Americast® Engineered Steel

A REMARKABLE ALTERNATIVE TO CAST IRON
Why Choose Americast

Cast Iron Bathtub
• Very heavy and difficult to work with
• Cold to the touch
• Susceptible to reverse impact damage

Enamel Steel Bathtub
• Loud noise transmitting qualities
• Poor insulating qualities
• Light weight and highly susceptible to damage

Princeton Americast Bathtub
• Structurally strong and weighs less than a cast iron tub
• Excellent noise buffering qualities
• Excellent heat retention qualities
• Consistent structural integrity

Americast combines the best attributes for a winning solution
Nothing Else is Americast

Americast Layered Construction

Americast is a composite construction composed of a porcelain enamel top layer over a robust layer of enameling-grade steel with a thick, insulating layer of structural composite all bonded together across the entire back side of the tub.
Americast - A material like no other

- Easier to install
  - Lighter than cast iron
  - Easily carried by two people
  - Soft-grip on apron brace
  - Easier to install and ship
  - Less time lost on jobs due to injury

- Better heat retention
  - Bath stays warmer, longer

- Better noise deadening
  - Showers are quieter

- Large bathing area
  - 42 gal for a more luxurious soak

- More comfortable
  - Beveled headrest for comfort
Princeton Americast with Integral Apron

Product Features and Benefits

- Made with Americast exclusive patented bonding process
- Weights less than cast iron
- Three structural support material layers
- 100% Lead free enamel
- StanSure slip resistant tub floor helps improve bathroom safety
- Soaking depth of 9-1/2”, deeper than Kohler Villager
- Factory manufactured integral tile flange
- Padded carrying bar for easy handling
- Prefabricated leveling grid for easier installation
- Lumbar support and beveled headrest – contoured for increased lower back support and improved head and neck comfort
- Comfortable low 14” step-over height
  - Ideal for daily showering
  - Meets ADA guidelines
- 10 Yr Limited Warranty (Commercial)
- Limited Lifetime Warranty (Residential)
- Made in USA
  - Qualifies for the Buy American Act
Installation Advantages Over Cast Iron

Princeton Americast delivers lighter weight for easier installation
- The Villager cast iron bathtub weighs substantially more (75% more) than the Princeton Americast bathtub
- Extra weight of cast iron could require additional floor reinforcement
- Lighter Americast weight means faster, easier installation
  - Less laborers needed to do the job
  - Less labor and faster installation helps save on project costs
- Lower Americast bathtub weight improves handling of the product on job sites and during unpacking and setting
- Lighter Americast weight reduces risk of back injuries during handling

Princeton Americast design enhancements provide installation benefits
- Prefabricated leveling grid allows tub to easily slide into alcove
  - Gives extra support to tub floor to prevent warping and cracking
  - Saves time when leveling
- Easy to carry using the comfortable padded carrying bar

<table>
<thead>
<tr>
<th>BRAND</th>
<th>PRODUCT NAME</th>
<th>SKU #</th>
<th>DIMENSIONS</th>
<th>SOAKING DEPTH</th>
<th>ADA COMPLIANT</th>
<th>CODES / STANDARDS</th>
<th>WEIGHT</th>
<th>MINIMUM FLOOR LOAD</th>
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<tbody>
<tr>
<td>Kohler</td>
<td>Villager</td>
<td>K-715</td>
<td>60&quot;L x 30-1/4&quot; W x 14&quot;H</td>
<td>8-5/8&quot; (219 mm)</td>
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</table>
Princeton Americast Integral Drain

Features and Benefits

- Integral overflow is factory-installed for a simplified one-point assembly
- Molded directly onto the outside tub wall and is completely protected by Americast’s proprietary structural composite backing material
- No need to purchase a drain so you save on parts
- Eliminating the need to install a drain saves not only material cost but also installation time helping make project completion more efficient and cost effective
- Integral drain option provides faster, easier more cost effective installation
- Saves money on parts and installation time

Included with Princeton Americast Integral Drain Bathtub
- Escutcheon plate and a lift and turn drain stopper
Princeton Americast Model Options

<table>
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<tr>
<th>Installation Feature</th>
<th>2390/2391</th>
<th>2392/2393</th>
<th>2394/2395</th>
<th>2396/2397</th>
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<tr>
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<td>60&quot;L x 30&quot; W x 14&quot;H</td>
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<td>60&quot;L x 34&quot; W x 14&quot;H</td>
<td>60&quot;L x 34&quot; W x 17-1/2&quot;H</td>
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<tr>
<td>Integral Drain</td>
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<tr>
<td>Above Floor Rough</td>
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<tr>
<td>Luxury Ledge</td>
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**Princeton Model Options**

- **Integral Drain**
  - Integral Factory installed overflow
  - For a faster, cost effective install
  - Saves labor and material costs

- **Above Floor Rough**
  - Leaves clearance between the tub’s underside and floor so waste pipe can be routed without breaking ground or relocating the drain
  - Saves installation time and material keeping project costs lower

- **Luxury Ledge**
  - Adds 4” to tub ledge for added storage or additional elbow room
Princeton Americast Tub Cover (Optional)

Helps protect the tub floor, walls, deck and apron against job site damage

• Ships inserted in tub so tubs are ready and prepared prior to installation
• Protects tub finish from normal jobsite wear during and after installation including:
  • Nails and screws on floor
  • Paint and spackle
  • Scuff marks from ladders, boots, etc.
  • Added protection for dropped tools, lumber or other project materials that could cause damage to the tub surface

Waffled floor design provides added floor protection
Americast Luxury Models

**Cambridge – 5” x 32” x 17¾”**
- Integral Apron
- Deeper tub for luxurious soak
- Great “sell up” from Princeton
- Also available as Whirlpool
- Extra wide luxury ledges for placement of toiletries

**Stratford – 5½” x 32” x 20”**
- Drop-in model
- Deep, luxurious soak
- Whirlpool available
- Can be under-mounted
Improved Americast StanSure Slip Resistant Surface

Improved StanSure slip resistant surface

- Stays cleaner longer for less cleaning
- Easier to clean, tough scrubbing not necessary
- A brighter white textured surface that is more visually appealing
- Full surface coverage – 56% more coverage than before
- Increased coverage helps to increase bathroom safety
§ **Styrofoam Sprayed with Polyurethane Backing**

- **Disadvantages:**
  - Styrene is listed on California Proposition 65 hazardous chemical list [https://www.p65warnings.ca.gov/](https://www.p65warnings.ca.gov/)

  - Styrene or Styrofoam is spot glued to metal surface
    - Results in air gaps between foam and metal
  - As the Styrofoam layer is compressed over time, it causes oil canning of the tub floor surface
    - Cracking and crazing of the enamel with water pooling can occur which causes rusting
  - Polyurethane coating is not as rigid or strong as Americast
  - Tile flanges are not reinforced
    - Flanges are covered with duct tape and sprayed over with black polyurethane

**WARNING:** This product can expose you to chemicals including styrene and styrene compounds, which are known in the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
Americast Sales Support Tools

Support

- 3” X 3” Americast Samples – side wall and waffle bottom
- Americast Technology website content with links from product page
- 4-page Americast Sell Sheet
- EPD – Environmental Product Declaration (Princeton, Cambridge & Stratford)
- On-line Training
- FAQs
FAQ’s

Question: There have been reported instances of Americast layered delamination in past years. Is there a current risk of this occurring?
Answer: The delamination matter was identified in 2008 and was resolved quickly with a corrective process initiated by our Quality Team along with our expert engineers. This resulted in improved bonding of the molded reinforcement composite backing to the enameled steel layer.

Process steps were taken to improve the adhesion of the Americast molded reinforcement composite backing to the metal layer. This resolution was a chemical change to the “primer” (to state it simply). Our Quality Team then tested the improved material for hot water immersion with a 7 day accelerated stress test, using elevated temperature water immersion testing. The “new primer system” passed this rigorous testing protocol. The material and makeup of each tub has undergone enhancements to address any past issues.

Question: What has changed/improved with Americast specific to the slip resistant surface?
Answer: American Standard is committed to improving the quality and performance of our products. An example related to Americast bathtubs is the focus on improving the slip resistant surface on our Americast tubs.

By modifying the composition and the application coverage of the tub floor, we have improved the surface so that it stays cleaner longer making it easier to clean and also improved the visual appearance to a brighter white while maintaining the friction for safety.

With regards to the improved coverage area, changing the design to cover the full tub floor surface vs the prior oval pattern, provides 56% more coverage than before helping to increase bathroom safety.

Question: A customer mentioned that they hear a hollow sound given off by Americast as compared to a cast iron tub. Is this accurate?
Answer: The density of materials will transmit sound with a different degree of attenuation, so when tapping on the installed product they may echo differently. When installed per the instructions, sounds through the floor are very similar, so most people cannot distinguish a difference between the two products. Americast is a patented layered technology with a molded reinforcement composite backing giving it noticeable sound deadening qualities. It is engineered to created bathtubs of unequaled strength, durability and weight.

Question: Does an Americast tub installation require more time and materials than to install Kohler’s cast iron tub?
Answer: A prefabricated leveling grid on the bottom of the Princeton Americast tub gives extra support to the tub floor to prevent warping and cracking and allows for it to be easily slid into place saving time when leveling. Mortar or bedding material is mentioned and is optional and not required. The Princeton Americast installation instructions call for a long side support stringer. Figure 6 from the Kohler cast iron tub installation instructions call for all four floor feet to be supported with metal shims mentioning that the tub may need to be moved in and out of the recessed area until it is shimmed properly. The lighter weight of the Americast tub compared to a cast iron tub means a one-person installation that won’t exhaust laborers. The lighter bathtub weight of the Americast tub improves handling on job sites also when unpacking and setting and makes carrying and installing easier.