

ROOM MAKER® WALL BED

INSTALLATION INSTRUCTIONS

BEFORE YOU BEGIN ...

IMPORTANT: It takes *two* people to safely assemble the system – *do not* try to do it by yourself.

Please read and understand the instructions **before** you start to assemble.

Installing the bed in a finished recess is similar to hanging a steel door-if the frame is true and square, you are unlikely to have any problems. Make sure that all measurements are correct and that the recess is plumb, level, and square.

If you have any problems when installing, contact SICO Customer Service at 1-800-424-0796

WARNING

This bed must be securely anchored to the floor. Failure to follow instructions may cause the baseplate or hinges to release, which could cause serious injury.

VERIFY SIZE OF RECESS

IMPORTANT: Before you start to install the bed, refer to the table and verify the size of the recess opening.

The SICO bed is designed to be installed in either a 22" or an 18-5/8" deep recess. However, if heavy blankets, quilts, or other bedding will be used, or if pillows will be stored on the bed, SICO recommends setting up the bed at the 22" depth only.



| BED STYLE | BED SIZE | opening Height | OPENING WIDTH | RECESS DEPTH |
|-----------|---------------------|----------------------|----------------------|-----------------------------------|
| END FOLD | Twin Regular | 83-1/2" (2121 mm) | 41" (1041 mm) | 18-5/8"or 22" (473 or 559 mm) |
| | Twin Extra Length | 88-5/8" (2251 mm) | 41" (1041 mm) | 18-5/8" or 22" (473 or 559 mm) |
| | Double Regular | 83-1/2" (2121 mm) | 56" (1422 mm) | 18-5/8" or 22" (473 or 559 mm) |
| | Double Extra Length | 88-5/8" (2251 mm) | 56" (1422 mm) | 18-5/8" or 22" (473 or 559 mm) |
| | Queen | 88-5/8" (2251 mm) | 62-1/2" (1588 mm) | 18-5/8" or 22" (473 or 559 mm) |
| | King | 88-5/8" (2251 mm) | 79" (2007 mm) | 18-5/8" or 22" (473 or 559 mm) |
| SIDE FOLD | Twin Regular | 49" (1245 mm) | 77" (1956 mm) | 18-5/8" or 22" (473 or 559 mm) |
| | Twin Extra Length | 49" (1245 mm) | 83" (2108 mm) | 18-5/8" or 22" (473 or 559 mm) |
| | Double Regular | 64" (1626 mm) | 77" (1956 mm) | 18-5/8" or 22" (473 or 559 mm) |
| | Double Extra Length | 64" (1626 mm) | 83" (2108 mm) | 18-5/8" or 22" (473 or 559 mm) |
| | Queen | 70-1/2" (1791 mm) | 83" (2108 mm) | 18-5/8" or 22" (473 or 559 mm) |







TOOLS REQUIRED

- · Phillips screwdriver
- · Large flat-blade screwdriver
- Utility knife
- Electric drill (3/8")
- A 1" drill bit may be required (see page 5)
- Rotary hammer drill and 1/2" bit optional
- Masonry bit (if attaching to masonry floor or wall); size of bit depends on floor type - refer to pages 4 - 5
- Tape measure
- Pencil
- Carpenter's level
 Hammer
- Vise-grip pliers
- Pliers

- · Ratchet wrench
- 9/16" and 3/4" deep sockets
- 6" socket extension
- Open-end wrenches: 7/16" (qty 2); 9/16"; 3/4"; 15/16".

UNPACKING

- 1. Remove the steel bands and open the carton.
- 2. Remove the main frame and place it on the floor with the face panel facing down (be sure there is nothing on the floor which could scratch the bed face).

ACAUTION

To avoid damaging the unit, do not walk on the bed's face panel!

If the bed was ordered without a factory-finished face panel on the main frame, you can attach paneling or other covering either while the frame is still on the floor or after the bed is in the recess. Refer to the separate instructions which are included in the small parts pack.

- 3. King bed frames are shipped in two sections which must be bolted together. Refer to page 7 for an illustration of the parts.
- 4. Unpack the headboard, padboard, baseplate, mattress strap, handle package, and any other items which may be stapled to the carton. Refer to the illustration below, or to the Parts List drawing on page 17, to identify the various parts.
- Open the separate carton which contains the power packs (hinge weldments and spring tubes) and the headboard supports.



SECURING THE WALL ATTACHMENT KIT

See the ROOM MAKER WALLBED Wall Attachment instruction manual (part number 117787) for complete instructions on how to attach the bed to the wall.

SECURE BASEPLATE TO FLOOR

IMPORTANT: If you have not already done so, verify the recess opening with the chart on the front page.

If heavy blankets, quilts, or other bedding will be used, or if pillows will be stored on the bed, SICO recommends setting up the bed at the 22" depth ONLY.

- 1. Check that the baseplate fits into the recess:
 - a. If the baseplate is narrower than the recess, center it (side to side) in the recess opening.
 - b. If the baseplate is wider than the recess, be sure that the recess was properly constructed. The recess opening should be 1/2" wider than the bed frame. Refer to the chart on the front page.
- If there is a floor molding or base-board which is more than 1/8" thick, remove it.
- Position the rear edge of the baseplate 18-1/4" from the front edge of the verticals. Check both ends.
- 4. Secure the baseplate to the floor, following the appropriate floor anchoring instructions on the next three pages.



WARNING

DO NOT floor mount the bed on top of post tension concrete. If you are unsure of the concrete, have the floor x-rayed or check with the architect. Serious injury and damage to the unit can occur.

FLOOR ANCHORING – Hard Concrete Slab Floors

NOTE: Anchors for hard concrete slab floors are provided with the bed. Use six (6) anchors per bed, use nine (9) anchors for the king bed. Use anchors appropriate to the type of floor: SICO recommends Red-Head #HN-1230 1/2 x 3" Expansion Anchors, or their equivalent.

- 1. Have the baseplate in position before installing anchors.
- At the first anchor location, drill a 1/2" diameter hole straight down through the baseplate and at least 2-3/4" into the concrete. You may have to drill a 1/4" diameter pilot hole, then enlarge it to 1/2".

Do not allow the drill to rotate and hammer on the hard aggregate, or the hole may become enlarged. If this happens, refer to the procedure for "Lightweight Concrete Floors" on page 5.

 Install the washer onto the anchor bolt (see note above), then install the nut one turn.

Drive the anchor into the hole.

IMPORTANT: The anchor must extend at least 2-1/4" into the concrete.

Tighten the nut on the anchor. If you don't feel firm resistance on the wrench, the anchor isn't seating or locking properly (the floor may be lightweight concrete – see page 5).

If the anchor bolt didn't tighten, or if you met an obstacle such as a reinforcing bar, drill a new hole through the baseplate and into the concrete, 1-1/2" away from the existing hole.

5. Repeat steps 2 through 4 for the other anchors.

A WARNING

If the bed must be securely anchored to the floor Failure to follow instructions may cause the baseplate to release, which could cause serious injury.



A WARNING

DO NOT floor mount the bed on top of post tension concrete. If you are unsure of the concrete, have the floor x-rayed or check with the architect. Serious injury and damage to the unit can occur.

FLOOR ANCHORING – Wood, Lightweight Concrete, Thin Concrete Over Wood, Metal Deck, and Miscellaneous Floors

NOTE: Use anchors appropriate to the type of floor: SICO recommends the Star 3/8 x 6" round-head toggle bolts which are supplied with the bed (or their equivalent). Use six (6) anchors per bed, use nine (9) anchors for the king bed.

- 1. Have the baseplate in position before installing anchors.
- At the first anchor location, drill a 1" diameter hole through the baseplate and floor.

If you encounter a joist, or if a wood floor won't support any type of anchor, follow the procedure under "Joists," page 6.

3. Assemble a 1-1/2" diameter washer onto a 3/8" diameter toggle bolt.

Insert the toggle bolt through the hole.

- 4. Repeat steps 2 and 3 for the other anchors.
- 5. Tighten the toggle bolts with a flat-blade screwdriver.



A WARNING

If the bed must be securely anchored to the floor Failure to follow instructions may cause the baseplate to release, which could cause serious injury.

> If you encounter any problem or a unique floor construction, contact SICO Customer Service at 1-800-328-6138.

IMPORTANT: Score / cut carpet before drilling for anchors. This will prevent the carpet from fraying.

Especially on plush carpet, be sure the baseplate is pulled down tightly to the floor.

Do not continue with the bed installation unless all anchors are properly installed and tightened.

AWARNING

If the bed must be securely anchored to the floor Failure to follow instructions may cause the baseplate to release, which could cause serious injury.

FLOOR ANCHORING – Joists

If you encounter a joist at the anchoring location, use the following procedure. Note that toggles are preferred for anchoring the baseplate, so the following procedure should be used only if unavoidable.

NOTE: Floor anchors for wood joists are not provided with the bed. Use six (6) 1/2 x 5" hex-head lag screws (available from any hardware store), use nine (9) for the king bed.

- 1. Have the baseplate in position before installing anchors.
- 2. At the first anchor location:

Floors of Lightweight Concrete Over Wood. Drill a 3/8" diameter pilot hole through the baseplate and concrete. Then drill a 7/32" diameter pilot hole into the joist.

Wood Floors. Drill a 7/32" diameter pilot hole through the baseplate and floor, into the joist.

 Use a 1/2" diameter lag screw and large washers. The screw must be long enough so that at least 2" of it penetrates the joist.

Install the lag screw and tighten it down securely.

4. Repeat steps 2 and 3 for the other anchors.



If you encounter any problem or a unique floor construction, contact SICO Customer Service at 1-800-328-6138.

IMPORTANT:

Score / cut carpet before drilling for anchors. This will prevent the carpet from fraying.

Especially on plush carpet, be sure the baseplate is pulled down tightly to the floor.

Do not continue with the bed installation unless all anchors are properly installed and tightened.

ATTACH BED HALVES TOGETHER (King Bed Only)

King bed frames are shipped in two halves, which must be bolted together using a center plate.

- 1. Slide the two frame halves together (see below).
- Attach the center plate (fingertight only) to the rear of the bedframe as shown, using four 1/2-13 x 2" bolts, lockwashers, and hex nuts.
- Install the rubber corners on the front end rail. Attach the two frame halves together, and attach the end rail to the front end of the frame, using 3/8-24 x 2" bolts and lock nuts (also finger-tight).
- 4. Tighten all fasteners securely in the following sequence:
 - a. Center plate.
 - b. Front end rail.
 - c. Frame halves.



Hardware for assembling the frame halves and attaching the center plate are in the bag marked "102474."



ATTACH POWER PACKS

- If you have purchased a bed with no face, you should install the bed face panel now. See the instructions in the small parts package marked "101866."
- 2. Move the bed frame about 2 ft from the recess opening, aligned with the recess.



3. Attach the two headboard supports to the cams on the bed frame (see also the illustration on page 2):

NOTE: For king beds, there is an additional right-hand headboard support. Attach it to the center-cam.

- a. Remove the two **outside** 1/2" diameter locknuts and washers from each cam. **Don't loosen or remove the two inside nuts.**
- b. Install the headboard support over the threaded bolts.
- c. Reattach the lockwashers and nuts, and tighten them securely.
- The two power packs (spring tube assemblies mounted on hinge weldments – see the illustration on page 2), are shipped in a separate carton.

NOTE: King beds have a third power pack.

To prepare the unit for installing the power packs:

- a. Remove the 5/8" lock nut from the end of each cable.
- b. Pull the plunger out of the end of each spring tube assembly.
- c. Remove the cotter pin and hinge pin from each cam.



5. Attach each power pack to its cam by inserting a hinge pin and securing with a cotter pin.

NOTE: The spring is coated with grease. Don't allow it to drop out of the spring tube.



It makes no difference which side of the bed each spring is installed on – even if they are different colors.

a. Reinstall the plunger in the end of the spring tube. If the spring end is not flat (A), install the plunger with its lugs toward the spring; if the spring end is flat (B), install the plunger with its lugs away from the spring.

Lugs are different heights to match different springs.

b. Secure the plunger by loosely reattaching the 5/8" nut on the end of the cable.



IMPORTANT! Make sure the plunger is sitting FLAT on the spring.

c. Using a 9/16 open-end wrench or vise-grip pliers, grasp the cable as shown. Turn the locknut on the cable thread until at leastfour threads are visible past the plastic insert on the locknut.



ATTACH POWER PACKS (continued)

- 6. Remove the nuts and washers from the carriage bolts in the baseplate (12 bolts in a king-size baseplate, 8 bolts in others).
- 7. Slide the bed frame approximately 1" into the recess.
- 8. With one person inside the recess and one outside, lift the bed to its vertical position.

Slip the hinge weldments onto the carriage bolts in the baseplate, and fasten them loosely with 1-1/2" O.D. washers and hexnuts.

IMPORTANT: Do not fully tighten the hex nuts yet.



ALIGN BED FRAME IN RECESS

 Attach the handles to the bed frame, using two 1/4" dia. x 2-1/2" machine screws in each handle.



- Position the bed frame so there is an equal gap (about 1/4") between the frame and the recess on both sides, at the bottom.
- 3. Insofar as possible, you want to position the bed so the frame is flush with the front edge of the recess. As a starting point, maneuver the frame so it is flush with the recess on both sides **at the bottom**.
- 4. Check the top of the frame. If necessary, move the bottom in or out on each side until the **top** is flush on both sides.

NOTE: Because of small cumulative variations in the recess, wall, and floor, you may not be able to keep the bottom of the frame flush with the recess.



ALIGN BED FRAME IN RECESS (continued)

5. Tighten the nuts on the two REAR carriage bolts, to secure each hinge weldment to the baseplate.



- If the top gap (between the bed frame and the recess header) is not even:
 - a. Determine which is the high side (the side with the least gap between the frame and header).
 - b. On that same side, install and tighten the two front nuts and washers which secure the hinge weldment to the baseplate.
 - c. On the low side (the side with the most gap between the frame and header), screw in both height adjustment hex bolts until the top gap is the same on both sides. Be sure to turn both low-side adjustment bolts by the same amount.
 - d. If the baseplate is installed on carpet, turn both height adjustment bolts an additional half turn to compensate for later settling.
- Install and tighten the front nuts and washers which hold the other hinge weldment(s) to the baseplate.





ATTACH BOXSPRING AND MATTRESS

 Turn the boxspring on edge. Using #8 x 3/4" screws, attach the mattress strap to the side framing member (wood) on the underside of the boxspring, about 9" in from the foot end. Keep the strap snug.



- 2. Bring the bed down to the floor, and place the boxspring and mattress on the frame to hold the bed down. For the time being, position the mattress so there will be clearance for installing the headboard and padboard.
- 3. There are two clips (one on a twin bed) at the foot of the bed, that are used to secure the boxspring to the bed frame.

Install the clip screws through the clips and into the wooden framing members on the foot of the box-spring.



ACAUTION

CAUTION: The bed will be difficult to pull down because the springs are being compressed. Do not let go of the bed frame until the boxspring and mattress are installed.



4. Move the mattress into position on the boxspring. Wrap the long end of the mattress strap snugly around the mattress as shown, and attach it to the Velcro on the short end.



ATTACH HEADBOARD/PADBOARD ASSEMBLY

1. Attach the padboard to the headboard, using the pre-attached screws and hinges.

The padboard is shipped with the linkage mounting brackets installed for use in a 22" recess. If installing the bed in an 18-5/8" recess, move the brackets to the predrilled higher set of holes (using the same fasteners).

2. Attach the linkage assemblies to the padboard brackets and to the hinge weldments. For a 22" recess, attach as shown, with the 12" sections toward the padboard.

For an 18-5/8" deep recess:

- a. Move the padboard brackets (see step 1).
- b. On both linkage assemblies (three on a king bed), disconnect the two linkage sections (15" and 12") from the pivot plate. Switch their positions, and reinstall them so the 15" section is attached to the padboard and the 12" section to the hinge weldment.

CAUTION: Don't over-tighten the locknuts, or the linkages won't pivot. Tighten just until the parts are snug.

 Attach the assembled padboard/ headboard to the support brackets on the bed frame:

CAUTION: Don't step on the end of the bed face.

- a. Use the upper two slots for a 22" deep recess.
- b. Use the lower two slots for an 18-5/8" deep recess.



LINKAGES ARE SHOWN CONNECTED FOR A 22" RECESS



ACAUTION

For either recess depth, the 90° notch on the pivot plate must face up (that is, toward the white pad on the linkage mounting bracket).

If the pivot plate is installed upside down, the hinge will bend or break when the bed is raised.



MAKE FINAL ADJUSTMENTS

- 1. **Do not** try to adjust the bed until: a. The boxspring and mattress
 - a. The boxspring and mattress are secured to the bed frame; and
 - b. Any desired bed face or panel is installed.

The combined weight of the face and bedding is what counteracts the hinge springs when the bed is lowered to the floor.

 Before raising the bed, loosen the headboard adjustment bolts until 1/4" of thread extends beyond the nut (top illustration).

Then adjust the bolts until the bed frame is flush with the edge of the recess. Turn in direction \mathbf{Y} to move the frame out of the recess, or direction \mathbf{X} to move it into the recess. Adjust both bolts equally.

IMPORTANT: If the bed frame is not flush with the recess, repeat this adjustment – do not adjust the spring tube.

- The finished bed (with blankets or other covers installed) should require only a minimum of "lift" to begin folding it up. Also, when first installed, it should rest 2 - 4" above the floor. If not:
 - a. **Bed won't stay near the floor.** Turn the 1/2-13 lock-nuts on the spring tube mounting bolts counterclockwise (direction A). Adjust all four nuts equally, and make only 1/2 turn on each nut. Repeat until the bed operates properly.
 - b. Bed is too heavy to lift. Turn the 1/2-13 locknuts on the spring tube mounting screws clockwise (direction B). Adjust all four nuts equally until the bed operates properly.

NOTE: After the bed has been in use for some time, it will gradually settle to the floor.

4. The bed is now ready for use.





A WARNING

Be careful where you place your fingers until the bed is adjusted. The bed frame could pinch your fingers if it folds too far into the recess.



BED "LIFT" ADJUSTMENT Spring tube weldment must be centered in hinge weldment

Spring Tube Mounting Bolt

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A WARNING

At least one full thread must be visible on the end of the bolt. If you remove the nuts from the bolts when the bed is down, the spring will release suddenly – which could result in serious injury.

If the bed doesn't operate properly after the above adjustment, contact SICO Customer Service. When calling, please have the bed size and serial number, and the dot colors on the spring tube.

The lift adjustment may have to be repeated periodically until the bed has been in use for some time.

Colored

Dot

PARTS LIST

ITEM

- NO. DESCRIPTION
- 1 Frame
- 2 Pad, linkage connector
- 3 Pin, dowel
- 4 Baseplate assembly
- 5 Headboard assembly
- 6 Padboard assembly
- 7 Cable
- Spring [#] 8
- 9 Linkage assembly
- 10 Washer, 7/16" ID x 1-112" OD x 1/8"
- 11 Plunger
- 12L Support, headboard, LR
- 12R Support, headboard, RH
- 13 Cam
- 14 Screw, cap, 1/4-20 x 7/8"
- 15 Tube, spring
- 16 Locknut, 1/2-13
- 17 Bracket, mounting
- 18 Pin, hinge
- Handle (SPECIFY: color) 19
- 20 Screw, machine, 1/4" dia. x 2-1/2"
- 21 Corner, rubber
- 22 Washer, 1/2"
- 23 Pin, cotter
- 24 Screw, #8 x 3/4"
- 25 Screw, cap, 1/2-13 x 3-1/2"
- 26 Bolt, anchor, 1/2-3/8 x 3"
- 27 Locknut, 1/4-20
- 28 Lockwasher, 1/2"
- 29 Nut, 1/2-13
- 30 Bolt, carriage, 3/8" x 1-3/4"
- Hinge

- ITEM NO. DESCRIPTION
- 32 Bolt, carriage, 1/4-20 x 1-1/4"
- Screw, cap, 1/2-13 x 3" 33
- 34 Hinge weldment
- 35 Clip, boxspring [early models only]
- 36 Nut, hex, 3/8-16
- 37 Locknut, 5/8-11
- 38 Strap, mattress (SPECIFY: bed size)
- 40 Screw, cap, 3/8-24 x 2"
- 41 Nut, hex, 1/4-20
- 42 Cap, end (SPECIFY: chrome or brass)
- Rail, end (SPECIFY: chrome or brass) 43
- Rail, side, RH (SPECIFY: chrome or brass) 44
- 45 Rail, side, LH (SPECIFY: chrome or brass)
- 46 Frame, side-fold bed
- 47 Baseplate assembly, side-fold bed
- 48 Headboard assembly, side-fold bed
- 49 Padboard assembly, side-fold bed
- 50 Frame, RH, king bed
- Frame, LH, king bed 51
- Rail, end, king bed 52
- 53 Bolt, 3/8 x 2"
- 54 Nut, lock, 3/8-24
- 56 Screw, mattress strap
- Bolt, toggle, 3/8-16 x 6" 57
- 58 Screw, flat-head, #7 x 1-1/4"
- 59 Screw, flat-head, #6 x 5/8"
- 60 Screw, cap, 1/2-13 x 3-1/2", fully-threaded
- Screw, machine, round-head, #10 x 3/4" 61
- 62 Washer, lock, #10
- 63 Plate, center
- 64 Screw, cap, 1/2-13 x 2"

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[#] Spring combinations vary with bed size. Contact SICO Customer Service Department for specific information.

Order by Item Number. Specify "for Room Maker Wall Bed."

Always provide the serial number of the bed when ordering parts.

SICO Incorporated reserves the right to substitute materials or make changes if materials are not available and such changes improve the product.

PARTS LIST



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NOTE:

The ideal bed requires a **DISTINCT PULL** to come out of the wall, after 10 degree of movement (approximately 10" outward movement of bed face handle). Properly adjusted beds should "hold" or "float when the bed face is at a 45 degree angle.

- 1. Once every six months, lubricate the pivot points of the bed with a silicone spray or standard oil to minimize cam wear and noise.
- 2. If the bed becomes difficult to lift, or won't stay on the floor, refer to step 3 on page 15.

If it does not remain flush with the edge fo the recess, refer to step 2 on page 15.

Fine Tuning of Spring Mechanism

Different spring combinations are used with different size and face weight beds, some of which call for two different springs, and king or heavy queen beds have three spring packs. While it might not be possible to adjust every bed to the ideal adjustment, very good operation can be expected out of the proper spring combinations.

Start with the basic adjustment called out on page 15 (at least four threads showing past the cable nut, and two threads on the spring tube mounting bolts.

New beds should be adjusted so that the bed rises a few inches off the floor; after being cycled and left down a while, the spring will compress which will allow the bed to rest on the floor. The basic adjustment that you always start with is having the bed near the balance point when at the floor. If the bed is too heavy at the floor, tighten the spring tube bolts evenly until it balances.

If the bed does not stay near the floor, loosen the spring tube nuts evenly. On all hinges, there MUST be the same number of threads showing past the top face of the elastic nut for the nut to be considered engaged.

If the bed balance is correct at the floor level, but falls past the 45 degree angle - tighten the spring tube bolts a little more.

If the bed tends to lift upward from the 45 degree angle, loosen the adjustments on all hinges.

If the bed tends not to lift and hold with all adjustment bolt threads exposed, a larger diameter spring should be used.

NOTE:

The final adjustments of the springs should be done AFTER the mattress, box spring, and bedding are all secured in place on the bed.

Visit our website at www.sicoinc.com

The Americans

SICO America Inc. USA In U.S., phone (800) 328-6138 Outside U.S., (952) 941-1700 Fax: (952) 941-6688 E-mail: sales@sicoinc.com

Spain & Portugal Sistemas SICO S.L.

Spain Phone [34] (91) 358-9076 Fax: [34] (91) 358-9264 E-mail: sales@sistemas-sico.com

Europe SICO Europe LTD. England Phone [44] (1303) 234000 Fax: [44] (1303) 234001 E-mail: sales@sicoeurope.com

Australasia & South Africa SICO South Pacific Australia

Phone [61] (2) 4388-5100 Fax: [61] (2) 4389-1341 E-mail: sales@sicosp.com.au

Japan

SICO Nippon Co., LTD Japan Phone [81] (3) 3791-2277 Fax: [81] (3) 3791-3300 E-mail: siconpn@apricot.ocn.ne.jp Asean Countries/ Korea & India SICO Asia PTE LTD. Singapore 118535 Phone [65] 6472-2633 Fax: [65] 6472-2600 E-mail: sales@sicoasia.com

China SICO-SST China Phone [86] (10) 6467-9126 Fax: [86] (10) 6466-4815 E-mail: sales@sico-sst.com