

Techni-Beam Diving Board
Techni-Spring Steel & Fiberglass Stand

### JUMP BOARD

#### **INSTALLATION MANUAL**



This INTER-FAB diving board shall be installed only by a professional swimming pool contractor or with the direct supervision of a licensed professional engineer or architect. Diving boards may be installed only on swimming pools properly designed for their use.

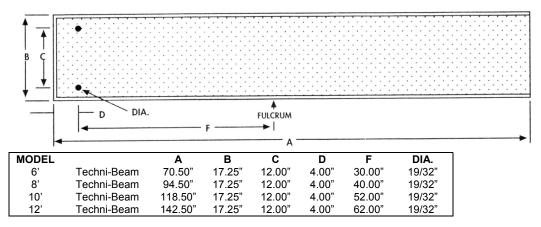
Diving boards improperly installed can be very dangerous to the user resulting in possible serious head and/or spinal column injury, including the death of the user.

It is very important that diving boards be installed in strict accordance with the current "standard for residential (or commercial) swimming pool" published by National Spa & Pool Institute, 2111 Eisenhower Avenue, Alexandria, VA 22314.

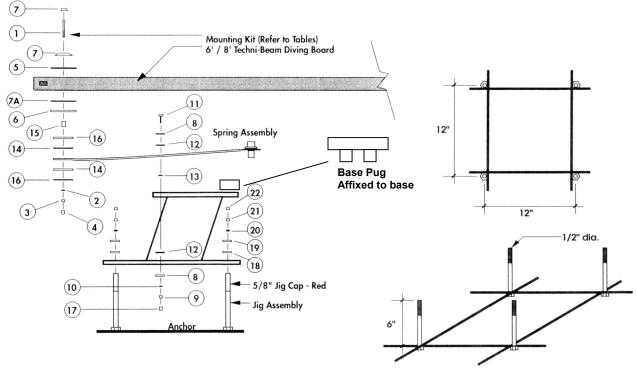
In addition to the above standard, these installation instructions provided by INTER-FAB, Inc. must be diligently followed.

It is also important that any and all warnings provided with the diving board be strictly adhered to and posted in a conspicuous location. If none were provided, or they are misplaced, please purchase warning signs from your pool contractor or professional swimming pool supply store and post them in a location that the users of the diving board can see.

## TECHNI-BEAM DIVING BOARD WITH TECHNI-SPRING STAND



#### Fig. 2. TECHNI-SPRING STEEL STAND



#### **TIGHTENING SCHEDULE:**

- 1. Secure stand to jig with anchor hex nuts at 40-50 ft-lbs.
- 2. Secure spring to sand with mounting hex nuts at 40-50 ft-lbs.
- 3. Secure board to stand mounting hex nuts at 20-25 ft-lbs.

#### **BOARD MOUNTING KIT: (TB-M)**

- 1. ½' x 4-½" Carriage Bolt C/S Zinc Plated (2 ea.)
- 2. ½" Lock Washer C/S Zinc Plated (2 ea.)
- 3. ½" Hex Nut C/S Zinc Plated (2 ea.)
- 4. ½" White Rubber Nut Cap (2 ea.)
- 5. ½" x 2" Black Rubber Mounting Washer (4 ea.)
- 6. ½" x 2" Flat Washer C/S Zinc Plated (2 ea.)
- 7. White Plastic Recessed Mounting Washer Assy (2 ea.)
- 7A. ½" x 2" Red Rubber Mounting Washer (2 ea.)

#### **TECHNI-SPRING BOLT: (TS-M)**

- 8. 5/8" x 1- 3/4" Flat Washer C/S Zinc Plated (2 ea.)
- 9. 5/8" Hex Nut C/S Zinc Plated (2 ea.)
- 10. 5/8" Lock Washer C/S Zinc Plated
- 11. 5/8" x 2" Hex Head Bolt C/S Zinc Plated Grade 5 (2 ea.)

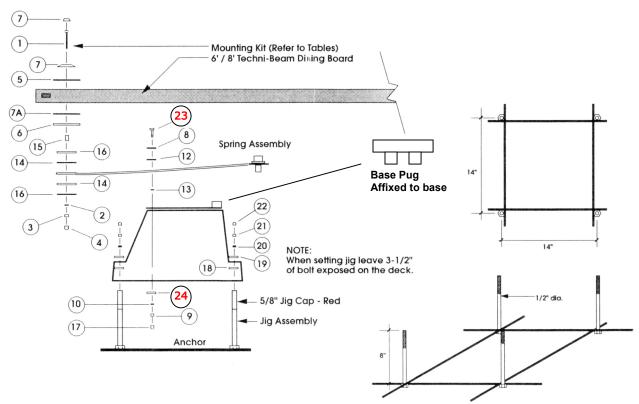
#### TECHNI-SPRING BOLT KIT: (TS-M) (cont.)

- 12. 5/8" 1- 3/4" Nylon Protective Washer (4 ea.)
- 13. 5/8" x 2" Square Nylon Washer (2 ea.)
- 14. 1/2" x 1- 1/2" Round Nylon Washer (4 ea.)
- 15. 1" Spacer Schedule 40 Pipe C/S Zinc Plated (2 ea.)
- 16. ½" x 1- 3/8" Flat Washer C/S Zinc Plated (4ea.)
- 17. 5/8" White Rubber Nut Cap (2 ea.)

#### **TECHNI-SPRING STEEL STAND BOLT KIT: (TS-BK)**

- 18. ½" x 1- ½" Round Nylon Washer (4 ea.)
- 19. 1/2" x 1- 3/8" Flat Washer C/S Zinc Plated (4 ea.)
- 20. 1/2" Lock Washer C/S Zinc Plated (4 ea.)
- 21. 1/2" Hex Nut C/S Zinc Plated (4 ea.)
- 22. 1/2" White Rubber Nut Cap (4 ea.)

Fig. 2. TECHNI-SPRING FIBERGLASS STAND



#### **TIGHTENING SCHEDULE:**

- Secure stand to jig with anchor hex nuts at 40-50 ft-lbs.
- Secure spring to sand with mounting hex nuts at 40-50 ft-lbs.
- Secure board to stand mounting hex nuts at 20-25 ft-lbs.

#### **BOARD MOUNTING KIT: (TB-M)**

- 1/2' x 4- 1/2" Carriage Bolt C/S Zinc Plated (2 ea.)
- ½" Lock Washer C/S Zinc Plated (2 ea.)
- 10. 1/2" Hex Nut C/S Zinc Plated (2 ea.)
- 11. ½" White Rubber Nut Cap (2 ea.)
- 12. ½" x 2" Black Rubber Mounting Washer (4 ea.)
- 13. ½" x 2" Flat Washer C/S Zinc Plated (2 ea.)
- 14. White Plastic Recessed Mounting Washer Assy (2 ea.)
- 7A. 1/2" x 2" Red Rubber Mounting Washer (2 ea.)

#### **TECHNI-SPRING BOLT: (TS-M)**

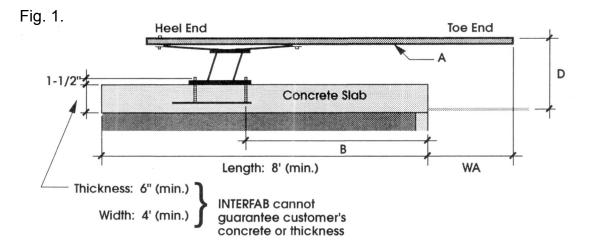
- 8. 5/8" x 1-3/4" Flat Washer C/S Zinc Plated (2 ea.)
- 9. 5/8" Hex Nut C/S Zinc Plated (2 ea.)
- 10. 5/8" Lock Washer C/S Zinc Plated
- 11. 5/8" x 2" Hex Head Bolt C/S Zinc Plated Grade 5 (2 ea.)

#### TECHNI-SPRING BOLT KIT: (TS-M) (cont.)

- 12. 5/8" 1- 3/4" Nylon Protective Washer (4 ea.)
- 13. 5/8" x 2" Square Nylon Washer (2 ea.)
- 14. 1/2" x 1- 1/2" Round Nylon Washer (4 ea.)
- 15. 1" Spacer Schedule 40 Pipe C/S Zinc Plated (2 ea.)
- 16. ½" x 1- 3/8" Flat Washer C/S Zinc Plated (4ea.)
- 17. 5/8" White Rubber Nut Cap (2 ea.)

#### TECHNI-SPRING STEEL STAND BOLT KIT: (TS-BKF)

- 18. 1/2" x 1- 1/2" Round Nylon Washer (4 ea.)
- 19. 1/2" x 1- 3/8" Flat Washer C/S Zinc Plated (4 ea.)
- 20. 1/2" Lock Washer C/S Zinc Plated (4 ea.)
- 21. 1/2" Hex Nut C/S Zinc Plated (4 ea.)
- 22. ½" White Rubber Nut Cap (4 ea.)
- 23. 5/8" x 3" Hex Head Bolt C/S Zinc Plated Grade 5 (2 ea.) (Hardware for spring assembly to fiberglass stand)
- 24. 5/8" x 1- 3/4" Moon Washer C/S Zinc Plated (2 ea.) (Hardware for spring assembly to fiberglass stand)



All diving board installation should be made in accordance with National Spa & Pool Institute "Standards for Residential Pools" dated April 25, 1995. Copies of this standard are available from, NSPI, 2111 Eisenhower Avenue, Alexandria, VA 22314. Refer to this standard for proper board overhang (WA) for your pool. Below dimensions for guide only.

- Point A: Point A is the point from which all other forward dimensions of width; length and depth are then established for Minimum Diving Water Envelope. If the tip of the diving board or diving platform overhang is located at a distance of WA or greater from the deep end wall and the water depth at that location is equal to or greater than the water depth requirement at Point A See Table 2, then the point on the water surface directly below the center of the tip of the diving platform shall be identified as Point A.
- Location of Point A: The minimum Diving Water Envelope dimensions for pools manufactured diving equipment shall be taken from Point A as shown in Figure 5. Point A shall be defined as the point on the water surface where the water depth is required for Point A and is provided at a distance of WA as shown in Table 2 from the deep end wall. The center of the tip of the diving board shall be located directly above point A.

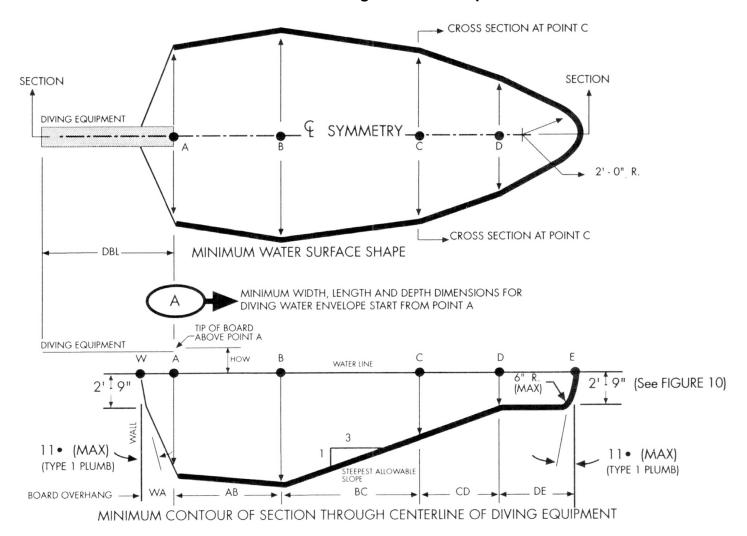
Refer to NSPI Guideline for specific design configurations

#### Note:

- 1. See Appendix J for individual Pool Type Minimum Diving Envelopes.
- 2. \* Minimum length between points CD may vary based upon water depth at point D and the slope between C & D.
- 3. \*\* ABBREVIATIONS: DBL=DIVING BOARD LENGTH, DB=DIVING BOARD, JP=JUMP BOARD, HOW=HEIGHT OVER WATER.
- 4. IMPORTANT: The walls of a Type I Pool, when defining the Maximum Diving Water Envelope shall be plump.
- 5. Figure 5 drawings are not to scale.
- 6. All dimensions are minimum, except where noted as maximum.
- 7. One half (½) the width shown at each point shall be available on each side of the diving equipment centerline.
- 8. Minimum water depth under tip of diving board (point A) is important to maintain.

# NSPI – POOL SPECIFICATIONS FOR DIVING EQUIPMENT

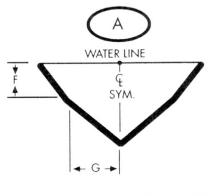
Figure 5
Minimum Diving Water Envelope



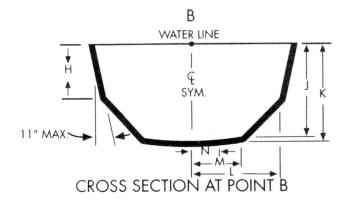
POOL TYPE	MAX. DIVING BOARD LENGTH	MAX. HEIGHT OVER WATER	MINIMUM DEPTHS AT POINT				MINIMUM WIDTHS AT POINT			MINIMUM LEGTHS BETWEEN POINTS						
	DBL **	HOW **	Α	В	С	D	Α	В	С	D	WA	AB	ВС	CD*	DE	WE
0	DIVING EQUIPMENT IS PROHIBITED															
1	6' DB/6' JB	20'	6'-0"	7'-6"	5'-0"	2'-9"	10'-0"	12'-0"	10'-0"	8'-0"	1'-6"	7'-0"	7'-6"	VARIES	6'-0"	28'-9"
II	8' DB/6' JB	20'	6'-0"	7'-6"	5'-0"	2'-9"	12'-0"	15'-0"	12'-0"	8'-0"	1'-6"	7'-0"	7'-6"	VARIES	6'-0"	28'-9"
III	10' DB/8' JB	26'	6'-10"	8'-0"	5'-0"	2'-9"	12'-0"	15'-0"	12'-0"	8'-0"	2'-0"	7'-6"	9'-0"	VARIES	6'-0"	31'-3"
IV	10' DB/8' JB	30'	7'-8"	8'-6"	5'-0"	2'-9"	15'-0"	18'-0"	15'-0"	9'-0"	2'-6"	8'-0"	10'-6"	VARIES	6'-0"	33'-9"
V	12' DB/8' JB	40'	8'-6"	9'-0"	5'-0"	2'-9"	15'-0"	18'-0"	15'-0"	9'-0"	3'-0"	9'-0"	12'-6"	VARIES	6'-0"	36'-9"

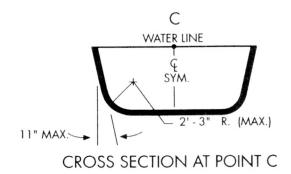
# NSPI – POOL SPECIFICATIONS FOR DIVING EQUIPMENT

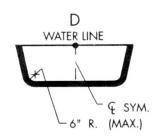
Figure 5
Minimum Diving Water Envelope



CROSS SECTION AT POINT A







CROSS SECTION AT POINT D

CROSS SECT	IONAL DIMENSION	IS AT POINT A		POOL						
F	F G H		J	K L		М	N	TYPE		
DIVING EQUIPMENT IS PROHIBITED										
2'-9"	5'-0"	4'-0"	7'-2 ½"	7'-6"	6'-0"	3'-9"	2'-1 ½"	I		
2'-9"	3'-10"	4'-2"	7'-2 ½"	7'-6"	6'-8"	3'-9"	2'-1 ½"	II		
2'-9"	4'-4 3/4"	4'-4 1/2"	7'-5 ½"	8'-0"	6'-7"	3'-11 ½"	1'-7" ½"	III		
2'-9"	5'-10 ½"	3'-10"	7'-8"	8'-6"	8'-3"	5'-7"	2'-7"	IV		
2'-9"	6'-2"	3'-11 ½"	7'-9 ½"	9'-0"	8'-2 1/2"	5'-9"	2'-1"	V		

## TECHNI- SPRING STEEL & FIBERGLASS JUMP STAND Chart 1, Refer to Fig. 1 (NSPI STANDARDS FOR RESIDENTIAL POOLS – 1995)

BOARD	POOL TYPE	Steel Base: Distance For Setting Front Bolt of Jig From Water's	Fiberglass Base: Distance For Setting Front Bolt of Jig From Water's Edge	Minimum Overhang Plus or Minus 3"	Maximum Height of Board Over Water
Α		Edge	B	WA	HOW
		В	_		
6'		32"	28"	18"	20"
6'	II	32"	28"	18"	20"
6'	III	26"	22"	24"	26"
8'	III	45"	41"	24"	26"
6'	IV	20"	16"	30"	30"
8'	IV	39"	35"	30"	30"
6'	V	14"	10"	36"	40"
8'	V	33"	29"	36"	40"

## \*(WA) DIMENSION IS VALID ONLY IN CONJUNCTION WITH (A) DEPTH (SEE FIG. 5 FOR POOL TYPE AND BOARD TO BE USED)

When coping is used do not set front bolts of jig closer than 3" from the back edge of coping.

### INSTALLATION INSTRUCTIONS

BE SURE CONCRETE DECK SURROUNDING ANCHOR JIG COMPLIES WITH MINIMUM DIMENSIONS AS SHOWN IN FIG. 1

- 1. Read carefully Fig. 5 DIMENSIONS FOR RESIDENTIAL POOLS WITH DIVING EQUIPMENT of the National Swimming pool Institute Standards for Residential Pools 1995.
- 2. The four-bolt jig should be set in accordance with the Chart 1 Rule Sheet above and Fig.1, with the two "RED" capped bolts closest to the pool. This will give the desired minimum overhang. Board must be placed at deep end of pool on centerline.
- 3. Make sure bolts project out of concrete  $1 \frac{1}{2}$ " with ample concrete depth below jig. (On the Fiberglass Stand, bolts will project out  $3 \frac{1}{2}$ "). Refer to Fig. 1 for minimum deck thickness, width and length.
- 4. When finishing deck surface, maintain level deck where jig bolts project out so that the stand makes uniform contact with deck surface.
- 5. Before mounting stand, chisel away any excess concrete that may have built up around jig bolts and remove the red and yellow bolt caps.
- 6. Place stand over jig bolts and secure according to Fig. 2. Tighten ANCHOR hex nuts. Use TIGHTENING SCHEDULE in fig. 2 when tightening all MOUNTING and ANCHOR hex nuts.
- 7. Place springs over stand and secure according to fig. 2. Tighten MOUNTING hex nuts.
- 8. With TECHNI-SPRING JUMP STAND properly secured, select board size according to Chart 1. Install board to stand according to Fig. 2 and tighten MOUNTING hex nuts.
- 9. ONLY ONE PERSON ON DIVING BOARD AT A TIME, WITH A MAXIMUM WEIGHT LIMIT OF 250 LBS.