

# How to Install your NEW S.R.Smith Handrail or Ladder

#### Retrofitting onto Existing Deck

- Core drill a minimum 4" diameter hole for a standard stainless steel or bronze anchor, or 5" diameter hole for a universal anchor at least  $\frac{1}{2}$ " deeper than the anchor depth.
- Clean and completely dry the hole with a pipe cleaner and shop vacuum.
- Ensure that the drain hole at the bottom of the anchor is not plugged to prevent corrosion. Refer to Figure below.
- Set anchor flush with deck, with wedge oriented away from pool. Refer to Figure below.
- Bond anchor to existing rebar in deck. Make sure to follow NEC or local building codes.
- Use either epoxy or compression cement with a minimum of 3,000 PSI. Epoxy or cement not included.
- Allow epoxy or cement to cure per manufacturer's instructions.
- Install the ladder or rail into the anchor.

#### New Construction

- Set anchor flush with the deck, with wedge oriented away from pool. Refer to Figure below.
- Bond anchor to rebar in deck. Make sure to follow NEC or local building codes.
- Pour concrete with minimum compression strength of 3,000 PSI. Concrete not included.
- Allow cement to cure per manufacturer's instructions.
- Install the ladder or rail into the anchor.



#### Replacing an Existing Rail

- Measure existing rail dimensions. See "Getting the Right Fit" below.
- Determine your replacement rail.
- Remove existing ladder or rail from anchors by untightening the wedge.
- Install new ladder or rail into existing anchors.



ARTISAN RAIL MODEL	EASILY REPLACES
Artisan Hand Rail	Figure 4
Artisan Stair Rail	5' 2-Bend or 5' 3-Bend Stair Rails
Artisan Ladder	24'' 3-Step Ladder
Artisan Deck-Mounted T	DMS-100, 101, 102 & 103
Artisan Deck-Mounted T	Deck Mounted Rail 50-902

## Suggested Anchor Types

Part Number	Description	Tubing
AS-104MG	4" Commercial Stainless steel Anchor	1.90" OD Tubing
AS-100B-SS	4" Residential Stainless steel Anchor	1.90" OD Tubing
AS-100P	Universal Anchor, Plastic	1.90" OD Tubing
AS-100B	4" Bronze Anchor	1.90" OD Tubing
AS-200B	4" Bronze Anchor	1.50" OD Tubing

### **Anchor Placement**

The table below outlines the distance between anchors and the minimum anchor setback. Before installing make sure to follow NEC or local building codes.

Rail Type	Center to Center of Anchors	Anchor Setback
4' 2-Bend	4'-O"	6" minimum
5' 2-Bend	5'-0"	6" minimum
6' 2-Bend	6'-0"	6" minimum
4' 3-Bend	4'-O"	6" minimum
5' 3-Bend	5'-0"	6" minimum
5'6" 3-Bend	5'-6"	6" minimum
6' 3-Bend	6'-0"	6" minimum
6'6" 3-Bend	6'-6"	6" minimum
7' 3-Bend	7'-0"	6" minimum
8' 3-Bend	8'-0"	6" minimum
DMS-100	8"	6" minimum
DMS-101	8"	6" minimum
DMS-102	8"	6" minimum
DMS-103	8"	6" minimum
Figure 4	8"	22"
Residential Ring	3.63"	19"
Spa Rail	No Anchor- drills into deck	19"
Artisan Hand Rail	8"	6" minimum
Artisan Stair Rail	5'-0"	6" minimum
Artisan Ladder	20"	17.5"
Artisan Deck-Mounted Stair Rai	l 8"	6" minimum
Artisan Deck-Mounted Hand Ra	ail 36"	6" minimum
Camelback Ladder	19" or 20"*	17"
Economy Ladder	19" or 20"*	17"
50-901	30"	6' minimum
50-770	32"	6" minimum
50-902	36"	6" minimum
50-766	4O"	6" minimum
50-903	42"	6" minimum

\*Elite models are 20'' O.C. and the Econoline models are 19'' O.C. See manufacturer's specifications for more product detail.