloured MDF

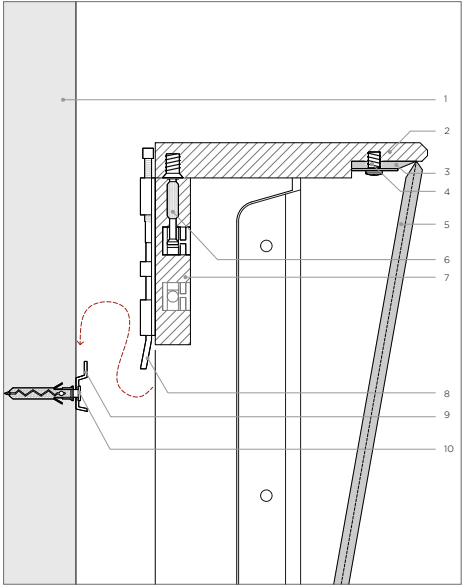
PHOTO CREDITS: Andrea Segliani





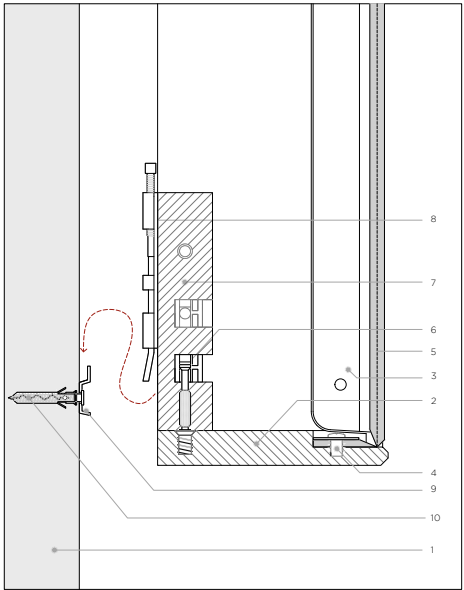
DETAILS

D1



- 1- Existing wall
- 2- Finished frame
- 3- W-S flap
- 4- Euro screw
- 5- W-S sandwich
- 6- Cam lock fastener
- 7- Wooden block
- 8- Hanging bracket
- 9- Hanging bar
- 10- Fixing hardware

D2



- 1- Existing wall
- 2- Finished frame
- 3- W-S flap
- 4- Euro screw
- 5- W-S sandwich
- 6- Cam lock fastener
- 7- Wooden block
- 8- Hanging bracket
- 9- Hanging bar
- 10- Fixing hardware

2.4 TAILOR MADE SERVICE

WOOD-SKIN Tailor Made surfaces are bespoke products created for specific projects. The guiding design principle here is the geometry. Our architectural and design team has years of experience working with award-winning design and architecture practices on international projects, by engineering intricate shapes, designing custom details, and devising solutions to ‘impossible’ problems. Thanks to WOOD-SKIN®’s proprietary design software and digital manufacturing process, the most expensive and time-consuming aspects of customization are significantly reduced.

Years of experience in the creation of designs and their installation have allowed us to increasingly improve our technical skills and to be able to propose new and better solutions. The process behind the creation of a tailor-made surface starts with the analysis of a customer-defined design or a simple customer concept. Our designers are then able to follow the customer step by step by proposing solutions or by engineering the shapes defined by an external architect..

The tailor-made service consists of already tested and engineered geometries that can be customized and extended.

4300 Wilson, Arlington – 2021



TYPESOLOGIES

The WOOD—SKIN design team is able to discretize any complex geometric input with single or double curvature and transform it into a series of flat elements easily produced and installed. Our Tailor Made product allows the generation and design of complex geometric surfaces, which can then be easily installed through many techniques.

FLUID



Project example: Milano Apartment, Milano

WAVE



Project example: Muze Gazhane, Istanbul

MORPH



CLOTH



Project example: Room XIX of UN Palace

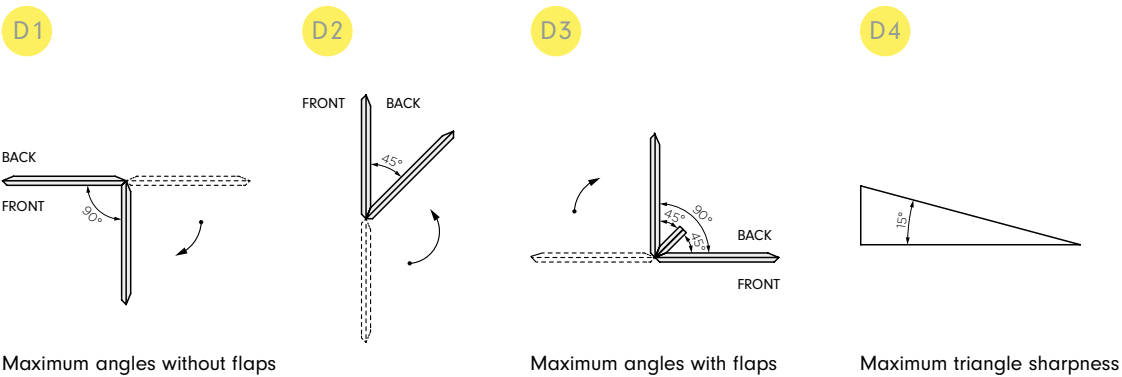
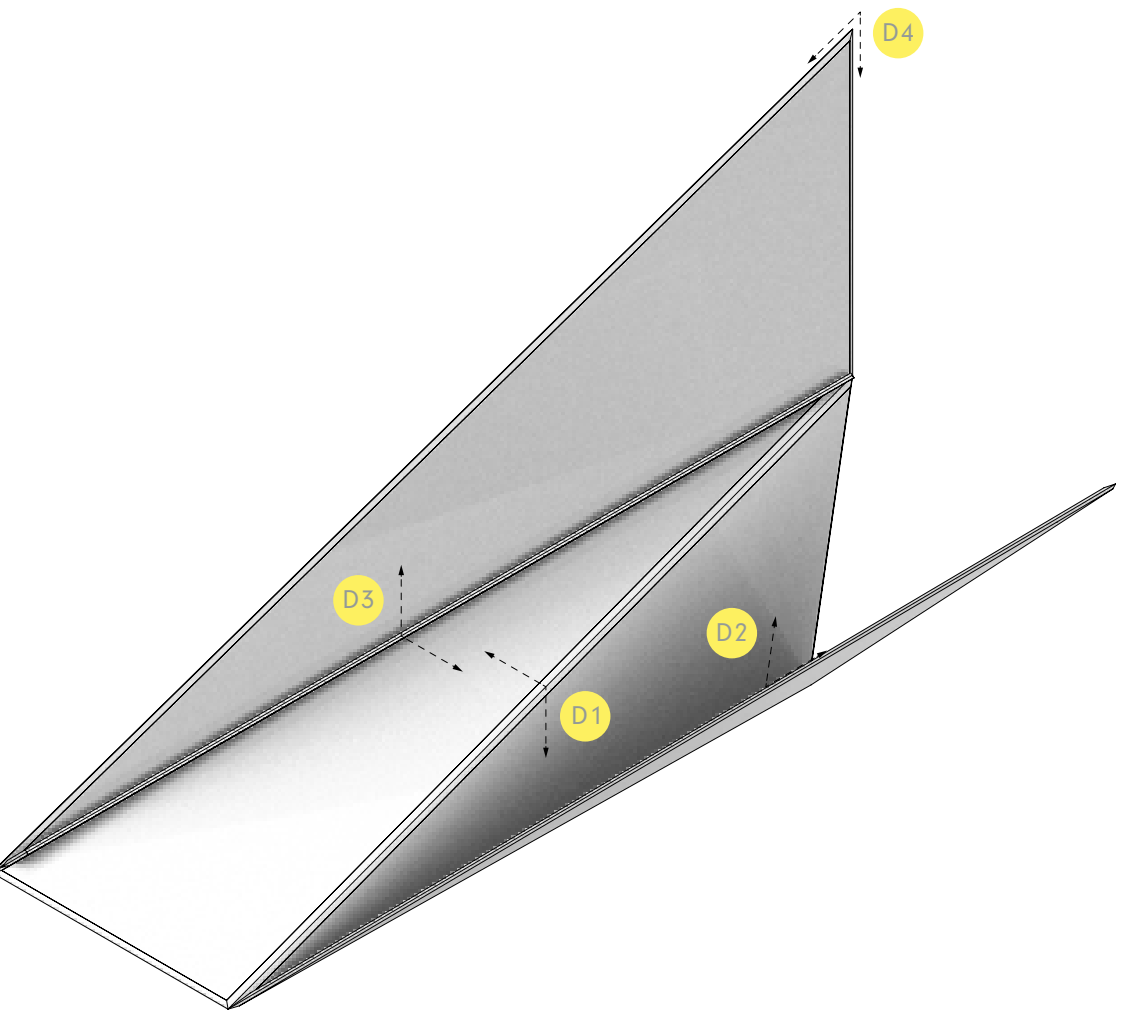
GEODE



Project example: Merelli woodworking

CONSTRAINTS

The fabrication process has an important role in the definition of the final 3D geometry of our products. The advanced milling machines and tools we use allow us to create strong hinges. In order to ensure the product resistance certain geometric limitations apply.



JOINING SYSTEMS

Each WOOD-SKIN product is characterized by some key features. The joining system is essential for the assembly of multiple Wood-Skin sheets. The suspension system instead allows for the desired three-dimensional effect in wall or ceiling installation. Three main types of joinery are used for assembling Wood-Skin sheets (to be explained in the coming pages) to each other or to supporting items. The flaps are embedded in the sheets and come with standard dimensions, designed to ensure a seamless and resistant joint. Custom flaps are designed and fabricated according to the application and installation requirements.

JOINING SYSTEMS



STANDARD FLAPS
All WOOD-SKIN surfaces are joined together by the flaps already embedded in the product. They are designed and fabricated to ensure a seamless and strong joint between the sheets while maintaining flexibility.



CUSTOM FLAPS
The flaps can also be customised and produced in different shapes in order to accommodate specific requirements. The custom flaps necessitate more material than the standard ones, a single WOOD-SKIN sheet can be produced with both standard and custom flaps.

FLAP-TO-JIG JOINT



This type of joint is used for attaching the border flaps of WOOD-SKIN sheets to a supporting frame/jig. The MDF or Okoume jigs are custom milled to accommodate the geometry of the sheets and are provided by WOOD-SKIN. The flaps are joined to the jig with screws.

SUSPENSION SYSTEM



HOLES

The holes in the flaps allow WOOD-SKIN Surfaces to be suspended, from walls and ceilings, and are essential in determining the final three-dimensional form.

SUSPENSION KIT

The suspension kit, provided by WOOD-SKIN, consists of an aircraft cable and a steel locking cable wire rope grip which allows the length of the cable to be adjusted. WOOD-SKIN makes sure to provide you with the kit most suitable for the selected product and its intended application.

SYMBOLS

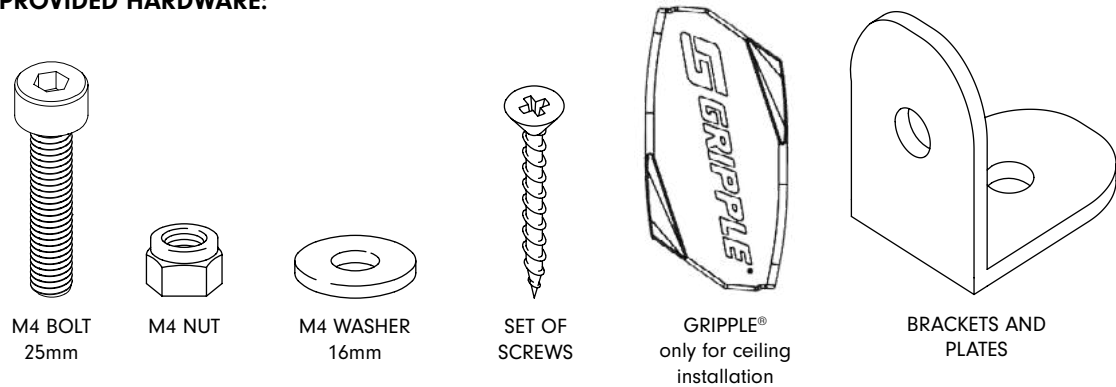


The symbol on the back of each WOOD-SKIN piece helps their assembly. The numbers indicate the assembly sequence and are present in all WOOD-SKIN products. The -/o symbols instead are crucial for achieving the designed three-dimensional result. They can be found on the Fold Panels and Tailor Made surface pieces. The “-” defines a valley, meaning that the edge where this symbol is placed should be folded inwards, while “o” defines a mountain, the edge must be folded outwards.

HARDWARE AND TOOLS

The assembly process of WOOD-SKIN surfaces depends largely on the type of product and the application. Specific technical information about the assembly and installation of the various typologies are provided further in this manual. Together with the product itself, WOOD-SKIN also provides the necessary hardware for the assembly (tools not provided).

PROVIDED HARDWARE:



NEEDED TOOLS:

- Electric screwdriver and bits:
- HEX3 (3 mm ALLEN BIT)
- PZ2 (POZIDRIV 2)
- PH2 (PHILLIPS 2)
- 7mm Wrench

REQUIREMENTS FOR DESIGN

SURVEY

Thanks to the digital fabrication process, all WOOD-SKIN elements are produced to exact measures. The custom surfaces are made to order and with few tolerances. This requires a precise survey of the space where WOOD-SKIN products will be installed.

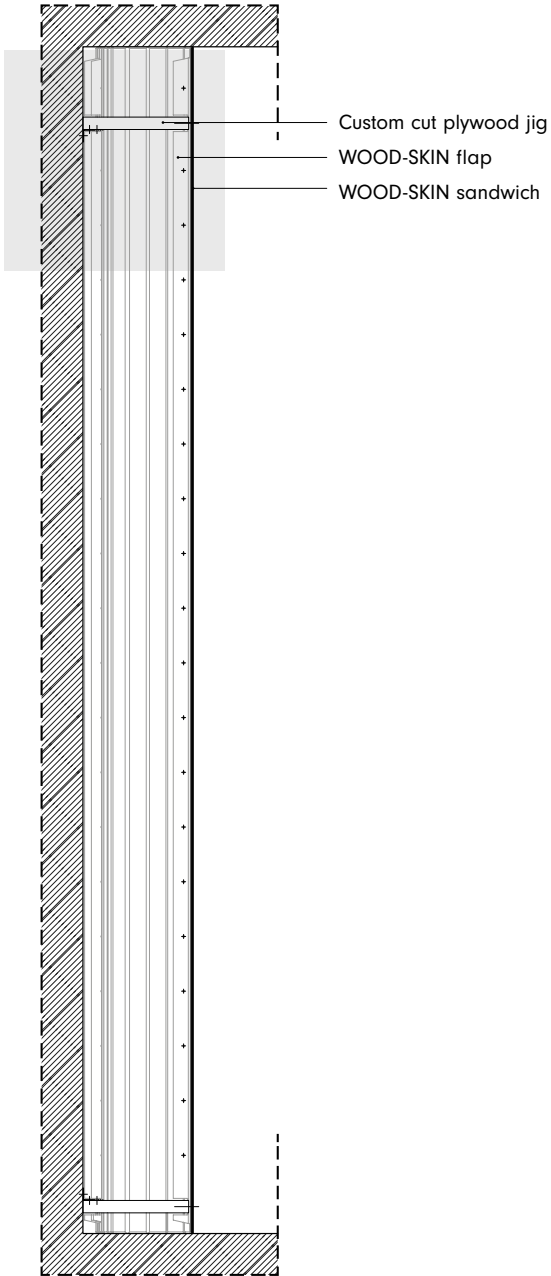
LASER SCANNING AND DIGITAL 3D MODEL

For complex or large-scale projects, our technical team recommends a laser scan and an accurate 3D model of the site. This allows for the design team to create and produce highly precise surfaces and reduce waste material.

TPOLOGY: Tailor Made Fluid
INSTALLATION: Wall
MATERIAL: Ultra-thin reconstituted wood
NAME: Milano Today Apartment
CLIENT: Pier Lomascolo
DESIGN: Pier Lomascolo and WOOD-SKIN team
LOCATION: Milan - Italy
CATEGORY: Residential
YEAR: 2018
PHOTO CREDITS: Pier Lomascolo



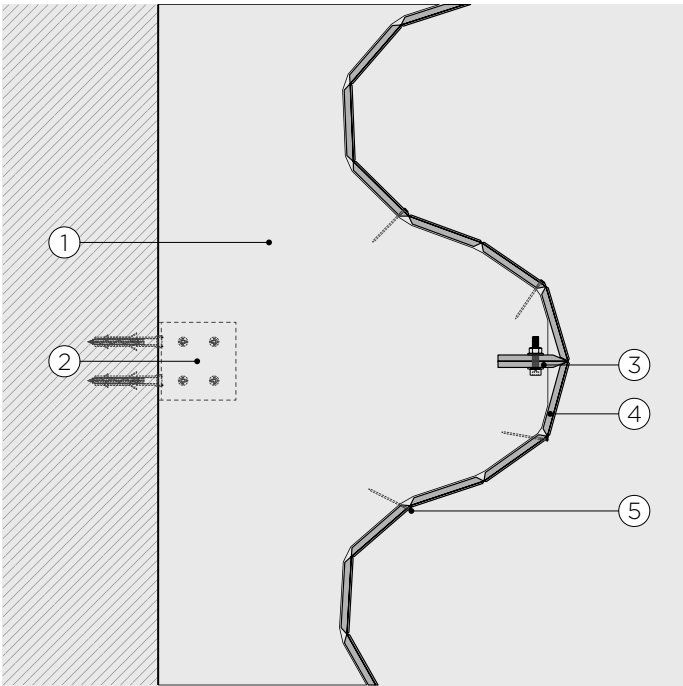
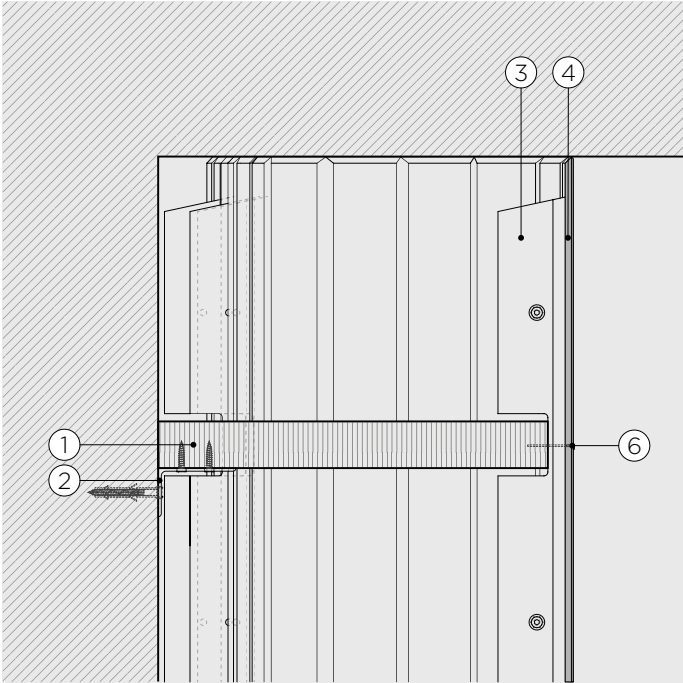
WALL INSTALLATION
Fluid



This classic WOOD-SKIN pattern consists of a series of millings usually running longitudinally across the surface, despite the simplicity of the geometrical compositions it can be designed and shaped in an unlimited variety of forms.

D1

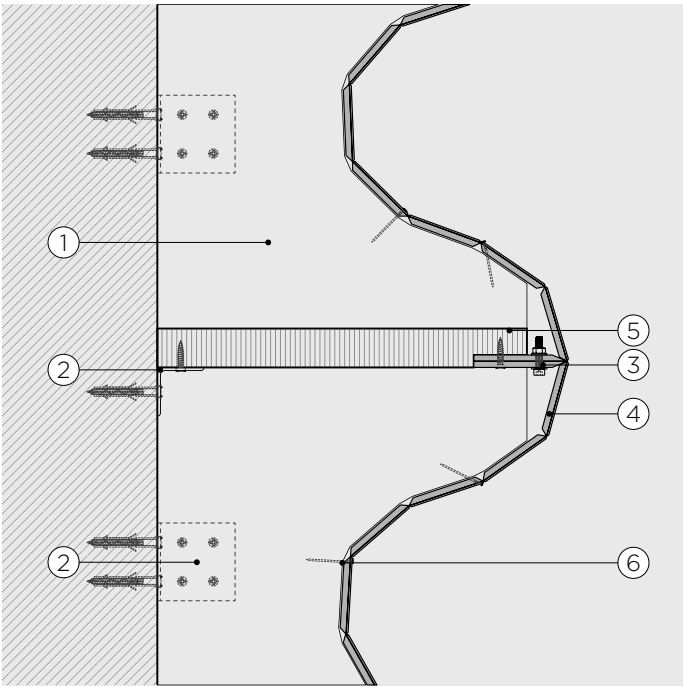
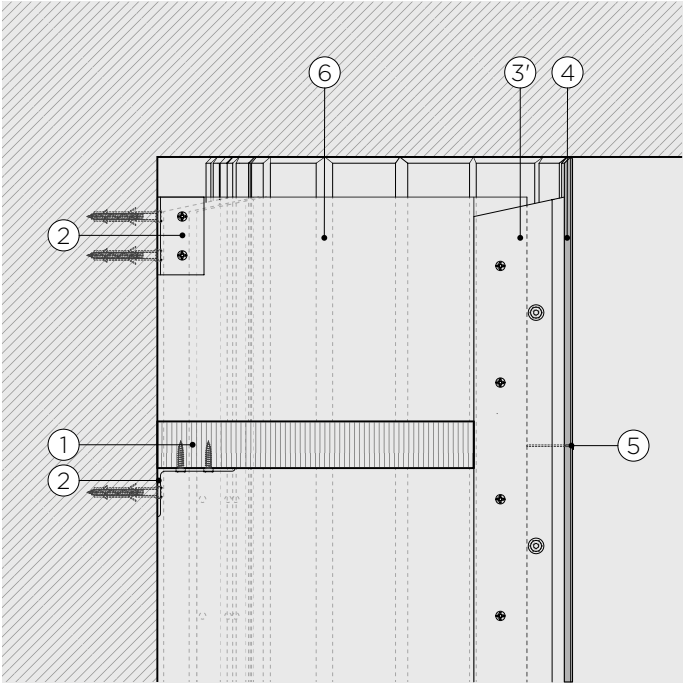
Attachment with horizontal jigs

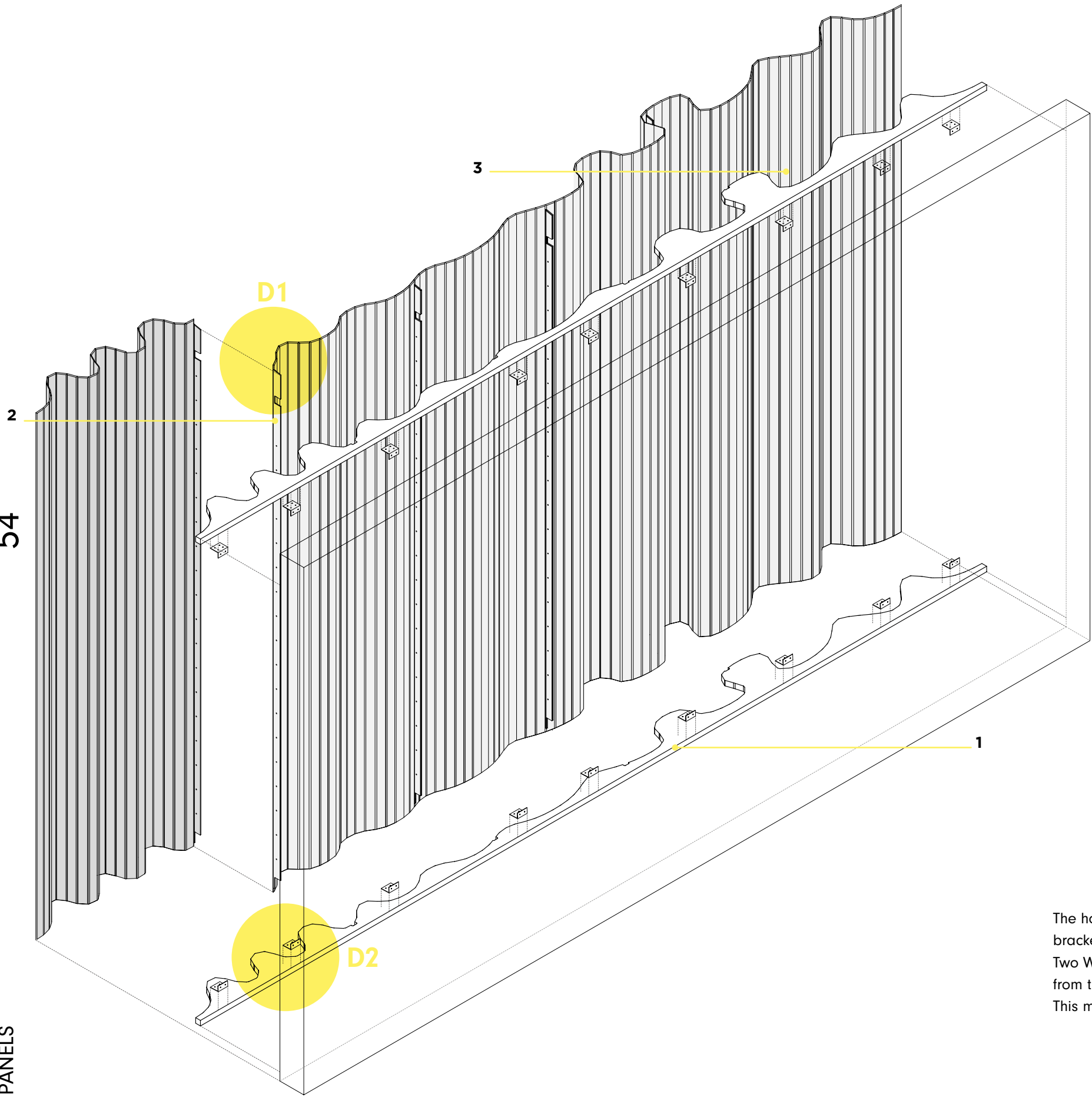


- 1- Custom cut horizontal plywood jig – thickness: 30mm
- 2- L-shaped metal profile – aluminium
- 3- W-S with custom cut
- 3'- W-S flap
- 4- W-S sandwich
- 5- Custom cut vertical plywood jig – thickness: 25mm
- 6- Brad/Finishing nail

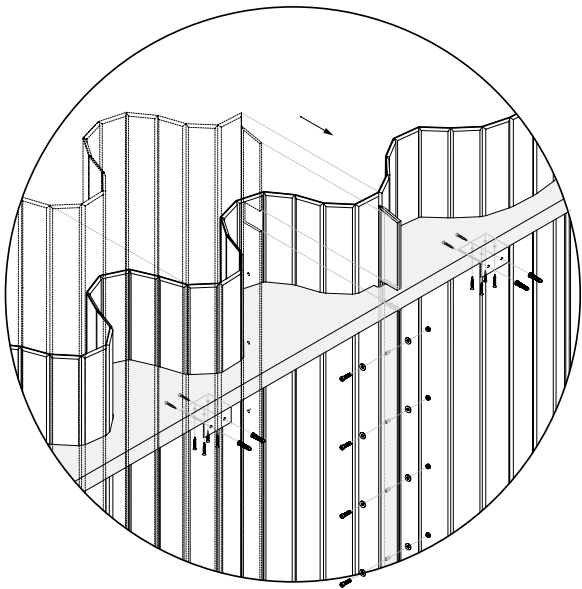
D2

Attachment with horizontal and vertical jigs

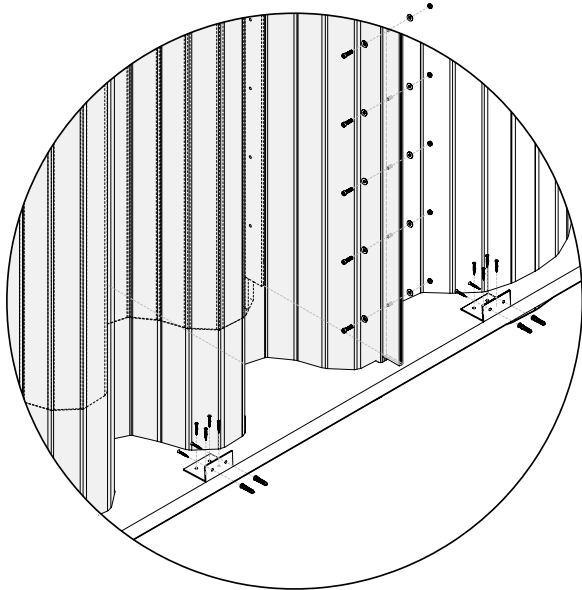




DETAILS



D1
Attachment jig to wall



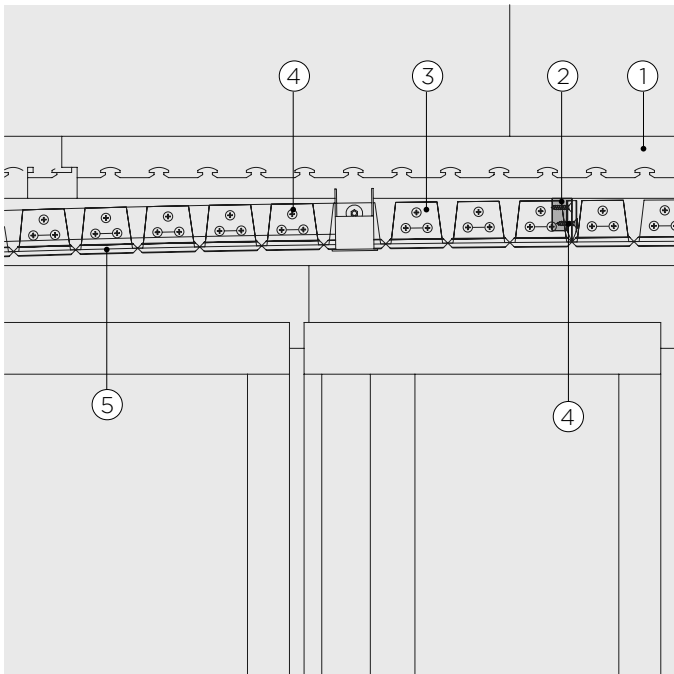
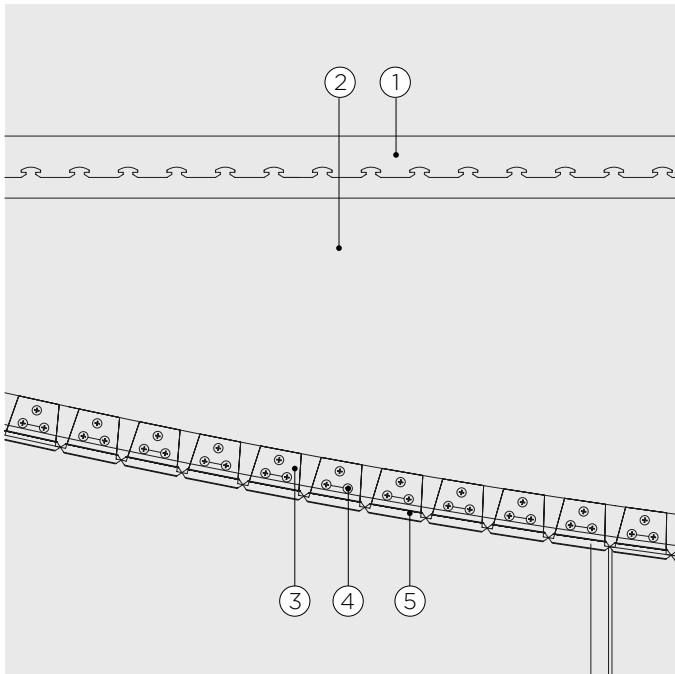
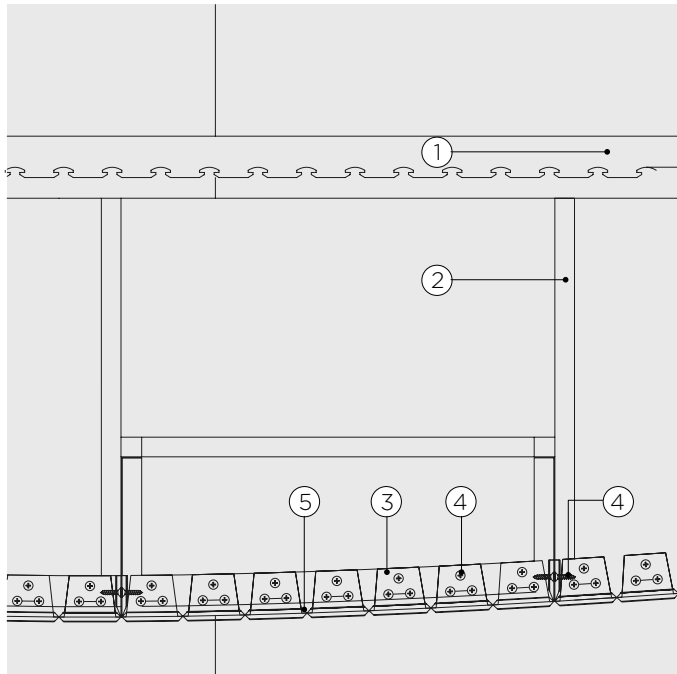
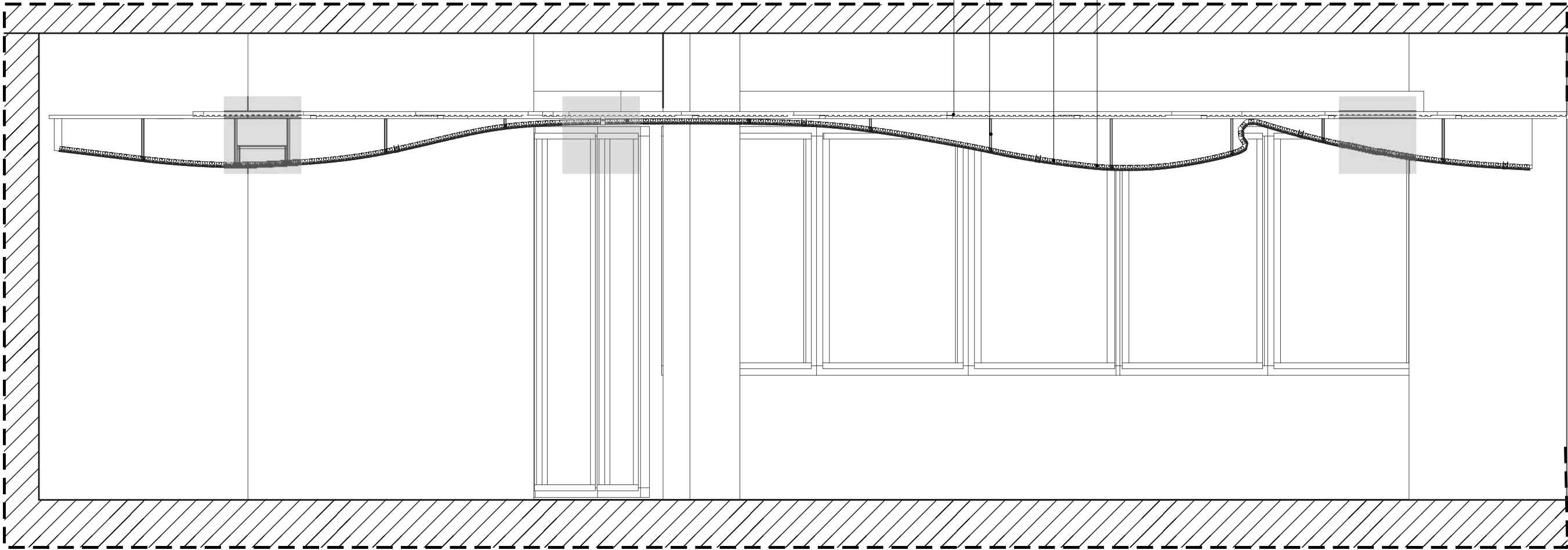
D2
Flap joint and
attachment to jig

The horizontal custom cut jigs provided by WOOD-SKIN are installed to the wall with L-shaped metal bracket **1**.
Two W-S surfaces are joined by the flaps **2**. The joined surfaces are then placed on the jigs. Starting from the side and proceeding along the length, the sheets are fixed onto the jig with brad nails **3**.
This membrane match the shape of the jig precisely thanks to the digital fabrication process!

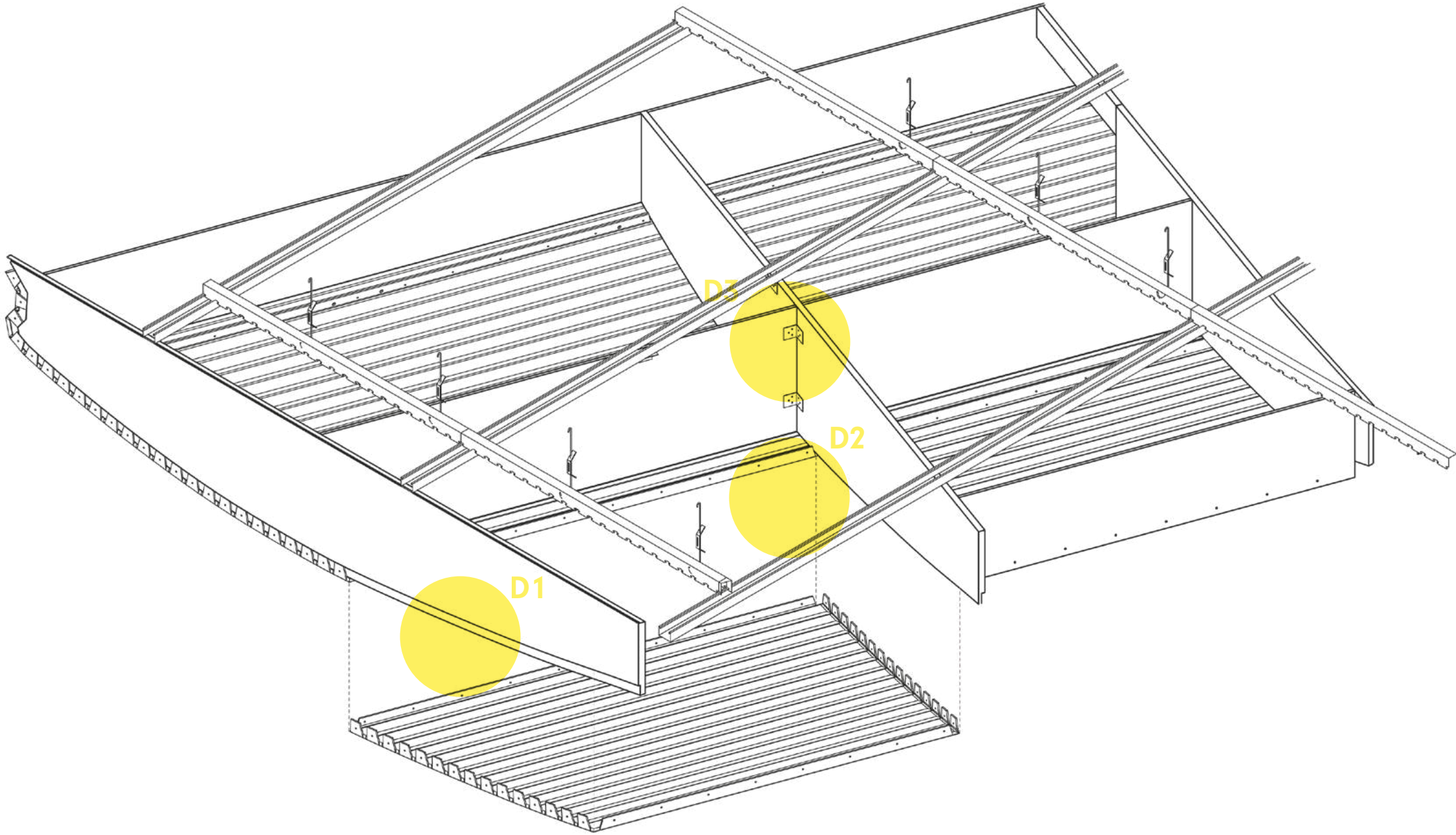
TPOLOGY: Tailor Made Fluid
INSTALLATION: Ceiling
MATERIAL: Veneered okoume
NAME: Accuracy
DESIGN: Atelier Flow
LOCATION: Paris - France
CATEGORY: Workspace
YEAR: 2019
PHOTO CREDITS: Frederic Atlan



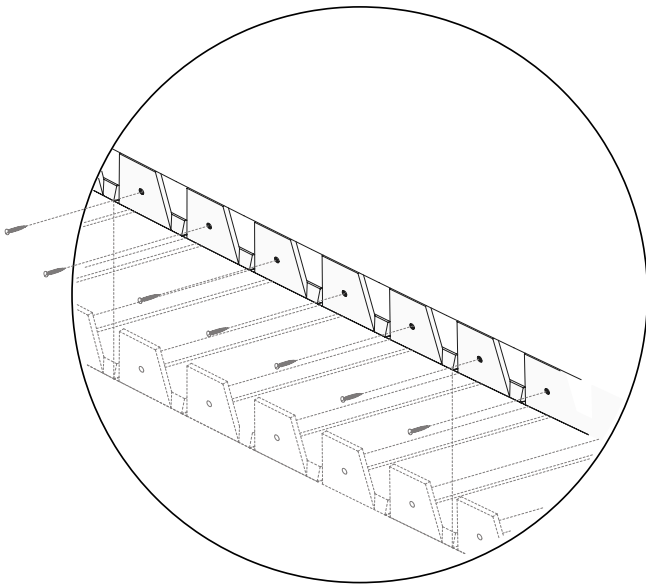
CEILING INSTALLATION
Fluid



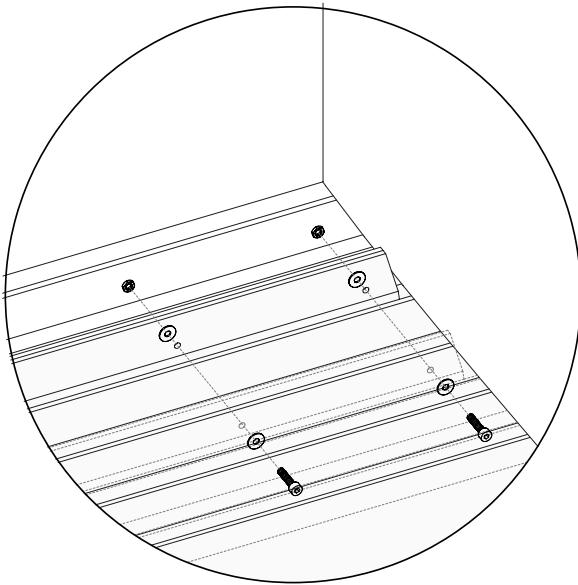
- 1- Metal substructure
- 2- Wooden jigs
- 3- W-S flaps
- 4- Wooden screw
- 5- W-S sandwich



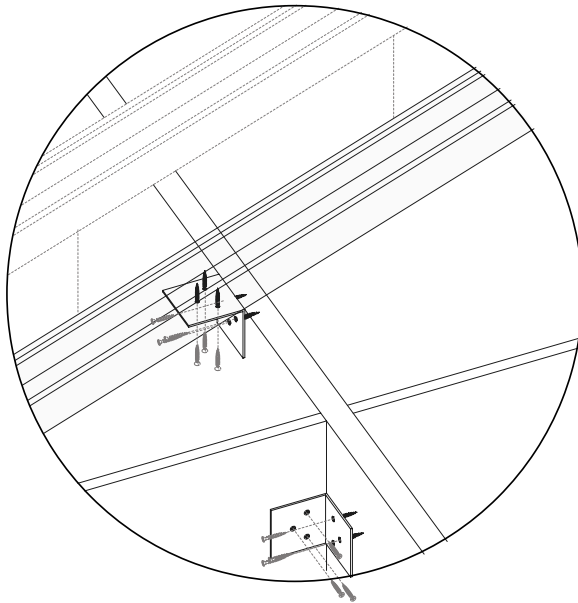
DETAILS



D1
Attachment surface to jig



D2
Flap joint

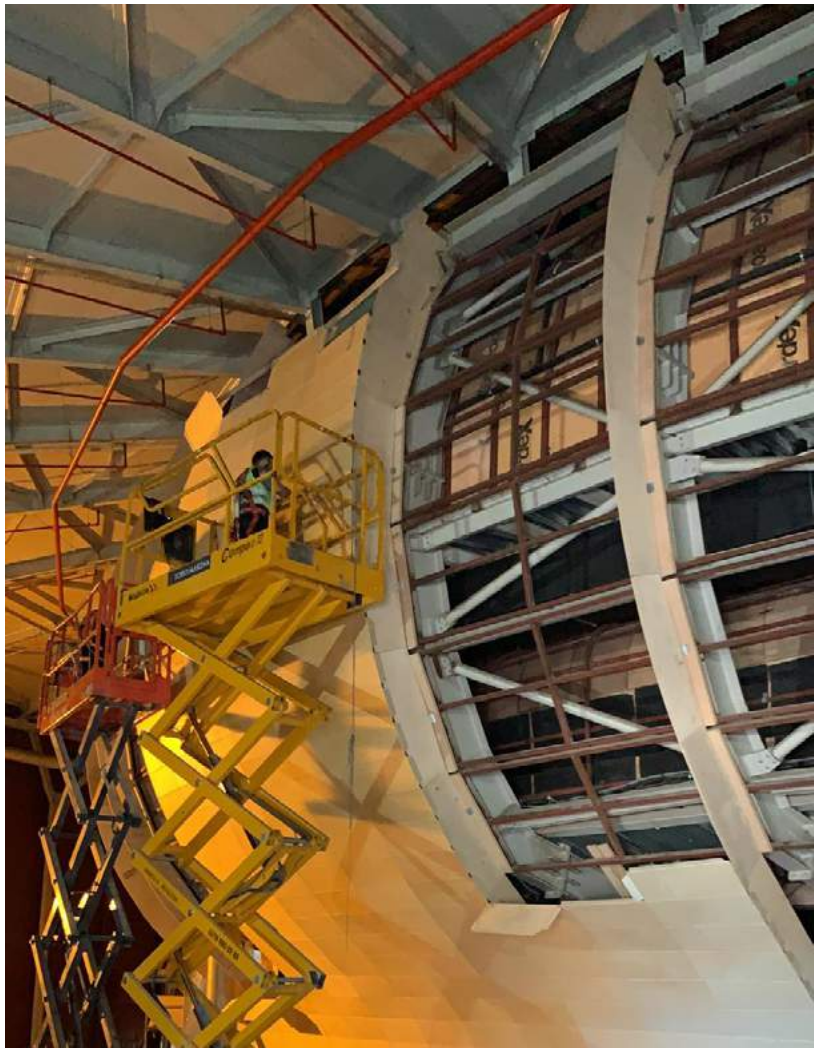


D3
Attachment jig to ceiling structure

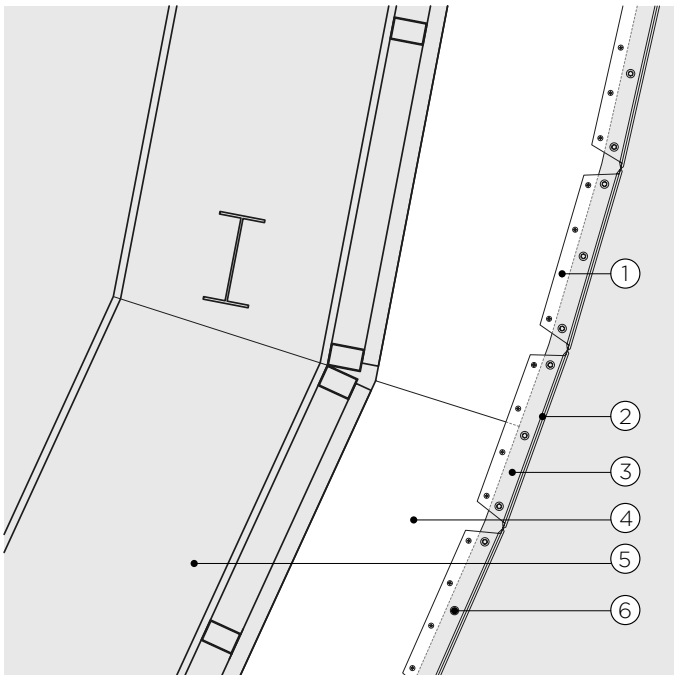
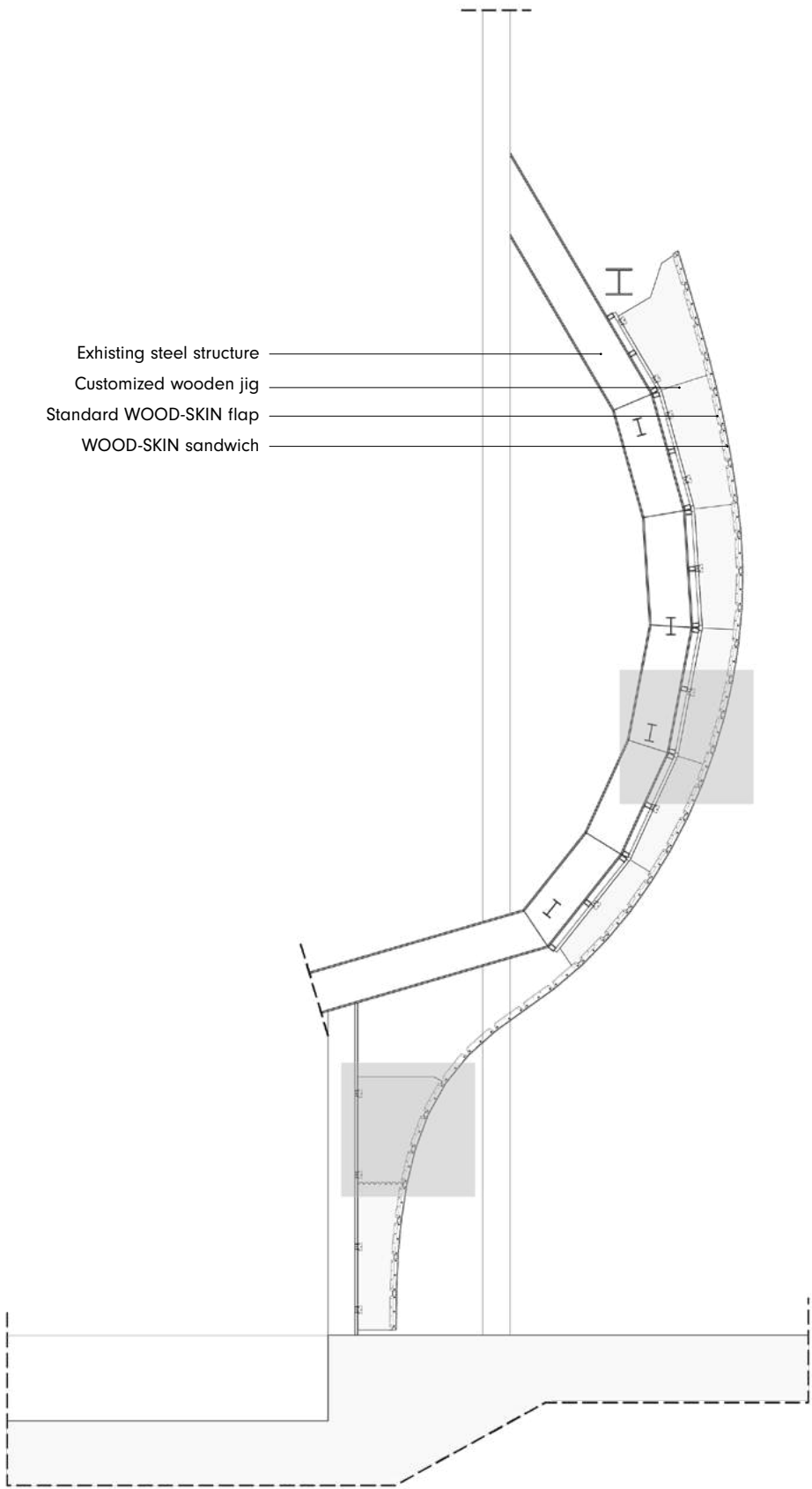
TPOLOGY: Tailor Made Wave
INSTALLATION: Wall
MATERIAL: Birch plywood
NAME: Muze Gazhane
DESIGN: DS ARCHITECTS
LOCATION: Istanbul - Turkey
CATEGORY: Institutional
YEAR: 2019



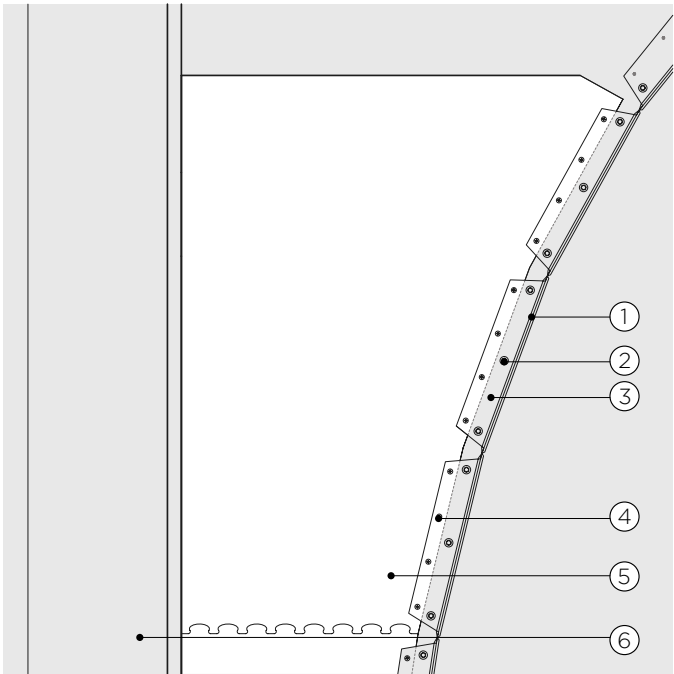
WALL INSTALLATION
Wave



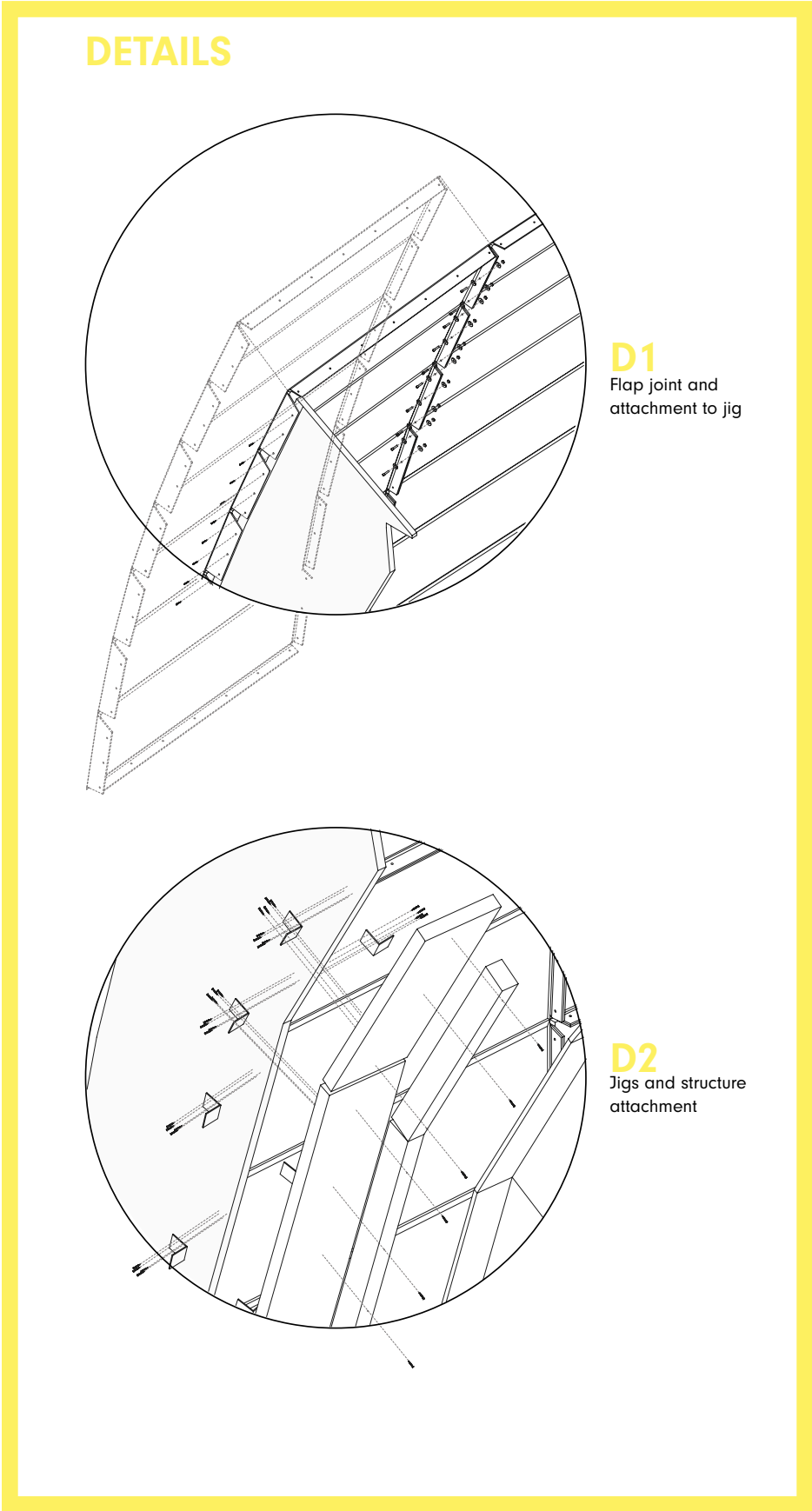
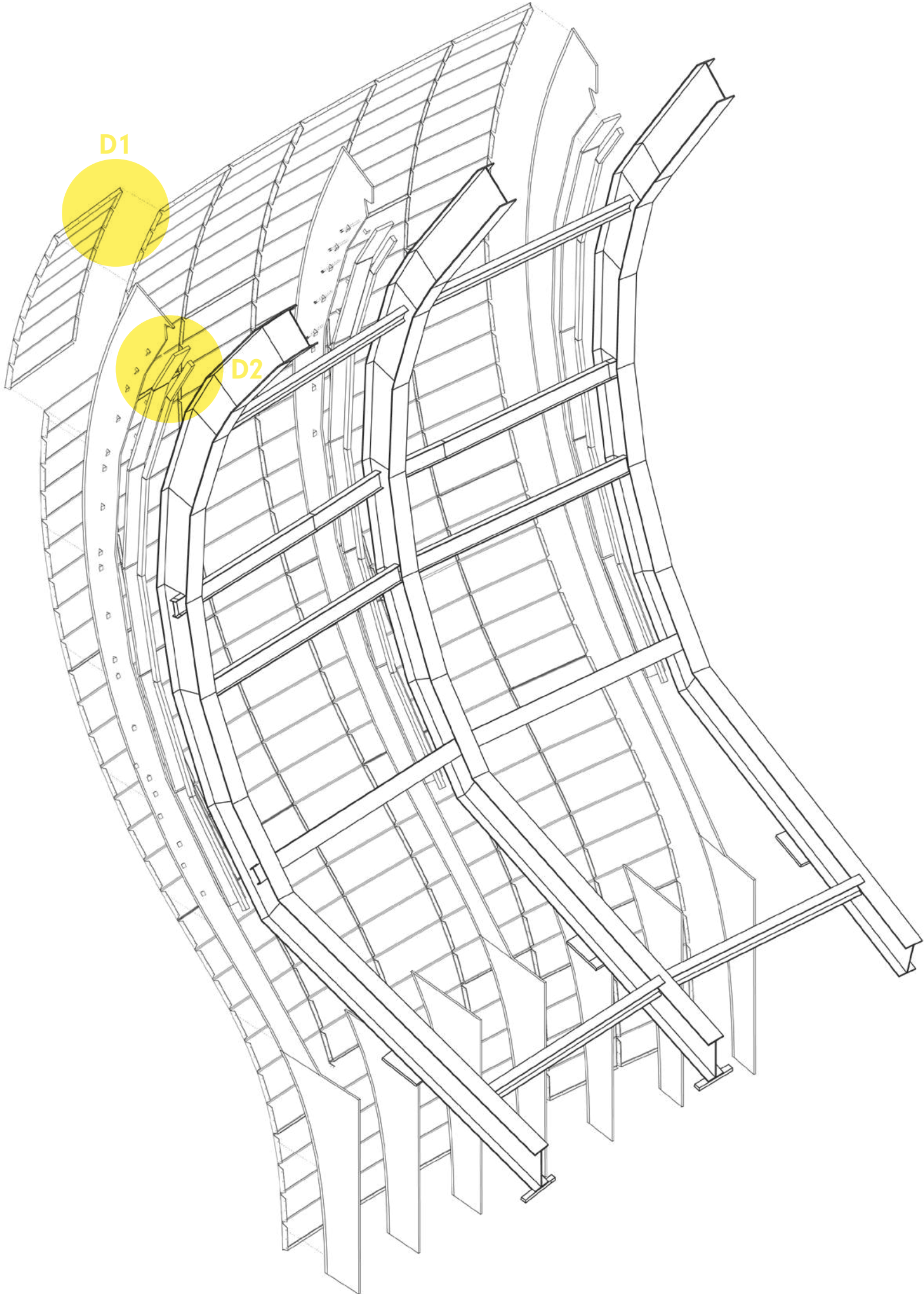
This unique typology of Tailor-Made surfaces makes it possible to create stunning double curvature surfaces. Its magic lies in its creation and design. Double curvature surfaces are thought to be too complex to build due to the bending of the surface happening in different directions (like domes or spheres).



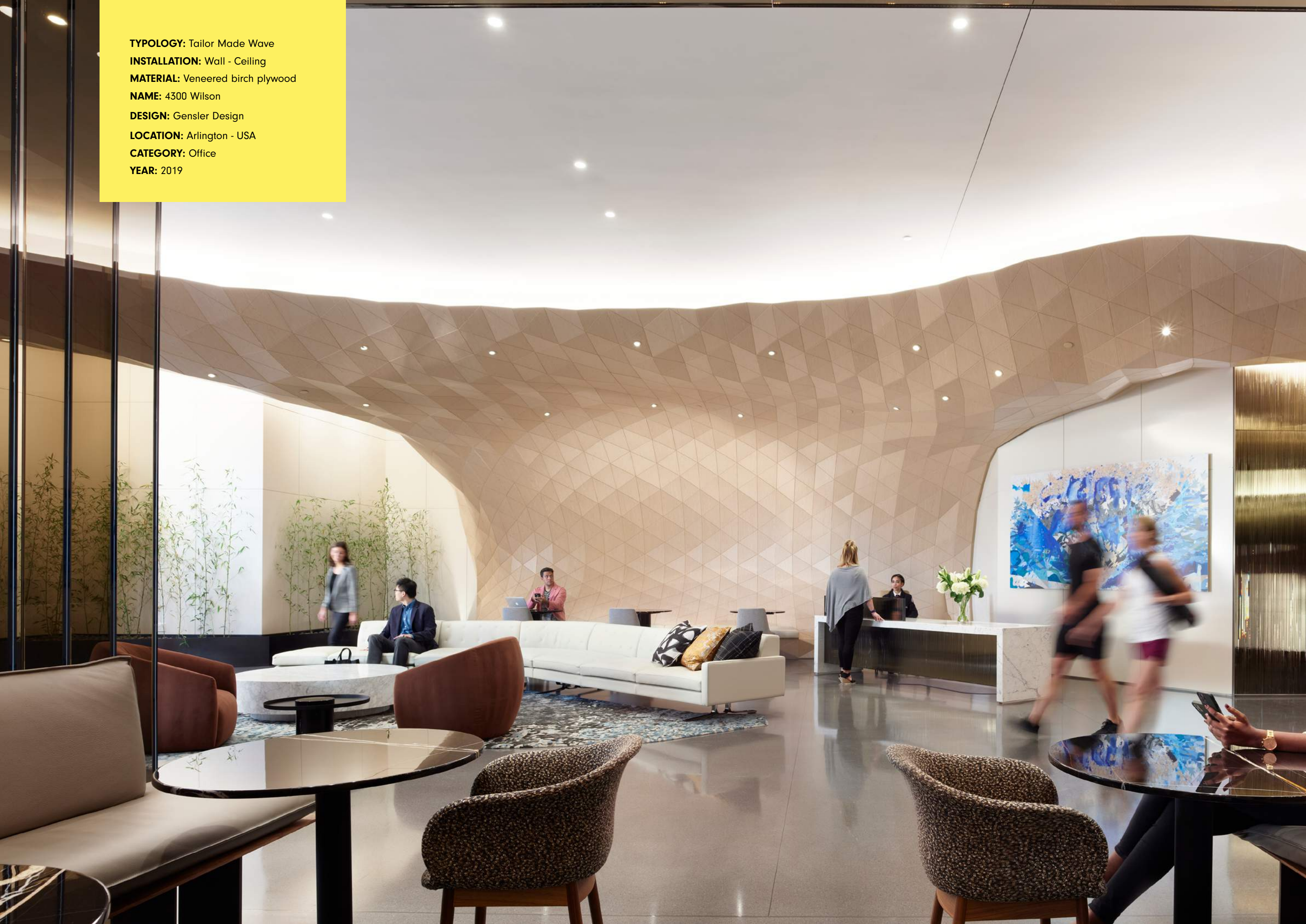
- 1- Wood screw
- 2- W-S sandwich
- 3- W-S flap
- 4- Customized wooden jig
- 5- Existing steel structure
- 6- M4 system | Socket screw + 2 Washers + Nuts



- 1- Wood-Skin sandwich
- 2- M4 system | Socket screw + 2 Washers + Nuts
- 3- Wood-Skin flap
- 4- Wood screw
- 5- Customized wooden jig
- 6- Existing steel structure

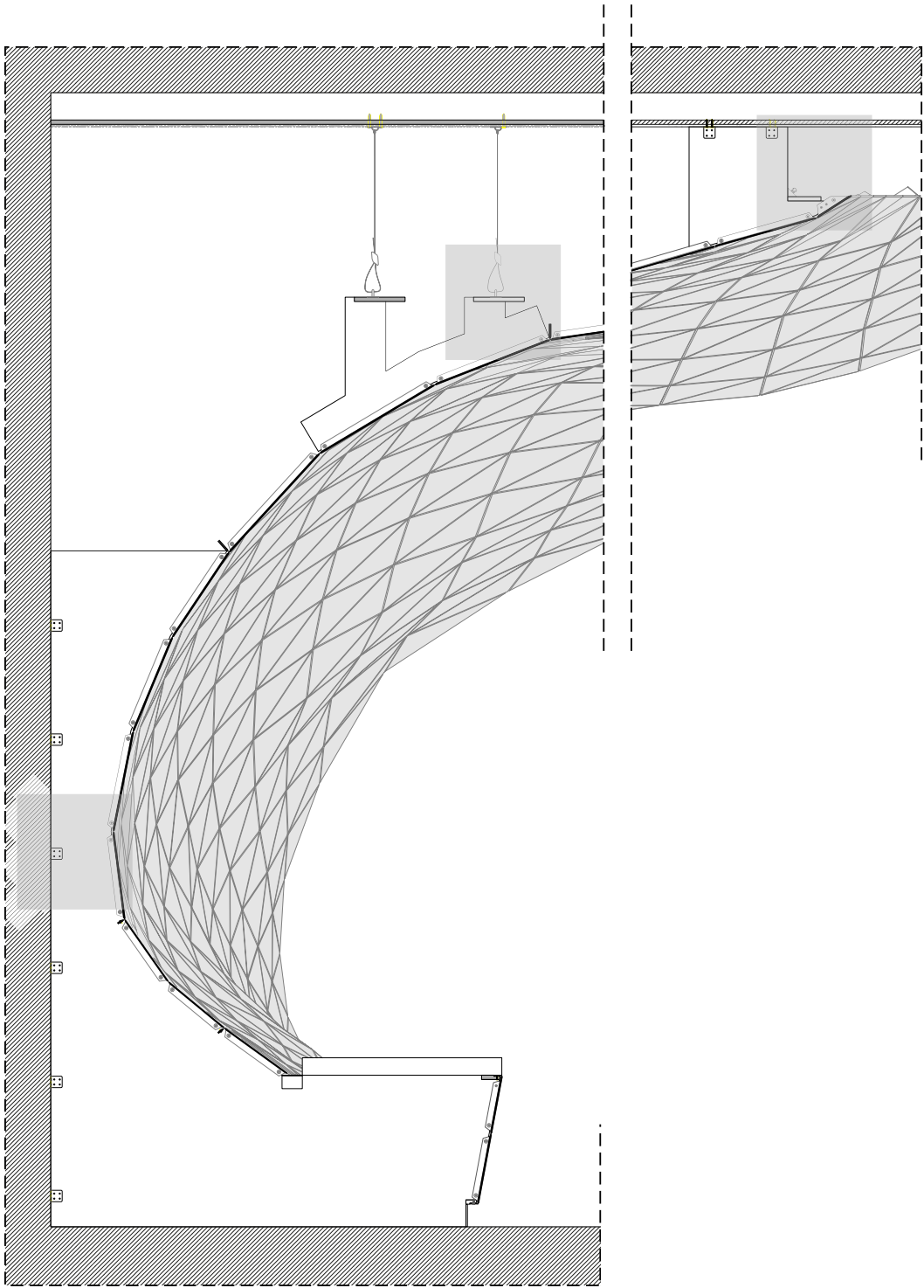


TPOLOGY: Tailor Made Wave
INSTALLATION: Wall - Ceiling
MATERIAL: Veneered birch plywood
NAME: 4300 Wilson
DESIGN: Gensler Design
LOCATION: Arlington - USA
CATEGORY: Office
YEAR: 2019

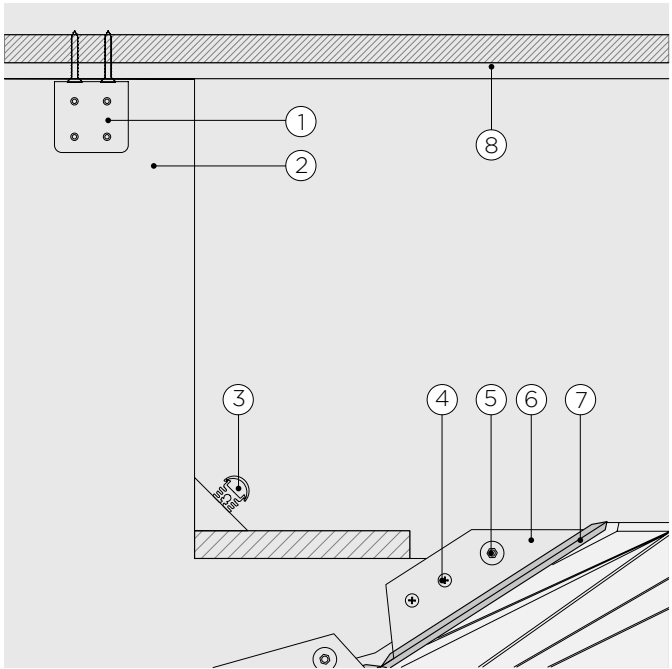


CANOPY INSTALLATION

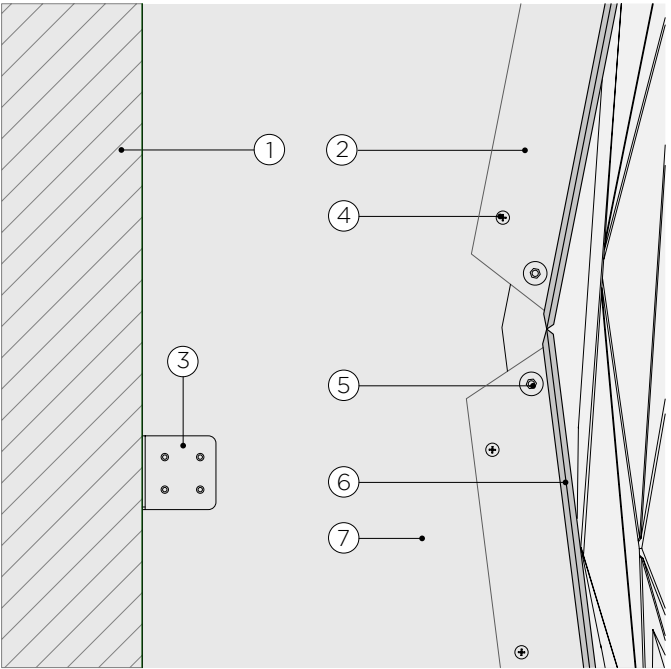
Wave



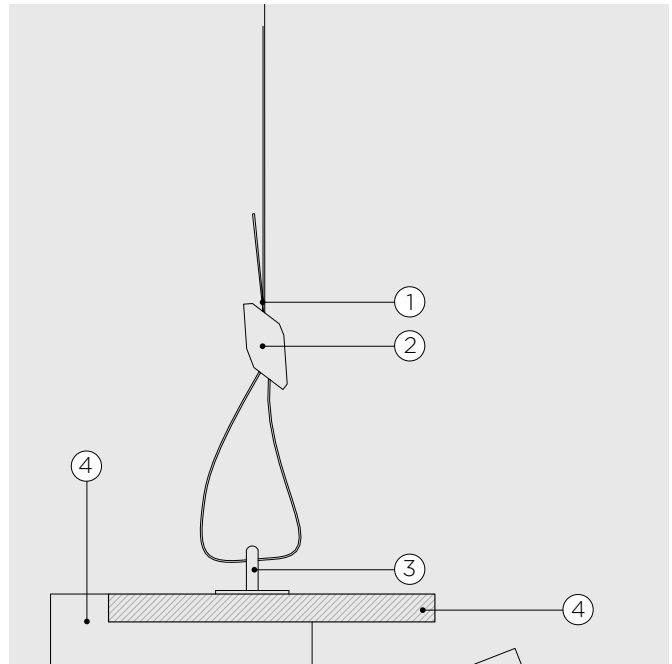
The canopies and similar installations are realised with vertical supporting jigs with cutouts accommodating the WOOD-SKIN flaps. The special pivoting system joining the flaps to the jigs ensures that even the most complex geometry can be installed. Additional suspension cables can be added depending on the complexity of the surface and the supporting structure density.



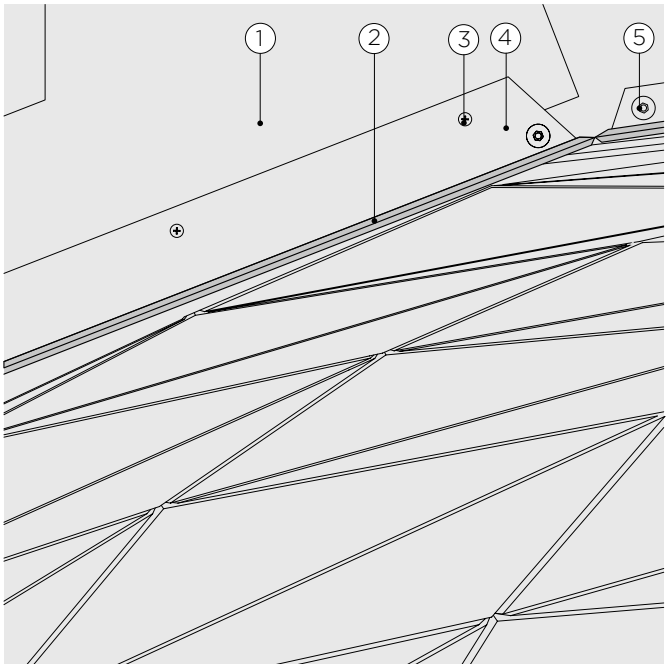
- 1- L joint plate
- 2- Wooden jig
- 3- Light feature
- 4- Wood screw
- 5- M4 system | Socket screw + 2 Washers + Nuts
- 6- W-S flap
- 7- W-S sandwich
- 8- Ceiling



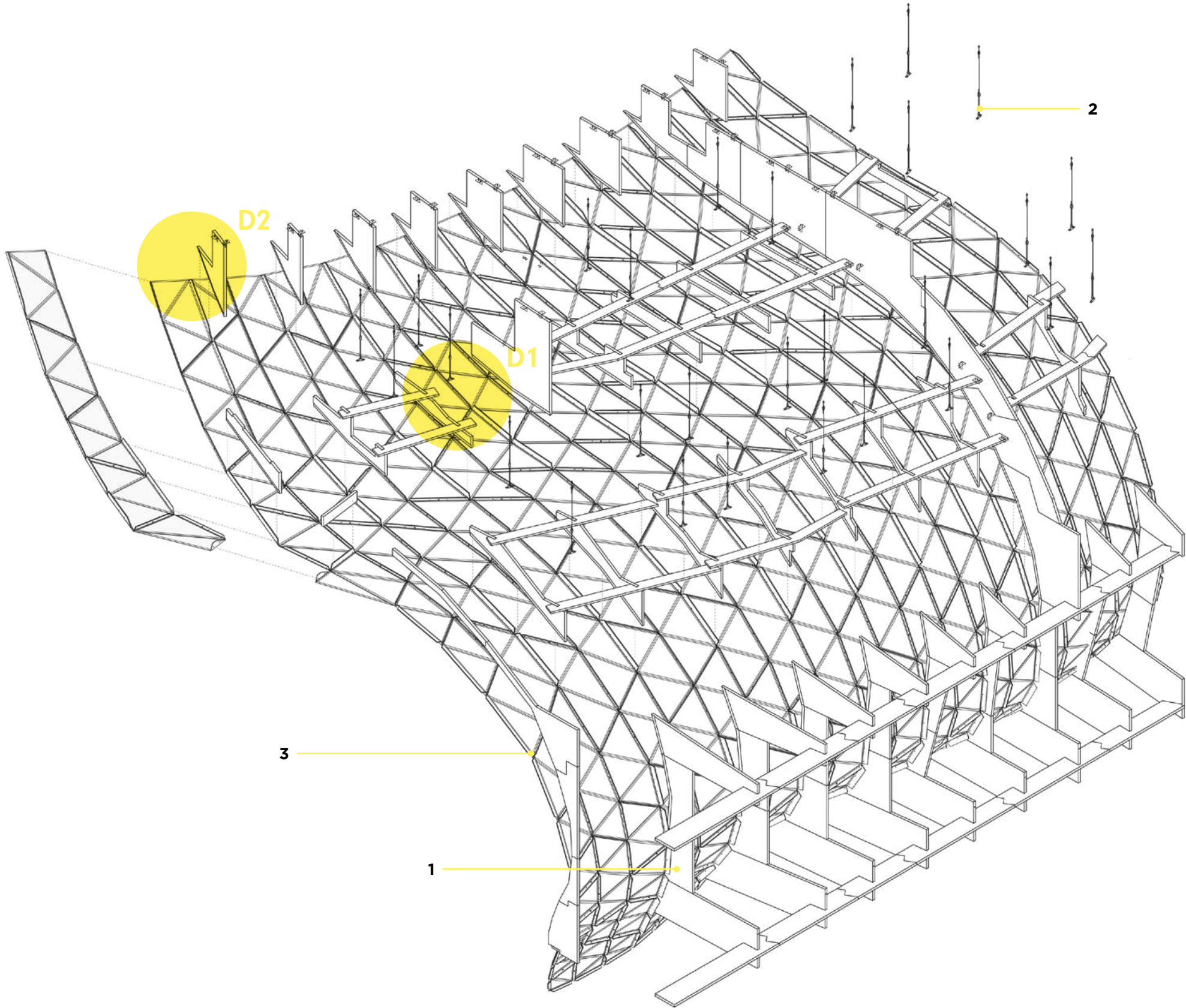
- 1- Wall
- 2- W-S flap
- 3- L joint plate
- 4- Wood screw
- 5- M4 system | Socket screw + 2 Washers + Nuts
- 6- W-S sandwich
- 7- Wooden jig



- 1- Steel cable
- 2- Gripper + hanging system
- 3- U-bolt plate
- 4- Wooden jig

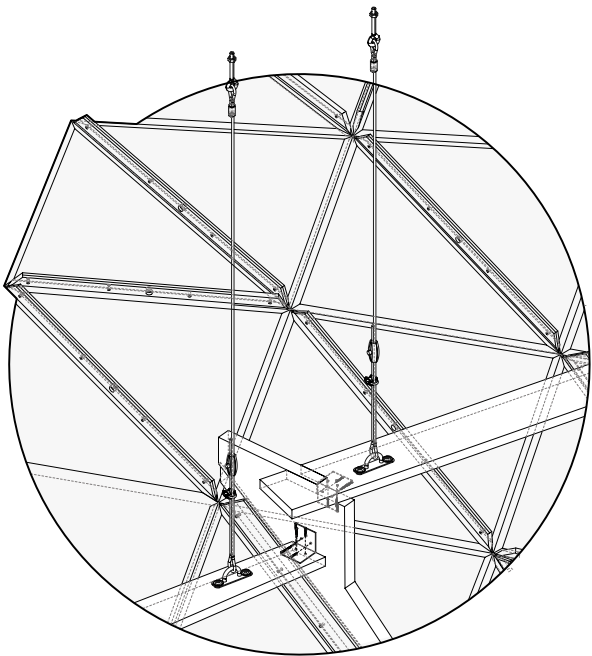


- 1- Wooden jig
- 2- W-S sandwich
- 3- Wood screw
- 4- W-S flap
- 5- M4 system | Socket screw + 2 Washers + Nuts

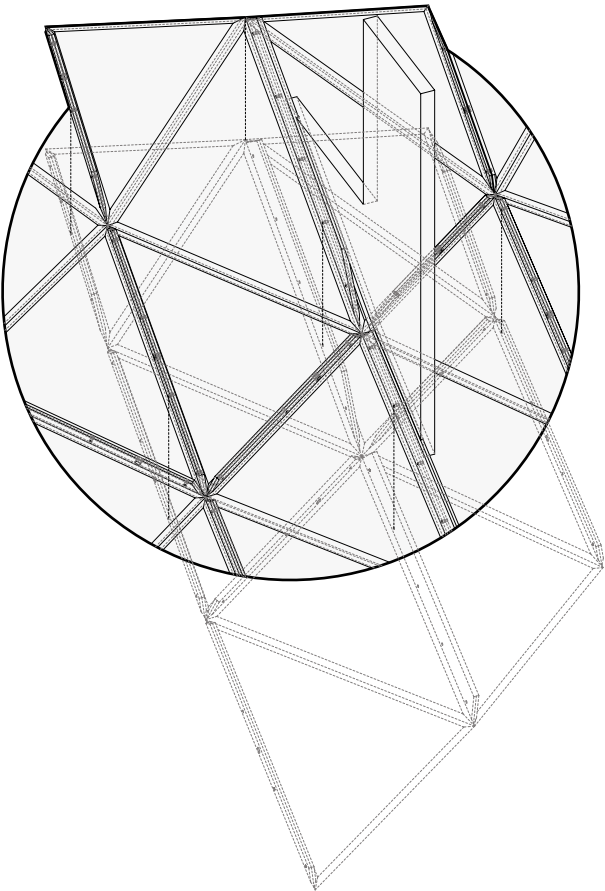


DETAILS

D1
Inner flap joint to vertical
jig through pivoting
bracket system



D2
Inner flap joint to vertical jig



TPOLOGY: Tailor Made Cloth

INSTALLATION: Ceiling

MATERIAL: Varnished okoume plywood

NAME: United Nation Palace, Room XIX

CLIENT: State of Qatar for UN organization

DESIGN: Peia Associati

LOCATION: Geneva - Switzerland

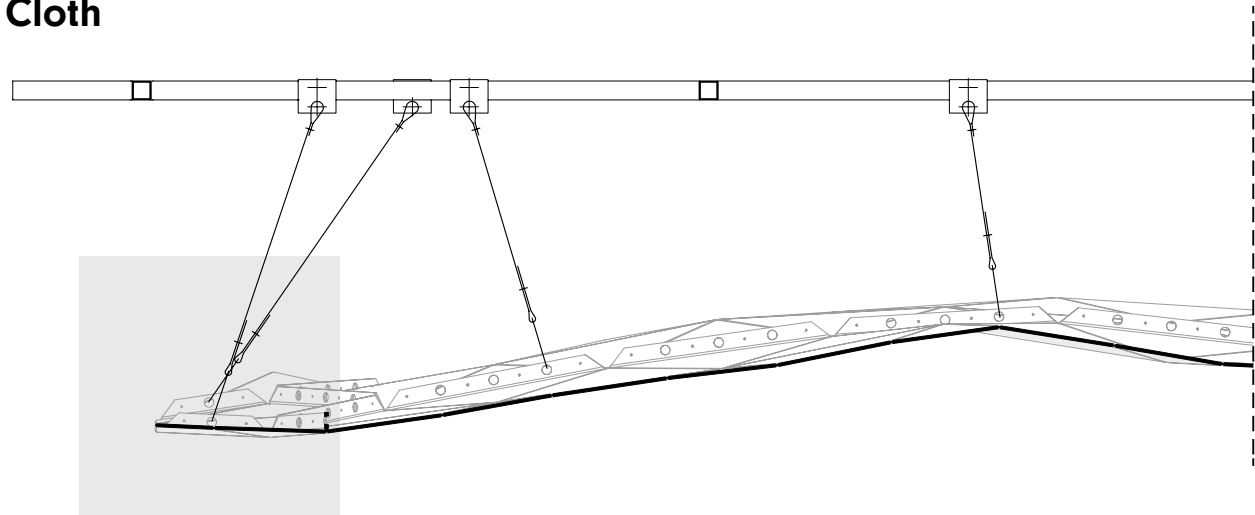
CATEGORY: Institutional

YEAR: 2019

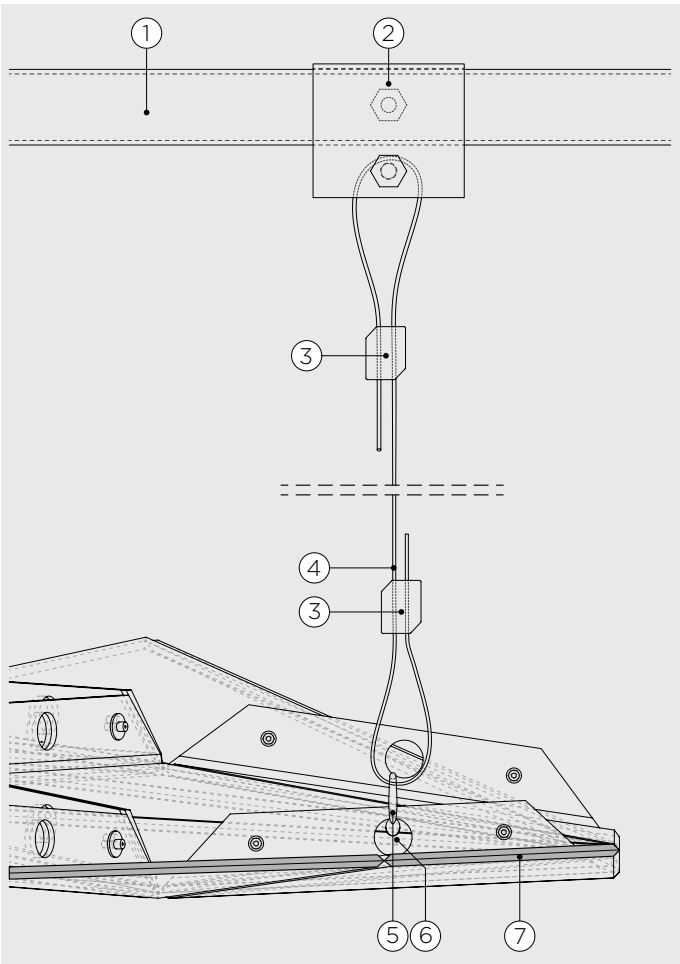
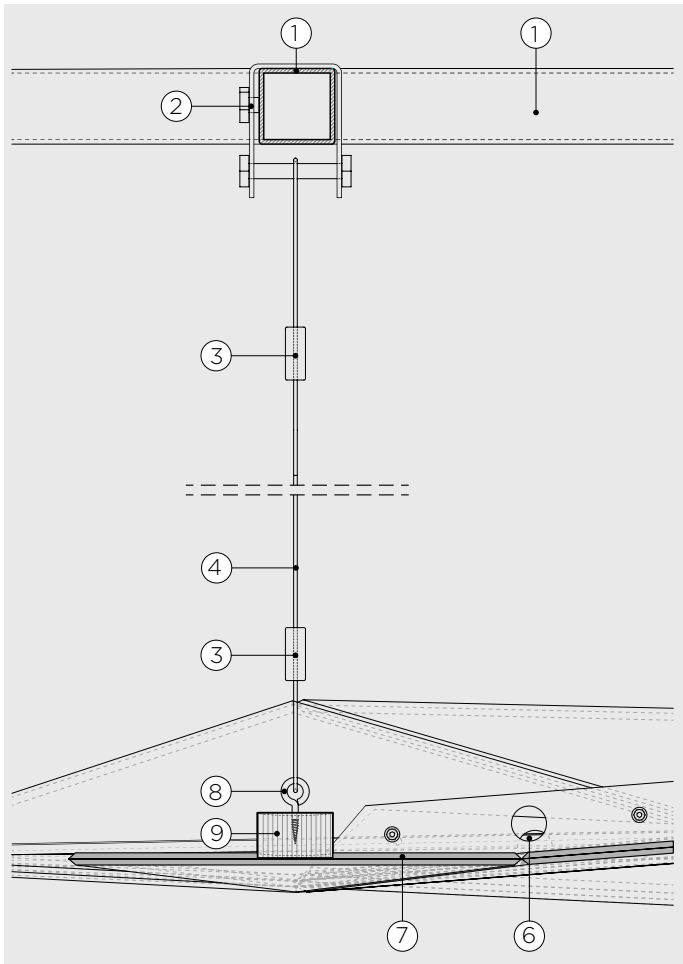
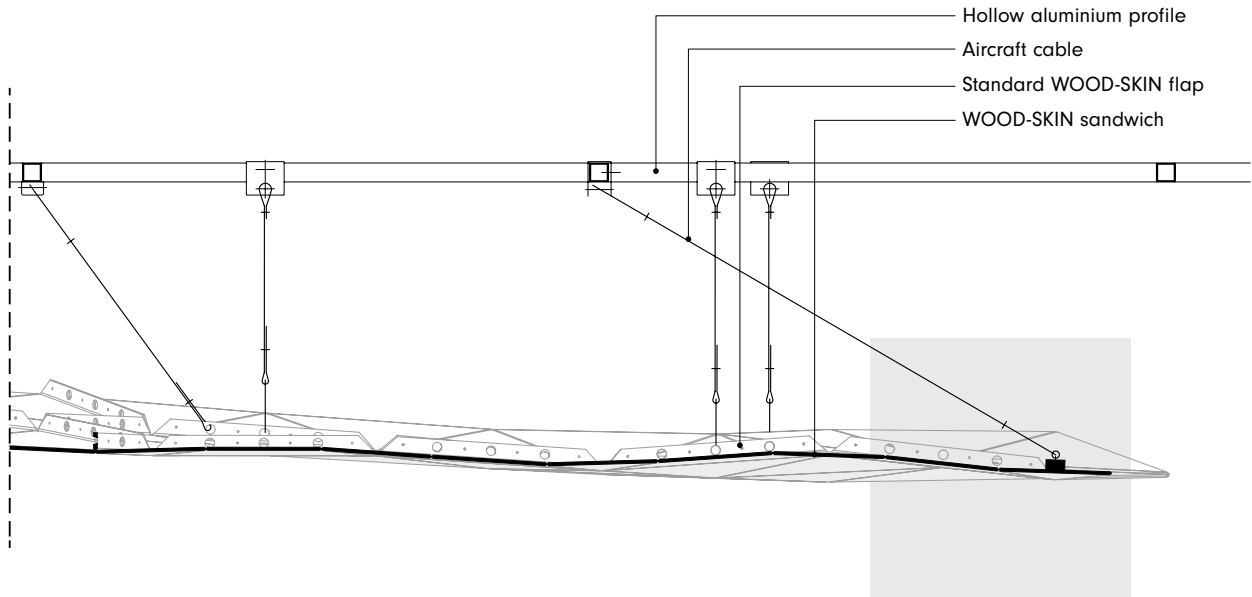
PHOTO CREDITS: Delfino Sisto Legnani
DSL studio



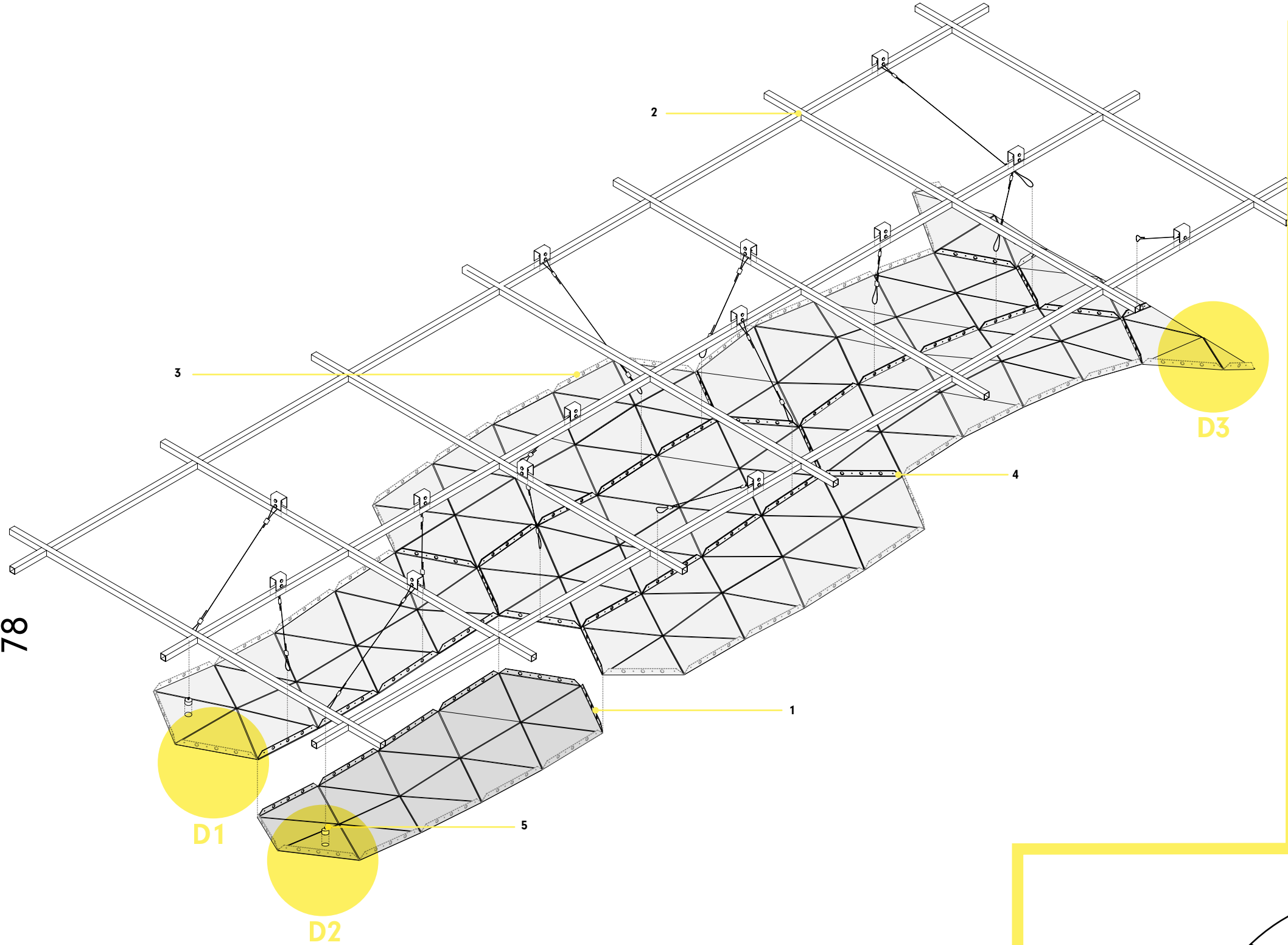
CEILING INSTALLATION
Cloth



WOOD-SKIN's Cloth-type panels open the doors to an entirely new category of architectural surfaces, free-form and textile-like aesthetics that were simply believed to be possible to achieve are now in every designer's toolbox. A truly random membrane that will never repeat itself.



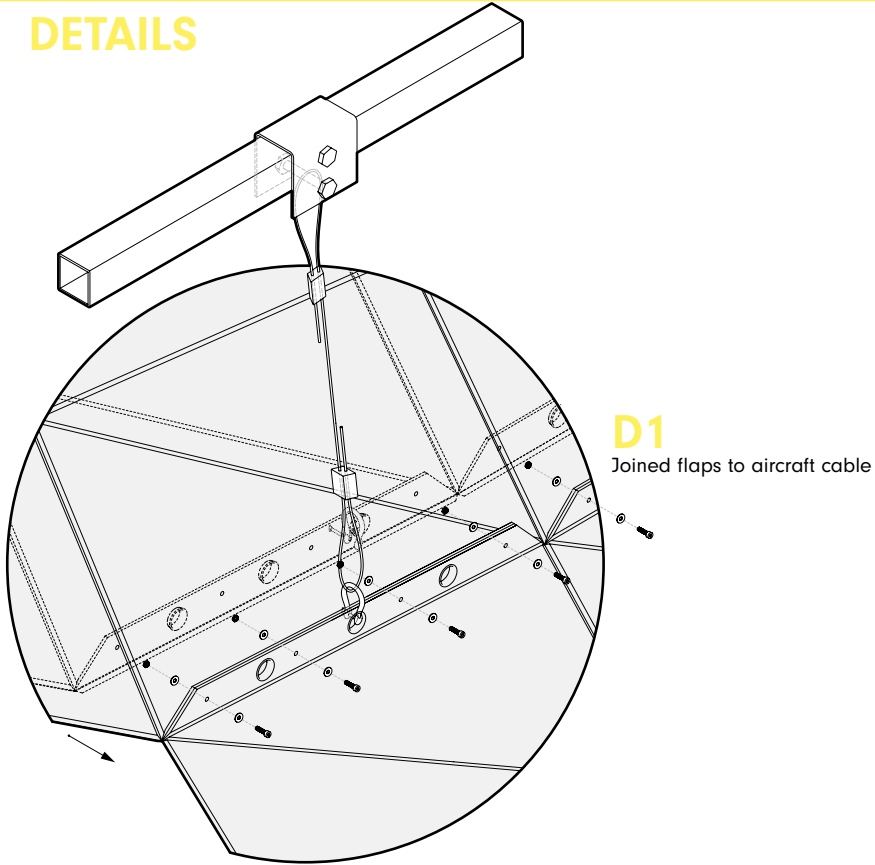
- 1- Hollow aluminium profile
- 2- Steel bracket
- 3- Adjustable self-locking wire rope grip
- 4- Aircraft cable
- 5- Shackle
- 6- Hanging hole
- 7- W-S sandwich
- 8- Self-tapping screw with eyelet
- 9- Glued wooden profile



Two or three WOOD-SKIN surface pieces are joined together by the flaps 1. The steel brackets and aircraft cables are installed only in a portion of the ceiling 2. The W-S pieces are attached to the aircraft cables by the dedicated holes in the flaps 3. Always try to keep the cables in tension!

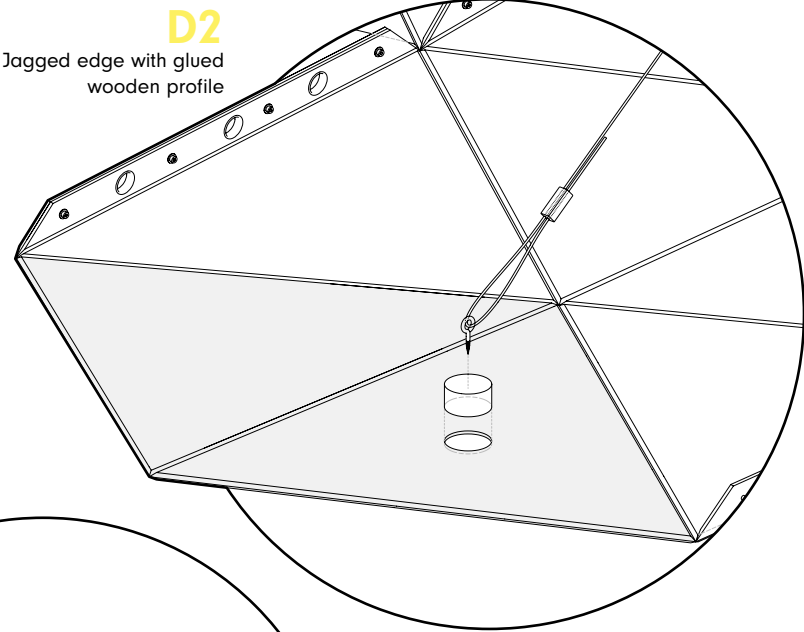
Two options are provided for the ceiling boundaries. For a straight edge effect, custom cut WOOD-SKIN sheets are provided. They are attached to the aircraft cable through standard hanging holes 4. For a jagged edge, the WOOD-SKIN sheets are attached to the aircraft cable by wooden profiles glued to the back surface, allowing the aircraft cable to be concealed 5.

DETAILS



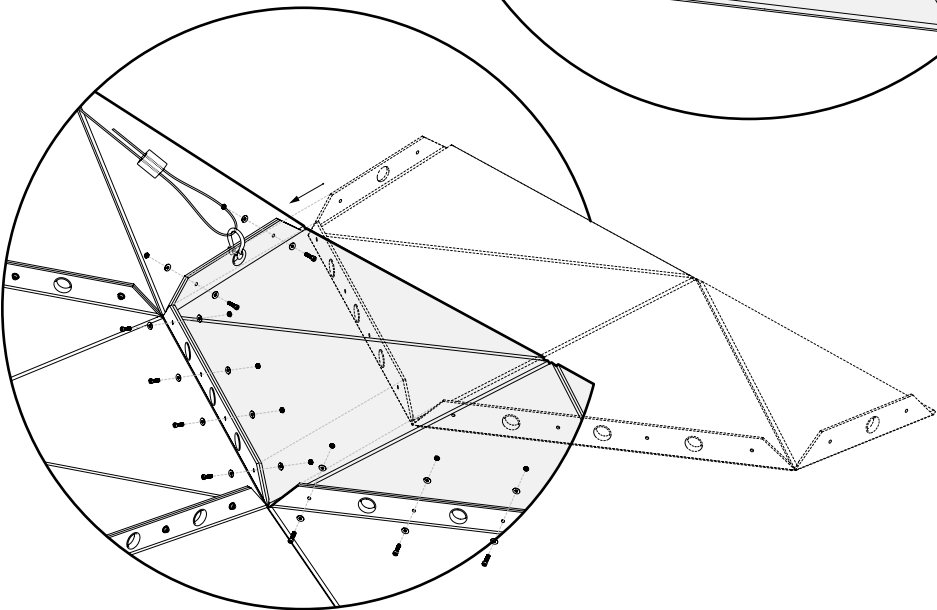
D1

Joined flaps to aircraft cable



D2

Jagged edge with glued wooden profile



D3

Flat edge with custom Wood-Skin sheet

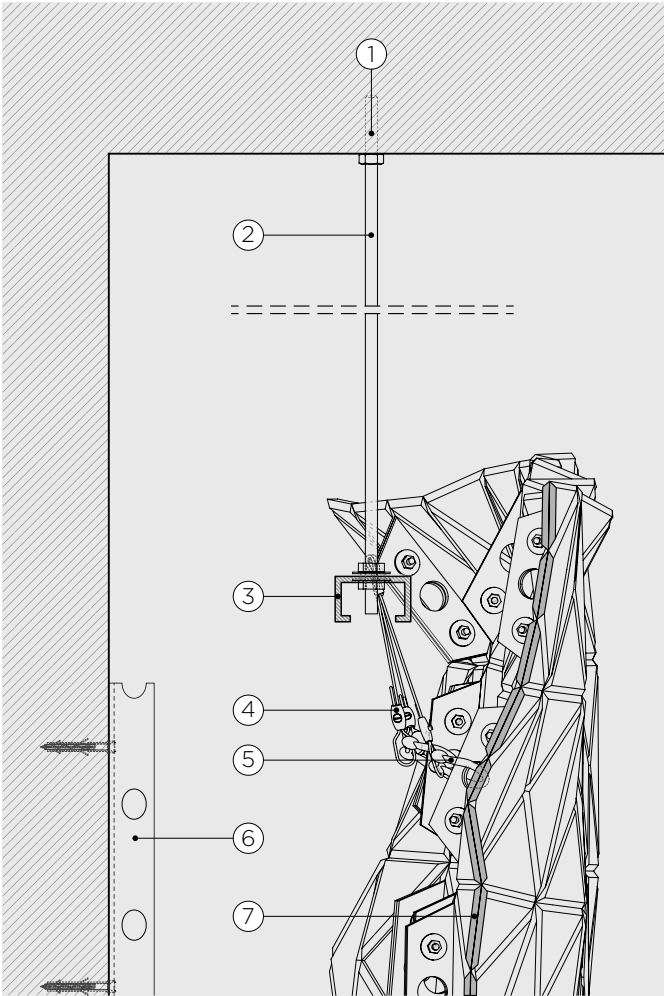
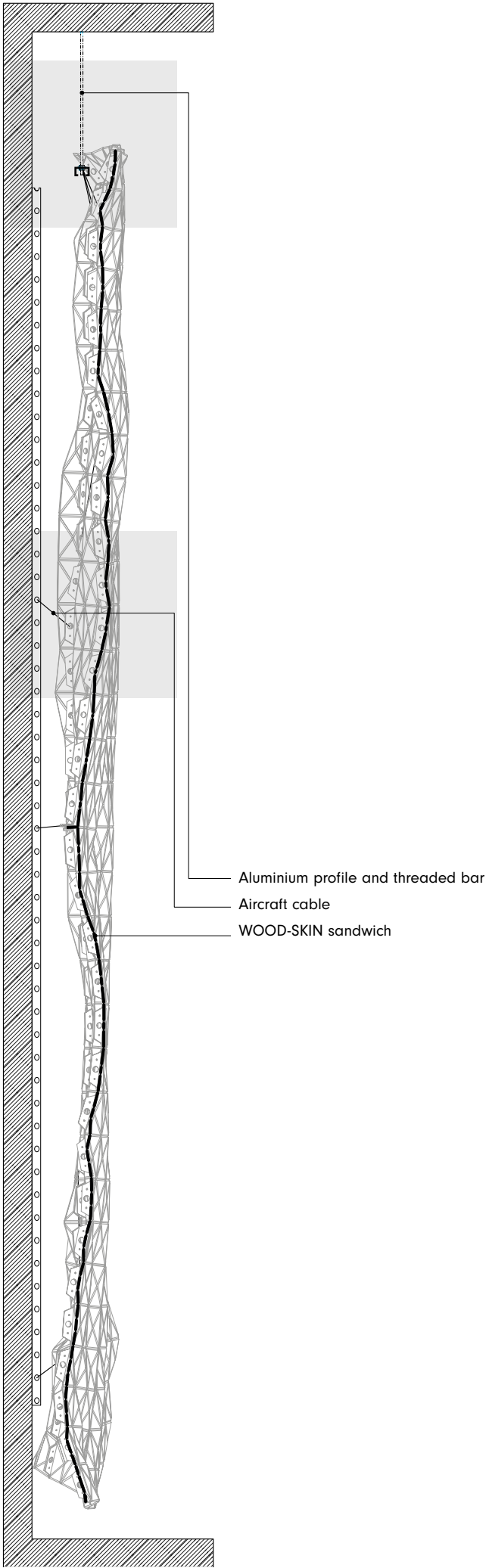
TYPOLOGY: Tailor Made Cloth
INSTALLATION: Wall
MATERIAL: Walnut finished birch
NAME: Reign Restaurant
CLIENT: Base LCC
LOCATION: Dubai - UAE
CATEGORY: Hospitality
YEAR: 2016
PHOTO CREDITS: WOOD-SKIN



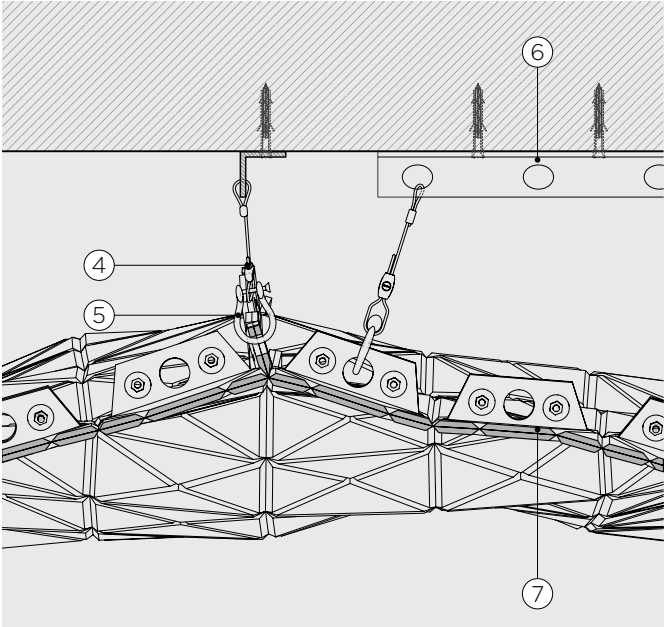
WALL INSTALLATION
Cloth

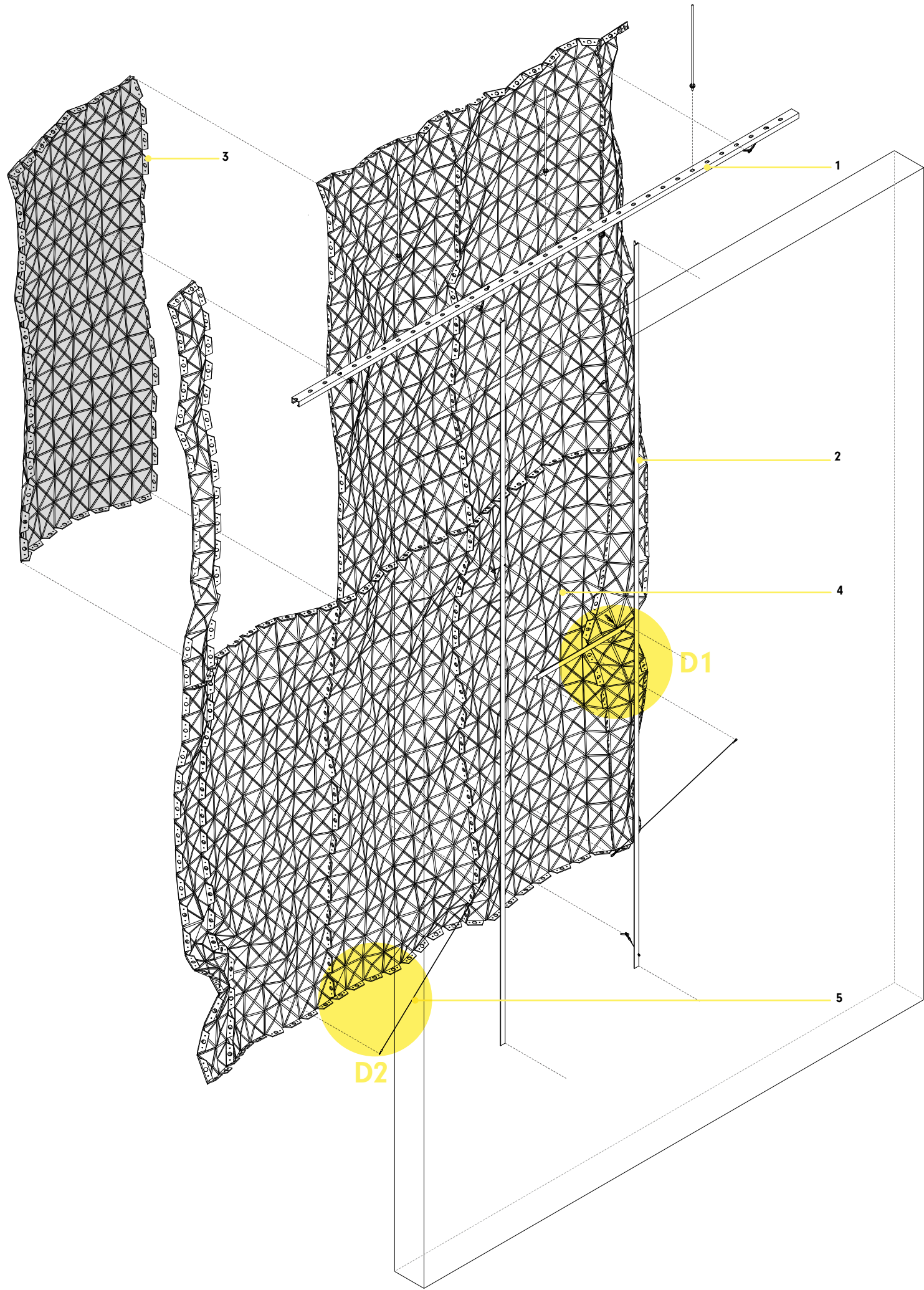


Similar to the suspended ceiling, for creating a soft curtain-like wall in WOOD-SKIN, a suspension wire system is used. The additional elements needed for realising a suspended wall are the vertical and horizontal L-profiles priorly attached to the existing wall, to which the aircraft cables are connected. The fixing elements are selected by the WOOD-SKIN installation team based on the wall typology.



- 1. Anchor bolt
- 2. Threaded bar
- 3. U-shaped metal profile – aluminium
- 4. Aircraft cable with adjustable self-locking wire rope grip
- 5. Shackle
- 6. L-shaped metal profile – aluminium
- 7. W-S sandwich

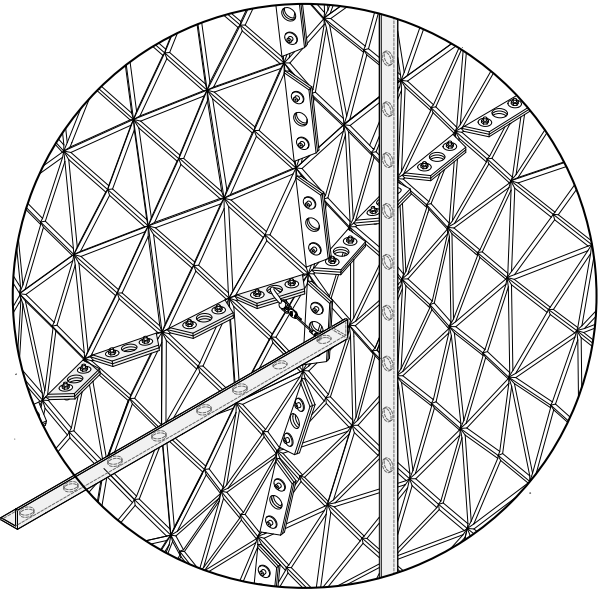




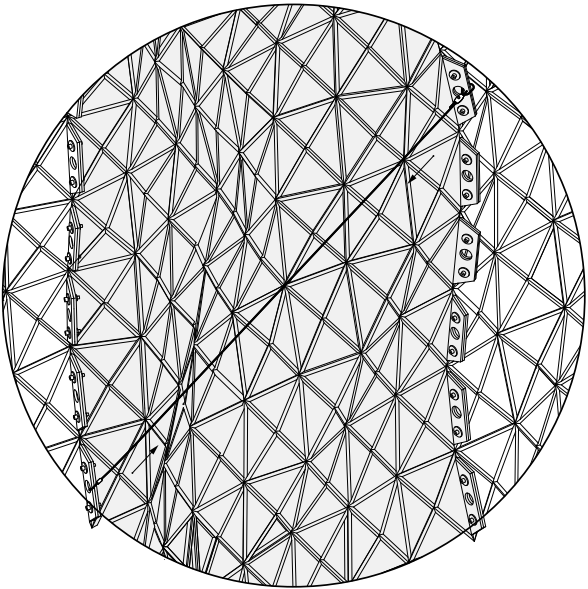
Horizontal U-shaped metal profile is first installed at the desired height to the ceiling with anchor bolts and threaded bars **1**. The vertical L-shaped metal profiles are installed to the wall. The perforated side must remain perpendicular to the wall **2**. Two or four WOOD-SKIN sheets are joined by their flaps such as to form a section which can be easily installed **3**. The joined pieces are first attached to the aircraft cables by the dedicated holes in the flaps, and then attached to the L-shaped profiles **4**. The cables should remain slightly tensioned. Once installed, additional aircraft cables are attached between the flaps of the W-S surface; they serve only for shaping purposes **5**.

Once the section is installed, the aircraft cables are tensioned such as to obtain the desired three-dimensional effect. The process is repeated until all sections are installed.

DETAILS



D1
Joint flaps to L-profiles with aircraft cable



D2
Aircraft cable between W-S surfaces

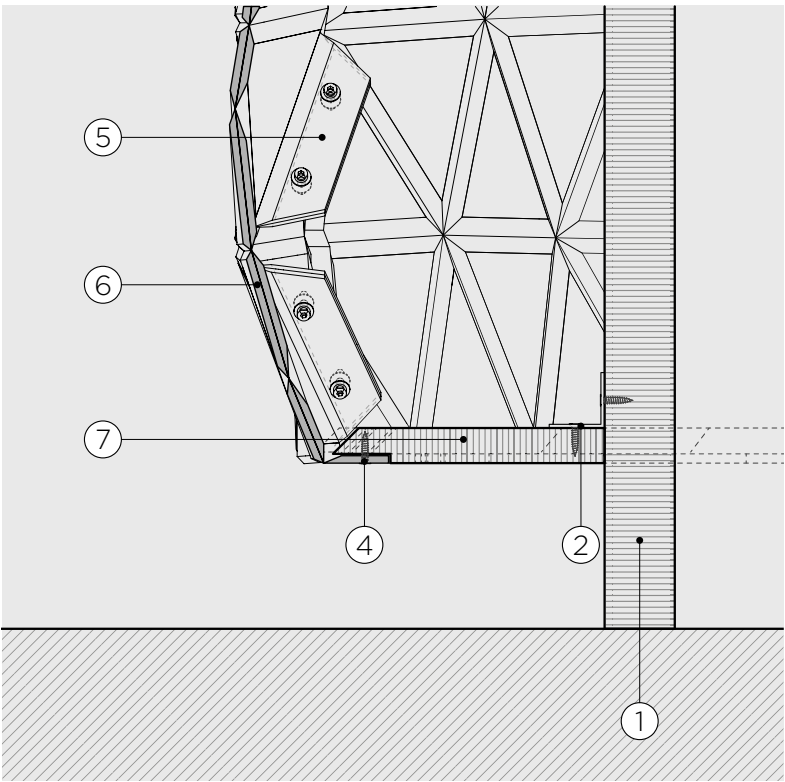
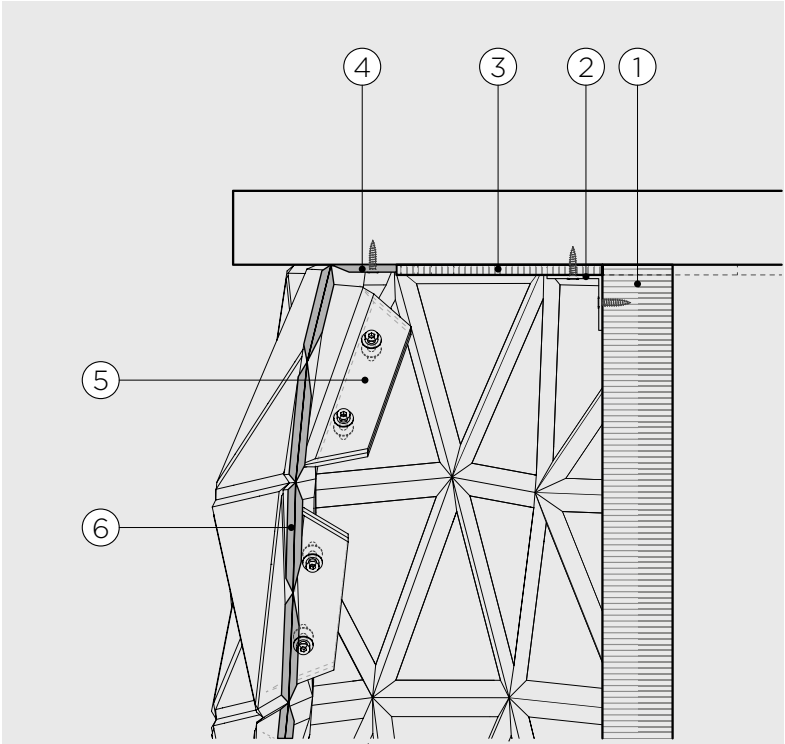
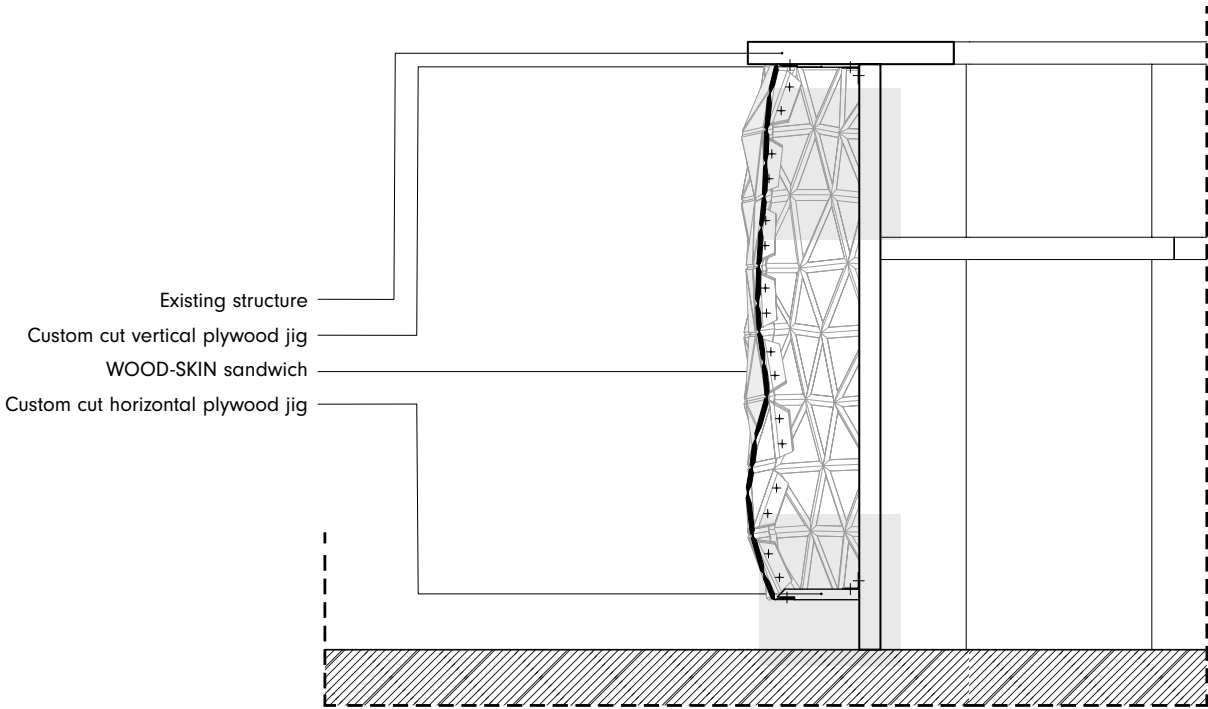
TPOLOGY: Tailor Made Cloth
INSTALLATION: Counter
MATERIAL: Full color HPL
NAME: Columbus Private Clinic
LOCATION: Milan - Italy
CATEGORY: Healthcare
YEAR: 2016
PHOTO CREDITS: WOOD-SKIN



COUNTER INSTALLATION
Cloth

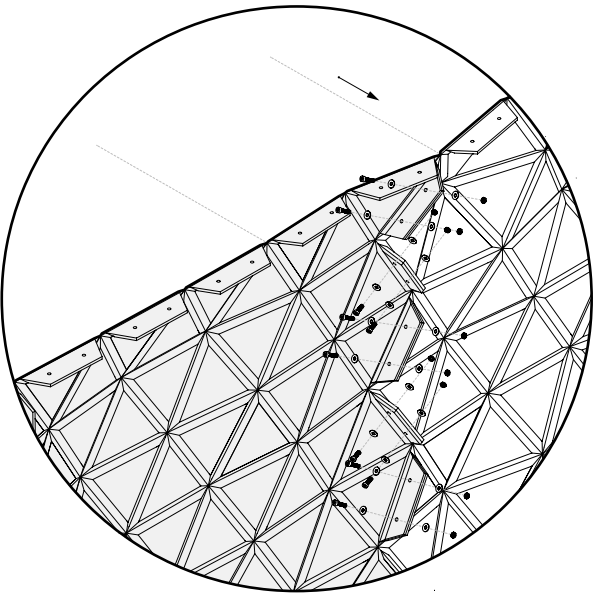


The counters realised in Tailor Made Cloth membrane can be shaped according to many design requirements. Can be installed over new or existing counter structures. Two horizontal jigs with areas accommodating the flaps ensure the stability and geometry of the counter.

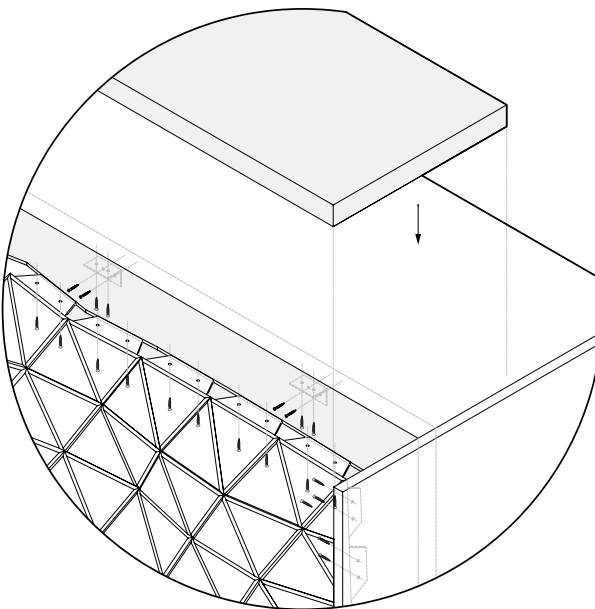


- 1- Existing counter structure
- 2- L-shaped metal bracket – aluminium
- 3- Custom cut top plywood jig – thickness: 6mm
- 4- W-S border flap
- 5- W-S flap
- 6- W-S sandwich
- 7- Custom cut bottom plywood jig – thickness: 19mm

DETAILS



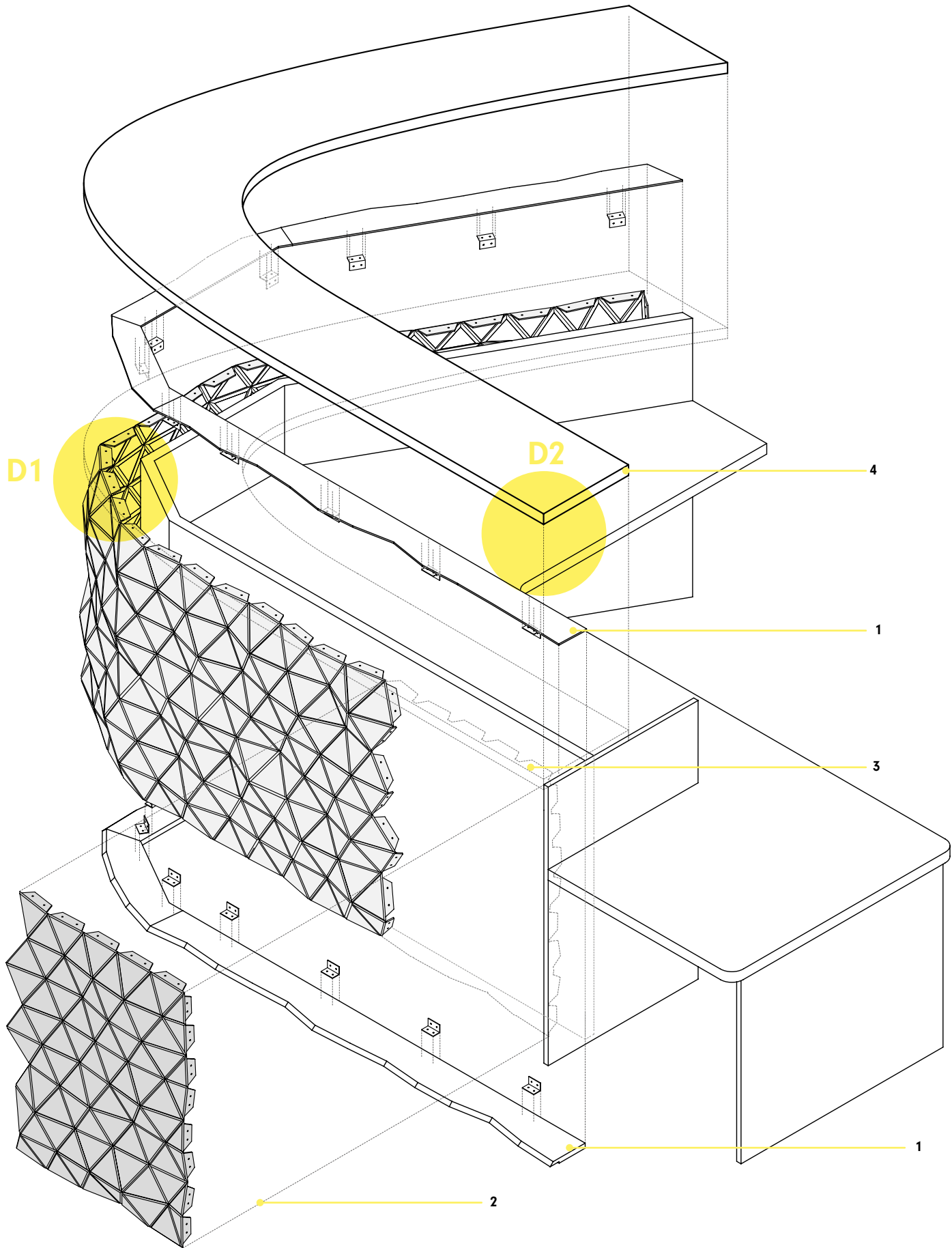
D1
Flap joint



D2
Attachment to horizontal top jig

Installing W-S membrane on a counter with existing supporting structure requires a section-by-section process.

The horizontal custom shaped jigs provided by WOOD-SKIN are attached to the top and bottom of the existing supporting structure with L-shaped metal brackets **1**. A first section is assembled joining two to three WOOD-SKIN sheets by their flaps **2**. The installation to the jigs starts from the side by screwing each flap to the top and bottom jigs **3**. Once all pieces are assembled and installed, a counter top is installed **4**.



D1

D2

4

1

3

1

2

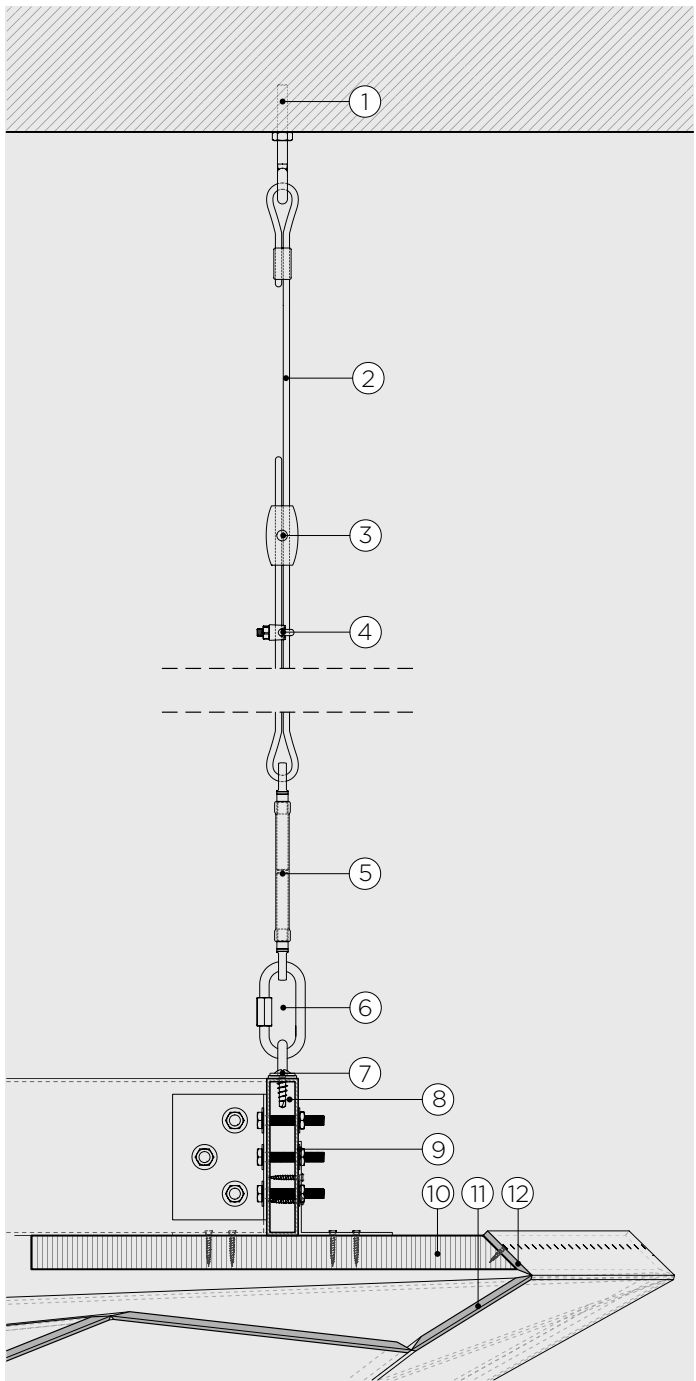
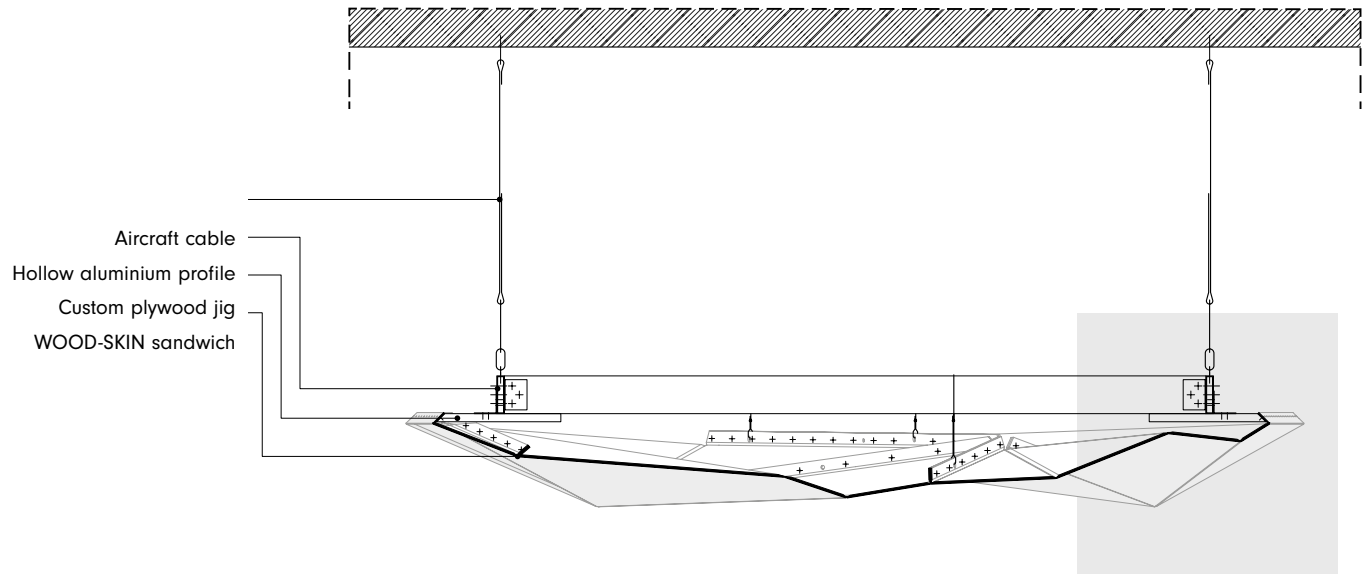
TPOLOGY: Tailor Made Geode
INSTALLATION: Ceiling
MATERIAL: Mirror laminate
NAME: La Clef Champs-Elysees
CLIENT: Ascott the Residence
DESIGN: Jean-Philippe Nuel
LOCATION: Paris - France
CATEGORY: Hospitality
YEAR: 2019
PHOTO CREDITS: WOOD-SKIN



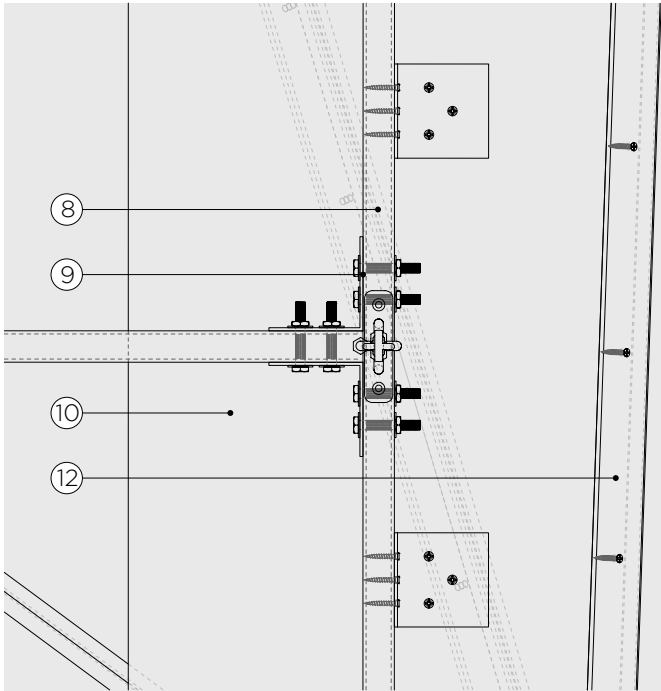
CEILING INSTALLATION
Geode



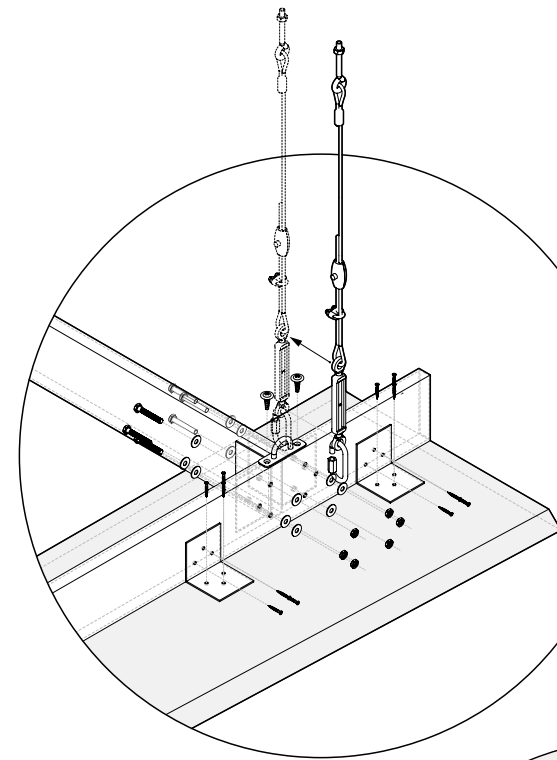
Advanced parametric design workflows allow us to streamline the design process and effectively work as an extension of the firm’s design team. Achieving unexpected results that would normally be considered too expensive and technically impossible to achieve.



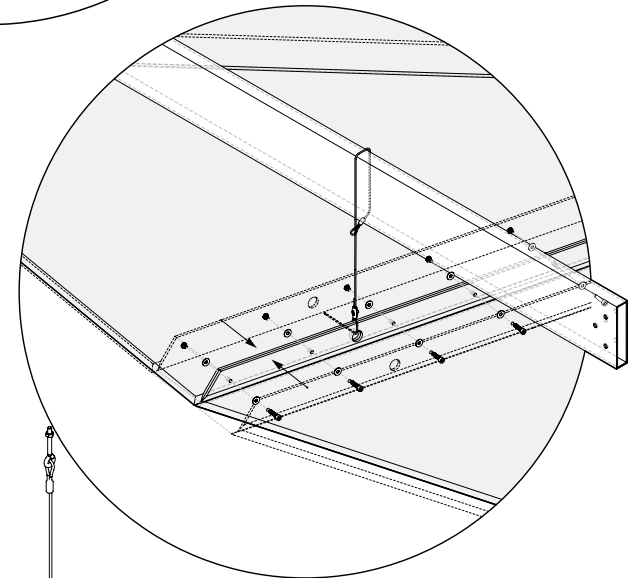
- 1- Anchor bolt with eyelet
- 2- Aircraft cable
- 3- Adjustable self locking wire rope grip
- 4- Wire rope grip
- 5- Cable tensioner
- 6- Quick link
- 7- Oval eye plate with self-tapping screws
- 8- Hollow aluminium profile
- 9- L-shaped metal bracket (aluminium)
- 10- Custom cut plywood jig – h: 25mm
- 11- W-S sandwich
- 12- Standard Wood-Skin flap screwed to the jig



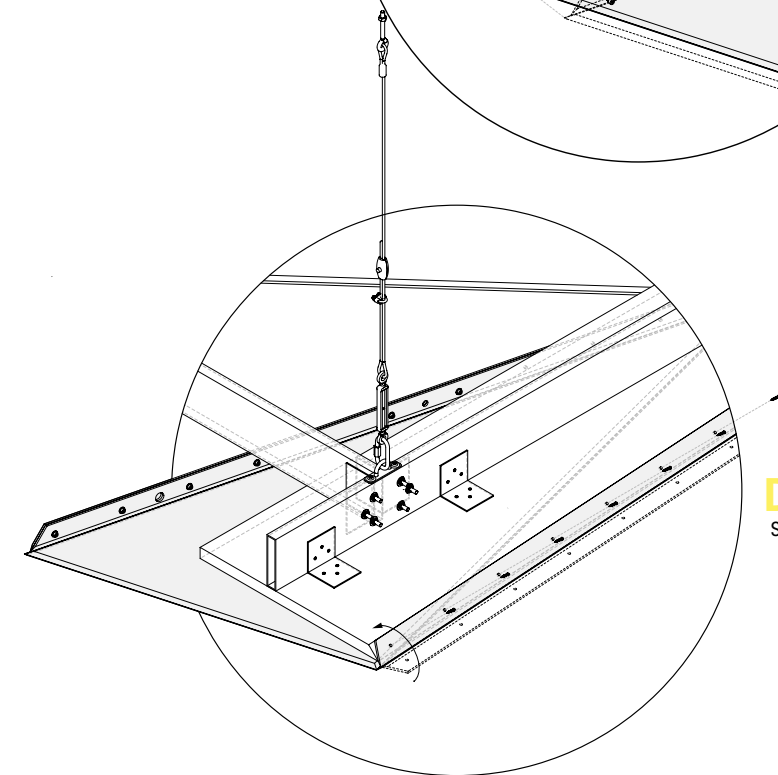
DETAILS



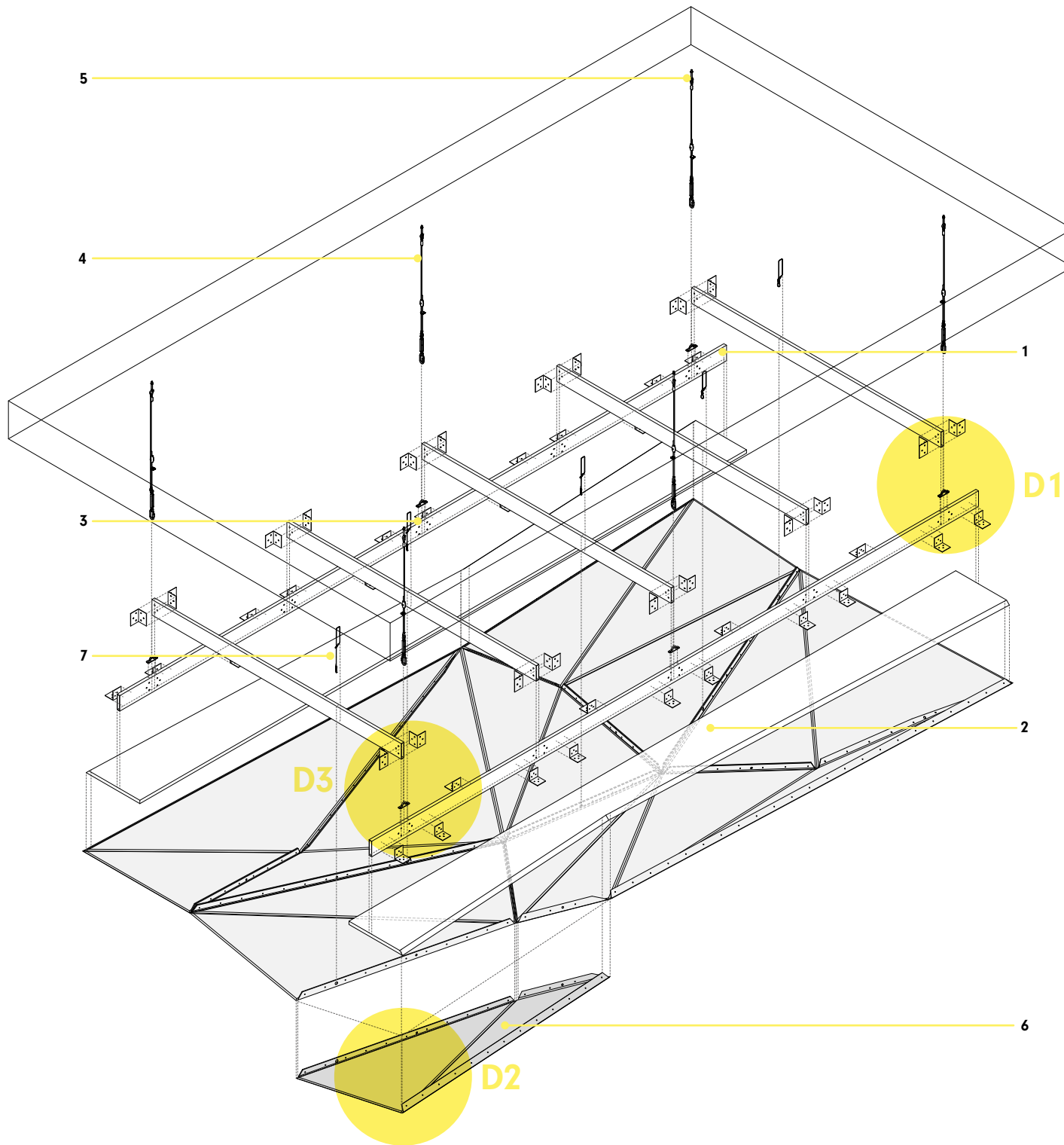
D1
Aluminium frame and
jig joint



D2
Inner flap joint and
suspension cable attachment



D3
Side flap joint to a jig



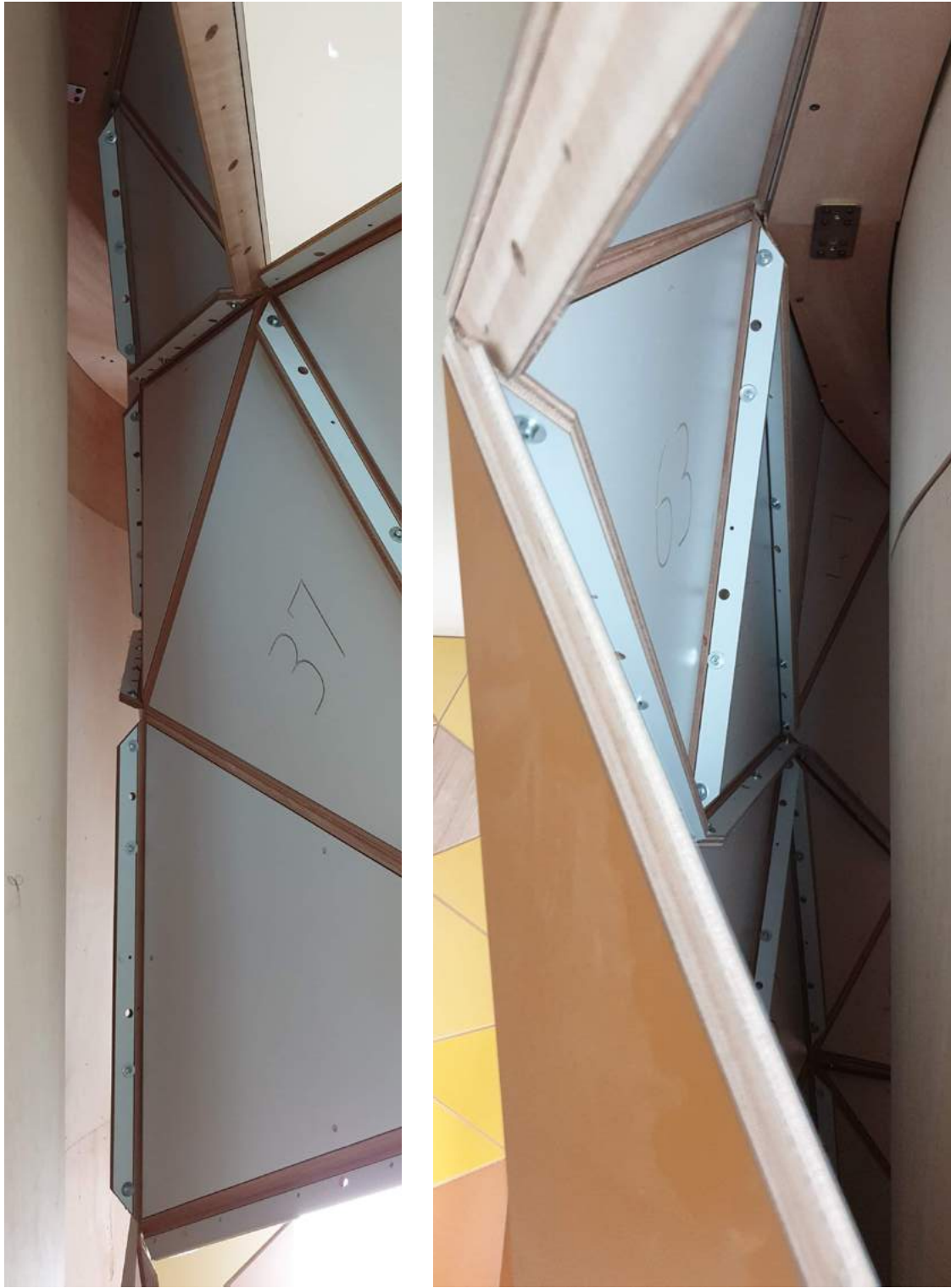
The installation of Tailor Made surfaces on a suspended ceiling sub-structure involves a step-by-step process.

The sub-structure should be assembled first. The hollow aluminium profiles are bolted together with L-shaped metal brackets to form a rigid frame **1**. The custom cut horizontal jigs are attached to the bottom of the long sides of the aluminium frame by L-shaped metal brackets **2**. Oval eye plates are screwed to the top side of the aluminium profiles **3**. Next, the aircraft cables are attached **4**. Once the sub-structure is fully assembled it is attached to the ceiling with anchor bolts **5**. Two or three Tailor Made sheets are first joined together by the flaps and then screwed to the jigs **6**. Additional aircraft cables are attached to the WOOD-SKIN sheets through the holes in the flaps and tensioned for additional stability **7**. The last two steps are repeated until all Tailor Made sheets are installed in place.

TPOLOGY: Tailor Made Geode
INSTALLATION: Wall
MATERIAL: Laminated okoume
NAME: B&B HOTEL Paris Porte des Lilas
CLIENT: B&B Hotel
DESIGN: Agence Blanchet D'Istria
LOCATION: Paris - France
CATEGORY: Hospitality
YEAR: 2019
PHOTO CREDITS: WOOD-SKIN

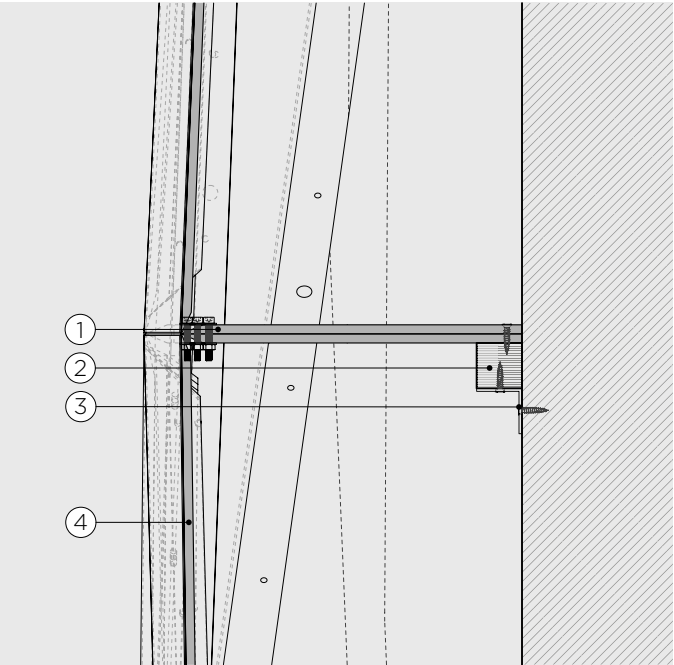
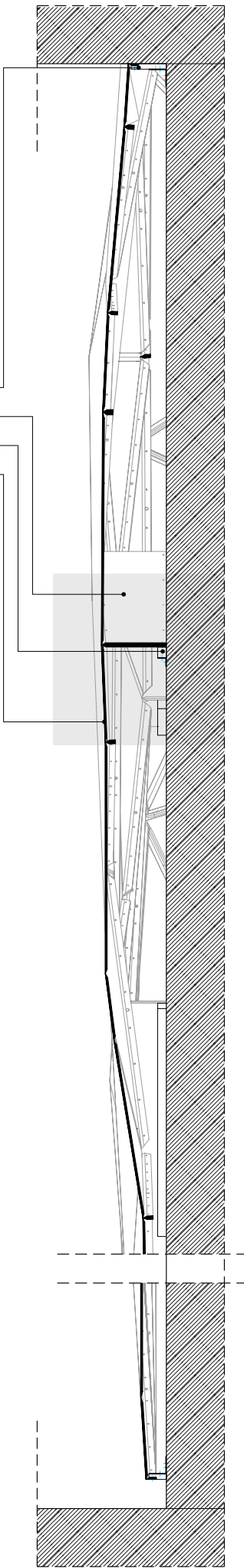


WALL INSTALLATION
Geode

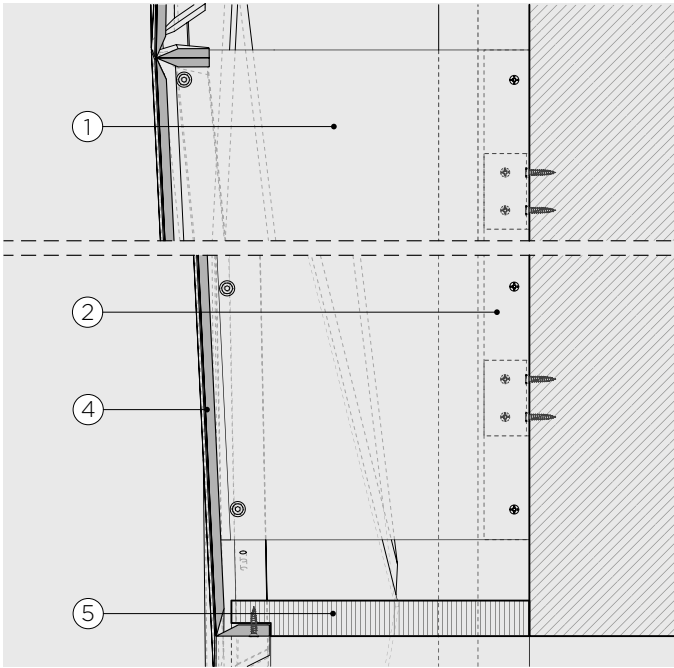


The WOOD-SKIN team developed a specific detail for installing the complex Tailor Made surfaces to the wall. Special flaps are cut only on some elements and the position is decided during the design phase.

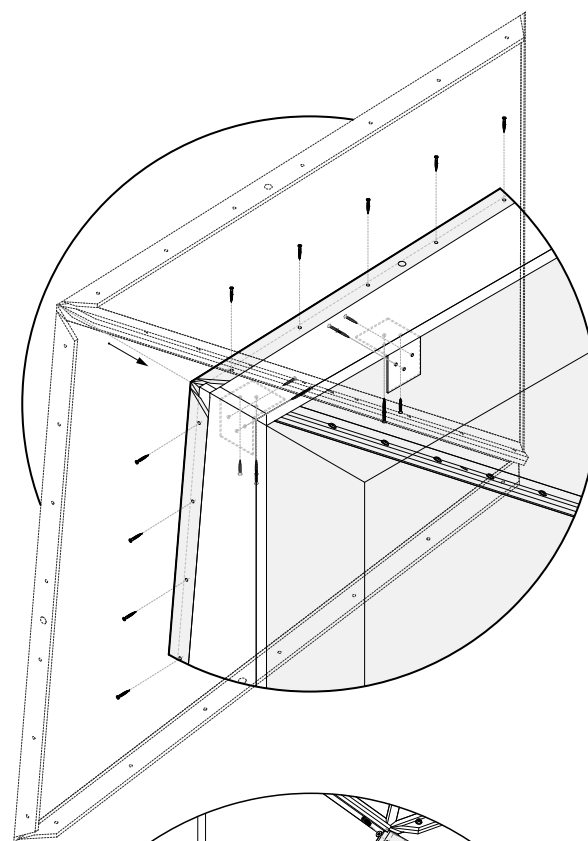
- Custom cut plywood jig
- Custom WOOD-SKIN flap
- Wooden joist
- WOOD-SKIN sandwich



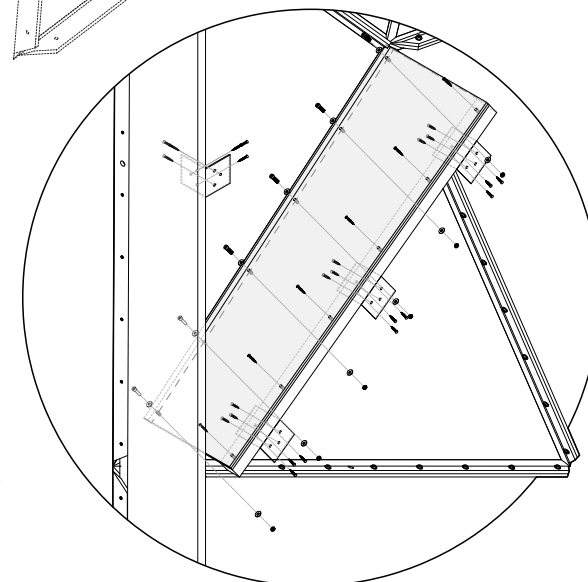
- 1- Custom cut Wood-Skin flap
- 2- Wooden joist
- 3- L-shaped metal bracket (aluminium)
- 4- Wood-Skin sandwich
- 5- Custom cut vertical plywood jig – thickness: 19mm



DETAILS

**D1**

Side flap joint to jig

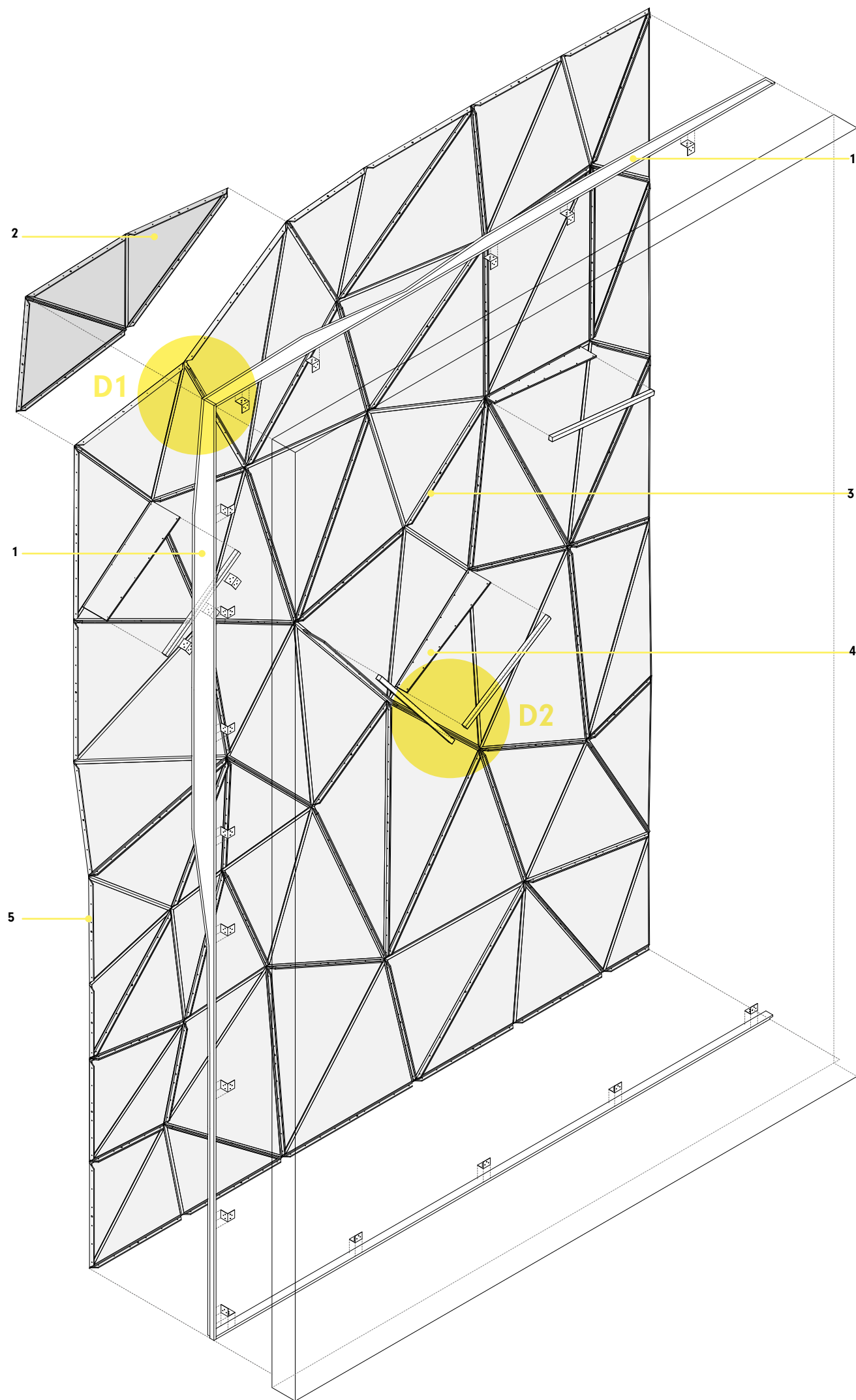
**D2**

Custom flap joint to wooden joist

Installing Tailor Made surfaces on a wall requires following a simple step-by-step process. A rigid frame is created by attaching the custom cut vertical and horizontal jigs provided by WOOD-SKIN to the wall using L-shaped metal brackets **1**.

The installation of the Tailor Made surfaces should start from one of the edges and proceed along. The first element is screwed to the horizontal and vertical jigs **2**. The next elements are joined to the installed one by one by bolting the inner flaps to each other **3**. The Tailor Made sheets with custom cut flaps should be screwed to wooden joists attached to the wall by L-shaped metal brackets **4**. Once all WOOD-SKIN surfaces are in place, the side flaps are screwed to the horizontal and vertical jigs **5**.

Flush installation with adjacent walls/ceiling can also be achieved by just slightly adapting this technique.



TPOLOGY: Tailor Made Geode

INSTALLATION: Counter

MATERIAL: Ultra-thin reconstituted wood

NAME: Borgomolino

DESIGN: Marco Casagrande

LOCATION: Roncadelle di Ormelle - Italy

CATEGORY: Hospitality

YEAR: 2017

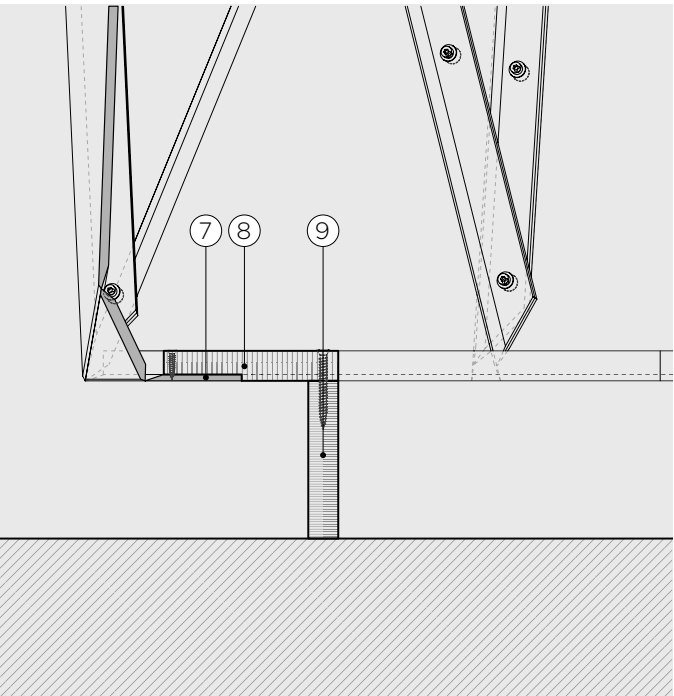
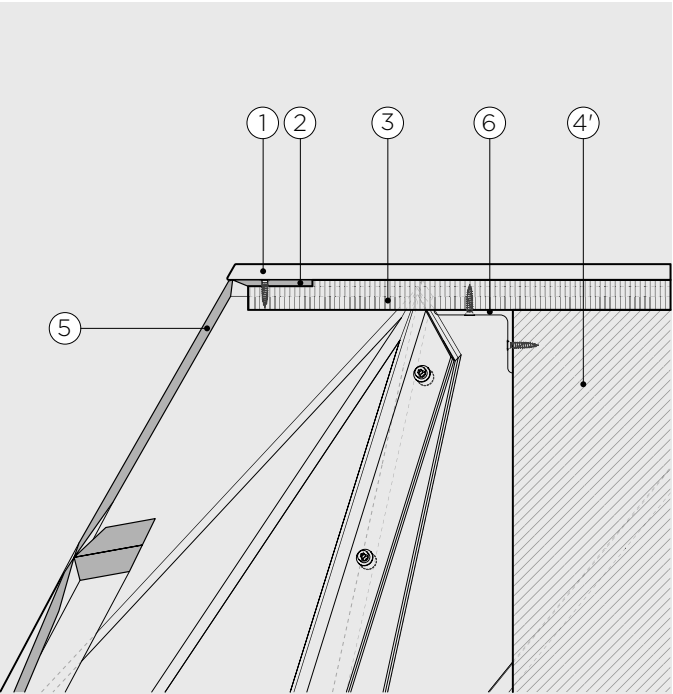
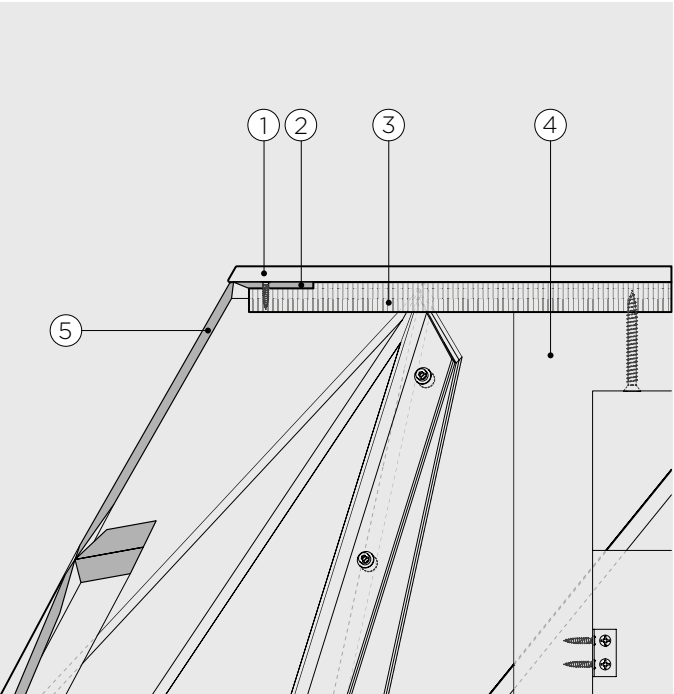
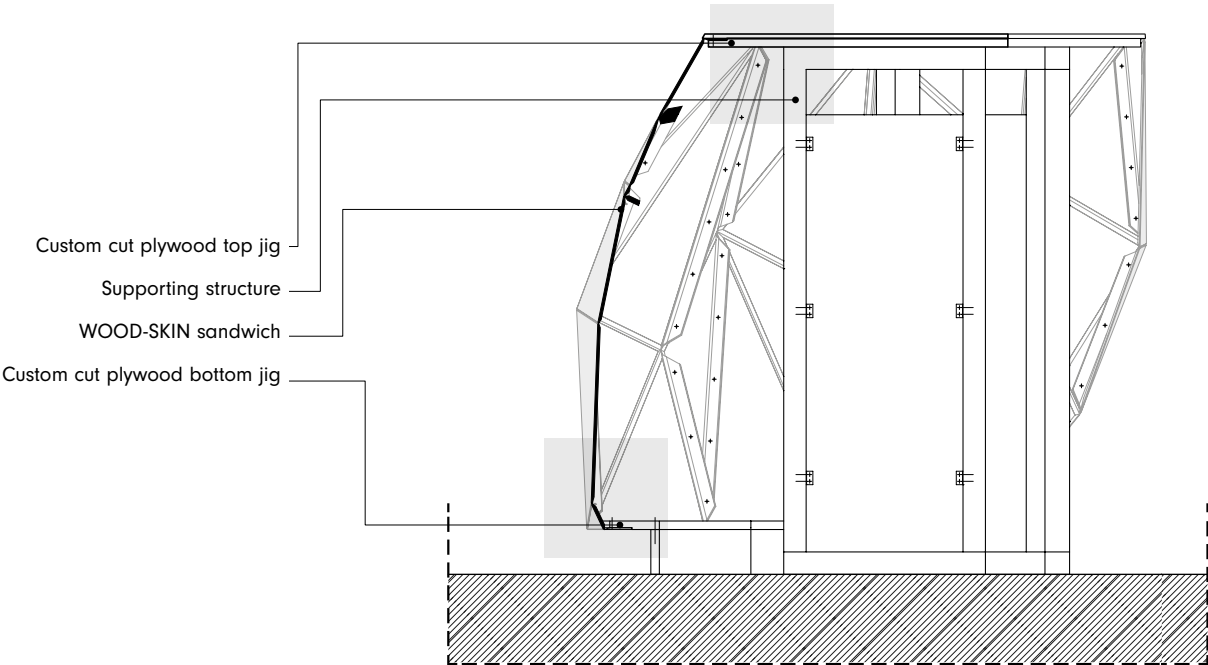
PHOTO CREDITS: WOOD-SKIN



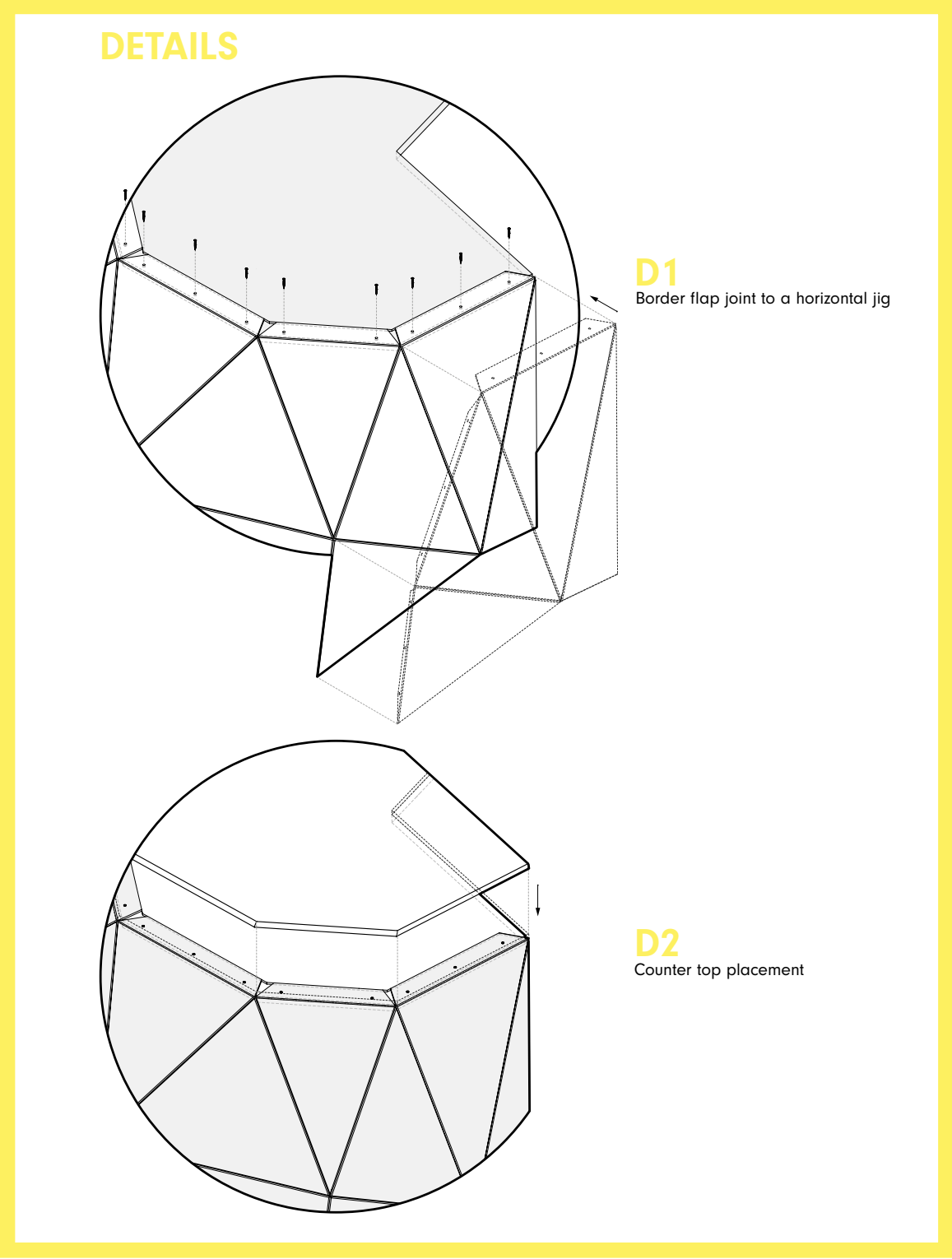
COUNTER INSTALLATION
Geode



Same approach of walls and ceiling applies for Tailor Made counter surfaces, where top and bottom jigs with custom cut geometry are used for the installation of Tailor Made counters on existing or new supporting structures. This system ensures that the installed product retains the shape requested by the client, achieving sturdy furniture elements.

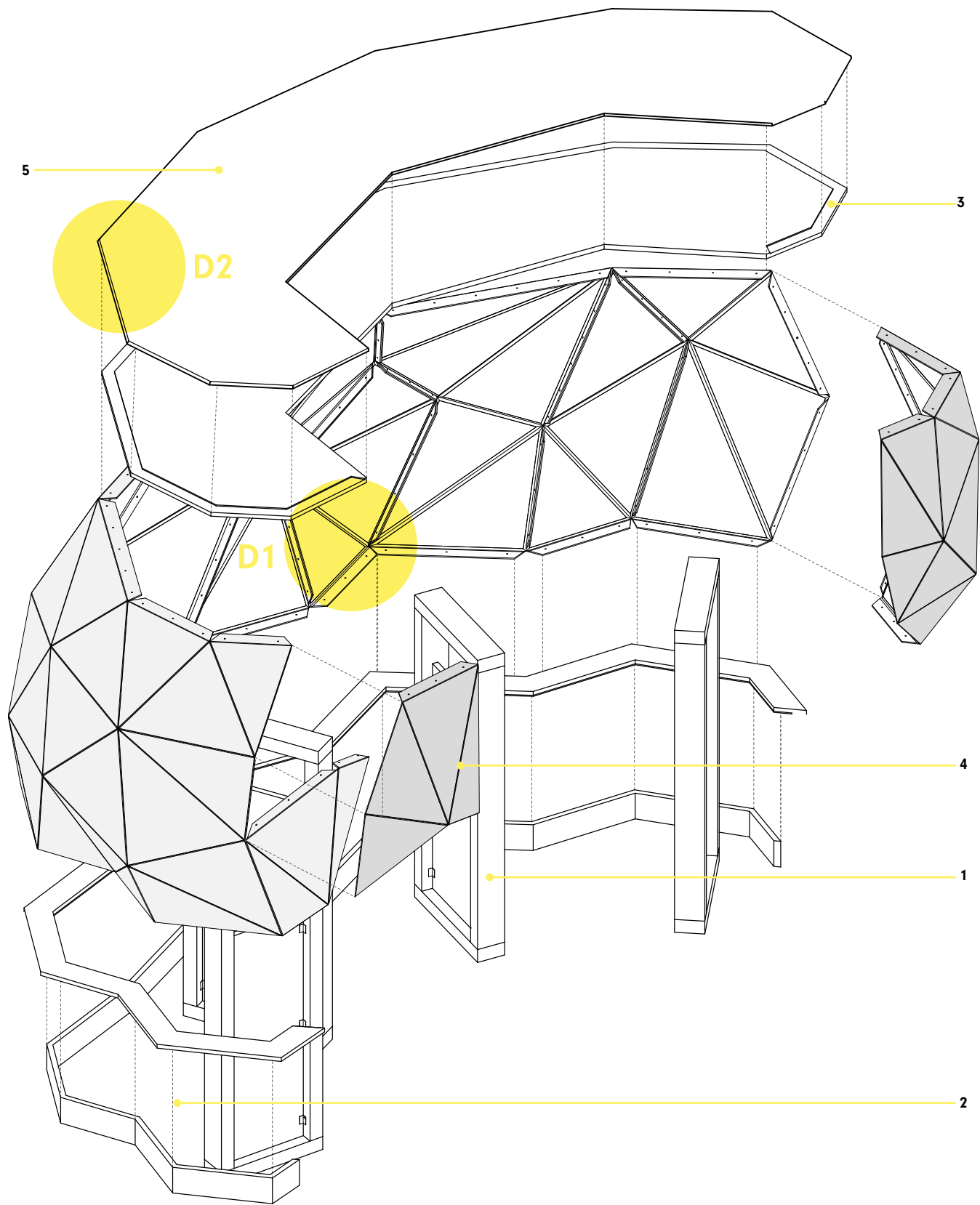


- 1- Counter top
- 2- Standard top Wood-Skin flap
- 3- Custom cut plywood top jig – thickness: 19mm
- 4- Supporting structure (wooden studs and MDF boards)
- 4'- Existing structure
- 5- Wood-Skin sandwich
- 6- L-shaped metal bracket
- 7- Standard bottom Wood-Skin flap
- 8- Custom cut plywood bottom jig – thickness: 19mm
- 9- Wooden skirt – thickness: 19mm



Counters with Tailor Made surfaces can be attached to existing or specifically crated sub-structure following a few steps.

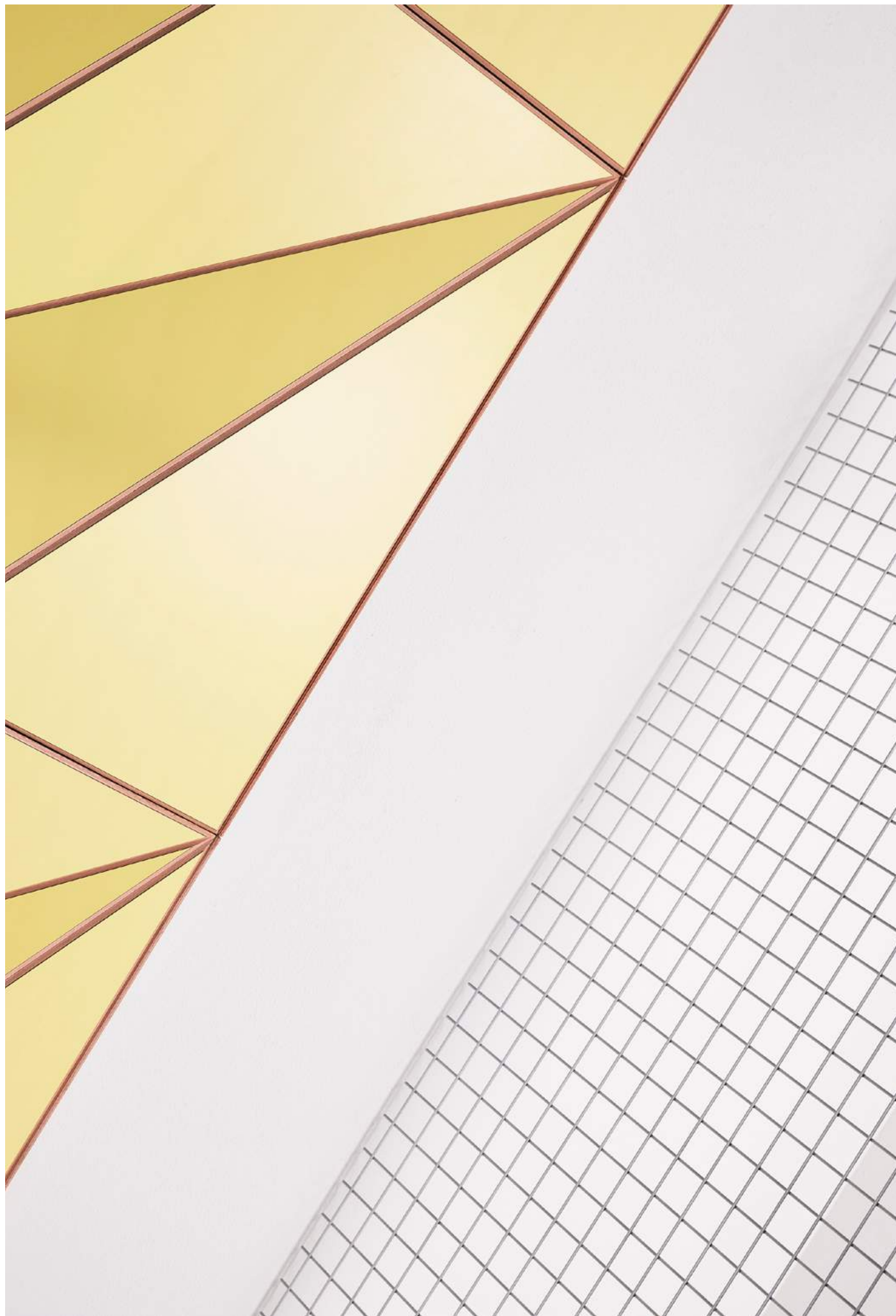
The sub-structure is first assembled and installed in place **1**. The bottom jigs provided by WOOD-SKIN are screwed together **2**. The top jig is screwed to the substructure **3**. The installation of the WOOD-SKIN sheets can start from either side, screwing the border flaps to the top and bottom jigs. The next Tailor Made sheet is joined to the already installed one by bolting the inner flaps together **4**. Once the W-S pieces are installed the counter top is glued to the top jig **5**.



TPOLOGY: Tailor Made Morph
INSTALLATION: Wall and ceiling
MATERIAL: Aluminum

A module that in the repetition of itself changes gradually, in small steps until it creates an apparently 'constant' surface. Literally, it is a metamorphosis, hence a functional and/or structural modification made possible thanks to the WOOD-SKIN's patented process and the wonders of our team of computational designers.





Part 2

**ADDITIONAL CUSTOMIZATIONS
& MATERIAL INFORMATION**

Fold Panels photo shooting, Italy – 2021

3 Additional customizations

Integrating elements like doors, light fixtures, sprinklers and others is an important part in the design and installation of WOOD-SKIN surfaces.

The following examples describe the technical details and installation of typical integrations developed by our design team.

The versatility of the WOOD-SKIN system allows for many more additional customisations to be made with ease thanks to the digital design and fabrication processes we use.

Each of these should be discussed with our design team and realised based on the specific design brief.



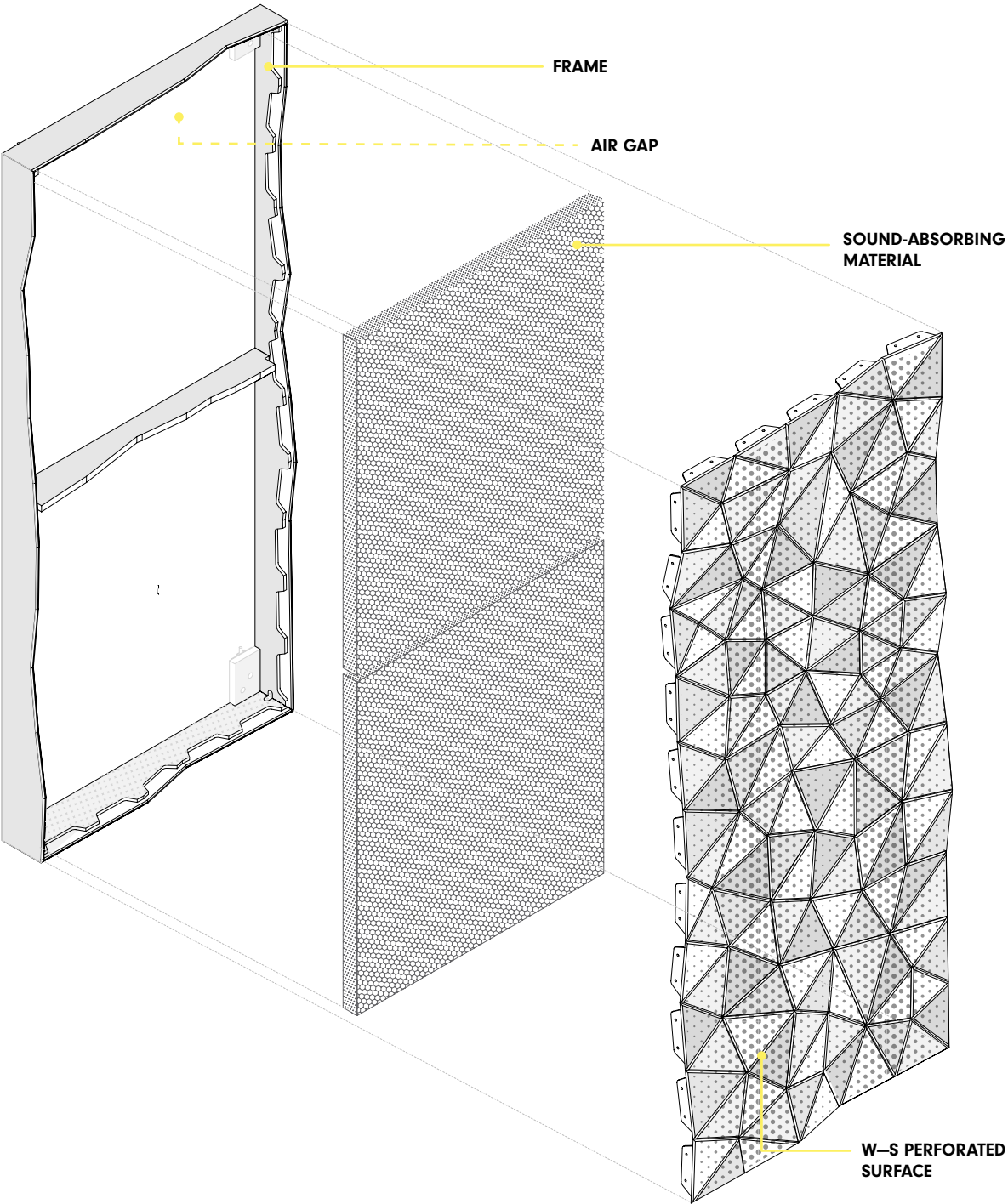
3.1 ACOUSTIC PERFORATIONS

The three-dimensionality of the W—S surfaces, the patented design and the installation method, all concur to create a high-performance acoustic solutions. In the back of the panel, between the W—S panel and the ceiling/wall to which it is applied, an air gap is created. In this air gap, it is possible to insert a sound-absorbing material. On the front of the panel, the 3D surface is perforated according to aesthetic and technical needs.

The W—S panels have been tested according to the European UNI ISO 354 and the American ASTM C 423 standards and with the use of 2 high-performance sound-absorbing materials.

The perforation pattern options can be customised to obtain a 14% perforated surface in order to achieve the acoustic result needed. The required perforated area can be achieved with circular holes or lines.

NOTE: the sound-absorbing material can be supplied by W—S upon specific request.

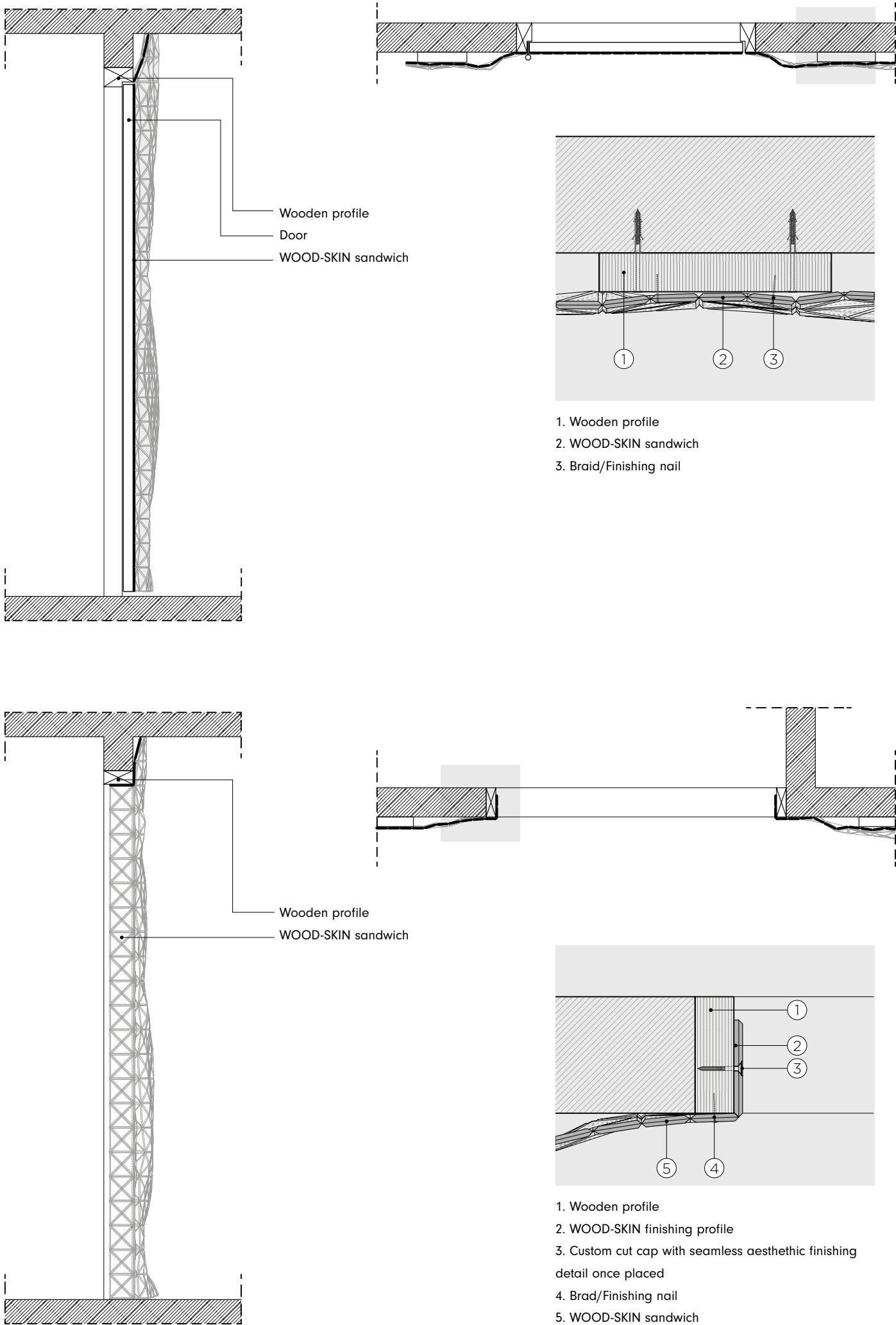


Fold Panels photo shooting, Italy – 2021

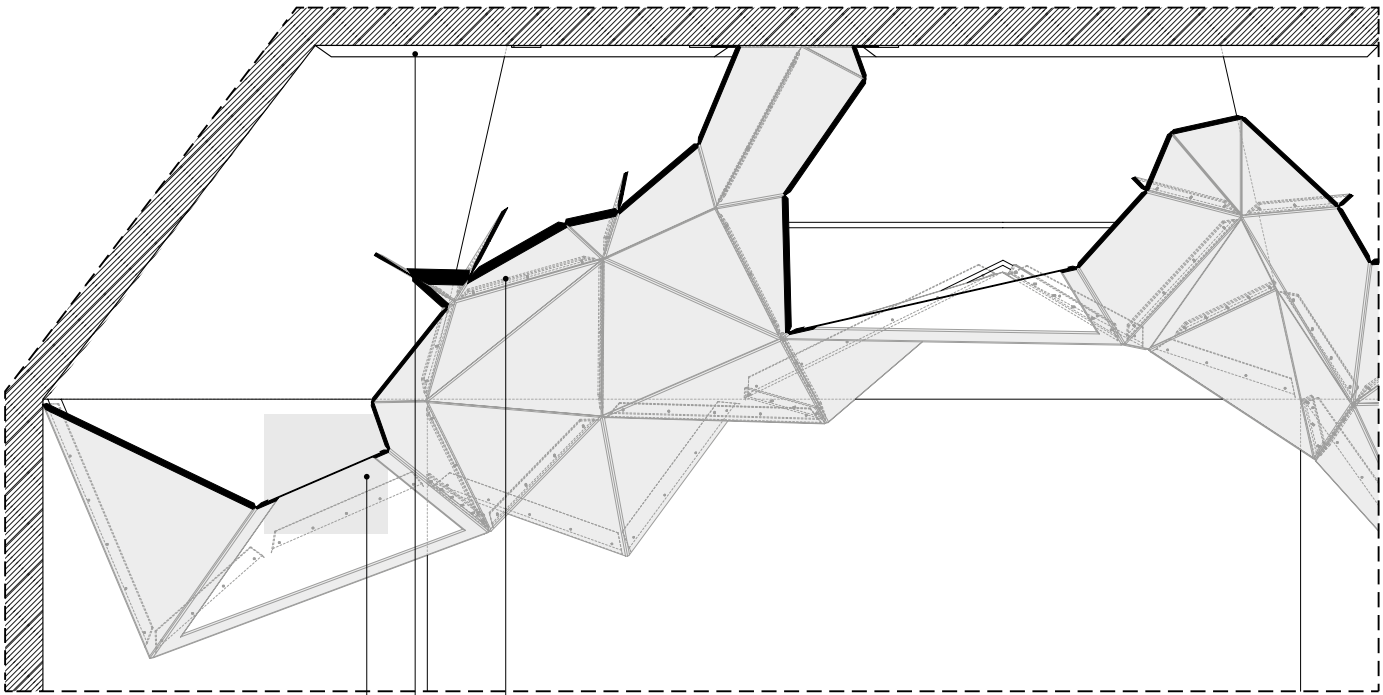
3.2 DOORS AND OPENINGS



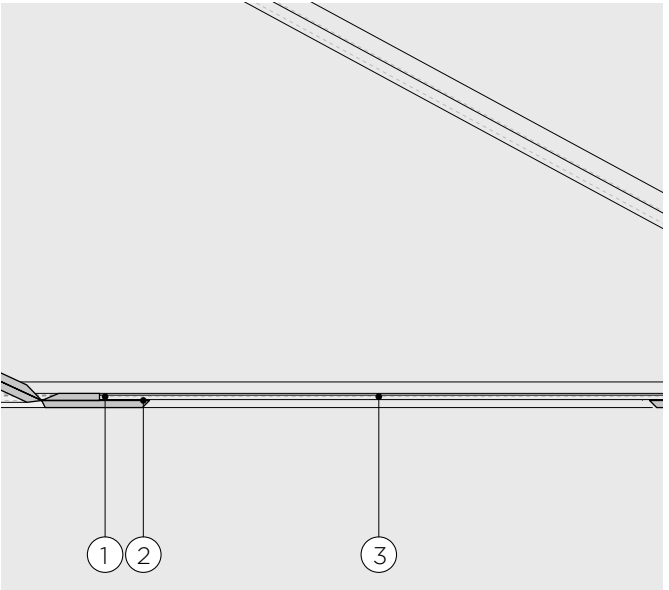
Lebkov&Sons, Amsterdam – 2018



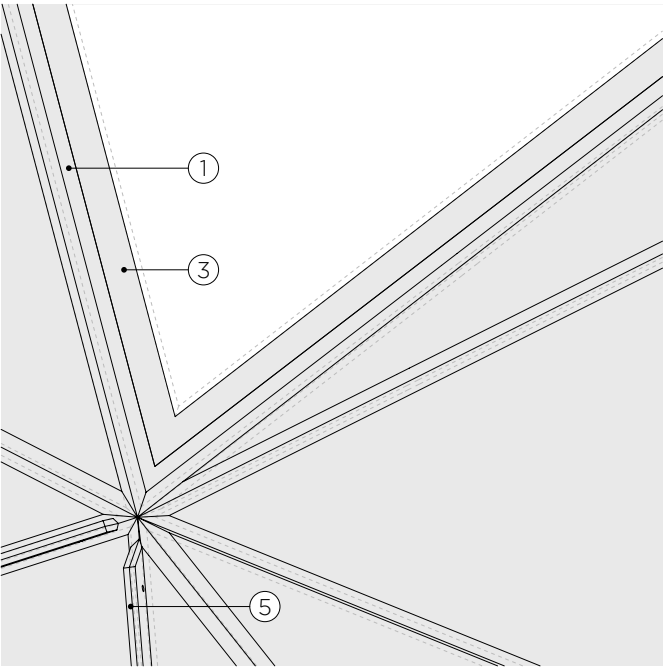
3.4 INTEGRATION OF OTHER MATERIALS



Glass
Custom cut jig
WOOD-SKIN sandwich



1 2 3

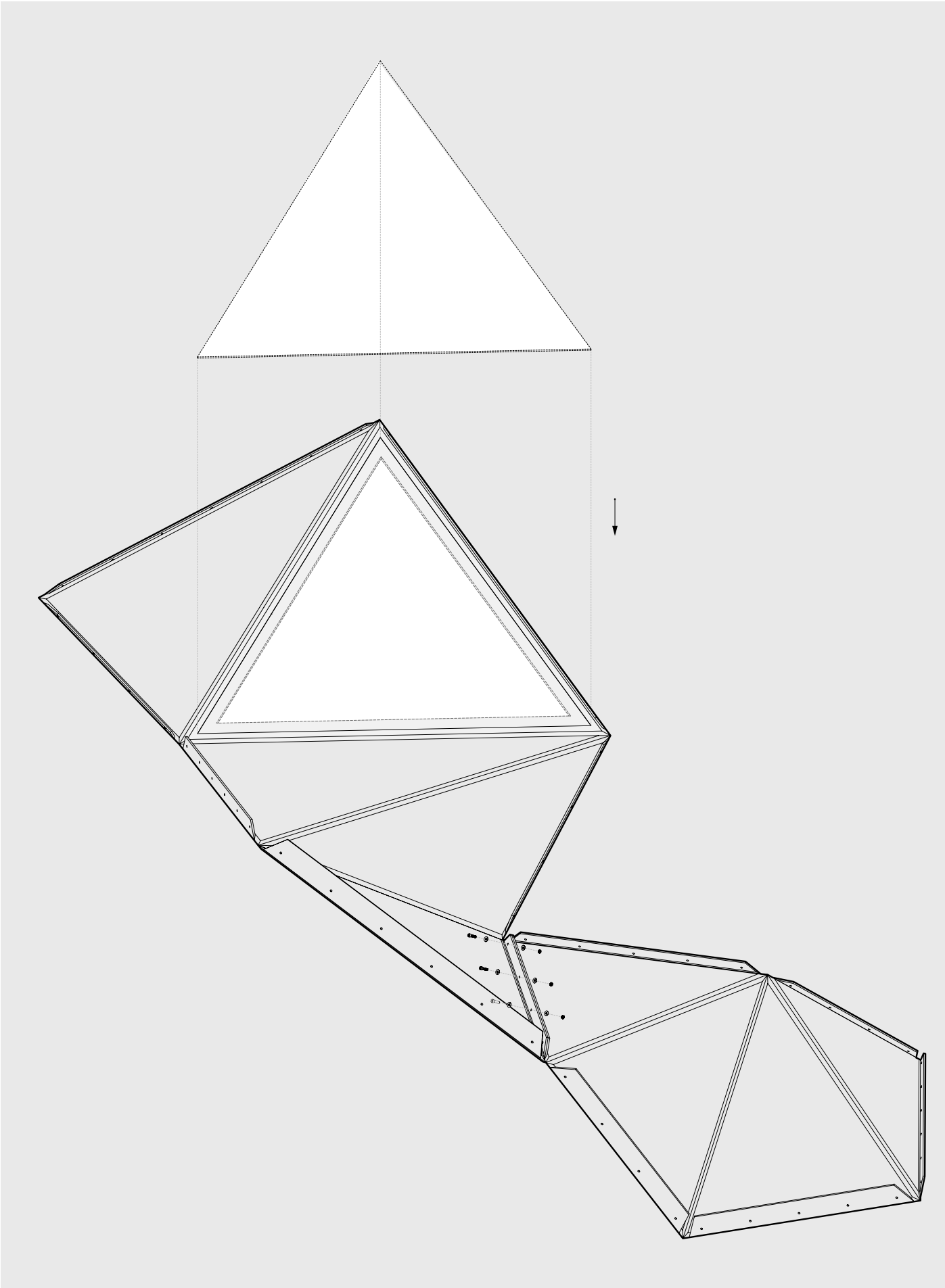


1

3

5

- 1. Custom milled WOOD-SKIN sandwich
- 2. Glue
- 3. Glass
- 4. WOOD-SKIN sandwich
- 5. WOOD-SKIN inner flaps



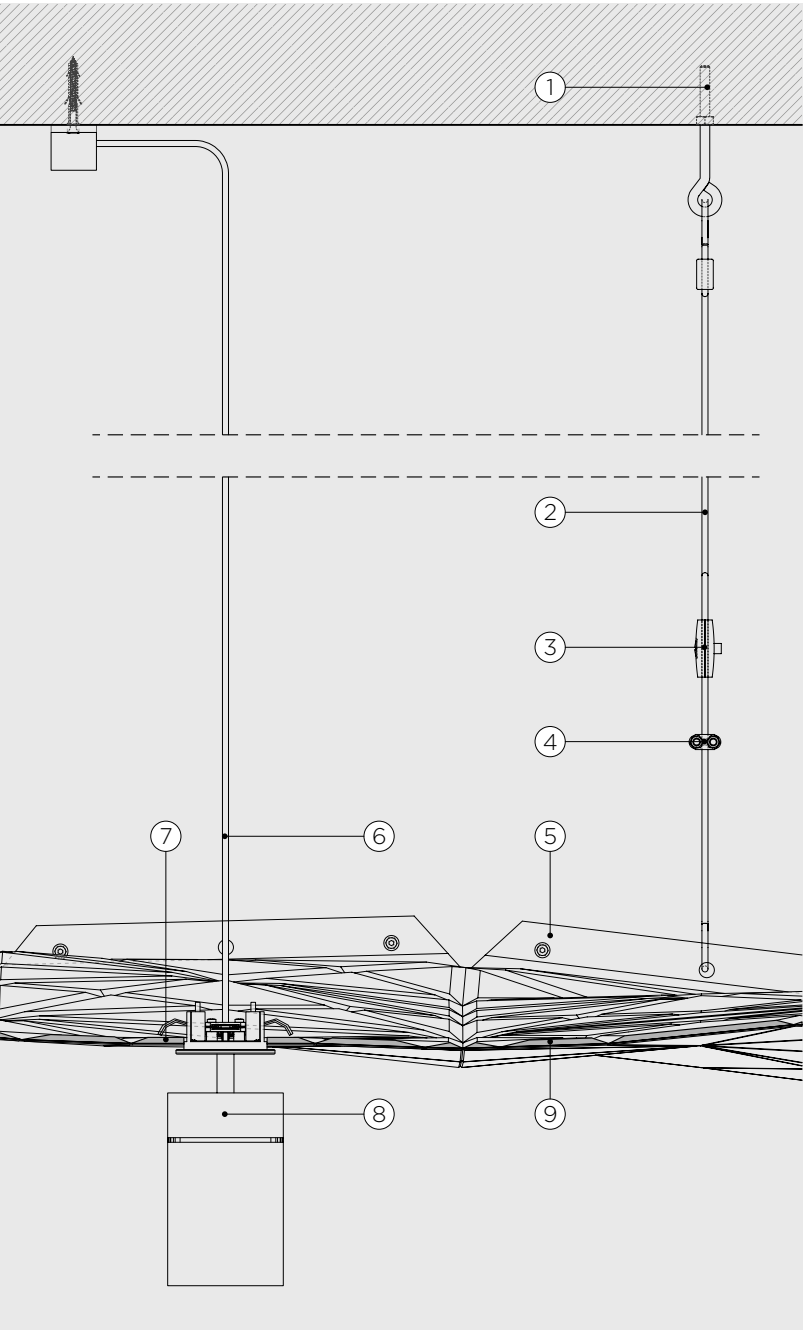
The WOOD-SKIN sheet where glass (or any other material) can be placed is provided with custom milled slot and cut-outs 1. The plexiglass sheet is glued to the surface in the slot before the installation is fully completed 2.



3.5 FIXTURES AND LIGHTING



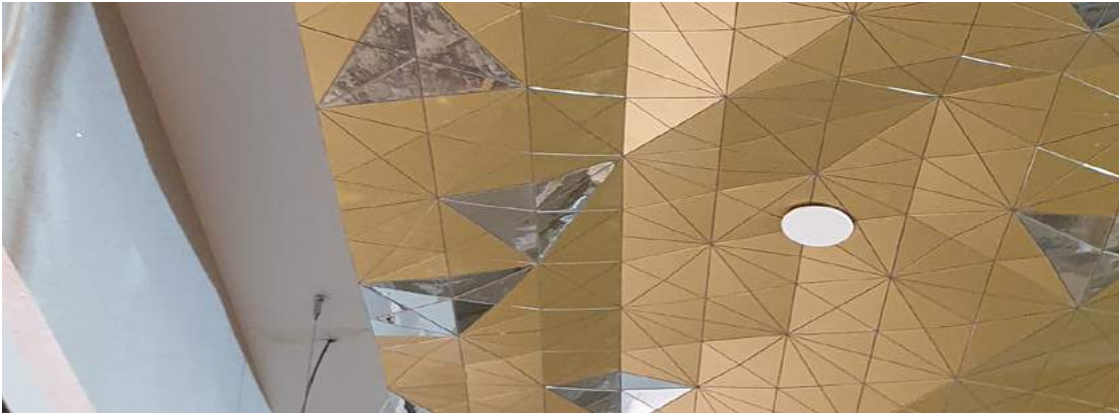
Ligna, Hannover – 2015



- 1. Anchor bolt with eyelet
- 2. Aircraft cable
- 3. Adjustable self locking wire rope grip
- 4. Wire rope grip
- 5. WOOD-SKIN inner flap
- 6. Power cord
- 7. WOOD-SKIN panel with milled opening*
- 8. Spotlight fixture
- 9. WOOD-SKIN sandwich

* Holes for the lighting fixtures can either be CNC-cut during production process, or be cut on site with standard woodworking tools.

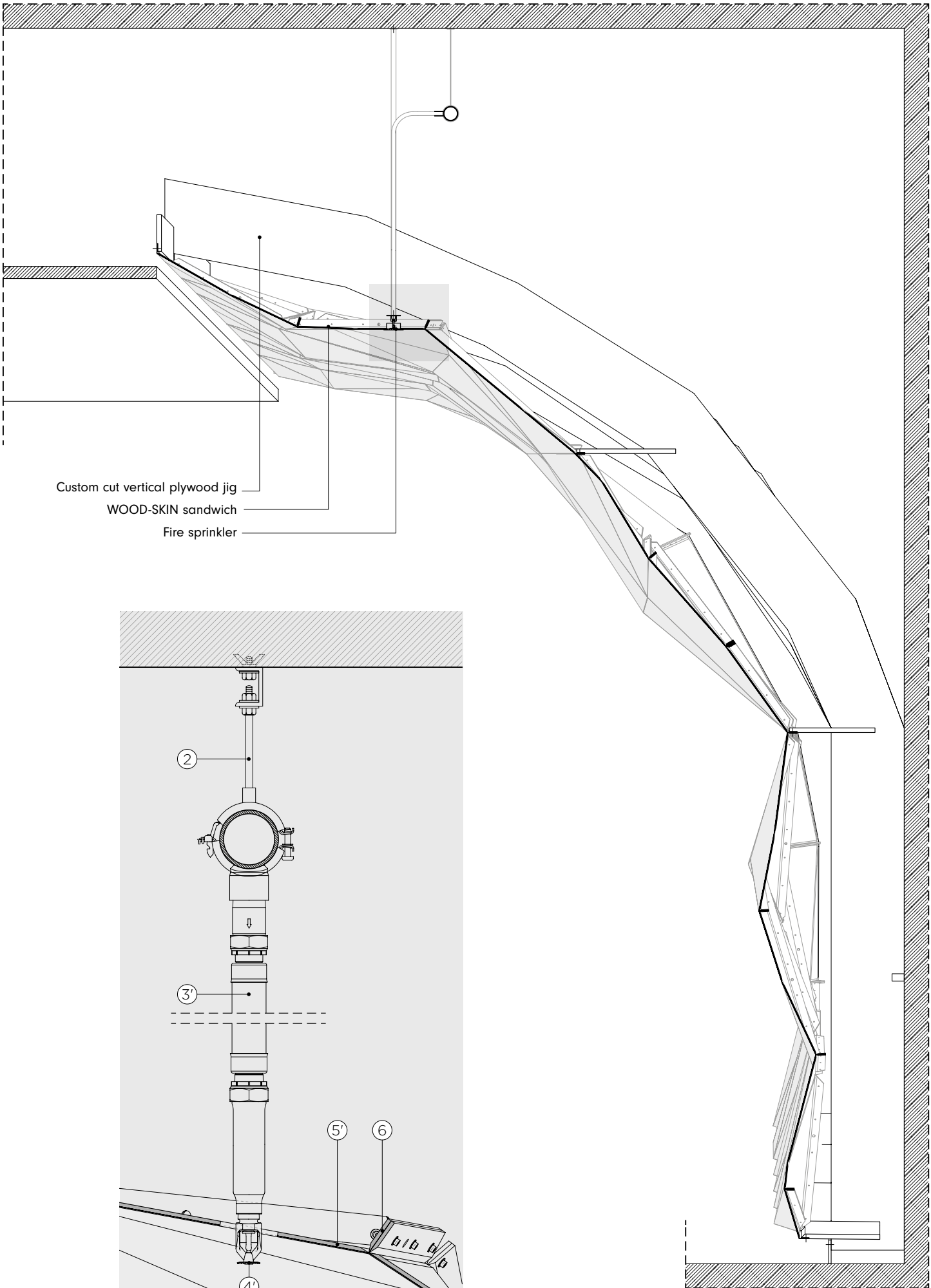
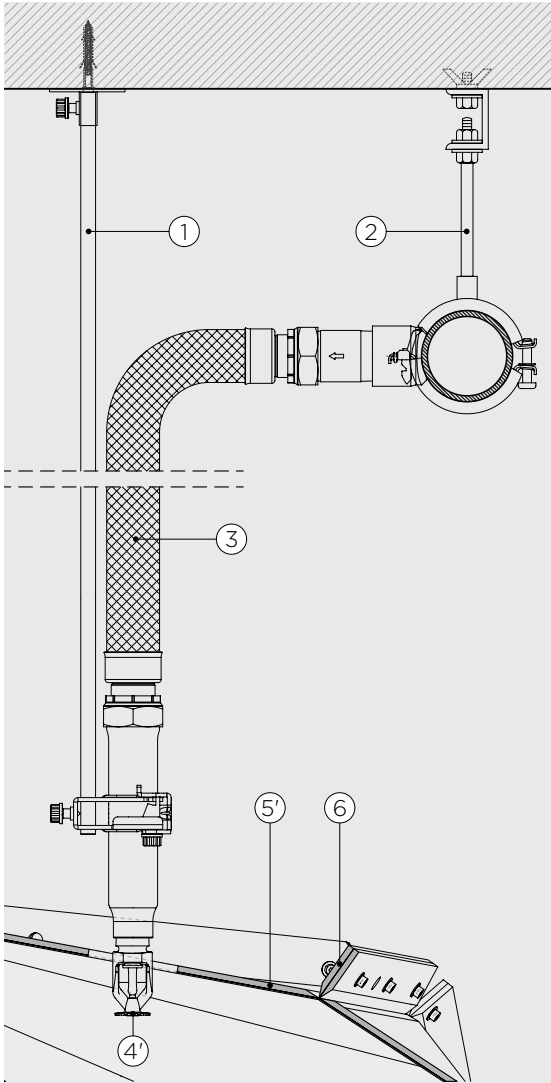
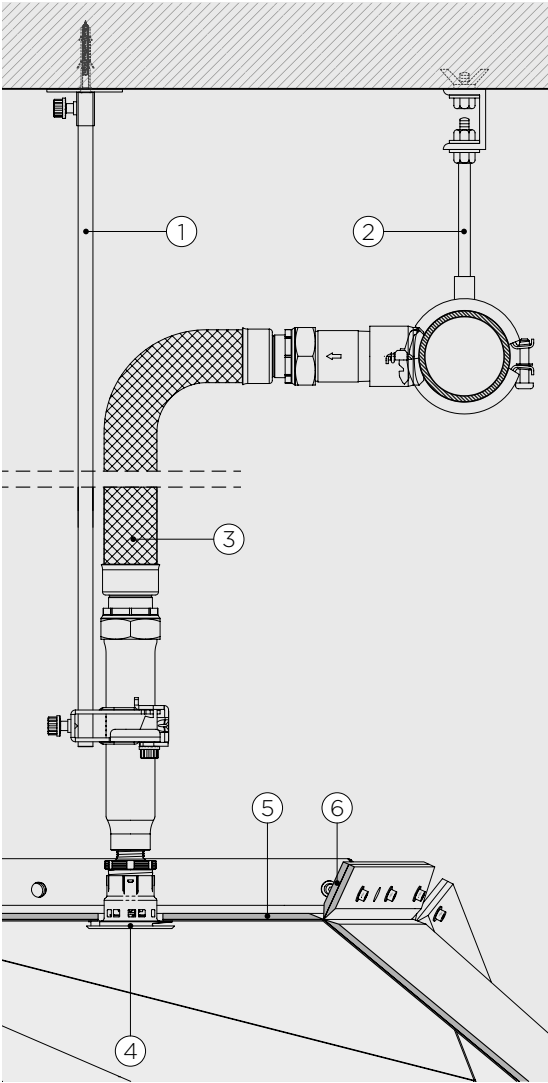
3.6 SPRINKLER

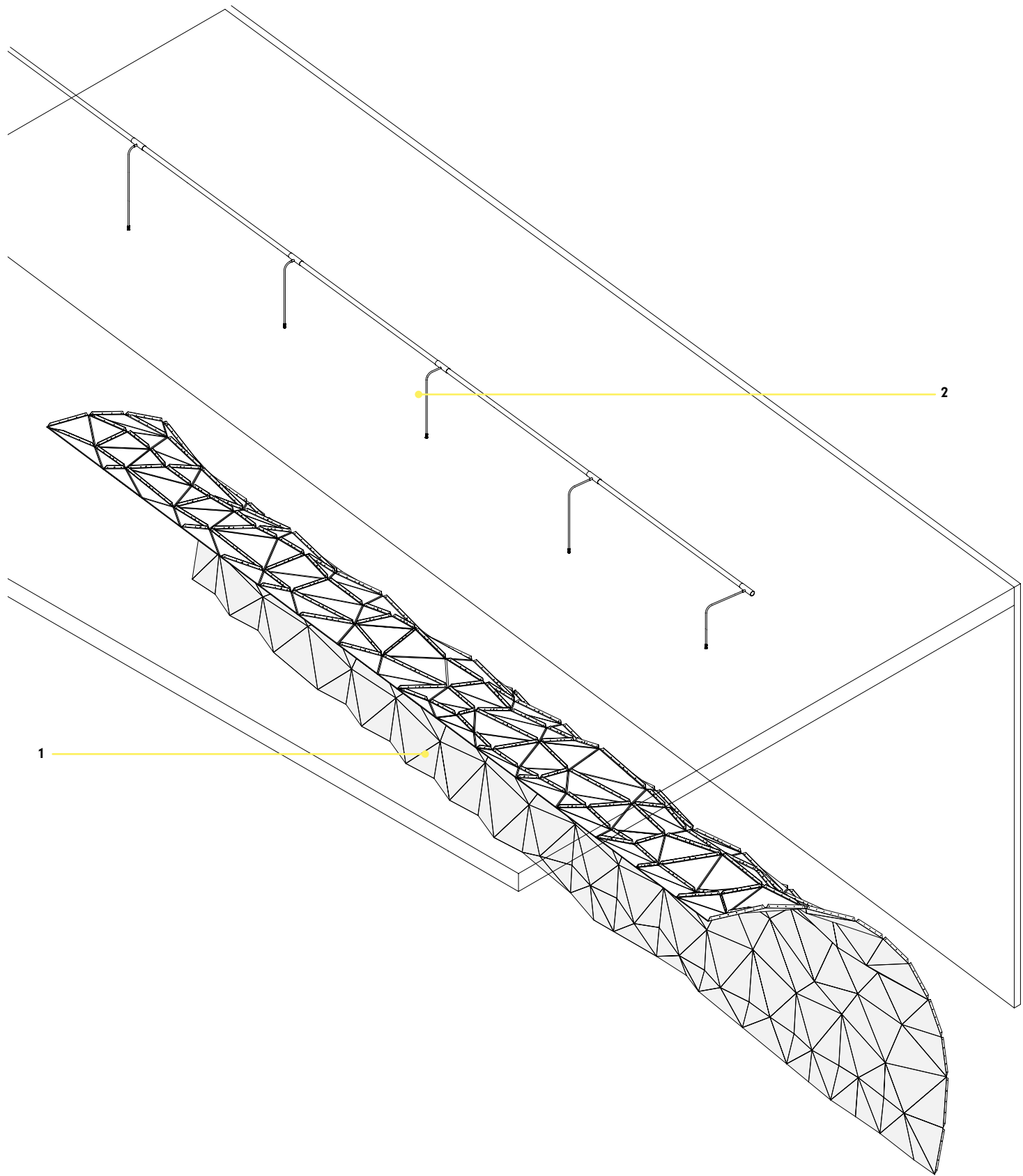


Sheik Jaber Museum, Kuwait – 2019

- 1. Fixing bracket*
- 2. Pipe fixture profile*
- 3. Flexible pipe*
- 3'. Rigid pipe*
- 4. Flat concealed pendent sprinkler*
- 4'. Conventional pendent sprinkler*
- 5. WOOD-SKIN sandwich with custom cut opening (Flat)
- 5'. WOOD-SKIN sandwich with custom cut opening (inclined)
- 6. WOOD-SKIN inner flaps

*elements NOT provided by WOOD-SKIN

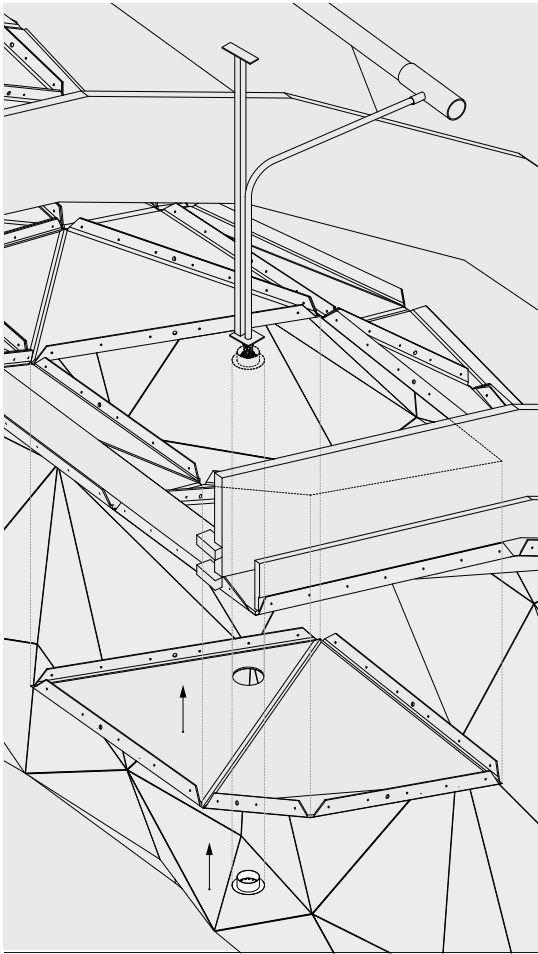




The WOOD-SKIN® technology 1 allows embedding of sprinklers with both flexible and rigid piping
2. The surfaces that interact with the sprinklers can be both parallel or inclined depending on the provided sprinkler head.

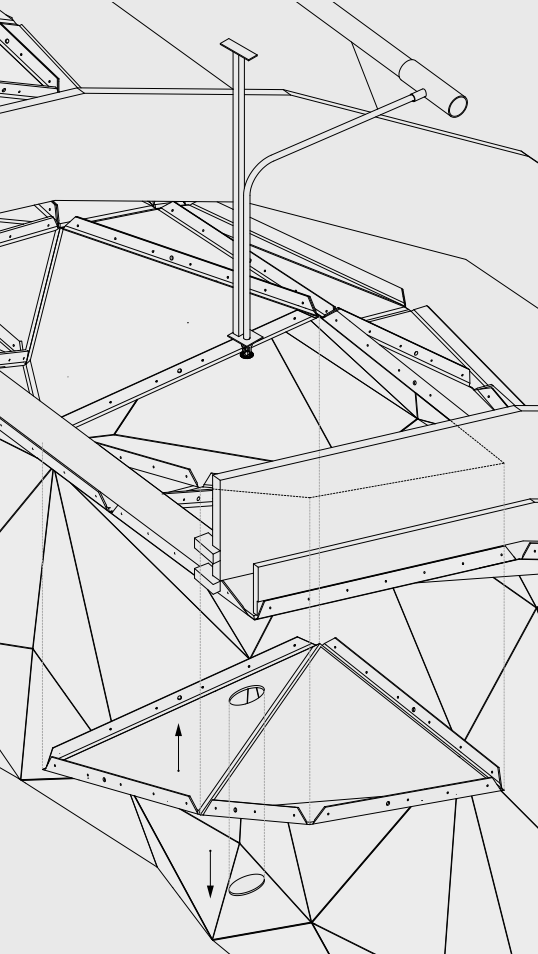
INSTALLATION OF A CONCEALED PENDANT SPRINKLER

The WOOD-SKIN sheet is provided with an opening based on the designed position of the sprinkler. Once the horizontal WOOD-SKIN panel is installed, the cap of the concealed pendent sprinkler can be attached.

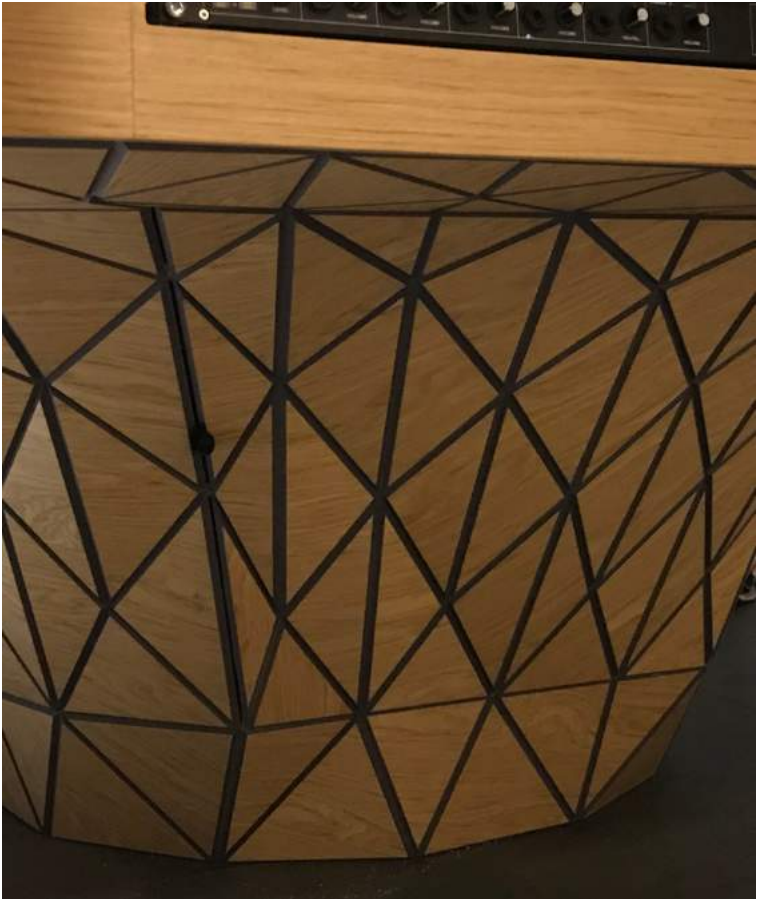


INSTALLATION OF A STANDARD PENDANT SPRINKLER

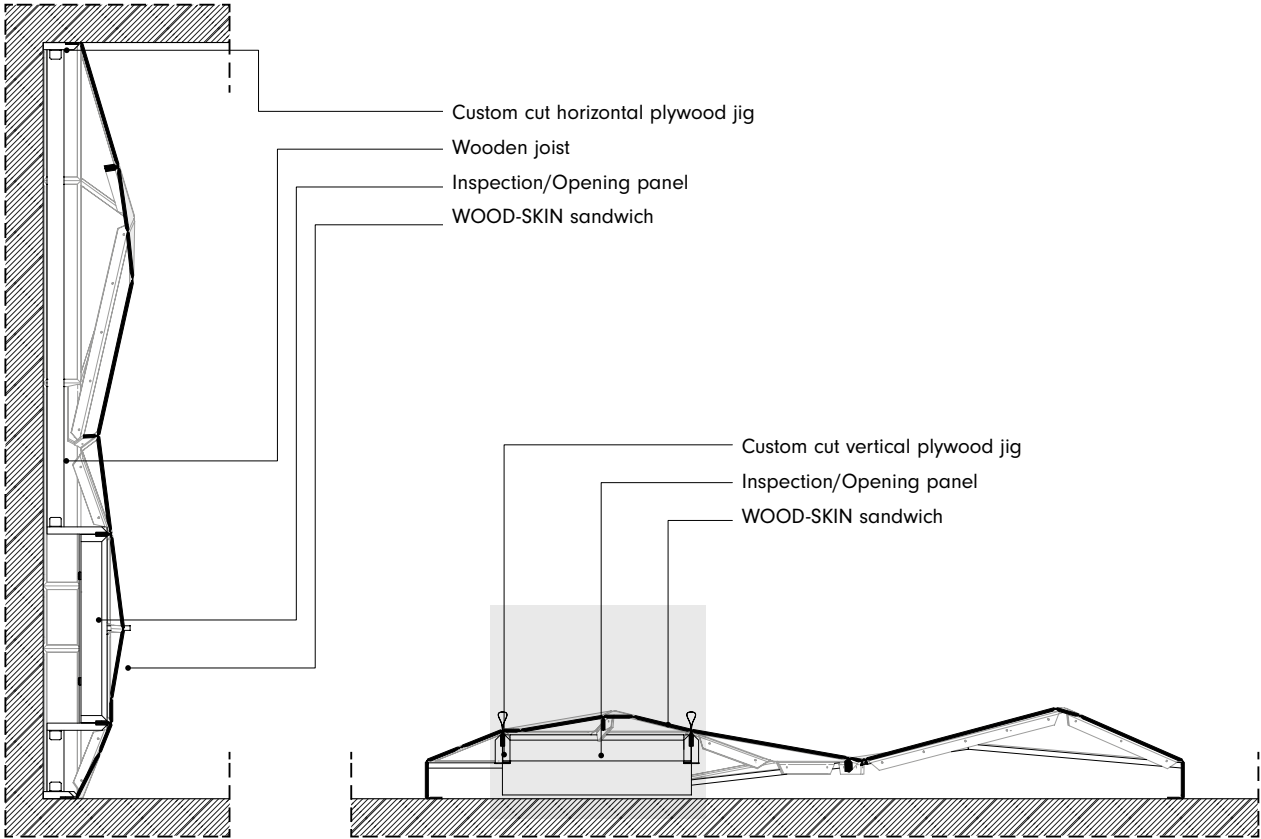
The opening for the sprinkler is cut during the installation of the WOOD-SKIN sheet based on the position of the already fixed sprinkler.



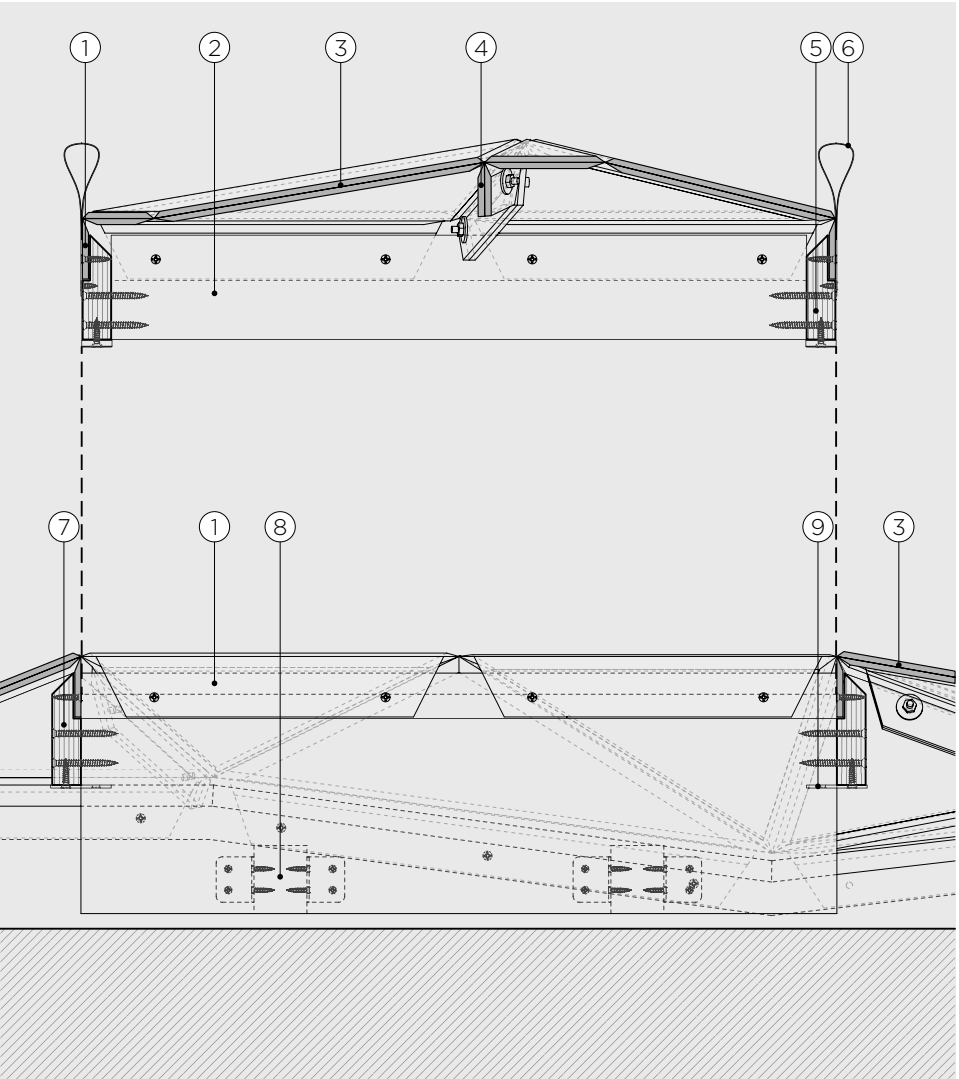
3.7 INSPECTION OPENINGS



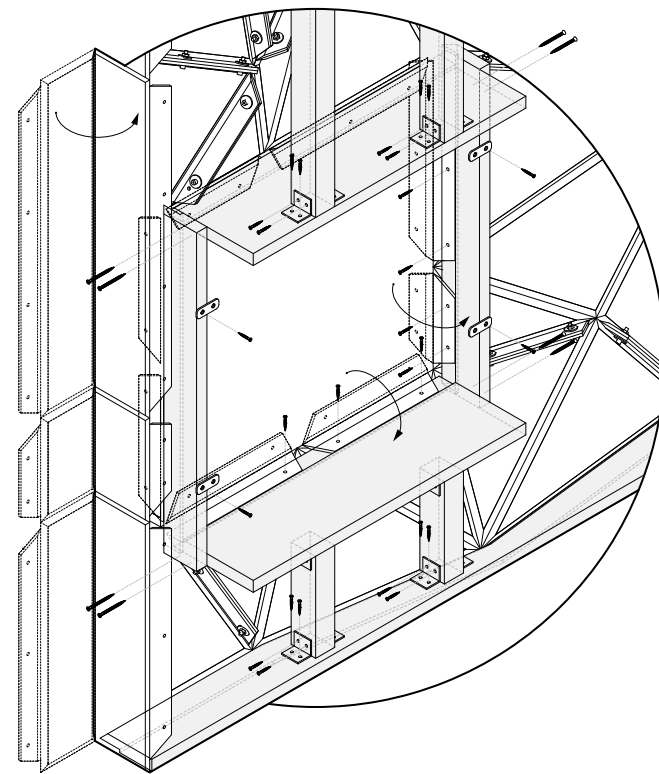
Radio DeeJay, Italy — 2021



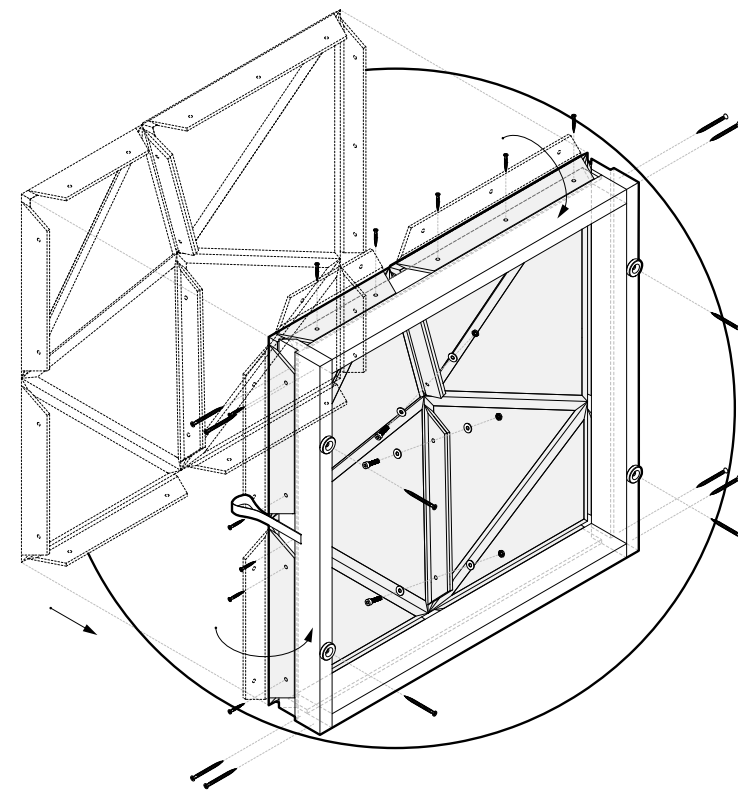
- 1. Wood-Skin border flap
- 2. Custom cut horizontal plywood jig (thickness=19 mm)
- 3. WOOD-SKIN sandwich
- 4. WOOD-SKIN inner flaps
- 5. Custom cut vertical plywood jig (thickness=19 mm)
- 6. Handle
- 7. Custom cut vertical plywood jig (h=19 mm)
- 8. Wooden joist
- 9. Magnet



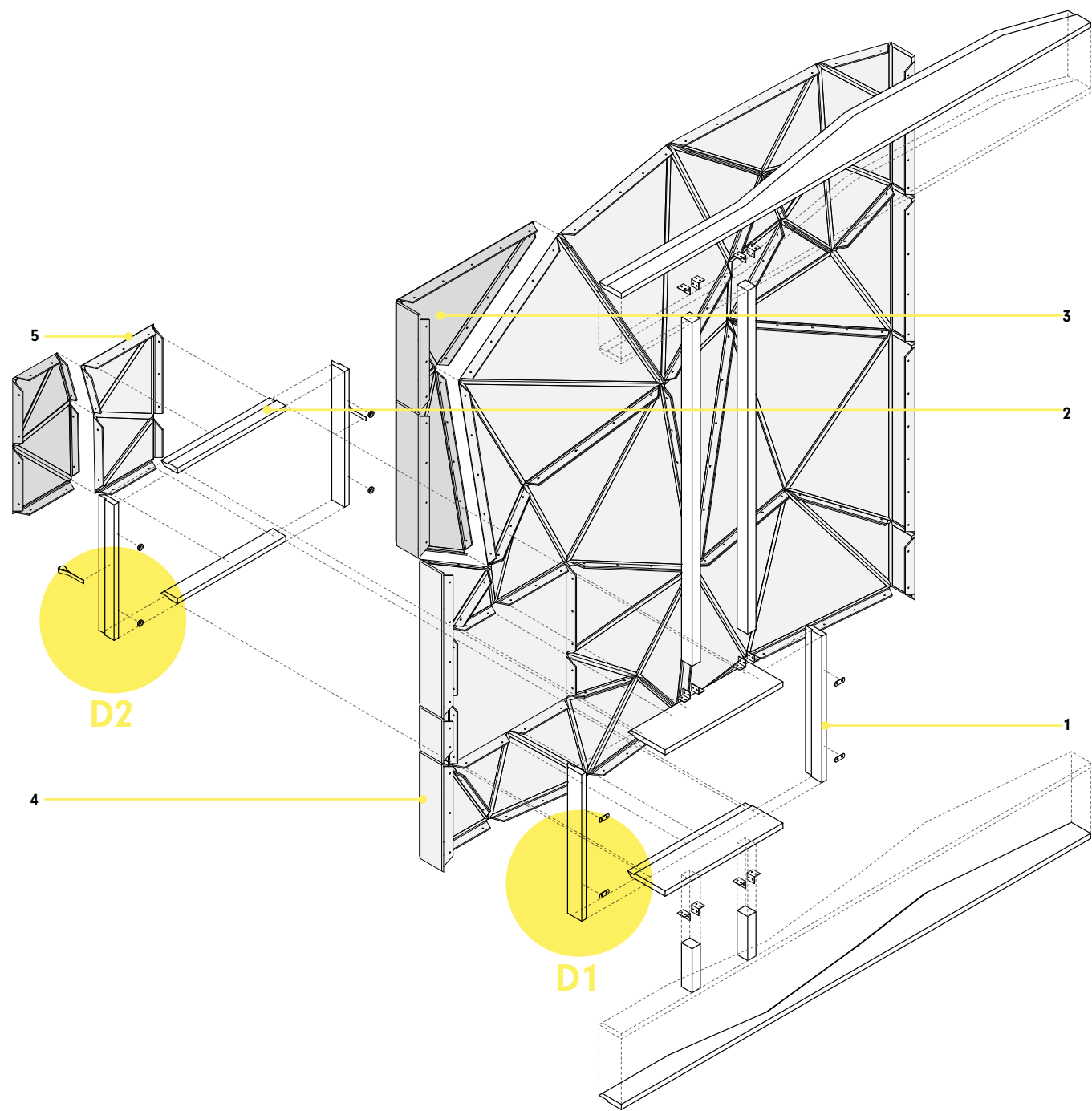
DETAILS



D1
Opening sub-structure and joint



D2
Inspection opening
cover panel

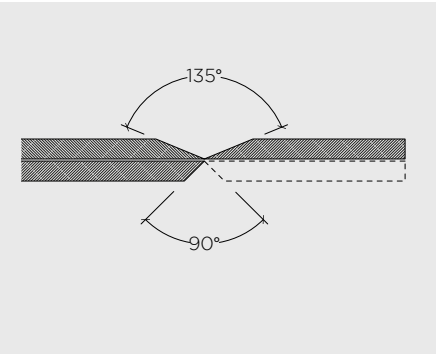
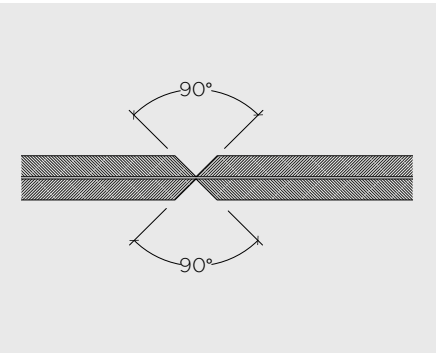


The sub-structure where the inspection opening will be located is first assembled by joining the wooden joists with L-shaped metal brackets 1. Then the openable section frame is assembled independently in the same way 2. The magnets and ferrous plates are screwed to the back of each supporting structure respectively.

The WOOD-SKIN surfaces are joined together by their inner flaps and installed onto the supporting structure 3. The custom cut side surfaces are screwed to the supporting structure before closing all the elements 4. Finally, the Wood-Skin sheets of the inspection opening cover are added to their supporting wooden structure and subsequently inserted in place, giving the overall installation a precise and seamless look 5.

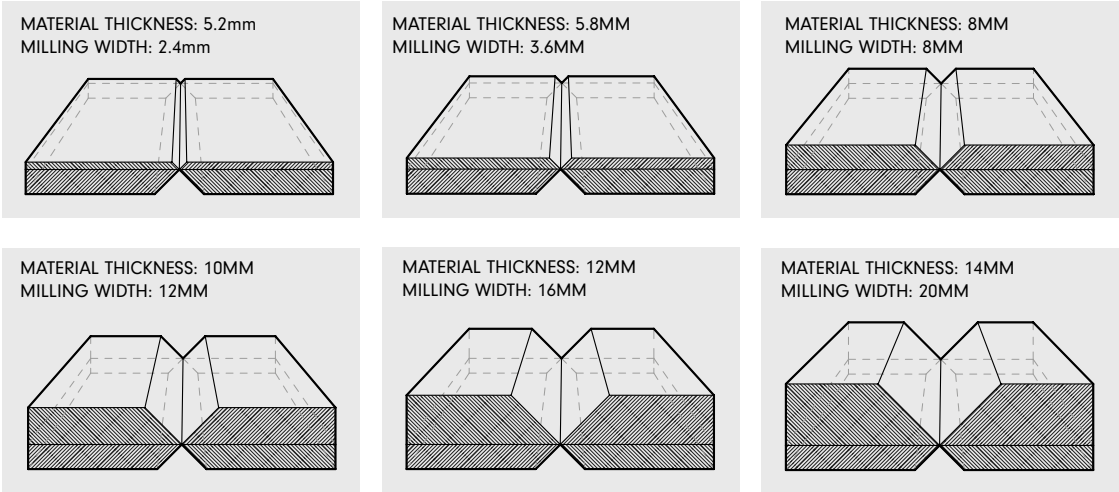
4 Composite and materials

4.1 HINGES AND SEAMS



HINGES
The hinges permit WOOD-SKIN surfaces to behave like a textile-like material. They are created by removing material from the front and back of the flat composite sheet using numerically controlled machinery. Two types of milling angles are used to guarantee a better control over the three-dimensionality - 90° for the front and back grooves and 135° for the back grooves where flaps are added.

RELATIONSHIP BETWEEN MATERIAL THICKNESS AND SEAM WIDTH
Because of the milling angles, the width of the seams depend on the thickness of the used material. This is an important aspect defining WOOD-SKIN’s aesthetics.



4.2 MATERIAL COMPOSITES

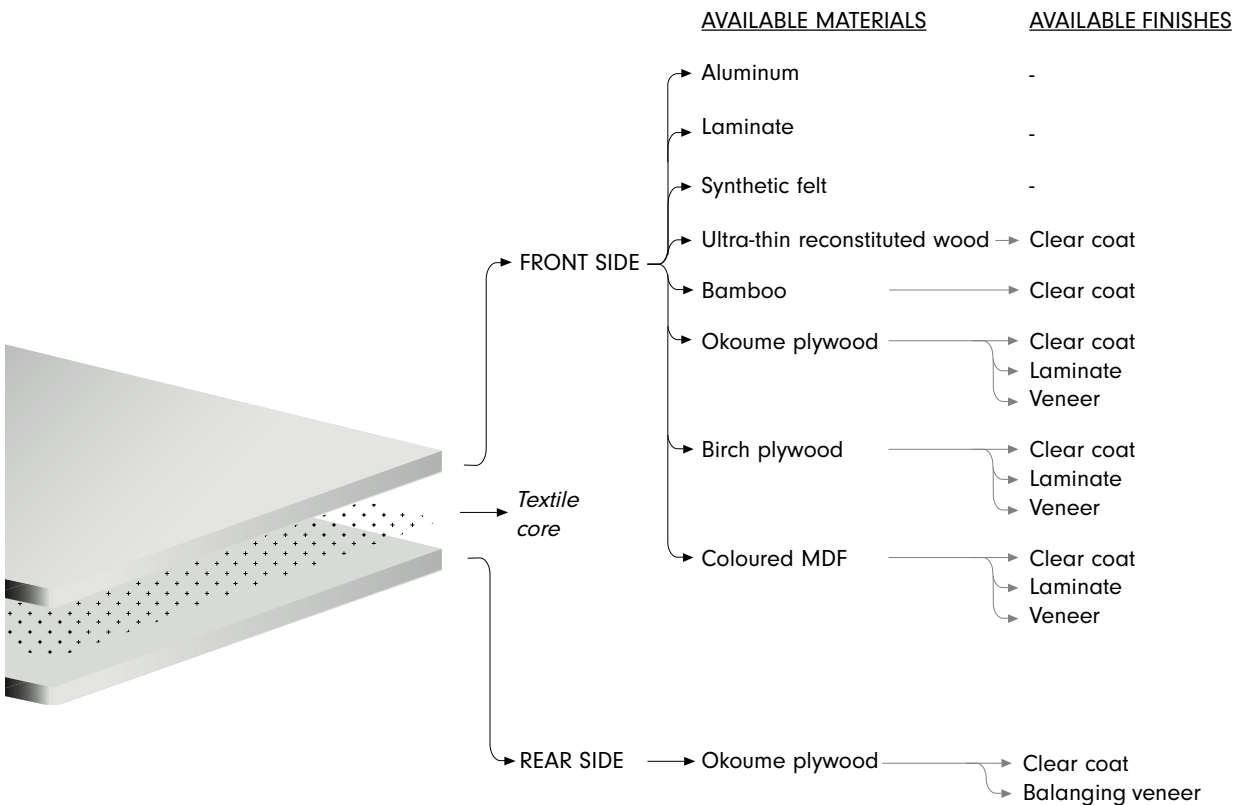
WOOD-SKIN works with material suppliers, this allows us to create composites with tailored properties, performance and aesthetics. Our team can help you design the most suitable material composite for your needs.

The standard core of WOOD-SKIN composites is made of a polyester based technical textile with the following characteristics:

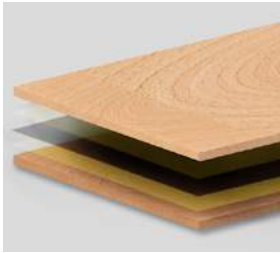
- Total weight - 250 gr/m²
- Tensile strength - 1800/1700 N/50 mm
- Tear strength - 350/330 N
- Seam strength - 50/N 5 cm

Information about adhesive available upon request

COMPOSITE



BIRCH



FRONT SURFACE: Birch plywood | 4mm

CHARACTERISTICS:

High quality aesthetic and structural performance. Light color with amber hue

FINISHES AVAILABLE ON BIRCH:

- + transparent varnish
- + veneer (wide variety)
- + laminate (any color)
- + anodized aluminum

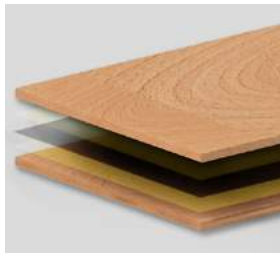
COLOURS: natural

SUGGESTED APPLICATION: indoor application

BACK SURFACE: Birch plywood | 4mm

- Fire retardant treatment available
- Acoustic version available *

OKOUME



FRONT SURFACE: Okoume plywood | 4mm

CHARACTERISTICS:

High quality marine plywood with warm hue. Dimensionally stable and resistant to moisture. Lightweight

FINISHES AVAILABLE ON OKOUME:

- + transparent varnish
- + veneer (wide variety)
- + laminate (any color)
- + anodized aluminum

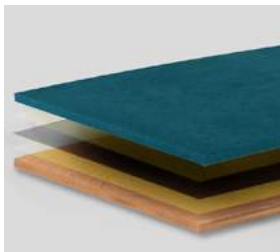
COLOURS: natural

SUGGESTED APPLICATION: indoor application

BACK SURFACE: Okoume plywood | 4mm

- Fire retardant treatment available
- Acoustic version available *

COLOURED MDF



FRONT SURFACE: Coloured MDF | 5 - 8mm

CHARACTERISTICS:

Wide range of colors and finishes possibilities. Moderately hydrophobic

FINISHES AVAILABLE ON MDF:

- + transparent varnish
- + veneer (wide variety)
- + laminate (any color)
- + anodized aluminum

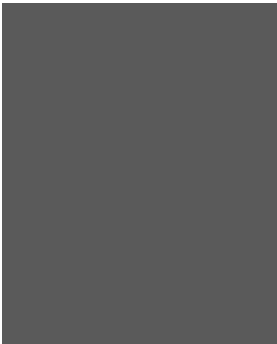
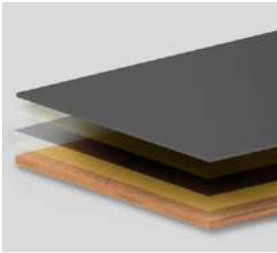
COLOURS: wide variety

SUGGESTED APPLICATION: indoor application

BACK SURFACE: Okoume plywood | 4mm

- Fire retardant treatment available
- Acoustic version available *

LAMINATE

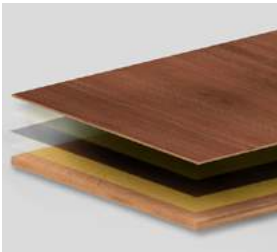


FRONT SURFACE: Laminate | 0.7 - 1.2mm
CHARACTERISTICS:
An innovative nanotech material for interior design: a smart, extremely matt, anti- fingerprint, very resistant, soft touch surface.
FINISHES AVAILABLE ON LAMINATE:
+ No finish
COLOURS: any color
SUGGESTED APPLICATION: indoor application

BACK SURFACE: Okoume plywood | 4mm


 Acoustic version available *

ULTRA-THIN RECONSTITUTED WOOD



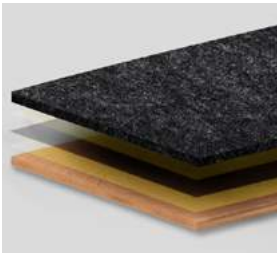
FRONT SURFACE: Reconstituted wood | 1.8mm
CHARACTERISTICS:
High-quality and aesthetic
FINISHES AVAILABLE ON RECONSTITUTED WOOD:
+ transparent varnish
COLOURS: wide variety
SUGGESTED APPLICATION: indoor application

BACK SURFACE: Okoume plywood | 4mm

 Fire retardant treatment available

 Acoustic version available *

SYNTHETIC FELT

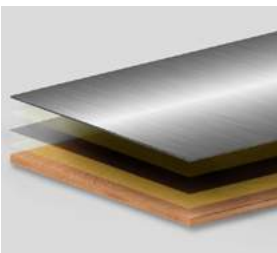


FRONT SURFACE: Synthetic felt |
CHARACTERISTICS:
The acoustically highly effective fibre-reinforced composite ensures a high level of sound absorption, even with a low material thickness.
FINISHES AVAILABLE ON SYNTHETIC FELT:
+ No finish
COLOURS: wide variety
SUGGESTED APPLICATION: indoor application

BACK SURFACE: Okoume plywood | 4mm


 Acoustic version available *

METAL LAMINATE OR ALUMINIUM



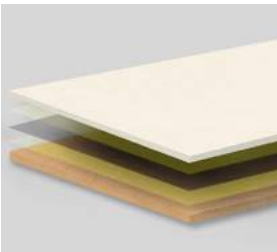
FRONT SURFACE: Anodized aluminum | 0.6 - 1mm
CHARACTERISTICS:
High quality and resistance
FINISHES AVAILABLE ON ALUMINIUM:
+ no finish
COLOURS: wide variety
SUGGESTED APPLICATION: indoor and outdoor application

BACK SURFACE: Okoume plywood | 4mm

 Fire retardant treatment available


 Acoustic version available *

SOLID SURFACE































FRONT SURFACE: Solid Surface | ??
CHARACTERISTICS:
Non-toxic and resistance
FINISHES AVAILABLE ON SOLID SURFACE:
+ no finish
COLOURS: wide variety
SUGGESTED APPLICATION: indoor and outdoor application

BACK SURFACE: Okoume plywood | 4mm

 Fire retardant treatment available

 Acoustic version available *

MATERIAL APPLICABILITY TO PRODUCT

	CLASSIC			BASIC		DIGITAL	DECOR		A-GAMI	O-GAMI				U-GAMI		O-GAMI							
	A	C	D	A	B		A	B	SA	SO	DO	NO		YU	FU	SO	DO	TO	FLUID	WAVE	MORPH	GEODE	CLOTH
																							
STANDARD																							
 OKOUME + VARNISH or LAMINATE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
 COLORED MDF + VARNISH or LAMINATE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PREMIUM																							
 BIRCH + VARNISH or LAMINATE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
 OKOUME + VENEER or METAL LAMINATE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
 COLORED MDF + VENEER or METAL LAMINATE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
 LAMINATE AND ULTRA-MATTE LAMINATE	✓	✓	X	✓	✓	X	✓	X	X	✓	✓	✓	✓	X	X	✓	✓	✓	✓	✓	✓	✓	To be checked
 ULTRA-THIN RECONSTITUTED WOOD	✓	✓	X	✓	✓	X	✓	X	X	✓	✓	✓	✓	X	X	✓	✓	✓	✓	✓	✓	✓	To be checked
 METAL LAMINATE	✓	✓	X	✓	✓	X	✓	X	X	✓	✓	✓	✓	X	X	✓	✓	✓	✓	✓	✓	✓	To be checked
DELUXE																							
 BIRCH + VENEER or METAL LAMINATE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
 SYNTHETIC FELT	✓	✓	X	✓	✓	X	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
 SOLID SURFACE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

5 Certifications

ACOUSTIC

UNI EN ISO 254

tested at Zeta Lab



ASTM C 423-17

tested at Zeta Lab



FIRE REACTION

Available in Class A according to US standard ASTM E 84

tested at Intertek



Available in Bs-2d-0 according to European standard UNI EN 13501-1

tested at CSI



UNIAXIAL TENSILE TEST

UNI ISO EN 1421:2017

tested at Politecnico di Milano



MECHANICAL TEST - OPENING AND CLOSING CYCLES

Resistance to repeated hinges stress

tested at Catas



Fire reaction certifications available for Russian and English market

The illustrated certifications are subject to constant revisions and continuous research.

For any further information about certifications and material tests contact us at info@wood-skin.com



CERTIFICATO / CERTIFICATE
ICILA-COC-004204

SI CERTIFICA CHE LA GESTIONE DELLA CATENA DI CUSTODIA ATTUATA DA
WE HEREBY CERTIFY THAT THE MANAGEMENT OF CHAIN OF CUSTODY OPERATED BY

WOOD SKIN SRL

sede legale/registered office: VIA MARCANTONIO DAL RE, 24 - 20156 MILANO (MI) - Italia

PRESSO LE SEGUENTI SEDI/SITES INCLUDED IN THE CERTIFICATION

VIA MARCANTONIO DAL RE, 24 - 20156 MILANO (MI) - Italia

È CONFORME AGLI STANDARD / IS IN COMPLIANCE WITH THE STANDARDS
FSC-STD-40-004 v3.0

PER LE SEGUENTI LAVORAZIONI E PRODOTTI / FOR THE FOLLOWING PROCESSING AND PRODUCTS

Acquisto di compensati, MDF
e laminati FSC 100%, FSC Misto e FSC Riciclato
e di tranciati FSC 100% e FSC Misto.
Produzione di rivestimenti di muri FSC 100%, FSC Misto e FSC Riciclato.

Purchase of plywood, MDF
and paperboard laminates FSC 100%, FSC Mix and FSC Recycled
and veneers FSC 100% and FSC Mix.
Production of wall cladding FSC 100%, FSC Mix and FSC Recycled.

La lista completa dei gruppi di prodotti inclusi nell'ambito di applicazione del certificato è disponibile sul database FSC® all'indirizzo <http://info.fsc.org>
The full list of the products groups that are included in the scope of the certificate is available on the database FSC® at the address <http://info.fsc.org>

Questo certificato non costituisce evidenza che un particolare prodotto fornito dal titolare del certificato sia certificato FSC (o FSC Controlled Wood).
I prodotti offerti, spediti o venduti dal titolare del certificato possono essere considerati inclusi nel campo di applicazione del presente certificato solo quando
la prevista dichiarazione FSC è attestata chiaramente sulle fatture e sui documenti di trasporto/ This certificate itself does not constitute evidence that a particular product
supplied by the certificate holder is FSC-certified (or FSC Controlled Wood). Products offered, shipped or sold by the certificate holder can only be considered covered
by the scope of this certificate when the required FSC claim is clearly stated on sales and delivery documents.

I termini di uso e la validità del presente certificato sono definiti nel Regolamento per la concessione e il mantenimento della certificazione della gestione
della CATENA di CUSTODIA secondo gli STANDARD FSC e per il rilascio delle autorizzazioni all'uso del LOGO FSC e subordinati al rispetto dello stesso.
The terms of use and validity of this certificate are defined in Regolamento per la concessione e il mantenimento della certificazione della gestione
e della CATENA di CUSTODIA secondo gli STANDARD FSC e per il rilascio delle autorizzazioni all'uso del LOGO FSC and subject to the respect of the same.

Questo certificato rimane di proprietà di CSI SpA. Il certificato e tutte le sue copie, se richiesto da CSI SpA, devono essere restituite o distrutte.
This certificate remains the property of CSI SpA. The certificate and all copies or reproductions of it shall be returned or destroyed on CSI SpA request.

La validità di questo certificato deve essere verificata sul sito <http://info.fsc.org> / The validity of this certificate shall be verified on <http://info.fsc.org>

PRIMA EMISSIONE
FIRST ISSUE
20/01/2020

DATA DI VALIDITA'
EFFECTIVE DATE
20/01/2020

DATA DI SCADENZA
EXPIRING DATE
19/01/2025



Viale Lombardia, 20 - 20021 Bollate (MI) - www.csi-spa.com
CSI S.p.A. a socio unico soggetta ad attività di direzione e coordinamento di IMQ Group S.r.l.
REA MI 1466310 R.I./C.F./P.I. 11360160151 Cap. Soc. € 1.040.000

Ing. P. Baldazzi

B. U. Management Systems



The mark of
responsible forestry

SELF-DECLARATION
COMMUNICATION WITH REFERENCE TO THE EU TIMBER REGULATION

The EU Timber Regulation No. 995/2010 of the European Parliament establishes the obligations of operators who place timber and timber products on the market, expressing the prohibition of placing illegally harvested timber on the EU market.

In order to support our customers in fulfilling this commitment, WOOD—SKIN srl declares that it can provide all the information required by EU Regulation No. 995/2010 so that the regulation is complied with.

The available information is:

- Scientific name of the wood species;
- Country of origin and/or area of production
- Details of the supplier
- Documents proving the legality of the concessions of origin
- Documents proving compliance with fiscal, social and environmental regulations of the producing country
- Risk assessment procedures in third-party procurement policy

Furthermore, as further proof of the existence of established procedures, also aimed at complying with the obligations expressed in European legislation, WOOD—SKIN holds the FSC® C154721 ICILA-COC-004204 environmental certification

SELF-DECLARATION
QUALITY POLICY

WOOD—SKIN has, from the very beginning of its activity, adopted a policy oriented toward the creation of products of a high technical and qualitative level.

This original vision, and subsequent evolutions, have led to the creation of products of outstanding aesthetics and design in the area of decorative surfaces. This is a precise choice of strategic competitive positioning that has enabled the achievement of an exclusive brand identity.

The company has identified this path to satisfy the Customer’s needs and expectations and strives to demonstrate this through the creation of a high-quality products, seeking ever greater precision in the design and production process.

The Customer seeks products of high standards and aesthetic perfection, but at the same time expects technical support in the design and use of the product and is increasingly attentive to environmental concerns. Hence the choice towards the search for suppliers of natural materials, ethically responsible processes and products and the growing commitment to sustainability. With respect to the latter, WOOD—SKIN aims to search for raw materials with reduced environmental impact, reduce waste, produce only on demand, and incentivize the transportation/shipping of its unassembled products (plates) so as to reduce their space inside cargo.

This path requires great attention to human resources in terms of involvement and professional qualification.

WOOD—SKIN is also committed to a process of understanding, sharing and transparency with the surrounding community while respecting its role as an economic and ethical reference point.

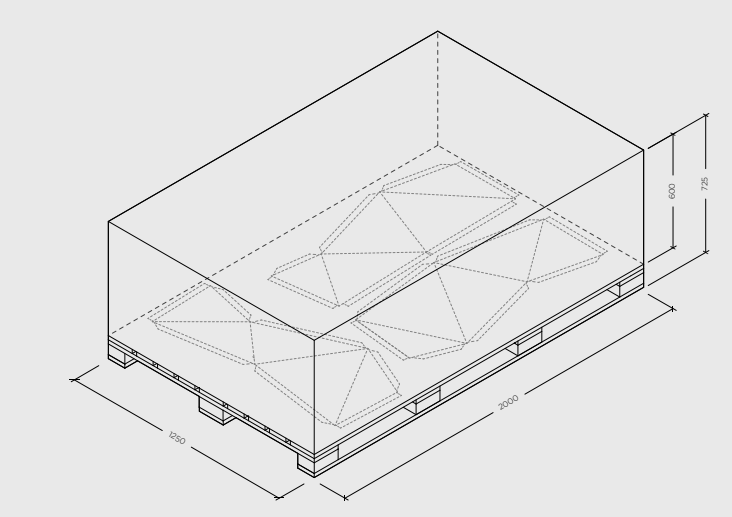
In particular, the company pursues:

- compliance with all mandatory requirements applicable to its business sector and products;
- compliance with all regulations regarding control, traceability and legality of origin of wood materials;
- the protection of the environment by reducing emissions, waste for disposal and water and energy consumption;
- research and development of aesthetically and functionally innovative products;
- the continuous improvement of its processes to make them more precise and minimize time and expenses;
- the constant expansion of product and service offerings and the development of best practices for their implementation;
- the continuous training of personnel.

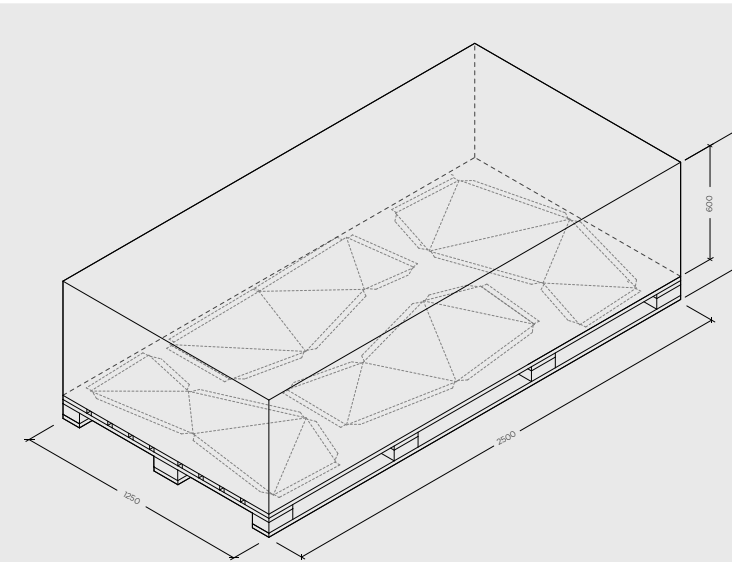
6 Storage and handling

6.1 PACKAGING AND SHIPPING

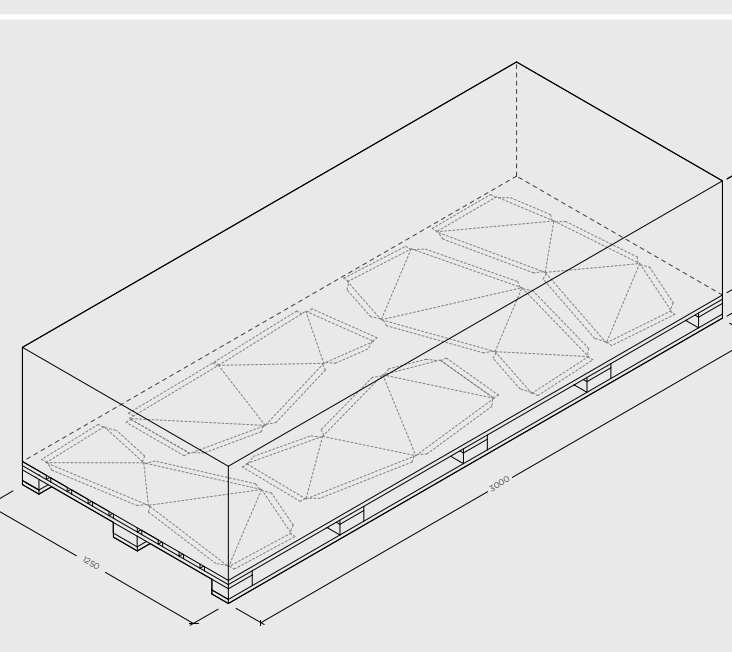
Wood-Skin products arrive in wooden boxes on pallets shipped by plane or boat. The crates come in three sizes which generally depend on the amount and type of order.



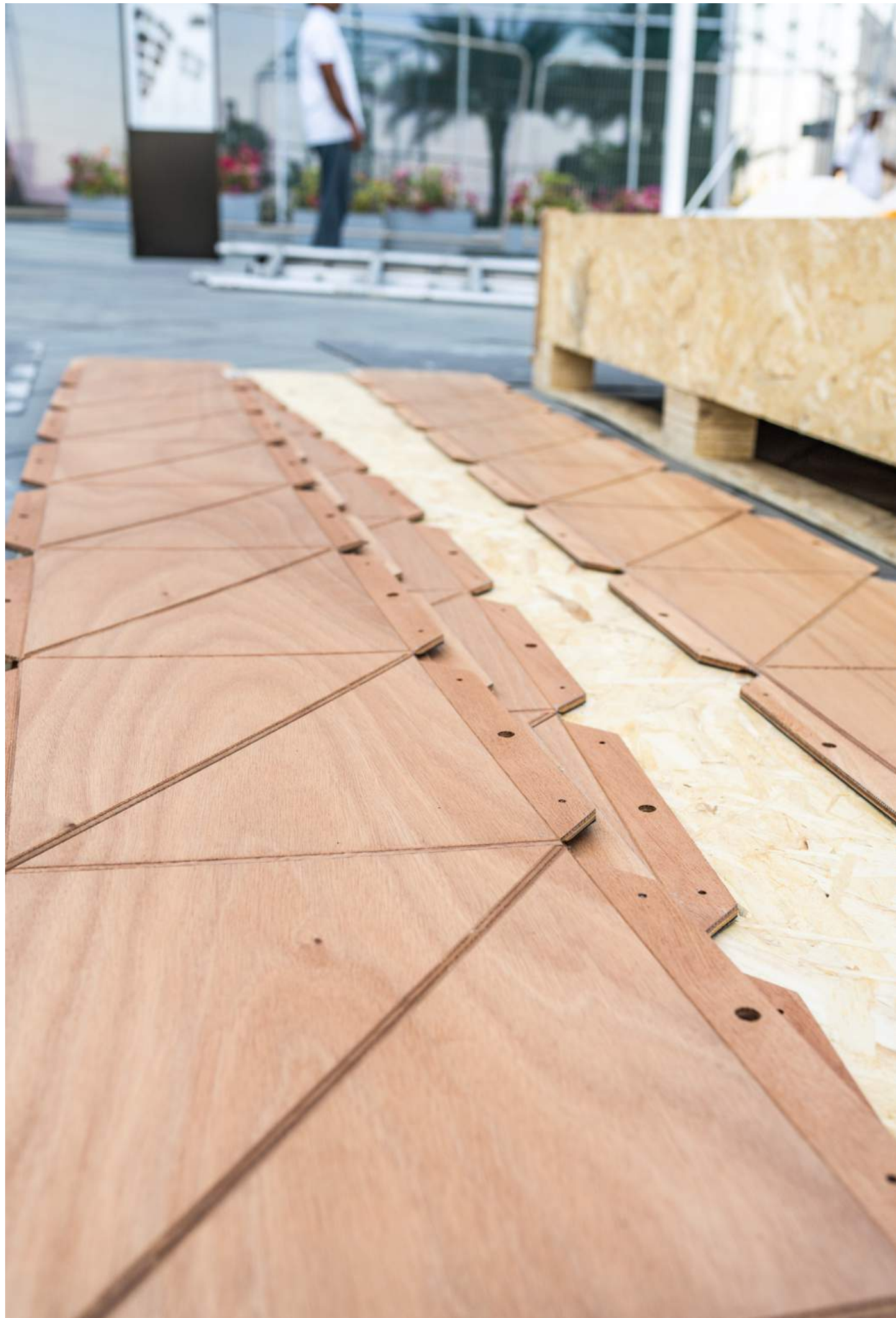
CUSTOM I
Small
W1250 x L2000 x H600



CUSTOM II
Medium
W1250 x L2500 x H600



STANDARD
Large
W1250 x L3000 x H600



6.2 HANDLING

Due to the nature of the materials, Wood-Skin sheets must be stored in a dry place with proper ventilation to avoid changes in color and performance. All pieces are delivered with the back side facing up and a plastic protective film on the front side. Instruction sheets for the assembly are provided.

Unboxing:

1. Space for assembly should be provided
2. All pieces should be taken out of the box and placed on a soft material in order to protect the surfaces
3. The pieces should be placed with the back side facing up so that all symbols and numbers are visible
4. Assembly should be done according to the instruction sheet

WOOD-SKIN

is a product of Wood-Skin s.r.l.
via Marcantonio dal Re - 24
20156 - Milano - Italy
C.F. / P.IVA 08311500964

MAIL
info@wood-skin.com

TEL
+39 02 87036995

WOOD-SKIN.COM

MATERIALS AND FINISHES INDEX

MDF by Valchromat
valchromat.pt | gruppobonomipattini.com

Cork by Tecnosugheri
tecnosugheri.it

Bamboo by Moso
gruppobonomipattini.com

Ultra thin reconstituted wood by Alpi Wood
alpiwood.com

Aluminum by Alucobond
alucobond.com

Metal laminates by Almeco
almecogroup.com

Metal laminates by Formica
formica.com

Metal laminates by Sadun
sadun.it

Ultra matte laminates by Fenix NTM
fenixforinteriors.com

Laminates by Arpa Industriale
arpaindustriale.com

Laminates by Abet Laminati
abetlaminati.com

Laminates by Formica
formica.com

Veneers by Alpi Wood
alpiwood.com

PROJECT CREDITS

Tailor Made photo-shooting 2022, Italy
WOOD-SKIN | Photos: Marco Menghi

Parametric surface, Dubai
SUPERFUTUREDESIGN | Photos: Oana Maria Minuti®

Mesh Panels photo-shooting 2021, Italy
WOOD-SKIN & Want Studio | Photos: Omar Sartor

Fold Panels photo-shooting 2021, Italy
WOOD-SKIN & Want Studio | Photos: Omar Sartor

Dräger, Milan – Italy
APIUC Architetti Associati and Matteo Lomaglio
| Photos: Andrea Segliani

4300 Wilson, Arlington – USA
Gensler Design | Photos: James John Jetel

Milano Today Apartment, Milan – Italy
WOOD-SKIN | Photos: Pier Lomascolo

Accuracy, Paris – France
Atelier Flow | Photos: Frederic Atlan

Muze Gazhane, Istanbul – Turkey
DS architects

United Nation Palace - Room XIX, Geneva – Switzerland
PEIA Associati | Photos: DSL studio®

Reign Restaurant, Dubai
WOOD-SKIN | Photos: WOOD-SKIN

Columbus Private Clinic, Milan
WOOD-SKIN | Photos: WOOD-SKIN

La Clef Champs-Elysees, Paris
Jean-Philippe Nuel | Photos: WOOD-SKIN

B&B HOTEL Paris Porte des Lilas, Paris
Agence Blanchet D’Istria | Photos: WOOD-SKIN

Borgomolino, Italy
Marco Casagrande | Photos: WOOD-SKIN

CREDITS

Graphic design
Maia Zheliazkova | Anna Bortolini

3D drawings and renders
Maia Zheliazkova | Andrea Tellatin
Matteo Lomaglio | Alexia Gomez Lopez
Vera Irawan | Julia Shabanova

Text
Maia Zheliazkova | Tom Phillips

The illustrated products are subject to constant revision in terms of their functional details. Continuous research goes into the finishing treatments. The products presented in this catalogue, as well as the descriptions and specifications, are illustrative and subject to changes by WOOD-SKIN srl.

Non-contractual document.