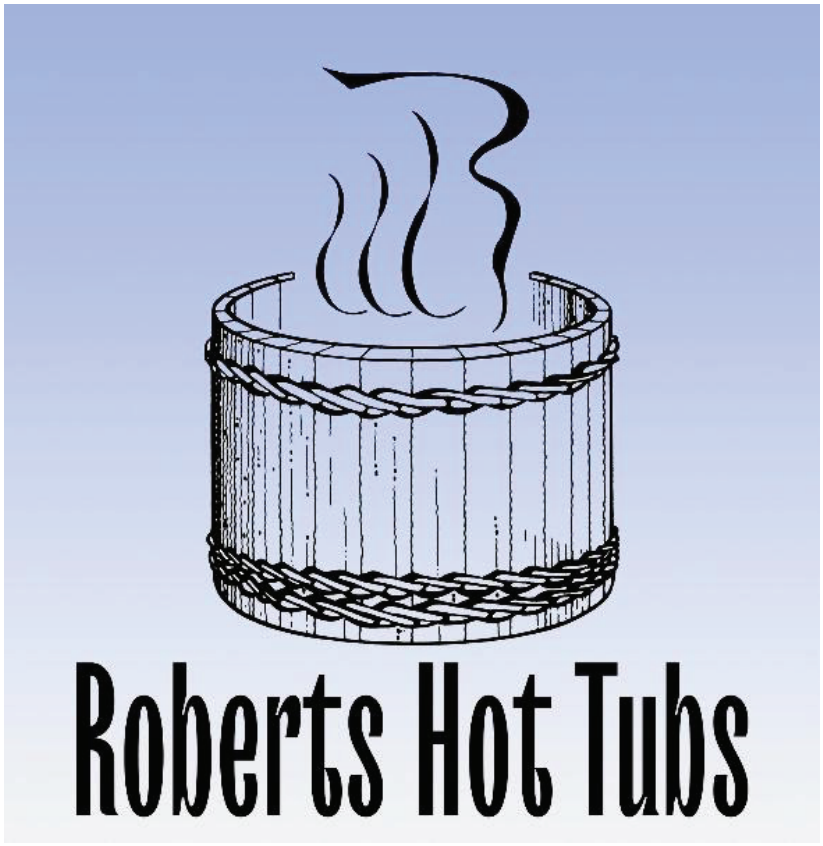

Hot Tub Assembly

Contact Information

510-234-7920

www.rhtubs.com

benny@rhtubs.com

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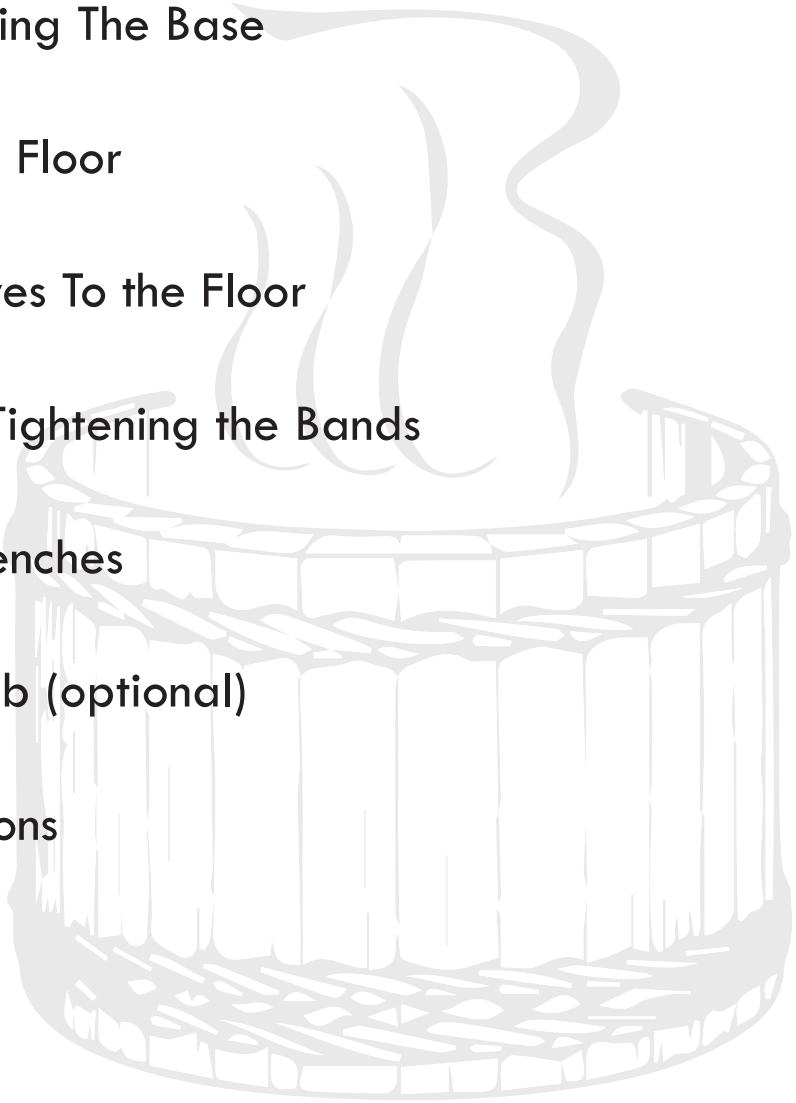


Roberts Hot Tubs

Tools and Materials Needed

1. Mallet (dead blow prefered, no hammers)

2. Level

3. Drill

4. 7/8 Extra deep socket or wrench

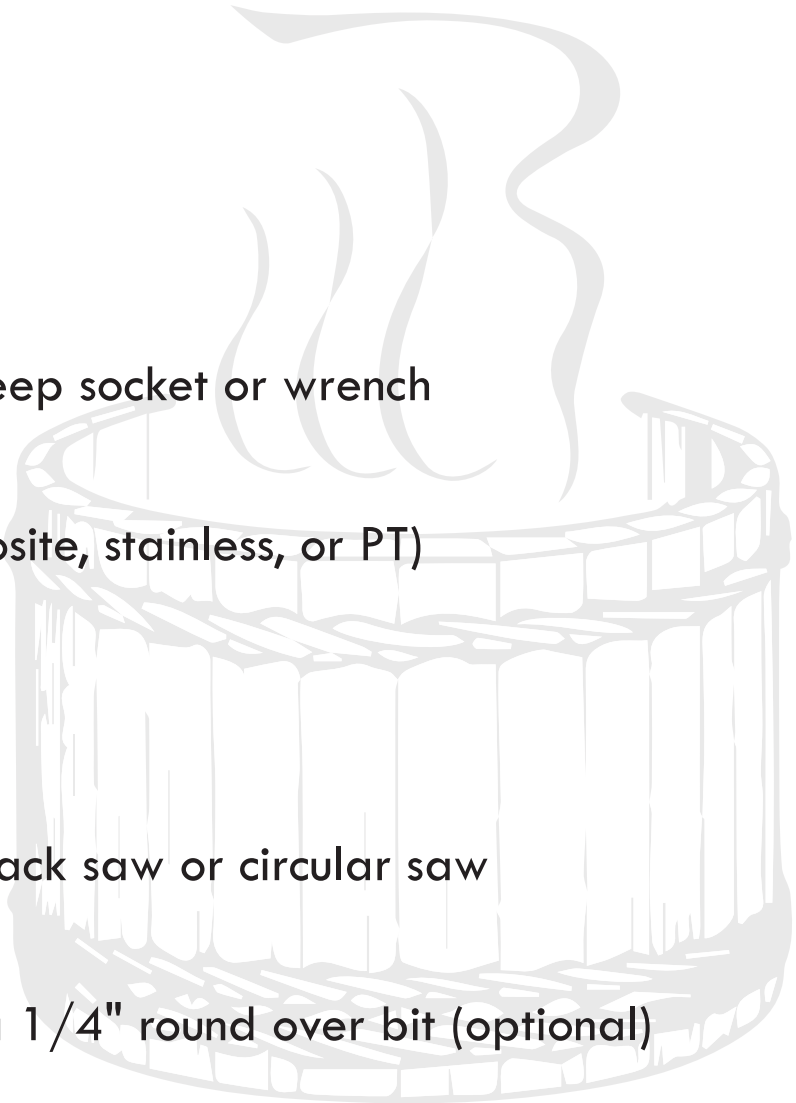
5. Shims (composite, stainless, or PT)

6. Drill bits

7. Table saw, track saw or circular saw

8. Router with a 1/4" round over bit (optional)

9. Belt sander (optional)



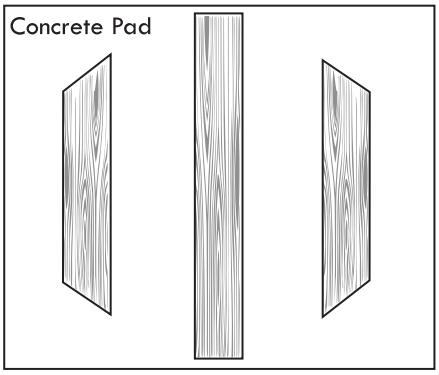
Roberts Hot Tubs

Setting & Leveling The Base

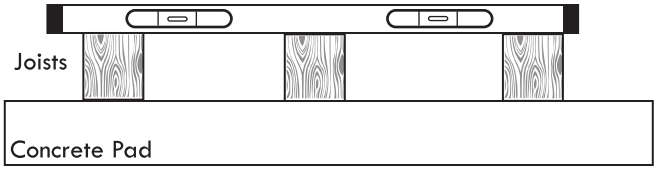
1. Level Chine Joists

Place the chine joints on the concrete pad so that they are 5 ½" tall. Find the highest point of the chine joists and bring the rest to that level.

Top View



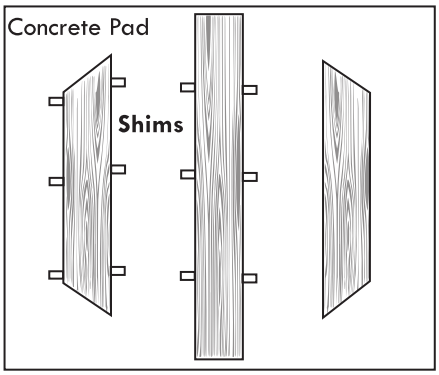
Front View



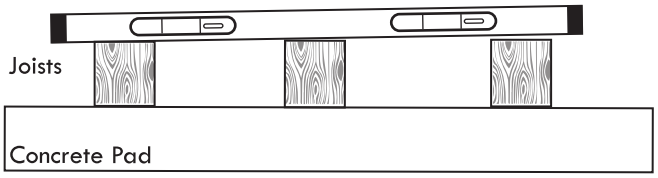
2. Shim Chine Joists

When shimming the chine joists for leveling, it is important to shim along the entire length of each joist. There should be enough of the shim under the joists to prevent the shims from compressing under the weight of the tub.

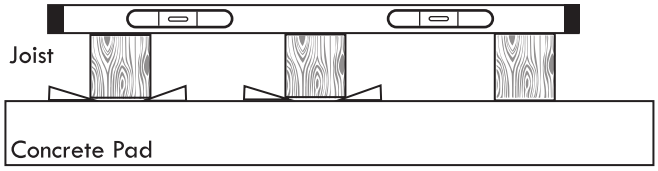
Top View



Before (Not Level)



After (Level With Shims)

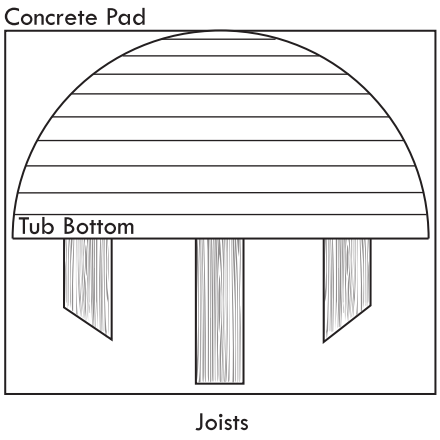


Assembling The Floor

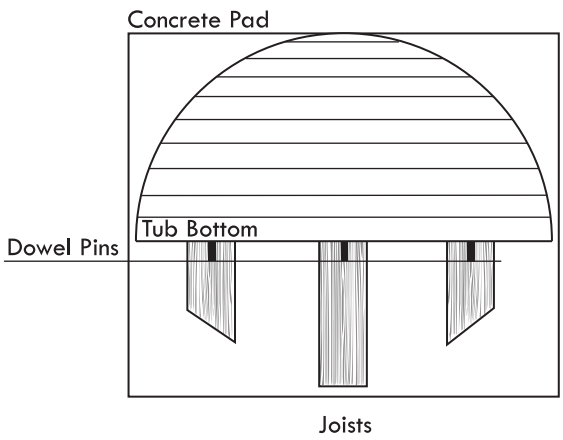
1. Put Floor Sections Together

Put the three dowel pins in one section of the bottom of the tub and place on top of the chine joists. Make sure the sanded side is facing up. Slide bottom sections together and ensure seams are **perpendicular** to joists.

Top View



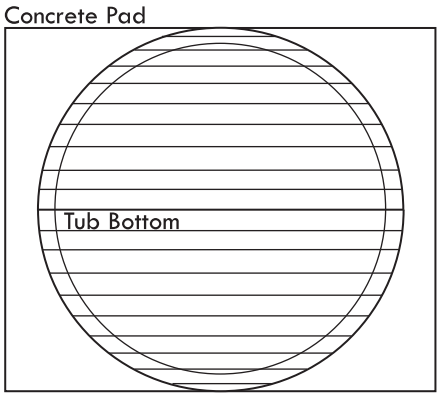
Top View



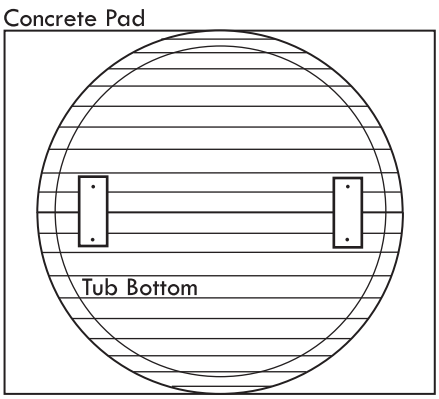
2. Secure Plywood Strips

Place the plywood strips 3" from either end along the perimeter of the tub across the seams of the two halves. Remove before the tub is filled.

Top View



Top View

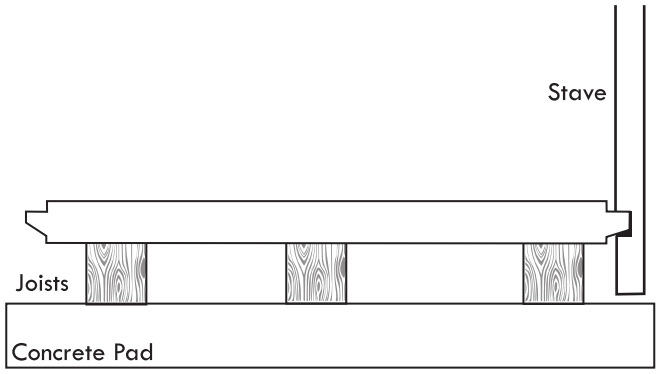


Fitting The Staves To The Floor

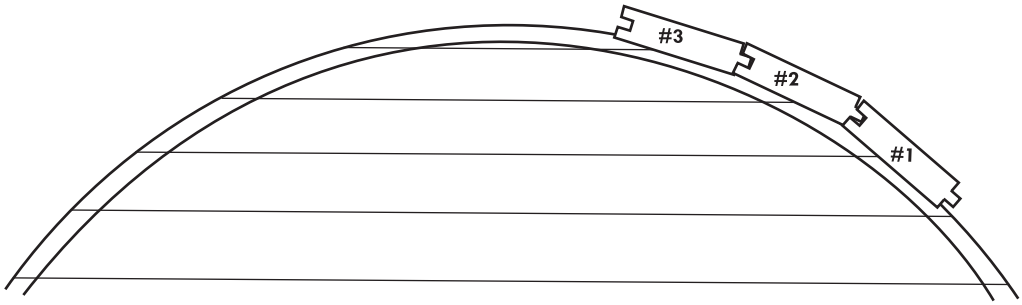
1. Position Staves on Floor Tongue

Begin by sliding the first stave onto the floor tongue. Using a mallet the staves should be tapped onto the floor tongue—just to the point that they are not falling off. Slide the next stave against the previous stave. Tap into place until either the tongue and groove merge. You can use painters tape to hold staves in place if necessary.

Front View



Top View



2. Attach Last Stave

When you are down to one stave, slide it down into place from the top. Gently tap into place!

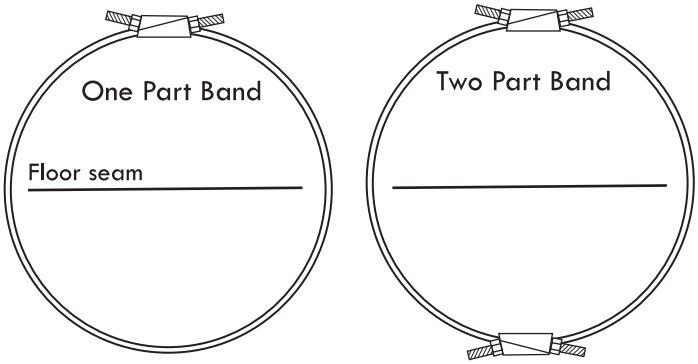
If you find there is not enough room for the last stave, carefully tap and slide the other staves to make a little more room.

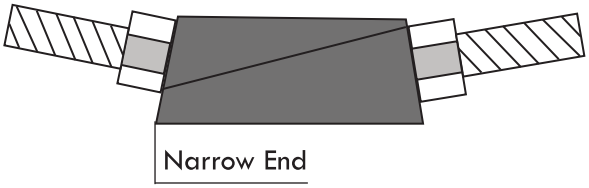
Note: If there is a gap after the last stave has been put in, it will not close by tightening the bands. Either take the tub apart and start over or please give us a call for further instructions. A key stave will need to be cut.

Applying and Tightening The Bands

1. Pre-assemble Bands

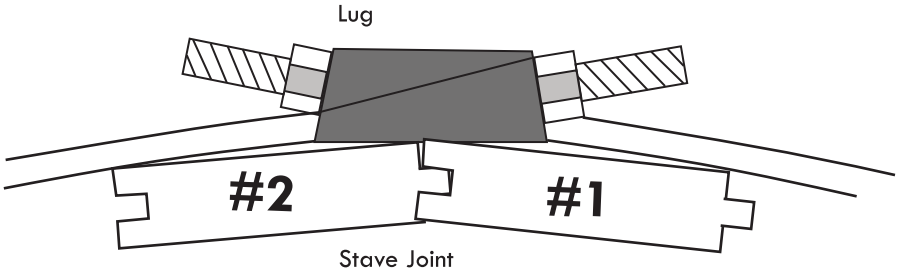
Pre-assemble the bands, making sure the nuts are screwed on loosely. When assembling bands, be sure to insert from the narrow end. Lug should be perpendicular to seam on the floor.





2. Band Orientation

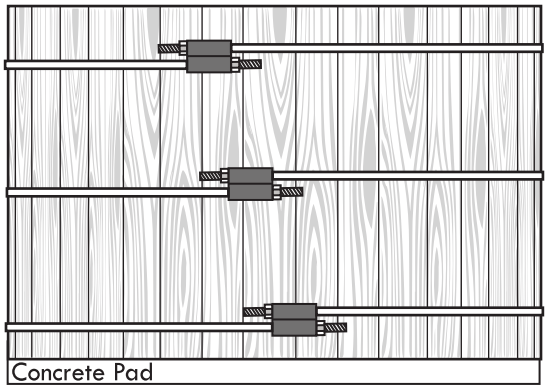
The lug on the band should rest over a stave joint. If you have bands with two lugs, make sure at least one, though both are optimal, are located over the stave joint



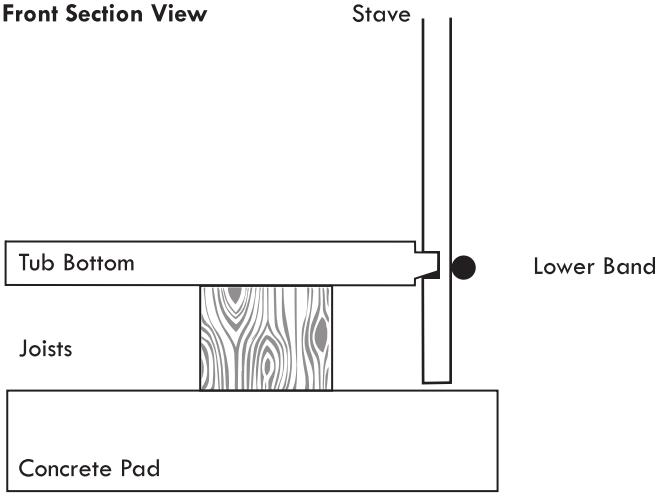
The bottom band should be parallel to the floor of the tub-where the stave grooves were placed along the floor tongue

No lugs should be on the same stave joint.

Front View



Front Section View



	Bottom Band	Middle Bands	Top Band
Cedar and tubs 6ft and smaller	Parallel with tub floor	Equal distant from top and bottom bands	3" from top of tub
Teak and tubs 7ft and larger	Parallel with tub floor	Equal distant from top and bottom bands 4th band should be 1" above bottom band	3" from top of tub

3. Move Bands Into Place and Tighten.

Tighten all bands just til just snug Drive in staves by hitting the bottom band, make as many revolutions around the tub as necessary until there is a gap roughly 1/8"-1/4" from the trough of the floor. After the boards are fully knocked in, tighten the bands fully til nice a tight. Be careful not to overtighten as bands can snap.

Note: Tightening bands will not make the boards go in further or get rid of gaps. Please do NOT keep tightening if you still have gaps. If a gap opens up between floor pieces hitting the staves more will only make the gap larger.

Installing the Benches

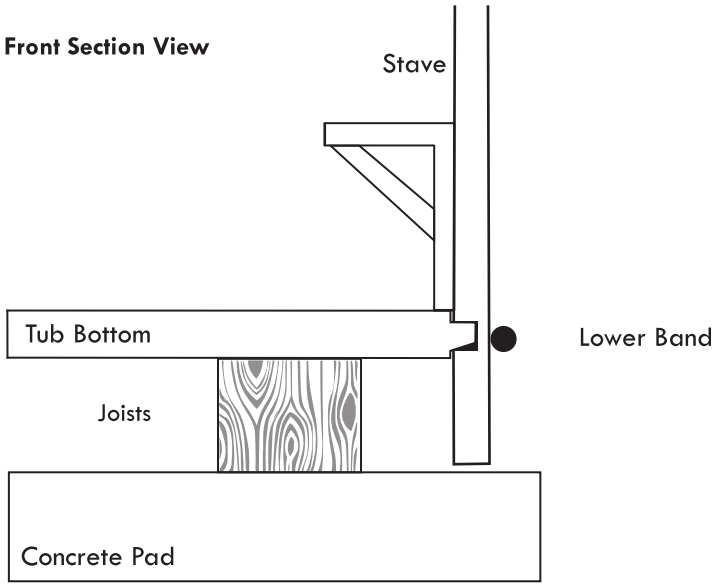
Go to Circular Sectional for tubs 5ft and larger. If installing a bench on 3ft height tubs, go to assembly of the Circular Sectional with a block. Refer to "Oval Slab Bench" for 4ft diameter tubs and smaller.

The following are instructions for assembly of the Circular Sectional for 5ft tubs and larger:

* There will be an approximate 1/4 " +- gap between the inside of the tub wall and the outside perimeter of the bench.

1. Determine Where the Corbels will be Attached to the Tub

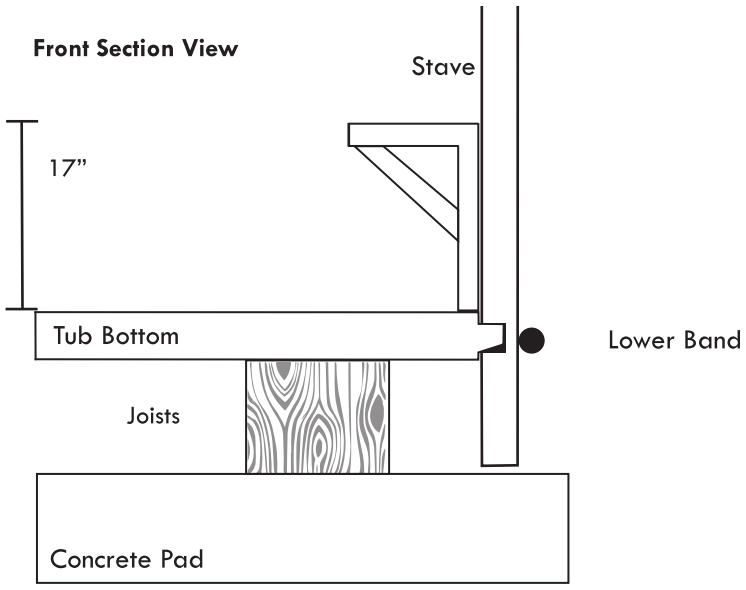
Dry fit the circular bench to the floor of the tub. Mark where Corbels will be attached to the wall. It is okay if the Corbel falls on a stave joint. The edge of the bench seat rests on one half of the Corbel.



2. *Finishing The Bench Height*

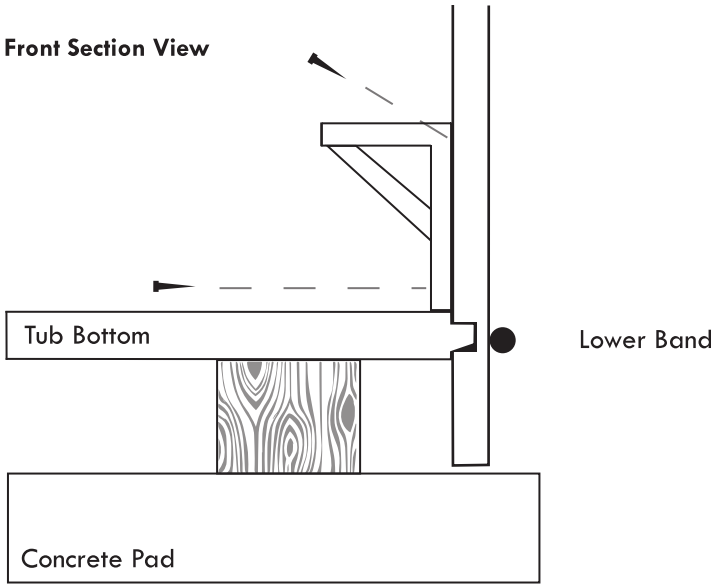
Red or Yellow Cedar benches are a default 17" from the floor. Teak benches are a default 16 ¼" off tub floor.

* You may raise or lower depending on your desired height. Keep in mind, however, to lower the bench height more than 17", you will have to cut off a portion of the Corbel.



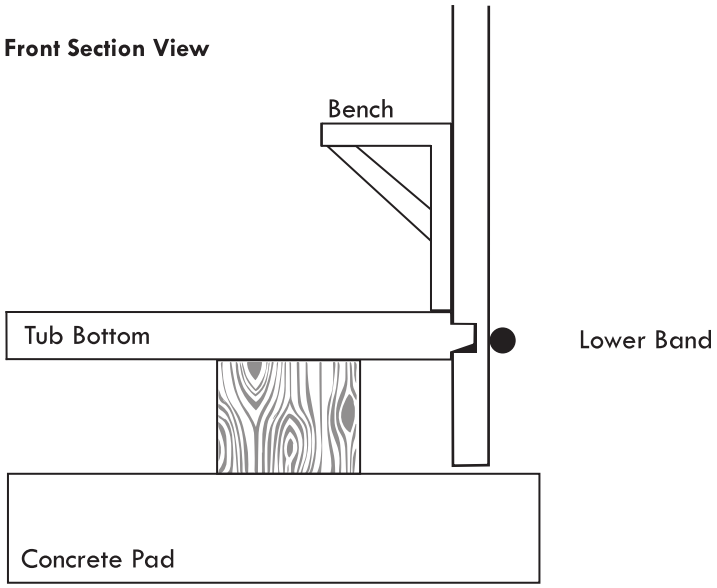
3. *Attaching Corbels To Stave Wall*

Use the supplied 2.25" stainless steel screws and screw through the pre-drilled holes of Corbel to attach to the tub wall.

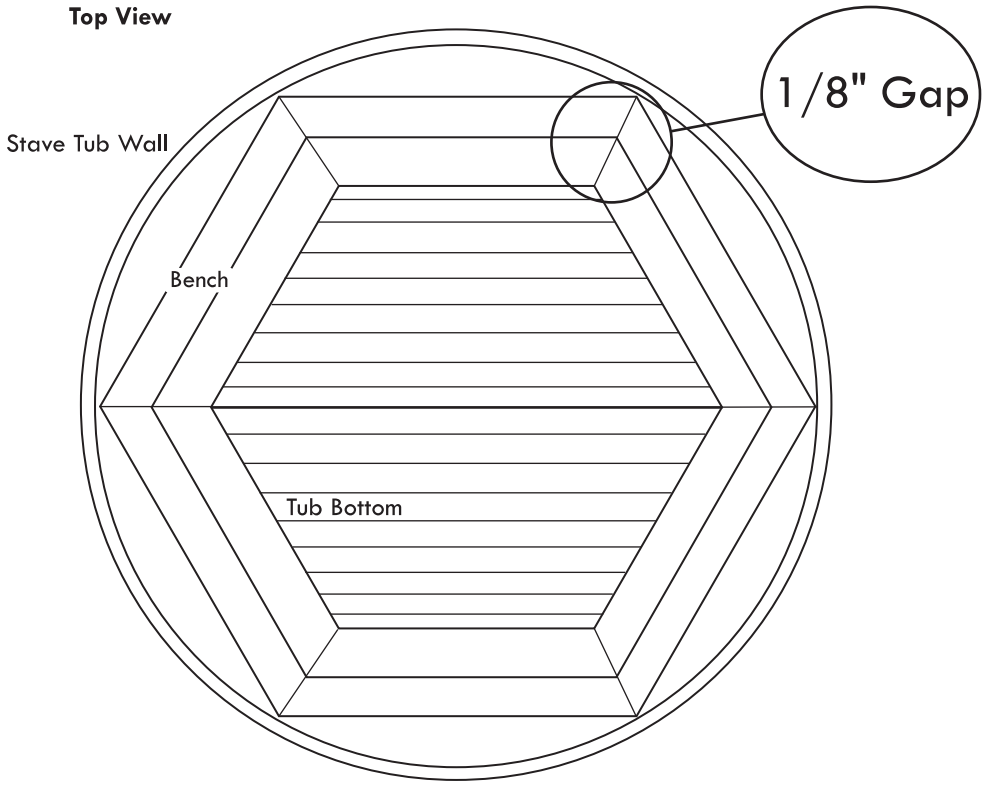


4. *Securing Bench Seat*

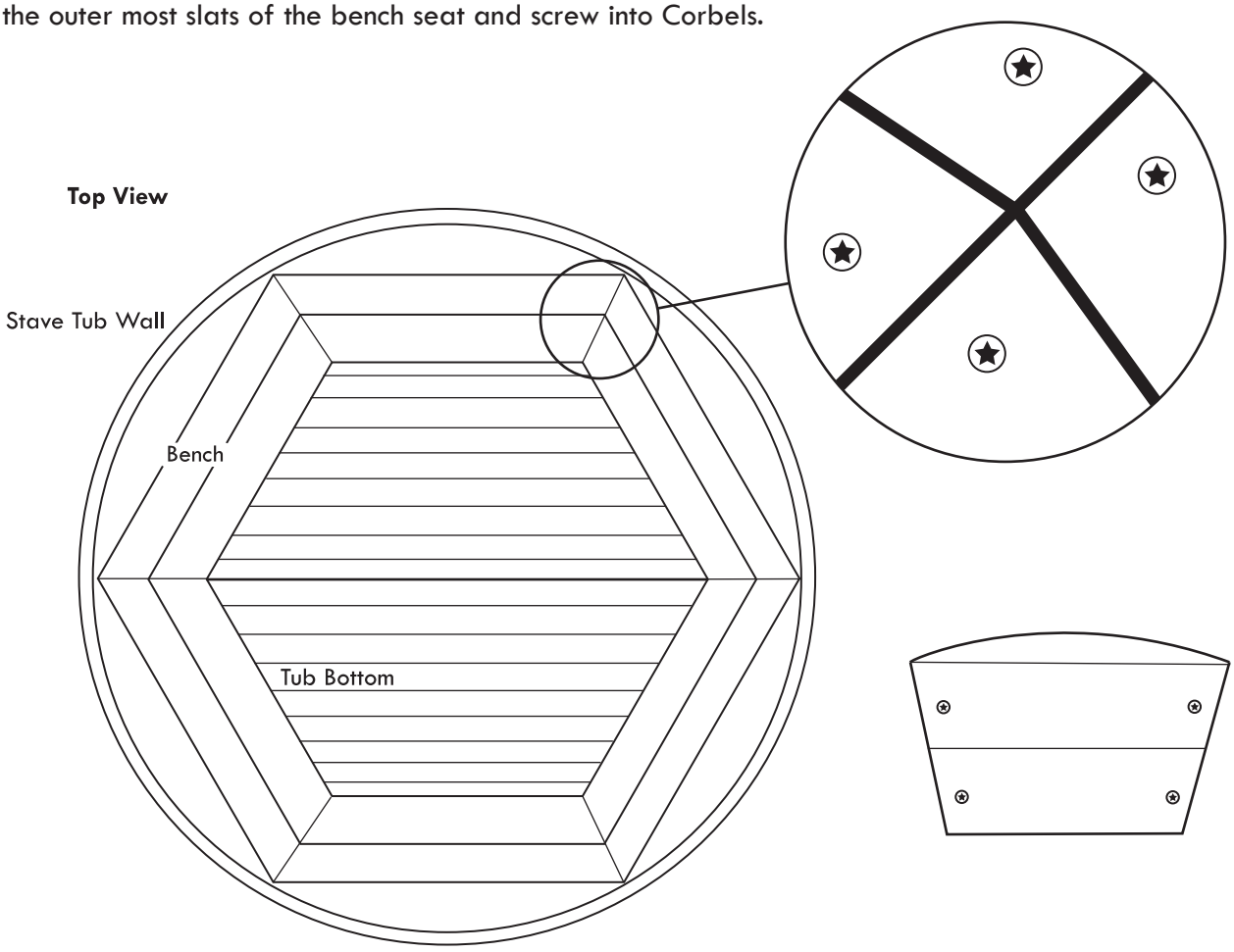
Place bench seats on the Corbels.



* There should be a 1/8" gap between each bench section at the joint, matching the 1/8" gap between the three slats of each bench section.



* Using included Star Drive Bit screws, place screws on both sides of the outer most slats of the bench seat and screw into Corbels.



The following instructions for 3' Height tubs for assembly of the Circular Sectional with a bench block:

3' Height tubs Bench Blocks, for benches to be measured down from the top edge 25 -1/2".

1. Secure Block

Place and use the blocks as you would the corbels described above in terms of location relative to the bench sections. Using two of the 3.5" or 4" Stainless Steel Screws per block, attach to the floor.

2. Attaching Bench Seat

The bench sections are placed upon the blocks and fastened as described above.

Assembly of The Oval Slab Bench For 4ft Diameter Tubs and Smaller.

Benches usually sit 26" bellow top of the tub. However, the bench can be mounted higher or lower to suit your personal preference.

1. Marking Bench Support Location

Mark the staves which you will secure the bench supports to, making sure that now screws will be screwed within ½" of the stave joint.

2. Securing the Supports to the Stave Wall

Attach to the wall of the tub using 2" stainless steel screws.

3. Attaching the Bench Seat to the Supports

Screw through top of the bench into the supports.

Finishing The Tub (optional):

1. Using a belt sander, sand the top of the staves untill they are all the same height.

2. Using a ¼" round over bit and a router, round over both the inside and outside edge of the top of the tub.

Safety Instructions

Owners of a hot tub should become well acquainted with the following safety instructions. It is the owner's responsibility to inform guests and family of these safety precautions and to see that they are followed.

1. When installing and using electrical equipment, these basic safety precautions should always be followed:
   a) To reduce the risk of injury, do not permit children to use this product unless they are always closely supervised.
   b) All electrical power supplied to this system must be connected to a ground-fault circuit-interrupter at the power source.
   c) The GFCI should be tested regularly. Push the test button on the GFCI. The product should not operate. Now push the reset button on the GFCI. The product should now operate normally. If the product fails to perform in this manner, there is a chance that there could be a ground current flowing, indicating the possibility of an electric shock. Disconnect the power until the fault has been identified and corrected.
   d) Bonding lugs are provided where appropriate and should be used to connect a minimum No. 8 AWG (8.4mm2) solid copper conductor between the equipment and any metal objects.

2. Risk of Electric Shock.
   a) The actual tub or spa should be installed at least 5 feet (1.5 m) from all metal surfaces. As an alternative, it may be installed within 5 feet of metal surfaces if each metal surface is permanently connected by a minimum No. 8 AWG (8.4 mm2) solid copper conductor to the wire connector on the terminal box that is provided for this purpose.
   b) Do not permit any electric appliance, such as a light, telephone, radio, or television, within 5 feet (1.5 m) of the tub.

3. Risk of Accidental Drowning.
   a) Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use the tub unless they are always supervised.
   b) The use of alcohol, drugs, or medication before or during hot tub use may lead to unconsciousness with the possibility of drowning.

4. When installing and using electrical equipment, these basic safety precautions should always be followed:
   a) The suction fittings in this system are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible. Never operate the hot tub if any part of the suction fittings is broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original fitting.
   b) The water in the hot tub should never exceed 104° F (40° C). Water temperatures between 100° F and 104° F (38° and 40° C) are considered safe for a healthy adult. Lower water temperatures are recommended for the elderly, for young children and when hot tub use exceeds 10 minutes.
   c) Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit water temperatures to 100° F (38° C).
   d) Before entering a hot tub, the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature-regulating devices varies.
   e) The elderly, obese persons, and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a hot tub.
   f) Persons using medication should consult a physician before using a hot tub since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.
   g) High water temperature and prolonged periods of exposure can raise internal body temperature excessively and impair the body's ability to regulate temperature. This effect is even heightened in children. High body temperature affects people differently. Excessive exposure may result in nausea, dizziness, or fainting. Until you become familiar with your own body's reaction to hot water immersion at various temperatures, you should limit your initial time in the water to 10 minutes at a maximum temperature of 100° F.
   h) Do not use the hot tub immediately following strenuous exercise.
   i) People with open sores or infectious conditions should not use the hot tub.
   j) Do not jump or dive into the hot tub, which can result in serious injury or death.
   k) Wet surfaces surrounding hot tubs are slippery and care must be used when entering and exiting. Installation and use of handrails are recommended.
   l) Glass and other breakable objects should not be brought into or near the hot tub.
   m) When not in use, the hot tub should be covered with a rigid cover (such as our Vinyl Insulating Cover). The cover should be completely removed prior to the use of the hot tub. Do not sit, stand, or lie on the vinyl insulating cover as it is not meant to support such weight. The cover should be locked or latched when the hot tub is not in use to prevent unauthorized use or entry, especially by small children.
   n) All outdoor installations should comply with local fencing codes, and some method should be employed to prevent unauthorized use or entry to the area around the tub
   o) Do not use attachments unless recommended by the manufacturer. Use the equipment in this system only for its intended use.
   p) Never drop or insert any object into any opening. Prevent small objects such as beads, buttons, etc. from entering the system through the jets or suction fittings. Remove loose fitting jewelry (such as earrings) before entering the hot tub.
   q) Bathers with long hair should tie their hair up or use a bathing cap to prevent hair from entering the system.
   r) Never operate this unit without the guard (screen cover) over the suction fittings, which can result in serious injury and possible drowning.
   s) Install the equipment so that access for future servicing is provided.
   t) Never service the unit without first interrupting the power supply by turning off the main circuit breaker in the homes electrical panel box.

Warranty

3 Year manufacturer warranty on all wooden products:

Roberts Hot Tubs warrants our wood products to the original end user, to be free from defects in material and workmanship, under normal usage, for a period of 3 years (36 months) from the date of manufacturing to the original end user. Such limited warranty does not cover damages caused by animals, fire, vandalism, excessive chemicals, improper installation and strain, abuse or abrasion, acts of God or use for purposes other than that for which the product was designed. Ordinary wear and tear, and improper installation are not considered to be a defect in workmanship or material. Any expressed or implied warranty is limited in duration to 3 years (36 months) from the date of manufacturing to the original end user. Roberts Hot Tubs shall not be liable for any incidental or consequential damages.

Any wood product deemed by Roberts Hot Tubs to have failed due to defects in materials or workmanship within 3 years (36 months) from date of purchase will be repaired or replaced, at our option, without charge for materials or labor (excludes cost of freight FOB Richmond, CA).

WARRANTY DOES NOT COVER IMPROPER USE OR ANY OF THE FOLLOWING:

- Wood product has been subjected to alteration, misuse, abuse, or if any repairs on the product are attempted by anyone other than our authorized representatives, unless express written approval is given.
- Damage due to excessive use of chemicals of water or contact with other chemicals on the material (this includes the use of stain and other wood treatment products).
- Fading of wood is not considered a defect and will naturally occur due to normal exposure to the elements and aging.
- Damage caused by improper installation or during transportation from the dealer to purchaser.
- Any damage resulting from any misuse, abuse, negligence, acts of God, accident or alteration, (i.e. cover lifts, animals and excessive weight or wind).

Implied Warranties: The only express warranties are set forth herein. Any implied warranties, including the warranties of merchantability and fitness for a particular purpose, are limited in duration to that of the expressed warranties. This warranty does not cover consequential damages or incidental damages including damage to property or injury arising for the use or inability to use this product. Some states do not allow the exclusion or limitation of consequential of incidental damages, so the above limitation may not apply to you.