

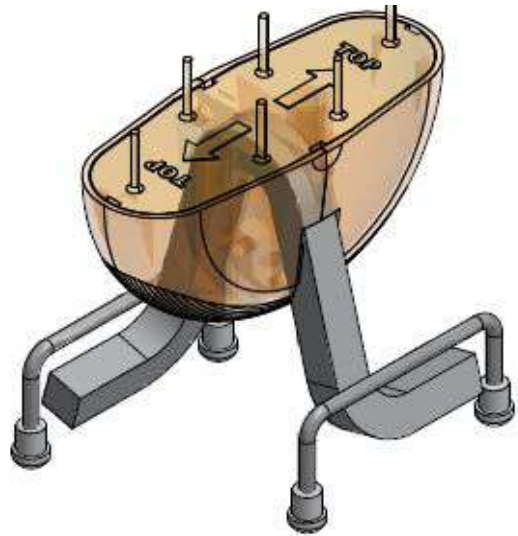


TILT WALL
**HEADQUARTERS
& SUPPLIES**

A TUF-N-LITE COMPANY

PRODUCT CATALOG

22K TILT WALL PANEL LIFTING SYSTEM



DETAILING SERVICES-INSERTS-SUPPLIES-RENTALS

LIMITED WARRANTY STATEMENT

TILTWALL HEADQUARTERS & SUPPLIES GUARANTEES ITS PRODUCTS WILL BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF 12 MONTHS FROM DATE OF DELIVERY TO CUSTOMER AS SHIPPED FROM THE FACTORY AND WHEN USED WITHIN THE SCOPE OF SAFE WORKING PRACTICES BY TRAINED, QUALIFIED, EXPERIENCED WORKERS.

PRODUCT DRAWINGS, DESCRIPTIONS AND APPLICATIONS ARE INTENDED ONLY AS A GUIDE THAT SUCH PRODUCTS ARE AVAILABLE AND AS AN AID TO PURCHASING OR ARRANGING RENTALS.

THE CUSTOMER IS RESPONSIBLE FOR EVALUATING TILTWALL HEADQUARTERS & SUPPLIES PRODUCTS AS TO THE APPROPRIATE USE/APPLICATION; AND IS RESPONSIBLE FOR THE CORRECT/SAFE INSTALLATION OF THE PRODUCTS AND ASSUMES ALL LIABILITIES AND RISKS WHATSOEVER IN CONNECTION THEREWITH.

TILTWALL HEADQUARTERS & SUPPLIES RESERVES THE RIGHT TO CHANGE PRODUCT DESIGNS, SAFE WORKING LOADS, ETC. AT ANY TIME WITHOUT PRIOR NOTICE TO CUSTOMERS.

TILTWALL HEADQUARTERS & SUPPLIES PRODUCT WARRANTY CONSISTS OF REFUNDING THE UNIT PRICE OR REPLACING AT ITS ELECTION ANY PRODUCT THAT IS FOUND TO BE DEFECTIVE, PROVIDED THE PRODUCT HAS BEEN USED FOR THE CORRECT APPLICATION AND INSTALLED CORRECTLY AND WHEN USED WITHIN THE SCOPE OF ITS HANDBOOKS, LITERATURE.

TILTWALL HEADQUARTERS & SUPPLIES DOES NOT WARRANT/GUARANTEE ANY PRODUCT ALTERED BY ANY SHOP/FIELD MODIFICATION OR REPAIRS; OR ANY MATERIALS SPECIFIED FOR USE BY TILTWALL HEADQUARTERS & SUPPLIES AND FURNISHED/MANUFACTURED BY OTHERS.

IN NO EVENT SHALL TILTWALL HEADQUARTERS & SUPPLIES BE LIABLE FOR ANY DELAYS CAUSED BY DEFECTS; FOR LOSS OF USE; FOR INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE WHATSOEVER INCURRED WITHOUT TILTWALL HEADQUARTERS & SUPPLIES EXPRESS CONSENT. THE FOREGOING IS THE FULL EXTENT OF THE RESPONSIBILITY OF TILTWALL HEADQUARTERS & SUPPLIES.

TILTWALL HEADQUARTERS & SUPPLIES, A SUBSIDIARY OF TUF-N-LITE, IS LOCATED IN DALLAS, TEXAS. CONTACT US AT THE ADDRESS AND PHONE, FAX AND E-MAIL LISTED BELOW.

TILTWALL HEADQUARTERS & SUPPLIES PROVIDES ACCURATE AND INFORMATIVE TILTWALL PANEL DETAILING SERVICES AND QUALITY TILTWALL PANEL PRODUCTS TO CUSTOMERS DESIGNING AND BUILDING TILTWALL PANEL CONSTRUCTION PROJECTS.

TILTWALL HEADQUARTERS & SUPPLIES PERSONNEL ARE QUALIFIED AND EXPERIENCED IN THE ERECTION OF TILTWALL PANELS. OUR TILTWALL PANEL DETAILING PERSONNEL HAVE OVER 35 YEARS OF TILTWALL PANEL ERECTION DESIGN EXPERIENCE.

TILTWALL HEADQUARTERS & SUPPLIES BELIEVES THAT COMMUNICATION AND INFORMATION ARE THE MOST PROFITABLE "TOOLS" ON ANY CONSTRUCTION PROJECT.

TILTWALL HEADQUARTERS & SUPPLIES' COMPUTER ANALYSIS SOFTWARE AND EXPERIENCED PERSONNEL USE PROVEN TECHNIQUES TO MINIMIZE THE TILTWALL PANEL LIFTING STRESSES WHILE KEEPING ERECTION INSERTS, ADDED REINFORCEMENT, AND TEMPORARY BRACING TO A MINIMUM AND ASSURING THAT TILTWALL PANELS ARE LIFTED SAFELY AND EFFICIENTLY.

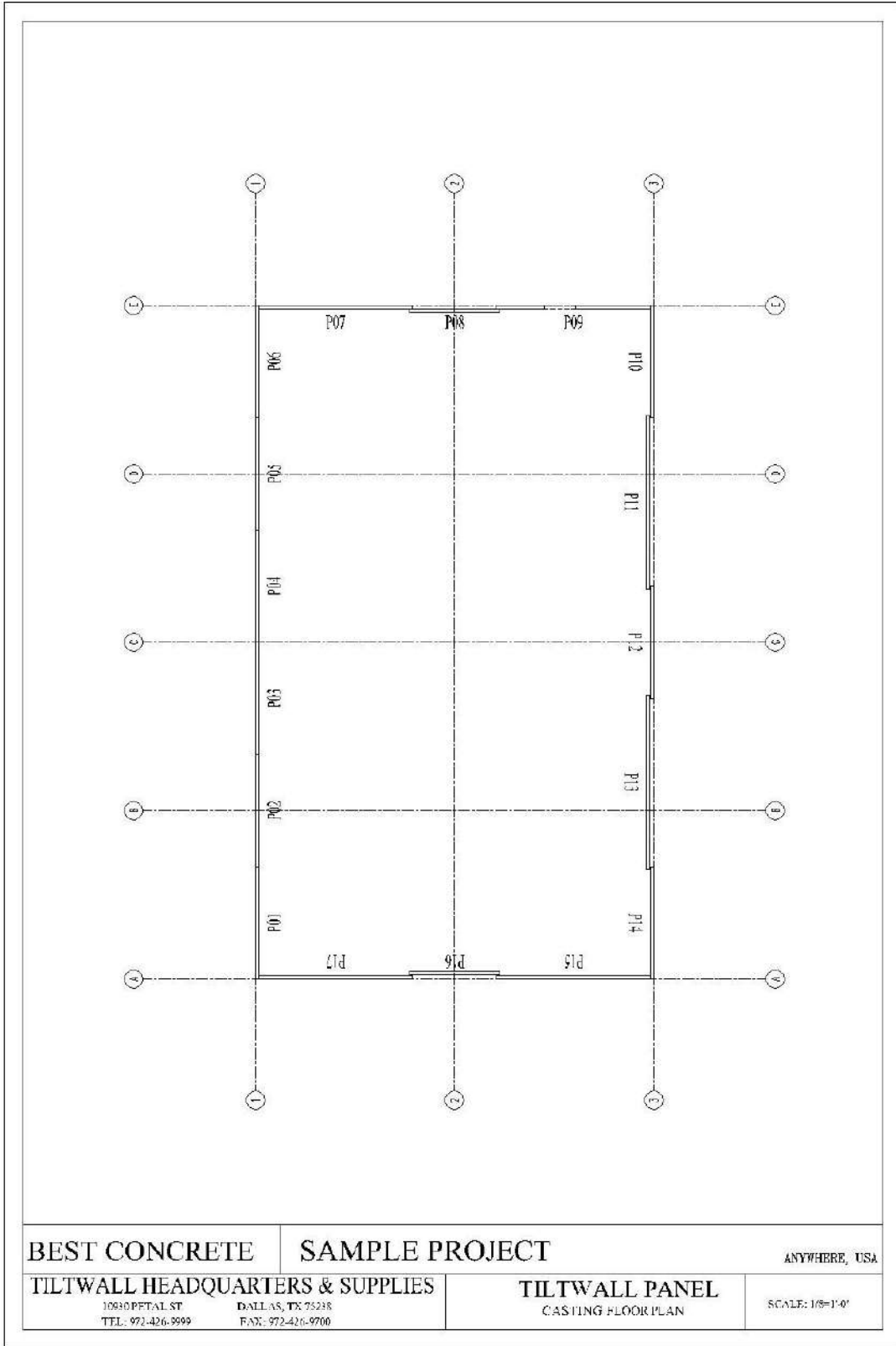
TILTWALL HEADQUARTERS & SUPPLIES PROVIDES COMPUTER GENERATED TILTWALL PANEL DRAWINGS THAT PROVIDE ALL TILTWALL PANEL DIMENSIONS AND LIFTING/BRACING INFORMATION; ALL STEEL EMBED AND REINFORCING STEEL INFORMATION (LOCATIONS – QUANTITY – MARKS – TYPE); PAPER DOLL CASTING BED PLANS AND TILTWALL PANEL ELEVATIONS; ACCURATE AND DETAILED LIST OF MATERIALS AND EQUIPMENT; ALL IN AN EASY READ FORMAT (11" X 17" SHEETS, 36" X 42" SHEETS).

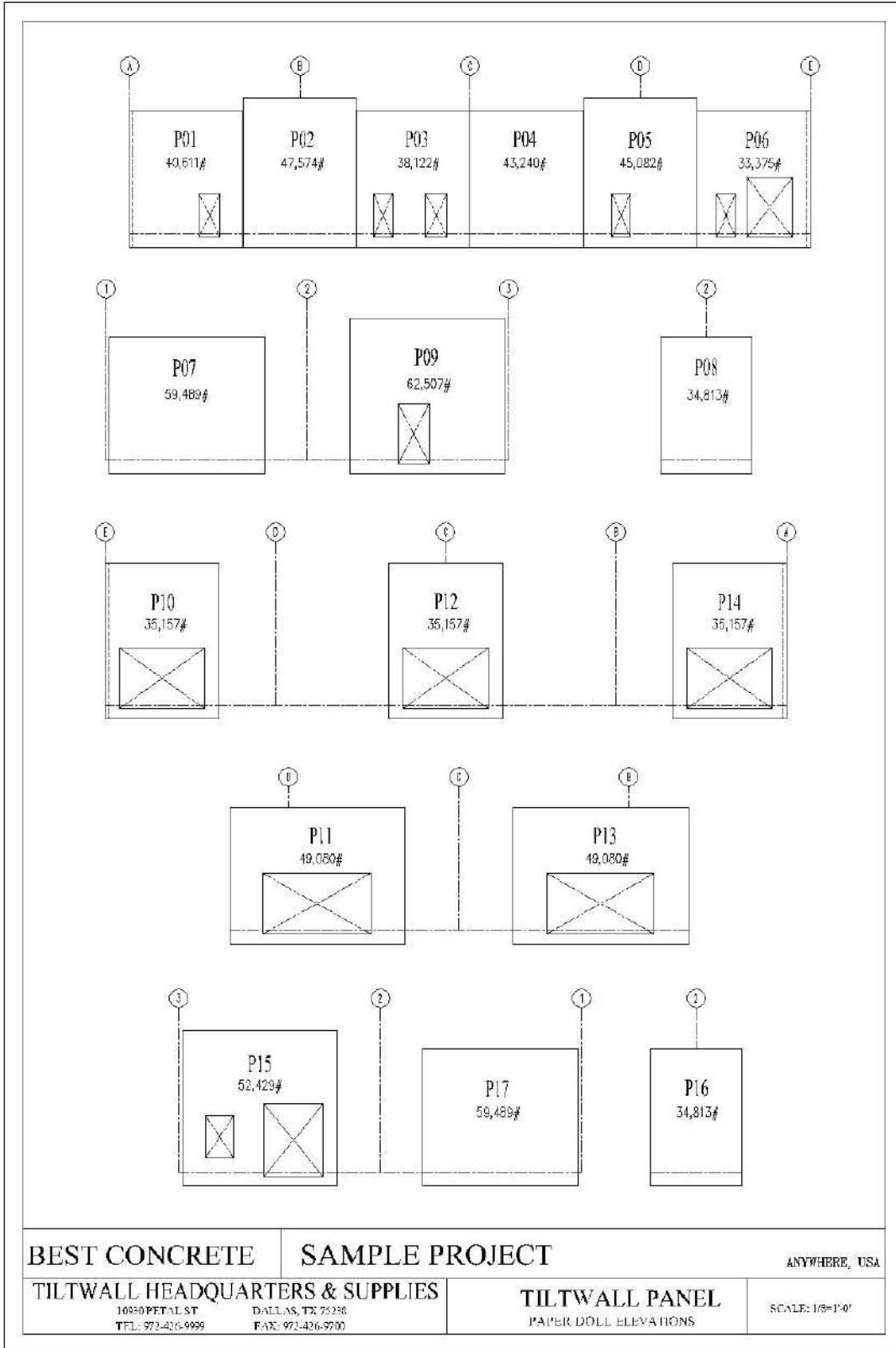
THESE ARE THE "TOOLS" THAT GIVE THE CONTRACTOR AND SUBCONTRACTOR ACCURATE, INFORMATIVE, PRE-PLANNING COMMUNICATION AND INFORMATION THAT ALLOWS THEM TO CONDUCT AN EFFICIENT, PRODUCTIVE, SAFE AND SUCCESSFUL TILTWALL PANEL OPERATION.

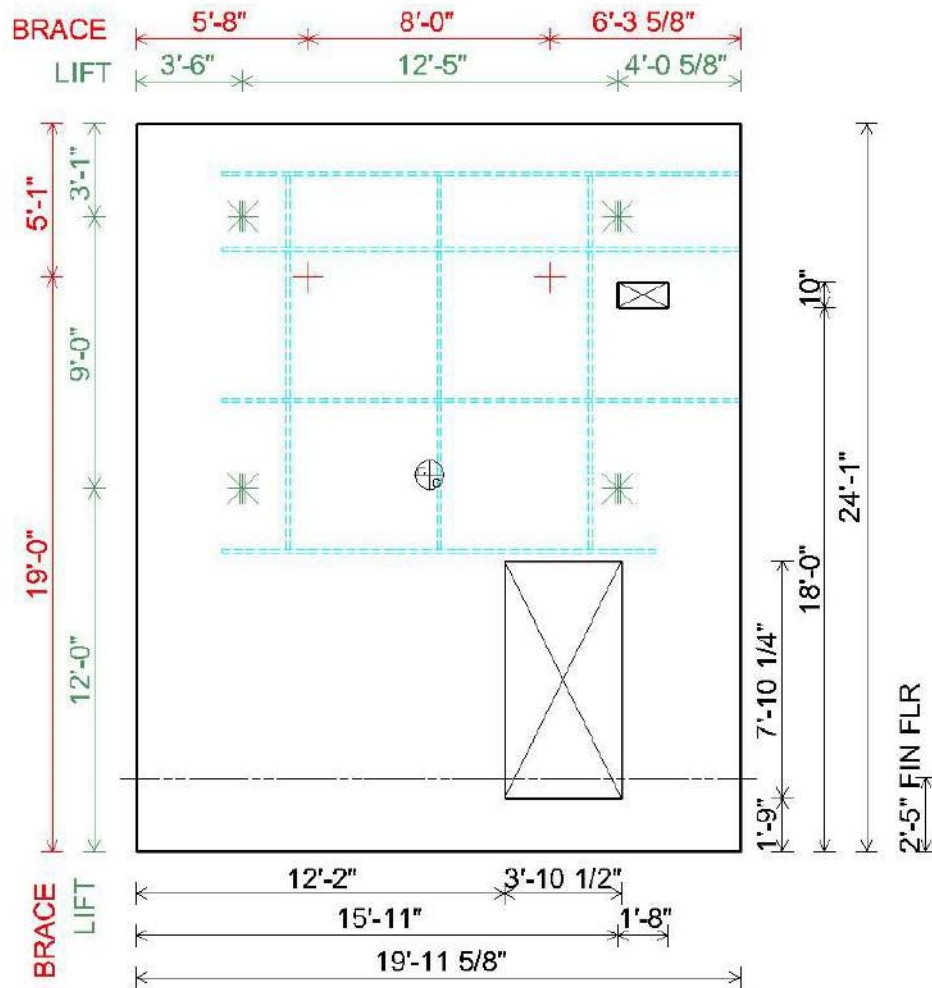
TILTWALL HEADQUARTERS & SUPPLIES EXPERIENCED PERSONNEL HAVE CONSISTENTLY ASSISTED CONTRACTORS SAFELY ERECT APPROXIMATELY 100 MILLION SQUARE FEET OF TILTWALL PANELS.

TILTWALL HEADQUARTERS & SUPPLIES STOCKS FOR EVERYDAY DELIVERY ALL TILTWALL PANEL PRODUCTS: TILTWALL PANEL BONDBREAKER, TILTWALL PANEL PIPE BRACES, TILTWALL PANEL LIFT HARDWARE, TILTWALL PANEL 22K LIFT INSERTS, BRACE INSERTS, WOOD REVEAL, WOOD CHAMFER, AND OTHER CONCRETE ACCESSORIES.

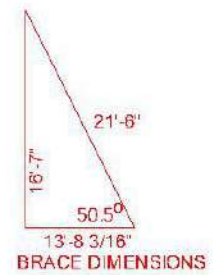
GIVE US THE OPPORTUNITY TO EARN THE RIGHT TO DO BUSINESS WITH YOUR COMPANY!



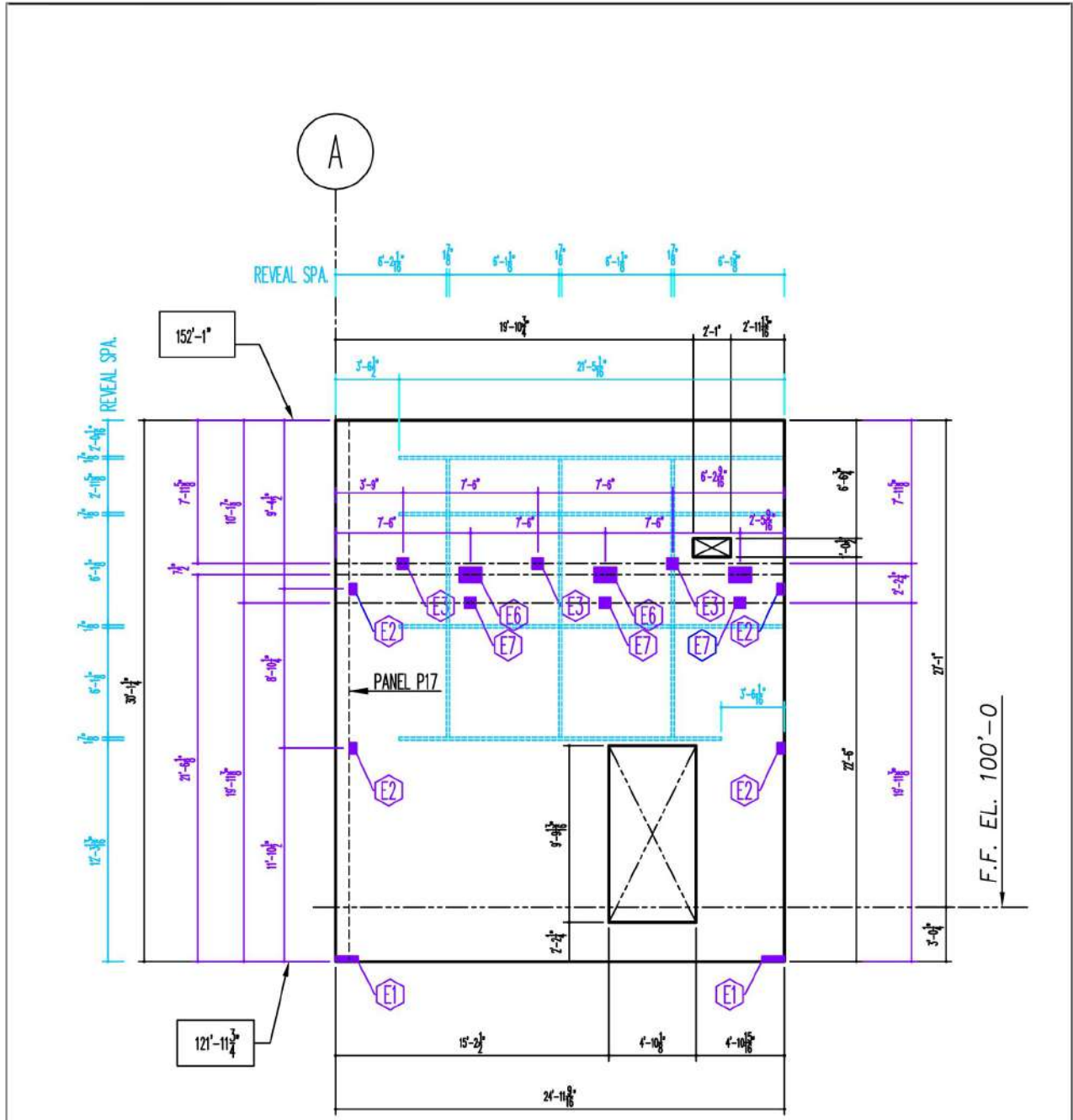




- NOTE 1: MINIMUM CONCRETE STRENGTH OF 3000 PSI REQUIRED AT TIME OF LIFT
- NOTE 2: PANEL TO BE CAST WITH EXTERIOR FACE DN
- NOTE 3: * = LIFT INSERT; THQT22K 7 1/4" LIFT INSERT
- NOTE 4: + = BRACE INSERT: 3/4" X 7 1/4"
- NOTE 5: BRACE TYPE: THQT #8 PIPE BRACE 21/22'
- NOTE 6: CONSTRUCTION PERIOD DESIGN WIND VELOCITY: 80 MPH
- NOTE 7: BRACING DESIGN IS BASED ON REINF. CONC. HAVING MIN. THK. OF 5" AT BOT. OF BRACE



OVERALL THICKNESS	STRUCTURAL THICKNESS	PANEL WIDTH	PANEL HEIGHT	PANEL WGT (LBS)	CONC VOL (CY)	RIGGING TYPE	NO. REQ'D	PANEL MARK	
7 1/4"	7 1/4"	19'-11 5/8"	24'-1"	40578	10.02	R-22F	1	SAMPLE_P01	
MAX LIFT INS. LOAD: 10651		BRACE LOAD: 2416		CGX: 9'-8 3/16"		CGY: 12'-5 5/16"			
MIN CABLE LENGTHS: LOWER: 24'-5"				NET PNL AREA: 449 SF			DATE: 08/25/2021		
TILT WALL HEADQUARTERS & SUPPLIES				SAMPLE PROJECT			JOB NO.: 210325-01		
10930 PETAL ST. DALLAS, TX 75238		PHONE: 972-426-9999		FAX: 972-426-9700		SHT. NO.: SAMPLE P01			



⊞ INDICATES EMBED ON DOWN FACE ■ INDICATES EMBED ON UP FACE OR EDGE = INDICATES REVEAL

SAMPLE PROJECT																									ANYWHERE, USA									
PANELS DETAILED OUTSIDE FACE DOWN AND INSIDE FACE UP																																		
EMBED MK	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	PANEL THK.								
QUANTITY	2	4	3	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7 1/4"								
TILT WALL HEADQUARTERS & SUPPLIES LLC																				PHONE: (972)426-9999					FAX: (972)426-9700					PANEL NO.:				
THIS PANEL DRAWING SUBMITTED FOR REVIEW.....03/30/2021																																		
THIS PANEL DRAWING ISSUED FOR CONSTRUCTION.....05/04/2021																																		
DETAILED BY: LANCE@TILT WALLHQT.COM																																		
P1																																		

TILT WALL HEADQUARTERS & SUPPLIES

TILTWIN - VERSION 21.08.22.32 TILT WALL HEADQUARTERS
GENERAL INFORMATION SAMPLE PROJECT

PANEL NUMBER	PANEL WIDTH	PANEL HEIGHT	PANEL THK	TYPICAL / TOTAL	RIGGING STYLE	LOWER CABLE MIN LEN	LT EQ BM CAB SPC A	RT EQ BM CAB SPC C	SPDR BM CAB SPC A2+B+C/2	CONC STRINGTH BLUFT (PSI)	CONCRETE VOLUME (CY)	PANEL WEIGHT (POUNDS EA PNL)	NET CONTACT AREA (SF)
P1	17'-6 5/8"	30'-6"	8"	1	R-22F	30'-11"			10'-2"	2500	13.20	53440	536
P2	27'-10 1/2"	29'-4"	7 1/4"	1	R-24F	29'-8"	6'-3"	9'-6"	14'-1 1/2"	2500	15.90	64370	712
P3.5	19'-11 1/4"	30'-6"	8"	2	R-22F	30'-11"			11'-7"	2500	29.97	60884	1216
P4.6	27'-11 1/4"	29'-4"	7 1/4"	2	R-24F	29'-8"	6'-8"	9'-7"	14'-3 1/2"	2500	33.02	66851	1479
P7	20'-6 5/8"	30'-6"	8"	1	R-22F	30'-11"			11'-11"	2500	15.45	62590	627
P8	22'-7 7/8"	30'-6"	8"	1	R-22F	30'-11"			15'-3"	2500	17.24	69815	699
P9	35'-7 1/4"	29'-4"	7 1/4"	1	R-24F	29'-8"	9'-2"	9'-11"	18'-2 1/2"	2500	17.75	71941	794
P10a	21'-3 1/4"	30'-6"	8"	1	R-22F	30'-11"			12'-4"	2500	12.87	52138	523
P10b	21'-3 1/4"	30'-6"	8"	1	R-22F	30'-11"			14'-0"	2500	12.87	52138	523
P11	35'-7 1/4"	29'-4"	7 1/4"	1	R-24F	29'-8"	9'-1"	9'-11"	18'-3"	2500	17.75	71941	794
P12a	23'-7 1/2"	30'-6"	8"	1	R-24F	30'-11"	7'-0"	8'-11"	13'-1 1/2"	2500	17.77	71974	721
P12b	31'-11 5/8"	29'-4"	7 1/4"	1	R-24F	29'-8"	9'-2"	9'-2"	17'-4"	2500	20.97	84935	938
P13	34'-5 7/8"	30'-6"	8"	1	R-24F	30'-11"	8'-4"	8'-4"	18'-2"	2500	17.37	70345	704
P14.16	15'-11 1/4"	29'-4"	7 1/4"	2	R-22F	29'-8"			9'-3"	2500	13.12	26599	587
P15	31'-11 1/4"	30'-6"	8"	1	R-24F	30'-11"	8'-3"	8'-2"	18'-4 1/2"	2500	15.45	62561	626
P17	32'-7 7/8"	30'-6"	8"	1	R-24F	30'-11"	8'-4"	8'-5"	19'-6 1/2"	2500	15.99	64743	646
P18	18'-0 1/8"	31'-11"	7 1/4"	1	R-22F	32'-4"			10'-8"	2500	12.82	51918	574
P19	24'-11 1/4"	31'-11"	7 1/4"	1	R-24F	32'-4"	7'-0"	7'-5"	13'-9"	2500	15.81	63211	683
P20	26'-10 1/4"	35'-6"	7 1/4"	1	R-24F	35'-11"	8'-11"	8'-11"	13'-9"	2500	21.28	86190	953
P21	33'-11 1/4"	35'-6"	7 1/4"	1	R-24F	35'-11"	8'-6"	8'-9"	17'-4 1/2"	2500	25.80	104483	1156
P22	33'-11 1/4"	35'-6"	7 1/4"	1	R-24F	35'-11"	8'-6"	8'-8"	17'-5"	2500	26.85	108723	1205
P23	33'-11 1/4"	35'-6"	7 1/4"	1	R-24F	35'-11"	8'-8"	8'-8"	17'-4"	2500	26.31	106545	1179
P24	31'-7 3/8"	35'-6"	7 1/4"	1	R-24F	35'-11"	8'-9"	8'-11"	16'-0"	2500	21.73	88016	972
TOTALS				23/26							437.11		18848

TILTWIN - VERSION 21.08.22.32 TILT WALL HEADQUARTERS
SALE MATERIALS SAMPLE PROJECT

PANEL NUMBER	TYPICAL / TOTAL	LIFT INSERT THOT#22K 6" LIFT INSERT	LIFT INSERT THOT#22K 7 1/4" LIFT INSERT	BRACE INSERT 3/4" X 8"	BRACE INSERT 3/4" X 7 1/4"	STRONG BACK INSERT 3/4" X 7 1/4"	WOOD CHAMFER 3/4" X 3/4" (FT)	REVEAL -3" X 4" X 3 1/2" (FT)	REVEAL 3" X 10" X 3 1/2" (FT)	SHIM PACKS 1 1/8" X 4" X 8"	GROUT (LB)	BOND BREAKER (GAL)	FORM LUMBER (FT)	
P1	1	4		2			192			2	50	2.69	65	
P2	1		8		2		369			2	50	4.09	155	
P3.5	2	8		4			404			4	100	6.08	141	
P4.6	2		16		4		650			4	100	8.19	266	
P7	1	4		2			204			2	50	3.13	72	
P8	1	4		2			214	5		2	50	3.49	78	
P9	1		8		3		426			2	50	5.22	184	
P10a	1	4		2			354	4	3	2	50	3.24	147	
P10b	1	4		2			354	4	3	2	50	3.24	147	
P11	1		8		3		426			2	50	5.22	184	
P12a	1	8		2			216		3	2	50	3.60	78	
P12b	1		8		3		245	5		2	50	4.69	93	
P13	1	8		3			472	5		2	50	5.25	205	
P14.16	2		8		4		574	6		4	100	4.67	228	
P15	1	8		2			462	5		2	50	4.87	200	
P17	1	8		2			465	6		2	50	4.98	202	
P18	1		4		2		209	7		2	50	2.87	72	
P19	1		8		2	24	313	6		2	50	3.98	126	
P20	1		8		2		349	8		4	2	50	4.77	89
P21	1		8		3		334	18		4	2	50	5.02	131
P22	1		8		3		278	17		10	2	50	8.02	103
P23	1		8		3		322	18		5	2	50	8.02	125
P24	1		8		2		360	5		2	2	50	5.61	148
TOTALS	23/26	60	108	23	38	24	8098	119	24	52	1300	107.94	3237	

TILTWIN - VERSION 21.08.22.32 TILT WALL HEADQUARTERS
RENTAL EQUIPMENT SAMPLE PROJECT

PANEL NUMBER	TYPICAL / TOTAL	LIFTING CLUTCH (EA)	BRACE COIL BOLT 3/4" X 3 1/2"	BRACE THOT #5 PIPE BRACE 21/22"	BRACE THOT #12 PIPE BRACE 31/32"	STRONG BACK DBL-C8 X 11.5	STRONG BACK COIL BOLT ADJ 3/4" X 18"	STRONG BACK COIL WING NUT 3/4"	STRONG BACK WASHER PLATE 3/4" X 5" X 1'-0"
P1	1	4	2	2					
P2	1	8	2	2					
P3.5	2	4	4	4					
P4.6	2	8	4	4					
P7	1	4	2	2					
P8	1	4	2	2					
P9	1	8	3	3					
P10a	1	4	2		2				
P10b	1	4	2		2				
P11	1	8	3	3					
P12a	1	8	2	2					
P12b	1	8	3	3					
P13	1	8	3	3					
P14.16	2	4	4	4					
P15	1	8	2	2					
P17	1	8	2	2					
P18	1	4	2	2					
P19	1	8	2	2	2	2@30'-0"	24	24	22
P20	1	8	2	2	2				
P21	1	8	3	3	3				
P22	1	8	3	3	3				
P23	1	8	3	3	3				
P24	1	8	2	2	2				
TOTALS	23/26	8	99	40	19		24	24	22

The steel embeds listed below are shown on architectural and structural contract documents for connections of steel members to embedded steel items in concrete wall panels. Final detailing and coordination of these embeds and their corresponding fabrication mark is the responsibility of the General Contractor. This list of embeds is only for reference and field use. ----- NOT FOR FABRICATION -----

FAB. MK.	EMBED MK	DESCRIPTION	REFERENCES
B		PL 1/4" X 4" X 0'-8" W/ (2) 1/2" Ø X 4" H.C.A.	5/S501 METAL DECK CONN.
E		BENT PL 3/8" X 4" X PNL THKNESS X 4" X 1'-0" W/ (2) #5 X 1'-9" D.B.A.	8/S702 PANEL-PIER CONN.
J		L3 1/2 X 3 1/2 X 3/8" X 1'-0" W/ (1) 1/2" Ø X 1'-6" D.B.A. (2) 5/8" Ø X 4" H.S.A.	2, 6 & 8/S-501 BEAM POCKET CONN.
R		L3 1/2 X 3 1/2 X 1/4" X 0'-8" W/ (2) 1/2" Ø X 4" H.S.A.	1 & 4/S-501 "K" JOIST CONN.
S		L6 X 6 X 3/8" X 0'-10" W/ (1) 1/2" Ø X 1'-6" D.B.A. (2) 5/8" Ø X 4" H.S.A.	/- ---
W		L4 X 4 X 1/4" X 0'-10" W/ (2) 1/2" Ø X 4" H.S.A.	3 & 7/S-501 "LH" JOIST CONN.

TILTWIN - VERSION 21.08.11.32 TILT WALL HEADQUARTERS
EMBED COUNT PROSPER FORD_Embed Count

PNL	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	Q	X	Y	Z	AA
TOT	0	112	0	0	52	0	0	0	26	0	0	0	0	0	0	138	0	0	0	0	29	0	0	0	0
P1	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-
P2	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-
P3	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-
P4	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-
P5	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-
P6	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-
P7	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-
P8	-	7	-	-	2	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-
P9	-	10	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P10a	-	7	-	-	2	-	-	-	1	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-
P10b	-	6	-	-	2	-	-	-	1	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-
P11	-	11	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P12a	-	6	-	-	2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P12b	-	9	-	-	2	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-
P13	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-
P14	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-
P15	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-
P16	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-
P17	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-
P18	-	-	-	-	2	-	-	-	3	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-
P19	-	-	-	-	2	-	-	-	2	-	-	-	-	-	-	22	-	-	-	-	-	-	-	-	-
P20	-	9	-	-	2	-	-	-	5	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-
P21	-	12	-	-	2	-	-	-	3	-	-	-	-	-	-	18	-	-	-	-	-	-	-	-	-
P22	-	12	-	-	2	-	-	-	5	-	-	-	-	-	-	17	-	-	-	-	-	-	-	-	-
P23	-	12	-	-	2	-	-	-	3	-	-	-	-	-	-	18	-	-	-	-	-	-	-	-	-
P24	-	11	-	-	2	-	-	-	2	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-
TOT	0	112	0	0	52	0	0	0	26	0	0	0	0	0	0	138	0	0	0	0	29	0	0	0	0
PNL	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	Q	X	Y	Z	AA

SAMPLE PROJECT

TILT WALL HEADQUARTERS & SUPPLIES

10930 PETAL STREET DALLAS, TX 75238
PHONE: (972)426-9999 FAX: (972)426-9700

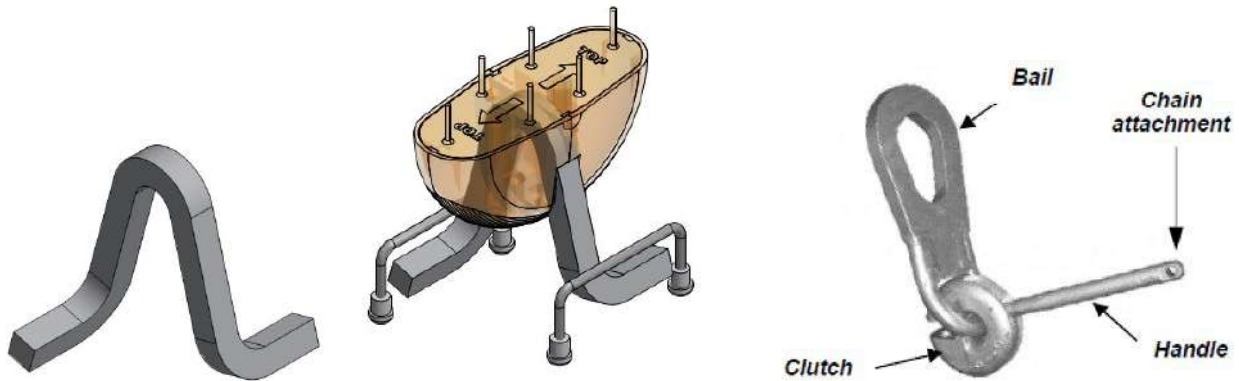
DETAILED BY: HUY@TILT WALL HQT.COM

03-30-2021

DRAWING SUBMITTED FOR REV...
DRAWING SUBMITTED FOR 2nd R...
DRAWING ISSUED FOR CONSTRUCTION... 07/27/2021

#210615-B
SAMPLE, TX

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THQT 22K INSERT

THQT 22K LIFT INSERT ASSEMBLY

THQT 22K LIFT CLUTCH

INSERT SAFE WORKING LOAD

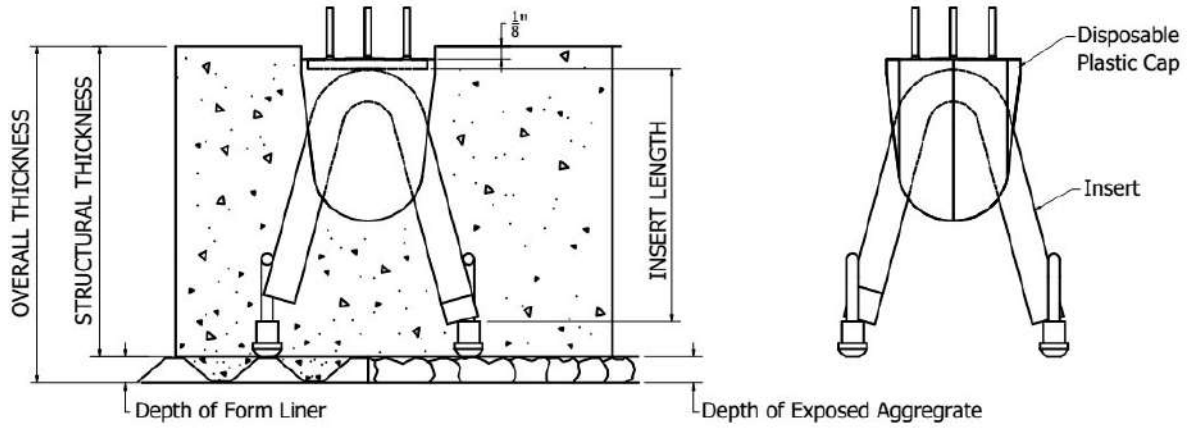
- **SWL FACTOR @ 2:1**
- THE SAFE WORKING LOAD VARIES WITH APPLICATION, TILT WALL PANEL THICKNESS, THQT LIFT INSERT DEPTH, ETC. REFER TO THQT TILT WALL PANEL DETAILING SHEETS FOR THQT LIFT INSERT SIZE AND LOCATIONS.

LIFT CLUTCH SAFE WORKING LOAD

- **SWL FACTOR @ 5:1**
- THQT LIFT CLUTCH HAS SAFE WORKING LOAD, SAFETY FACTOR AND THQT ID MARKINGS ON THE LIFT CLUTCH BAIL. THE THQT LIFT CLUTCH SAFE WORKING LOAD VARIES WITH APPLICATION, TILT WALL PANEL THICKNESS, THQT LIFT INSERT DEPTH, ETC. REFER TO THQT TILT WALL PANEL DETAIL SHEETS FOR GUIDES TO INSTALLATION AND DISENGAGEMENT.
- THQT LIFT CLUTCH IS CONFIGURED WITH A CLUTCH BODY AND A CURVED INTERLOCKING HOOK BOLT AND A HIGH STRENGTH LIFTING BAIL. ATTACH THQT LIFT CLUTCH TO THQT LIFT INSERT AND BEGIN LIFTING TILT WALL PANEL. THQT LIFT CLUTCH ROTATES TO LOCK OVER THE PROTRUDING THQT 22K LIFT INSERT AND RECESS INTO A CLOSED POSITION.
- STANDARD LIFTING BAIL ROTATES 180° FOR SPALL-FREE LIFTING. ONCE THE THQT LIFT CLUTCH IS IN LOCKING POSITION AND SUPPORTING THE FULL LOAD THE THQT LIFT CLUTCH CANNOT BE RELEASED.

GENERAL SAFE WORKING GUIDELINES

- CUSTOMER IS RESPONSIBLE FOR FURNISHING THE CORRECT RIGGING/CABLE SLINGS/SPREADER BEAMS AS DETAILED AND SPECIFIED ON THQT TILT WALL PANEL DETAILING SHEETS.
- THQT LIFT CLUTCH IS TO BE USED WITH THQT LIFT INSERTS. DO NOT USE THQT LIFT CLUTCH ON LIFT INSERTS MANUFACTURED BY OTHERS UNLESS APPROVED IN WRITING BY THQT.
- REFER TO THQT INSERT AND THQT LIFT CLUTCH DETAILING SHEETS FOR APPLICATIONS BEFORE USING.
- ALL THQT LIFT CLUTCHES MUST BE CHECKED FOR DAMAGE, CRACKS, ETC. BEFORE LIFTING TILT WALL PANELS.
- THE THQT LIFT CLUTCH HANDLE ALWAYS NEEDS TO BE POINTING TOWARDS THE TOP OF THE TILT WALL PANEL.
- CONTACT THQT DETAILING DEPARTMENT FOR ADVICE ON THE CORRECT SAFE USE OF ANY THQT PRODUCT.



SECTION @ TILT WALL PANEL

THQT 22K LIFT INSERTS

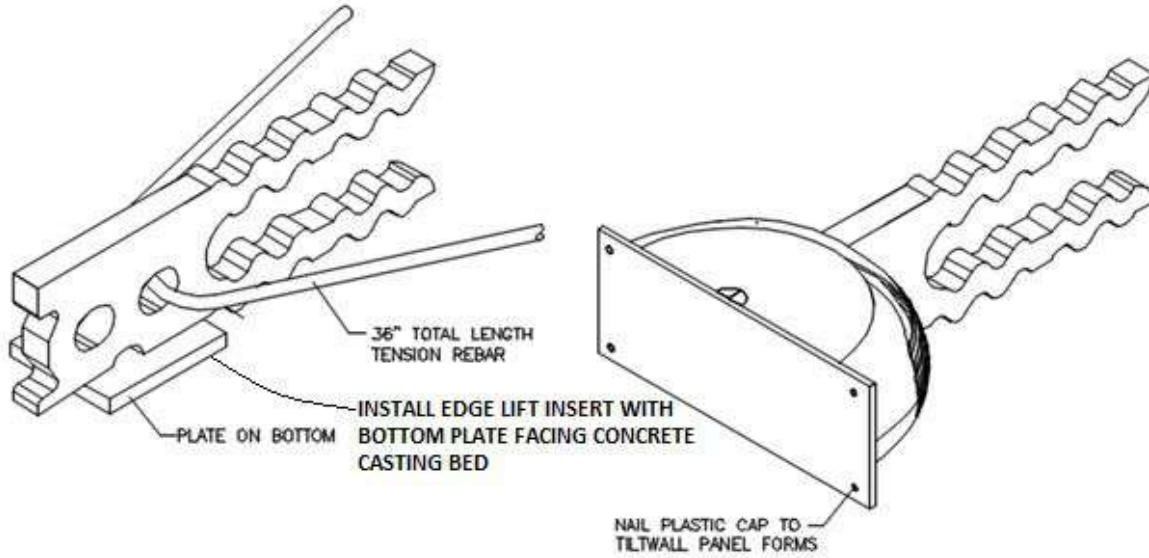
Safety Factor = 2:1

Normal Weight Concrete, Compressive strength = 2,500 psi

TILT WALL PANEL STRUCTURAL THICKNESS	22K INSERT LENGTH	PART NUMBER	SAFE WORKING LOAD (TENSION)	SAFE WORKING LOAD (SHEAR)
INCHES	INCHES	#	LBS.	LBS.
5-1/2"	4-1/2"	TWLI-512	11,117	16,766
6"	5"	TWLI-6	11,117	16,766
6-1/2"	5-1/2"	TWLI-612	11,117	16,766
7"	6"	TWLI-7	11,117	16,766
7-1/4"	6-1/4"	TWLI-714	16,734	22,000
7-1/2"	6-1/2"	TWLI-712	16,734	22,000
8"	7"	TWLI-8	18,559	22,000
9"	8"	TWLI-9	18,559	22,000
9-1/4"	8-1/4"	TWLI-914	22,000	22,000
10"	9"	TWLI-10	22,000	22,000
11"	10"	TWLI-11	22,000	22,000
12"	11"	TWLI-12	22,000	22,000

Note:

- Safe working loads are based on calculations and full scale load tests.
- For panel thicknesses not shown, contact TILT WALL HEADQUARTERS & SUPPLIES.



22K EDGE LIFT INSERT

22K EDGE LIFT INSERT ASSEMBLY

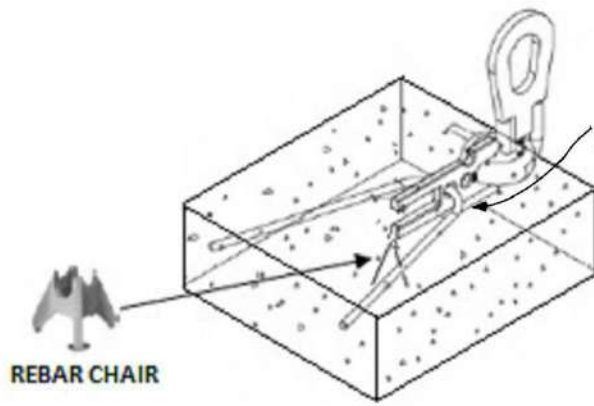
THQT 22K EDGE LIFT INSERT			
Safety Factor = 2:1 in 2,500 psi concrete			
TILT WALL PANEL THICKNESS	SHEAR LOAD TILT-UP PANEL VALUES 2:1 SAFETY FACTOR	TENSION WITHOUT TENSION BAR 2:1 SAFETY FACTOR	TENSION WITH TENSION BAR 2:1 SAFETY FACTOR
INCHES	LBS.	LBS.	LBS.
5 ½"	3,696	8,360	10,080
6"	4,032	9,125	11,000
6 ½"	4,724	13,688	16,500
7"	5,415	18,250	22,000
7 ¼"	5,645	19,188	22,000
7 ½"	5,874	20,125	22,000
8"	6,333	22,000	22,000
8 ½"	6,621	22,000	22,000
9"	6,908	22,000	22,000
9 ¼"	7,052	22,000	22,000
10"	7,484	22,000	22,000
11"	7,916	22,000	22,000
11 ¼"	8,024	22,000	22,000
12"	8,348	22,000	22,000

Notes:

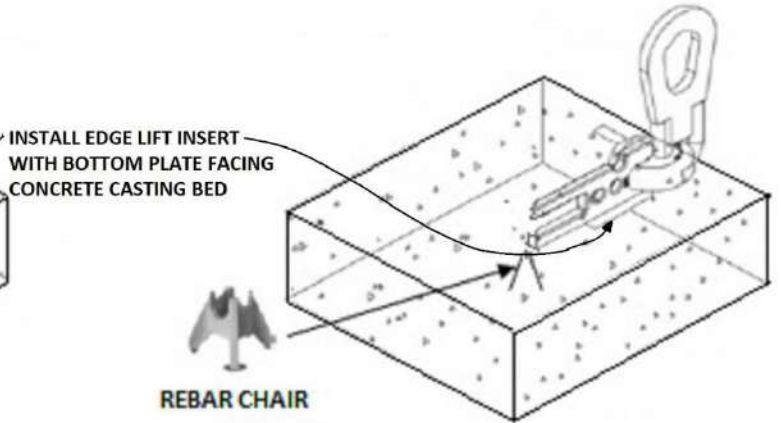
- Minimum distance to a tiltwall panel corner is 24" *
- Minimum distance between edge lift inserts is 24" *
- #5 Tension Bar as shown unless noted otherwise in tiltwall panel detailing.
- **Edge Insert centered in panel structural thickness.**

* unless noted otherwise on tiltwall panel lift drawing

The THQT Edge Lift insert must be centered within the tiltwall panel structural thickness and the foot of the THQT Edge Lift Insert must be supported using a single rebar chair.

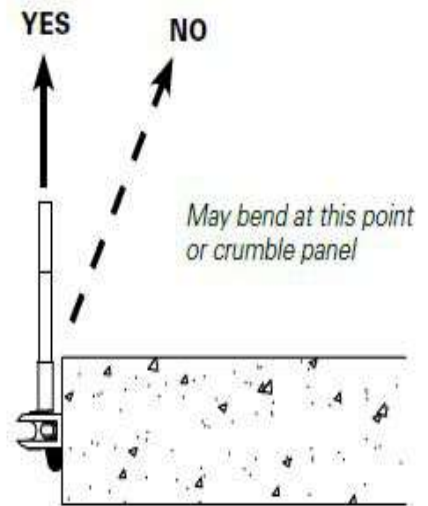
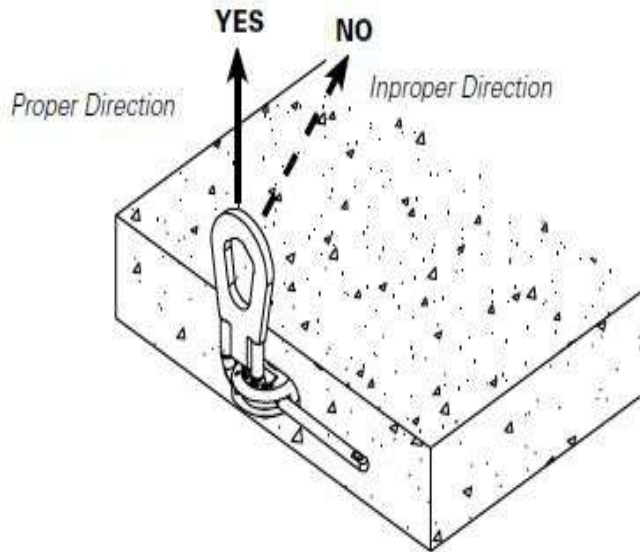


Application with Tension Bar



Application without Tension Bar

CORRECT



THQT Clutch Application with Edge Lift

The THQT 22K lift clutch is produced in compliance with THQT quality control system and every THQT lift clutch is verified and tested before delivery to customer. The tests have shown that the THQT lift insert only yields when loads occur that are more than two times higher than the safe working load of the THQT lift clutch.

LIFT INSERTS AND SHEAR CONES

When the shear cone is formed, the shape of the THQT 22K lift insert creates a break-out cone with theoretical slope of 1:1. See Figure 1. This is an angle of approximately 45° in relation to the longitudinal axis of the THQT 22K lift insert.

ANGULAR LIFTING

With angular lifting, the increase of force in the sling must be taken into account.

The THQT 22K lifting clutch makes attaching it a quick and simple task. Lifting can take place as soon as the THQT lifter is attached to the THQT lift insert.

Position the handle of the THQT lift clutch between the sling. The THQT lift clutch handle should always point to the top of the tiltwall panel.

In this position, the THQT lift clutch handle can be pushed against the concrete during tiltwall panel lifting. When THQT tiltwall panel is in the air, it is necessary to make sure the THQT lift clutch handle of the THQT lift clutch pushes against the concrete during erection.

The THQT 22K lifting clutch is always shipped with an Individual identification number. After every job, the THQT lift clutch receives a visual inspection in order to detect defects and to check dimensions.

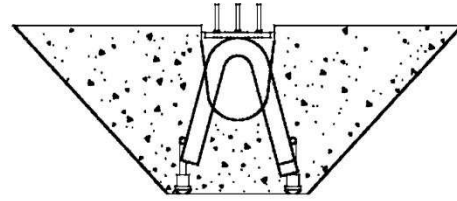
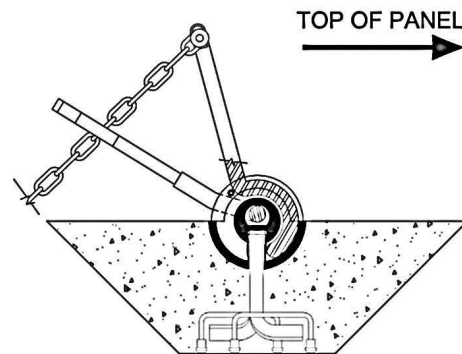
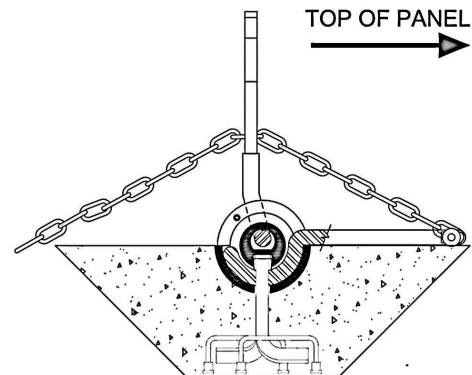


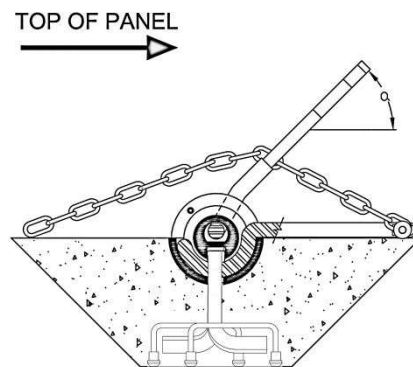
Figure 1: Placement



Step one: Attaching the Lifter



Step two: Closing the Lifter



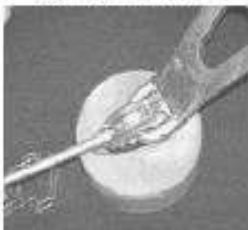
Step three: Preparing for lifting



TOP OF PANEL ⇐



TOP OF PANEL ⇐



TOP OF PANEL ⇐

PLACING THE INSERT

1. Confirm the THQT lift insert is in 90° alignment to the tiltwall panel surface and the arrows on the top of the THQT lift insert are pointed toward the top of the tiltwall panel. Secure the THQT 22K lift insert to the tiltwall panel reinforcing to prevent movement during pouring of the concrete.
2. Pour the concrete. The placement indicators (whiskers) should stick up over the surface of the concrete. Let the concrete cure.

REMOVING THE CAP

1. Once the concrete is cured, remove any extra concrete or debris from the top of the THQT insert.
2. Use a claw hammer to lift up and remove the plastic former. Remove both sides of the plastic cap.
3. Clean the void around the THQT lift inserts before connecting the THQT lift clutch. The void and THQT lift insert must be plumb, clean and clear of debris before continuing.

CONNECTING THE HARDWARE

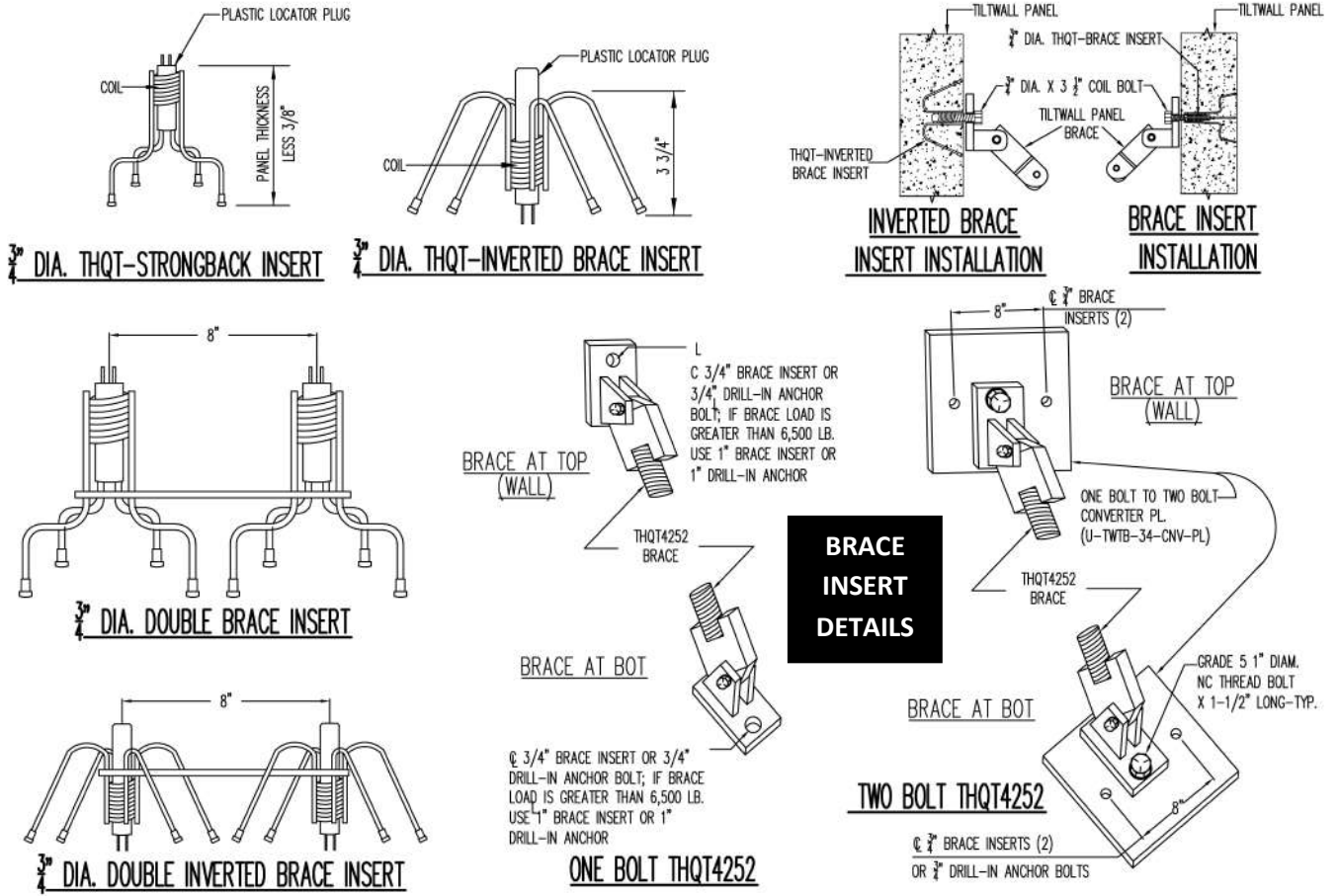
Confirm that the THQT lift clutch is placed with the chain connection to the top of the tiltwall panel. The release chain should go through or beside the opening of the THQT clutch lifting bail to the bottom of the tiltwall panel. Position the THQT lift clutch over the head of the THQT lift insert. Make sure the THQT lift clutch lifting bail is fully engaged and rotated to the maximum extent that the THQT lift clutch body will allow.

LIFTING THE TILT WALL PANEL

1. Be sure the THQT clutch lifter bail is correctly attached to both the THQT lift clutch and the rigging.
2. Ensure that the THQT clutch lifter is kept in place with the handle pointing to the **TOP** of the tiltwall panel and the release chains are hanging down through or beside the THQT lifter bail. **Now it is safe to lift.**
3. Maintain a safe, clear distance when the tiltwall panel is being lifted.

RELEASING THE LIFTER

1. After erecting and placing the tiltwall panel into position, connect the temporary tiltwall panel braces and begin to align the tiltwall panel.
2. After releasing the tension of the crane, the THQT lifter clutch can easily be disconnected by pulling the release chain. The handle will then release from the THQT lift insert. Be sure to hold the chains to prevent the running of the rigging through the rolling blocks.
3. Confirm the THQT lift clutch bail is lowered down to a minimum of 90° before releasing the hardware.

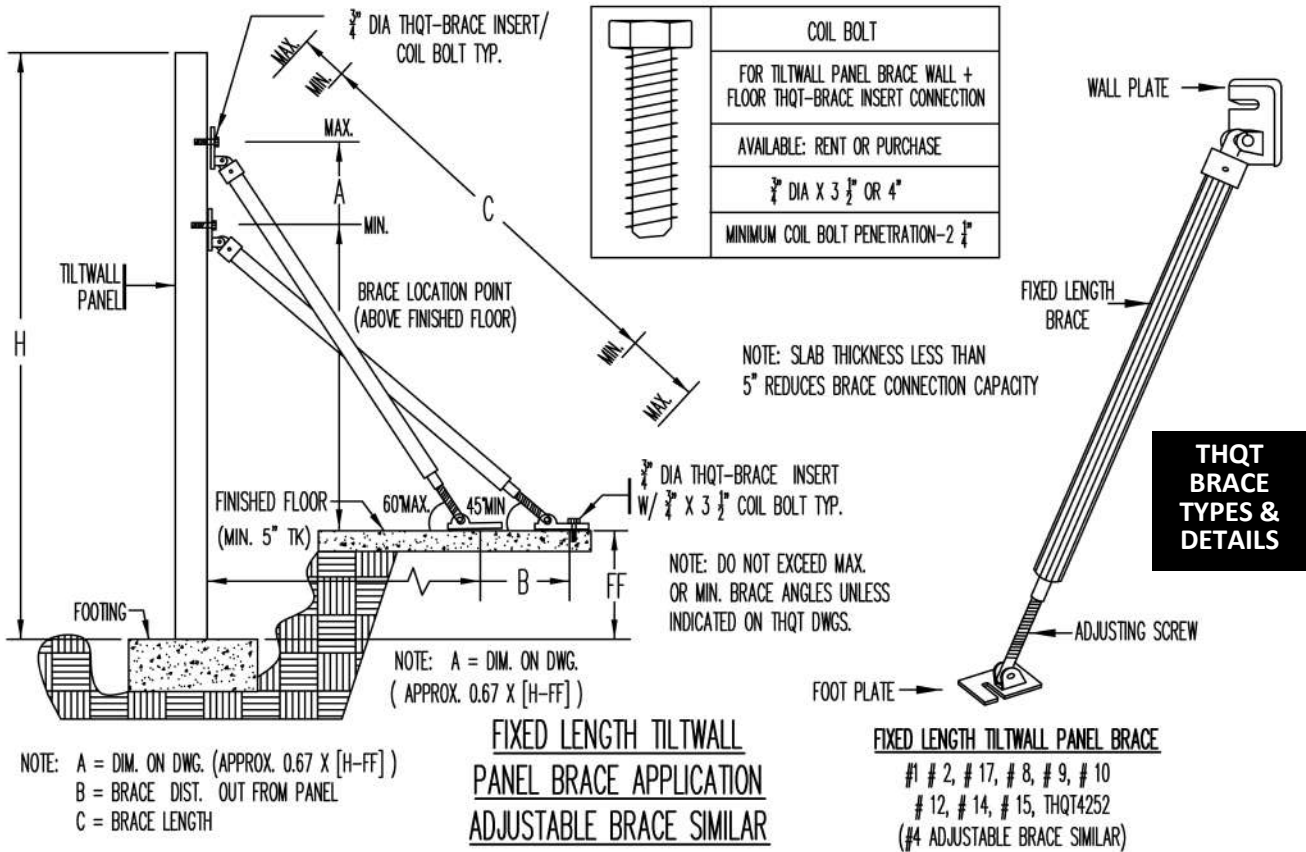


POSITION THQT-BRACE INSERT IN PLACE AND WIRE SECURELY TO REBAR TO PREVENT HORIZONTAL OR VERTICAL MOVEMENT.

TILT WALL HEADQUARTERS & SUPPLIES THQT – BRACE INSERT SAFE WORKING LOADS (TENSION) CHART							
Tiltwall Panel Thickness	5 1/2"	6"	6 1/2"	7 1/4"	7 1/2"	8"	9" – 12"
THQT-Brace Insert	3/4" Dia. X 5 1/2"	3/4" Dia. X 6"	3/4" Dia. X 6 1/2"	3/4" Dia. X 7 1/4"	3/4" Dia. X 7 1/2"	3/4" Dia. X 8"	3/4" Dia. X 9"-12"
Safe Working Loads	6,500 lbs	6,500 lbs	6,500 lbs	6,500 lbs	6,500 lbs	6,500 lbs	6,500 lbs
SAFE WORKING LOADS REFLECT A MINIMUM 2 TO 1 SAFETY FACTOR IN 2,500 PSI CONCRETE WITH A 3/4" DIA. THQT-BRACE INSERT CAST IN A CONCRETE TILT WALL PANEL. SAFE WORKING LOADS ARE BASED ON TESTS AND CALCULATIONS. CHART DOES NOT APPLY TO INSERTS OR OTHER ANCHORING SYSTEMS USED TO SECURE TILT WALL PANEL PIPE BRACES TO CONCRETE FLOOR SLAB / DEADMAN.							

CUSTOMER IS RESPONSIBLE FOR CHOOSING THE CORRECT ANCHORING SYSTEM TO MATCH THE TILT WALL PANEL BRACE LOADS WITH THE CONCRETE SLAB THICKNESS AND CONCRETE DEADMAN. THE ANCHOR SYSTEM MUST BE PROPERLY INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS. CUSTOMER IS RESPONSIBLE FOR VERIFYING THAT THE BUILDING CONCRETE SLAB HAS BEEN DESIGNED TO SUPPORT THE TILT WALL PANEL BRACE LOADS IMPOSED ON THE CONCRETE BUILDING SLAB WHEN ERECTING CONCRETE TILT WALL PANELS.

CONCRETE BUILDING SLAB THICKNESS, REINFORCEMENTS, LEAVE OUTS, POUR JOINTS, CONTROL JOINTS ARE ALL FACTORS THAT NEED TO BE REVIEWED AND VERIFIED TO PREVENT A CONCRETE TILT WALL PANEL BRACING FAILURE.



STANDARD BRACE TYPE & SAFE WORKING LOAD (SWL)

TYPE	MIN-MAX	DESCRIPTION	ULT	SWL	WEIGHT
THQT # 1	6'-0" to 7'-0"	4" Dia. Fixed Length	10,830 lbs	6,500 lbs	45 lbs
THQT # 2	10'-0" to 11'-0"	4" Dia. Fixed Length	10,830 lbs	6,500 lbs	65 lbs
THQT # 4	14'-6" to 23'-6"	Adjustable Length; Capacity at 14'-6" Long:	9,770 lbs	5,850 lbs	130 lbs
THQT # 4	14'-6" to 23'-6"	Adjustable Length; Capacity at 15'-10" Long:	9,770 lbs	5,850 lbs	130 lbs
THQT # 4	14'-6" to 23'-6"	Adjustable Length; Capacity at 16'-8" Long:	9,770 lbs	5,850 lbs	130 lbs
THQT # 4	14'-6" to 23'-6"	Adjustable Length; Capacity at 17'-6" Long:	8,910 lbs	5,333 lbs	130 lbs
THQT # 4	14'-6" to 23'-6"	Adjustable Length; Capacity at 18'-4" Long:	7,220 lbs	4,320 lbs	130 lbs
THQT # 4	14'-6" to 23'-6"	Adjustable Length; Capacity at 19'-2" Long:	5,900 lbs	3,533 lbs	130 lbs
THQT # 4	14'-6" to 23'-6"	Adjustable Length; Capacity at 20'-0" Long:	5,380 lbs	3,218 lbs	130 lbs
THQT # 4	14'-6" to 23'-6"	Adjustable Length; Capacity at 20'-10" Long:	4,470 lbs	2,678 lbs	130 lbs
THQT # 4	14'-6" to 23'-6"	Adjustable Length; Capacity at 21'-8" Long:	3,760 lbs	2,250 lbs	130 lbs
THQT # 4	14'-6" to 23'-6"	Adjustable Length; Capacity at 22'-6" Long:	3,420 lbs	2,048 lbs	130 lbs
THQT # 4	14'-6" to 23'-6"	Adjustable Length; Capacity at 23'-4" Long:	2,530 lbs	1,515 lbs	130 lbs
THQT # 17	16'-6" to 17'-6"	4" Dia. Fixed Length	10,830 lbs	6,500 lbs	105 lbs
THQT # 8	21'-3" to 22'-9"	4" Dia. Fixed Length	9,750 lbs	5,850 lbs	136 lbs
THQT # 9	26'-3" to 27'-9"	4" Dia. THQT #8 + 5' Extension	7,940 lbs	4,760 lbs	190 lbs
THQT # 10	31'-3" to 32'-9"	4" Dia. THQT #8 + 10' Extension	5,390 lbs	3,230 lbs	225 lbs
THQT # 12	31'-3" to 32'-9"	5 1/2" Dia. Fixed Length	13,500 lbs	6,500 lbs	300 lbs
THQT # 14	41'-3" to 42'-9"	5 1/2" Dia. THQT #12 + 10' Extension	8,020 lbs	4,810 lbs	400 lbs
THQT # 15	51'-3" to 52'-9"	5 1/2" Dia. 10' Exten + THQT #12 + 10' Exten	5,770 lbs	3,460 lbs	520 lbs
THQT4252	41'-3" to 52'-9"	6" SQ TUBE 42' or 52' Nominal Length	17,200 lbs	10,300 lbs	780 lbs

SWL: Provides a minimum factor of safety of 1.67 to 1 (Note that wall or foot plate connection capacity may govern)

Customer is responsible for choosing the correct anchoring system to match the tiltwall panel brace loads with the concrete slab thickness and concrete deadman. The anchor system must be properly installed according to the manufacturer's instructions. Customer is responsible for verifying that the building concrete slab has been designed to support the tiltwall panel brace loads imposed on the concrete building slab when erecting concrete tiltwall panels. Concrete building slab thickness, reinforcements, leave outs, pour joints, control joints are all factors that need to be reviewed and verified to prevent a concrete tiltwall panel bracing failure. Slab reinforcing is required at brace landing points.

WEIGHTS OF COMMON SIZE CYLINDRICAL CONCRETE DEADMEN					
Deadman Height	24" Dia.	30" Dia.	36" Dia.	42" Dia.	48" Dia.
2'-0"	940	1,470	2,120	2,890	3,770
2'-6"	1,180	1,840	2,650	3,610	4,710
3'-0"	1,410	2,210	3,180	4,330	5,650
3'-6"	1,650	2,580	3,710	5,050	6,600
4'-0"	1,890	2,950	4,240	5,770	7,540
4'-6"	2,120	3,310	4,770	6,490	8,480
5'-0"	2,360	3,680	5,300	7,220	9,420
5'-6"	2,590	4,050	5,830	7,940	10,370
6'-0"	2,830	4,420	6,360	8,660	11,310

Minimum Concrete Properties:
 Concrete compressive strength = 2500 p.s.i.
 Concrete Density = 145 p.c.f.

Minimum Soil Properties:
 Soil Density = 100 p.c.f.
 Angle of soil shearing resistance = 35 degrees
 Vertical soil bearing = 1500 p.s.f.
 Lateral soil bearing = 150 p.s.f.

WEIGHTS PER LF OF COMMON GRADE BEAM CONCRETE DEADMEN				
Depth (Inches)	18" Width	24" Width	30" Width	36" Width
18	338	450	563	675
24	450	600	750	900
30	563	750	938	1,125
36	675	900	1,125	1,350
42	788	1,050	1,313	1,575
48	900	1,200	1,500	1,800
54	1,013	1,350	1,688	2,025
60	1,125	1,500	1,875	2,250

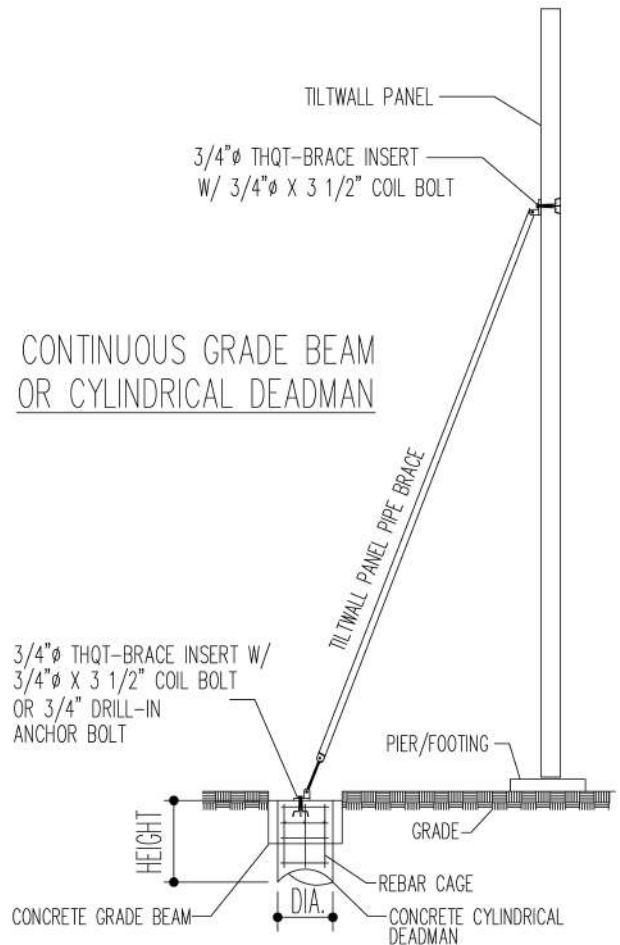
$BRACE\ LOAD \div BRACE\ SPACING \times .87 = WEIGHT\ PER\ LF$

NOTE: MINIMUM REINFORCEMENT AS REQUIRED BY ACI-318

WARNING!

THESE TABLES APPLY TO CONCRETE DEADMAN ONLY, CAST DIRECTLY AGAINST UNDISTURBED SOIL WITH THE MINIMUM SOIL AND CONCRETE PROPERTIES AS NOTED. DO NOT USE FORMING MATERIAL INSIDE THE HOLE TO FORM THE CONCRETE DEADMAN AS THIS WILL REDUCE THE LOAD CARRYING CAPACITY OF THE CONCRETE DEADMAN. DO NOT PLACE CONCRETE DEADMAN IN OR CLOSE TO EMBANKMENTS AS THIS WILL REDUCE ITS LOAD CARRYING CAPACITY. THE CONCRETE DEADMAN SIZE OBTAINED FROM THESE TABLES ARE RECOMMENDED MINIMUM SIZES BASED ON THE SOIL CONDITIONS LISTED. A QUALIFIED PROFESSIONAL ENGINEER FAMILIAR WITH THE JOB SITE SOIL CONDITIONS MUST REVIEW THE CONCRETE DEADMAN SIZE SELECTED TO ENSURE THIS IS ADEQUATE IN SIZE AND PROPERLY LOCATED TO WITHSTAND THE APPLIED BRACE LOADS.

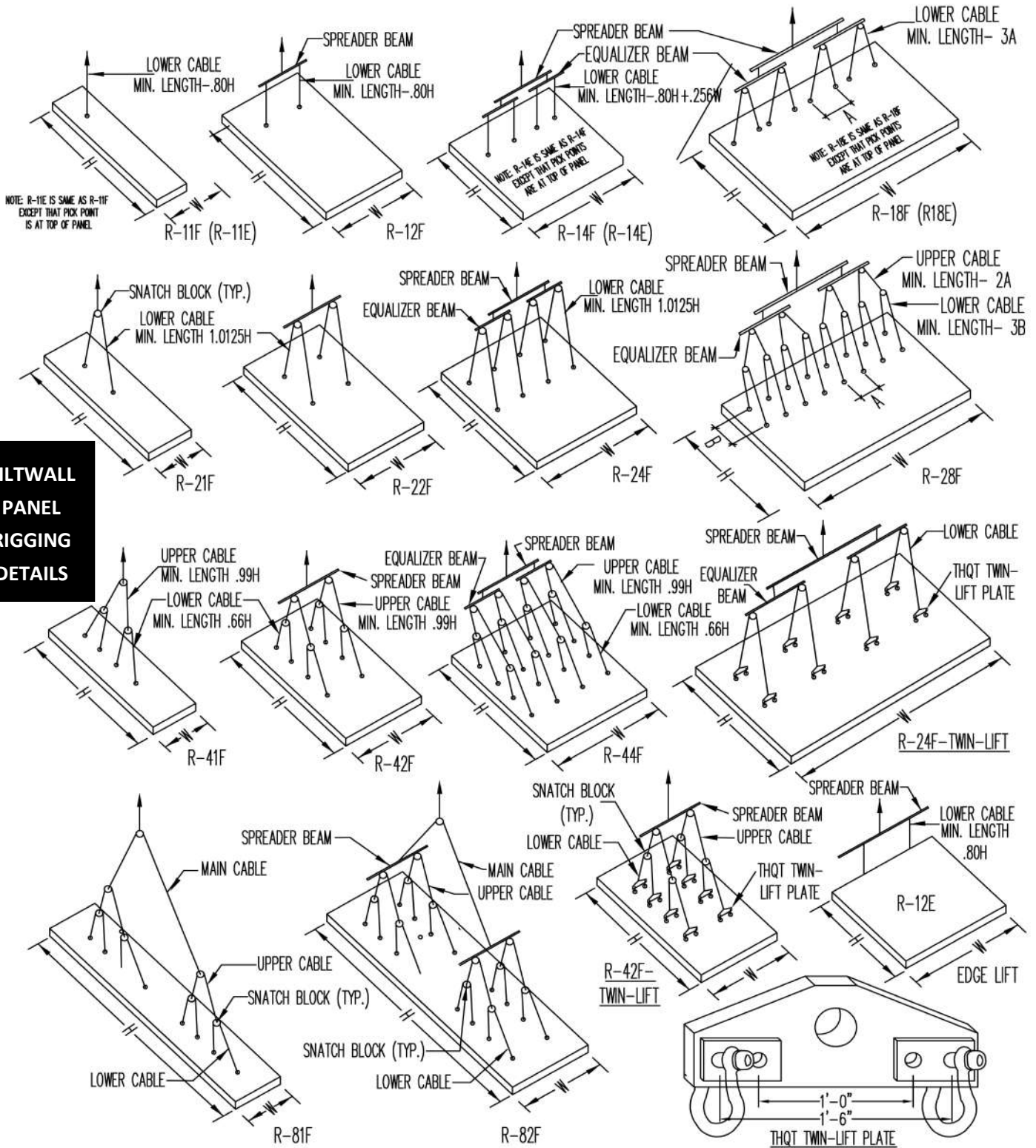
**TILT WALL PANEL
 CONCRETE
 DEADMAN**



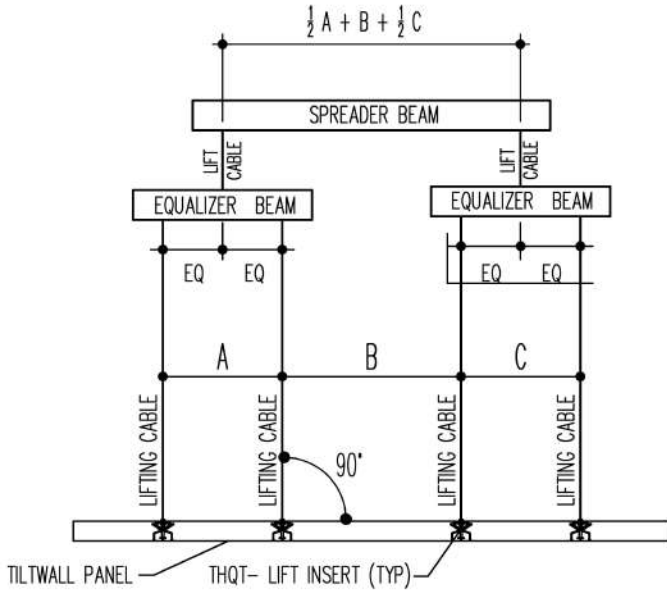
NOTE: AN ADEQUATE CONCRETE DEADMAN MUST WEIGH AT LEAST 87% OF THE MAXIMUM BRACE LOAD.
 NOTE: MINIMUM REINFORCEMENT AS REQUIRED BY ACI-318.

REFER TO TILT WALL HEADQUARTERS & SUPPLIES DETAILING SERVICES FOR SPECIFIC INFORMATION REGARDING TILT WALL PANEL BRACES AND CONCRETE DEADMAN APPLICATIONS.

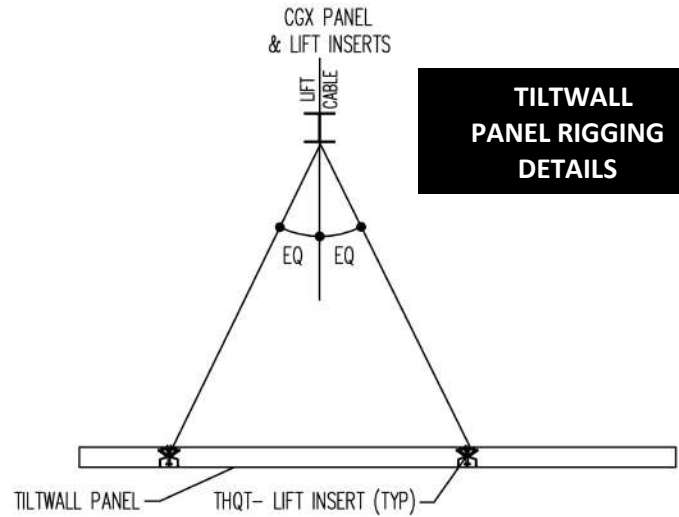
**TILT WALL
PANEL
RIGGING
DETAILS**



- TILT WALL HEADQUARTERS & SUPPLIES (THQT) does not specify the size, types or safe working loads of cranes, spreader beams, cables or rigging gear. The tilt wall panel erection contractor is responsible for determining, choosing and providing the correct crane, spreader beams, cables and rigging gear to safely erect tilt wall panels for the project. The tilt wall panel erector must use spreader beams and equalizer beams of such lengths that rigging cables are at a 90 +/- degree angle with the spreader beams and equalizer beams.
- All rigging must conform to the rigging configuration specified on each page of THQT tilt wall panel detailing book and as illustrated on THQT tilt wall panel standard rigging details sheet. Standard rigging cable lengths shown here are for estimating purposes only.
- The correct rigging and spreader beams are integral factors in THQT erection stress analysis and must conform to the illustrations as shown on THQT tilt wall panel standard rigging details sheet.

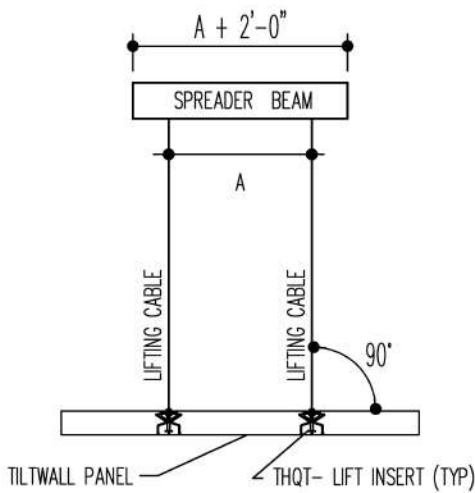


FRONT VIEW

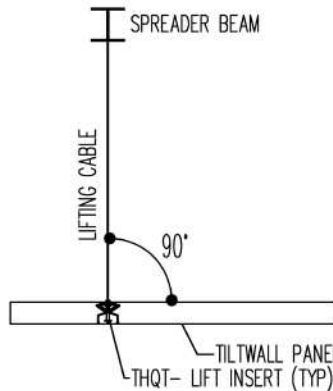


SIDE VIEW

TILT WALL PANEL RIGGING DETAILS

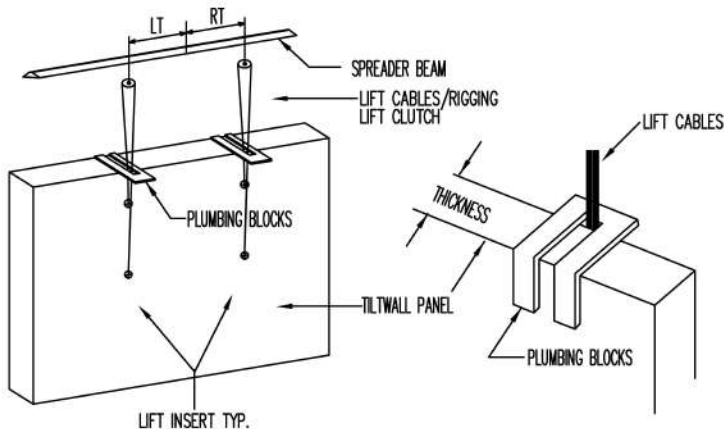


FRONT VIEW



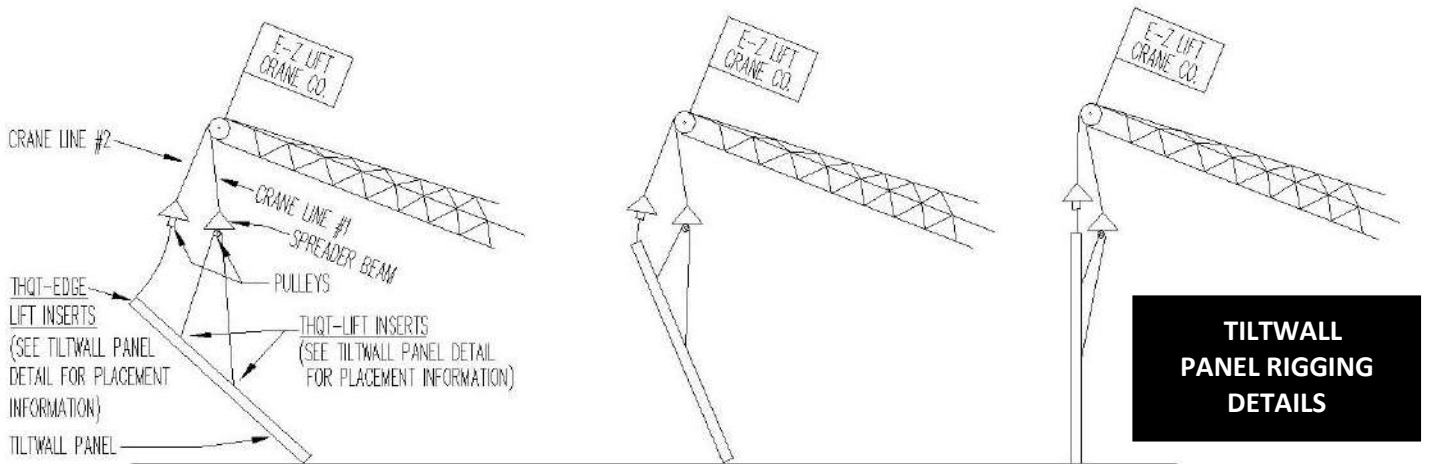
SIDE VIEW

THE TILT WALL PANEL ERECTOR MUST USE SPREADER BEAMS AND EQUALIZER BEAMS OF SUCH LENGTHS THAT RIGGING CABLES ARE AT A 90 +/- 5 DEGREE ANGLE WITH THE SPREADER BEAMS AND EQUALIZER BEAMS. RIGGING METHOD AND MINIMUM CABLE LENGTHS MUST CONFORM TO THE RIGGING CONFIGURATION SPECIFIED ON EACH PAGE OF TILT WALL HEADQUARTERS & SUPPLIES (THQT) TILT WALL PANEL DETAILING BOOK AND AS ILLUSTRATED ON THE THQT TILT WALL PANEL STANDARD RIGGING DETAILS SHEET. FAILURE TO USE CORRECT SPREADER/LIFT BEAMS AND EQUALIZER BEAMS LENGTHS AND RIGGING CABLE LENGTHS CAN RESULT IN TILT WALL PANEL CRACKING OR STRUCTURAL FAILURE.



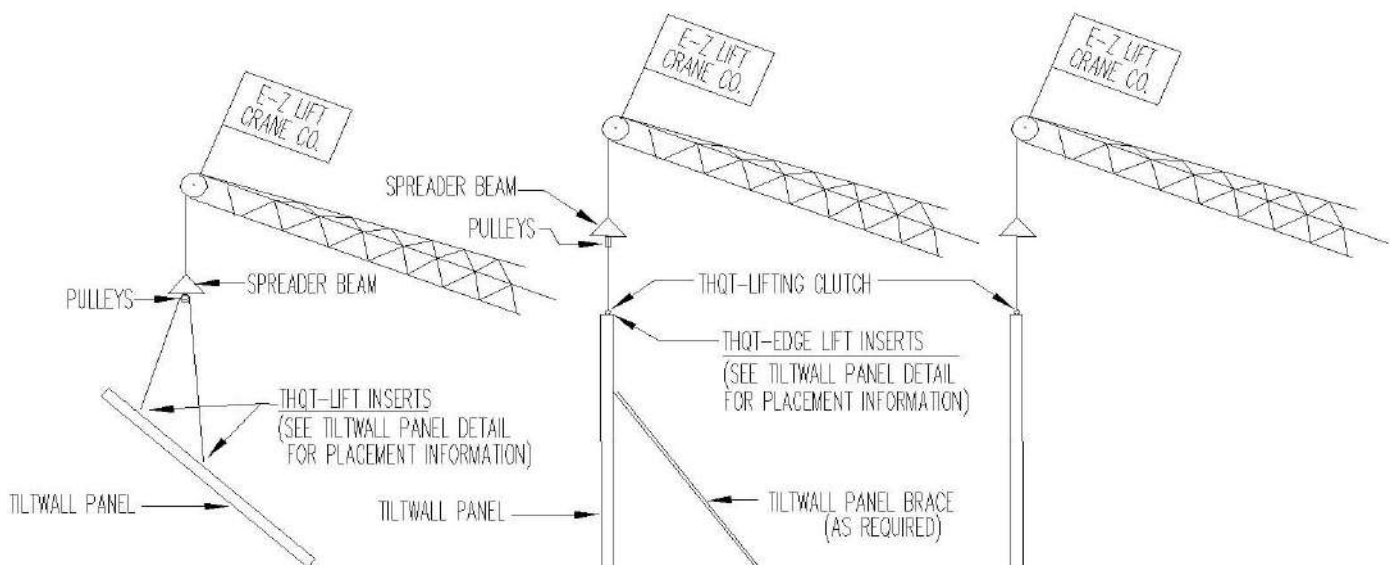
PLUMBING BLOCKS

TILT WALL PANELS ARE LIFTED FROM THE CASTING BED IN THE CONVENTIONAL MANNER WITH THE BOTTOM OF THE TILT WALL PANEL RESTING ON THE GROUND AND THE TOP OF THE TILT WALL PANEL TIPPED UNTIL IT RESTS AGAINST ITS SLINGS. THE PLUMBING BLOCKS ARE THEN PLACED AROUND THE SLINGS AND HOOKED OVER THE TOP OF THE TILT WALL PANEL. THE TILT WALL PANEL CAN THEN BE LIFTED VERTICALLY. THE SLING'S TENDENCY TO PULL AWAY FROM THE TILT WALL PANEL WILL KEEP THE BLOCKS TIGHT WHEN FREE OF THE GROUND. CUSTOMER IS RESPONSIBLE FOR DESIGNING AND FABRICATING PLUMBING BLOCKS, AND THE SAFE USE THEREOF.



TILT WALL PANEL WITH MID-AIR TRANSFER (TWO CRANE LINE METHOD)

1. Lift the tiltwall panel to vertical position using crane line #1 and THQT lift inserts only, leaving slack in crane line 2.
2. Once the tiltwall panel is hanging vertical and free of the casting bed, transfer the entire load of the tiltwall panel to crane line #2 and the THQT edge lift inserts in the top edge of the tiltwall panel.
3. The tiltwall panel may now be set into position using crane line #2 and the THQT edge lift inserts in the top edge of the tiltwall panel only.

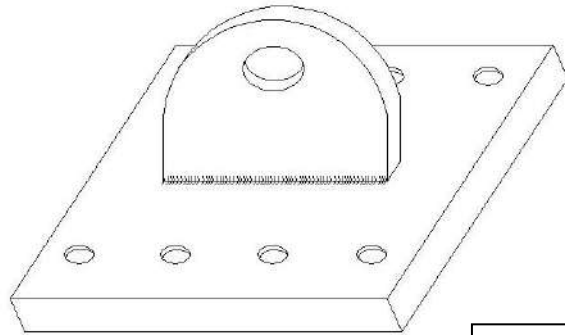


TILT WALL PANEL BRACE AND TRANSFER (SINGLE CRANE LINE METHOD)

1. Lift the tiltwall panel to vertical position using THQT-lift inserts only.
2. Securely brace the tiltwall panel in the vertical position in a manner consistent with applicable building codes and construction safety policies.
3. Release the crane lines and THQT-lifter clutches from the THQT-lift inserts and attach the crane lines and THQT-lifter clutches to the THQT-edge lift inserts in the top edge of the tiltwall panel.
4. With the lines taught supporting the tiltwall panel, release the tiltwall panel bracing and lift the tiltwall panel with the THQT-edge lift inserts and THQT-lifter clutches to set it in its final location.

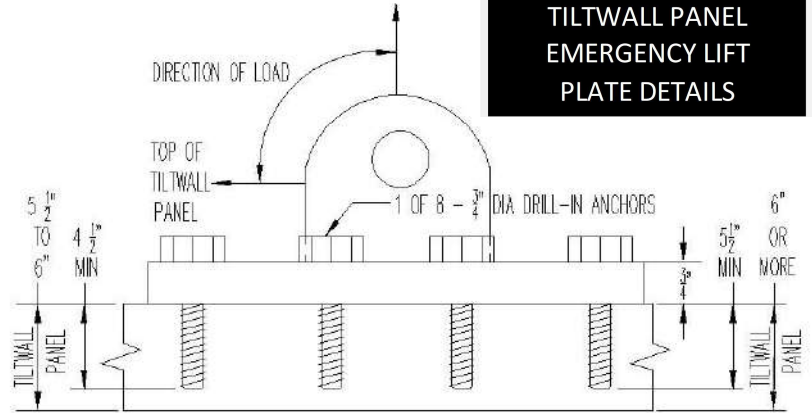
Note: Rigging shown above is for illustration purposes only. See general notes and tiltwall panel details for actual rigging configuration, sling lengths and spreader beam requirements.

THQT-EMERGENCY LIFT PLATE



ISOMETRIC VIEW

RENTAL OR PURCHASE



SIDE VIEW

DO NOT APPLY LOADS AT AN ANGLE TO THE VERTICAL/FLAT SIDE OF THE THQT-EMERGENCY LIFT PLATE

TILT WALL PANEL EMERGENCY LIFT PLATE DETAILS

THQT-EMERGENCY LIFT PLATE

THQT-EMERGENCY LIFT PLATE WILL LIFT TILT WALL PANELS WITH MISPLACED OR MISSING INSERTS. IT REQUIRES THE USE OF EIGHT 3/4" DIAMETER DRILL-IN ANCHORS AND ONE THQT-EMERGENCY LIFT PLATE.

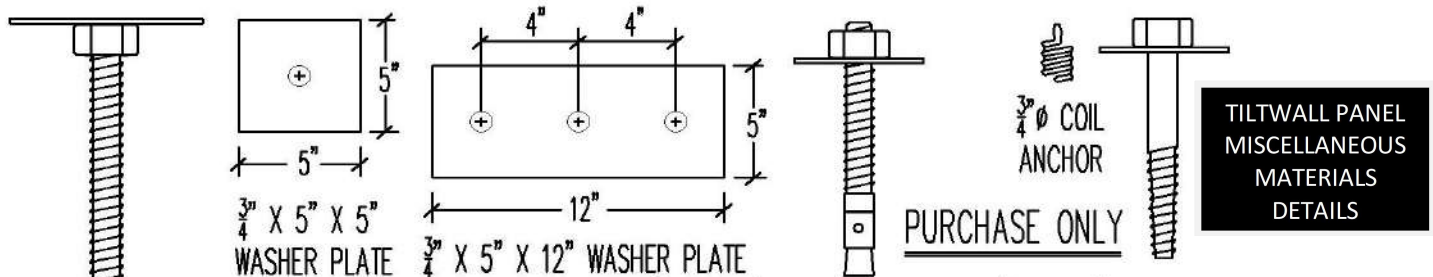
INSTALLATION INSTRUCTIONS

1. DRILL 8 HOLES PER MANUFACTURERS INSTRUCTIONS. CLEAN OUT DUST. USE THQT-EMERGENCY LIFT PLATE AS TEMPLATE. INSTALL 8 DRILL-IN ANCHORS THRU HOLES IN THQT-EMERGENCY LIFT PLATE PER MANUFACTURERS INSTRUCTIONS.
2. DRILL-IN ANCHORS MUST OBTAIN SAME STRENGTH AS CAST IN PLACE THQT-LIFT INSERT. SEE MANUFACTURER'S DRILL-IN ANCHOR CHARTS FOR AVAILABLE SAFE WORKING LOADS AND INSTRUCTIONS FOR INSTALLING.
3. CONTACT TILT WALL HEADQUARTERS & SUPPLIES TO DETERMINE WHERE TO LOCATE THE THQT-EMERGENCY LIFT PLATE.
4. SAFE WORKING LOAD IS 22,500 LBS. PROVIDED THQT-SUPPLIED WEDGE ANCHORS ARE USED.

CAUTION

DO NOT ATTEMPT TO LIFT TILT WALL PANEL WITHOUT ALL 8 DRILL-IN ANCHORS INSTALLED AT THE PROPER DEPTH, WITH THE PROPER TORQUE, PER MANUFACTURERS INSTRUCTIONS.

THQT TILT WALL PANEL STRONGBACK HARDWARE



TILT WALL PANEL MISCELLANEOUS MATERIALS DETAILS

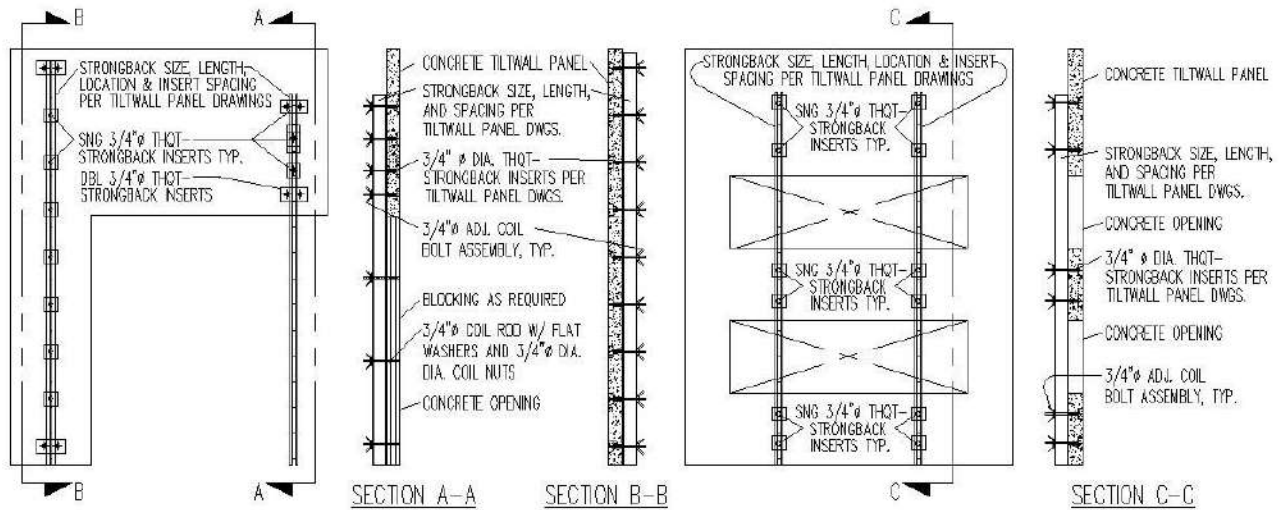
PURCHASE ONLY

3/4" X 18" L ADJUSTABLE COIL ROD
 THQT TILT WALL PANEL STRONGBACK HARDWARE

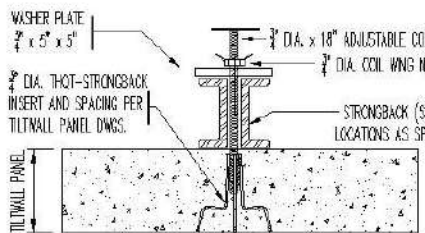
RENTAL OR PURCHASE

3/4" X 5" X 5" WASHER PLATE
 3/4" X 5" X 12" WASHER PLATE
 3/4" X 5 1/2", 6", 7" OR 8" L DRILL-IN EXPANSION ANCHOR
 3/4" X 4 1/2" OR 6" L DRILL-IN COIL EXPANSION ANCHOR BOLTS

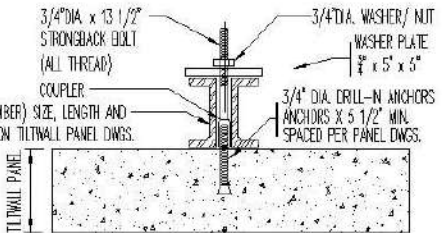
CUSTOMER IS RESPONSIBLE FOR CHOOSING AN ANCHORING SYSTEM WITH SAFE WORKING LOADS TO MATCH A SPECIFIED LOAD REQUIREMENT; AND FOR INSTALLING DRILL IN ANCHORS PER MANUFACTURERS INSTRUCTION



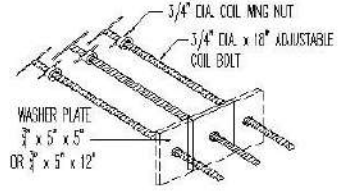
TILT WALL PANEL ELEVATIONS



SECTION-SINGLE STRONGBACK INSERT
TYPICAL STRONGBACK WITH THQT-STRONGBACK INSERT AND HARDWARE
INSTALL ALL MATERIALS PER MFG'S INSTRUCTIONS



SECTION-SINGLE DRILL-IN ANCHOR
TYPICAL STRONGBACK WITH DRILL-IN ANCHORS AND HARDWARE
INSTALL ALL MATERIALS PER MFG'S INSTRUCTIONS

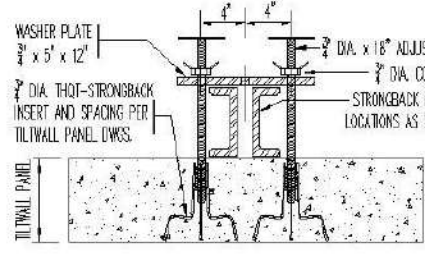


COIL BOLT/WING NUT/WASHER PL. ASSY.

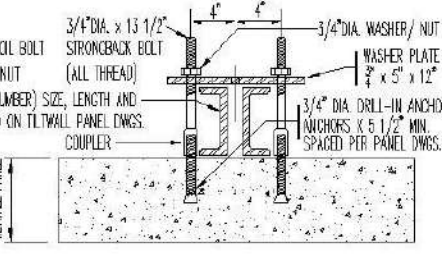


STRONGBACK BOLT/WASHER PL. ASSY.

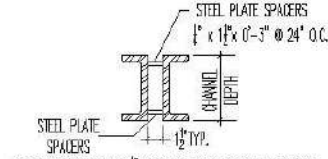
TYPICAL STRONGBACK AND THQT-STRONGBACK INSERT DETAILS



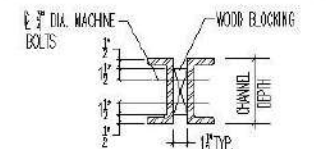
SECTION-DOUBLE STRONGBACK INSERT
TYPICAL STRONGBACK WITH THQT-STRONGBACK INSERTS AND HARDWARE
INSTALL ALL MATERIALS PER MFG'S INSTRUCTIONS



SECTION-DOUBLE DRILL-IN ANCHOR
TYPICAL STRONGBACK WITH DRILL-IN ANCHORS AND HARDWARE
INSTALL ALL MATERIALS PER MFG'S INSTRUCTIONS



SECTION-TYPICAL DBL. C STRONGBACK



SECTION-ALTERNATE DBL. C STRONGBACK

NOTE: ALL THQT STRONGBACK INSERTS TO BE AT LEAST 12 INCHES FROM OPENING AND PANEL EDGES AND THE MAXIMUM SPACING SHALL BE IN ACCORDANCE WITH THQT TILT WALL PANEL DRAWINGS. SIZE, LENGTH, SPACINGS AND LOCATIONS SHALL BE AS PER THQT TILT WALL PANEL DRAWINGS.

THQT MOD-STRONG STRONGBACKS



THQT MOD-STRONG STRONGBACKS ARE MODULAR SO THAT THEY CAN BE TRANSPORTED AND ASSEMBLED IN ANY COMBINATION OF LENGTHS. STANDARD SIZES ARE DBL-C8, DBL-C10 AND DBL-C12. MODULAR LENGTHS ARE 6'-0" AND 12'-0". BOLTING THEM TOGETHER IS EASY AND CAN BE DONE IN THE SHOP OR IN THE FIELD.

CONVENIENT FORKLIFT HOLES MAKE MANEUVERING MOD-STRONGS EASY, EITHER INDIVIDUALLY OR IN BUNDLES. THE BUTT SPLICES DEVELOP THE FULL STRENGTH OF THE STRONGBACK SO THEY CAN BE USED WITH ANY DESIGN CALLING FOR STRONGBACKS. (RENTAL OR SALE)

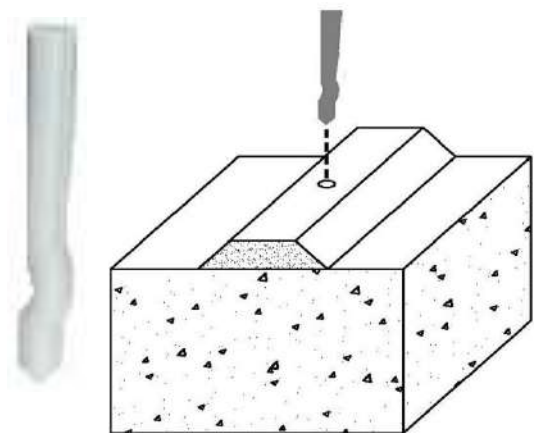
SPRAY ADHESIVE

- AVAILABLE IN 17.6 OUNCE CONTAINERS (3M)
- OR 14 OUNCE CONTAINERS (GluDown)
- 12 CONTAINERS TO A CASE.
- PRODUCT IS DESIGNED FOR BONDING REVEAL, CHAMFER AND TILT WALL PANEL BRACING DEVICES TO CONCRETE OR WOOD. FAST DRYING, HIGH STRENGTH ADHESIVE.



PLASTI-NAIL™

- PLASTI-NAIL™ IS A SOLID VINYL PLASTIC FASTENER.
- PLASTI-NAIL™ IS AVAILABLE IN 1/4" DIA. X 2" LONG
- 500 PCS. PER BOX.
- PLASTI-NAIL™ FASTENS REVEAL, TILT WALL PANEL BRACING DEVICES AND OTHER MATERIAL TO CONCRETE.
- DRASTICALLY REDUCES CONCRETE SPALLING SHEAR OFF PLASTI-NAIL™ WITH FLOOR SCRAPER, LEAVING REMAINDER OF PLASTI-NAIL™ IN CONCRETE SLAB. ELIMINATES HAVING TO FILL/PATCH HOLES.



ACCESSORIES:

BONDBREAKER (55 GAL)

CURING COMPOUND (55 GAL)

INDUSTRIAL SPRAYERS (3.5 GAL)

ALL PURPOSE GROUT (50 LB)

THIN PATCH (10 LB)

SPRAY GLUE (17 OZ)

WOOD CHAMFER

NAILS

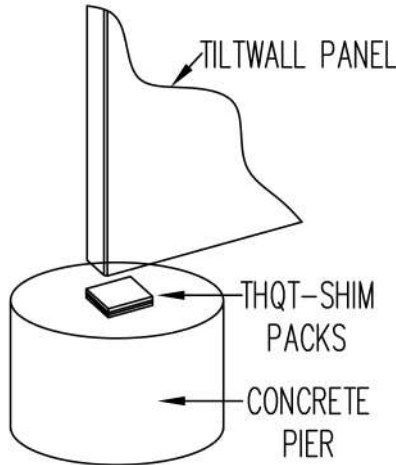
BONDING AGENT (1 GAL)

FORM LINERS

REBAR PLASTIC CHAIRS

ANCHOR BOLTS

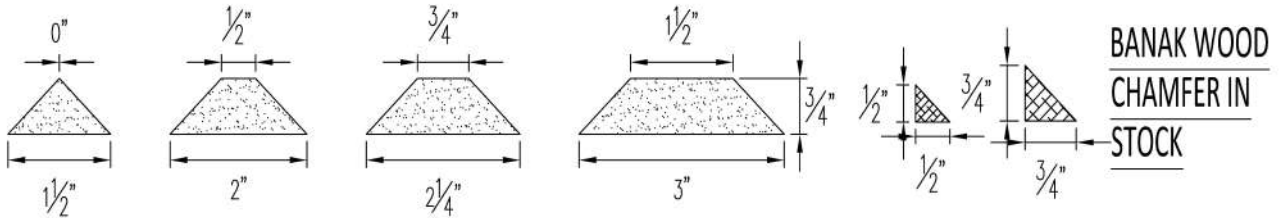
**TILT WALL PANEL
MISCELLANEOUS
MATERIALS
DETAILS**



THQT-SHIM PACKS

- COMPRESSIVE STRENGTH 8000 PSI / HIPS MATERIAL.
- SERRATED TO PREVENT MOVEMENT OF TILT WALL PANEL.
- 4" WIDE X 6" LONG X 1-1/16" THICK SHIM PACK.
- EACH SHIM PACK CONTAINS:
 - 3 EACH – 4" WIDE X 6" LONG X 1/4" THICK SHIM.
 - 2 EACH – 4" WIDE X 6" LONG X 1/8" THICK SHIM.
 - 1 EACH – 4" WIDE X 6" LONG X 1/16" THICK SHIM.

THQT-MDF REVEAL (IN STOCK): CUSTOM SIZES AVAILABLE ON ORDER



TILT WALL HEADQUARTERS & SUPPLIES PRODUCES WOOD REVEALS FOR TILT WALL PANEL CONSTRUCTION AND CONCRETE WALLS, COLUMNS, ETC. TWO TYPES OF REVEAL ARE AVAILABLE WITH DIFFERENT MOISTURE RESISTANCE CAPABILITIES. OUR REVEAL IS MADE FROM A MEDIUM DENSITY COMPOSITE FIBERBOARD WHICH IS WATER RESISTANT AND HAS AN EXTREMELY SMOOTH SURFACE. WE CAN PRODUCE REVEAL IN 1/2", 3/4", 1", 1 1/4", 1 1/2" THICKNESS X 8' - 0" LONG. THE SIZES LISTED AND SHOWN ABOVE ARE IN STOCK FOR EVERYDAY DELIVERY.

MR50 REVEAL (RECOMMENDED):

- NO CONCRETE RETARDATION
- NO WATER BLEEDING STREAKS
- NO SWELLING/CRAWLING (WATER/BONDBREAKER)
- NO DETERIORATION (WATER/BONDBREAKER)

MR10 REVEAL (NOT RECOMMENDED):

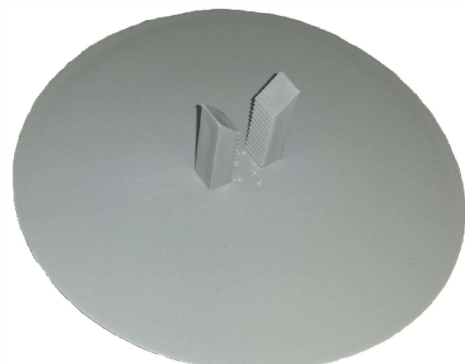
- CONCRETE RETARDATION
- WATER BLEEDING STREAKS
- SWELLING/CRAWLING (WATER/BONDBREAKER)
- DETERIORATION (WATER/BONDBREAKER)



BRACE INSERT CAP



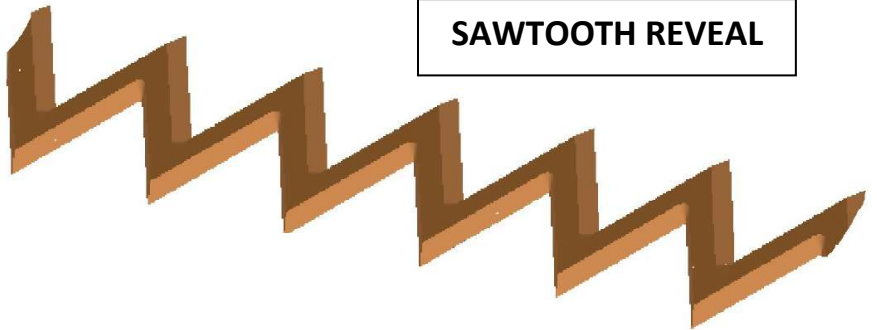
LIFT INSERT CAP



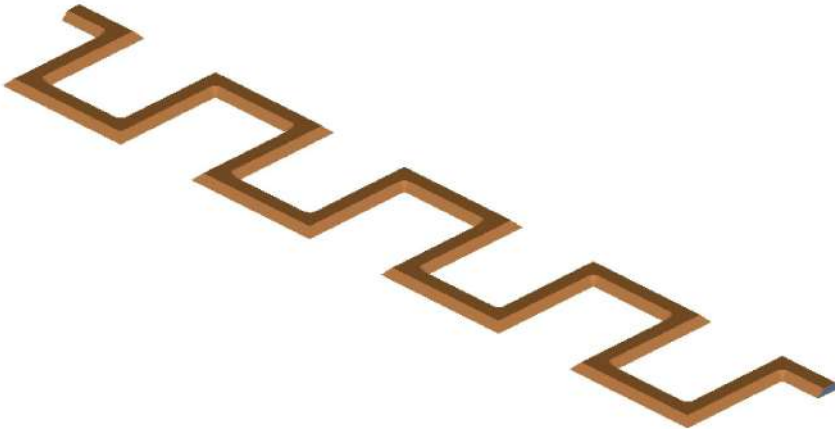
**TILT WALL
PANEL
CUSTOM
SPECIALTY
REVEALS**

**WE CAN MAKE CUSTOM REVEALS CONFORMING
TO YOUR SPECIFICATIONS! SEE EXAMPLES BELOW.**

SAWTOOTH REVEAL



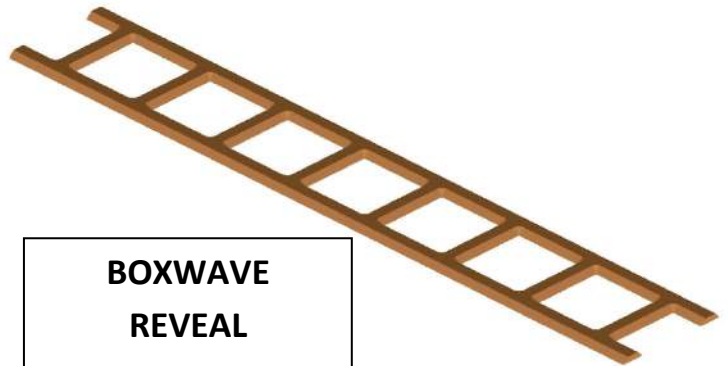
**SQUAREWAVE
REVEAL**



**ARCWAVE
REVEAL**



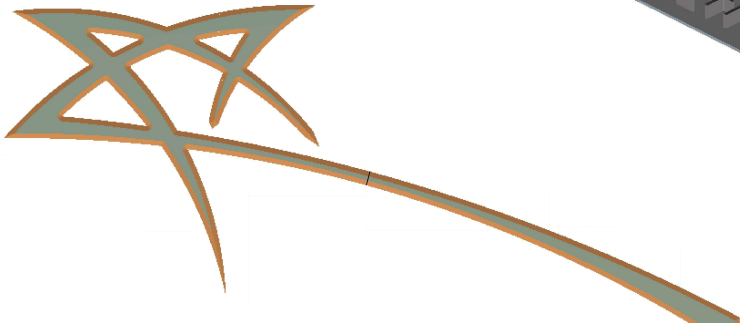
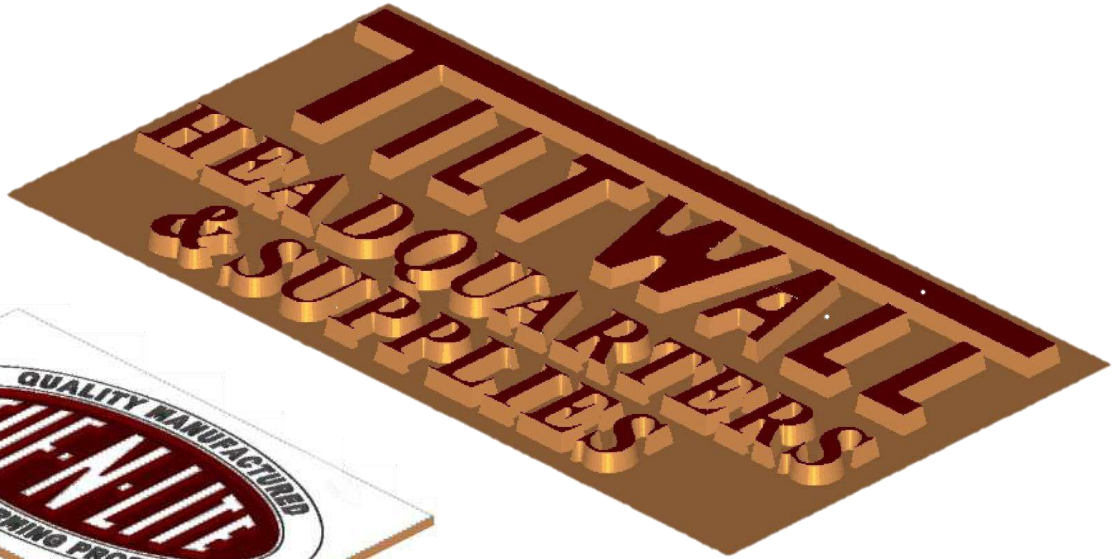
**BOXWAVE
REVEAL**



WE CAN MAKE CUSTOM LOGOS BASED ON YOUR SPECIAL DESIGN. SEE EXAMPLES BELOW.

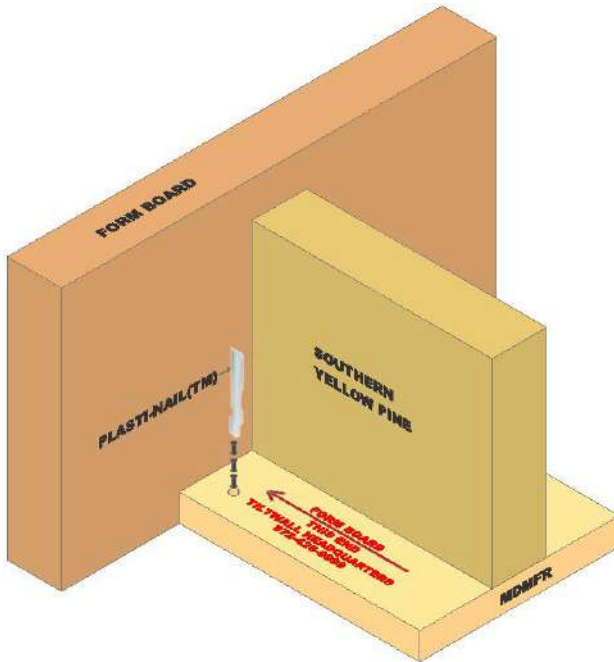
Just send your CAD drawing file (.dwg or .dxf format) to thq@tiltwallhqt.com for a quote.

**TILT WALL
PANEL
CUSTOM
SPECIALTY
LOGOS**



THQT FORM BRACE WITH PLASTI-NAILS™

INSTALLATION GUIDE



THQT FORM BRACES CAN BE FASTENED TO CONCRETE WITH PLASTI-NAILS™ FOR TILT WALL PANEL THICKNESSES UP TO 12" WITH A MINIMUM FACTOR OF SAFETY OF 2. MAXIMUM SPACING IS 24".

HOLE SIZE IS CRITICAL IN BOTH THE MDFMR AND THE CONCRETE. HOLES MUST BE EXACTLY 1/4" DIAMETER IN ORDER TO MAKE SURE THE PLASTI-NAIL™ DOES NOT PULL OUT OF THE CONCRETE OR MDFMR.

INSTALLATION INSTRUCTIONS

1. PLACE FORM BRACE ON CHALK LINE WHERE FORM BOARD WILL BE LOCATED. HOLD FORM BRACE FIRMLY IN PLACE AND USE 1/4" MASONRY DRILL BIT TO DRILL FIRST HOLE IN CONCRETE AT LEAST 1-3/4" DEEP.
2. DRIVE PLASTI-NAIL™ INTO FIRST HOLE SO THAT TOP OF PLASTI-NAIL™ IS FLUSH WITH TOP OF MDFMR. THEN, HOLDING FORM BRACE FIRMLY IN PLACE, USE 1/4" MASONRY DRILL BIT TO DRILL SECOND HOLE IN CONCRETE AT LEAST 1-3/4" DEEP. NOW DRIVE SECOND PLASTI-NAIL™ INTO SECOND HOLE SO THAT TOP OF PLASTI-NAIL™ IS FLUSH WITH TOP OF MDFMR.
3. AFTER ALL FORM BRACES ARE IN PLACE, USE NAIL GUN TO NAIL FORM BOARD TO SOUTHERN YELLOW PINE (NOT MDFMR). MANUAL NAILING RUNS THE RISK OF DISPLACING THE PLASTI-NAILS™.
4. BEFORE PLACING CONCRETE, INSPECT ALL FORM BRACES TO MAKE SURE THEY ARE COMPLETELY FASTENED DOWN AGAINST THE CASTING BED (USUALLY THE FLOOR SLAB).
5. REMOVE THE FORM BRACE/PLASTI-NAILS™ BY DRIVING A FLAT BLADE FLOOR SCRAPER UNDER THE FORM BRACE TO SHEAR THROUGH THE PLASTI-NAIL™, LEAVING THE PLASTI-NAIL™ EMBEDDED IN THE CONCRETE.



**BONDBREAKER
AND
SPRAYER**

NOX-CRETE

SILCOSEAL

SELECT

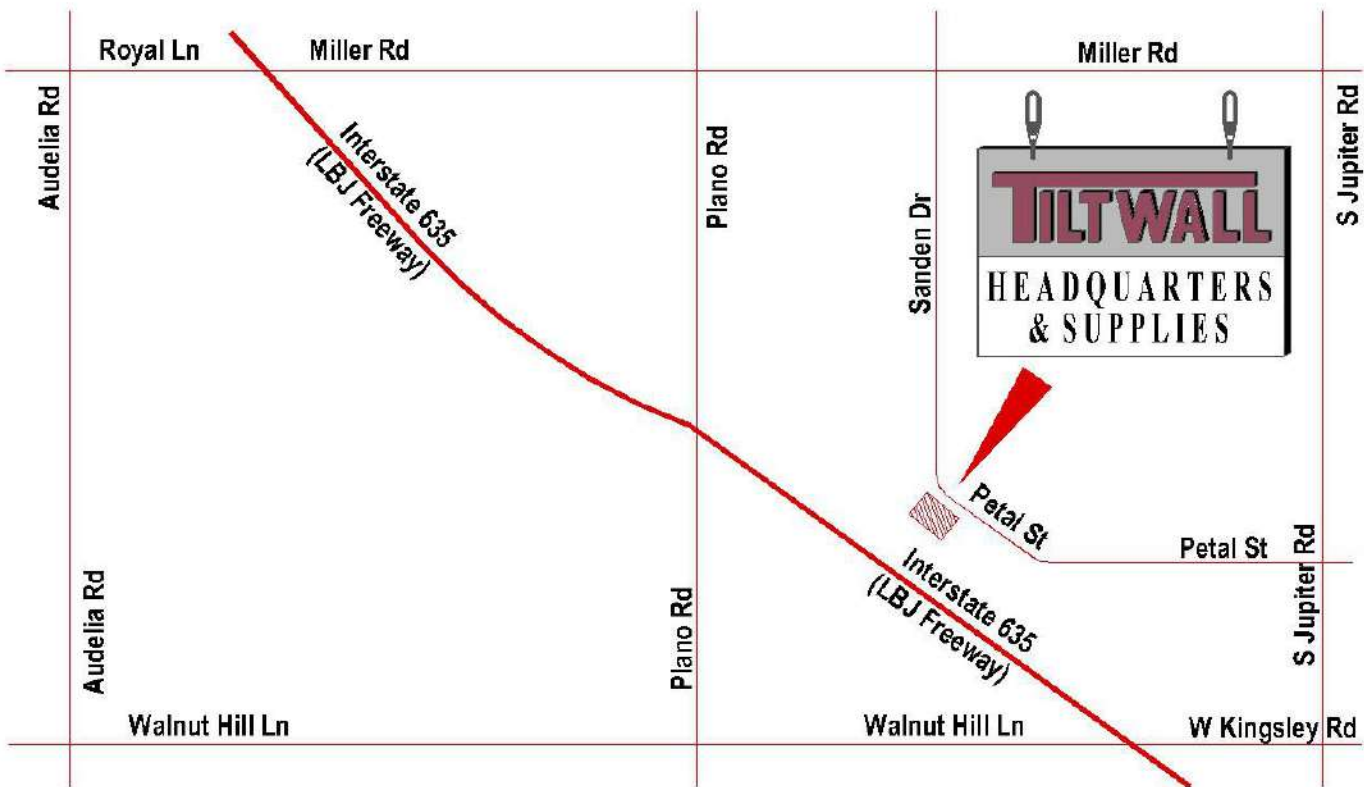
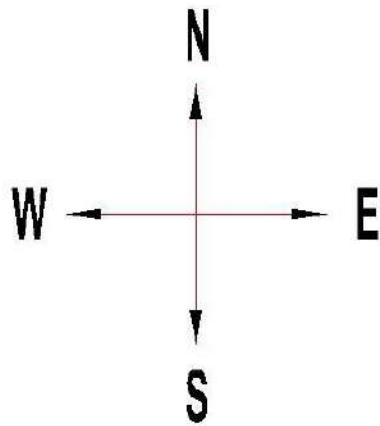
BONDBREAKER

- 55 GALLON DRUM CONTAINER
- WATER BASED SOLVENT SYSTEM
- MEETS ASTM C309
- FAST DRY
- MEETS ALL FEDERAL, STATE AND LOCAL REQUIREMENTS



CHAPIN SPRAYER MODEL 1949

- 3.5 GALLON TRI-POXY TANK WITH 4" WIDE MOUTH
- HANDLES A VARIETY OF CURES AND SEALERS
- EASY FILLING AND CLEANING
- PARTS AVAILABLE



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