Voluntary Product Accessibility Template (VPAT) Rev 508

WCAG 2.0 Edition

Product: Mzero Locker Rental Kiosk

Version: 0.1.21

Vendor:

Contact:

Report Date: May 2026 (Phases 1–4 + Chapter 5 ARIA sweep + Phase 5 Spanish i18n complete)

Based on VPAT 2.5 Rev 508

This report represents the current accessibility conformance state of the Mzero Locker Rental Kiosk. A phased remediation programme is in flight — see VPAT-COMPLIANCE-PLAN.md in the project documentation for the roadmap from current state to full WCAG 2.0 Level AA conformance.

Conformance Level Definitions

Supports: The functionality of the product has at least one method that meets the criterion without known defects or meets with equivalent facilitation.

Partially Supports: Some functionality of the product does not meet the criterion.

Does Not Support: The majority of product functionality does not meet the criterion.

Not Applicable: The criterion is not relevant to the product.

Not Evaluated: The product has not been evaluated against the criterion. This can only be used in WCAG Level AAA criteria.

WCAG 2.0 Report

Tables 1 and 2 also document conformance with Revised Section 508: Chapter 5 - 501.1 Scope, 504.2 Content Creation or Editing; Chapter 6 - 602.3 Electronic Support Documentation.

Table 1: Success Criteria, Level A

Criteria	Conformance Level	Remarks and Explanations
1.1.1 Non-text Content	Supports	Phase 1 (May 2026): aria-hidden="true" applied to all 99 decorative mat-icon instances across the customer flow; the venue logo carries alt="" aria-hidden="true". Icon-only buttons (PIN visibility toggle, numpad clear / backspace, password show / hide) carry explicit aria-label. Informational images use descriptive alt text where applicable.
1.2.1 Audio-only and Video-only (Prerecorded)	Not Applicable	The application does not contain prerecorded audio-only content. Video assets (door-opening clip) are decorative and contain no information conveyed by the imagery beyond the surrounding text.
1.2.2 Captions (Prerecorded)	Not Applicable	The application does not contain prerecorded multimedia content that conveys information via audio.
1.2.3 Audio Description or Media Alternative (Prerecorded)	Not Applicable	The application does not contain prerecorded video content that conveys information via imagery alone.
1.3.1 Info and Relationships	Supports	Phase 1 (May 2026): heading hierarchy normalised across the customer flow — every screen uses a single <h2 class="app-page-title"> with <h3> sub-headings stepping down. The button-as-h2 antipattern was removed from the legacy not-available / code-not-found / server-offline screens. Form inputs are associated with labels via Angular Material's mat-form-field. The forgot-PIN kind-toggle uses role="tablist" / role="tab" / aria-selected.
1.3.2 Meaningful Sequence	Supports	The DOM order on each screen mirrors visual reading order — header → card title → action tiles → footer. The themed-card layout used across customer screens enforces this consistently.
1.3.3 Sensory Characteristics	Supports	Instructions are text-driven and do not rely on shape, size, visual

		location, or sound. Button labels and tile titles always use text content alongside any icon.
1.4.1 Use of Color	Supports	Phase 3 (May 2026): every <p class="app-input-error"> in the customer flow now carries a leading mat-icon error_outline glyph alongside the red text — colour is no longer the sole signal of validation failure. Balance / payment / locker-failed status indicators were already paired with icons; verified during the colour-vs-meaning sweep.
1.4.2 Audio Control	Not Applicable	The application does not auto-play audio content.
2.1.1 Keyboard	Supports	Phase 4 (May 2026): Storm Interface AudioNav 1400-series keypad integrated. The main process hooks WM_KEYDOWN messages on the kiosk window and translates the AudioNav's USB-HID keycodes (headphone JackIn/JackOut at 0x7e/0x7f, Volume key at 0x80) into IPC events. Headphone insertion launches NVDA, flips AccessibilityService into accessibility mode (Phase 2 hook), and parks focus on the first interactive element. Headphone removal stops NVDA and returns to standard touchscreen mode. Action tiles, themed buttons, and numpad keys all carry paired (click) / (keyup.enter) / (keyup.Space) bindings so the AudioNav directional pad + Enter key drives every interactive element.
2.1.2 No Keyboard Trap	Supports	Phase 2 (May 2026): the idle-timer dialog now opens with autoFocus: true and restoreFocus: true so Material's focus-trap moves focus into the dialog and back to the trigger on close. Connecting / platform popups carry ariaLabel for screen-reader announcement; they're status-only and don't capture focus. Standard Material dialogs handle the trap natively.
2.2.1 Timing Adjustable	Supports	Phase 2 (May 2026): an existing idle-warning popup ('Are you still there?') interrupts before the auto-bounce-to-attract with a Continue button. A new AccessibilityService exposes an enabled flag (persisted via electron-store at rental.setup.accessibilityMode);

		when on, IdletimerService suppresses both the warning popup AND the navigation-away on userGone, giving accessibility users unlimited time on every screen. Phase 4 will flip this flag automatically when an assistive keypad is detected.
2.2.2 Pause, Stop, Hide	Supports	The attract screen video / image content stops when the user begins a session. No other auto-updating content exists in customer flows.
2.3.1 Three Flashes or Below Threshold	Supports	The application does not contain content that flashes more than three times per second.
2.4.1 Bypass Blocks	Supports	Phase 2 (May 2026): a skip-link is rendered at the top of app.component.html. It's visually hidden until it receives keyboard focus (revealed by Tab on app load), at which point it animates into the top-left corner. Activating it shifts focus past the global header to the <main id="app-main" tabindex="-1"> region that wraps the router-outlet.
2.4.2 Page Titled	Supports	Phase 1 (May 2026): a centralised PageTitleService listens for router NavigationEnd and i18n onLangChange events, reads the current route's data.titleKey, translates it via TranslateService, and writes the result to document.title. Every customer-flow route declares a titleKey under APP.PAGE_TITLE.* in the i18n catalogues.
2.4.3 Focus Order	Supports	Phase 2 (May 2026): action tiles use native <button> in DOM order matching the visual order. The skip-link is the first focusable element on every page. Modal dialogs trap focus and restore it on close.
2.4.4 Link Purpose (In Context)	Supports	All links and buttons carry descriptive text content. There are no link-text patterns like 'Click here' in the application.
3.1.1 Language of Page	Supports	Phase 1 (May 2026): AppComponent.ngOnInit() sets <html lang="…"> from the active i18n locale at boot and subscribes to TranslateService.onLangChange to keep it in sync (with BCP-47 normalisation, e.g. 'en_US' → 'en-US'). Phase 5 (May 2026) added Spanish (es-US) as a second catalogue alongside English, with a customer-facing English/Spanish

		toggle on the welcome screen — switching languages updates <html lang> in real time.
3.2.1 On Focus	Supports	Receiving focus does not trigger a change of context anywhere in the customer flow.
3.2.2 On Input	Supports	Changing the value of form inputs (PIN, customer details, balance amount) does not auto-trigger a change of context. Submission requires explicit user action via a Submit / Next / Pay button.
3.3.1 Error Identification	Supports	Form validation errors render adjacent to the field with both colour (red) and icon / text content. PIN and balance entry use the same error pattern across the customer flow.
3.3.2 Labels or Instructions	Supports	All form fields have visible labels via mat-form-field. Specific instructions (e.g. 'Create a four-digit pin') are surfaced near the input, not only in placeholder text.
4.1.1 Parsing	Supports	The application is built with Angular's strict template parser, which rejects malformed markup at compile time. There are no duplicate IDs in any rendered template.
4.1.2 Name, Role, Value	Supports	Phase 1 (May 2026): action tiles use real <button> elements with text content (title + caption) so name / role / state are exposed natively. The forgot-PIN kind-toggle uses role="tablist" / role="tab" / aria-selected. Icon-only buttons across the customer flow (PIN visibility toggle, numpad clear / backspace, password show / hide) carry explicit aria-label.

Table 2: Success Criteria, Level AA

Criteria	Conformance Level	Remarks and Explanations
1.2.4 Captions (Live)	Not Applicable	The application does not contain live multimedia content.
1.2.5 Audio Description (Prerecorded)	Not Applicable	The application does not contain prerecorded video content that conveys meaning via imagery.
1.4.3 Contrast (Minimum)	Supports	Phase 3 (May 2026): formal contrast audit completed across all four themes — measured ratios published in docs/THEME-CONTRAST.md. Body-text pairings (on-surface vs bg) hit AAA on every theme (14.1:1 to 21.0:1). Two borderline button-text pairings were documented as opportunistic fixes; primary affordance on every theme remains operable. Customers needing maximum contrast can switch to the new theme-high-contrast variant (21:1 white-on-black with 15:1 yellow accent).
1.4.4 Resize Text	Supports	Phase 3 (May 2026): a TextSizeControlComponent (A− / A / A+ trio) is embedded in the customer-facing page header, on every screen. The new TextSizeService applies one of three classes to <html> (text-size-smaller / default / larger) which scale the root font-size at 0.85x / 1.0x / 1.15x. All themed CSS uses rem so the entire UI scales proportionally. The preference is persisted via electron-store under ui.textSize and resets to default when the kiosk returns to attract so each customer starts fresh.
1.4.5 Images of Text	Supports	All content text is rendered as live text. The only image-text in the application is the venue logo (an acceptable exception).
2.4.5 Multiple Ways	Partially Supports	The application is a kiosk with a guided task flow, which qualifies for the kiosk exception. Customers can retrieve via QR scan OR locker number entry. Phase 2 evaluates whether additional navigation paths are warranted.
2.4.6 Headings and Labels	Supports	Each screen has a descriptive page-title heading. Form labels accurately describe their inputs. Action tiles carry clear titles.
2.4.7 Focus Visible	Supports	Phase 2 (May 2026): a global :focus-visible rule in src/styles/themes/_components.scss applies a high-contrast outline to

		every themed interactive element (action tiles, pill buttons, numpad keys, PIN toggle, kind-toggle, grid items, [role=button], [role=tab], form inputs). The ring colour is theme-aware via --app-focus-ring-color tokens — measured ≥ 3:1 against each theme's background (yellow #ffd84d for modern dark, neon green #6cff7a for minimalist, dark blue #1d4ed8 for light).
3.1.2 Language of Parts	Supports	Phase 5 (May 2026): Spanish (es-US) catalogue shipped — 712 keys covering every customer-flow screen, mirroring the English catalogue exactly. The customer-facing English/Spanish toggle on the welcome screen drives both ngx-translate (UI strings) and a region-suffixed currentLocaleCode that resolves locale-specific Mustache and XSL variants. The signed agreement renders from agreement.es-US.mustache when Spanish is selected, and the payment receipt renders from rental-payment-receipt.es-US.xsl with translated status titles. Operators can drop additional locale variants (e.g. fr-CA) into the templates folder and they're picked up by the same resolver without code changes.
3.2.3 Consistent Navigation	Supports	Header, footer, and back-button placement is consistent across every customer-facing screen via the shared themed-card layout.
3.2.4 Consistent Identification	Supports	Same-purpose components (Back, Next, Pay, action tiles) use consistent icons, labels, and positioning across the application.
3.3.3 Error Suggestion	Supports	Form validation errors include specific suggestions (e.g. 'Please enter a valid phone number'). Wrong-PIN errors after the 3rd attempt route to the locked-out screen with the call-for-help affordance.
3.3.4 Error Prevention (Legal, Financial, Data)	Supports	Card payments display the amount and require explicit confirmation. The agreement signature step requires explicit draw-and-confirm. End-of-rental balance is shown before the payment terminal is engaged.
1.4.11 Non-text Contrast	Supports	Phase 3 (May 2026): focus-ring colours (Phase 2 deliverable) were measured at 5.9:1 to 19.5:1 across the four themes — see docs/THEME-

		CONTRAST.md. Borders are below 3:1 on the colour themes but acceptable per WCAG 1.4.11 because they're never the sole control affordance (text labels and background fill carry the meaning). The new theme-high-contrast variant uses pure-white borders (21:1) for users who need maximum non-text contrast.

Table 3: Success Criteria, Level AAA

Level AAA criteria have not been evaluated for this product.

Criteria	Conformance Level	Remarks and Explanations
1.2.6 Sign Language (Prerecorded)	Not Evaluated	
1.2.7 Extended Audio Description (Prerecorded)	Not Evaluated	
1.2.8 Media Alternative (Prerecorded)	Not Evaluated	
1.2.9 Audio-only (Live)	Not Evaluated	
1.4.6 Contrast (Enhanced)	Not Evaluated	
1.4.7 Low or No Background Audio	Not Evaluated	
1.4.8 Visual Presentation	Not Evaluated	
1.4.9 Images of Text (No Exception)	Not Evaluated	
2.1.3 Keyboard (No Exception)	Not Evaluated	
2.2.3 No Timing	Not Evaluated	
2.2.4 Interruptions	Not Evaluated	
2.2.5 Re-authenticating	Not Evaluated	
2.3.2 Three Flashes	Not Evaluated	
2.4.8 Location	Not Evaluated	
2.4.9 Link Purpose (Link Only)	Not Evaluated	
2.4.10 Section Headings	Not Evaluated	
3.1.3 Unusual Words	Not Evaluated	
3.1.4 Abbreviations	Not Evaluated	
3.1.5 Reading Level	Not Evaluated	
3.1.6 Pronunciation	Not Evaluated	
3.2.5 Change on Request	Not Evaluated	
3.3.5 Help	Not Evaluated	
3.3.6 Error Prevention (All)	Not Evaluated	

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Chapter 3: Functional Performance Criteria

Criteria	Conformance Level	Remarks and Explanations
302.1 Without Vision	Supports	Phase 4 (May 2026): Storm Interface AudioNav 1400 keypad integrated end-to-end. Insertion of a headphone into the AudioNav's 3.5mm jack triggers a WM_KEYDOWN (0x7e) which the main process translates into NVDA launch + AccessibilityService.setEnabled(true) + focus handoff to the first interactive element on the current screen. The AudioNav's directional rocker + Enter key navigates every element in the customer flow (Phase 2 keyboard parity). Removing the headphone triggers (0x7f) which kills NVDA and returns to standard mode. Volume key (0x80) cycles through 33% / 66% / 100% via the existing toggleVolume helper.
302.2 With Limited Vision	Supports	Phase 3 (May 2026): customers can choose A− / A / A+ text-size from the in-product header control on every screen — root font-size scales the entire UI. A new theme-high-contrast variant (white-on-black with yellow accent, all pairings ≥ 15:1 contrast) is selectable via /admin/apps → Appearance for users who need maximum contrast.
302.3 Without Perception of Color	Supports	Phase 3 (May 2026): formal colour-vs-meaning audit completed. All form-field validation errors carry a leading mat-icon error_outline glyph alongside the red text; balance / payment / locker-failed status indicators were already paired with icons. No information is conveyed by colour alone in the customer flow.
302.4 Without Hearing	Supports	The application does not rely on audio for any content. All state changes are conveyed visually.
302.5 With Limited Hearing	Supports	Same as 302.4.
302.6 Without Speech	Supports	The application does not require speech input.
302.7 With Limited Manipulation	Supports	Phase 4 (May 2026): in addition to the touchscreen, customers can drive the entire flow via the Storm Interface AudioNav 1400 directional rocker + Enter key (no fine motor control or simultaneous key presses required). Volume is adjustable via a

		dedicated single-press key. Touchscreen targets remain large enough for users with reduced precision.
302.8 With Limited Reach and Strength	Not Applicable	Physical kiosk placement and hardware design are evaluated separately from the software. Refer to the kiosk hardware accessibility documentation.
302.9 With Limited Language, Cognitive, and Learning Abilities	Supports	The customer flow is linear and uses plain language. Confirmation steps prevent accidental actions. Phase 5 (May 2026) added Spanish as a second supported language — customers can toggle between English and Spanish from the welcome screen, and every customer-facing screen, the signed agreement PDF, and the payment receipt all render in the chosen language.

Chapter 4: Hardware

Hardware platform is venue-specific. The Mzero Locker Rental software runs on the customer's chosen kiosk hardware (Meridian and partner-supplied options). Hardware-level accessibility (reach ranges, tactile controls, assistive audio peripheral) is the responsibility of the hardware deployment and is not evaluated by this VPAT. Where the software needs to integrate with assistive hardware (e.g. an AudioNav keypad), that integration is tracked as Phase 4 of the compliance plan.

Phase 4 (May 2026) shipped software support for the Storm Interface 1400-series AudioNav keypad. The main process hooks WM_KEYDOWN messages on the kiosk window and translates the AudioNav's USB-HID keycodes (headphone JackIn 0x7e, JackOut 0x7f, Volume 0x80, Orientation 0x81/0x82). Headphone insertion launches NVDA, flips AccessibilityService.enabled, and parks focus on the first interactive element so the screen reader has something concrete to read aloud. Headphone removal stops NVDA and returns to standard touchscreen mode.

Chapter 5: Software

Criteria	Conformance Level	Remarks and Explanations
501.1 Scope - Incorporation of WCAG 2.0 AA	See WCAG 2.0 Report	See Tables 1 and 2 above for WCAG 2.0 Level A and AA conformance.
502.2.1 User Control of Accessibility Features	Supports	Phase 4 (May 2026): hardware-detected accessibility mode is now wired — plugging a headphone into the AudioNav 3.5mm jack flips AccessibilityService into accessibility mode (idle timer suppressed, NVDA launched, focus parked on first interactive element). Removing the headphone restores standard mode. Phase 3 (May 2026) added user-controlled A− / A / A+ text-size affordances on every screen via the header control.
502.2.2 No Disruption of Accessibility Features	Supports	The application does not disrupt platform accessibility features. Electron's Chromium engine exposes the standard accessibility tree to assistive technologies; no application-level overrides interfere with that exposure.
502.3.1 Object Information	Supports	Phase 1 + ARIA sweep (May 2026): action tiles use real <button> elements with descriptive text content, the forgot-PIN kind-toggle uses role="tablist"/"tab"/aria-selected, action-tile grids and numpads carry role="group" with translated aria-label, and the footer accessibility cluster uses role="group" too. Standard HTML elements (input, mat-card, mat-icon) expose role/state/properties natively.
502.3.2 Modification of Object Information	Not Applicable	The application does not require assistive technology to modify object information.
502.3.3 Row, Column, and Headers	Not Applicable	No data tables are presented in the customer flow. Operator-side reports live in MzeroManage which is evaluated separately.
502.3.4 Values	Supports	Form input values are exposed through standard HTML input elements.
502.3.5 Modification of Values	Supports	Phase 2 (May 2026): every customer form input accepts native keyboard input AND on-screen / hardware-keypad input. Phase 4 added Storm Interface AudioNav 1400 keypad integration so values can be modified via the assistive directional rocker + Enter. Numpad keys carry paired (click) + (keyup.enter) + (keyup.Space) bindings.

502.3.6 Label Relationships	Supports	Form controls have associated labels via mat-form-field and / or aria-label attributes.
502.3.7 Hierarchical Relationships	Supports	Parent-child relationships are expressed through the DOM structure and standard HTML nesting.
502.3.8 Text	Supports	Text content is available through standard Chromium accessibility APIs.
502.3.9 Modification of Text	Supports	Text inputs support standard text editing operations via keyboard.
502.3.10 List of Actions	Supports	Available actions on interactive elements are exposed through standard HTML semantics on Material and native widgets.
502.3.11 Actions on Objects	Supports	Phase 2 + ARIA sweep (May 2026): every themed interactive element (action tiles, pill buttons, numpad keys, PIN visibility toggle, kind-toggle, forgot-PIN form, high-contrast toggle, text-size buttons) carries paired (click) + (keyup.enter) + (keyup.Space) bindings so all actions are reachable via mouse, touchscreen, AudioNav directional rocker, and standard keyboard.
502.3.12 Focus Cursor	Supports	Phase 2 (May 2026): a global :focus-visible rule in src/styles/themes/_components.scss applies a high-contrast outline to every themed interactive element across all four themes. The ring colour is theme-aware via --app-focus-ring-color tokens — measured ≥ 3:1 against each theme's background (yellow for modern, neon green for minimalist, dark blue for light, yellow for high-contrast).
502.3.13 Modification of Focus Cursor	Partially Supports	Phase 2 (May 2026): Tab navigation works across all interactive elements in DOM order; skip-to-main link is the first focusable element on every screen; the AudioNav-launched NVDA flow parks focus on the first interactive element automatically. Roving-tabindex / arrow-key navigation between sibling action tiles is not implemented — Tab is required to step between tiles. Acceptable per the Section 508 requirement (focus IS modifiable, just via Tab rather than arrows).
502.3.14 Event Notification	Supports	State changes (dialog open / close, screen transitions) are communicated via Angular's DOM updates which trigger accessibility notifications.

502.4 Platform Accessibility Features	Supports	The application runs on Electron / Chromium which supports platform accessibility APIs.
503.2 User Preferences	Supports	Phase 3 (May 2026): customers control text size on every screen via the A− / A / A+ header control (preference persisted via electron-store, reset on attract) and toggle the high-contrast theme variant via the in-product header toggle. Phase 5 (May 2026): customers also toggle between English and Spanish from the welcome screen, with the choice driving all UI strings, the signed agreement PDF, and the payment receipt. Operator-configured defaults (base theme, default locale) remain available where venues want to pre-select for their typical customer.
503.3 Alternative User Interfaces	Not Applicable	The application does not provide alternative user interfaces beyond the planned accessibility mode (Phase 4).
503.4.1 Caption Controls	Not Applicable	The application does not contain multimedia content requiring captions.
503.4.2 Audio Description Controls	Not Applicable	The application does not contain video content requiring audio description.
504.2 Content Creation or Editing	Not Applicable	The application is not an authoring tool.
504.2.1 Preservation of Information Provided for Accessibility in Format Conversion	Not Applicable	The application does not perform format conversion.
504.2.2 PDF Export	Not Applicable	Receipt and agreement PDFs are generated server-side from XSL templates; the kiosk UI is not an authoring tool.
504.3 Prompts	Not Applicable	The application is not an authoring tool.
504.4 Templates	Not Applicable	The application is not an authoring tool.

Chapter 6: Support Documentation and Services

Criteria	Conformance Level	Remarks and Explanations
602.2 Accessibility and Compatibility Features	Does Not Support	An accessibility section in the Mzero Locker Rental customer guide does not yet exist. Phase 5 of the compliance plan adds the documentation alongside the language catalogues.
602.3 Electronic Support Documentation	See WCAG 2.0 Report	See Tables 1 and 2 above. Customer-facing electronic documentation is a Phase 5 deliverable; operator documentation is published in MzeroManage.
602.4 Alternate Formats for Non-Electronic Support Documentation	Supports	Operator documentation is published as electronic Confluence pages, accessible via web browser. Printed alternatives are available on request.
603.2 Information on Accessibility and Compatibility Features	Partially Supports	Operator support staff can describe the configuration surface (rates, themes, hours, contact channels). Customer-facing accessibility features are limited until Phase 2 / 3 / 4 ship.
603.3 Accommodation of Communication Needs	Supports	Multiple support channels (email, telephone, web) accommodate communication needs. Text-based channels (email, web) are available for users who cannot use voice communication.

Legal Disclaimer

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