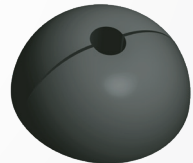
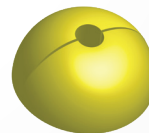
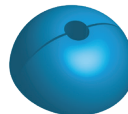
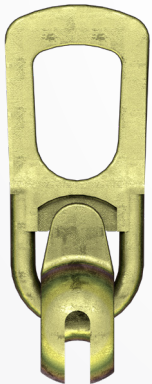
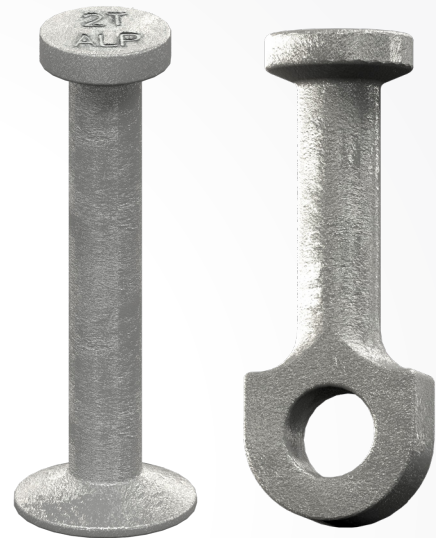


# ALP<sup>®</sup> LIFTING PIN SYSTEM

## ALP<sup>®</sup> LIFTING PIN ANCHORS ALP<sup>®</sup> LIFTING EYES RECESS MEMBERS & HARDWARE

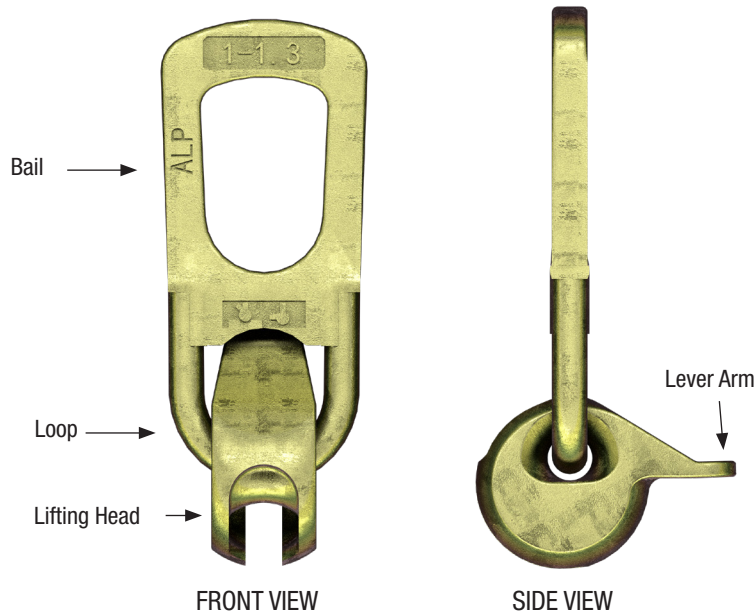
- Economical and Versatile System
- Multidirectional Loading
- High Quality Steel



7/F BTTC Centre  
288 Ortigas Ave.  
San Juan City 1502  
Philippines

Email: [inquiry@gpbs.ph](mailto:inquiry@gpbs.ph)  
Website: [gpbs.ph](http://gpbs.ph)  
Landline: +63 7623 6117  
Mobile: +63 917 323 7404

### ALP® LIFTING EYE TERMINOLOGY AND INSPECTION



#### INSPECT ALL LIFT EYES FOR THE FOLLOWING:

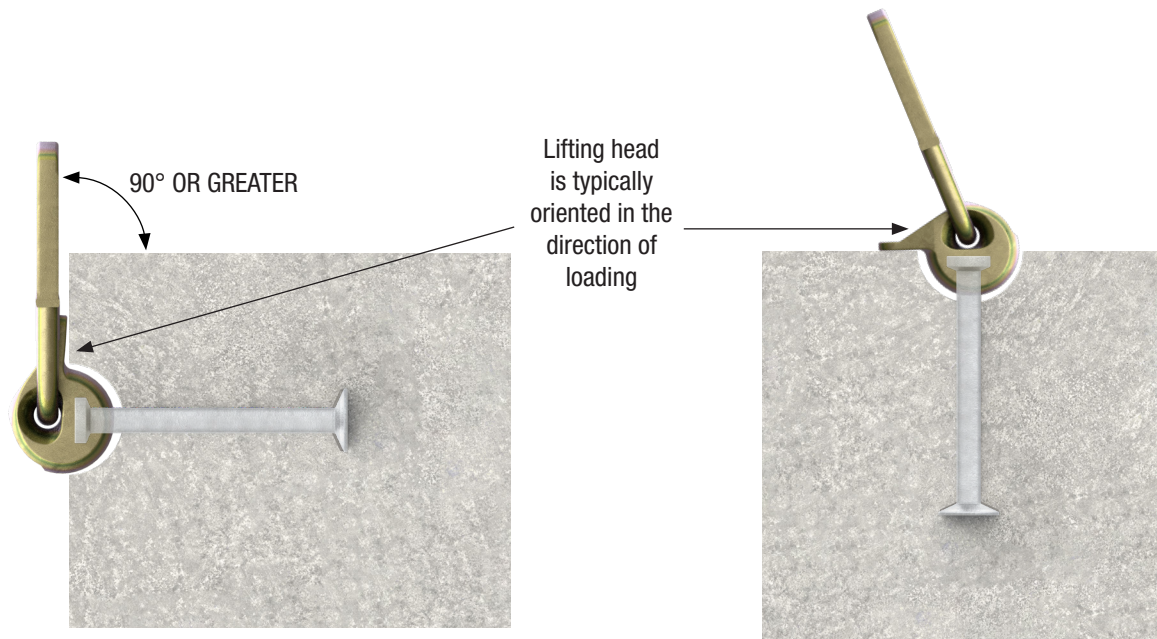
- Inspect the Bail and Lifting Head for cracks.
- Inspect the Bail and Loop for any bends.
- Inspect and remove from service if there are signs that excessive external heat was applied to any parts.

#### WHEN TO REMOVE LIFT EYES FROM SERVICE:

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

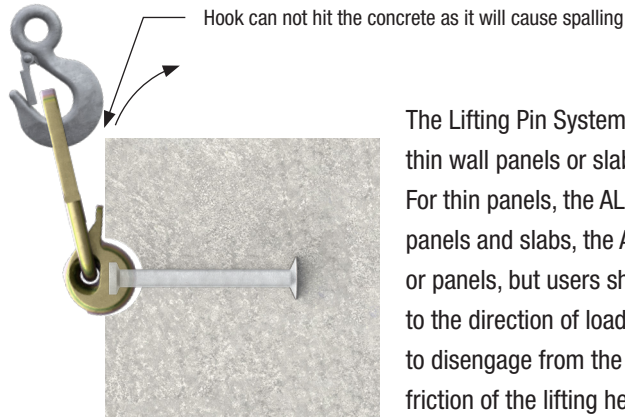
See ALP Supply® website for Inspection and Maintenance Guidelines for routine inspection of lifting hardware.

### ALP® LIFTING EYE GENERAL USE



## EDGE LIFTING OF SLABS AND WALL PANELS

# 1

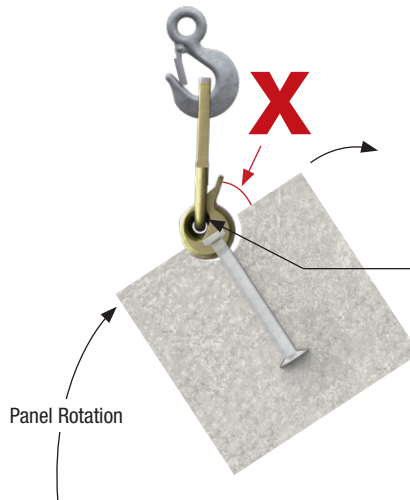


The Lifting Pin System is **not typically recommended** for lifting in the edge of thin wall panels or slabs due to the system's low shear capacity in that application. For thin panels, the ALP Supply® QUIKLIFT® System should be used. In thicker panels and slabs, the ALP Supply® Lifting Pin System can 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. This is due to the friction of the lifting head and the bail.

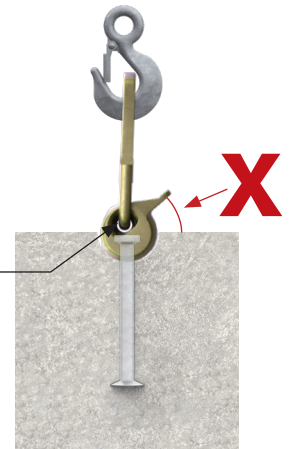
# 2

Lubricate with  
soap/water  
solution

SIDE VIEW

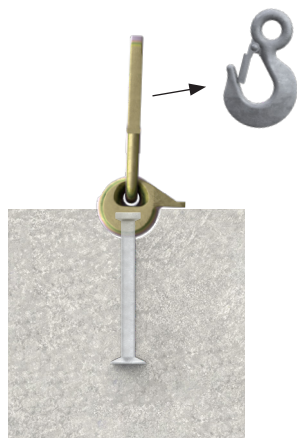


Without lubrication between the lifting bail and the lifting head, the lifting head has a tendency to rotate and open up during the rotation of the panel.

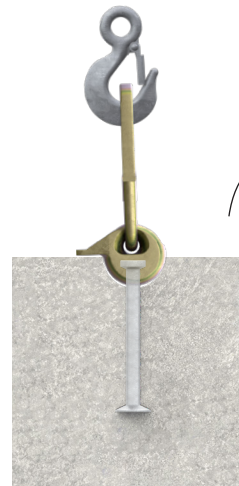
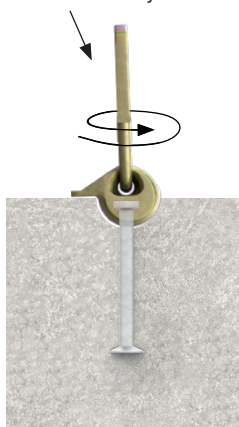


# 3

If laying panel down on opposite side follow these instructions



Rotate Lift Eye 180°



Hook can not hit the concrete as it will cause spalling

Slowly lay down panel

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

### 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. These Lifting Pin Anchors are designed to meet the OSHA requirements of a 4 to 1 Safety Factor. **Standard Finish is Hot-Dipped Galvanized.**

*Safe Working Loads (SWL) displayed in the below chart apply to loading in any direction.*

Part Number	U.S. Tons	Length (mm)	Weight Per Piece (kg)	Anchor Capacity in Concrete, 4:1 SWL					
				1,500 PSI 10.3 MPa (KN)	2,500 PSI 17.2 MPa (KN)	3,500 PSI 24.1 MPa (KN)	5,000 PSI 34.5 MPa (KN)	Min. Edge Distances	
								Tension (mm)	Shear (mm)
LPA1T238G	1T	60	0.06	4.6	6.0	7.1	8.5	203	305
LPA1T258G	1T	67	0.06	5.2	6.7	7.9	8.9	203	305
LPA1T338G	1T	86	0.07	8.5	8.9	8.9	8.9	203	305
LPA1T434G	1T	121	0.10	8.9	8.9	8.9	8.9	254	305
LPA2T234G	2T	70	0.15	6.1	7.9	9.3	11.2	203	305
LPA2T338G	2T	86	0.16	8.9	12.0	14.5	17.3	203	305
LPA2T434G	2T	121	0.20	14.5	17.8	17.8	17.8	254	381
LPA2T512G	2T	140	0.22	17.8	17.8	17.8	17.8	279	432
LPA2T634G	2T	171	0.26	17.8	17.8	17.8	17.8	279	432
LPA2T11G	2T	279	0.39	17.8	17.8	17.8	17.8	279	432
LPA4T212G	4T	64	0.29	6.2	8.1	9.6	11.4	203	305
LPA4T3G	4T	76	0.33	8.7	11.3	13.3	15.9	203	305
LPA4T312G	4T	89	0.37	10.1	13.1	15.5	18.5	203	305
LPA4T334G	4T	95	0.39	11.3	14.5	17.6	20.9	203	305
LPA4T414G	4T	108	0.41	13.3	17.1	20.2	24.2	229	330
LPA4T434G	4T	121	0.44	16.2	20.9	24.9	29.8	254	381
LPA4T512G	4T	140	0.49	20.2	26.0	30.9	35.6	279	432
LPA4T718G	4T	181	0.60	30.7	35.6	35.6	35.6	381	559
LPA4T912G	4T	241	0.73	35.6	35.6	35.6	35.6	432	660
LPA8T434G	8T	121	0.98	18.0	23.1	27.6	33.1	254	381
LPA8T634G	8T	171	1.13	31.1	40.0	47.8	57.2	356	533
LPA8T834G	8T	222	1.36	57.5	71.2	71.2	71.2	457	686
LPA8T10G	8T	254	1.54	65.8	71.2	71.2	71.2	508	762
LPA8T1338G	8T	340	1.93	71.2	71.2	71.2	71.2	686	1041
LPA8T2634G	8T	679	3.58	71.2	71.2	71.2	71.2	686	1041
LPA16T778G	16T	200	2.99	31.1	40.0	47.8	57.2	356	533
LPA20T10G	20T	254	3.74	52.3	67.4	79.8	95.6	508	762
LPA20T1934G	20T	502	6.12	115.7	150.3	177.9	177.9	1016	1219

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

- Table is based on normal weight concrete ( 2323-2403Kg/m<sup>3</sup> )
- Loads are listed at varying concrete strengths (MPa) to accommodate varying conditions at time of loading
- Above capacities are based upon mechanical testing, concrete testing and available industry data
- Proper rigging and all lifting angle load magnifications are to be used to determine actual applied loads
- Minimal reinforcement required to achieve above load values
- Capacities in radius sections are reduced - consult ALP Supply® Tech Support
- For lifting and handling of thin slabs, design needs to ensure slab is properly reinforced to prevent flexural stresses from cracking slab
- To achieve published values a minimum concrete cover of 1" below the foot of anchor is required.
- Minimum anchor spacing is 2x the published edge distance.



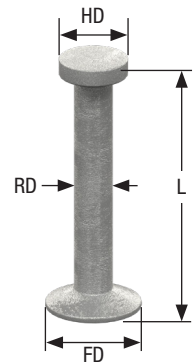
### LIFTING PIN ANCHOR - DIMENSIONS AND MECHANICAL CAPACITIES

Ton	L - Length	HD - Head Diameter	RD - Rod Diameter	FD - Foot Diameter	Head Marking	Foot Marking	Anchor Ultimate Mechanical Load in Tension (KN)
1T	Varies	19.0	10.0	25.0	1T ALP	Lot #	36
2T	Varies	26.0	14.0	35.0	2T ALP		72
4T	Varies	36.0	20.0	50.0	4T ALP		144
8T	Varies	46.0	28.0	70.0	8T ALP		288
16T	Varies	70.0	40.0	98.0	16T ALP		570
20T	Varies	70.0	40.0	98.0	20T ALP		712

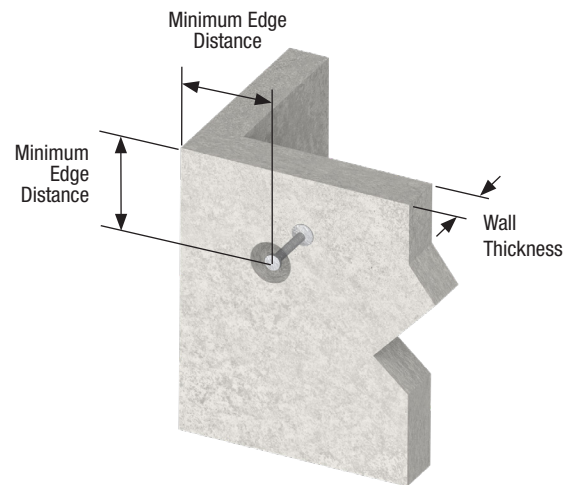
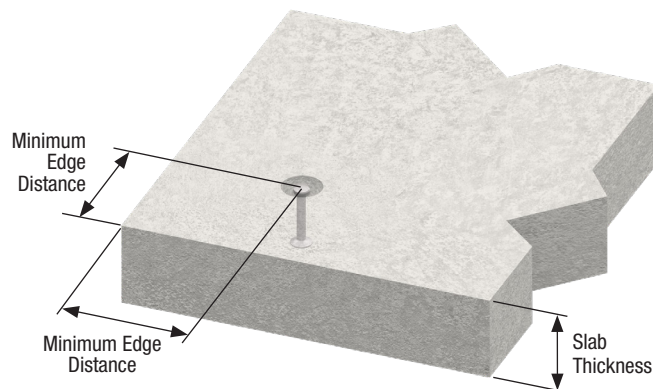
HEAD MARKING



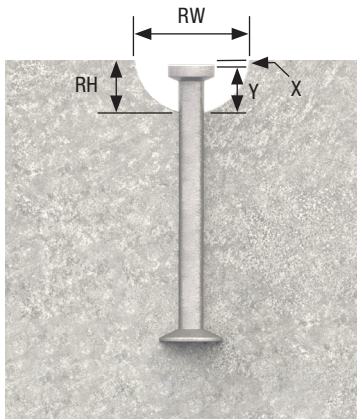
FOOT MARKING



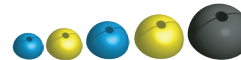
### ALP® LIFT PIN ANCHOR - MINIMUM EDGE DISTANCES



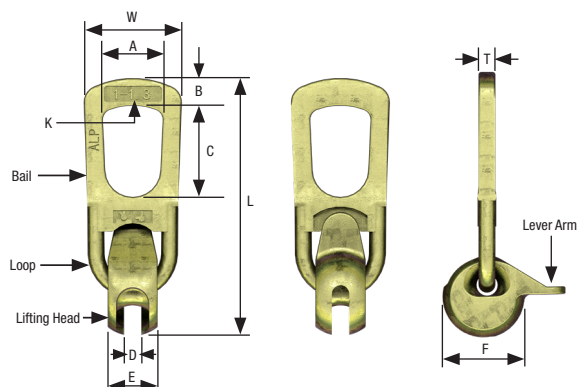
### LIFT PIN ANCHOR DIMENSIONS IN CONCRETE



Lift Pin Anchor Tonnage	X	Y	Rubber Recess System	
			RW	RH
1T	9.5	22.2	60.3	31.7
2T	9.5	30.0	76.2	39.5
4T	14.0	33.0	95.0	47.0
8T	13.0	45.0	128.0	58.0
20T	16.5	60.5	165.0	77.0



### ALP® LIFTING EYE - STANDARD



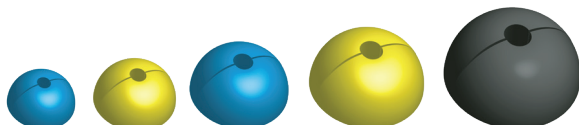
Designed as an attachment link for lifting and transport of precast concrete units in combination with the ALP® Lifting Pin Anchor System. The Lifting Eye consists of a Lifting Head with a protruding lever arm and a high strength Bail. The Lifting Head has a “T” slot that engages the head of a Lifting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

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

Part Number	Description	L	W	T	A	B	C	D	E	F	Weight Each (kgs)	K Load Range (Tons)	Ultimate Capacity in Tension (KN)
LPLE1T	1T Lift Eye	196.0	74.5	13.0	46.0	21.0	70.0	11.5	33.0	54.2	1.00	1T-1.3T	58
LPLE2T	2T Lift Eye	228.0	88.0	15.0	57.0	24.5	85.0	16.0	42.2	66.5	1.63	1.5T-2.5T	111
LPLE4T	4T Lift Eye	282.0	117.0	17.0	68.0	36.0	88.0	21.5	58.8	88.7	3.47	3T-5T	222
LPLE8T	8T Lift Eye	404.3	159.0	27.0	81.0	51.0	112.0	30.5	76.0	115.8	9.84	6T-10T	445
LPLE20T	20T Lift Eye	485.0	193.0	35.0	114.0	69.0	154.0	42.0	112.7	145.6	20.00	12T-20T	890

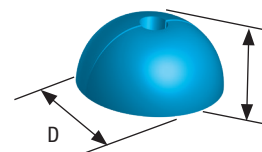
Rated load has a 5:1 safety factor.

### ALP® LIFTING PIN RUBBER RECESS MEMBERS



- Flexible material - Easy to install and remove from concrete
- Long-lasting and reusable

Part Number	Size	D - Diameter	H - Height	Color	Weight Per Piece (kgs)
LPRM1T	1T	60.3	31.7	Blue	0.07
LPRM2T	2T	76.2	39.5	Yellow	0.14
LPRM4T	4T	95.0	47.0	Blue	0.27
LPRM8T	8T	128.0	58.0	Yellow	0.51
LPRM20T	20T	165.0	77.0	Black	1.11



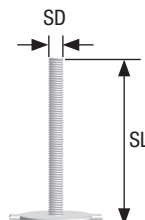
### ALP® LIFTING PIN STUD PLATES AND WINGNUTS



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



Part Number	Description	Size	Weight Per Piece (kgs)
LPWN1T	For 1T Stud Plate	8mm	0.03
LPWN248T	For 2T, 4T, 8T Stud Plates	12mm	0.12
LPWN20T	For 20T Stud Plate	18mm	0.23



Part Number	Size	SD Stud Diameter	SL Stud Length	Weight Per Piece (kgs)
LPSP1T	1T	8mm	80.9	0.03
LPSP2T	2T	12mm	101.6	0.09
LPSP4T	4T	12mm	101.6	0.10
LPSP8T	8T	12mm	101.6	0.11
LPSP20T	20T	18mm	101.6	0.34