

Manual QA Checklist for CAPTCHA (Frontend & Backend)

1. CAPTCHA Type Verification

- Correct CAPTCHA type is implemented:
 - reCAPTCHA v2 ("I'm not a robot" checkbox)
 - reCAPTCHA v3 (invisible, score-based)
 - hCaptcha
 - Math CAPTCHA or simple question
 - CAPTCHA version is compatible with the form plugin in use
 - Site and secret keys are configured correctly in admin panel
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2. Functional Testing

- CAPTCHA displays on all required forms:
 - Login form
 - Registration form
 - Forgot password form
 - Comment form
 - Contact/feedback/custom form (e.g., Elementor, WPForms, etc.)
- CAPTCHA prevents form submission if not completed
- CAPTCHA allows form submission when passed correctly
- CAPTCHA validation happens before form is processed/sent
- Error messages display clearly if CAPTCHA fails

3. Behavioral Testing

- Submitting form with CAPTCHA unchecked prompts error
- Refreshing form generates a new CAPTCHA token/session
- Browser back/forward navigation does not break CAPTCHA
- CAPTCHA does not reset or disappear unexpectedly
- No conflict with page caching or optimization plugins (e.g., WP Rocket)

4. Multiple Forms on Same Page

- CAPTCHA loads correctly on **all** instances (e.g., two contact forms)
- No JS/CSS conflict or duplication errors in browser console
- Each CAPTCHA operates independently and validates its own form

5. Cross-Browser & Device Testing

- CAPTCHA works on:
 - Chrome
 - Firefox
 - Safari
 - Edge
- Fully functional on:
 - Desktop
 - Tablet
 - Mobile (iOS/Android)

- No layout issues caused by CAPTCHA on small screens
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6. Spam & Abuse Prevention

- CAPTCHA successfully blocks:
 - Empty spam submissions
 - Bot-generated inputs
 - Form spam rate decreases compared to before implementation
 - CAPTCHA cannot be bypassed via direct POST requests (check with developer)
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7. User Experience (UX)

- CAPTCHA does not significantly delay or block legitimate users
 - reCAPTCHA v3 doesn't show warning unless score is low
 - Invisible reCAPTCHA doesn't disrupt form flow
 - Language of CAPTCHA matches the site's locale
 - Form submits smoothly even after CAPTCHA interaction
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8. Admin Panel Configuration

- Site and secret keys are stored securely and validated
 - CAPTCHA is enabled selectively where needed (not overused)
 - Option to disable CAPTCHA for logged-in users (if required)
 - CAPTCHA logging (spam attempts blocked, failures) is working
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9. Integration With Plugins & Themes

- Works with security/firewall plugins (Wordfence, iThemes Security, etc.)
 - Compatible with form plugins (WPForms, Contact Form 7, Elementor, Gravity Forms)
 - CAPTCHA does not conflict with themes (no layout breakage)
 - Supports multilingual plugins (e.g., WPML, Polylang)
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10. Error Handling & Debugging

- Invalid CAPTCHA error is user-friendly and styled properly
 - CAPTCHA errors log in browser console/server logs for debug
 - CAPTCHA loads even when other scripts (ads, popups) are blocked
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Optional Advanced Tests

- Use browser dev tools or POST request spoofing to test CAPTCHA bypass
- Use VPNs/proxies to simulate suspicious user behavior (for reCAPTCHA v3)
- Test fallback mechanism if CAPTCHA fails to load (graceful degradation)