Opening Emergency Entrance and Exit

How To Guides

Opening Emergency Entrance and Exit

Figure 1. Typical ECE air handling unit with service-corridor configuration. The emergency entrance/exit door provides safe egress from inside the corridor and controlled access from the external side.

Video Duration: 5 minutes 11 seconds
Applies to: AHU Service Corridor Emergency Door with Push Bar Hardware
Document Status: Controlled technical instruction

1. Purpose

The emergency entrance/exit door provides a safe means of egress from within the AHU service corridor and controlled access from the external side.

2. Important AHU Information

- ECE AHUs are bespoke. Do not assume that information, access arrangements, terminal numbers, wiring colours, component selections or controls logic from another AHU applies to the AHU being reviewed or worked on.
- The certified drawing and current project-specific documentation are the primary sources for the AHU arrangement and component technical information.
- Where component technical information is checked, it must be checked against the certified drawing and related manufacturer data for the exact AHU.

IMPORTANT: Always use the project-specific asset information, certified drawing, relevant ECE product-range IOM, quotation scope and component information for the exact AHU being reviewed or worked on.

3. Safety and Competency Requirements

- Only competent and authorised personnel should carry out this procedure. The required competency depends on the task being undertaken.
- Before starting, confirm the correct AHU, asset tag, certified drawing, relevant ECE product-range IOM and any applicable wiring diagram, controls description, component technical information or manufacturer data sheet.
- Follow all site-specific RAMS, permits, PPE, isolation and access requirements.
- Where the task requires physical access to the AHU, do not open access doors, remove panels or work inside the AHU unless fans and relevant equipment are isolated, stationary and safe to access.
- Do not bypass safety devices, interlocks, alarms or controls.
- Stop and escalate if the AHU identity, current technical information, safe isolation, access condition or required competency cannot be confirmed.

Figure 2. Site personnel in PPE reviewing the certified drawing. Confirm site authorisation and Permit-to-Work before operating the emergency door for maintenance access.

Task-specific requirements:

- Before opening access doors or removing panels, select Maintenance Mode where applicable, allow fans to ramp down fully, confirm airflow has stopped, isolate relevant equipment and apply lock-off/tag-out where required by site procedure.
- Do not open AHU access doors while fans are rotating.
- Use suitable PPE and manual-handling controls for the component being removed, cleaned, replaced, inspected or tested.
- Do not leave tools, fixings, debris, packaging or loose items inside the AHU.
- Stop and escalate if safe isolation cannot be confirmed, the component does not match the certified drawing, or the access/withdrawal route is obstructed.

4. Before You Begin

- Access the AHU asset information via the ECE Client Portal using the asset tag or 18-digit reference number where available.
- Confirm the AHU reference, project name, location and latest document revision.
- Review the certified drawing, relevant ECE product-range IOM, quotation scope, component schedule and manufacturer data sheets where applicable.
- Review the wiring diagram, controls description and commissioning information where the task involves electrical, controls or BMS interfaces.
- Confirm the required personnel, tools, PPE, access equipment, permits and isolation method before starting work.

Figure 3. Asset Tag plate carrying the unique 18-digit reference number used to retrieve AHU technical information from the ECE Client Portal.

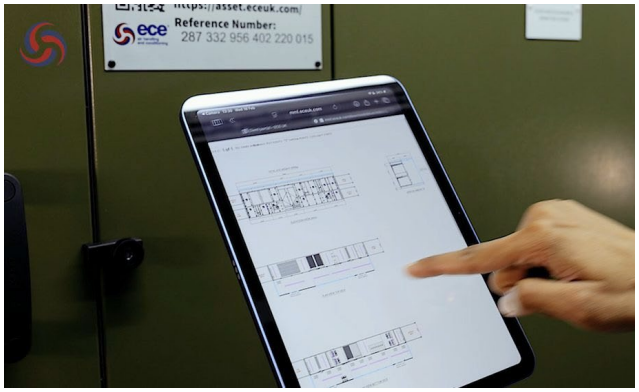

Figure 3b. AHU technical information opened on a device via the Asset Tag link, used to confirm AHU reference, drawing revision and fan information before starting work.

5. Required Tools, Equipment, PPE and Information

- Project-specific certified drawing and relevant ECE product-range IOM
- Task-specific hand tools
- Replacement components or spares where applicable
- PPE required by site procedure
- Cleaning materials or seal inspection tools where applicable
- Maintenance record or site log

6. Procedure

It is fitted with:

- Internal push bar emergency release mechanism
- External controlled access handle/lock mechanism
- Automatic latch re-engagement on closure

This procedure describes correct and safe operation for both exit (from inside) and entry (from outside).

Before operating the emergency door:

- Ensure the service corridor is adequately lit.
- Confirm there are no obstructions blocking the exit route.
- If entering for maintenance, ensure:
- Authorisation has been granted.
- Any relevant Permit-to-Work (PTW) procedures are followed.
- Do not operate the emergency door during fire alarm testing or security lockdown unless instructed.

6.1 Door Hardware Overview

Based on the installed system:

Internal Side (Service Corridor)

- Horizontal push bar mechanism.
- Spring-loaded latch.
- Designed for immediate exit without key or code.

External Side

- Handle and locking mechanism.
- May require:
- Key
- Thumb turn
- Controlled access system
- Door is normally secure from outside when closed.

6.2 Procedure – Exiting the AHU (From Inside)

Step 1 – Approach the Door

- Ensure the exit path is clear.
- Visually confirm door is unobstructed.

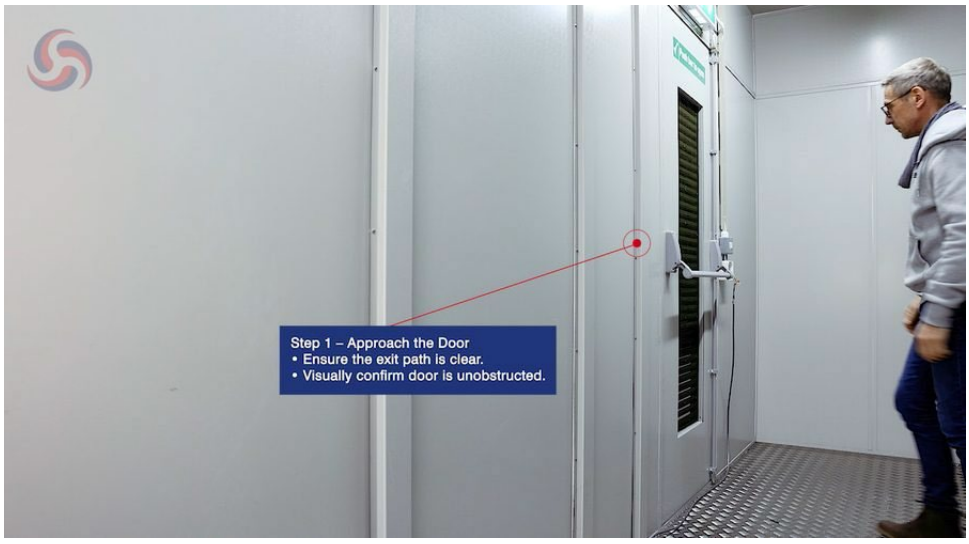

Figure 4. Approach the door: ensure the exit path is clear and the door is unobstructed.

Step 2 – Operate the Push Bar

- Apply steady forward pressure to the horizontal push bar.
- The latch will retract automatically.
- Continue pressure until the door swings open.

Important: Do not strike or force the push bar. A smooth, continuous push is sufficient.

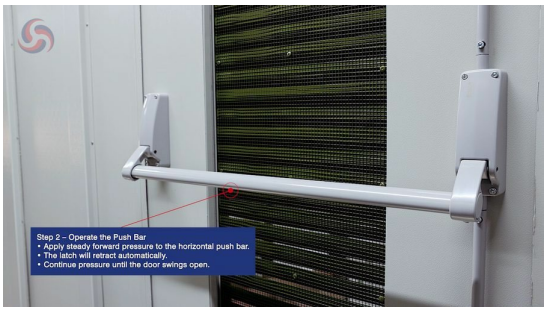

Figure 5. Operate the push bar: apply steady forward pressure to the horizontal bar. The latch retracts automatically.

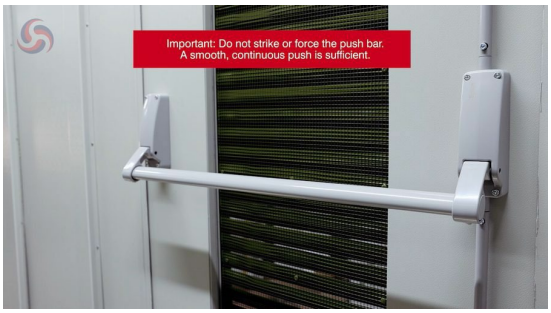

Figure 6. Do not strike or force the push bar — a smooth, continuous push is sufficient.

Step 3 – Exit Safely

- Step through the doorway.
- Maintain awareness of any trip hazards at threshold level.

Step 4 – Allow Door to Close

- Release the push bar.
- Allow the door to close under its own closing mechanism.
- Do not slam.

Figure 7. Release the push bar and allow the door to close under its own closing mechanism. Do not slam.

Step 5 – Confirm Latch Engagement

- Once closed, gently pull to confirm it has fully latched.
- The latch should re-engage automatically.

Do not wedge or prop the emergency door open unless permitted by site fire strategy.

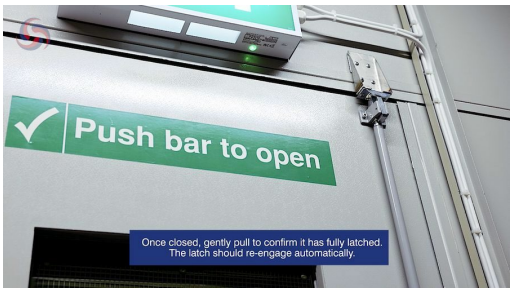

Figure 8. Confirm latch engagement: gently pull the closed door — the latch should re-engage automatically.

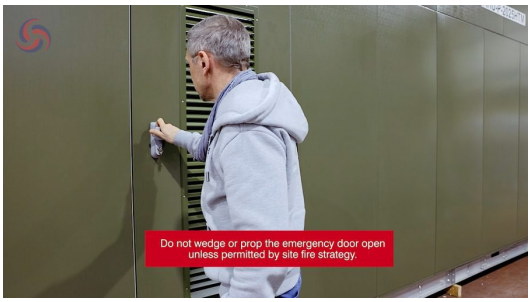

Figure 9. Do not wedge or prop the emergency door open unless permitted by the site fire strategy.

6.3 Procedure – Entering the AHU (From Outside)

Step 1 – Confirm Authorisation

- Ensure you are authorised to enter the service corridor.
- Follow site access procedures.

Step 2 – Operate External Locking Mechanism

- Use key, handle, or approved access control device as installed.
- Rotate or disengage locking mechanism fully.

Figure 10. Operate the external locking mechanism using the key, handle or approved access device.

Step 3 – Open the Door

- Pull the door open using the handle.
- Maintain control of the door during opening.

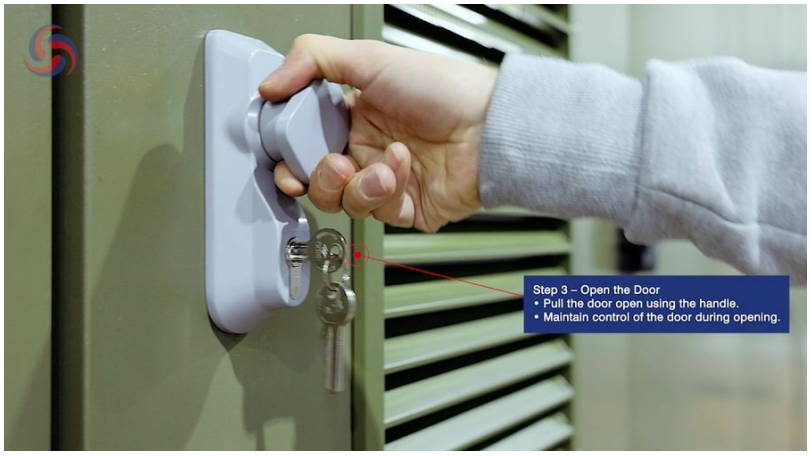

Figure 11. Pull the door open using the handle and maintain control during opening.

Step 4 – Enter and Close

- Enter the corridor.
- Close the door behind you immediately.
- Confirm latch has engaged correctly.

Figure 12. Enter the corridor and close the door behind you immediately.

6.4 Latch and Locking Mechanism Function

- The internal push bar directly retracts the latch bolt.
- When the bar is released, the latch automatically resets.
- The external lock prevents entry unless authorised.
- The door is designed to always allow exit from inside, regardless of external lock state.

Figure 13. Latch engaged correctly — the spring-loaded latch automatically resets when the door is closed.

6.5 Inspection and Operational Check

During routine maintenance checks:

- Confirm push bar moves freely and returns correctly.
- Check latch retracts fully when bar is depressed.
- Verify door closes squarely into frame.
- Confirm compression seal is intact.
- Ensure no damage to hinges or frame.
- Confirm signage (“Push bar to open”) remains visible and legible.

6.6 Fault Conditions

If the door:

- Does not open when push bar is depressed,
- Does not latch when closed,
- Appears misaligned,
- Feels excessively stiff or obstructed,

Immediately report to Estates or Maintenance.

Do not leave the door unsecured.

6.7 Key Compliance Considerations

- Emergency egress must remain unobstructed at all times.
- No tools or stored materials may block access.
- Door hardware must remain in working condition to comply with safety regulations.
- The emergency exit must never be locked in a manner that prevents escape from inside.

6.8 Summary of Correct Use

Action	Method
Exit	Push internal bar firmly and step through
Entry	Use authorised external access method
After Use	Close fully and confirm latch engagement
Never	Wedge open without authorisation

7. Verification / Functional Test

- Component is correctly refitted, seated, latched, sealed or secured.
- Access doors, panels and latches are fully closed and secure.
- No tools, fixings, packaging or loose items remain inside the AHU.
- AHU is returned to normal operating condition and no abnormal noise, vibration, leakage or alarm condition is present.
- Emergency entrance/exit opens from the required side and latches securely after use.

8. Stop-and-Escalate Conditions

STOP: Stop work or stop the review and escalate to the responsible ECE/project technical contact if any of the following apply:

- The AHU reference, asset tag, certified drawing or document revision cannot be confirmed.
- The information found does not match the physical AHU, installed component or project scope.
- Safe access, safe isolation or required site permits cannot be confirmed.
- A required component technical detail, wiring detail, control signal or manufacturer data sheet is missing.
- The task would block or compromise AHU maintenance access, withdrawal routes, isolators, terminal boxes or emergency access.
- Access cannot be obtained safely.
- Door, panel, latch, rail or component condition is damaged or does not match the certified drawing.
- The replacement component does not match the original component or asset information.
- Emergency access/exit cannot be closed and latched after use.
- The emergency route is obstructed, locked incorrectly or not authorised for use.

9. Final Checks

- Confirm the AHU, component, wiring, control function or approval item has been left in the intended safe and complete condition.
- Confirm access doors, panels, terminal boxes, covers, guards, isolators and labels are secure where applicable.
- Confirm no tools, temporary materials, loose items, debris or packaging remain in or around the AHU.
- Confirm any alarms, faults, abnormal indications or unresolved comments have been recorded and escalated.

10. Records to Complete

Record enough evidence to prove that the task, review or test has been completed using the correct AHU information and by competent personnel.

- AHU isolated and made safe
- Component removed/refitted or adjusted
- Final physical inspection completed
- Operational check completed
- Maintenance record updated

Evidence item	Required entry
AHU reference / asset tag	To be completed
Certified drawing revision / document revision	To be completed
Person completing task / review	To be completed
Date completed	To be completed
Result / status	Pass / fail / comment / not applicable
Outstanding actions	To be completed or marked none

11. Completion Checklist

[ ] Correct AHU and guide number confirmed.
[ ] Latest asset information and certified drawing checked.
[ ] Relevant IOM, wiring diagram, controls description or manufacturer data checked where applicable.
[ ] Safety and competency requirements confirmed.
[ ] Procedure completed or approval review completed.
[ ] Verification / functional test completed.
[ ] Stop-and-escalate conditions checked and no unresolved stop condition remains.
[ ] Records to Complete section completed.
[ ] AHU returned to safe condition or review status recorded.

12. Learning Outcome

After completing this guide, the user should be able to complete or review Opening Emergency Entrance and Exit using the correct AHU information, with clear safety controls, defined verification, completion records and escalation criteria.