



LDT vs. TITEN HD

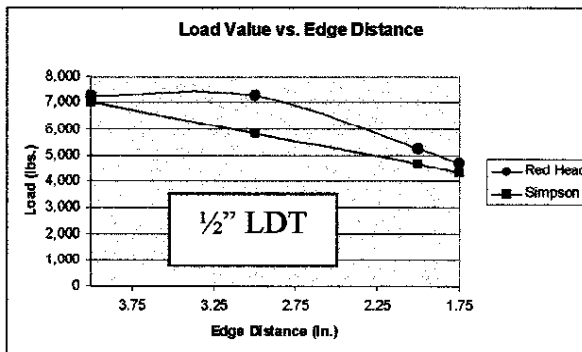
Edge Comparative

2000 psi Concrete Tensile Performance Tables
(Load values in lbs.)

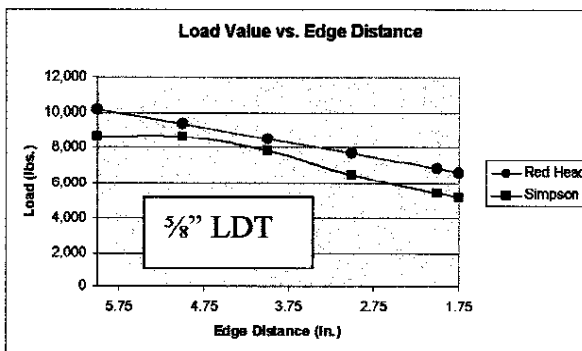
Diameter	Embedment	LDT	TITEN HD*	LDT vs. Titen
	2"	3,580		
1/2"	3 1/2"	7,252	7,013	3.4%
	4 1/2"	10,176	8,593	18.4%
5/8"	2 3/4"	5,277	4,610	14.5%
	3 1/2"	7,973	6,864	16.2%
	4 1/2"	11,569	9,714	19.1%

- *Values were linearly interpolated from published pull-out data.
- Residential Home building typically occurs in 2000-3000 psi concrete.

Edge Distance Performance



Anchoring close-to-edge is a typical application in the field. However, this critically affects an anchor performance. LDTs hold their value better as an anchor gets close to an edge when compared to the Titen HD. The following shows the values of an LDT vs. Titen HD 1/2" size embedded 3 1/2" into 2000 psi concrete.



LDT's design holds their value as the anchor gets closer to an edge better than other competitor's products!

LDT Vs CAST IN PLACE

APPLICATION: Replace ½" cast-in-place anchor with ½" x 4" or 5" LDT used for garage door framing "bucks" material attachment.

Clearly the LDT design for many uses. This paper is written to explore only one major application.

EXPANDING THE MARKET:

Our largest competitor is the cast-in-place anchor market.

Focus on conventional anchor improvements is important however **Contractors** typically do not complain about anchor performance today. Wedge anchors work, cast-in-place works. They prefer faster, cheaper if possible, easier to install product. LDT solves the production builder/framer problems in several ways. Primarily by saving time with the process. Eliminating steps saves time, time is money and all the other benefits LDT offers are realized.

HOW DOES LDT ELIMINATE STEPS IN THE FRAMING PROCESS:

- 1). This application exists only in CMU construction. CMU with a grout filled cell accounts for 75% of SF, 80% of MF residential. For the purpose of this report I will limit the scope and size of this opportunity to residential construction in Florida.
- 2). Using LDT eliminates the need to "punch or poke" holes into the CMU during the bond beam pouring process. This is messy and can damage the block requiring a "call back" for the mason. Even assuming no damage to the block, placing the anchor bolt in the cell is a random process. Easy for the bond beam contractor but requires more work for the framing contractor. LDT is designed to be used after the bond beam is cured.
- 3). Random placement of the cast-in-place bolt means measuring around and marking each bolt. Usually 10 bolts are required per opening. This takes time. Each hole must be marked and drilled separately. LDT holes can be marked and drilled using a guide or template. Ten LDT holes can be drilled ready for placement in 1/3 the time necessary for the cast-in-place bolt.
- 4). Attaching the furring is easier with LDT. With the wood pre-drilled as a guide simply use a hammer drill to bore the necessary pilot hole in the grout filed CMU. A 7/16" x 4-inch holes is all that is required. Once drilled use the same hammer drill with a LDT Condrive sleeve and ¾" nut runner to drive the LDT into position. An impact drill can be used to speed the process further. Once the LDT is driven the framer is finished and the application can be inspected. The cast-in-place method requires the hand assembly of a nut and washer. These will be rusted at the time of installation and require paint or sealer. LDT is mechanically galvanized and requires no finishing steps. LDT uses a commonly available, inexpensive ANSI hammer-drill bit.

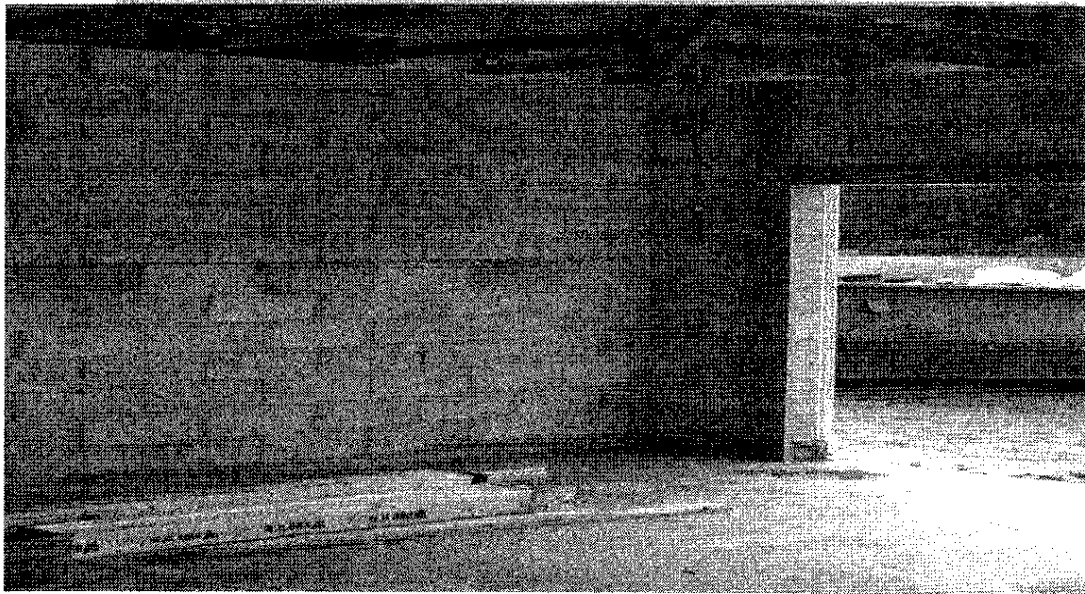
**FEWER STEPS + LOWER INSTALLED COST +
SUPERIOR FINISH = MORE PROFITS**

ELIMINATES CALLBACKS FOR THE BUILDER.

ITW REDHEAD PRODUCT FLYER

**Large Diameter
Tapcon replaces 1/2"
Anchor Bolts**

**BONTEL & REDHEAD: PROUDLY INTRODUCE
THE FUTURE OF FASTENING**



- Replaces hard to use cast-in anchor bolts around garage openings
- Eliminates random and unnecessary holes in your block wall
- Installs 3 times faster through pre drilled holes
- Eliminates the need for "extra" washer
- Galvanized part looks better and requires no finishing
- Uses commonly available, inexpensive ANSI STANDARD 7/16" Bit
- Works great for anchoring "load bearing" bottom plates