modular solutions

PORCELANOSA Offsite

Contents

1. Industrialized Systems: Porcelanosa Offsite

is committed to industrialized construction

PORCELANOSA Offsite

The Porcelanosa Offsite line, by Butech, is committed to industrialized construction with a production plant that has a surface area of 10,000 square meters and with the possibility of expanding to a further 6,000 square meters, uses the latest technology for manufacturing Monobath modules and Modfacades panels.

With a yearly production capacity of more than 7,000 units, the new plant will become the most modern and automated industrialized construction plant in Spain.

The new production center is located within Porcelanosa Grupo's industrial area in Vila-real. All the brands of the international company are concentrated within a diameter of five kilometers, providing products for the new plant, ensuring supply and compliance with delivery deadlines.

The robotic arms incorporated in the assembly line, featuring high precision, handle materials and perform an assembly that allows for greater performance and productivity, while streamlining and automating the entire production process.

In response and adaptation to the needs of the building sector in 2019, Porcelanosa Offsite - the range of finished and ready-to-install construction systems for kitchens, bathrooms and facades - came into being. Reducing environmental impact, improving delivery times and efficiency are the premises on which this line of modular elements works.

The demand for modular elements has experienced strong growth in recent years, due to several factors, including the lack of skilled labor, the need to reduce delivery times and the search for alternatives that minimize environmental impact.

By means of a fast and effective on-site installation, the industrialized modules are introduced and taken to the final location, with no other requirements than to have a lifting system and a gap in the enclosure through which to insert the industrialized element to its final location.

Why choose the
industrialized option?

Which problems are solved
with the installation of
modules?

What improvements does
Porcelanosa Offsite
provide compared to other
developers?

→

Benefits and improvements of industrialized systems

Reduction of...

- Execution times
- Indirect costs and financial expenses
- Order management and industrial organization
- Labor risks
- Waste, breakage, shrinkage and theft
- Help, stockpiling and transfer
- Cleaning, repairs and after-sales service

Shipping

- By means of a fast and effective on-site installation, the modules are introduced and taken to their final location, with no other requirements than to have a lifting system and a gap in the enclosure through which to insert the industrialized the bathroom or kitchen

Construction process

- Customization of interiors: construction and finishing in the factory
- On-site installation prior to facade installation
- Porcelanosa Grupo finishes: commissioning by professionals with extensive experience in installing ceramic tiles and bathroom accessories to ensure proper installation, which reduces the after-sales service
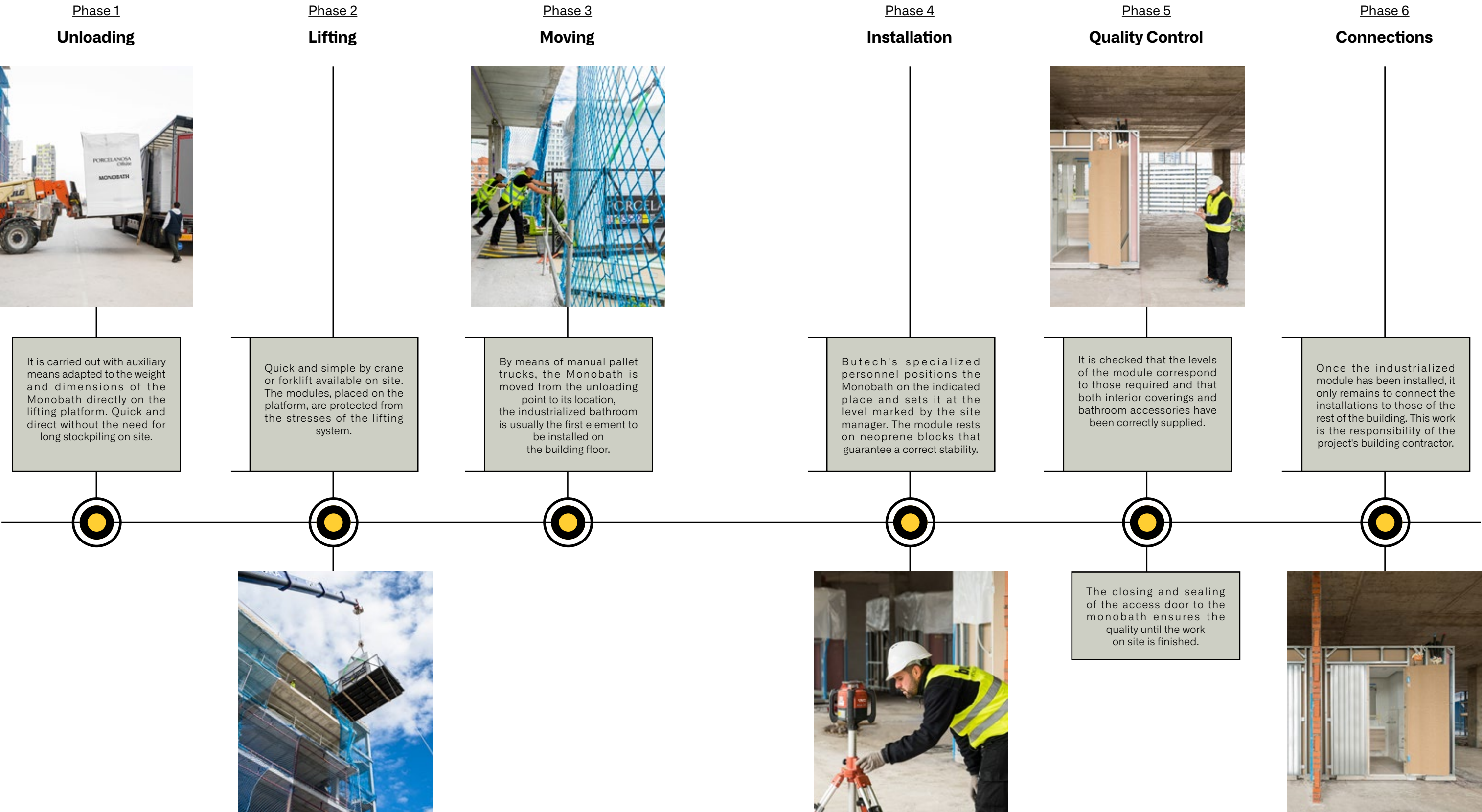
Services

- Customization of each project, engineering
- Production capacity and fast turnaround times
- Quality, efficiency and sustainability
- Production control with qualified personnel
- Quality control
- Pre-certifications and adapted to regulations of each country
- Logistics, state-of-the-art facilities
- Execution, quality levels and assured execution deadlines, thorough controls in the installation on site

→ All the advantages of having a single contact with the guarantee of **Porcelanosa Grupo**

Installation on site

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
Unloading	**Lifting**	**Moving**	**Installation**	**Quality Control**	**Connections**

It is carried out with auxiliary means adapted to the weight and dimensions of the Monobath directly on the lifting platform. Quick and direct without the need for long stockpiling on site.

Quick and simple by crane or forklift available on site. The modules, placed on the platform, are protected from the stresses of the lifting system.

By means of manual pallet trucks, the Monobath is moved from the unloading point to its location, the industrialized bathroom is usually the first element to be installed on the building floor.

Butech's specialized personnel positions the Monobath on the indicated place and sets it at the level marked by the site manager. The module rests on neoprene blocks that guarantee a correct stability.

It is checked that the levels of the module correspond to those required and that both interior coverings and bathroom accessories have been correctly supplied.

Once the industrialized module has been installed, it only remains to connect the installations to those of the rest of the building. This work is the responsibility of the project's building contractor.

The closing and sealing of the access door to the monobath ensures the quality until the work on site is finished.

2. Monobath
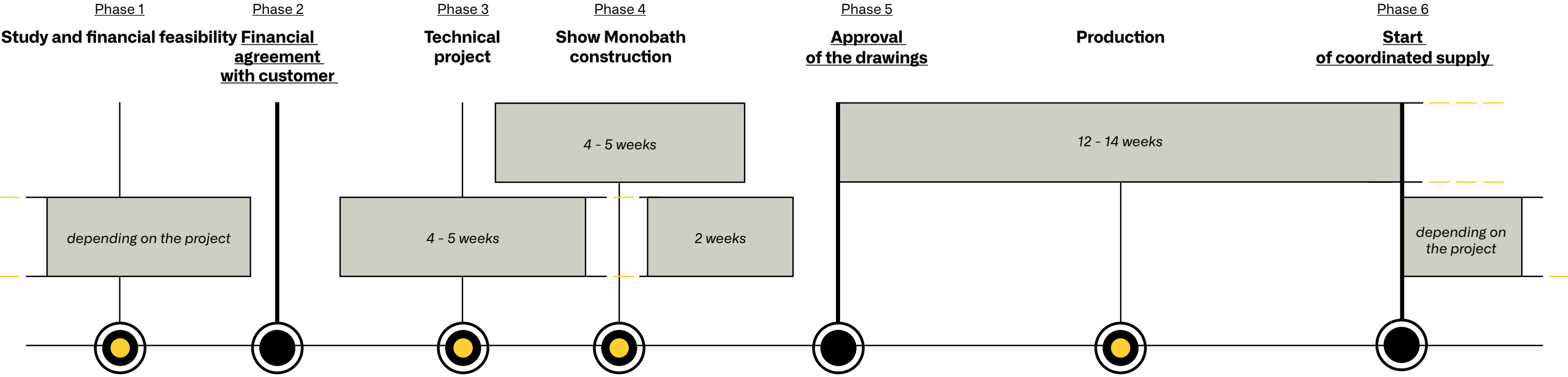
finished, industrialized bathrooms

MONOBATH

Monobath is an industrial development for the production of completely finished baths, ready to be installed on site, which brings together quality finishes and Porcelanosa Grupo warranty. Industrialized bathrooms include interior finishes, furniture, sanitary fixtures and accessories, as well as plumbing and electrical installations. They can be adapted to any available space, with interior finishes according to range preference.

Features for Monobath design and installation

1. **Neoprene bases for support on slab**
2. **Standard type base** (80 mm – 3 $\frac{5}{32}$ in)
3. **Type base with radiant floor** (120 mm – 4$\frac{23}{32}$in)
4. **Slim base option** (30 mm – 1$\frac{3}{16}$in)
5. **Wall and ceiling structure**
6. **Boards: plasterboard / fiber plaster / cementitious. (As needed)**
7. **Interior ceramic covering**
8. **Ceiling**
9. **Facilities**
10. **WC option**
11. **Interior ceramic floor**
12. **Shower tray**
13. **Door**

Design and production process

Phase 1
Study and financial feasibility

Phase 2
Financial agreement with customer

Phase 3
Technical project

Phase 4
Show Monobath construction

Phase 5
Approval of the drawings

Production

Phase 6
Start of coordinated supply

4 – 5 weeks

12 – 14 weeks

depending on the project

4 – 5 weeks

2 weeks

depending on the project

3. Monobath Typologies
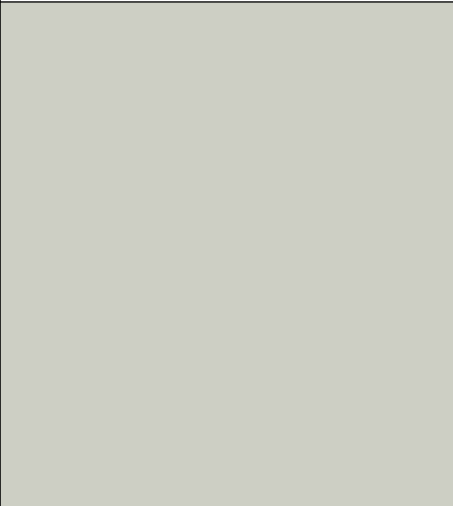
finished projects presented as needed

1. Single-family

Housing designed for a single family. It is a large and functional bathroom, prepared so that several people can use it at the same time.

Bathroom finishes

Floor tile **Matika Bone** 59,6 cm x 59,6 cm (23.5 x 23.5 in)
Wall tile **Matika Bone** 33,3 cm x 100 cm (13.1 x 39.4 in)
Wall decor **Block Matika Bone** 33,3 cm x 100 cm (13.1 x 39.4 in)
WC **Urban C**
Bidet **Urban C**
Washbasin faucet **NK Concept**
Washbasin **Hoop** 120 cm x 45 cm (47.3 x 17.7 in)
Vanity unit **Mega** 120 cm x 45 cm (47.3 x 17.7 in)
Mirror **Smart Line** 120 cm x 50 cm (47.3 x 19.7 in)
Shower column **Smart**
Shower tray **Slate** 160 cm x 80 cm (63 x 31.5 in)
Shower screen **Yove 9**
Towel dryer **Round** 56 cm x 120 cm (22 x 47.3 in)
Accessories **NK Concept** hanger, paper holder without cover, towel rail 45 cm (17.7 in), floor/wall toilet brush holder

Measures

Length: 3.07m (120.8 in)
Width: 1.96m (75.6 in)
Inner height: 2.30m (90.5 in)

Weight

2.350 kg approx. (5.1809 lb)

*Module with approximate measurements and finishes.
Customization per project.*

3,07

1,96
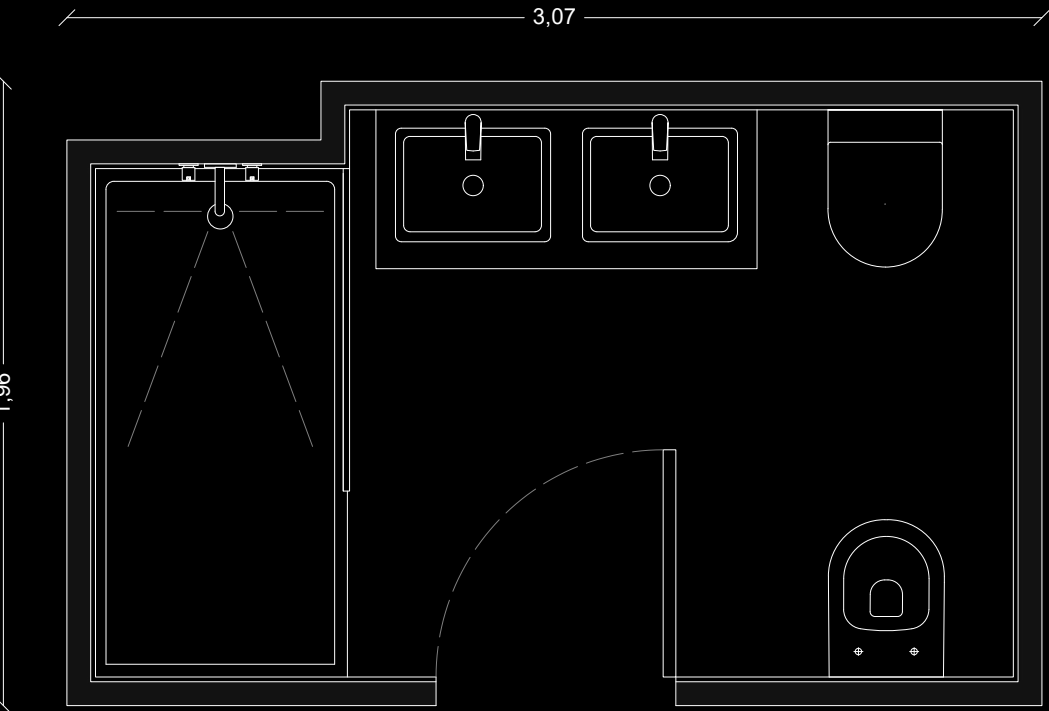
2. Multifamily

Rental housing, shared or individual apartments ready to move into. Fully equipped bathroom with a selection of basic elements, due to the temporary nature of the space and the passage of different people throughout its useful life.

Bathroom finishes

Floor tile **Vela Grey** 59,6 cm x 59,6 cm (23.5 x 23.5 in)
Wall tile **Vela Grey** 33,3 cm x 100 cm (13.1 x 39.4 in)
Wall decor **Limit Vela Grey** 33,3 cm x 100 cm (13.1 x 39.4 in)
WC **Acro Compact**
Washbasin faucet **Hotels**
Washbasin **NK Concept** 65 cm x 45 cm (25.6 x 17.7 in)
Vanity unit **NK Concept** 65 cm x 45 cm (25.6 x 17.7 in)
Mirror **Lite** 60 cm x 70 cm (23.6 x 27.6 in)
Shower faucets **Hotels + Pack Round**
Shower tray **Zen** 160 cm x 70 cm (63 x 27.6 in)
Shower screen **Yove 1**
Accessories **Hotels** hanger, paper holder without cover, spare paper holder, 60 cm (23.6 in) shelf, towel rack without bar, floor/wall toilet brush holder

Measures
Length: 2.40m (94.5 in)
Width: 1.60m (63.8 in)
Inner height: 2.30m (90.5 in)

Weight
1.650 kg approx. (3.6377lb)

Module with approximate measurements and finishes.
Customization per project.

2,4

1,6
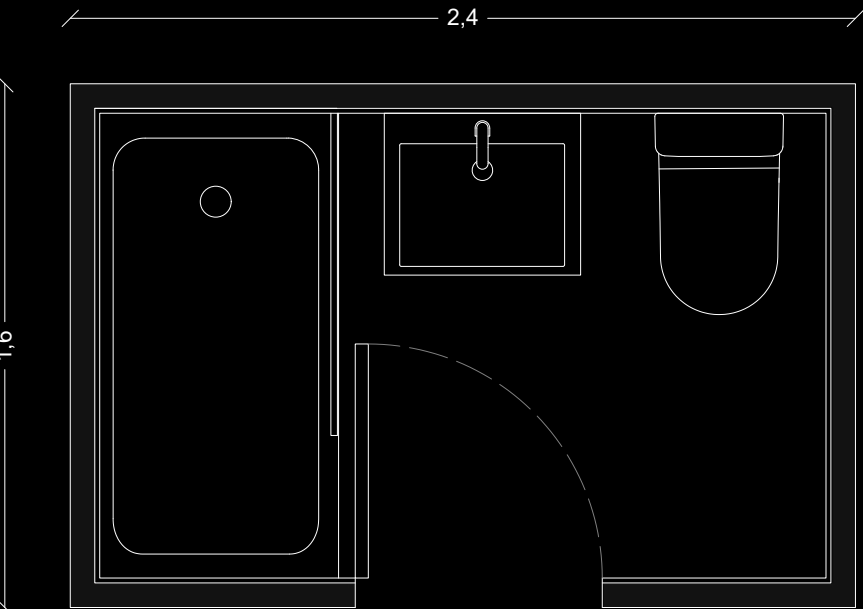
3. Corporate

Rental housing aimed at people who, for work reasons, move temporarily away from home. It is an individual bathroom, equipped with high performance elements that provide comfort and elegance.

Bathroom finishes

Floor tile **Bottega White** 80 cm x 80 cm (31.5 x 31.5 in)
Wall tile **Bottega White** 45 cm x 120 cm (17.7 x 47.3 in)
Wall decor **Spiga Bottega White** 45 cm x 120 cm (17.7 x 47.3 in)
WC **Acro Compact** Susp. Rimless 49 cm (19.3 in)
Double flush **Smart Line Oval**
Washbasin faucet **Round**
Worktop **Radio** 80 cm x 50 cm (31.5 x 19.7 in)
Vanity unit **Radio** 80 cm x 50 cm (31.5 x 19.7 in)
Mirror **Radio** 75 cm x 55 cm (29.5 x 21.7 in)
Shower faucets **Rondo Composition**
Shower tray **Unseen** 120 cm x 90 cm (47.2 x 35.4 in)
Shower screen **Attica 1**
Towel dryer **Round** 56 cm x 120 cm (22 x 47.3 in)
Accessories **Hotels** hanger, paper holder without cover, floor/wall toilet brush holder

Measures

Length: 2.95m (116.5 in)
Width: 1.91m (75.2 in)
Inner height: 2.30m (90.5 in)

Weight

2.250 kg approx. (4.9604b)

Module with approximate measurements and finishes.
Customization per project.

29
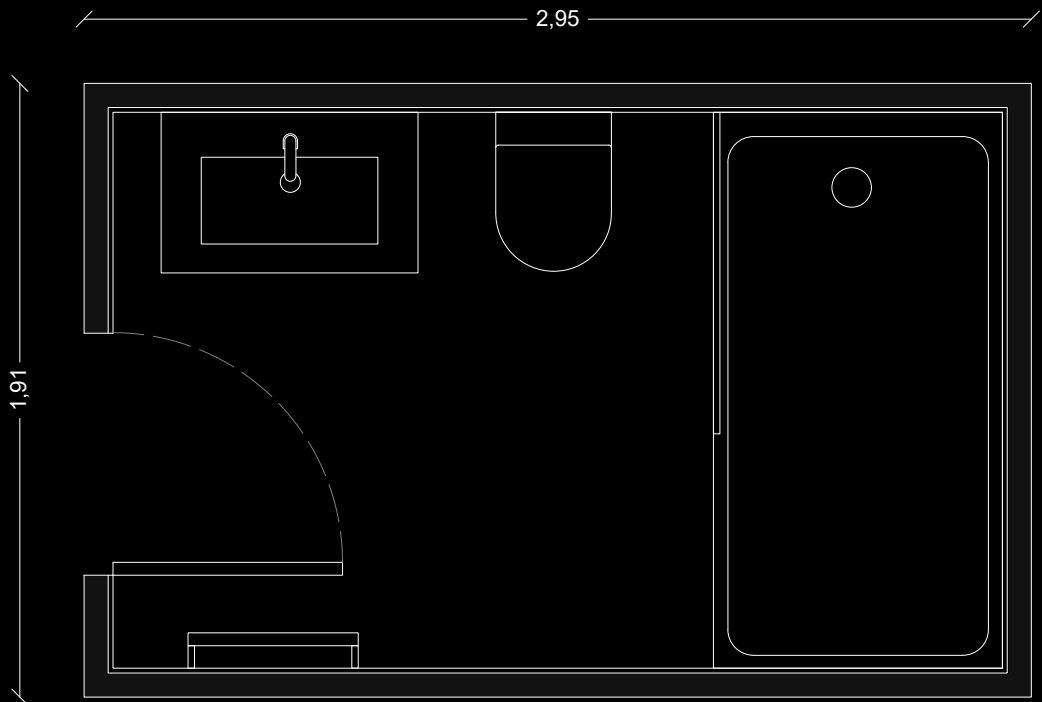
4. Senior living

A stay prepared for seniors seeking comfort and independence without giving up the services and quality of life in a community. Spacious and well-equipped bathroom that offers all the necessary services that provide comfort to the space.

Bathroom finishes
Floor tile **Nantes** 120 cm x 120 cm (47.3 x 47.3 in)
Wall tile **Nantes** 45 cm x 120 cm (17.7 x 47.3 in)
Wall decor **Listón Madera Roble** 45 cm x 120 cm (17.7 x 47.3 in)
WC **Arquitect** Suspended
Double flush **Tono**
Washbasin faucet **Lignage Luxe**
Washbasin **Liem** 56 cm x 39 cm (22 x 15.4 in)
Vanity unit **Liem** 122 cm x 47 cm (48 x 18.5 in)
Mirror **Liem** 60 cm x 110 cm (23.6 x 43.3 in)
Shower faucets **Lignage + Pack Rondo**
Shower tray **Shower Deck**
Shower screen **Optima 1**
Accessories **Urban C** hanger, paper holder with cover, towel rail 50 cm (19.7 in), floor/wall toilet brush holder

Measures
Length: 3.12m (122.8 in)
Width: 1.98m (78 in)
Inner height: 2.30m (90.5 in)

Weight
2.600 kg approx. (5.7323 lb)

Module with approximate measurements and finishes.
Customization per project.
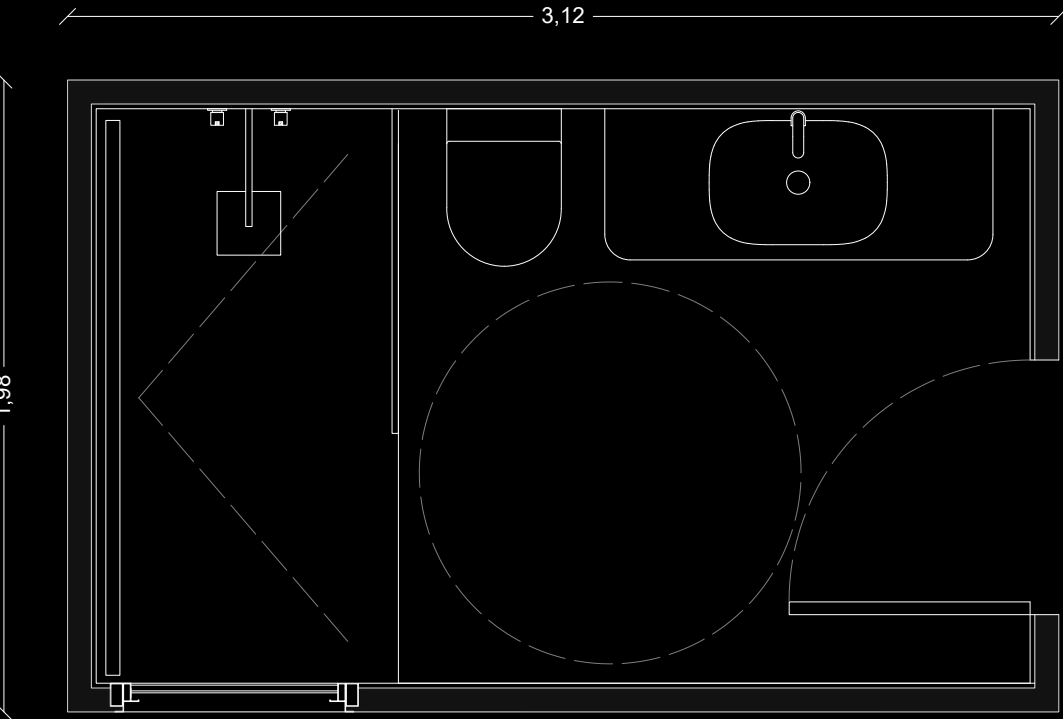
5. Senior residence

Aimed at nursing homes and hospitals that require adapted, safe and comfortable spaces to care for dependent people. Spacious,
full-featured, but obstacle-free bathroom that meets the needs of professionals
and patients, without architectural barriers.

Bathroom finishes
Floor tile **Vela Smoked Ant**. 59.6 cm x 59,6 cm (23.5 x 23.5 in)
Wall tile **Vela Smoked** 33,3 cm x 100 cm (13.1 x 39.4 in)
Wall decor **Limit Vela Smoked** 33,3 cm x 100 cm (13.1 x 39.4 in)
WC **Easy**
Double flush **I-Comfort Line**
Washbasin faucet **Easy**
Washbasin **Easy** 65 cm (25.6 in)
Tilted mirror **Easy** 80 cm x 50 cm (31.5 x 19.7 in)
Shower faucets **Bela Sani + Pack Round**
Shower tray **Shower Deck**
Accessories **Easy** hanger, folding bar with paper holder 80 cm (31.5 in), handrail 60 cm (23.6 in) and 100 cm (39.4 in), horizontal corner bar, folding seat
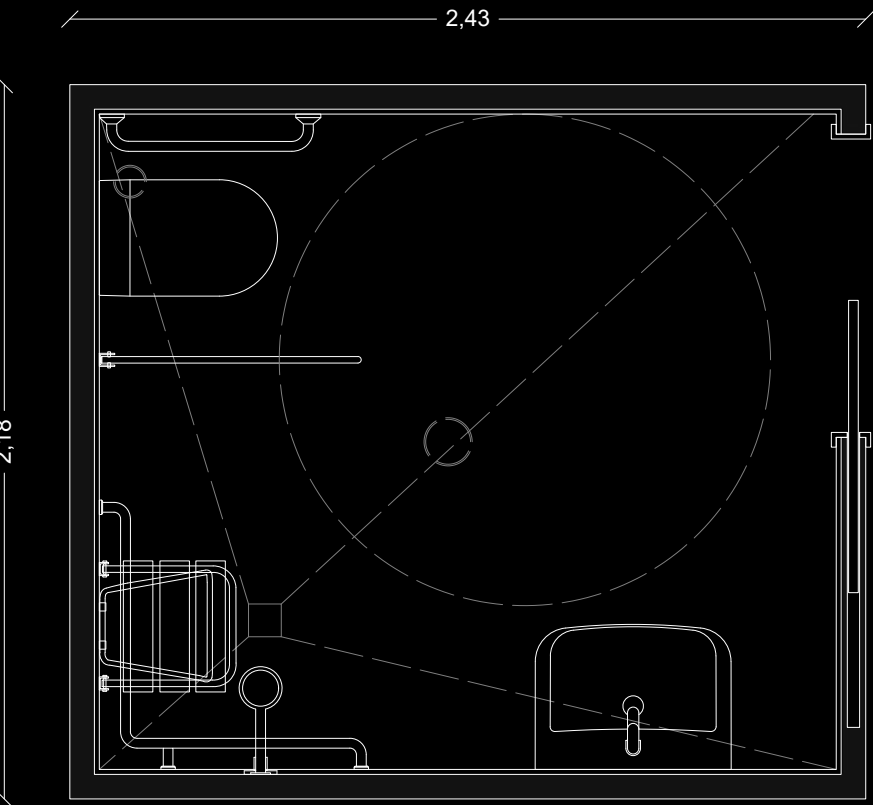Accessories **Hotels** floor/wall toilet brush holder, corner soap dish

Measures
Length: 2.43m (95.6 in)
Width: 2.18m (85.8 in)
Inner height: 2.30m (90.5 in)

Weight
2.150 kg approx. (4.7391 lb)

Module with approximate measurements and finishes.
Customization per project.

2,43

2,18

6. Student residence

Young people, independent for study reasons, away from home temporarily. Private, simple and functional space, but large enough to be shared with roommates. This type of module can also incorporate a kitchen front on the wall next to the bathroom to integrate it into the living room.

Bathroom finishes

Floor tile **Bottega Caliza** 44,3 cm x 44,3 cm (17.4 x 17.4 in)
Wall tile **Bottega Caliza** 25 cm x 44.3 cm (9.8 x 17.4 in)
Wall decor **Granada Mint** 25 cm x 44.3 cm (9.8 x 17.4 in)
WC **Urban C**
Washbasin faucet **Hotels**
Washbasin **NK Concept** 65 cm x 45 cm (25.6 x 17.7 in)
U-bend **Round**
Vanity unit **NK Concept** 65 cm x 45 cm (25.6 x 17.7 in)
Mirror **Lite** 60 cm x 70 cm (23.6 x 27.6 in)
Shower faucets **Hotels + Pack Oval**
Shower tray **Work** 140 cm x 70 cm (55.1 x 27.6 in)
Shower screen **Inter 4**
Accessories **Hotels** hanger, paper holder without cover, spare paper holder, towel rail 45 cm (17.7 in) shelf 60 cm (23.6 in), floor/wall toilet brush holder

Measures

Length: 2.98m (117.3 in)
Width: 2.27m (89.3 in)
Inner height: 2.30m (90.5 in)

Kitchen finishes

Upper fronts **Clear**
Lower fronts **Zinc**
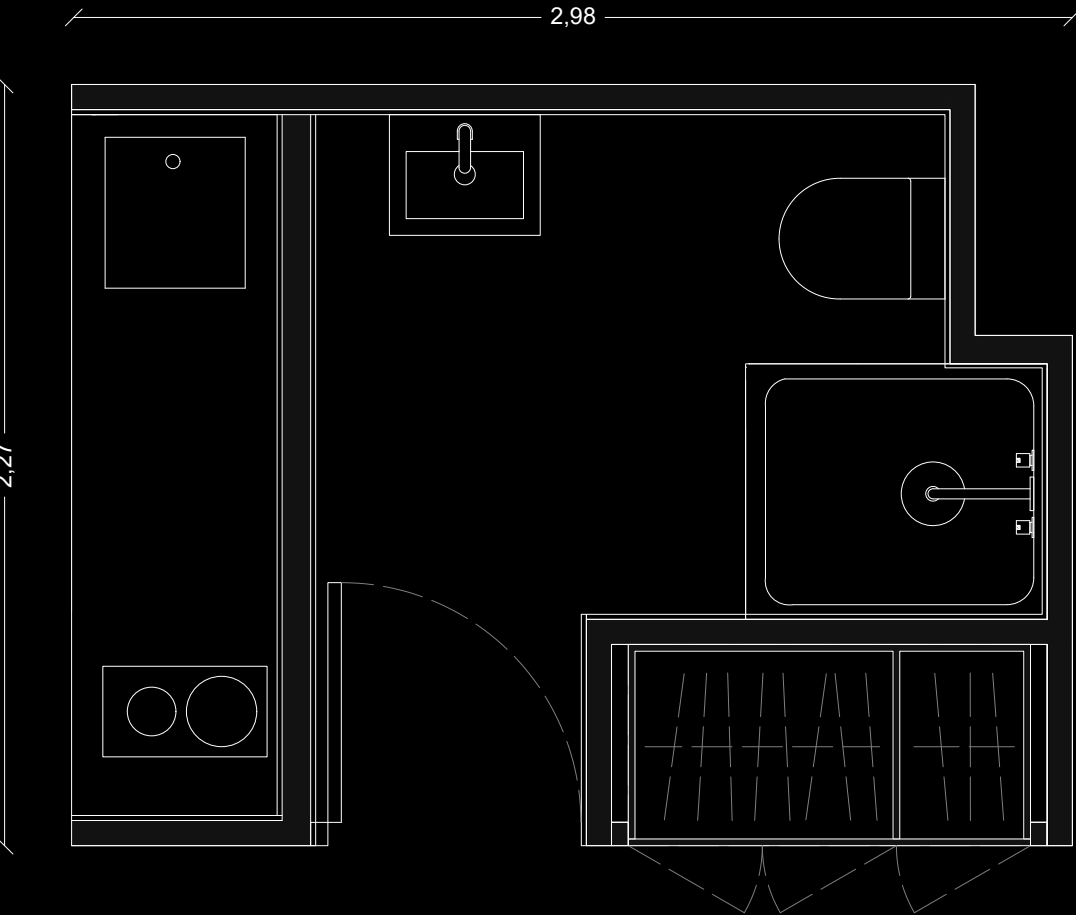Kitchen faucets **Arquitect**
Worktop + backsplash **Xtone Bottega Caliza**

Dressing room finishes

Doors **Tortola Leather**
Interior **Tortola Leather**

Weight

2.800 kg approx. (6.1731 lb)
Option without kitchen or cupboard: 1.600 kg approx. (3.52 lb)

Module with approximate measurements and finishes. Customization per project.

2,98

2,27

7. Hotel 3* & 4*

Hotels that offer medium-high quality services and facilities, with comfortable sized rooms and fully equipped bathrooms to enjoy a good stay.
 Private space designed for a customer who wants to find all possible conveniences and feel at home.

Bathroom finishes

Floor tile **Urban Caliza Nature** 59,6 cm x 59,6 cm (23.5 x 23.5 in)
Wall tile **Calacatta Gold Nature** 150 cm x 300 cm (59 x 118 in)
WC **Acro Compact** Susp. Rimless
Double flush **Smart Line Oval**
Washbasin faucet **Round**
Washbasin **Square** 80 cm x 45 cm (31.5 x 17.7 in)
U-bend **Round**
Vanity unit Structure + shelf **Square** 80 cm (31.5 in)
Mirror **Square** 80 cm x 60 cm (31.5 x 23.6 in)
Shower faucets **Pack Rondo**
Shower tray **Flow** 160 cm x 90 cm (63 x 35.4 in)
Shower screen **Attica 1**
Towel dryer **Round** 56 cm x 120 cm (22 x 47.3 in)
Accessories **Hotels** hanger, towel rail 60 cm (23.6 in) and 45 cm (17.7 in), paper holder without cover, spare paper holder, floor/wall toilet brush holder
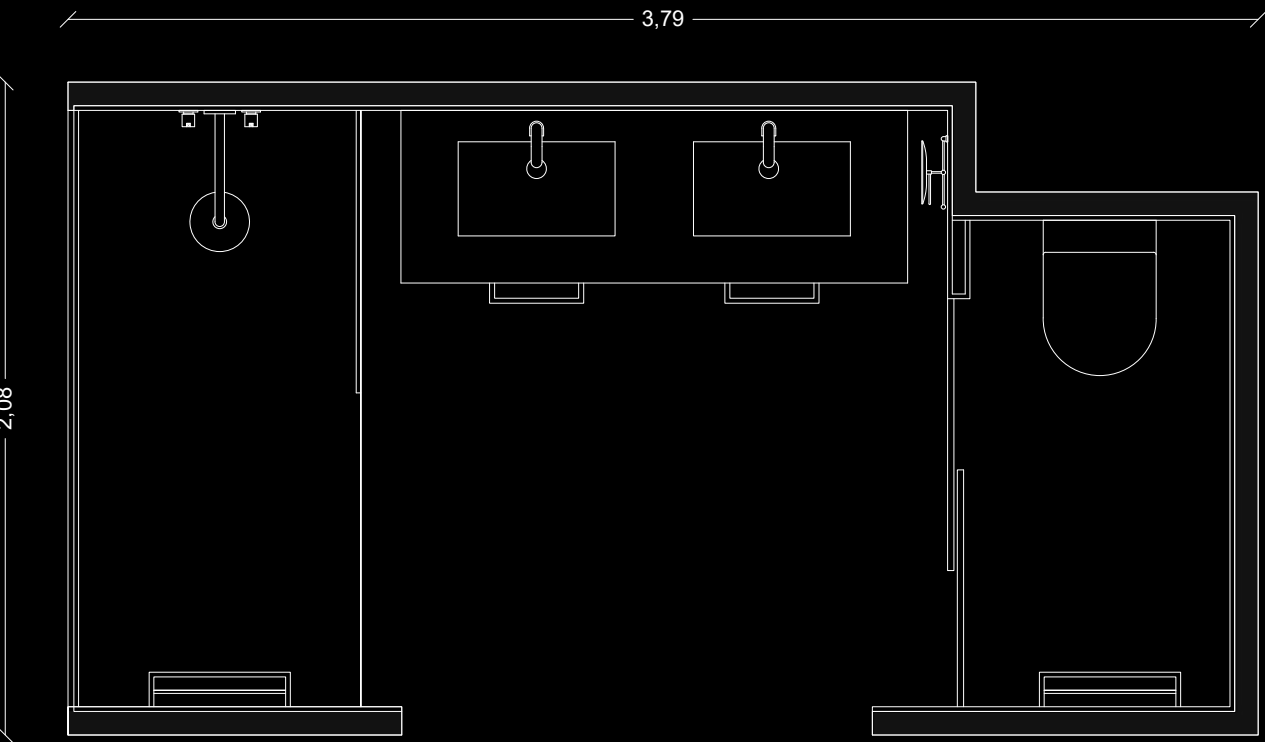
*Module with approximate measurements and finishes.
Customization per project.*

Measures

Length: 3.79m (149.2 in)
Width: 2.08m (81.89 in)
Inner height: 2.30m (90.5 in)

Weight

3.150 kg approx. (6.950 lb)

3,79

2,08

8. 5* hotel and resort

Large bathroom for the most exclusive environments, where high-end elements make the difference. Private space for customers who want to enjoy an elegant environment, with plenty of space and superior amenities. Depending on the dimensions of the bathroom, it can be supplied as two modules which are assembled into a single one on site.

Bathroom finishes

Floor tile **Vela Grey** 100 cm x 100 cm (39.4 x 39.4 in)
Wall tile **Glem White Polished** 120 cm x 250 cm (47.3 x 98.4 in)
Wall decor **Piano** 30.5 cm x 30.5 cm (12 x 12 in)
WC **Tono** Susp. Rimless
Double flush **Tono**
Washbasin faucet **Lignage**
Washbasin **Slender** 40 cm (15.7 in)
Worktop **Krion** made to measure
Mirror **Minim** 120 cm x 60 cm (47.2 x 23.6 in)
Magnifying mirror **Tono** 22 cm (8.7 in)
Shower faucets **Lignage + Pack Lignage**
Bathtub **New Lounge** 170 cm x 80 cm (66.9 x 31.5 in)
Bathtub faucet **Lignage**
Shower screen **Attica 1**
Towel dryer **Round** 56 cm x 120 cm (22 x 47.3 in)
Accessories **Urban C** hanger, washbasin towel ring, toilet paper holder with cover, floor/wall toilet brush holder
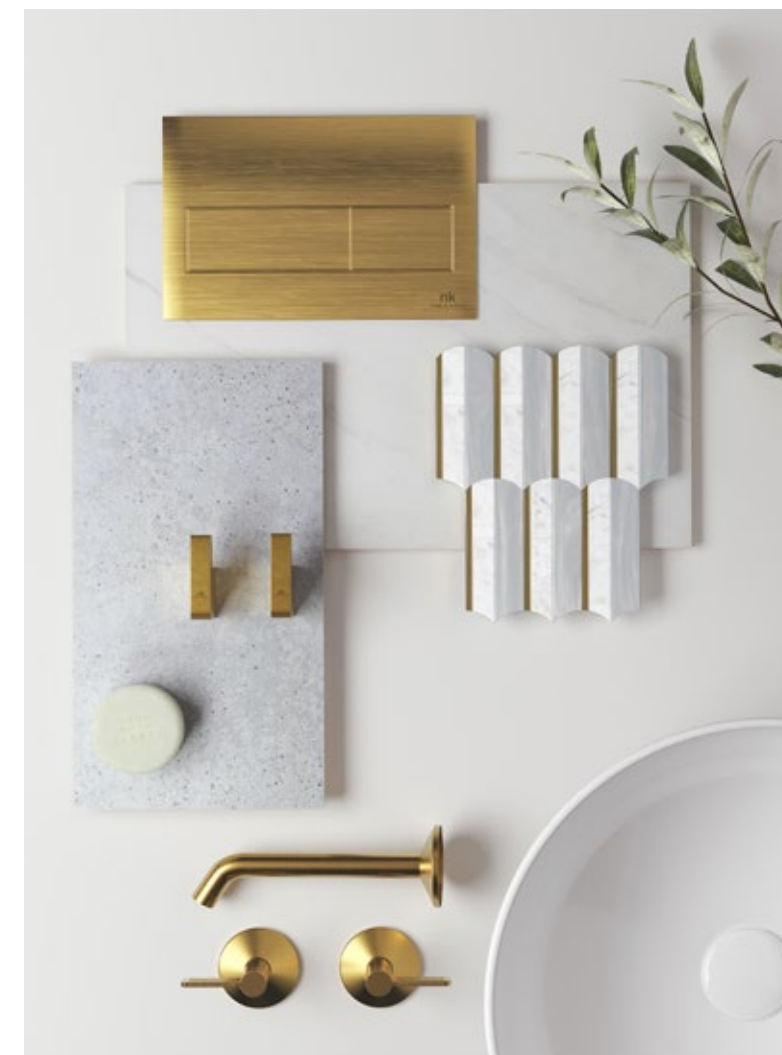
Measures

Length: 2.02m (79.5 in)
Width: 1.58m (62.2 in)
Inner height: 2.30m (90.5 in)

Weight

3.100 kg approx. (6.83 lb)

Module with approximate measurements and finishes.
Customization per project.

9. Tourist apartment

This type of holiday equipment provides compact and full bathrooms with all the basic functionalities required by a family. This type of easy maintenance module can also incorporate a kitchen front on the wall next to the bathroom to integrate it into the living room.

Bathroom finishes

Floor covering **Linkfloor Kingdom Rome** 22,8 cm x 180 cm (9 x 70.1 in)
Wall tile **Urban Acero Nature** 33.3 cm x 100 cm (13.11 x 39.4 in)
Wall decor **Cubik Urban Acero Nature** 33.3 cm x 100 cm (13.11 x 39.4 in)
WC **Urban C**
Worktop **One** 80 cm x 50 cm (31.5 x 19.7 in)
Vanity unit **Smart** 80 cm x 50 cm (31.5 x 19.7 in)
Washbasin faucet **Hotels**
Mirror **Lite** 80 cm x 70 cm (23.6 x 27.6 in)
Shower faucets **Hotels + Pack Rondo**
Shower tray **Slate** 160 cm x 90 cm (63 x 31.5 in)
Shower screen **Yove 1**
Accessories **Hotels**: hanger, towel rail 45 cm (17.7 in), shelf 60 cm (23.6 in), spare paper holder, floor/wall toilet brush holder

Measures

Length: 2.95m (116.14 in)
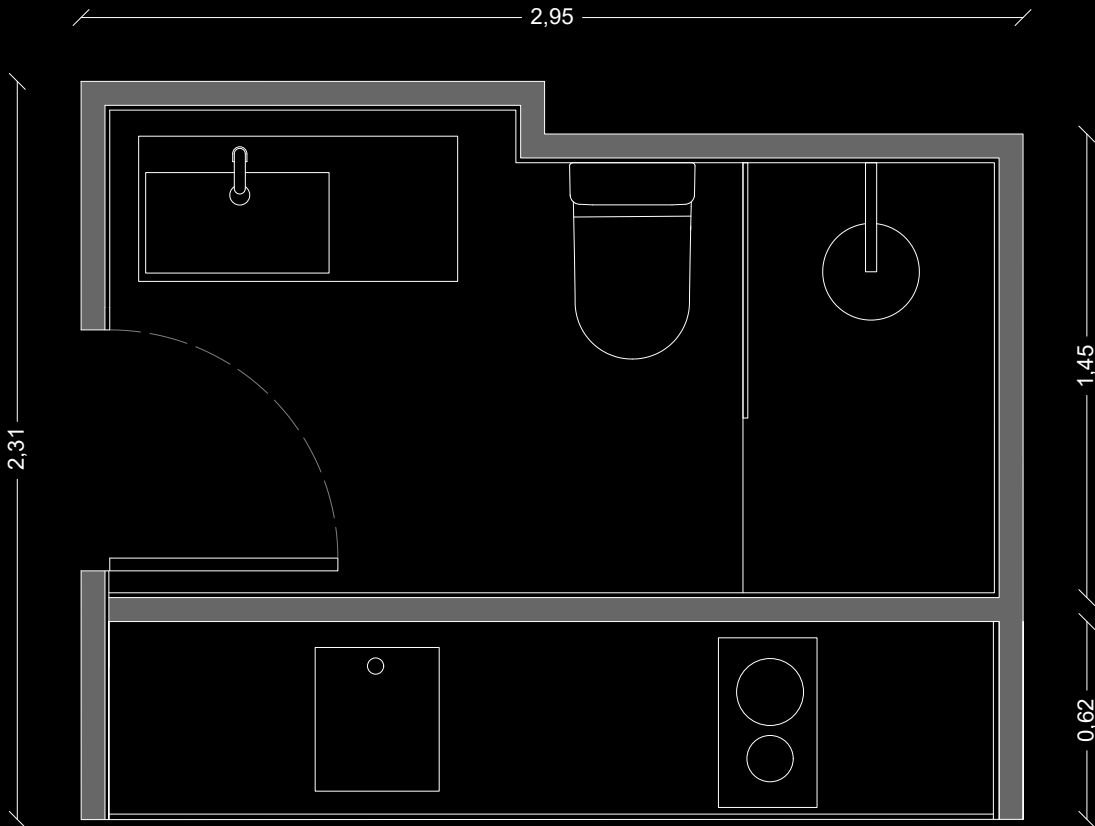Width: 2.31m (90.95 in)
Inner height: 2.30m (90.5 in)

Kitchen finishes

Upper fronts **Etimoe Land**
Lower fronts **Blanco Núbol**
Kitchen faucets **Round**
Worktop + backsplash **Liem Grey Nature**

Weight

2.750 kg approx. (6.0638 lb)
Option without kitchen: 2.100 kg approx. (4.6297 lb)

Module with approximate measurements and finishes. Customization per project.

2,95

2,31

1,45

0,62

10. Office module

Smart and functional design for office buildings made with industrialized modules.
It has the required interior partitions according to the size of the bathroom and includes all common bathroom accessories for collective bathrooms.

Bathroom finishes

Floor tile **Matika Silver** 59,6 cm x 59,6 cm (23.5 x 23.5 in)
Wall tile **Alluslate Materica Original Matt**
120 cm x 260 cm (47.2 x 102.4 in)
WC **Acro Compact** Susp. Rimless 54 cm (19.3 in)
Double flush **Smart Line Oval**
Electronic washbasin faucet **Hotels**
Washbasin **Krion** made to measure
U-bend **Round**
Mirror **Lite** 40 cm x 70 cm (23.6 x 27.6 in)
Optical hand dryer 220V **NK**
Accessories **Urban C** hanger, paper holder with cover, floor/wall toilet brush holder

*Module with approximate measurements and finishes.
Customization per project.*

Measures
Length: 3.20m (126 in)
Width: 2.40m (94.5 in)
Inner height: 2.30m (90.5 in)

Weight
2.850 kg approx. (6.2833lb)
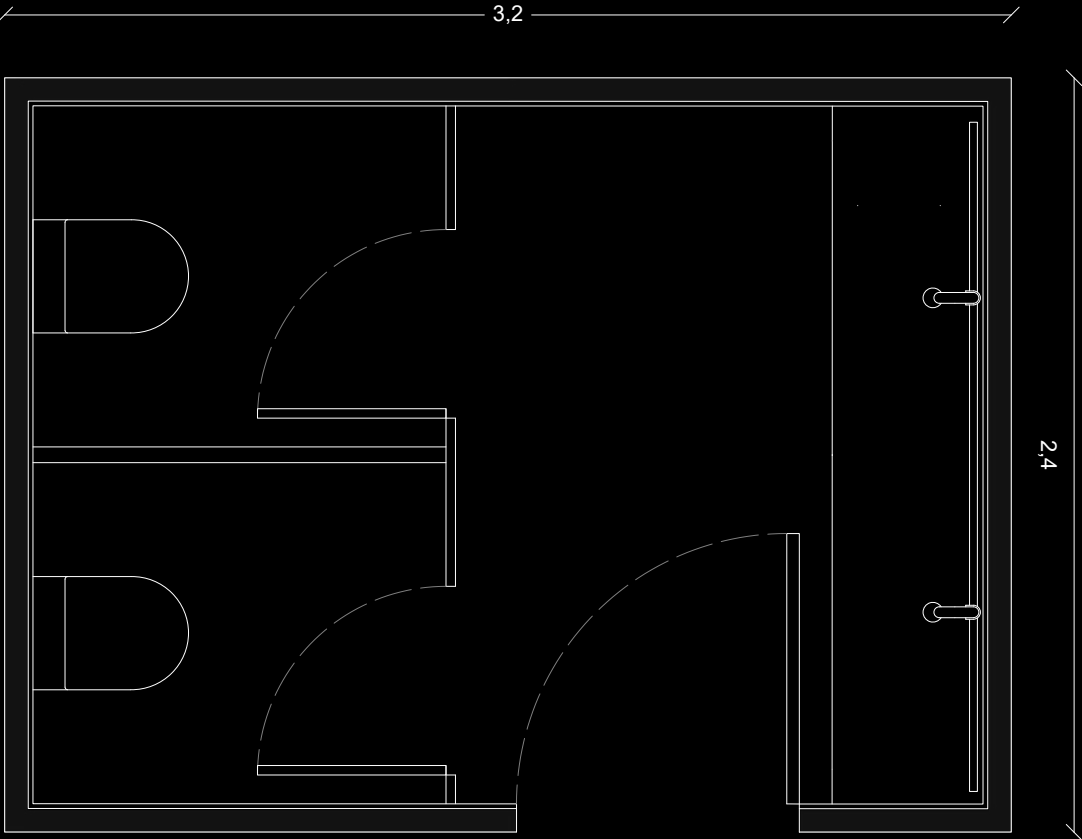
11. Monobath Eco

Modular option with lower environmental impact. This type of bathroom module manufactured on a wooden structure incorporates natural thermal insulators such as cork and Porcelanosa Grupo's
most sustainable collections of ceramics and bathroom accessories.

Bathroom finishes

Floor tile **Forest Maple** 22 cm x 90 cm (8.7 x 35.4 in)
Wall tile **Emerald Green** 150 cm x 300 cm (59 x 118 in)
Wall decor **Boulder Beige** 30.5 cm x 30.5 cm (12 x 12 in)
WC **Acro Compact**
Washbasin faucet **Round**
Washbasin **One**
U-bend **Round**
Mirror **Lite** 80 cm x 70 cm (23.6 x 27.6 in)
Shower faucets **Tec Round**
Shower tray **Slate** 180 cm x 90 cm (63 x 31.5 in)
Towel dryer **Round**
Accessories **Urban C** paper holder with cover,
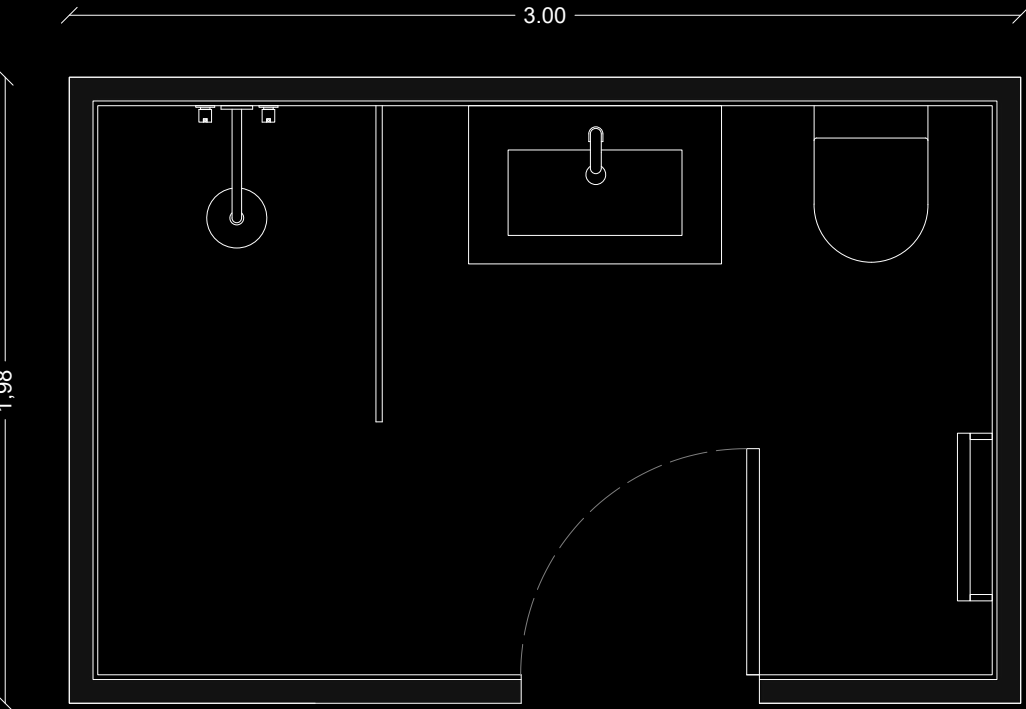set of stopcocks

Module with approximate measurements and finishes.
Customization per project.

Measures
Length: 3.00m (118.1 in)
Width: 1.98m (78 in)
Inner height: 2.30m (90.5 in)

Weight
1.400 kg approx. (3.0865 lb)

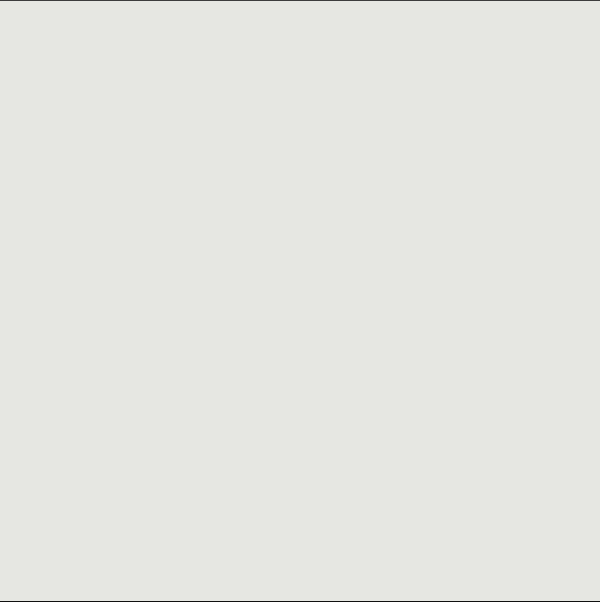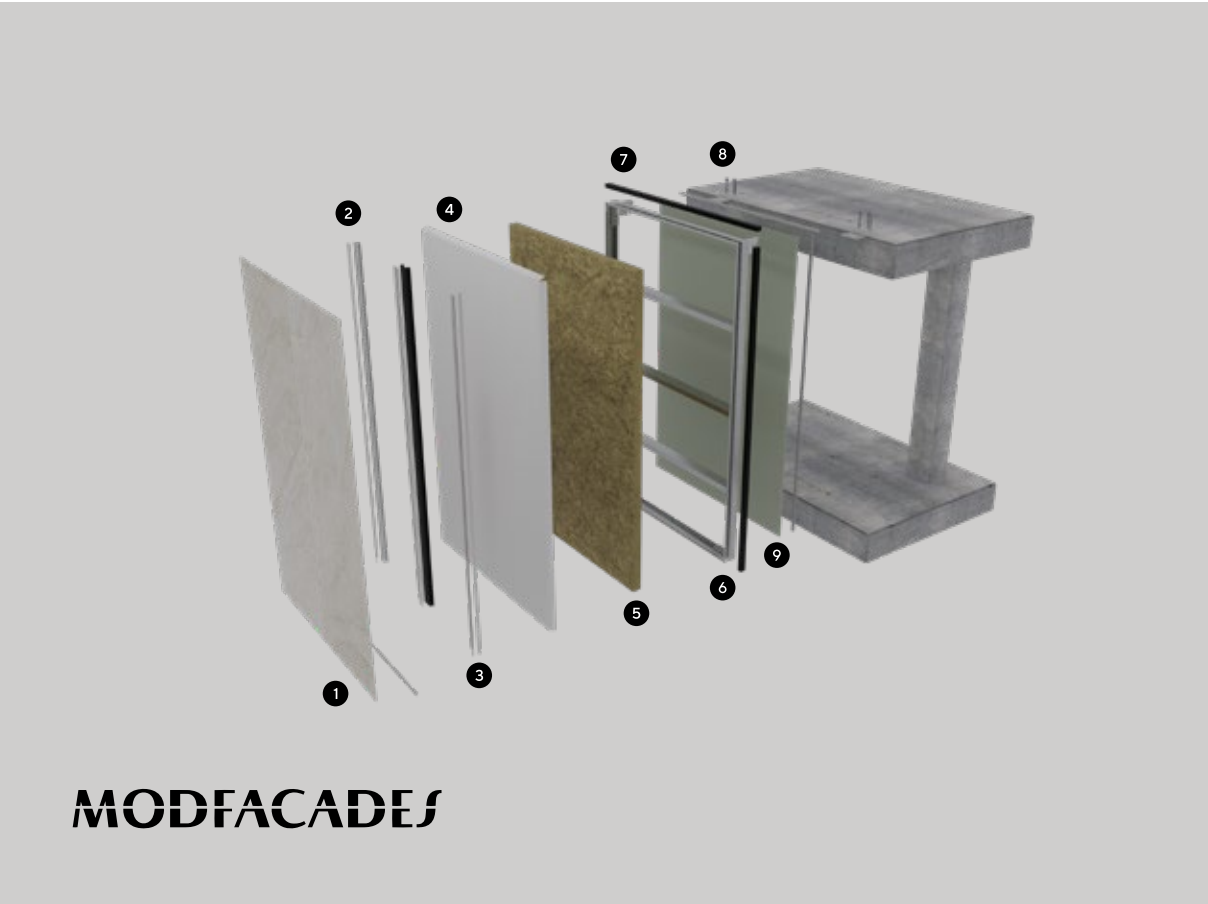3.00

1,98

4. Modfacades

industrialized facade modules

MODFACADES

Modfacades is a system of facade modules that are supplied completely finished from the factory with Porcelanosa Grupo's insulation, structure and finish. Being a product manufactured in the workshop, it has many advantages over the traditional facade. It is a system that guarantees high construction quality, creating a standard solution with high technical performance adapted to the needs of the project that allows accurate control of the manufacturing and installation process.

Features for monofacade design and installation

1. Outer finish: large format ceramic, Stonker, Krion, aluminum composite...
2. Adhesive and double-sided tape
3. Omega profile
4. Waterproof sheet
5. Mineral wool insulation
6. Joint system
7. Perimetral frame
8. Anchoring to slab
9. Galvanized steel plate

It has a system of EPDM joints that allows dilatation and alignment, avoiding water penetration. The modules are fixed to the floor slabs by means of galvanized steel anchor plates that allow adjustment in the 3 Cartesian axes. There is the possibility to include the windows and their trims inside the modules.

Module dimensions

Width: from 1,0 m (3.3 ft) to 2,40 m (7.9 ft) (there is the possibility of making bigger widths, but with special transport surcharge)
Height: from 2,8 m (9.2 ft) to 4,00 m (13 ft) (there is the possibility of making bigger heights with a study and custom calculation)
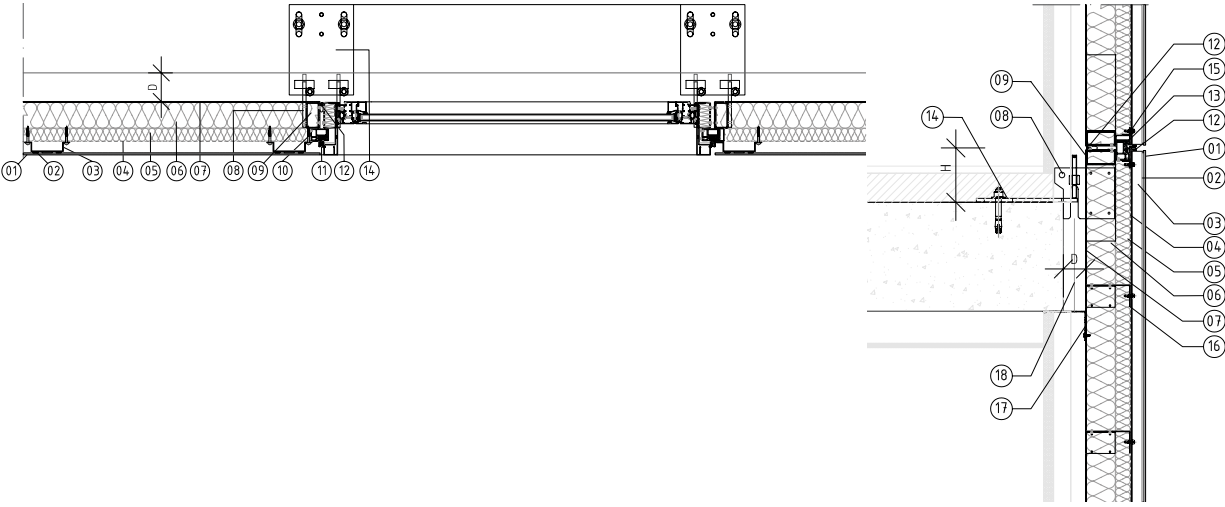
General features

Weight: between 45 y 55 Kg/m^2 (9.2 - 11.3 lbm/sq.ft). 2 m (6.6 ft) wide standard panel = Between 264 y 282 kg (582 - 621.7 lbs)
Thickness: 160mm
Height over slab: 120< H<200
Dimension of the slab - panel edge chamber: 60 < d <120

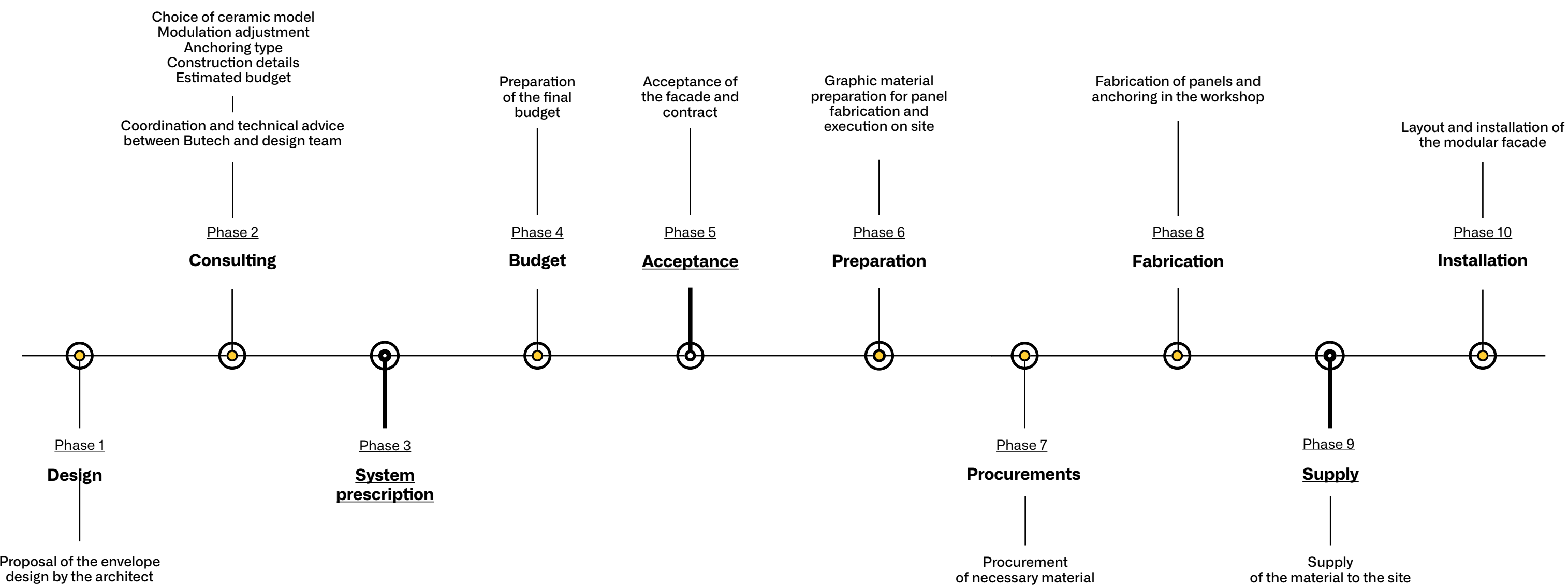## Tests

Permeability to air (UNE-EN 12153:2000) >750 Pa Class AE
Watertightness to water under static air pressure (UNE-EN 12155:2000) 750Pa-RE750
Resistance to wind load (UNE-EN 12179:2000) 1500Pa and -1.500Pa
Reaction to fire (UNE-EN 13823:2010+A1:2014) Euroclass B-s1-d0
Fire resistance (UNE-EN 13501-2:2016)→EI60
Acoustic resistance with backing (UNE-EN ISO 10140-2:2022) RA, tr: 51,7 dBA

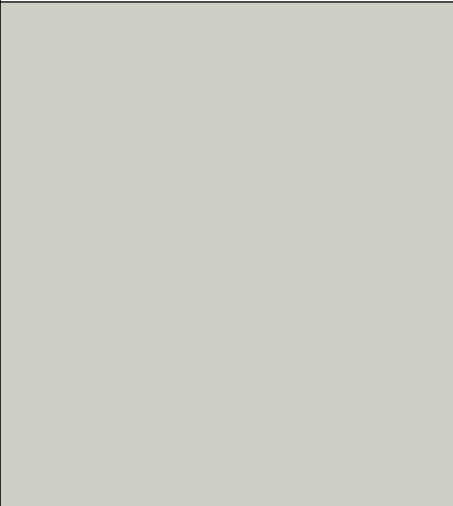## Details

1. Plasterboard panel with vapor barrier
2. Mineral wool e=90mm (3$^{35/64}$in)
3. Waterproof sheet
4. Aluminum omega profile 140.30
5. Aluminum omega profile 90.30
6. Double-sided tape & structural adhesive
7. Ceramic (e=3 or 6mm - 0$^{1/8}$ or 0$^{15/64}$in)
8. Neoprene joint
9. Galvanized steel frame (e=1,5mm - 0$^{1/16}$in)

11. Anchor plate to floor slab
12. Jointing and sealing bottom
13. Leveling bolt
14. Galvanized steel connecting plate
15. Rock wool (fire protection barrier)
16. Steel "L" profile (fire protection barrier)
17. Plasterboard fireproof board
18. Fireproof sealing
19. Joint in flooring (by others)

Design and production process

Choice of ceramic model
Modulation adjustment
Anchoring type
Construction details
Estimated budget

Coordination and technical advice
between Butech and design team

Preparation
of the final
budget

Acceptance of
the facade and
contract

Graphic material
preparation for panel
fabrication and
execution on site

Fabrication of panels and
anchoring in the workshop

Layout and installation of
the modular facade

Phase 2

Consulting

Phase 4

Budget

Phase 5

Acceptance

Phase 6

Preparation

Phase 8

Fabrication

Phase 10

Installation

Phase 1

Design

Phase 3

**System
prescription**

Phase 7

Procurements

Phase 9

Supply

Proposal of the envelope
design by the architect

Procurement
of necessary material

Supply
of the material to the site
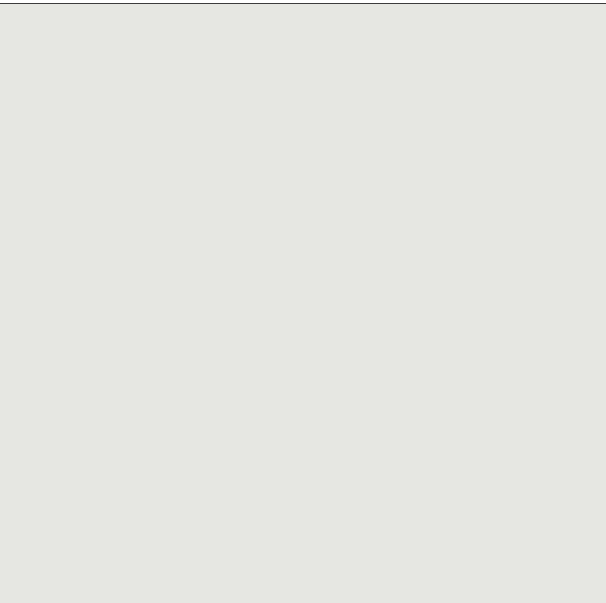
5. Modfacades Typologies

finished projects presented as needed

Type of panels

Blind panel

Crowning panel

Window panel
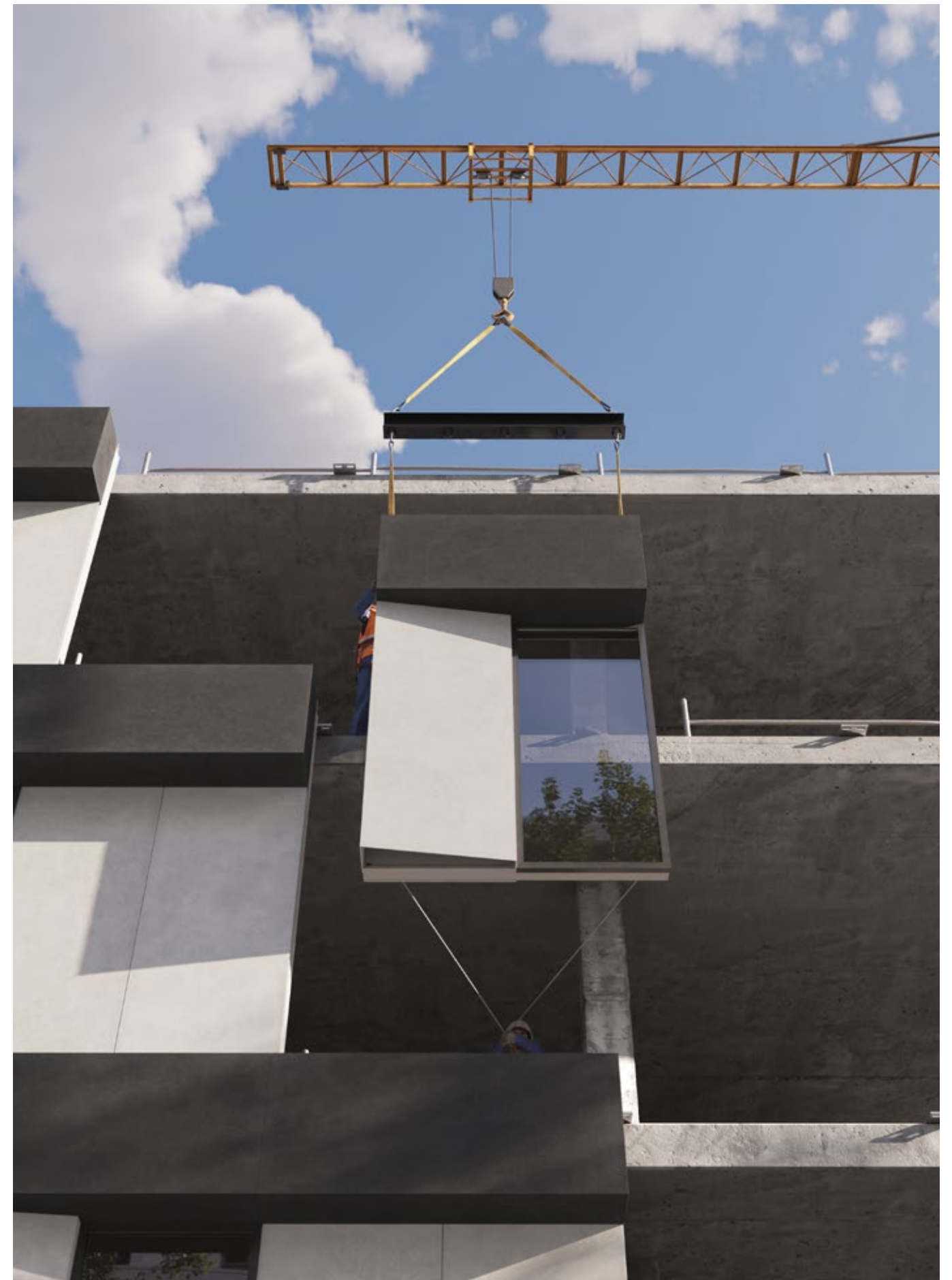
Corner panel

Vertical window panel
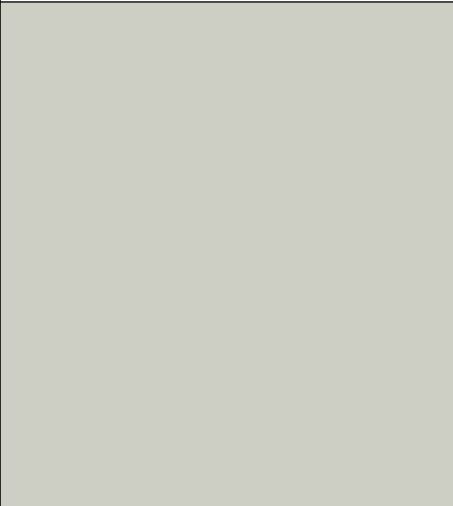
Starter panel

Sliding window panel

Balcony panel

Ventilated facade, Modfacades
Wall covering: Bottega Acero, Bottega Antracita

6. Environmental benefits

a commitment to the future for today's building industry

MONOBATH eco

Porcelanosa's ecological transition to industrialization

Monobath Eco is a proposal that aims to reduce environmental impact, improve the health and comfort of users while allowing for the easy replacement of its elements. These industrialized bathroom modules are conceived under the philosophy of eco-design and circular economy.

This compact system makes it possible to market a product with all the advantages of the industrialized bath, but it also offers greater benefits and advantages in terms of sustainability which minimize the environmental impact throughout the product's life cycle, from its design, production, use and up to its final phase and removal.

Lines of action

Carbon footprint

Healthiness

Circularity

IT REDUCES ...

21% environmental impact compared to a conventional industrialized bath.

External GWP environmental impact study performed by SGS according to ISO 14067:2018 with an industrialized bath with 1.80 m x 3.13 m (5.9 x 10 ft) dimensions.

IT REDUCES ...

the weight of your installation by 50% compared to a modular bath.

External GWP environmental impact study performed by SGS according to ISO 14067:2018 with an industrialized bath with 1.80 m x 3.13 m (5.9 x 10 ft) dimensions.

Construction system:

—— Structure and walls

· **Floor** with CLT 60 mm (2²³/₆₄in) counter-laminated wood

· **Light** timber framed wall 60 mm x 45 mm (2²³/₆₄ x 1⁴⁹/₆₄ in) every 60 mm (2²³/₆₄in)
+ SuperpanTech P5 10 mm (0²⁵/₆₄in) board

· **Light** timber framed ceiling 90 mm x 45 mm (3³⁵/₆₄ x 1⁴⁹/₆₄ in) every 60 mm (2²³/₆₄in)
+ gypsum plasterboard type H 15 mm (0¹⁹/₃₂in)

· **Natural thermal** insulation: cork and cotton

—— Construction method

· Dry construction by mechanical fastening for structure

· Ferroimant solution for ceramic wall and floor covering

· Continuous adhesive tape system on floor with flow rate limiter to

6 liters/min

Interior equipment:

—— Flooring

· Porcelain stoneware
Forest Maple 22 cm x 90 cm (8.7 x 35.4 in)
→ **95% recycled content**

—— Wall tile

· Large format ceramic sheet
Emerald Green Polished
120 cm x 250 cm (47.2 x 102.4 in)
→ **40% recycled content in its composition**

· Glass mosaic
Boulder Beige
→ **100% recycled content in its composition**

· **Mineral-based paint**
for ceiling

—— Sanitaryware

· Shower tray: **Slate** (**Eco-Stone**)
→ **60% recycled content in its composition**

· Worktop: **One** (**Krion Shell**)
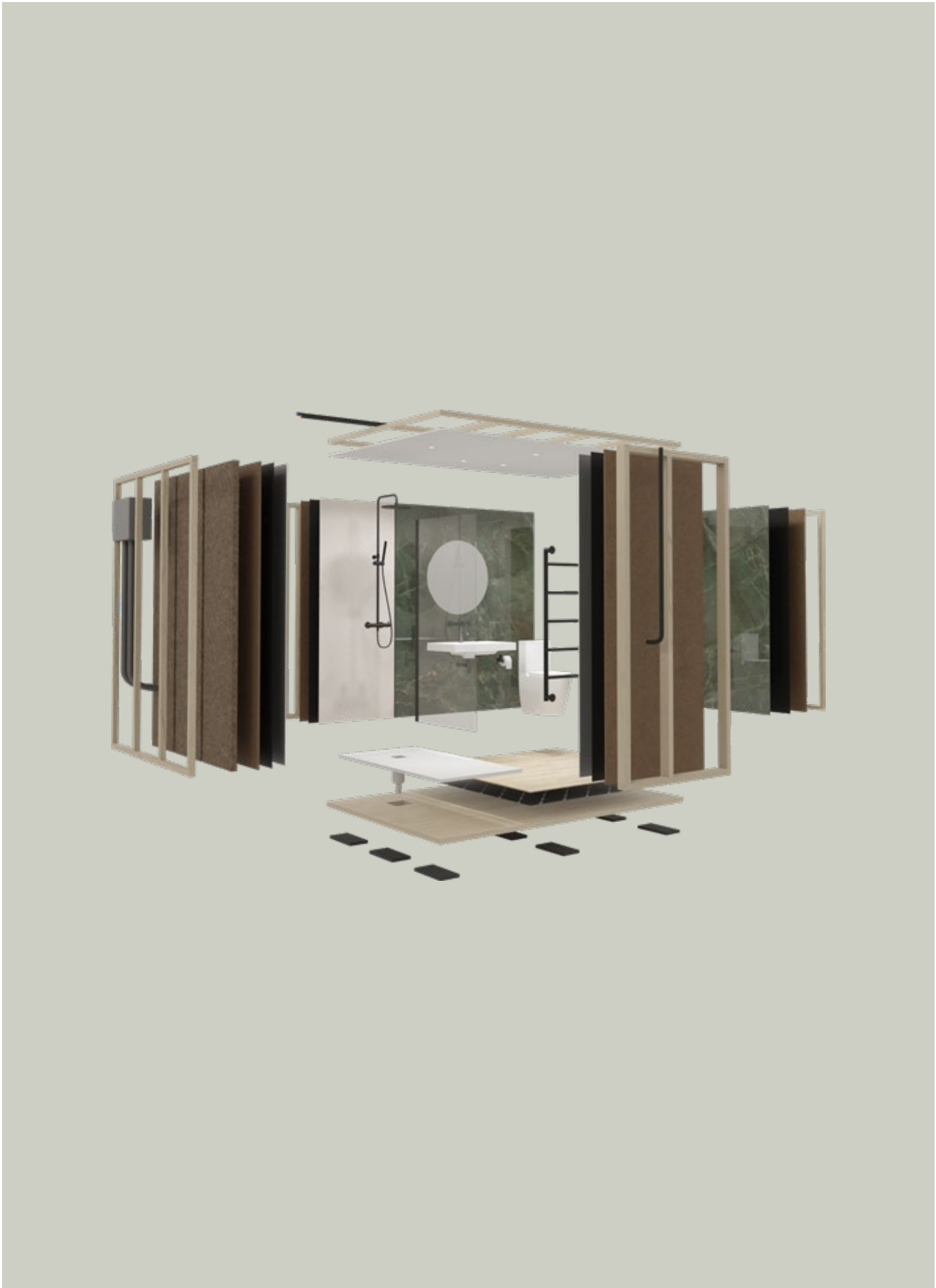→ **5% recycled content in its composition**

· Washbasin faucet **Round**
with aerator **Spray Eco** with a
consumption of 1.3 liters/min
→ **89% water saving**

· Toilet: **Acro Compact** dual flush
eco 4/2 liters
→ **70% water saving**

· Shower column: **Tec Round** with
flow rate limiter to 6 liters/min
→ **70% water saving**

—— Facilities

· Bio-based **PEX** water pipelines
→ **It reduces 90% environmental impact compared to other facilities**

FOREST

is the ceramic parquet with the highest recycled content on the market.

Recycled composition with more than 95% from other industrial processes.

Linked to the circular economy model with which Porcelanosa Grupo seeks to increase the lifespan of each product by revaluing each resource and raw material, PAR-KER® ceramic parquet reproduces the warmth and texture of natural wood through a recycled composition of more than 95% (Zero Waste strategy).

Forest is an innovative, high quality porcelain stoneware tile that uses solid ceramic waste from other industrial processes to minimize the environmental footprint.
 The Forest series is designed to meet the growing demand of the residential and hotel market and has been awarded the environmental product declaration (Dapcons).

The pieces of the Forest series have a Global Warming Potential GPW (kg CO_2eq/unit) of less than 20% compared to other similar materials that are conventionally manufactured.

WATERFOREST

reduces energy consumption and CO2 emissions by up to 73%, and saves **74% in water consumption** thanks to the bathroom equipment.

Internal study considering specific use and consumption scenarios according to European studies and standards.

Interior equipment:
Washbasin faucet **Round**
Toilet **Acro Compact**
Shower column **Tec Round**

ECO-START: technologies such as the cold start system always turns the faucet on cold water, allowing hot water to be selected only when necessary.

ECO-FLOW: the ECO aerator limits the flow to a fixed value regardless of the pressure and saves up to 89% water.

ECO-FLUSH: all Noken toilets can incorporate the ECO dual-flush system, the toilets of which allow more or less water to be flushed with options of 6/3 liters or 4.5/3 liters. With them you can save up to 55% and 61% water respectively.

ECO-AIR: a system for sprinklers and hand showers that mixes water with air and its mechanism reduces water consumption by 10%. In contrast to the cost of a standard shower (20 liters/minute), AIR ECO limits this consumption to 6 liters/minute, which means 70% less water consumption.

WATERFOREST,
designer shower
trays with
environmental
awareness.

ECO-STONE
60% recycled white
marble, **30%** resin
and **10%** thermolite

ECO-STONE: Mineral Stone shower trays have a natural calcium carbonate composition and a high percentage of recycled products. This way, the brand Noken reduces the tons of waste that are dumped in the oceans and seas

and promotes a more environmentally friendly design, while enhancing the durability and efficiency of each shower tray.

Krion Shell®
sustainable toilets
contain 5% recycled
material in their
composition.

Krion Shell® is the Engineered Mineral Composite from Krion. While its internal composition is made of minerals bonded with Eco resin and recycled PET, its external layer is made of alumina trihydrate and resins. Due to its innovative composition (5% recycled material) and versatility, this material can be used in shower trays, washbasins or bathroom worktops.

One worktop: its perimeter ridge is virtually imperceptible and prevents splashing. With two finishes available: glossy and matte, the ONE collection improves the functionality and hygiene of spaces thanks to its easy cleaning and maintenance.

Porcelanosa's ecological
## commitment to society

Society and politics are implementing new frameworks and regulations in response to the climate emergency in which we find ourselves.

At the corporate level, companies are rising to the challenge by committing to measures aligned with the UN **Sustainable Development Goals** and complying with **ESG** criteria and the **Taxonomy** of Sustainable Finance.

The current landscape has turned today's challenges into new opportunities to transform the industry and keep investing in innovation, sustainability and industrialization in order to generate value and progress towards circular and sustainable construction.

THEN...
which improvements does Monobath Eco offer compared to a traditional industrialized bathroom?

-21%

Environmental Impact (GPW)

-50%

Installation weight
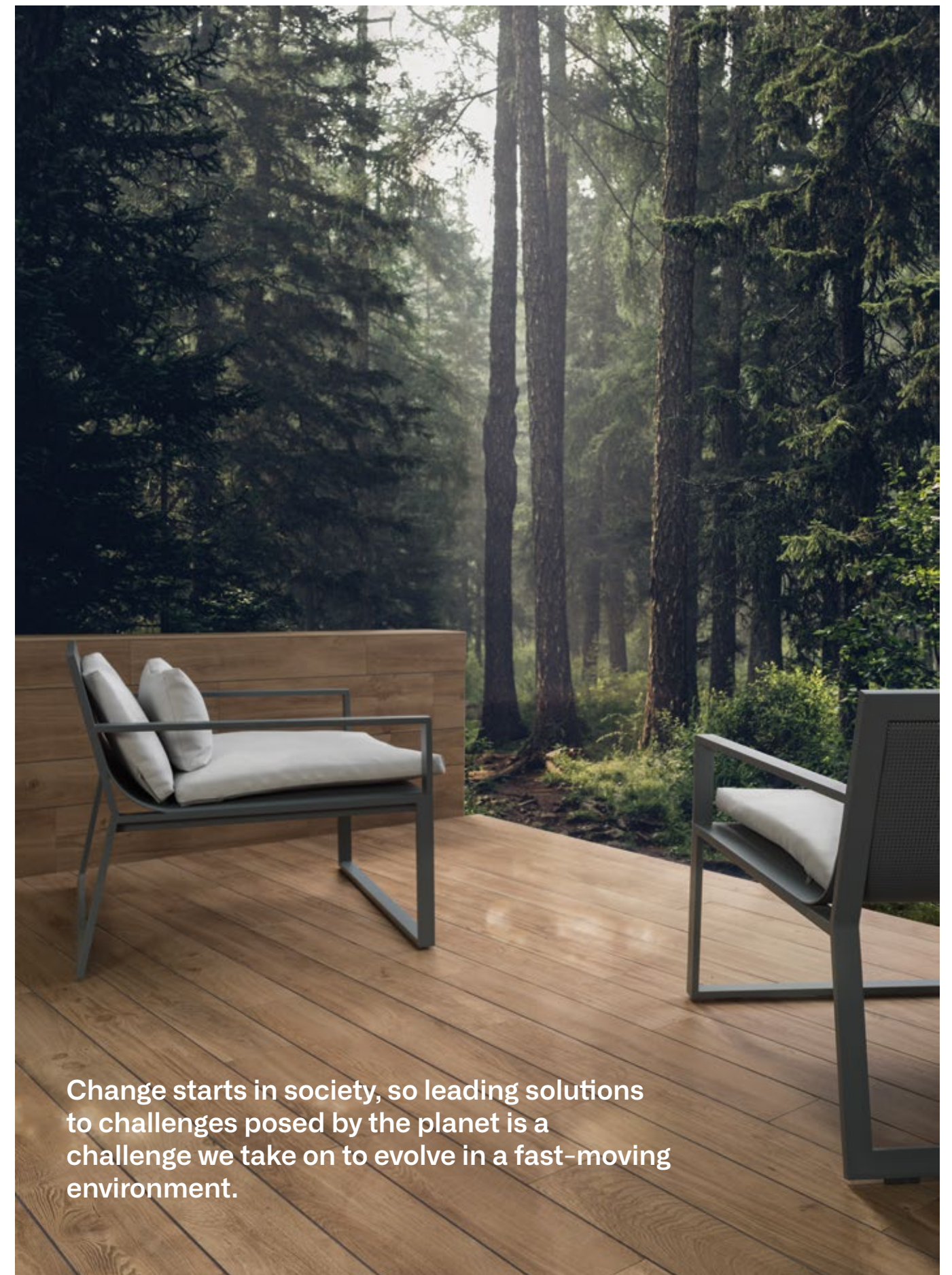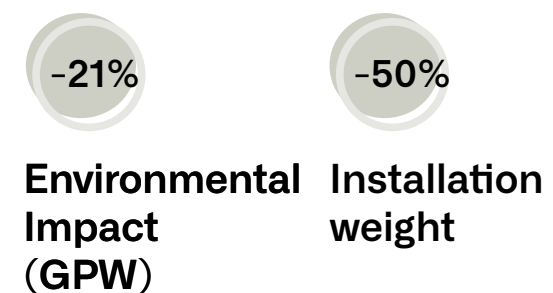
Change starts in society, so leading solutions to challenges posed by the planet is a challenge we take on to evolve in a fast-moving environment.

Porcelanosa Grupo's materials and products comply with the highest global requirements and regulations in terms of safety, health and sustainability. All these developments, which aim to reduce environmental impact and guarantee people's quality of life, are the result of the company's innovation and efficiency program, which promotes ecological transition and circular economy in building.

+ **6.000** references
recycled content

+ **2.000** products
with environmental certifications

Product certifications

Content statement. Utmost transparency

Indoor air quality. Low emission of VOCs and Formaldehyde

Recycled content

Sustainably sourced timber and chain of custody

Environmental product declaration

Sanitary product and faucet certification

Performance certification

Water and energy efficiency

Standards

Building products and energy over the life of the building

7. Economic benefits

the profitability of the industrialized project

PORCELANOSA Offsite

The control and reduction of delivery times
are a great economic advantage

The construction of industrialized bathrooms is carried out entirely at Porcelanosa Grupo's facilities. **What does this do?** While the earthmoving and structural work takes place at the customer's project site, the modular bathrooms are being built so that, once the structure is ready, it can accommodate the Monobaths.

Once finished, how are the modules placed?
The placement of the bathrooms on site is done in an agile, fast and safe way. Our teams will leave 25-35 Monobaths per week per team positioned and leveled on site.

So, what do you get? This installation system eliminates difficult and time-consuming operations of supply management and organization of manufacturers on site, allowing a reduction of the execution time on site.

In terms of costs, does it have an impact? All the construction costs related to the execution time (indirect costs) as well as the costs of personnel involved in the organization of the items and trades necessary for the traditional construction of these bathrooms are reduced, simplifying both the operation and the necessary resources.

The financial conditions of the real estate investment improve due to the reduction of the financial expenses proportional to the term. This means that an early cancellation of the developer's loan allows us to save interest and improve the rate of return on the investment.

An early start-up of the property, considering both a lease and a hotel business, increases the expected
revenue, anticipating the return on investment.

Key points

— Reduction of indirect costs
— Reduction of financial expenses
— Reduction of after-sales expenses
— Increase hotel rental/operating revenues
— Increased rate of return on investment

Key points for using Monobath in a project:

—— Reduction of indirect costs

- Monthly site equipment costs

- Monthly expenses for rental of temporary on-site installation facilities

- Waste management costs

- Construction site cleaning

—— Reduction of financial expenses

- Early cancellation of the developer loan, interest reduction

- Reduction of the interest generated by the repayment period of the developer loan.

—— Reduction of after-sales expenses

- Factory-certified quality: quality controls at every stage of manufacturing ensure the delivery of a Monobath ready to connect, clean and ready to be delivered to your customer with Porcelanosa Warranty

—— Increased rate of return on investment

- Anticipated return on investment, improves IRR

- Improved profitability of the investment

- Reduced payback period, increased IRR

—— Increase hotel rental/operating revenues

- Income from start of rental

- Income from opening of the hotel

- Advance on start of rental or hotel operation revenues

- Reduced risk of loss of business window due to seasonal repayment of the developer loan
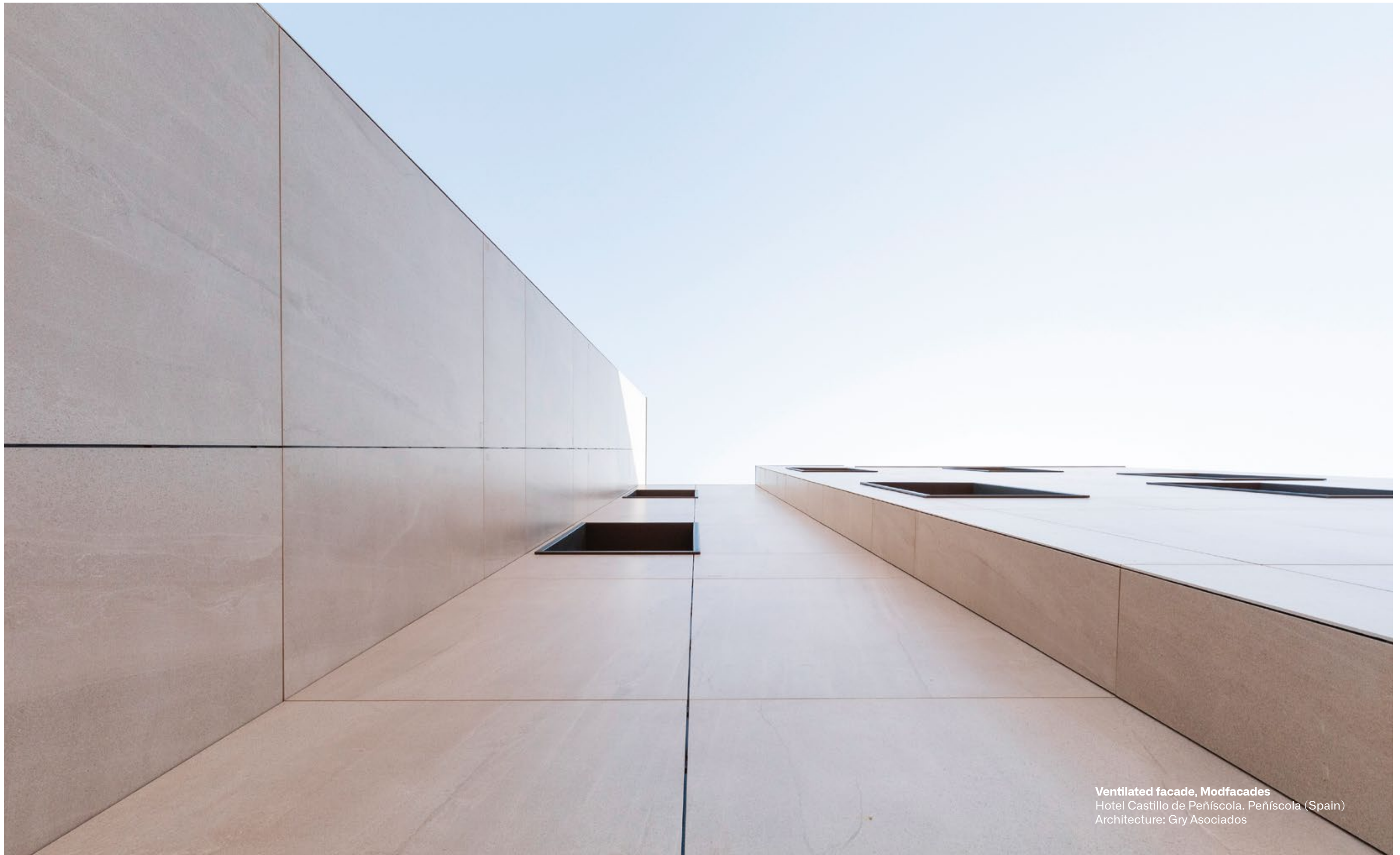
How much does the cost of bathroom items represent in the total cost of a project?

Whether it is a traditional or industrialized process, it represents **6-10%** of the construction cost
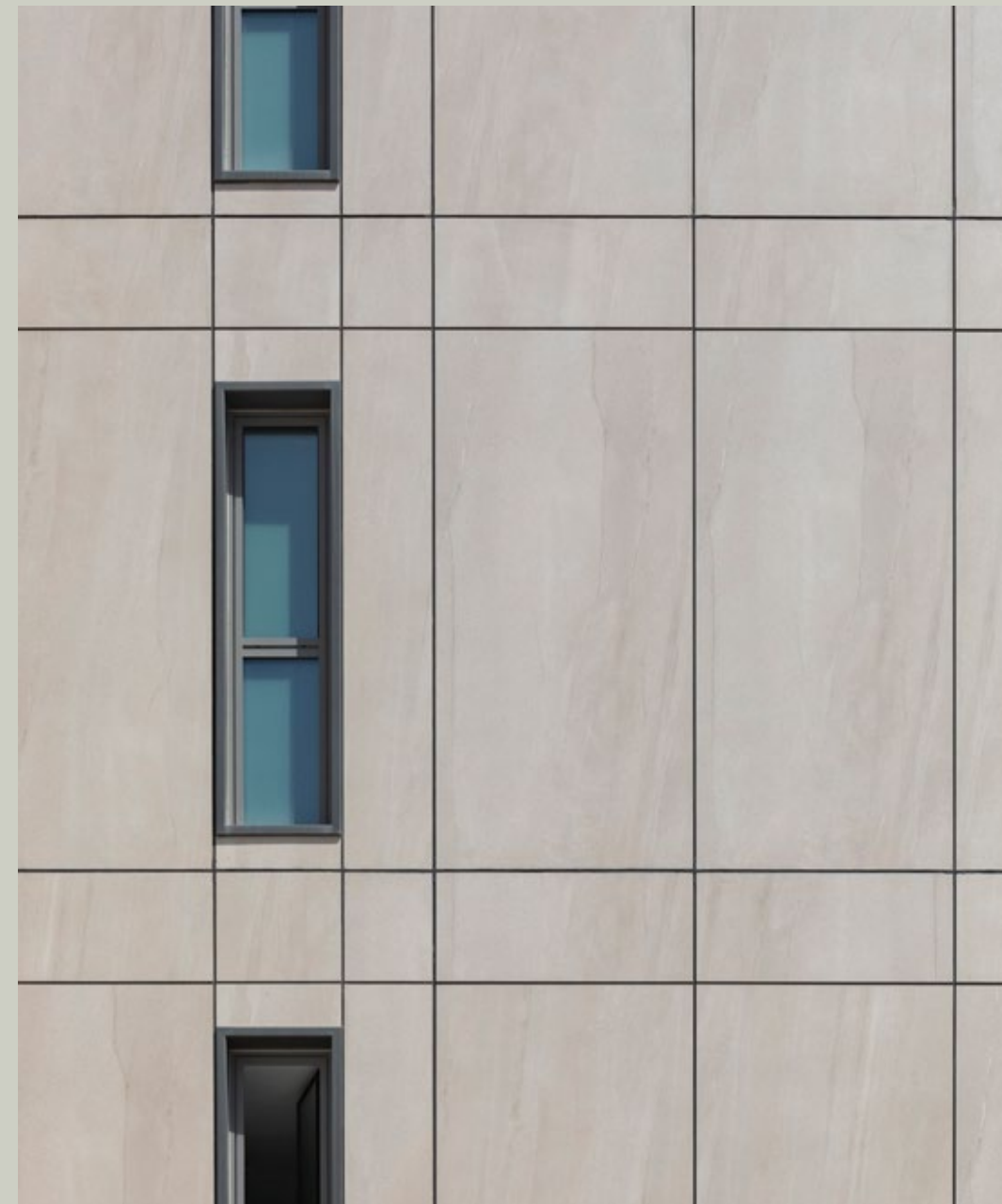
How much is saved with industrialization?

75%

Site management

90%

Site reviews

75%

After-sales

10-25%

Indirect costs

10-25%

Financial costs

10%

On-site waste

– On-site personnel

Ventilated facade, Modfacades
Hotel Castillo de Peñíscola. Peñíscola (Spain)
Architecture: Gry Asociados

PORCELANOSA Offsite

Do you need your own study to evaluate the industrialized proposal?

You can email us at porcelanosaoffsite@butech.es and send us information about the project.

—— Drawings
—— Qualities
—— Location
—— Start date
—— Delivery date