

RFID Wood & Bamboo Cards

Dimensions, construction & electronic options

Two published wood-card formats use different face dimensions and thickness ranges. Select the format with your required material and artwork; the production drawing fixes tolerances, layer construction and electronic configuration.

Specification	Published reference
Thin format	85.6 × 54 mm; 0.84–1 mm thick
Thicker format	86 × 54 mm; 1.2–2 mm thick
Material references	Cherry, sapele, bamboo, black walnut, beech and birch in the labelled sample sheet
Electronic construction	Embedded HF inlay or LF chip with copper coil; configuration selected per reader
Frequency choices	125 kHz LF or 13.56 MHz HF; separate chip configurations
Surface decoration	Laser engraving, UV color printing, offset or screen printing
Additional features	Magnetic stripe and decorative cut-outs shown as supplier options

Model & format references

Model / format	Physical construction
85.6 × 54 mm · 0.84–1 mm	85.6 × 54 mm 0.84–1 mm Thinner wood / bamboo card reference
86 × 54 mm · 1.2–2 mm	86 × 54 mm 1.2–2 mm Thicker wood / bamboo card reference

Six supplier-labelled materials



Printed, cut-out and magnetic-stripe examples



Photographs show product appearance and construction examples. Use the listed dimensions and the approved drawing for physical fit.

Chip-level selection references

Match the chip, data format and reader. IC memory and radio specifications do not define the read distance or environmental performance of every finished card.

Chip	Interface / memory	Selection notes
EM4200	LF identification · 125 kHz system reference Factory-programmed read-only identifier	Existing LF access readers Match the encoding and ID format. This chip does not offer writable NFC user memory or store a phone-tap URL.
NTAG213 / NTAG215 / NTAG216	13.56 MHz · NFC Forum Type 2 · ISO/IEC 14443 A 144 / 504 / 888 bytes user memory	Phone-tap links and NDEF content A short web link can point to a contact page or digital profile. NDEF formatting consumes part of the memory; the URL destination is managed separately.
MIFARE Classic EV1 1K	13.56 MHz · ISO/IEC 14443 A activation · Classic commands 1 kB total EEPROM · 16 sectors	An installed Classic credential system Match sector layout, keys and issuer requirements. The total includes manufacturer data and sector trailers; identical chip family does not guarantee hotel-system acceptance.
MIFARE DESFire EV3 · IC reference	13.56 MHz · ISO/IEC 14443 A / 14443-4 2 / 4 / 8 / 16 kB variants in the cited feature table	Application-based access projects Specify the generation, memory, applications and key management with the system integrator. The supplier lists the DESFire family; the quoted assembly defines the actual variant.

Sources & scope

[Wooden cards: thin-format technical data](#) — Proud Tek. 85.6 × 54 mm, 0.84–1 mm thickness; LF/HF, wood options and printing methods

[Wooden card for hotel locks](#) — Proud Tek. 86 × 54 mm, 1.2–2 mm thickness; six named material samples and personalization examples

[Six labelled material samples](#) — Proud Tek. Original image labels cherry, sapele, bamboo, black walnut, beech and birch; visual reference, not certification

[Wood-card personalization examples](#) — Proud Tek. Original supplier photographs labelled offset printing, hollow process, magnetic strip and RFID inlay inside

[EM4200 datasheet](#) — EM Microelectronic. Read-only LF identification IC; laser-programmed ROM, not writable NFC memory

[NTAG213 / NTAG215 / NTAG216 datasheet](#) — NXP Semiconductors. Rev. 3.2: NFC Type 2 and 144 / 504 / 888 bytes user memory

[MIFARE Classic EV1 1K datasheet](#) — NXP Semiconductors. 1 kB total EEPROM, 16 sectors and Classic command support

[MIFARE DESFire EV3 short datasheet](#) — NXP Semiconductors. Rev. 3.1, sections 2.1.1–2.1.4: ISO/IEC 14443 A, memory variants and application/key structure

The quotation and approved order drawing define the supplied construction, chip, marking and tolerances. Source listings are comparison references; current supply and any test conditions depend on the selected configuration.

[View product photographs, specifications and quote options](#) →