

KS280 Smart Lock

Installation guide

For the KS280 keypad and lever smart lock, all finishes and all published backsets.



Illustration, not to scale

BEFORE ANYTHING ELSE

This guide carries a document number and revision in the top corner of every page. If the copy in your hand and the copy on keylessolutions.nz disagree, the website copy is the current one.

SAFETY

Fit the lock with the door OPEN and keep it open until the mechanical key and a test code have both been proven. Drilling and chiselling put fragments at eye height: wear eye protection. This product is not a substitute for a fire rated assembly where one is required.

ESCAPE ROUTES AND FIRE DOORS: CHECK BEFORE YOU FIT

On a means of escape, Building Code solution C/AS2 clause 3.15.2 requires the door to be openable from the inside WITHOUT a key or other security device. Read that literally: the mechanical key override does NOT satisfy it, because using it means using a key. Do not treat the key as the compliant escape method. What complies is the fitted doorset as a whole, and that is for the designer or the building consent authority to confirm, not for us and not for you on site. On a fire rated doorset, hardware is not generically approved in New Zealand: it must be approved on that maker's doorset. Escape route, fire door, commercial or multi unit: stop and confirm before you cut. Altering a means of escape can require consent.

WHAT THIS LOCK IS

The KS280 opens by the TTLock app, a PIN code on the keypad, an RFID card, and a mechanical key. It has no fingerprint reader. Remote features need the Wi-Fi gateway, sold separately, and nothing in this installation requires one.

USB EMERGENCY POWER

This model has a USB emergency power port, on the bottom edge of the outside panel. If the batteries go completely flat, a USB power bank on that port powers the lock so your code works. It never opens the lock by itself and it never charges the batteries: replace them.

ANTI-LOCK BUTTON

The inside panel carries the anti-lock button, a slider between two padlock symbols. Show the owner where it is at handover. What each position does is still being confirmed, so this guide does not describe it.

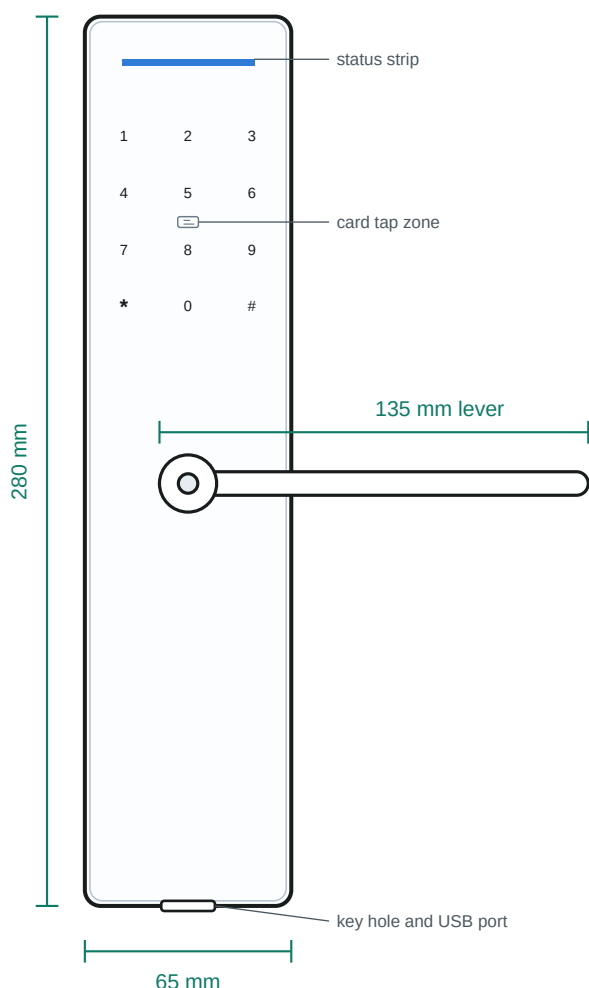
WARRANTY

Two year warranty, as published on keylessolutions.nz and subject to its conditions. The Consumer Guarantees Act applies separately to goods of a kind ordinarily bought for personal, domestic or household use and is not replaced by it. The manual in the box adds: do not unscrew the screw inside the handle hole when reversing the handle, or you will not have any warranty.

STUCK

Call 09 238 2377, or 027 8 ACCESS (222 377). Have the model, the backset and the door type ready and we will work it out with you. If something is not working, keylessolutions.nz/troubleshooting walks the common faults, worst first.

1 · The product and the numbers



Exterior unit, front elevation. The published envelope:

- Panel: 280 mm high x 65 mm wide (manufacturer drawing).
- Overall with lever: not published.
- Lever length: 135 mm, the lever alone.
- Lever projection: 48 mm from the panel face.
- Panel depth: 21 mm.
- Backsets published: 0, 30, 35, 40, 45, 50, 60 and 70 mm. Check the mortice case supplied before drilling anything.
- Batteries: 4 x AA, fitted in the interior unit.
- Weather rating IP65.
- Bluetooth 4.0 or above.
- Material: Aluminium alloy.
- Finishes: Black and Silver. Fitting is identical across finishes.

Tools

- Drill with bits to suit your door
- Sharp chisel and mallet (timber doors)
- Phillips screwdriver, tape measure, pencil
- Masking tape to hold the paper template

WHAT IS IN THE BOX

From the accessory list in the manual supplied with this lock: front lock, back plate, double latches mortice, battery cover, connecting pillar 30 or 35 mm, SPINDLE 80 mm, screws M4 x 30 and M4 x 45, strike plate, strike box (timber doors only), screw 4.2 x 25 mm (timber doors only), batteries, mechanical key and an M1 card. Check the lot is in front of you before you cut anything.

REVERSING THE HANDLE, AND THE WARRANTY

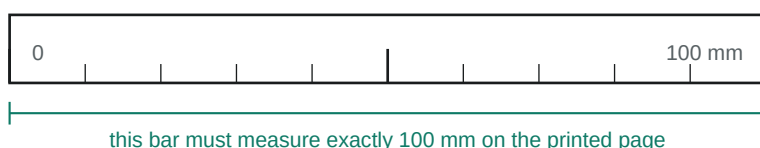
The handle is reversible: release the screw, turn the handle 180 degrees, refix. The manual supplied with this lock warns that you must NOT unscrew the screw inside the handle hole, and that if you do, you will not have any warranty. Set the direction before the lock goes on the door.

2 · The paper template, and proving your printer

READ THIS BEFORE YOU DRILL ANYTHING

The published envelope tells you whether the lock fits the door. It does not tell you where to drill. The card downloadable from keylessolutions.nz POSITIONS the lock and does not carry hole centres. Only the card packed in your box marks holes, cut for your exact backset. If the box card is missing or unreadable, call 09 238 2377 before you drill. Never transfer hole positions from another installation or from an older guide.

If you print a replacement template from the website, printers silently shrink pages unless told not to, and a template printed at “fit to page” puts every hole in the wrong place. Prove the scale before you mark the door.



- Print at 100% scale. In the print dialog this is the option that does NOT say fit, shrink, or scale to paper.
- Lay a ruler or tape along the printed bar above. It must read exactly 100 mm. This bar proves THIS page printed at full size. Check a replacement template the same way, against its own printed check bar.
- If it does not, do not use the print. Fix the print scale and print it again.
- Confirm the backset: the distance from the door edge to the centre of the spindle. It is the size the lock was ordered in, so check it against the mortice case supplied. Measure it in from the door edge and pencil a line down the door face.
- Sit the teal dashed centreline on that pencil line, at the height you want the lock and square to the door edge, then tape the sheet flat and mark around the outline with a sharp pencil. The lock is symmetrical across its width, so its centreline is the spindle line. Mark the inside face from the second outline, not by folding the sheet round the edge: the two outlines are not a door thickness apart.

THE BACKSET IS THE NUMBER THAT POSITIONS THE LOCK

The backset is the distance from the door edge to the centre of the spindle. It is the measurement that decides how far in from the edge the lock sits, and it is why this lock was ordered at the size it was. Check the size you ordered against the mortice case itself before you mark anything. If the two disagree, stop and call 09 238 2377.

MORTICE CASE OPTIONS · TO BE CONFIRMED

The full list of mortice cases in the range, and the spindle to cylinder pitch that goes with them, is still being confirmed. Until it is printed here, work from the case actually supplied with your lock and measure it rather than assuming a figure.

Published backsets for this model: 0, 30, 35, 40, 45, 50, 60 and 70 mm.

0 mm is how the option without a set backset is listed. What that option includes is still being confirmed, so call 09 238 2377 before ordering it. Every other figure is a backset in millimetres.

3 · Fitting, in order

- 1 Check the handing**

Stand on the OUTSIDE of the door. Hinges on your left is left-handed, on your right is right-handed. The lever can be set for either, and it is far easier to do before the lock is on the door. Follow the handing instructions in the manual in the box.
- 2 Position the lock from the card**

Tape the positioning card on the door at the height you want the lock, lined up as the card itself instructs, and mark around the outline. Mark hole centres ONLY if the card in your box carries them. The card published on keylessolutions.nz positions the lock and does not mark holes. Never measure hole positions off this guide, and never copy them from another door.
- 3 Drill and mortice**

Drill the marked holes square to the door face, working from both sides on a through hole so the exit does not break out. Mortice the door edge to the case supplied, and test fit before any fixing goes in.
- 4 Fit the mortice case**

Check the latch bevel faces the way the door closes, and reverse the bolt NOW if it does not. It cannot be reversed once the faceplate is screwed and the strike is cut. Then seat the case in the mortice and screw the faceplate flush with the door edge. The latch and the deadbolt must both move freely by hand before you go any further.
- 5 Fit the strike to the jamb**

Do NOT let the door latch shut: there is no lever on it yet. Tape the latch back, or transfer the latch and bolt centres to the jamb with the door open, then touch the door to without letting it catch. Mortice the jamb and fit the strike so both throw fully without being forced. Leave a little clearance and re-check once the door has settled. If the door has to be pulled or lifted to lock, adjust the keep, not the lock.
- 6 Run the cable and fit the spindle**

Pass the connecting cable from the exterior unit through its hole, never folded hard against the spindle, and seat the spindle through the mortice follower.
- 7 Hang the exterior unit**

Seat the exterior unit on the door, keeping the cable clear. It must sit flat against the door face with no rock. If it rocks, the door face is not flat and the fixings will pull it into a curve.
- 8 Fit the interior unit**

Check the cable is not trapped between the plate and the door: a pinched cable passes the bench test and fails a week later. Connect the cable to the interior unit BEFORE screwing anything down. Then fix the interior unit to the exterior unit with the machine screws supplied. Snug, not crushing.
- 9 Batteries and first test**

Fit the batteries in the interior compartment. With the door still OPEN, test the mechanical key, then the factory code printed in the manual, then turn the lever from both sides. Only close the door once all three work.

3 · Fitting, in order (continued)

10 Pair with the TTLock app

The lock pairs with the TTLock app, made by Hangzhou Sciener and free on the App Store and Google Play. Have the OWNER create their own account and add the lock while standing beside it, so the owner holds the administrator account rather than the installer. Adding the lock switches the factory code off: key in that factory code and check it is refused before you leave. On a rental or a sale it is that account, not the keys, that hands the lock over.

11 Enrol the cards and fobs

Add each RFID card or fob through the app while beside the lock, and label them as you go. Cards handed over without being enrolled will not open the door.

12 Hand over

Leave this guide, the keys and the cards with the owner, and write the backset on the handover record in section 4: it is the first thing anyone will ask for in five years.

4 · After fitting

The three questions every owner asks in the first month:

- Flat batteries: the mechanical key always works, and its key hole and the USB emergency power port are both on the bottom edge of the outside panel. A USB power bank on that port powers the lock so your code works. It never opens the lock by itself and never charges the batteries. Change all cells at once, with the door open.
- No internet: codes, cards and keys never depend on the internet. Only remote features do, and those need the separate Wi-Fi gateway.
- Selling or re-letting: transfer or reset the lock in the TTLock app BEFORE handover, or the old administrator keeps working access.

INSTALLERS: RELEASE THE LOCK BEFORE YOU LEAVE

If you added this lock to YOUR OWN TTLock account, you must delete it in the app while standing beside the lock, in Bluetooth range, before you leave site. Uninstalling the app does not release it. Deleting your account does not release it. If you skip this the owner cannot add the lock at all, and the only way out is a factory reset that wipes every code and every card.

4 · After fitting (continued)

HANDOVER RECORD

Leave this with the owner. Test with the door OPEN and tick: mechanical key ☐ admin code ☐ card or fob ☐ app unlock ☐

Model and finish

Backset fitted

Date fitted

Fitted by

Admin account holder

Owner's TTLock account email

Lock name in the app

Gateway serial, if fitted

Factory code refused (Y/N)

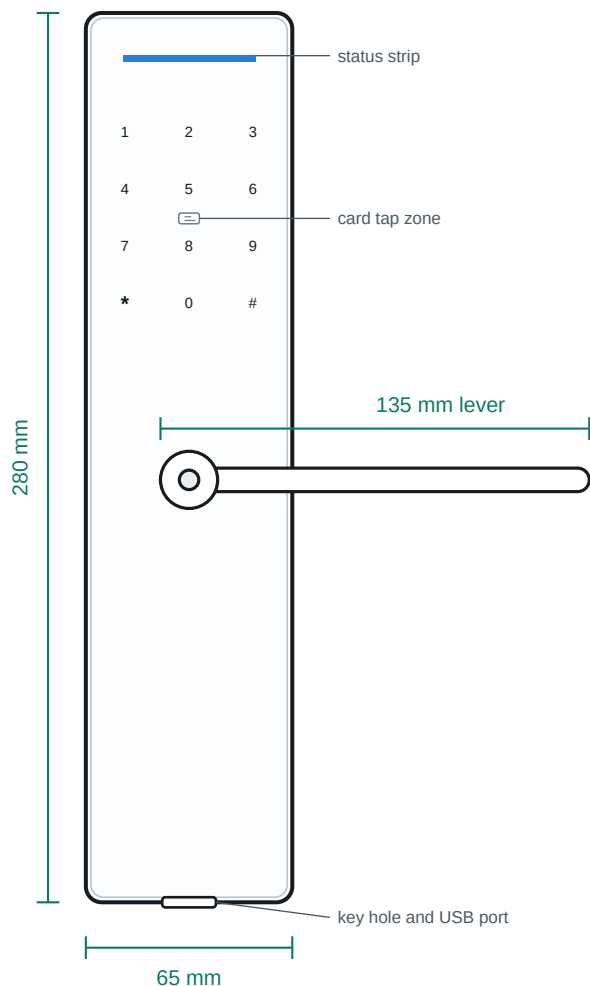
Cards or fobs enrolled

Keys handed over

Installer released lock (Y/N)

KS280 Smart Lock

For the KS280 keypad and lever smart lock, all finishes and all published backsets.



DIMENSIONS AND FINISH

Panel	280 x 65 mm
Overall with lever	Not published
Lever length	135 mm, the lever alone
Lever projection	48 mm from the panel face
Panel depth	21 mm
Spindle supplied	80 mm
Backsets published	0, 30, 35, 40, 45, 50, 60 and 70 mm
0 mm option	What it includes is being confirmed. Ask before ordering it.
Finishes	Black and Silver
Material	Aluminium alloy

ELECTRICAL AND ENVIRONMENT

Batteries	4 x AA
Weather rating	IP65
Bluetooth	4.0 or above
Remote access	Gateway ready. The Wi-Fi gateway is a separate purchase.
USB emergency power	Yes, on the bottom edge of the outside panel. Power only: it does not open the lock or charge the batteries.

ACCESS

Opens by	TTLock app, PIN code, RFID card, mechanical key
Key hole	On the bottom edge of the outside panel
Fingerprint	Not on this model
Keypad	3 columns x 4 rows
App	TTLock, by Hangzhou Sciener. Not a Keyless Solutions app.

DOOR PREPARATION · TO BE CONFIRMED

Drilling centres are being confirmed with the manufacturer. Do NOT set a door out from this sheet: it is not printed at true size. Use the true size fitting template for this model, and drill only from a card cut for your exact backset. If no such card came with your lock, call 09 238 2377 before you drill.

Sources: Our KS280 drawing and our KS280 listing on keylessolutions.nz. Spindle from the manual in the carton.

Keyless Solutions · keylessolutions.nz · 09 238 2377 · Check KS-DS-280 Rev A is current before specifying.

If something is not right

Call 09 238 2377, or 027 8 ACCESS (222 377). Have the model, the backset and the door type ready and we will work it out with you. If something is not working, keylessolutions.nz/troubleshooting walks the common faults, worst first.

Keep this leaflet

It carries the model, the revision and the numbers the next person will ask for. Keep it with the keys and the cards.

WARRANTY

Two year warranty, as published on keylessolutions.nz and subject to its conditions. The Consumer Guarantees Act applies separately and is not replaced by it. The manual in the box adds: do not unscrew the screw inside the handle hole when reversing the handle, or you will not have any warranty.



KS280

Smart Lock



START HERE

Open this leaflet. Five minutes now saves a phone call later.

FOLD

Four ways in

- PIN code**

Type it on the keypad. Set your own in the app, then check the factory code printed in the manual is refused.

- Card or fob**

Hold it to the reader. Enrol each one in the app first, or it will not open the door.

- Mechanical key**

Always works, batteries or not. The key hole is on the bottom edge of the outside panel. Keep a key somewhere sensible away from the door.

- The app**

TTLock, made by Hangzhou Sciener, free on the App Store and Google Play. It is not a Keyless Solutions app.

NO FINGERPRINT ON THIS MODEL

The KS280 has no fingerprint reader. If a guide tells you to enrol one, it is the wrong document.

FOLD

The three things people ring about

- Flat batteries**

The mechanical key always works. This model has a USB emergency power port, on the bottom edge of the outside panel. A USB power bank on that port powers the lock so your code works. It never opens the lock by itself and never charges the batteries. Change all cells at once, with the door open.

- No internet**

Codes, cards and keys never depend on the internet. Only remote features do, and for those this lock is gateway ready: the Wi-Fi gateway is a separate purchase.

- Selling or re-letting**

Transfer or reset the lock in the app BEFORE handover, or the previous administrator keeps working access. The keys are not what hands the lock over, the account is.

Your lock

Model	KS280
Panel	280 x 65 mm
Backsets	0, 30, 35, 40, 45, 50, 60 and 70 mm
Batteries	4 x AA
Weather	IP65

Full install guide: keylessolutions.nz/downloads

KS280 Smart Lock

Installation positioning card

Read this before you print

The outline sheets that follow are printed at TRUE SIZE. That only works if your printer does not resize the page. Before you mark any door, measure the bar below with a ruler or tape. If it is not exactly 100 mm, the print is wrong and the template must not be used.



This bar must measure exactly 100 mm, or the print is the wrong size.

How to use this card

- 1 Print at 100% scale on A4. In the print dialog turn OFF fit to page, shrink to fit, and scale to paper size. These are on by default in most drivers.
- 2 Check the 100 mm bar above with a ruler.
- 3 Wipe the door clean and dry where the lock will sit.
- 4 Confirm your backset: the distance from the door edge to the centre of the spindle. It is the size the lock was ordered in, so check it against the mortice case supplied. Measure that distance in from the door edge and pencil a line down the door face.
- 5 Turn the sheet a quarter turn, so the teal dashed centreline runs DOWN the door and parallel to the door edge. The outline is printed lying on its side so the whole length fits the page. Sit that centreline on your pencil line at the height you want the lock, and check it still sits on the line at BOTH ends so the sheet is not cocked. The lock is symmetrical across its width, so that centreline is the spindle line.
- 6 Tape the sheet flat and mark around the TOP outline for the outside face. The sheet carries two: the second one is the inside face. Mark that one from the door's inside, not by folding this sheet round the edge.
- 7 Check the marked extents clear any glazing bead, reveal or adjacent leaf before anything is cut. Check the LARGER of the two outlines, because that is the one that decides whether it fits.

HOLE CENTRES · TO BE CONFIRMED

This card positions the lock. It does NOT mark the holes. Drilling centres are being confirmed with the manufacturer and will be printed here. Until then, use whatever drilling card came in your box. If there is no card in yours, call 09 238 2377 rather than measuring holes off this sheet.

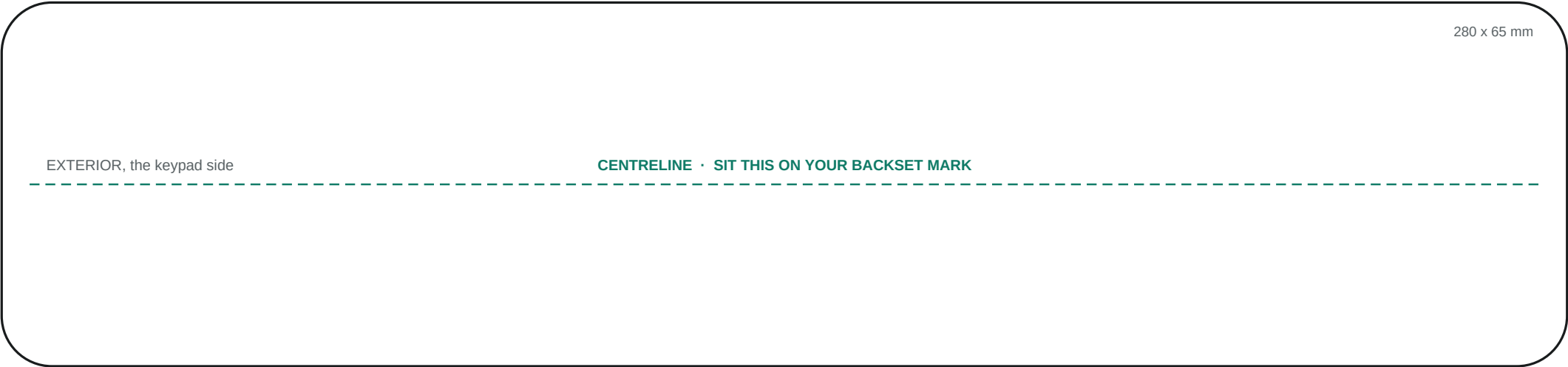
HOW FAR FROM THE DOOR EDGE

This sheet does NOT tell you how far the lock sits from the door edge. That is set by the backset you ordered, and it is different on every job. The sheet gives you the outline at true size so you can set the height, check the lock clears the glazing bead and the reveal, and mark exactly what it covers.

KS280 Smart Lock · Fitting template

True size outline, one sheet. Nothing to cut, nothing to tape.

PRINT ON A4 AT 100%. DO NOT SCALE.



This bar must measure exactly 100 mm.