



THUNDER BOLT ASSEMBLIES (CABLE LATCH)

PRODUCT INFORMATION AND INSTALLATION BROCHURE



Introduction

Thunder Bolts or Cable Latch are made from high grade stainless steel and are used for holding cable in cable raised areas like vertical wall or rock near pool site. Our anchor bolts are very reliable to hold your swimming pool safety covers cable in position.

Highly reliable in handling overload situations

Our Thunder Bolts are made from high grade stainless steel with a maximum ultimate tensile strength and it can easily take full load of entire safety pool cover without deformation. It can also with stand and function in all the weather condition with the few amount of continuous over load. Our Thunder Bolts Assembly comes with washer, Thunder bolt and expandable anchor which holds any surface like concrete, rock or wooden partition.

Long functional life and endurance

These Thunder Bolt Assemblies are made of high grade stainless steel that ensures a long functional life to hold pool safety cover cable in any weather conditions with the constant load.

Ease of Installation

Thunder Bolt Assemblies are easy to install in areas like vertical concrete wall, rock or wooden partition near pool site. For installation procedure of this product, see installation section below.

Corrosion resistance

Our Thunder Bolt assemblies are totally corrosion resistant and the material used for manufacturing these Thunder Bolt assemblies are selected with consideration of all the weather conditions and the swimming pool chemicals. These Thunder Bolt assemblies are electroplated (optional) for extra corrosion resistance.

Quality

For manufacturing these products, we bring into process raw materials of high grade and are processed to give a shape in best industrial conditions.

Packing options

If tangling is a problem we can assist by offering a number of customized packing options including vacuum formed plastic trays or individual wrapping.

IMPORTANT:

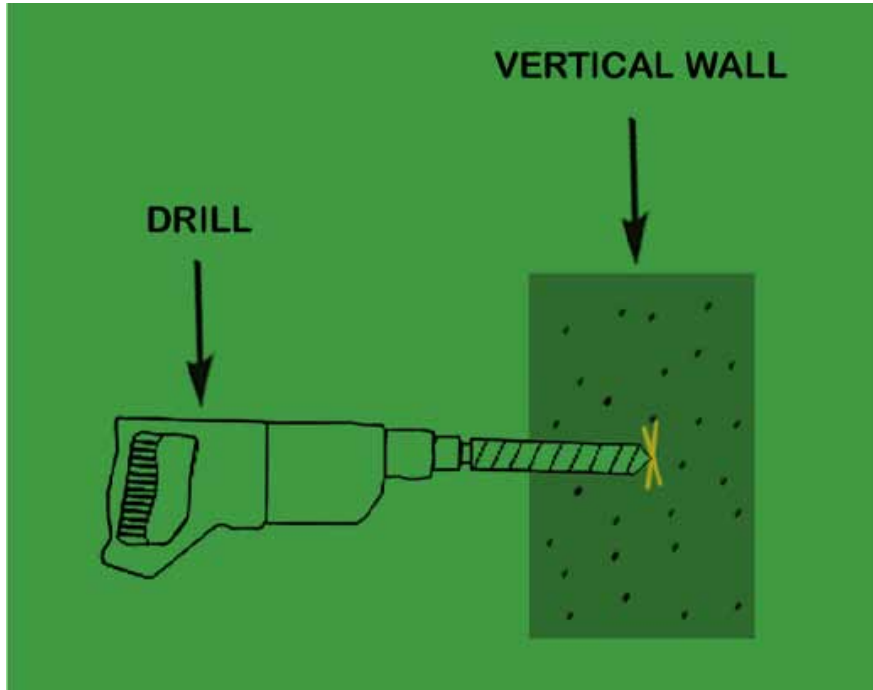
It is very important to determine and mark the exact location of anchor hole for Installation of Thunder Bolt Assembly before installation procedure begin. This product brochure gives information only on how to best install Thunder Bolt Assembly in stable surfaces like vertical cement or concrete wall, rock or wooden partition near pool site. For choice of appropriate anchor device and determining and marking the exact location for installation of this product, please refer to the installation manual that came with your swimming pool safety cover or ask your swimming pool safety cover provider or manufacturer for the same. For additional general guidance on installation of swimming pool safety cover you can download our swimming pool safety cover installation guidance pdf from our download section. Suzy International holds no responsibility for Guarantee or Warranty voidance due to improper installation of your swimming pool safety cover or any other possible reasons that affects you Guarantee or Warranty, and also any other consequences arising during or after installation of your swimming pool safety cover. Information provided here by Suzy International is with sole intention to demonstrate different ways of installation of swimming pool safety cover hardware and Suzy International has nothing to do with Guarantee or Warranty policy of individual companies selling swimming pool safety cover. Please refer to Disclaimer of Suzy International before beginning installation procedure of you swimming pool safety cover.

TOOLS REQUIRED FOR INSTALLATION

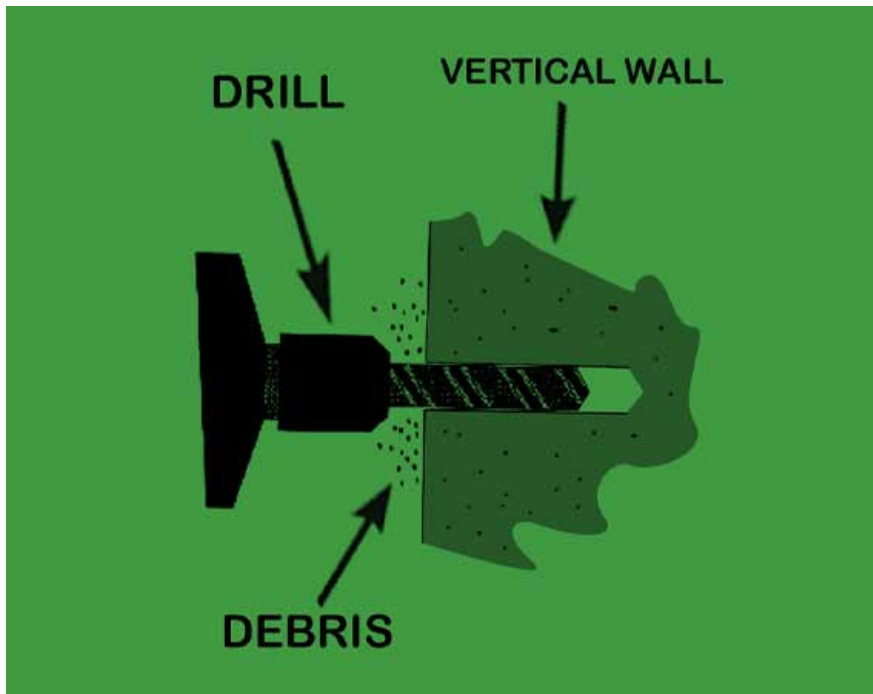
- Heavy Duty Rotary Hammer Drill
- 3/8" Concrete drill bit with long shaft (carbide / diamond tipped)
- Tape measure
- Hammer or mallet

ANCHOR HOLE DRILLING

Once you have determined and marked the exact locations of Anchor hole, you can drill holes to accept the Wall Anchor. Measure the drill bit beveled depth. Then add 2" (length of wall anchor). Mark this measurement onto your drill bit with electrical tape or use drill guide. Drill the hole into the vertical wall or rock **NO MORE THAN THE DEPTH** of the Wall Anchor taking care not to over-ream the diameter of the hole. If this does happen, simply apply some adhesive to the Wall Anchor before setting it into the hole. Drilling dust can be removed with a vacuum cleaner or carefully blown out.



START DRILLING ON MARKED ANCHOR HOLE POSITION



HOLE DRILLED TO A DEPTH OF 5" + BEVEL DEPTH

Some chipping of drilled surface is normal. This chipping can be reduced by using a sharp diamond tip drill bit and a high speed rotary hammer drill.

INSERTION OF WALL ANCHOR INTO DRILLED HOLE

When your anchor hole is properly prepared, remove the Bolt from the Anchor Bolt Assembly and the Wall Anchor can be lightly tapped into position with a hammer or mallet until it is flush with the wall or rock surface.

Now the Bolt is screwed into the Wall Anchor forcing the Anchor to expand to a tight fit in the wall.

Note:

When an installation includes raised wall or rock, Anchor Bolt Assemblies are used for anchorage due to inadequate deck area. Install this section of cover first. Never attempt to bypass the use of Anchor Bolt Assemblies when cover is provided with them. All covers must be installed drum-tight to eliminate excessive wear. Any gaps will render installation improper and non-safe. There should be no more than 18" spacing between two Anchor Bolt Assemblies installed.

GENERAL INFORMATION ABOUT MOST COMMONLY USED MATERIALS BY SUZY INTERNATIONAL FOR MANUFACTURING THUNDER BOLT ASSEMBLY

(Customer ordering large quantities can choose any one material type from below or specify any specific material requirements at the time of ordering)

Material Types: 300 Series Austenitic Stainless Steel
Type 302
Type 304
Type 304L

Material Group: Stainless Steel Rod

Stainless Steel Description:

Our Thunder Bolt Assemblies are manufactured from austenitic stainless steel type 302,304 or 304L. Austenitic stainless steels are iron-chromium-nickel alloys which are hardened only by cold working. Nickel is the main element carried within the alloys of this class while carbon is kept to low levels. When chromium is increased to raise the corrosion resistance of the metal, nickel must also be increased to maintain the austenitic structure. These alloys are slightly magnetic in the cold-worked condition, but are essentially non-magnetic in the annealed condition in which they are most often used. The austenitic types feature adaptability to cold forming, ease of welding, high-temperature service and in general, the highest corrosion resistance. Surface of these stainless steels may have a residue of nickel. This is normal and will not affect the function of the part.

Following are brief descriptions of some of the most commonly used materials by Suzy International for manufacturing Thunder Bolt Assembly:

Type 302 stainless steel is a general purpose material with greater corrosion resistance but less work hardening than type 301. This is the basic alloy of the austenitic group often referred to as 18:8 stainless steel.

Type 304 stainless steel has lower carbon to minimize carbide precipitation. It is less heat sensitive than other 18:8 stainless steels. Used in high-temperature applications.

Type 304L stainless steel has an extra low carbon content to avoid harmful carbide precipitation in welding applications. Its corrosion resistance is comparable to type 304.

Typical Analysis in Percent

Type#	UNS#	C	Cr	Ni	Mn	Si	S	P	Mo
302	S30200	.15	17-19	8-10	2.0	1.0	.03	.04	
304	S30400	.08	18-20	8-12	2.0	1.0	.03	.04	
304 L	S30403	.03	18-20	8-12	2.0	1.0	.03	.04	

(Percent maximum unless stated as a range or minimum)

Other impurities do not preclude the possible presence of other unnamed elements. However, analysis shall be regularly made only for the alloying elements listed in the table. The major element that is not analyzed shall be determined by difference between the sum of those elements analyzed and 100 percent. By agreement between the manufacturer and the purchaser, the limits may be established for elements not specified and analysis done.

Typical Physical Properties

Type#	Density lb/in ³	Specific Heat BTU/ °F/lb 0-100 °C	Thermal Conductivity BTU/Ft ² /Ft/ Hr/°F 100 °C	Coefficient of Thermal Expansion Per °F x 10 ⁻⁶ 0-100 °C	Electrical Resistivity Microhm-cm 21 °C	Magnetic Permeability (Annealed) μ
302	.29	.12	9.4	9.6	72.0	1.008
304	.29	.12	9.4	9.6	70.0	1.008
304 L	.29	.12	9.4	9.6	70.0	1.008

Typical Mechanical Properties

(Annealed Cond.) Type#	Tensile Strength 1000Psi	Yield Strength 1000 Psi	Elongation in 2 Inches, %	Reduction of Area, %	Brinell Hardness
302	90	40	55	70	150
304	85	35	55	70	150
304L	80	30	55	70	140

Disclaimer

some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. All materials specifications are provided for general reference purposes only. Material specification may vary or be subjected to change. This information is provided “as is” and Suzy International makes no warranty of any kind with respect to the subject matter or accuracy of the information contained herein. Suzy International specifically disclaims all warranties, expressed, implied or otherwise, including without limitation, all warranties of merchantability and fitness for a particular purpose. In no event shall Suzy International be liable for any special, incidental, indirect or consequential damages of any kind or any damages whatsoever resulting from loss of use, data, profits, whether or not advised of the possibility of damage, and on any theory of liability, arising out of or in connection with the use of the information contained herein. This publication may include technical inaccuracies or typographical errors. Changes may be periodically made to the information herein.

Custom Thunder Bolt Assembly Design:

Thunder Bolt Assembly design considerations are numerous. Our Engineers can assist you in your design efforts if you just provide a few basic design parameters.

To request for exact dimensions or technical information for this product, please contact:
techinfo@suzyinternational.com

Suzy International provides following additional services to their customers as a routine:

- Suzy International is a manufacturer and hence apart from our standard products, we can also customized and provide product according to our customer's specification and design.
- We provide customized labeling on product as well as on packaging and we have different packing options with standard size wooden pallet for handling and storage efficiency.
- We have a team of highly qualified engineers and technical staff that provides technical support to our customers in developing new product or designs.
- We have a dedicated team that gives you prompt response regarding any issue arising while the product is in the manufacturing process, or in transit or even after delivery.
- We have varied shipping options in order to cater to the customer's specific transportation needs – from our factory to customer's desired destination.

Suzy International assures complete peace of mind for their customers, by handling virtually all the parameters and aspects – right from customer placing an order to receipt of finished goods at customer's end.

OUR PRODUCTS

BRASS ANCHORS

Standard Concrete Brass Anchor
Single Knurling Concrete Brass Anchor
Double Knurling Concrete Brass Anchor
Single Twist Pop-up Concrete Brass Anchor
Wood Deck Brass Anchor

DRAWBAR COMPRESSION SPRINGS

Heavy Duty Large Spring
Heavy Duty Small Spring
Medium Duty Large Spring
Medium Duty Small Spring
Heavy Duty Double Coil Spring
Medium Duty Double Coil Spring

ALUMINIUM GARDEN SPIKE/STAKES

Aluminium Garden Spike

Standard Aluminium Pipe Anchor Assembly

Tapered End Aluminium Pipe Anchor Assembly

Crimped Head Aluminium Pipe Anchor Assembly

MISCELLANEOUS PRODUCTS

S.S. Buckle

Aluminium Cup

D-Ring

Square Ring

Brass Anchor Collar

Small Spring Cover

Large Spring Cover

Double Coil Spring Cover

Large Wall Anchor Bolt

Small Wall Anchor Bolt

Thunder Bolt

Allen Wrench

Temping Tool Standard

Temping Tool Aluminium

Installation Rod

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