

APPLICATION

LD and TP wall anchors are used to attach a variety of KWS® girts, rails and brackets to many types of substrates.

Featuring a large, pancake head style with a 6-lobe drive, the fasteners drive quickly and smoothly. With the use of a double barrier coating enduring over 1,000 hours of salt spray for High Corrosion Resistance (HCR®), they're engineered to hold up to the harshest conditions.

PRODUCT FEATURES

- Thermal break between fastener and girt.
- Case-hardened and tempered screw for easy installation and long-term durability.
- 6-lobe internal drive offers excellent bit engagement during installation, especially in high torque applications.
- Strong fastener for stronger connections.
- High corrosion resistance.

TP #14 (Thread Point)

Gimlet Point for Wood Stud, Concrete and CMU Applications.





LD #14 (Light Duty)

Drill Point for Steel, Wood, Concrete & CMU Applications.





MATERIAL SPECIFICATIONS

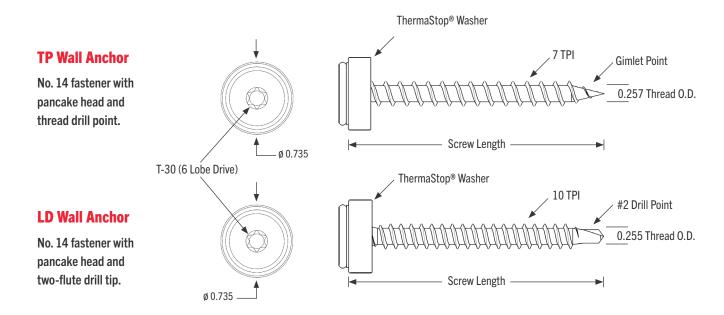
SCREW MATERIAL	Case-hardened & tempered ASTM A510 Carbon Steel
SCREW COATING	HCR® double barrier coating for high corrosion resistance
WASHER MATERIAL	SABIC LEXAN 143 Polycarbonate

FASTENER PROPERTIES

FASTENER	ALLOWABLE TENSILE (LB) AISI S904	ALLOWABLE SHEAR (LB) AISI S904	BENDING YIELD STRENGTH FYB (KSI) ASTM F1575	CORRSION RESISTANCE ASTM B117
TP	1,185	860	185	>1,000 hrs
LD	1,130	830	185	>1,000 hrs



PRODUCT SPECIFICATIONS



INSTALLATION GUIDELINES

LD & TP wall anchors are intended to mechanically attach KWS® girts, rails and brackets to various substrates.

- LD (Light Duty) screws are for installation into light gauge steel substrates (20-16 GA), wood, concrete or CMU. Install using a maximum 2,000 rpm screw gun.
- TP (Thread Point) screws are for installation into wood, concrete or CMU. Install using a low rpm/high torque screw gun.
- Lead holes are not required when installing into wood for both LD and TP screws.
- For installation into concrete or CMU, predrill with 3/16 in. masonry bit for both LD and TP screws.
- Do not use an impact driver and do not overdrive fasteners during installation.

CAUTION: These fasteners shall not be struck with a hammer during installation.



DESIGN PROPERTIES

TENSION VALUES IN CONCRETE & CMU (LB)						
COMPRESSION STRENGTH	3000 PSI CONCRETE	5000 PSI CONCRETE	7000 PSI CONCRETE	СМИ		
TP	699	859	1048	713		
LD	471	648	783	553		

TP/LD MINIMUM SPACING REQUIREMENTS (IN)			
MINIMUM SPACING 3			
CRITICAL EDGE DISTANCE	3		
MINIMUM EDGE DISTANCE	2.5		

All values are ultimate with 1-inch embedment.

Fastener penetration is the threaded length embedded in the main member, including the tip.

WITHDRAWL VALUES IN LUMBER AND ENGINEERED WOOD (LB/IN)							
W00D TYPE (SPECIFIC GRAVITY) SPF (0.42) DF-L (0.50) LVL FACE (0.50) LVL EDGE (0.50) LSL FACE (0.50)							
TP	615	702	556	495	711		
LD	497	720	540	469	646		

All values are ultimate at 1-inch penetration into main member.

Fastener penetration is the threaded length embedded in the main member, including the tip.

WITHDRAWL VALUES IN ENGINEERED WOOD (LB)							
WOOD TYPE	OSB PLYWOOD						
THICKNESS	1/2"	19/32"	23/32"	15/32"	19/32"	23/32"	
TP	244	324	626	333	529	681	
LD	261	334	693	344	519	720	

All values are ultimate with penetration through full thickness of board by 3/4".

TP/LD MINIMUM SPACING REQUIREMENTS (IN)				
EDGE DISTANCE LOAD IN ANY DIRECTION	0.625"			
END DISTANCE LOAD PERPENDICULAR TO GRAIN	2.625"			
SPACING BETWEEN FASTENERS IN A ROW - PERPENDICULAR TO GRAIN	2.625"			
SPACING BETWEEN ROW OF FASTENERS - IN-LINE	1.25"			

LD PULLOUT VALUES IN STEEL (LB)					
20 GAUGE 18 GAUGE 16 GAUGE					
396	606	961			

All values shown are ultimate.

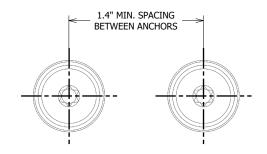
Penetration is a minimum of three full threads past the steel.

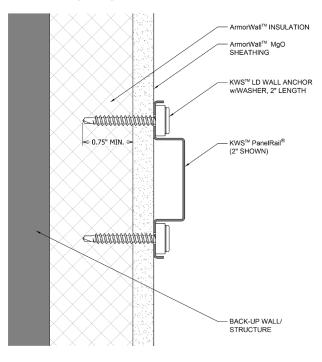
5/8" minimum spacing and 3/8" minimum edge distance.



DUPONT™ ARMORWALL™ APPLICATION

LD VALUES IN DUPONT™ ARMORWALL™ (LB)				
PULLOUT	367	All values shown are ultimate. Min. safety factor of 4 advised.		
SHEAR	529	Min. penetration through full thickness of sheathing board by 3/4".		





PRODUCT SELECTION

PART NUMBER	PART DESCRIPTION	MAXIMUM ASSEMBLY THICKNESS* (IN.)	BUCKET QUANTITY (EA.)	BUCKET WEIGHT (LB.)
133078	2.0" LD Screw with ThermaStop® Isolation Washer + HCR® Coating ^	0.75"	250	7.5
133079	2.5" LD Screw with ThermaStop® Isolation Washer + HCR® Coating	1.25"	250	8.5
133080	3.0" LD Screw with ThermaStop® Isolation Washer + HCR® Coating	1.75"	250	9.5
133081	2.0" TP Screw with ThermaStop® Isolation Washer + HCR® Coating	0.625"	250	7.5
133082	2.5" TP Screw with ThermaStop® Isolation Washer + HCR® Coating	1.00"	250	8.5
133083	3.0" TP Screw with ThermaStop® Isolation Washer + HCR® Coating	1.50"	250	10
133084	3.5" TP Screw with ThermaStop® Isolation Washer + HCR® Coating	2.00"	250	11

^{*} Assembly thickness = sheathing thickness + thermal isolation thickness. ThermaBracket® isolation thickness = 3/8" ThermaZee® isolation thickness = 1/4"

NO EXPRESS WARRANTIES ARE GIVEN EXCEPT FOR ANY APPLICABLE WRITTEN WARRANTIES SPECIFICALLY PROVIDED BY KNIGHT WALL SYSTEMS®. ALL IMPLIED WARRANTIES INCLUDING THOSE
OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. No freedom from any patent owned by KNIGHT WALL SYSTEMS® or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use. They are not guaranteed in any way by the Knight Wall Systems, Inc. since building design, engineering, and construction, including workmanship and materials are beyond the control of the manufacturer. The information provided here is subject to change without notice.

All content included on this document is and shall continue to be the property of Knight Wall Systems, Inc. or its content suppliers, and is protected under applicable copyright, trademark, and other proprietary rights. KNIGHT WALL SYSTEMS, the Knight Wall Systems design mark, MFI, THERMABRACKET, THERMASTOP, and FORMED TO PROTECT WHAT MATTERS MOST are trademarks of Knight Wall Systems, Inc. US Patent Nos. 8429866, 8973334, 9677268, 9732518, 98526655, D963894, 11299891, 11286676, and others are registered and pending patents of Knight Wall Systems, Inc. These lists are not exhaustive and Knight Wall Systems, Inc. does not waive its rights in regard to other intellectual property not listed.

© 2025 Knight Wall Systems, Inc. All rights reserved.



[^] Only the 2.0" LD screw is approved for use with Dupont ArmorWall.