ADOTTA

WALLEN – END OF LIFE OPTIONS

DISMOUNTING, REBUILD & RECYCLE INSTRUCTIONS

INTRODUCTION

Wallen wall system is designed allowing dismantling and reinstallation in different environments without compromising performance.

The end of life (EoL) documentation aims to ensure that materials and components can be managed responsibly once they reach the end of their service life.

By providing clear guidance on dismounting, reuse, and recycling, this document supports sustainable building practices, reduces waste, and promotes circular economy principles.

PURPOSE, SCOPE, STANDARDS & REFERENCES

This document supports architects, facility managers, and installers in managing the end-of-life phase of the Wallen Wall System, covering dismounting, reuse, and recycling options for Wallen products.

Wallen follows the principles of circular design, supported by EN 15804 and ISO 14040 through its EPD documentation. The system is engineered according to ISO 20887 guidelines for Design for Disassembly, allowing full material recovery.

MAIN COMPONENTS & MATERIALS

COMPONENT	MAIN MATERIAL	RECYCLING CODE	ESTIMATED RECYCLABILITY
ALUMINUM PROFILE	EXTRUDED ALUMINUM	ALU 22	≥95%
GLASS PANELS	FLOAT GLASS	GL 70	≥90%
WOODEN DOOR / PANELS / PROFILES	VENEERED WOOD	WOOD 50	70-80%
HARDWARE & ACCESSORIES	STEEL / ALUMINUM MIX	FE 40 / ALU 22	≥90%
SEAL & GASKETS	PVC / RUBBER	07 (OTHER)	50-60%
SCREWS & FIXINGS	STEEL	FE(40)	≥90%

DISMOUNTING INSTRUCTIONS

Wallen is engineered according to modular construction principles and designed to be fully demountable.
All structural connections are based on mechanical fasteners and interlocking profiles, with no use of structural adhesives or permanent bonding. This configuration allows each component to be removed, replaced or recovered without affecting the integrity of adjacent modules.

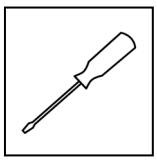
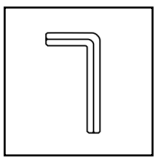
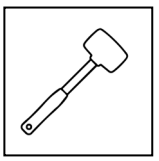
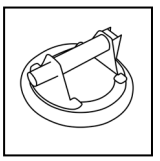
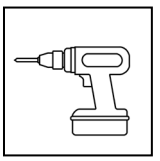
The system supports reverse installation logic, enabling controlled dismantling for relocation, reconfiguration or end-of-life material separation. During disassembly, care must be taken to access connection points progressively, maintaining the original assembly order in reverse sequence.

Before proceeding with component removal, it is essential to identify the type of door configuration (hinged or sliding) and the presence of fixed glass modules, as each configuration follows a dedicated disassembly procedure.

All fastening elements such as brackets, screws and connectors should be retained for potential reuse or replacement during reassembly or refurbishment phases.

The following instructions require the use of standard mechanical tools, typically including:

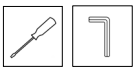
- Torx screwdriver
- Allen key
- Rubber mallet
- Suction cups for glass
- Power screwdriver
- Personal safety equipment (gloves, eyewear)

DISMOUNTING INSTRUCTIONS - DISASSEMBLY SEQUENCE FOR SWING DOOR

The following disassembly sequence applies to Wallen partitions equipped with a swing door.

STEP 1 - REMOVE HARDWARE FROM THE DOOR
- Detach handles or pulls, closing mechanisms and accessory fittings.

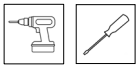


STEP 2 - REMOVE DOORS
- Detach hinges and remove the door.

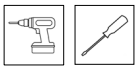
STEP 3 - REMOVE FINISHING PROFILES ON ONE SIDE
- Extract top/bottom and vertical finishing profile.
- Access to frame fasteners.

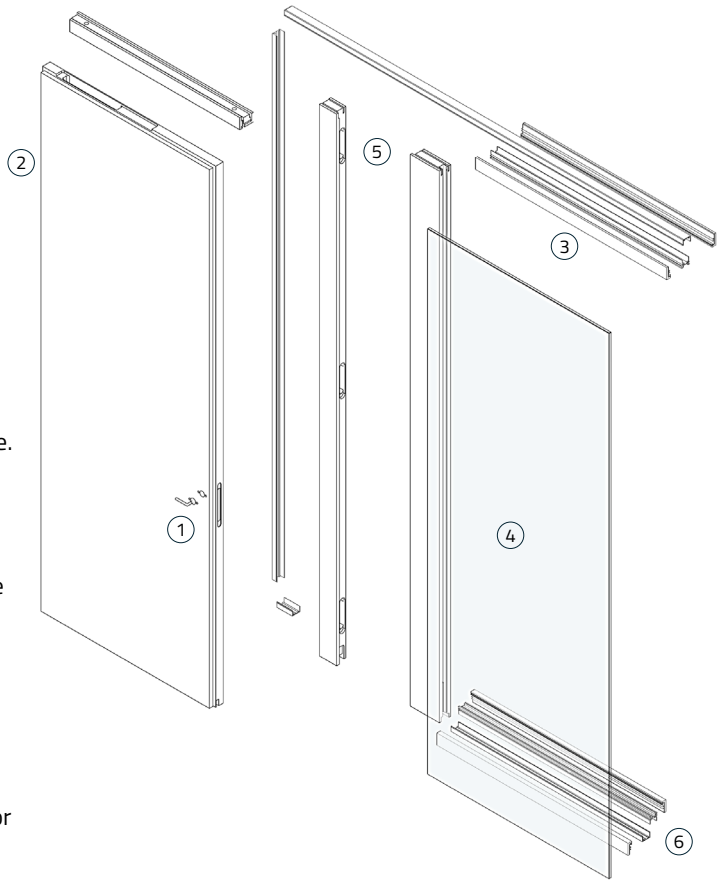
STEP 4 - EXTRACT FIXED GLASS PANELS
- Lift and remove glass panels with suction devices.
- Store glass panels, protecting the edges from damage.

STEP 5 – REMOVE DOOR JAMBS AND TRANSOM
- Unscrew the floor and ceiling fasteners to remove the door jamb and the horizontal transom.



STEP 6 - DISASSEMBLE ALUMINIUM BASE PROFILES
- Unscrew all mechanical fixings and remove the aluminum base profiles.
- Collect brackets, screws, gaskets and metal fittings for reuse or replacement.

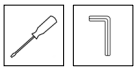




DISMOUNTING INSTRUCTIONS - DISASSEMBLY SEQUENCE FOR SLIDING DOOR

The following disassembly sequence applies to Wallen partitions equipped with a sliding door using Terno sliding tracks with integrated soft-stop mechanism.

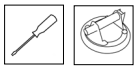
STEP 1 - REMOVE HARDWARE FROM THE DOOR
- Detach handles or pulls, closing mechanisms and accessory fittings.



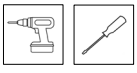
STEP 2 - REMOVE COVER PROFILES
- Remove frontal cover profiles to expose the upper sliding rail and sliding mechanism.

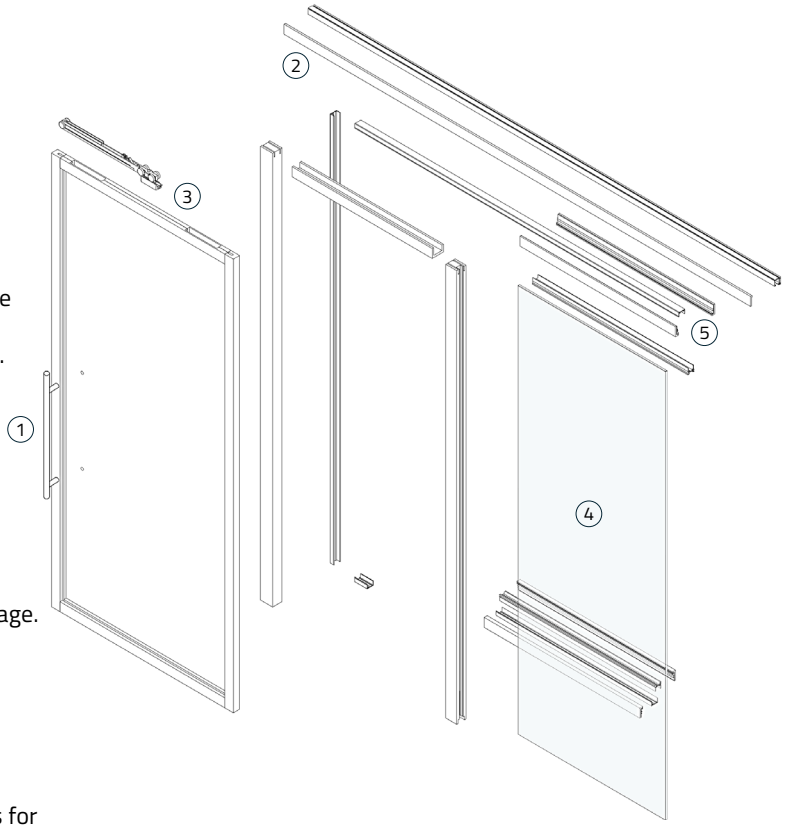
STEP 3 – DISENGAGE SOFT-STOP MECHANISM AND REMOVE THE SLIDING DOOR
- Disconnect the sliding carriage on the door from the soft-stop mechanism.
- Lift and remove the door panel from the sliding rail.

STEP 4 – REMOVE FINISHING PROFILES AND FIXED GLASS PANELS
- Remove finishing profiles on the side opposite the sliding track.
- Lift and remove glass panels with suction devices.
- Store glass panels, protecting the edges from damage.



STEP 5 - DISASSEMBLE ALUMINIUM BASE PROFILES
- Unscrew all mechanical fixings and remove the aluminum base profiles.
- Collect brackets, screws, gaskets and metal fittings for reuse or replacement.





REUSE OPTIONS

Wallen is a relocatable partition system, that can be dismantled and reinstalled in new environments such as offices, retail, or residential spaces without compromising structural integrity, acoustic or visual quality.

Partial or total reuse of glass panels, aluminum profiles, wood elements, and accessories is possible when components are undamaged, and the new installation maintains compatible dimensions for doors, glass and modules.

Adotta provides disassembly manuals and material documentation to support the End-of-Life management.

WALLEN MODULES ARE REMOUNTABLE IN DIFFERENT SITES

GLASS, ALUMINUM AND WOOD PROFILES ARE FULLY REUSABLE IF UNDAMAGED

PARTIAL REUSE: COMPONENTS CAN BE STORED FOR MAINTENANCE OR REPLACEMENTS

ADOTTA PROVIDES TECHNICAL SUPPORT FOR REINSTALLATIONS

RECYCLING OPTIONS

When reuse is not feasible, each component of Wallen can follow appropriate recycling channels.

ALUMINUM PROFILES
Aluminum profiles are fully recyclable and can be reintroduced into industrial recycling loops with minimal material loss.

WOOD ELEMENTS (MDF WITH NATURAL VENEER)
Wood-based MDF panels and profiles with natural veneer can be recovered and directed to wood recycling or fiber recovery processes, depending on surface treatments.

GLASS PANELS
Recyclable through float glass facilities, provided they are clean and free of contaminants (adhesives or coatings).

GASKETS & PLASTICS
Limited recyclability at specialized pvc plants, treated through thermal recovery.

ONLY FOR NON-REUSABLE OR NON-RECYCLABLE COMPONENTS:
DISPOSAL MUST TAKE PLACE AT AUTHORIZED FACILITIES IN COMPLIANCE WITH APPLICABLE REGULATIONS

CERTIFICATIONS & GREEN BUILDING CREDITS

Wallen has been assessed through a Life Cycle Assessment (LCA) and is supported by an Environmental Product Declaration (EPD) certified under EN 15804 and ISO 14025, together with an ISO 14021 self-declaration on recycled content, providing verified data on embodied impacts and enabling contributions to international green building rating systems such as LEED, BREEAM and WELL.

QUANTIFIED RECYCLABILITY
Total recyclable mass: ≥ 90% (glass, aluminum, steel as primary fractions)
Pre-consumer recycled content: 0,006%
Post-consumer recycled content: 0,17%

LEED v4 / v4.1 – MATERIALS & RESOURCES (MR)
MRc1 – Building Life-Cycle Impact Reduction: Modular system designed for disassembly and reuse
MRc2 – Environmental Product Declarations: Supported by Type III EPD compliant with EN 15804 and ISO 14025
MRc3 – Sourcing of Raw Materials: ISO 14021 self-declared recycled content (pre- & post-consumer)
MRc5 – Construction & Demolition Waste Management: material separability that enables high recovery rates

BREEAM - MATERIALS & WASTE
Mat 01 – Life Cycle Impacts: LCA data available through third-party verified EPD
Mat 03 – Responsible Sourcing: Documented material traceability and controlled supply chain
Wst 01 – Construction Waste Management: Dry assembly and full component separation at end of life

WELL BUILDING STANDARD
Certification not yet completed, but the system is aligned with WELL principles through:
Material Concept – Circular Design: Fully demountable system supporting reuse and reconfiguration
Material Transparency: EPD and recycled content disclosure available
Light & Visual Comfort: Glass modules support daylight transmission and visual openness

ENVIRONMENTAL DOCUMENTATION
EPD – EN 15804 / ISO 14025: Third-party verified lifecycle assessment and impact data
ISO 14021 – Recycled Content Declaration: Pre- and post-consumer recycled content disclosed
HPD – Health Product Declaration: Under development to support future material health reporting