

PCI DSS Compliance — Top 10 Controls

The highest-impact controls, pulled from our 78-point PCI DSS Compliance checklist.

Start here. These are the controls that block the most risk (and the ones auditors and cyber-insurance carriers ask about first). Work top-down — severity is highest at the top.

- CRITICAL** **Define and document the Cardholder Data Environment (CDE).**
Verify: Produce a current data-flow diagram and inventory identifying every system that stores, processes, or transmits cardholder data, plus connected system...
- CRITICAL** **Isolate the CDE from out-of-scope systems with network segmentation.**
Verify: Use firewalls, VLANs, or access controls so only required traffic reaches the CDE; without segmentation, the entire network is in scope.
- CRITICAL** **Install firewalls at every internet connection and between the DMZ and internal network.**
Verify: Deploy network security controls at each trust boundary so internet-facing traffic terminates in a DMZ, never directly on internal systems.
- CRITICAL** **Allow no direct public access between the internet and any CDE component.**
Verify: Ensure no CDE system has a public IP or inbound internet route; all access passes through controlled, proxied paths.
- CRITICAL** **Change all vendor-supplied default passwords before production deployment.**
Verify: Set unique, strong credentials on every new system, application, and appliance before it goes live.
- CRITICAL** **Change all vendor-supplied default security parameters.**
Verify: Harden defaults beyond passwords — SNMP community strings, sample apps, default keys, and insecure services.
- CRITICAL** **Do not store Primary Account Numbers (PANs) after authorization without a defined business need.**
Verify: Eliminate PAN storage wherever possible; where it's required, document the business justification and retention.
- CRITICAL** **Never store sensitive authentication data after authorization.**
Verify: Ensure full magnetic-stripe data, CVV/CVC, and PIN/PIN blocks are never written to logs, databases, or files after a transaction is authorized.
- CRITICAL** **Encrypt all cardholder data transmitted over open public networks.**
Verify: Use TLS 1.2 or higher with strong ciphers for any card data crossing the internet or other untrusted networks.
- CRITICAL** **Do not use SSL or early TLS (1.0 / 1.1) for cardholder data.**
Verify: Disable SSLv3, TLS 1.0, and TLS 1.1 on all endpoints handling card data.

Want all 78 controls? The complete StronDEX PCI DSS Compliance pack includes every control with step-by-step verify/fix guidance, a branded PDF, and an interactive progress tracker.

Get it at stronDEX.com → Products