
User-Led Accessibility Audit for Residential Rooms

Audited: May 2024

Accessibility for *All*.



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Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

User-Led Accessibility Audit for Residential Rooms – Report

Audited: May 2024

Introduction to the User-Led Accessibility Audits:

This initiative represents a pivotal step towards enhancing the inclusivity of our environment, ensuring that all members of our community can navigate and utilise our facilities with ease. We aim to harness the powerful insights of those that are directly affected by accessibility barriers in order to facilitate meaningful change across our community. Their nuanced encounters will provide critical expertise and provide extensive data which will encourage the development of effective change. Emphasising student stories confirms any recommendations uncovered are central to the unique needs of Trinity students, which allows us to continue fostering a supportive world-class educational environment for all.

What is a User-Led Audit? A User-Led Audit involves disabled community members who experience accessibility challenges first-hand. These individuals will lead the evaluation of our physical and sensory environments to ensure our campus meets their needs effectively. This approach allows us to gain authentic insights that are often overlooked in traditional audits, leading to more impactful and meaningful improvements.

Why User-Led Audits? User-Led Audits provide several key benefits:

- **Authentic Feedback:** Direct from community members affected by accessibility barriers, ensuring that changes reflect real needs.
- **Empowerment:** This initiative empowers those impacted by accessibility issues to contribute actively to solutions, fostering a sense of ownership and involvement.
- **Comprehensive Improvements:** Beyond compliance, these audits aim to enhance actual usability and comfort, making our campus welcoming for everyone.

Scope of the Audit: In May 2024, we began our series of audits with an initial focus on residential accommodation, assessing 36 enabled rooms across the campus, as well as 42 at Trinity Hall. Following this, our efforts will extend to academic buildings, including the Lloyd, Hamilton, TBSI, and JAMES' buildings. Our team, composed of disabled student interns and supported by staff from Estates, Accommodation, and Disability Services, will systematically evaluate these areas. We aim to identify obstacles that may not be evident without the perspective of those directly impacted by such

challenges. For more information on our brilliant student interns, please visit <https://www.tcd.ie/disability/contact/staff-profiles/student-interns/>

Your Role and How to Participate: We encourage all staff to engage with this process, whether by participating in the audits, providing feedback, or implementing changes within your respective areas.

Looking Forward: The findings from these audits will be instrumental in guiding future enhancements to our campus. Thank you for helping us make Trinity College Dublin a more accessible and inclusive environment for everyone.

General Recommendations for Accessibility:

Designing accessible student residential rooms requires the functionality and specific design of various aspects that can ensure inclusivity for wheelchair users, those who are visually impaired, have sensory needs and individuals with other disabilities. Below are recommendations and guidelines for improving furniture and overall room design to be referred to moving forward:

Wardrobe Accessibility

1. Adjustable Shelving and Hanging Rails:
 - a. Install wardrobes with adjustable shelving and hanging rails that can be easily reached from a seated position (i.e. a wheelchair).
2. Lowered Handles and Controls:
 - a. Ensure handles, knobs, and controls are at a height accessible to wheelchair users, typically between 15 to 48 inches from the floor.
3. Sliding Doors:
 - a. Use sliding doors instead of hinged doors where applicable to allow easier access without needing additional manoeuvring space.

Bathroom Design

4. Non-Slip Flooring:
 - a. Use slip-resistant flooring materials to prevent accidents.
 - b. Textured tiles or non-slip vinyl are good options.
5. Shower Seating:
 - a. Provide fold-down seats or fixed seating within the shower area, ensuring they are securely attached and can support varying weights.
6. Adjustable Shower Heads:
 - a. Install handheld shower heads with adjustable heights and a flexible hose to accommodate different user needs.
7. Grab Bars:
 - a. Place grab bars in key areas around the toilet, shower, and bathtub.
 - b. These should be securely anchored and positioned to aid transfer and stability.
8. Sufficient Turning Space:
 - a. Ensure there is adequate space for wheelchair users to turn and maneuver.
 - b. A clear turning radius of at least 60 inches is recommended.

Signage for Visually Impaired

9. Braille and Raised Text:
 - a. Use Braille and raised text on all signage to aid visually impaired individuals in navigating the space.
10. High Contrast Colours:
 - a. Employ high-contrast colour schemes for signs to enhance visibility.
 - b. This includes stair edges

11. Tactile Indicators:

- a. Implement tactile indicators on floors and walls, such as textured pathways, to guide visually impaired individuals safely through the building.

12. Fire-exit procedures:

- a. Ensure there is adequate fire-exit lighting and signage to guide a person with a visual impairment in dark conditions

General Room Design

13. Accessible Bed Height:

- a. Ensure beds are at a height that allows easy transfer from a wheelchair.
- b. Adjustable bed frames can cater to various needs.

14. Clear Pathways:

- a. Maintain clear and wide pathways (at least 36 inches) within the room to accommodate wheelchair movement.

15. Accessible Desks and Tables:

- a. Provide desks and tables with adjustable heights and enough clearance underneath for wheelchair access.

16. Automatic Doors:

- a. Consider installing automatic door openers or doors that require minimal force to open and close.

17. Lighting:

- a. Use adjustable lighting controls and ensure that switches are within easy reach.
- b. Lighting should be consistent and warm (in colour scale not temperature).

Additional Recommendations

18. Emergency Alerts:

- a. Install visual and audible emergency alerts for hearing and visually impaired individuals.

19. Training and Maintenance:

- a. Ensure staff are trained in accessibility requirements and maintain the facilities to keep them in good working order for disabled students ease of functionality.

Reference Standards

- Americans with Disabilities Act (ADA) Guidelines: Follow ADA guidelines for accessible design in public accommodations and commercial facilities.
- British Standards (BS8300): Refer to BS8300 for inclusive design of buildings and their approaches to meet the needs of disabled people.
- Universal Design Principles: Apply the principles of universal design to create environments that are inherently accessible to all people, regardless of age, disability, or other factors.

Implementing these recommendations can significantly enhance the accessibility and usability of student residential rooms for individuals with disabilities, ensuring a more inclusive and supportive living environment

Executive Summary

This User-Led Accessibility Audit for Trinity College Dublin, conducted in May 2024, evaluates the accessibility of residential rooms across multiple campus locations. The audit, driven by disabled student interns, identifies both general and specific accessibility issues in residential accommodations, aiming to foster a more inclusive environment. The report provides detailed recommendations and identifies specific areas for improvement.

Priority Recommendations

1. **Automate Entrances and Doors:**
 - Install automatic doors at all building entrances, apartment doors, and critical internal doors to improve accessibility for wheelchair users.
2. **Bathroom Modifications:**
 - Install adjustable shower seats, additional grab rails, and detachable showerheads.
 - Ensure bathroom emergency pull cords are functional and correctly connected.
3. **Kitchen and Living Spaces:**
 - Adjust extractor fans, oven controls, and fire safety equipment to accessible heights.
 - Implement under-sink and under-hob clearances for wheelchair accessibility.
4. **Bedroom Adjustments:**
 - Ensure bed heights facilitate easy transfers (ideal height: 48cm).
 - Make shelves, windows, and closet hanging rails reachable for wheelchair users.
5. **Emergency and Wayfinding Improvements:**
 - Enhance fire exit signage with braille and guided lighting.
 - Ensure emergency support systems are operational and accessible.
6. **Sensory Environment Enhancements:**
 - Replace inconsistent and flickering lights with stable, warm-toned lighting.
 - Designate low-noise, naturally lit rooms for students with sensory sensitivities.

Specific Issue Log - (Estates Department):

Area 1 – (Kevin Moloney)

Front Square:

Rooms Audited: 2.0.02, 7.0.04, 9.0.01, 9.1.01

Entrance and Navigation:

- **All** houses are accessed via a ramp – However, the gradient of these ramps is too steep and would be difficult to access for some wheelchair users
- The key card accesses reader is located by the edge of the steps and provides a fall risk for wheelchair users and visually impaired individuals – this needs to be addressed.
 - 2.0.02, 9.0.01, 9.1.01.

Automatic Doors:

- Apartment doors which require the addition of automatic function or for current function to be fixed as only work upon exit, not entrance:
 - 7.0.04, 9.0.01, 9.1.01.
- Kitchen/Living space doors which require the addition of automatic function:
 - 7.0.04, 9.0.01, 9.1.01.

Living / Kitchen Spaces:

- Space to be made accessible under sink for wheelchair users
 - 9.0.01, 9.1.01

Bathrooms:

- Shower seat to be installed:
 - 2.0.02
- **All** bathrooms require additional grab-rails to be installed in the shower space
- Sink height to be made accessible:
 - 7.0.04

Bedrooms:

- Shelves in **all bedrooms** need to be made reachable for wheelchair users
- Windows in **all bedrooms** need to be made reachable for wheelchair users
- Closet hanging rails in **all bedrooms** need to be made reachable for wheelchair users
- Bed Heights to be made accessible (ideal height for transfers – 48cm):
 - Reduction needed in 9.1.01 (current measurement 68cm)

Wayfinding:

- **All** rooms lack adequate fire exit signage, braille, and guided lighting to aid visually impaired individuals in the event of an emergency.

Emergency Support:

- Chords present in **All** rooms - Checks that emergency chords remain connected and functional are recommended as this was not able to be tested during audit.



Trinity Halls:

Rooms Audited:

| Apartment | Rooms Audited |
|-----------|--|
| 80 | 80.01.04, 80.04.04, 80.07.04, 80.10.04, 80.14.03 |
| 82 | 82.04.01, 82.07.01, 82.10.01, 82.14.01 |
| 85 | 85.03.01, 85.06.01, 85.09.01, 85.12.01, 85.16.01 |
| 86 | 86.02.01, 86.02.07, 86.05.01, 86.05.07, 86.08.01, 86.08.07, 86.11.01, 86.11.07, 86.15.05 |
| 87 | 87.02.01, 87.05.01, 87.08.01, 87.11.01, 87.15.01 |
| 88 | 88.03.01, 88.03.04 (Twin), 88.06.01, 88.09.01, 88.12.01 (in apt 11) |
| 89 | 89.01.02, 89.02.01, 89.05.01, 89.08.01, 89.11.01 |
| 91 | 91.02.01, 91.05.04, 91.08.04, 91.11.03, 91.14.03 |

Entrance and Navigation:

Both entrances into the complex are step-free, but the gates are not automated and very heavy and difficult for a wheelchair user to use.

Automatic Doors:

- **No** door throughout the complex was automatic, including all living spaces as well the reception area and other communal spaces such as the canteen.

Living / Kitchen Spaces:

- **All** rooms need Extractor fan and Oven controls on counter wall to be made reachable for wheelchair users
- **All** rooms need to have fire extinguisher / blanket re-adjusted to an accessible height
- **All** rooms recommended to have additional smaller fridge (as seen in Printing House Square) so that fridge access is fully accessible.

Access to Appliances:

We found that some cabinets in the kitchen areas can be removed to allow access for a wheelchair user. This should be common practice and implemented across all enabled apartments. Please find below a summary of spaces where this feature was not working as intended.

| APARTMENT BLOCK | SINK CABINET INTERVENTATION ONLY | HOB CABINET INTERVENTATION ONLY | INTERVENTION FOR BOTH SINK AND HOB |
|-----------------|----------------------------------|---------------------------------|------------------------------------|
| 80 | N/A | 80.14.03 | 80.07.04 |
| 82 | N/A | 82.04.01, 82.07.01, | 82.10.01, 82.14.01 |
| 85 | 85.03.01 | 85.09.01 | 85.06.01 |
| 86 | 86.08.01, 86.08.07 | 86.05.01, 86.05.07, | 86.11.01, 86.11.07 |
| 87 | 87.05.01, 87.08.01 | 87.15.01 | 87.02.01, 87.11.01 |
| 88 | N/A | 88.03.01, 88.03.04, 88.06.01 | 88.09.01, 88.12.01 |
| 89 | 89.11.01 | N/A | 89.01.02, 89.02.01, 89.05.01 |
| 91 | 91.05.04 | N/A | 91.02.03 |

Bathrooms:

- **All** bathrooms require the attached shower seat at the wall to be loosened as they are quite difficult to push down to enable use.

Bedrooms:

- Shelves in **all bedrooms** need to be made reachable for wheelchair users
- Windows in **all bedrooms** need to be made reachable for wheelchair users
- Closet hanging rails in **all bedrooms** need to be made reachable for wheelchair users

Emergency Support:

No enabled apartments possess a nurse-call / emergency alarm by their bedside which pose a significant safety issue in the event of an accident where potentially the resident would not be able to call for assistance. **All** enabled bathrooms possess a call alarm; however, some were non-functioning as described below and should be repaired as a matter of priority.

| Apartment | Room | Issue Description – Enabled Bathrooms |
|-----------|----------|---|
| 80 | 80.14.03 | Bathroom pull-chord is not functioning |
| 85 | 85.09.01 | Bathroom pull-chord is not functioning |
| 88 | 88.03.01 | Pull-chord showing wrong room (89.02.01) to reception |
| 91 | 91.02.03 | Bathroom pull-chord is not functioning |
| 91 | 91.08.04 | Bathroom pull-chord is not functioning |
| 91 | 91.14.03 | Bathroom pull-chord is not functioning |

Wayfinding:

- All rooms lacked adequate fire exit signage, braille, and automatic lighting for visually impaired students to be guided safely from their room to the fire exit. On the stairs, there is no continuous rail and lack of contrast between the steps which pose a risk to visually-impaired students in the event of an emergency.

Area 2 – (Patrick Curtin)

Botany Bay:

Rooms Audited: 12.0.1a, 12.0.1b, 12.0.1c, 13.0.1a, 13.0.1b, 13.0.1c, 14.0.1a, 14.0.1b, 14.0.1c

Automatic Doors:

All entrances into each building are automatic, but do not sense you unlike the automatic doors into each apartment and should be programmed in a similar manner.

- House 14 has an unideal process where the swipe card entrance with the same buttons opening front and room door – should be reviewed to improve access.

Living / Kitchen Spaces:

- All rooms need Extractor fan and Oven controls on counter wall to be made reachable for wheelchair users.
- All rooms have accessible kitchen shelves accessed via a pulley system – should be reviewed was quite awkward to access.
- All rooms need to have fire extinguisher / blanket re-adjusted to an accessible height
- All rooms recommended to have additional smaller fridge (as seen in Printing House Square) so that fridge access is fully accessible.

Bedrooms:

- All bedrooms can enhance their maneuvering space by reorganising their furniture, can be resolved by utilising a smaller desk and a wardrobe.
- Shelves in all bedrooms need to be made reachable for wheelchair users
- Windows in all bedrooms need to be made reachable for wheelchair users
- Closet hanging rails in all bedrooms need to be made reachable for wheelchair users

Bathrooms:

All bathrooms (which are shared) are recommended to have their shower to be designed similar to those in found in Printing House Square. Each shower needs a shower seat attached to the wall, additional grab rails to mitigate injury, a detachable showerhead to enhance functionality and a shower curtain to minimise water spillage and enhance privacy of the residents.

Emergency Support:

Chords present in All bedrooms - Check that emergency chords remain connected to security and functional are recommended as this was not able to be tested during audit.

However, emergency cords need to be installed in all bathrooms beside the toilet area and another within the shower.

Wayfinding:

All rooms lacked adequate fire exit signage, braille, and automatic lighting for visually impaired students to be guided safely from their room to the fire exit.

Area 5 – (Graham Tucker)

Goldsmith Hall:

Rooms Audited: 70.1.05, 70.1.09, 70.2.05, 70.3.05, 70.4.05, 71.4.05, 71.2.06,

71.3.06, 71.4.06

Entrance and Navigation:

All apartments are impossible to enter due to cumbersome door restricting access, requires immediate automation to access lift to relevant floors. The door leading onto the bridge across Pearse St is also very heavy and difficult to use. Upon crossing the bridge, all apartments are situated at the top of a steep hill, once again limiting entry for wheelchair users.

Automatic Doors:

- **No** door throughout the complex was automatic, including doors to all living spaces and kitchen.

Living / Kitchen Spaces:

- All rooms need Extractor fan and Oven controls on counter wall to be made reachable for wheelchair users
- All rooms need to have fire extinguisher / blanket re-adjusted to an accessible height
- All rooms recommended to have additional smaller fridge (as seen in Printing House Square) so that fridge access is fully accessible

Bedrooms:

- Shelves in all bedrooms need to be made reachable for wheelchair users
- Windows in all bedrooms need to be made reachable for wheelchair users
- Closet hanging rails in all bedrooms need to be made reachable for wheelchair users.
- All beds are too high for ideal transfers, should be reduced to 48cm to improve access.

Bathrooms:

All bathrooms are recommended to have their shower to be designed similar to those in found in Printing House Square. Each shower needs a shower seat attached to the wall, additional grab rails to mitigate injury, a detachable showerhead to enhance functionality and a shower curtain to minimise water spillage and enhance privacy of the residents.

- **HIGH-RISK:** Steep ramps are used to access bathrooms in all apartments in House 71 (4.05, 2.06, 3.06, 4.06)
 - High likelihood of injury upon exiting of bathroom – auditor crashed into wall due to lack of maneuvering space. Possible spillage of water due to lack of curtain which could flood entire apartment.

Wayfinding:

There is no continuous rail on the stairs and lack of contrast between the steps which pose a risk to visually impaired students in the event of an emergency at the main entrance.

Sensory Support:

- All rooms should have inconsistent colour and flickering lights removed and replaced with warmer toned bulbs that remain consistent throughout the apartment.

Emergency Support:

No emergency chords present in **70.1.05, 71.2.06, 71.3.06, 71.4.06 – install immediately.**

Checks that current emergency chords remain connected to security and functional are recommended as this was not able to be tested during audit.

However, emergency cords need to be installed in all bathrooms beside the toilet area and another within the shower.

Area 6 – (Bernard Smith)

New Square:

Rooms Audited: 34.0.02, 34.1.01, 36.1.01, 40.3.01, 40.3.02

Entrance and Navigation:

Automatic Doors:

- **All** entrance building doors require the addition of automatic function
- Apartment doors which require the addition of automatic function or for current function to be fixed:
 - 36.1.01, 40.3.01, 40.3.02
- Kitchen doors which require the addition of automatic function:
 - 34.0.02, 34.1.01, 36.1.01, 40.3.01, 40.3.02

Living / Kitchen Spaces:

- **All** rooms need Extractor fan and Oven controls on counter wall to be made reachable for wheelchair users
- **All** rooms need to have fire extinguisher / blanket re-adjusted to an accessible height
- **All** rooms recommended to have additional smaller fridge (as seen in Printing House Square) so that fridge access is fully accessible

Bathrooms:

- Shower seat to be installed:
 - 34.1.01, 36.1.01, 40.3.01, 40.3.02
- **All** bathrooms require additional grab-rails to be installed in the shower space
- Showerheads to be made detachable and reachable:
 - 36.1.01, 40.3.01, 40.3.02,

Bedrooms:

- Shelves in **all bedrooms** need to be made reachable for wheelchair users
- Windows in **all bedrooms** need to be made reachable for wheelchair users
- Closet hanging rails in **all bedrooms** need to be made reachable for wheelchair users
- Bed Heights to be made accessible (ideal height for transfers – 48cm):
 - 36.1.01, 40.3.01, 40.3.02

Wayfinding:

- All rooms lacked adequate fire exit signage and automatic lighting for visually impaired students to be guided safely from their room to the fire exit.

Emergency Support:

- Chords present in **All** rooms - Checks that emergency chords remain connected and functional are recommended as this was not able to be tested during audit. Ensure functional in bed area, toilet and shower.

Sensory Support:

-
- **All** rooms should have Inconsistent colour and flickering lights removed and replaced with warmer toned bulbs that remain consistent throughout the apartment.

Printing House Square:

Rooms audited: 41.8.03, 42.10.03, 42.11.01, 43.8.04, 44.2.03, 44.4.03, 44.6.03, 44.8.03, 44.10.01

Entrance and Navigation:

Automatic Doors:

- **ALL** exterior building, apartment and bedroom entrance doors have automatic functionality.
- **ALL** kitchen / living doors require the functionality to be added.

Living / Kitchen Spaces:

- A general presence of **too many sofas** around the complex that prevent maneuvering space
- **ALL** kitchens have switches for ovens and extraction unreachable above countertops

Bedrooms:

- Higher storage draws in wardrobes inaccessible in all rooms bar 43.08.04 – Would be better to be removed and used as shelf (43.08.04 as example where this has been done successfully).
- Blinds in all rooms need to be made reachable for wheelchair users

Emergency Support:

- Chords present in **All** rooms - Checks that emergency chords remain connected and functional are recommended as this was not able to be tested during audit

Sensory Recommended Rooms – (Accommodations Department):

These are rooms that we have identified for students with sensory sensitivities due to low noise pollution, amenable or natural lighting with neutral and soft colours and other sensory concerns:

- Front Square – All Areas Audited
- Botany Bay – Houses 12 and 13.
- Trinity Halls – Apartments within block 80, 81 and 82

Additional Recommended Accessibility Rooms – (Accommodations Department):

Front Square:

- 7.1.01
- 7.1.02
- 9.1.02 (Should be listed as enabled in lieu of 9.1.01 due to larger space.)

New Square:

- 34.1.02