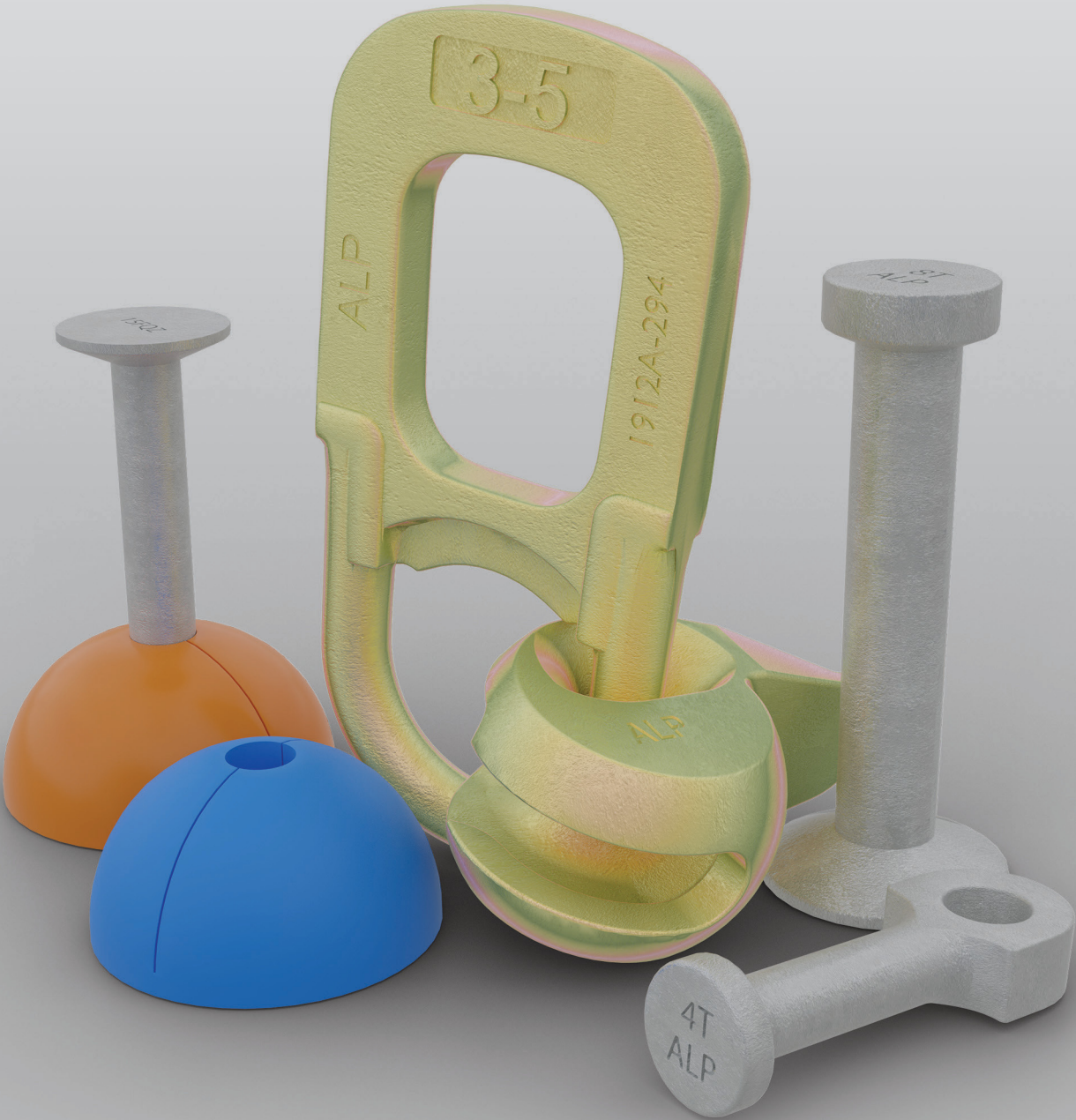
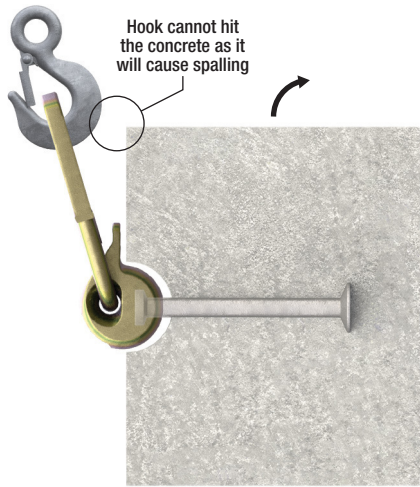


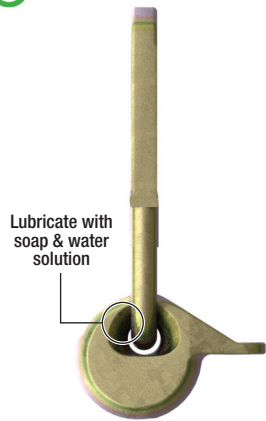
LIFTING PIN™
SYSTEM



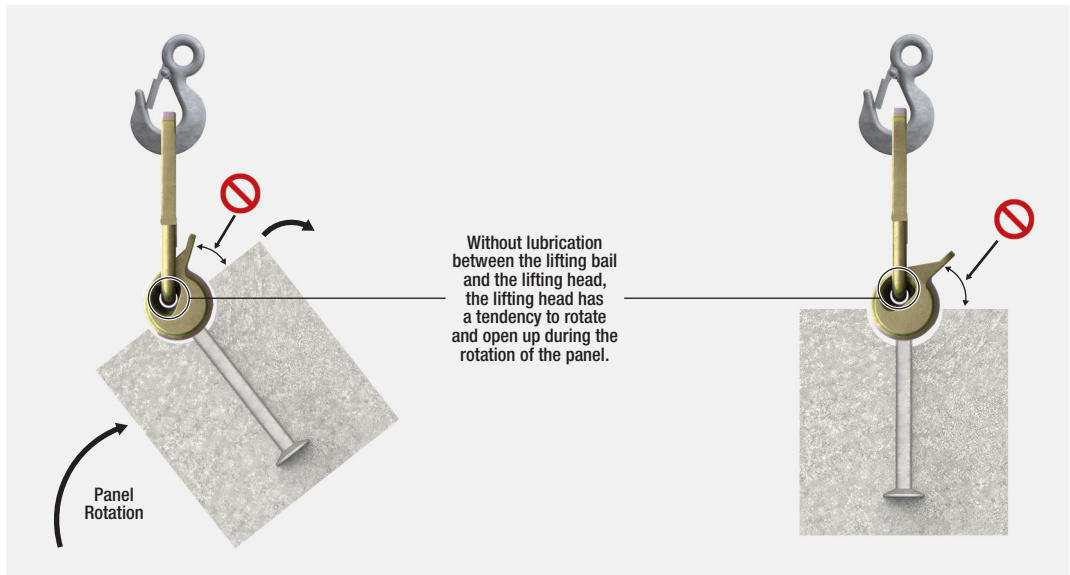
EDGE LIFTING OF SLABS AND WALL PANELS



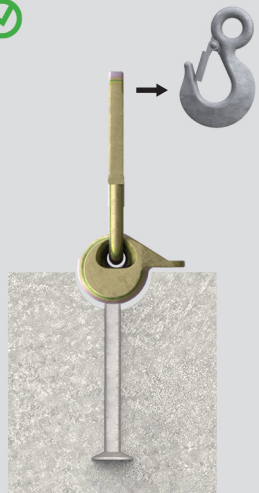
The Lifting Pin System is **not typically recommended** for lifting in the edge of thin wall panels or slabs due to the system's low shear capacity in that application. For thin panels, the ALP Supply QuikLift® System should be used. In thicker panels and slabs, the ALP Supply Lifting Pin System can be used to rotate slabs or panels, but users should monitor the orientation of the lifting head in relation to the direction of load. Without proper lubrication of the lifting head, it can start to disengage from the lifting anchor as the panel is rotated up. To minimize friction between the lifting head and the bail, a soap and water solution is recommended.



Side View



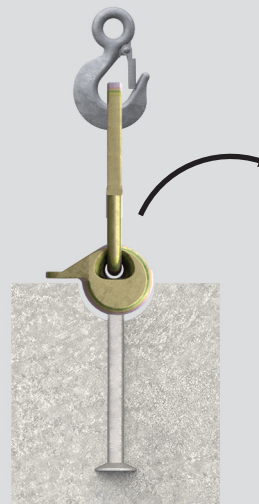
If laying panel down on opposite side follow these instructions



It may be necessary to disengage the lifting eye from the hook



Rotate Lift Eye



Slowly lay down panel

ALP® LIFTING EYE TERMINOLOGY AND INSPECTION

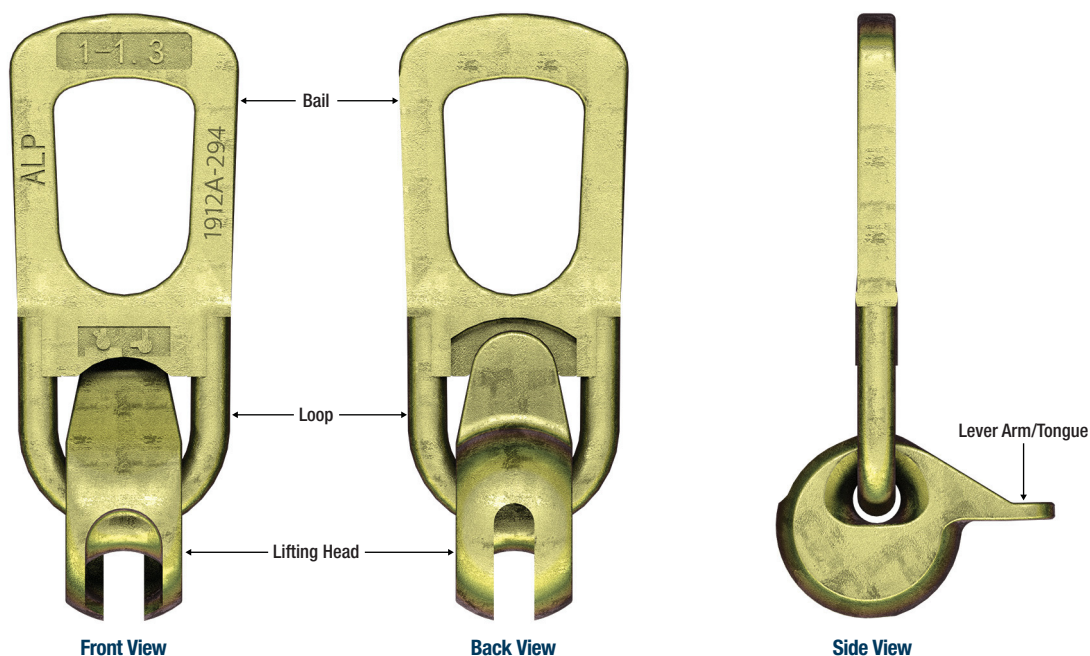
Inspect all Lift Eyes for the following:

- Inspect the Bail and Lifting Head for cracks.
- Inspect the Bail and Loop for any bends.
- Inspect and remove from service if there are signs that excessive external heat was applied to any parts.

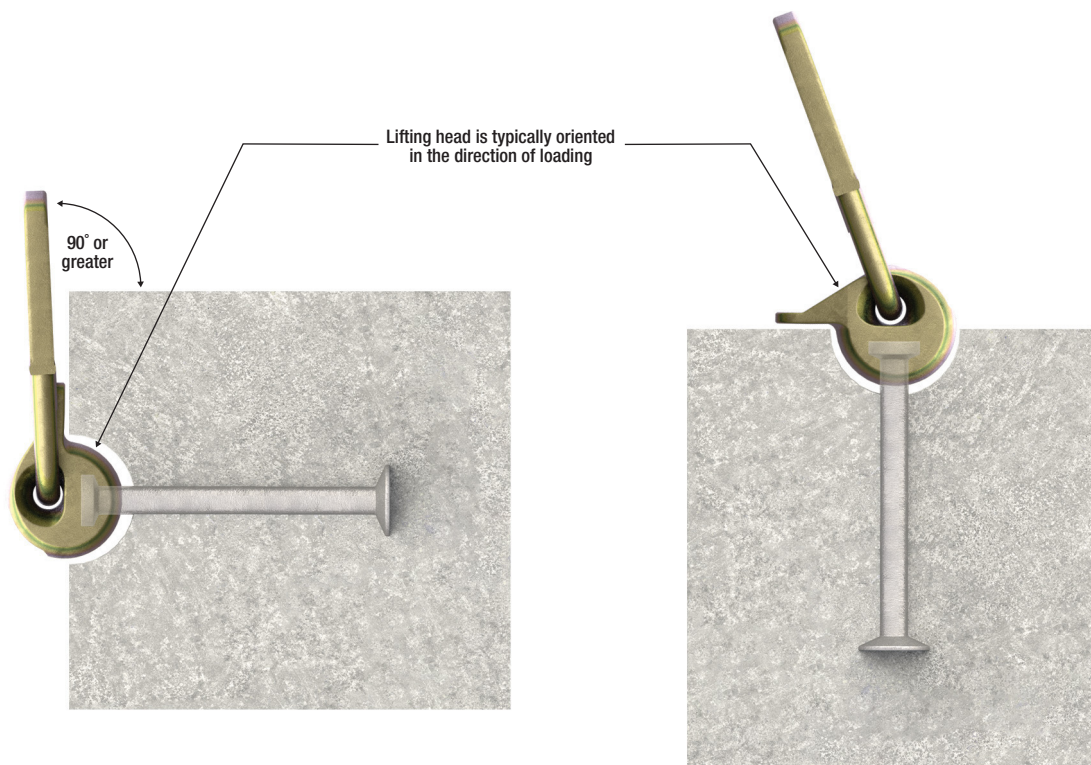
When to remove Lift Eyes from service:

- If the Bail has been bent.
- If a weld has been fractured.

See ALP Supply website for Inspection and Maintenance Guidelines for routine inspection of lifting hardware.

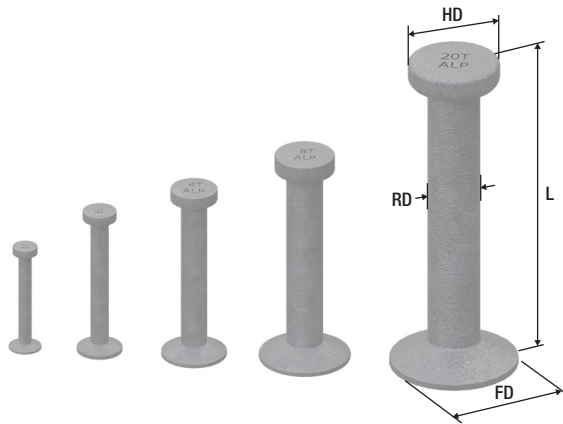


ALP® LIFTING EYE GENERAL USE



ALP® LIFTING PIN ANCHORS

All ALP Lifting Pin Anchors are manufactured using high strength steel with forged ends. The head design provides uniform engagement with the Lifting Eye, and the large forged anchor foot is embedded in the concrete to create the lifting capacity. **Standard finish is hot-dipped galvanized.** *Safe Working Loads (SWL) displayed in the below chart apply to loading in any direction.*



Head Marking

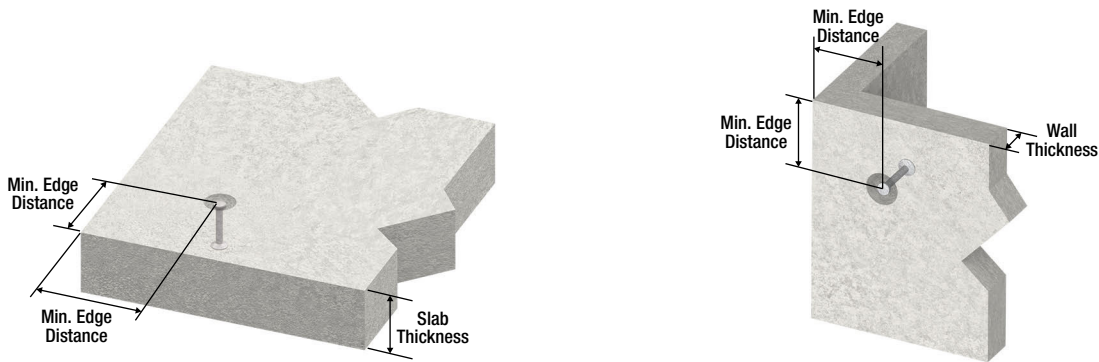


Foot Marking

DIMENSIONS AND CAPACITIES

Part #	Ton	L	HD	RD	FD	Head Marking	Ultimate Mechanical in Tension (lbs)	Weight (lbs)	Qty/Bag	Qty/Crate
LPA1T238G	1T	2-3/8"	3/4"	3/8"	1"	ALP 1T 238	8,000	0.11	300	15,000
LPA1T258G	1T	2-5/8"	3/4"	3/8"	1"	ALP 1T 258	8,000	0.14	300	15,000
LPA1T338G	1T	3-3/8"	3/4"	3/8"	1"	ALP 1T 338	8,000	0.16	200	5,000
LPA1T434G	1T	4-3/4"	3/4"	3/8"	1"	ALP 1T 434	8,000	0.22	100	5,000
LPA2T234G	2T	2-3/4"	1"	9/16"	1-3/8"	ALP 2T 234	16,000	0.31	100	5,000
LPA2T338G	2T	3-3/8"	1"	9/16"	1-3/8"	ALP 2T 338	16,000	0.35	100	5,500
LPA2T434G	2T	4-3/4"	1"	9/16"	1-3/8"	ALP 2T 434	16,000	0.43	100	5,000
LPA2T512G	2T	5-1/2"	1"	9/16"	1-3/8"	ALP 2T 512	16,000	0.48	50	4,500
LPA2T634G	2T	6-3/4"	1"	9/16"	1-3/8"	ALP 2T 634	16,000	0.57	100	4,000
LPA2T11G	2T	11"	1"	9/16"	1-3/8"	ALP 2T 11	16,000	0.85	30	1,500
LPA4T212G	4T	2-1/2"	1-7/16"	3/4"	2"	ALP 4T 212	32,000	0.67	50	3,000
LPA4T3G	4T	3"	1-7/16"	3/4"	2"	ALP 4T 3	32,000	0.74	50	3,000
LPA4T312G	4T	3-1/2"	1-7/16"	3/4"	2"	ALP 4T 312	32,000	0.77	50	2,500
LPA4T334G	4T	3-3/4"	1-7/16"	3/4"	2"	ALP 4T 334	32,000	0.82	50	2,500
LPA4T414G	4T	4-1/4"	1-7/16"	3/4"	2"	ALP 4T 414	32,000	0.89	50	2,500
LPA4T434G	4T	4-3/4"	1-7/16"	3/4"	2"	ALP 4T 434	32,000	0.94	25	2,500
LPA4T512G	4T	5-1/2"	1-7/16"	3/4"	2"	ALP 4T 512	32,000	1.05	50	2,000
LPA4T718G	4T	7-1/8"	1-7/16"	3/4"	2"	ALP 4T 718	32,000	1.25	25	1,600
LPA4T912G	4T	9-1/2"	1-7/16"	3/4"	2"	ALP 4T 912	32,000	1.60	20	1,500
LPA8T434G	8T	4-3/4"	1-13/16"	1-1/8"	2-3/4"	ALP 8T 434	64,000	1.96	20	1,000
LPA8T6G	8T	6"	1-13/16"	1-1/8"	2-3/4"	ALP 8T 6	64,000	2.31	20	1,000
LPA8T634G	8T	6-3/4"	1-13/16"	1-1/8"	2-3/4"	ALP 8T 634	64,000	2.48	20	1,000
LPA8T834G	8T	8-3/4"	1-13/16"	1-1/8"	2-3/4"	ALP 8T 834	64,000	3.06	15	750
LPA8T10G	8T	10"	1-13/16"	1-1/8"	2-3/4"	ALP 8T 10	64,000	3.33	10	500
LPA8T1338G	8T	13-3/8"	1-13/16"	1-1/8"	2-3/4"	ALP 8T 1338	64,000	4.26	N/A	450
LPA8T2634G	8T	26-3/4"	1-13/16"	1-1/8"	2-3/4"	ALP 8T 2634	64,000	7.83	N/A	270
LPA16T778G	16T	7-7/8"	2-3/4"	1-9/16"	3-7/8"	ALP 16T 778	128,000	6.59	N/A	300
LPA20T10G	20T	10"	2-3/4"	1-9/16"	3-7/8"	ALP 20T 10	160,000	7.82	N/A	200
LPA20T16G	20T	16"	2-3/4"	1-9/16"	3-7/8"	ALP 20T 16	160,000	11.00	N/A	200
LPA20T1934G	20T	19-3/4"	2-3/4"	1-9/16"	3-7/8"	ALP 20T 1934	160,000	13.35	N/A	160

ALP® LIFTING PIN ANCHORS CAPACITY IN CONCRETE

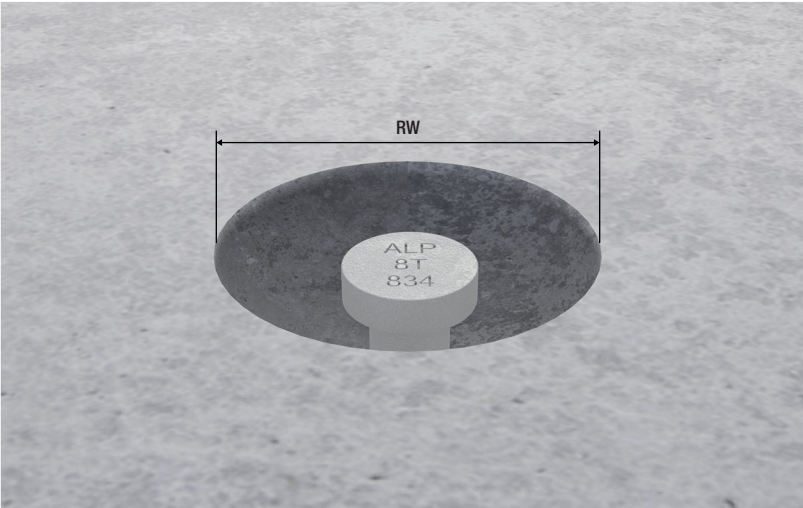


Capacity in Concrete, 4:1 SWL								
Part #	Ton	L	1500 PSI (lbs)	2500 PSI (lbs)	3500 PSI (lbs)	5000 PSI (lbs)	Min. Edge Distances	
							Tension	Shear
LPA1T238G	1T	2-3/8"	1,045	1,350	1,600	1,910	8"	12"
LPA1T258G	1T	2-5/8"	1,160	1,500	1,770	2,000	8"	12"
LPA1T338G	1T	3-3/8"	1,900	2,000	2,000	2,000	8"	12"
LPA1T434G	1T	4-3/4"	2,000	2,000	2,000	2,000	10"	12"
LPA2T234G	2T	2-3/4"	1,375	1,775	2,100	2,510	8"	12"
LPA2T338G	2T	3-3/8"	2,000	2,700	3,250	3,900	8"	12"
LPA2T434G	2T	4-3/4"	3,250	4,000	4,000	4,000	10"	15"
LPA2T512G	2T	5-1/2"	4,000	4,000	4,000	4,000	11"	17"
LPA2T634G	2T	6-3/4"	4,000	4,000	4,000	4,000	11"	17"
LPA2T11G	2T	11"	4,000	4,000	4,000	4,000	11"	17"
LPA4T212G	4T	2-1/2"	1,400	1,810	2,150	2,560	8"	12"
LPA4T3G	4T	3"	1,960	2,530	2,990	3,570	8"	12"
LPA4T312G	4T	3-1/2"	2,275	2,935	3,475	4,150	8"	12"
LPA4T334G	4T	3-3/4"	2,550	3,250	3,950	4,700	8"	12"
LPA4T414G	4T	4-1/4"	3,000	3,850	4,550	5,450	9"	13"
LPA4T434G	4T	4-3/4"	3,650	4,700	5,600	6,700	10"	15"
LPA4T512G	4T	5-1/2"	4,550	5,850	6,950	8,000	11"	17"
LPA4T718G	4T	7-1/8"	6,900	8,000	8,000	8,000	15"	22"
LPA4T912G	4T	9-1/2"	8,000	8,000	8,000	8,000	17"	26"
LPA8T434G	8T	4-3/4"	4,050	5,200	6,200	7,450	10"	15"
LPA8T6G	8T	6"	5,805	7,495	8,870	10,600	12"	18"
LPA8T634G	8T	6-3/4"	7,000	9,000	10,750	12,850	14"	21"
LPA8T834G	8T	8-3/4"	12,940	16,000	16,000	16,000	18"	27"
LPA8T10G	8T	10"	14,790	16,000	16,000	16,000	20"	30"
LPA8T1338G	8T	13-3/8"	16,000	16,000	16,000	16,000	27"	41"
LPA8T2634G	8T	26-3/4"	16,000	16,000	16,000	16,000	27"	41"
LPA16T778G	16T	7-7/8"	7,000	9,000	10,750	12,850	14"	21"
LPA20T10G	20T	10"	11,750	15,150	17,950	21,500	20"	30"
LPA20T16G	20T	16"	18,920	24,425	28,900	34,540	24"	36"
LPA20T1934G	20T	19-3/4"	26,000	33,800	40,000	40,000	40"	48"

Shaded area indicates the capacity in concrete is limited by the mechanical capacity of the anchor

- Table is based on normal weight concrete (145-150PCF)
- Minimum anchor spacing is 2x the published edge distance
- Minimal reinforcement required to achieve above load values
- Capacities in radius sections are reduced - consult ALP Supply® Tech Support
- Above capacities are based upon mechanical & concrete testing, calculations and available industry data
- Loads are listed at varying concrete strengths (PSI) to accommodate varying conditions at time of loading
- Proper rigging and all lifting angle load magnifications are to be used to determine actual applied loads
- To achieve published values, a minimum concrete cover of 1" below the foot of anchor is required
- For insulated wall panel and slab applications, the foot of the anchor can sit on or be recessed by the depth of the foot into the insulation, as long as full concrete bearing on the top of the foot is achieved
- For lifting and handling of thin slabs, design needs to ensure slab is properly reinforced to prevent flexural stresses from cracking slab

LIFT PIN ANCHOR DIMENSIONS IN CONCRETE



Lift Pin Anchor Tonnage	X	Y	Rubber Recess System		Plus Recess System	
			RW	RH	RW	RH
1T	3/8"	7/8"	2-3/8"	1-3/16"	-	-
2T	3/8"	1-3/16"	3"	1-9/16"	3-1/4"	1-7/16"
4T	9/16"	1-1/4"	3-3/4"	1-13/16"	4"	1-7/8"
8T	9/16"	1-3/4"	5"	2-5/16"	5"	2-1/8"
16T/20T	11/16"	2-5/16"	6-1/2"	3"	-	-

ALP® ASSEMBLED LIFT PIN ANCHORS

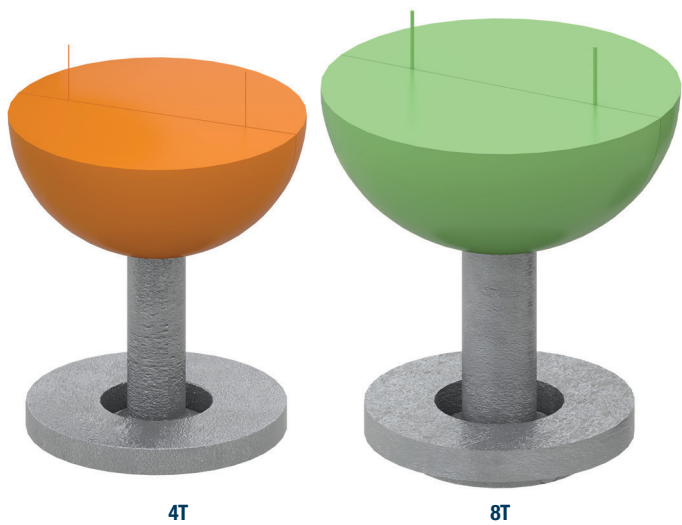


ALP Lifting Pin Anchors are available pre-assembled with a disposable recess member. Sold in carton quantities only. For concrete capacities, please review our ALP® Lifting Pin Anchors page.

DIMENSIONS

Part #	Ton	L	Qty/Ctn	Qty/Pallet
LPADR4T414G	4T	4-1/4"	35	1,260
LPADR4T434G	4T	4-3/4"	35	1,260
LPADR4T512G	4T	5-1/2"	35	1,260
LPADR4T718G	4T	7-1/8"	35	1,050
LPADR8T634G	8T	6-3/4"	20	480
LPADR8T10G	8T	10"	15	400

ALP® ASSEMBLED LIFT PIN DISK ANCHORS™



ALP Lift Pin Disk Anchors are available pre-assembled with a disposable recess member. Sold in carton quantities only. For concrete capacities, please review our ALP® Lift Pin Disk Anchors page.

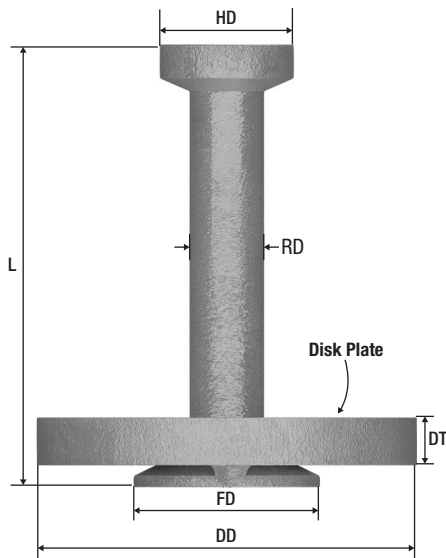
DIMENSIONS

Part #	Ton	LWT*	Qty/Ctn	Qty/Pallet
LPPDDR4T4WG	4T	4"	20	720
LPPDDR4T5WG	4T	5"	20	720
LPPDDR8T6WG	8T	6"	12	432

*Lifting Wythe Thickness based upon anchor sitting directly on top of insulation.



ALP® LIFT PIN DISK ANCHOR™



Head Marking



Foot Marking

The ALP Lift Pin Disk Anchor is the first system designed specifically for lifting insulated wall panels from the top wythe of concrete and does not require any additional reinforcing bars. Disk Anchor heights are optimized to fit specific wythe heights, with anchor heights that factor in the height of the recess member. When project requirements allow, insulation thickness can be reduced to fit deeper anchors to increase capacities. Disk Anchors can also be used in non-insulated panel applications, with 1" cover below the foot, as noted in the load charts. **Standard Finish is Hot Dip Galvanized, impact resistant, even in freezing temperatures. Patent No. EP 4,215,696 A1. Other patent pending.**

DIMENSIONS

Part #	Ton	L	HD	RD	FD	DD	DT	Head Marking	Ultimate Mechanical in Tension (lbs)	Weight (lbs.)	Qty/ Crate
LPPD2T3WG	2T	2-1/2"	1"	9/16"	1-3/8"	3"	3/8"	ALP PD2T 3W	16,000	0.97	2,200
LPPD4T3WG	4T	2-7/16"	1-7/16"	3/4"	2"	3-1/2"	3/8"	ALP PD4T 3W	32,000	1.51	1,400
LPPD4T4WG	4T	3-7/16"	1-7/16"	3/4"	2"	3-1/2"	3/8"	ALP PD4T 4W	32,000	1.64	1,300
LPPD4T5WG	4T	4-7/16"	1-7/16"	3/4"	2"	3-1/2"	3/8"	ALP PD4T 5W	32,000	1.75	1,200
LPPD8T6WG	8T	5-3/8"	1-13/16"	1-1/8"	2-3/4"	4"	1/2"	ALP PD8T 6W	64,000	3.56	600
LPPD8T7WG	8T	6-3/8"	1-13/16"	1-1/8"	2-3/4"	4"	1/2"	ALP PD8T 7W	64,000	3.84	550
LPPD8T8WG	8T	7-3/8"	1-13/16"	1-1/8"	2-3/4"	4"	1/2"	ALP PD8T 8W	64,000	4.10	500

CAPACITIES

Capacity in Concrete 4:1 SWL									
Part #	Ton	L	LWT*	1500 PSI (lbs)	2500 PSI (lbs)	3500 PSI (lbs)	5000 PSI (lbs)	Min. Edge Distance (Tension)	
LPPD2T3WG†	2T	2-1/2"	3"	2,843	3,671	4,000	4,000	6"	
LPPD4T3WG†	4T	2-7/16"	3"	2,648	3,418	4,045	4,834	6-1/2"	
LPPD4T4WG†	4T	3-7/16"	4"	4,750	6,133	7,256	8,000	8"	
LPPD4T5WG	4T	4-7/16"	5"	5,754	7,428	8,000	8,000	9-1/2"	
LPPD8T6WG	8T	5-3/8"	6"	8,440	10,896	12,893	15,410	11"	
LPPD8T7WG	8T	6-3/8"	7"	9,128	11,785	13,944	16,000	12-1/2"	
LPPD8T8WG	8T	7-3/8"	8"	12,132	15,662	16,000	16,000	14"	

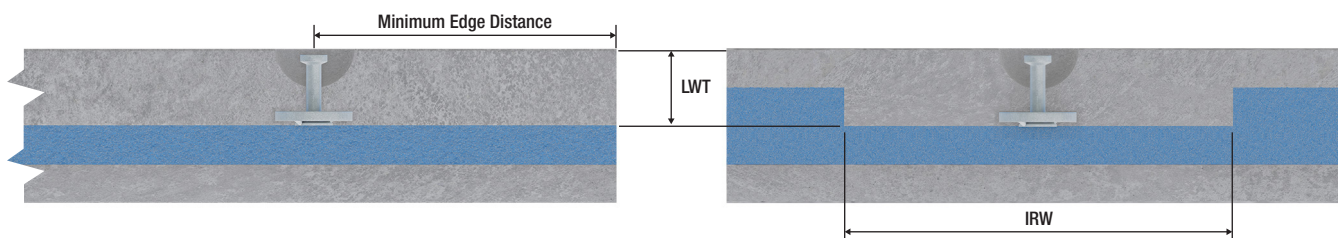
†Rebar should not be placed between the recess member and the disk plate as this may reduce the capacity of the system.

*Lifting Wythe Thickness based upon anchor sitting directly on top of insulation. For non-insulated applications, 1" cover required below the bottom of the anchor.

Shaded area indicates the capacity in concrete is limited by the mechanical capacity of the anchor

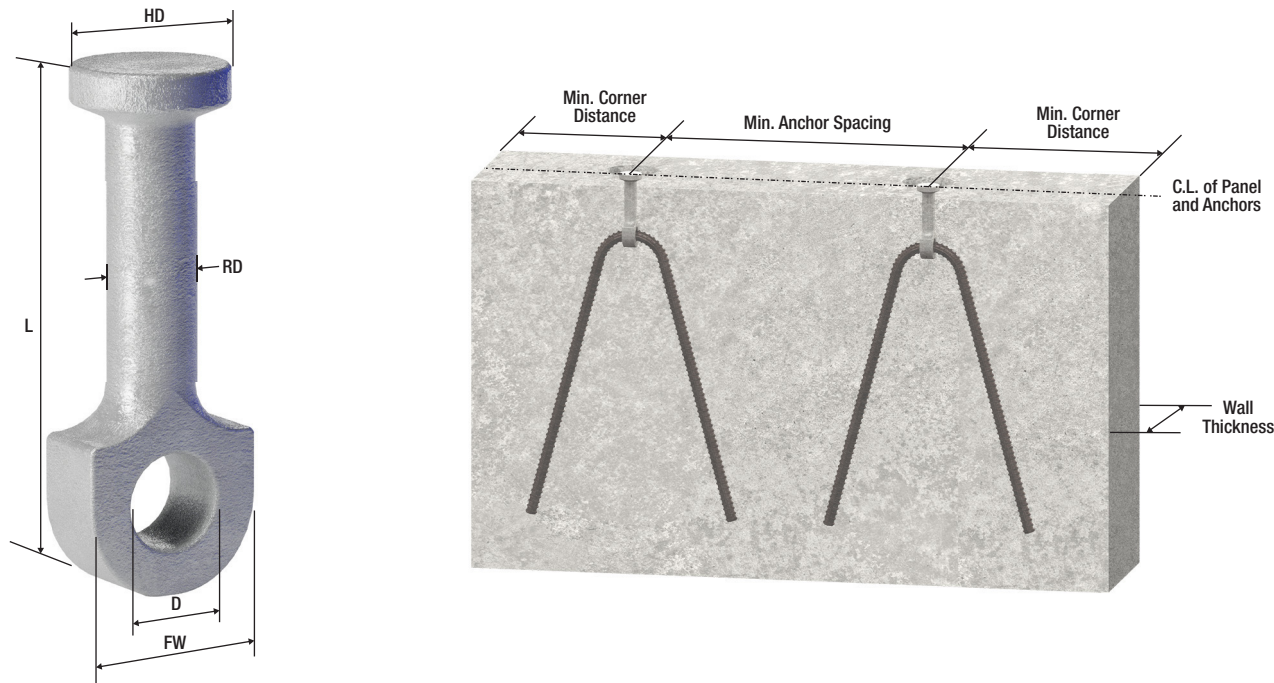
- Table is based on 145 PCF Concrete
- Above capacities are based upon mechanical and concrete testing.
- Tension edge distances are based upon testing in plain concrete.

- Shear edge distances should be based on ACI calculations or testing in plain concrete
- Insulated Recess Width (IRW) = 1.5x Minimum Edge Distance
- Minimum anchor spacing is 2x the published edge distance



ALP® LIFTING PIN EYE ANCHORS

The Lifting Pin Eye Anchor utilizes rebar reinforcement which transfers tension loads deep into the concrete element and produces high safe working loads in thin wall sections.



DIMENSIONS AND CAPACITIES WITH REBAR

Capacity in Concrete 4:1 SWL in tension at 2,000 PSI

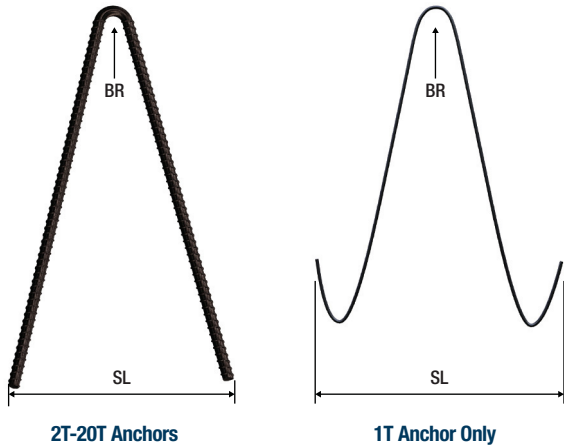
Part #	Ton	L	HD	RD	D	FW	Ultimate Mechanical in Tension (lbs)	Weight (lbs)	Qty/ Crate	Min. Wall Thickness	Min. Corner Distance	Min. Anchor Spacing	Tension w/ rebar (lbs)
LPEA1TG	1T	2-9/16"	3/4"	3/8"	3/8"	7/8"	8,000	0.18	10,000	3"	8"	16"	2,000
LPEA2TG	2T	3-1/2"	1-1/32"	9/16"	9/16"	1-5/16"	16,000	0.38	5,500	3"	4"	8"	4,000
LPEA4TG	4T	4-3/4"	1-7/16"	3/4"	7/8"	1-11/16"	32,000	0.97	2,100	4"	5"	10"	8,000
LPEA8TG	8T	7-1/16"	1-7/8"	1-1/8"	1-1/8"	2-3/8"	64,000	2.75	920	5"	7"	14"	16,000
LPEA20TG	20T	9-7/8"	2-3/4"	1-9/16"	1-9/16"	3-5/16"	160,000	7.01	300	6-1/2"	8-1/2"	17"	40,000

- Safe work loads are based on Anchors with tension bar installed.
- Above capacities are based on ACI 318 criteria and mechanical testing.
- Anchors must be centered in wall thickness when installed, otherwise deviations will result in a reduction of safe working loads.

TENSION BAR SELECTION CHART

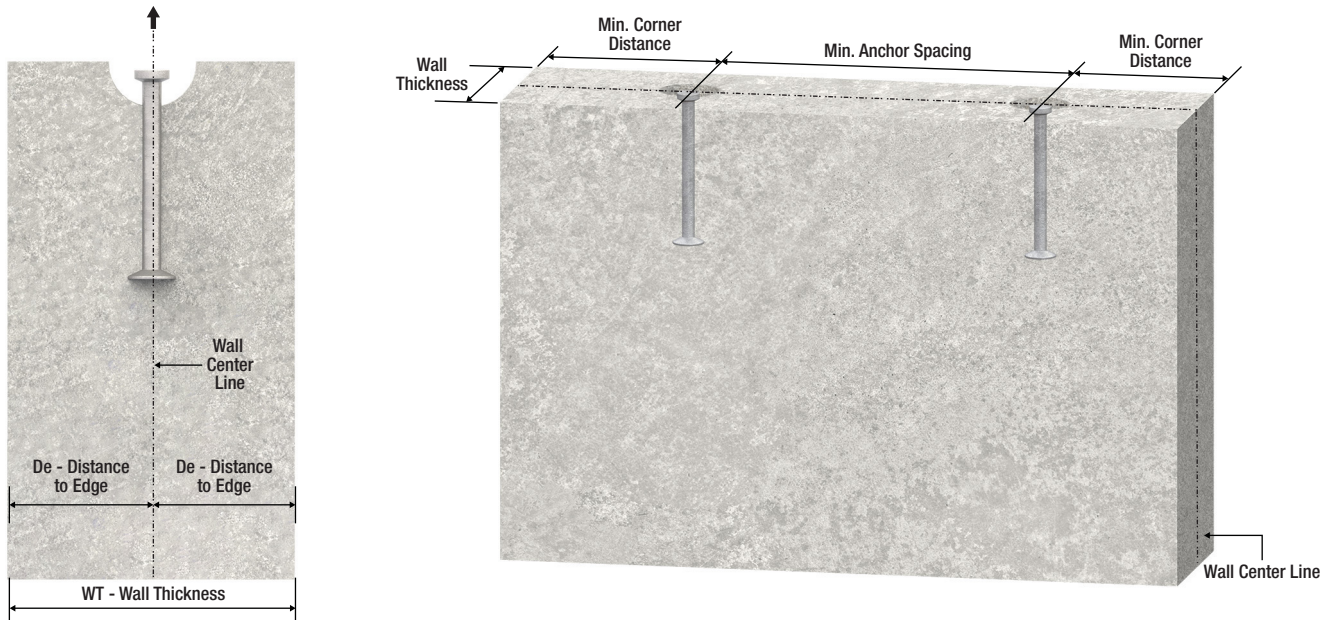
Anchor Load Rating	Rebar (Grade 60)		SL		BR (Min.)
	Size	Total Length	Min.	Max.	
1T	0.306" Wire	40"	14"	14"	3/4"
2T	#3	41"	6"	7-1/2"	1-1/8"
4T	#5	51"	7"	10"	1-7/8"
8T	#6	81"	10"	15"	2-1/4"
20T	#10	149"	12-1/2"	20"	5"

- Rebar is typically fabricated by precast producer
- Tension Bar Selection Chart is based on ACI-318 criteria
- 0.306" wire is medium grade, high carbon steel



ALP® LIFTING PIN ANCHORS IN THIN WALLS - TENSION ONLY

The ALP Lifting Pin System can be used in tension for lifting thin walls using the following load values.



TENSILE CAPACITY IN THIN WALLS

			Capacity in Concrete, 4:1 SWL in Tension at 4,500 PSI		
Lifting Pin Anchor Size	WT (2 x De)	De	Corner Distance		
			8"	12"	18" or >
1 Ton x 4-3/4" Long	2-1/2"	1-1/4"	1,000 lbs	1,200 lbs	1,300 lbs
	2-3/4"	1-3/8"	1,100 lbs	1,300 lbs	1,400 lbs
	3"	1-1/2"	1,200 lbs	1,400 lbs	1,600 lbs
	3-1/2"	1-3/4"	1,400 lbs	1,700 lbs	1,800 lbs
	4"	2"	1,600 lbs	1,900 lbs	2,000 lbs
	4-1/2"	2-1/4"	1,800 lbs	2,000 lbs	2,000 lbs

			Capacity in Concrete, 4:1 SWL in Tension at 4,500 PSI			
Lifting Pin Anchor Size	WT (2 x De)	De	Corner Distance			
			6"	12"	18"	24" or >
2 Ton x 6-3/4" Long	3"	1-1/2"	1,700 lbs	1,800 lbs	2,000 lbs	2,200 lbs
	3-1/4"	1-5/8"	1,900 lbs	2,000 lbs	2,200 lbs	2,400 lbs
	3-1/2"	1-3/4"	2,000 lbs	2,200 lbs	2,400 lbs	2,600 lbs
	4"	2"	2,300 lbs	2,500 lbs	2,700 lbs	3,000 lbs
	5"	2-1/2"	2,900 lbs	3,100 lbs	3,400 lbs	3,700 lbs
	6"	3"	3,500 lbs	3,700 lbs	4,000 lbs	4,000 lbs
2 Ton x 11" Long	3"	1-1/2"	2,100 lbs	2,700 lbs	2,900 lbs	3,100 lbs
	3-1/4"	1-5/8"	2,300 lbs	2,900 lbs	3,200 lbs	3,400 lbs
	3-1/2"	1-3/4"	2,500 lbs	3,200 lbs	3,400 lbs	3,600 lbs
	4"	2"	2,900 lbs	3,600 lbs	3,900 lbs	4,000 lbs
	5"	2-1/2"	3,600 lbs	4,000 lbs	4,000 lbs	4,000 lbs
	6"	3"	4,000 lbs	4,000 lbs	4,000 lbs	4,000 lbs

Shaded area indicates the capacity in concrete is limited by the mechanical capacity of the anchor

- For applications where the anchors need to be grouped together less than the required minimum spacing, consult with technical support at 800-332-7090.
- Above capacities are based upon mechanical testing and available industry data.

ALP® LIFTING PIN ANCHORS IN THIN WALLS - TENSION ONLY (CONT.)

TENSILE CAPACITY IN THIN WALLS

			Capacity in Concrete, 4:1 SWL in Tension at 4,500 PSI				
Lifting Pin Anchor Size	WT (2 x De)	De	Corner Distance				
			10"	15"	20"	24"	30"
4 Ton x 9-1/2" Long	3-3/4"	1-7/8"	2,900 lbs	3,200 lbs	3,400 lbs	3,500 lbs	3,800 lbs
	4"	2"	3,100 lbs	3,400 lbs	3,600 lbs	3,600 lbs	4,000 lbs
	5"	2-1/2"	3,600 lbs	4,300 lbs	4,600 lbs	4,800 lbs	5,100 lbs
	6"	3"	4,600 lbs	5,200 lbs	5,500 lbs	5,700 lbs	6,100 lbs
	7"	3-1/2"	5,400 lbs	6,000 lbs	6,400 lbs	6,700 lbs	7,200 lbs
	8"	4"	6,200 lbs	6,900 lbs	7,300 lbs	7,600 lbs	8,000 lbs

			Capacity in Concrete, 4:1 SWL in Tension at 4,500 PSI				
Lifting Pin Anchor Size	WT (2 x De)	De	Corner Distance				
			12"	18"	24"	36"	45"
8 Ton x 13-3/8" Long	5"	2-1/2"	4,800 lbs	5,800 lbs	6,100 lbs	6,700 lbs	7,200 lbs
	6"	3"	5,800 lbs	7,000 lbs	7,400 lbs	8,100 lbs	8,700 lbs
	7"	3-1/2"	6,800 lbs	8,200 lbs	8,600 lbs	9,500 lbs	10,200 lbs
	8"	4"	7,800 lbs	9,300 lbs	9,900 lbs	10,900 lbs	11,700 lbs
	10"	5"	9,800 lbs	11,700 lbs	12,300 lbs	13,600 lbs	14,600 lbs
	12"	6"	11,700 lbs	13,900 lbs	14,700 lbs	16,000 lbs	16,000 lbs

			Capacity in Concrete, 4:1 SWL in Tension at 4,500 PSI				
Lifting Pin Anchor Size	WT (2 x De)	De	Corner Distance				
			12"	18"	24"	36"	45"
20 Ton x 19-3/4" Long	6-1/2"	3-1/4"	7,000 lbs	9,000 lbs	10,500 lbs	11,500 lbs	12,200 lbs
	7"	3-1/2"	8,000 lbs	10,000 lbs	11,500 lbs	12,500 lbs	13,200 lbs
	8"	4"	9,200 lbs	11,200 lbs	13,000 lbs	14,400 lbs	15,100 lbs
	10"	5"	11,500 lbs	14,300 lbs	16,000 lbs	18,000 lbs	19,000 lbs
	12"	6"	14,000 lbs	17,300 lbs	20,000 lbs	21,500 lbs	22,800 lbs
	14"	7"	16,200 lbs	20,200 lbs	23,000 lbs	25,000 lbs	26,600 lbs

Shaded area indicates the capacity in concrete is limited by the mechanical capacity of the anchor

- For applications where the anchors need to be grouped together less than the required minimum spacing, consult with technical support at 800-332-7090.
- Above capacities are based upon mechanical testing and available industry data.

To adjust the Safe Working Load for anchors used in less than 4,500 PSI, multiply the Safe Working Loads by the below factors.

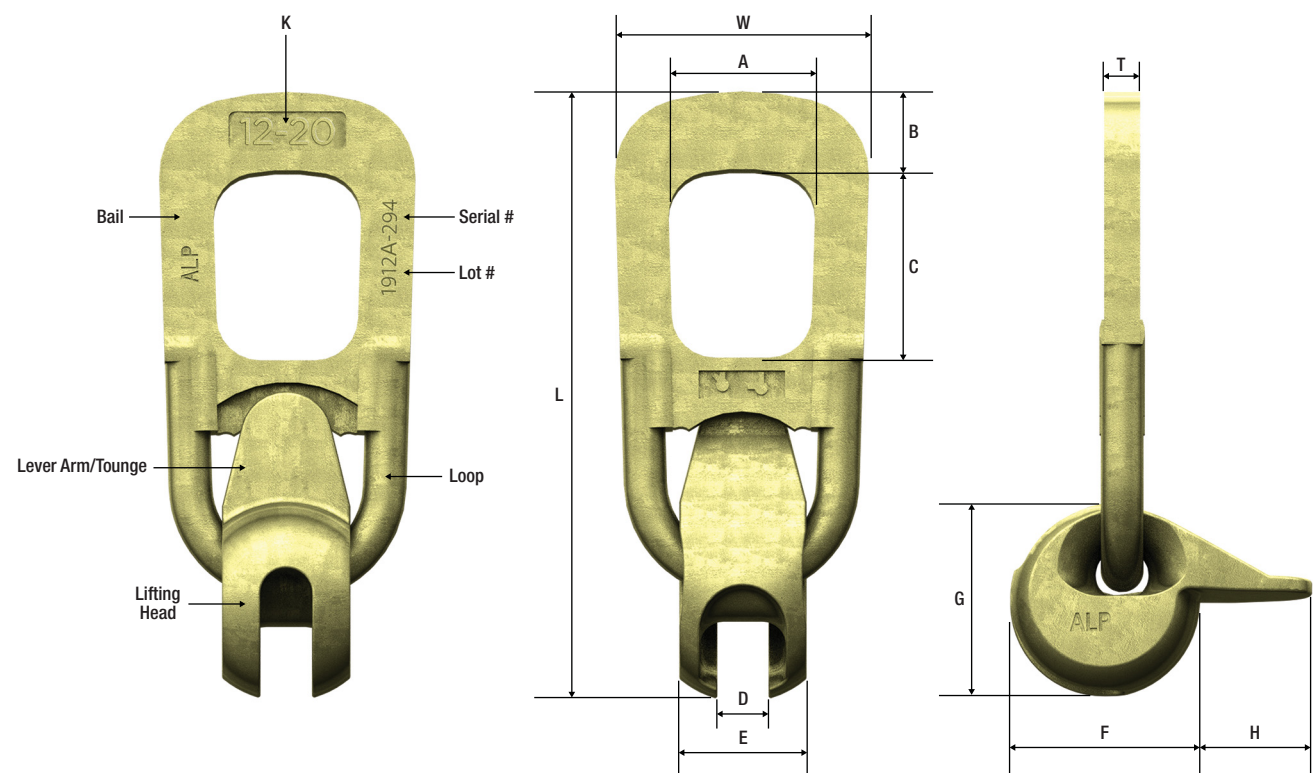
Convert from 4,500 PSI to Lower PSI	Reduction Factor
4,000 PSI	$\sqrt{4,000 / 4,500} = 0.94$
3,500 PSI	$\sqrt{3,500 / 4,500} = 0.88$
3,000 PSI	$\sqrt{3,000 / 4,500} = 0.81$
2,500 PSI	$\sqrt{2,500 / 4,500} = 0.74$
2,000 PSI	$\sqrt{2,000 / 4,500} = 0.66$

ALP[®] LIFTING EYE

Designed as an attachment link for lifting and transport of precast concrete units in combination with the ALP Lifting Pin Anchor System. The Lifting Eye consists of a Lifting Head with a protruding lever arm and a high strength Bail. The Lifting Head has a “T” slot that engages the head of a Lifting Pin Anchor. The rotation capabilities allow the lifting eye to stay oriented in the direction of loading without binding up.

See pages 14 and 15 for Lifting Eye usage information.

See ALP Supply[®] website for Inspection and Maintenance Guidelines for routine inspection of lifting hardware.



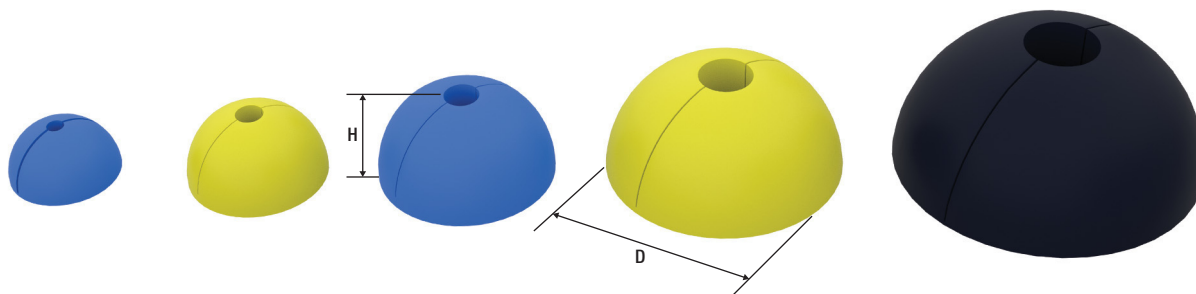
DIMENSIONS

Part #	K - Load Range (Tons)	L	W	T	A	B	C	D	E	F	G	H	Ultimate Capacity in Tension (lbs)	Weight (lbs)
LPLE1T	1T-1.3T	7-23/64"	2-61/64"	15/32"	1-51/64"	53/64"	2-3/4"	29/64"	1-19/64"	2-1/8"	2-7/64"	1-5/64"	13,000	2.07
LPLE2T	1.5T-2.5T	9-1/64"	3-15/32"	19/32"	2-15/64"	31/32"	3-21/64"	39/64"	1-39/64"	2-9/16"	2-33/64"	1-29/64"	25,000	3.35
LPLE4T	3T-5T	10-15/16"	4-5/8"	43/64"	2-43/64"	1-27/64"	3-15/32"	27/32"	2-1/4"	3-25/64"	3-25/64"	2-1/64"	50,000	7.70
LPLE8T	6T-10T	15-25/64"	6-9/32"	1-1/16"	3-3/16"	2"	4-13/32"	1-9/64"	2-57/64"	4-29/64"	4-29/64"	2-27/64"	100,000	21.85
LPLE20T	12T-20T	20"	7-19/32"	1-3/8"	4-31/64"	2-23/32"	6-1/32"	1-21/32"	4-7/16"	5-29/32"	5-21/32"	3-3/64"	200,000	44.93

Rated Load Range (K) has a 5:1 safety factor.

ALP® LIFTING PIN RUBBER RECESS MEMBERS

The ALP Lifting Pin Rubber Recess Members are designed to create a recess for the Lifting Eyes to engage the head of a Lifting Pin anchor.



Part #	Size	Color	D	H	Weight (lbs)	Qty/Ctn
LPRM1T	1T	Blue	2-3/8"	1-3/16"	0.14	300
LPRM2T	2T	Yellow	3"	1-9/16"	0.27	150
LPRM4T	4T	Blue	3-3/4"	1-13/16"	0.60	75
LPRM8T	8T	Yellow	5"	2-5/16"	1.15	40
LPRM20T	20T	Black	6-1/2"	3"	2.43	15

- Petroleum based form release and coatings should not be used with rubber products, as they will degrade the rubber.

ALP® LIFTING PIN STUD PLATES AND WINGNUTS

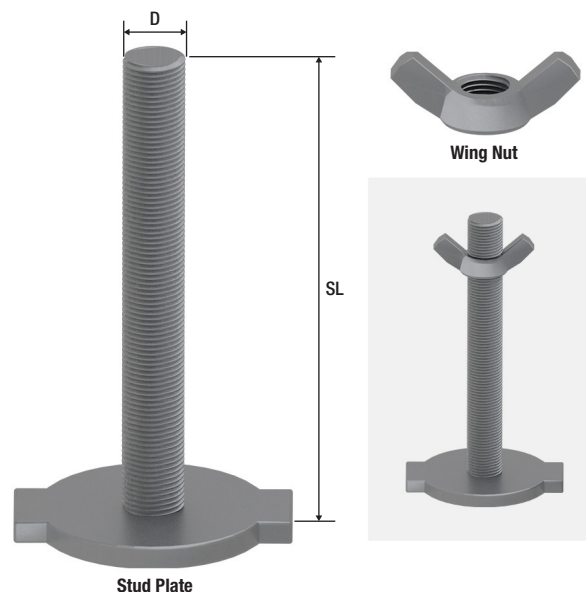
The Stud Plate and Wingnut combination is designed to attach the Lifting Pin Recess Member to the form.

WINGNUT DIMENSIONS

Part #	Description	Size	Weight (lbs)
LPWN1T	For 1T Stud Plate	8mm	0.02
LPWN248T	For 2T, 4T, 8T Stud Plates	12mm	0.04
LPWN20T	For 20T Stud Plate	18mm	0.12

STUD PLATE DIMENSIONS

Part #	Size	D	SL	Weight (lbs)
LPSP1T	1T	8mm	3-3/16"	0.07
LPSP2T	2T	12mm	4"	0.20
LPSP4T	4T	12mm	4"	0.23
LPSP8T	8T	12mm	4"	0.28
LPSP20T	20T	18mm	4"	0.60



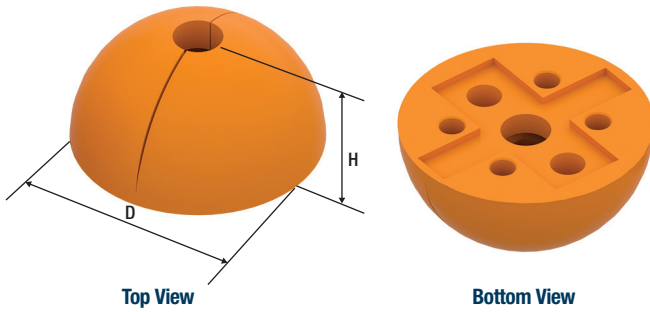
ALP® LIFTING PIN MAGNETIC PROFILE HOLDING PLATE (2-PIECE)

Part #	Size	Fits Recess Member
LPMHP1T	1T	LPRM1T
LPMHP2T	2T	LPRM2T
LPMHP4T	4T	LPRM4T
LPMHP8T	8T	LPRM8T
LPMHP20T	20T	LPRM20T

Caution: Vibration and placement of the concrete can cause the Magnetic Recess to move. It is recommended that the anchor is secured to the reinforcement before concrete placement.



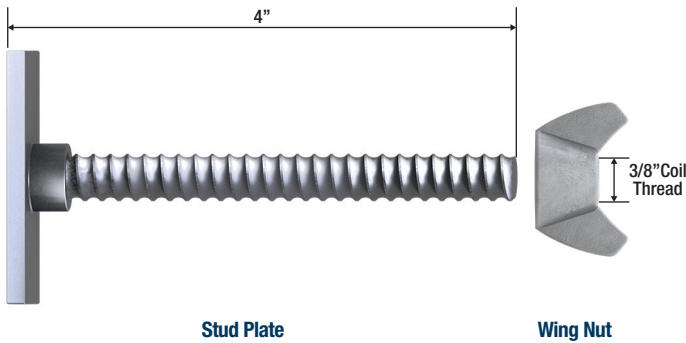
ALP® LIFTING PIN PLUS URETHANE RECESS MEMBER



The ALP Lifting Pin Plus Recess Member is constructed of a durable polyurethane material which improves tear, heat, and chemical resistance compared to the standard rubber material. ALP Plus Stud Plate, Wing Nut, Holding Rod, and Tapped Plates are designed so that they are interchangeable for all sizes of recess members.

Part #	Size	Color	D	H	Weight (lbs)	Qty/Ctn
LPPRM2T	2T	Yellow	3-1/4"	1-7/16"	0.25	240
LPPRM4T	4T	Orange	4"	1-7/8"	0.44	120
LPPRM8T	8T	Green	5"	2-1/8"	1.01	60

ALP® LIFTING PIN PLUS STUD PLATE AND WINGNUT - 3/8" COIL



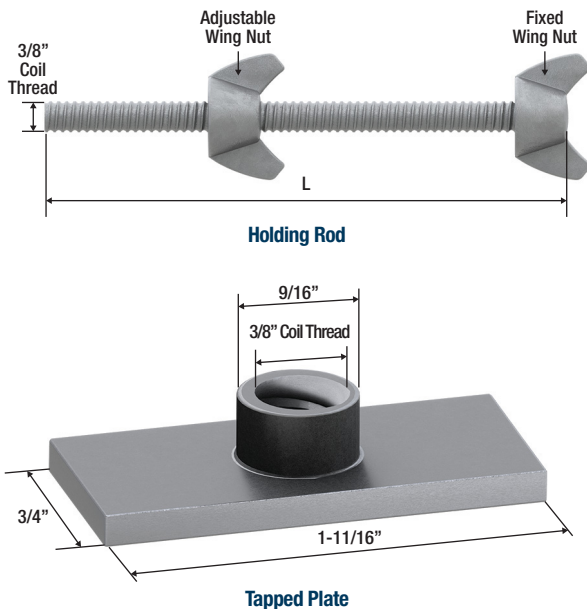
The ALP Stud Plate is used to mount the Plus Recess Members to the form. **Standard finish is plated.**

Installation Instructions:

1. Install the stud plate into the recess member.
2. Insert the lift pin into the recess member.
3. Insert the stud plate through a hole in the form.
4. The 3/8" wing nut is then used to tighten the recess member to the outside of the form.

Part #	Fits Size	Weight (lbs)
LPPSP	2T, 4T, 8T	0.17
LPWN38	2T, 4T, 8T	0.11

ALP® HOLDING ROD AND TAPPED PLATE - 3/8" COIL



ALP Holding Rods and Tapped Plate are used to mount the Plus Recess Members to the form. **Standard finish is plated.**

Installation Instructions:

1. Insert the tapped plate into the recess member.
2. Insert the lifting pin to the recess member.
3. Align the recess member to a pre-drilled hole in the form. The holding rod is then threaded into the recess using the fixed end coil nut until the thread bottoms out.
4. The movable wing nut is then tightened down until it is snug against the side of the form.

HOLDING ROD DIMENSIONS

Part #	Fits Size	L	Weight (lbs)
QL202	2T, 4T, 8T	6"	0.33
QL20212	2T, 4T, 8T	12"	0.47

TAPPED PLATE

Part #	Fits Size	Weight (lbs)
LPPTP	2T, 4T, 8T	0.08

ALP® LIFTING PIN PLUS MAGNETIC HOLDING PLATE (2-PIECE)



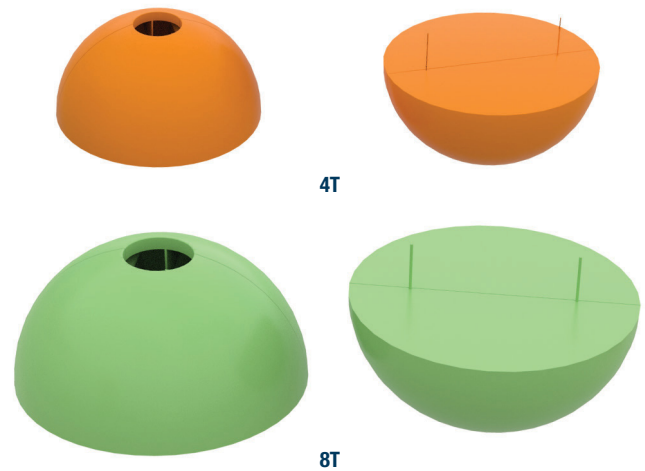
Part #	Size	Fits Recess Member
LPPMHP2T	2T	LPPRM2T
LPPMHP4T	4T	LPPRM4T
LPPMHP8T	8T	LPPRM8T

Caution: Vibration and placement of the concrete can cause the Magnetic Recess to move. It is recommended that the anchor is secured to the reinforcement before concrete placement.

ALP® LIFTING PIN DISPOSABLE RECESS MEMBERS

The ALP Lifting Pin Plastic Recess Member comes in 4T and 8T sizes and are typically used for wet setting applications.

Part #	Size	Color	D	Weight (lbs)	Qty/Ctn	Qty/Crate
LPRMD4T	4T	Orange	3-3/4"	0.12	120	2,160
LPRMD8T	8T	Green	5"	0.27	60	1,080

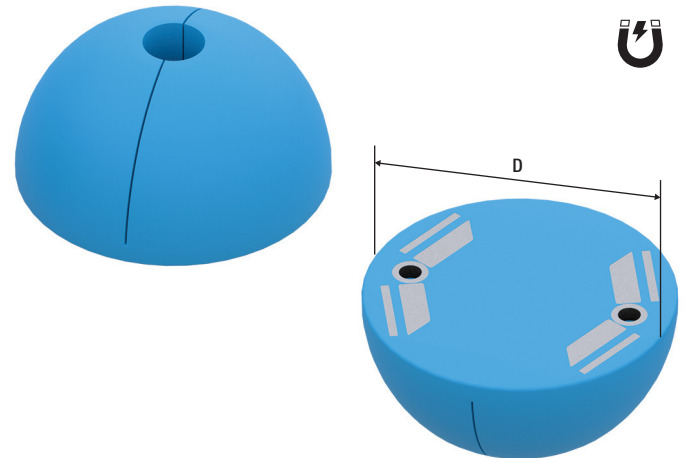


ALP® LIFTING PIN 1 PIECE MAGNETIC RECESS MEMBERS

The ALP Lifting Pin 1 Piece Magnetic Recess Members are used to avoid drilling of steel forms. The magnets are integral to the urethane recess member for efficient mounting of Lifting Pins to the form.

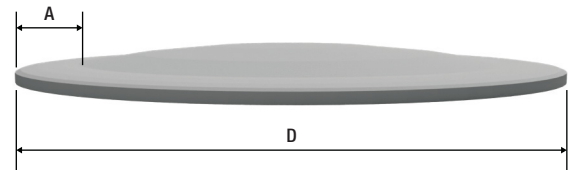
Part #	Size	Color	D	Weight (lbs)
LPRM1TM	1T	Blue	2-3/8"	0.22
LPRM2TM	2T	Yellow	3"	0.52
LPRM4TM	4T	Blue	3-3/4"	0.87
LPRM8TM	8T	Yellow	4-3/4"	1.34
LPRM20TM	20T	Black	8-3/4"	2.66

Caution: Vibration and placement of the concrete can cause the Magnetic Recess to move. It is recommended that the anchor is secured to the reinforcement before concrete placement.



LIFT COVERS

Lift covers are an injection molded, plastic cosmetic cover, commonly used for covering the recessed pockets created by lifting devices including ALP® Lifting Pin and QuikLift® anchors. Lift covers are required to use DAP Dynaflex 230 Caulk or NPC Solar Seal #900 Caulk when being bonded. Nylon Nail-It fasteners are an alternate method of fastening. Two sizes are available to fit 2T-4T anchors and 8T anchors. Standard color is light gray. Other colors made to order.



Part #	Fits Lifter Size	Color	D	A	Qty/Ctn	Weight (lbs)
CVLC6	2T, 4T	Light Gray	6"	1/2"	100	0.13
CVLC6B	2T, 4T	Beige	6"	1/2"	100	0.13
CVLC6CW	2T, 4T	Cream White	6"	1/2"	100	0.13
CVLC818	8T	Light Gray	8-1/8"	1-1/8"	100	0.26
CVLC818B	8T	Beige	8-1/8"	1-1/8"	100	0.26
CVLC818CW	8T	Cream White	8-1/8"	1-1/8"	100	0.26