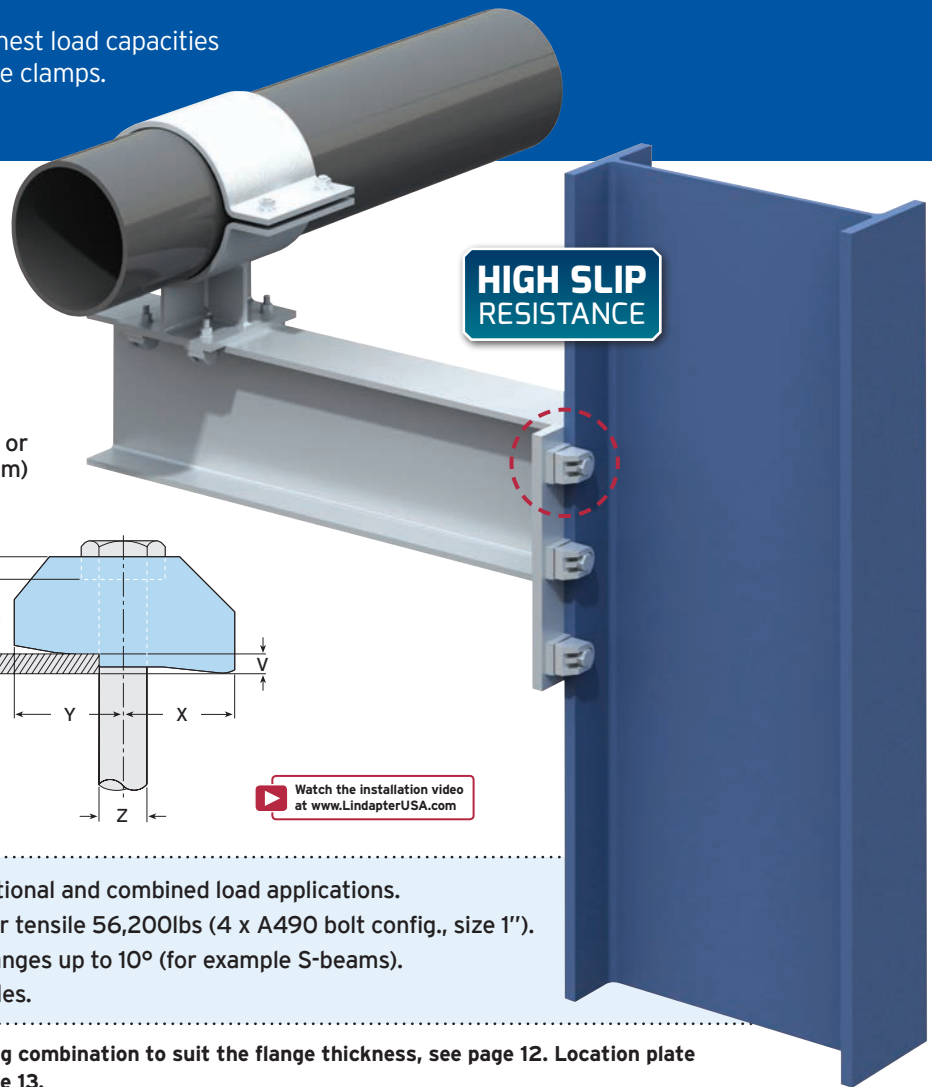
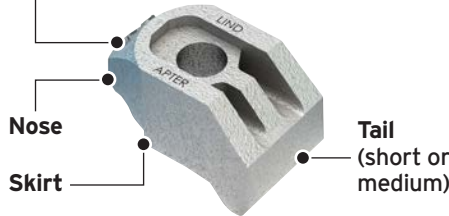


Type AF

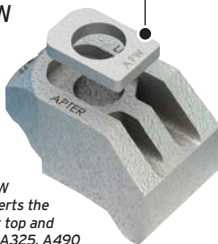
A heavy duty clamp offering the highest load capacities of all Lindapter's High Slip Resistance clamps. Hot dip galvanized as standard.



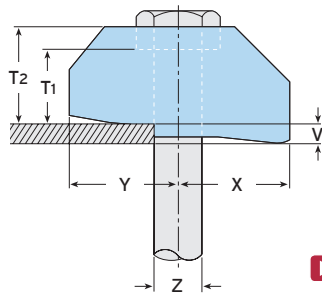
Recess - holds bolt head captive
(Grd. 5 bolts, sizes 1/2" - 3/4" only)



Type AF (with Type AFW washer)



Note: Type AFW (page 12) converts the recess to a flat top and is required for A325, A490 and 1" Grd. 5 structural bolts.



Watch the installation video at www.LindapterUSA.com

- High slip resistance for tensile, frictional and combined load applications.
- Static slip resistance of 15,736lbs or tensile 56,200lbs (4 x A490 bolt config., size 1").
- Suitable for parallel and tapered flanges up to 10° (for example S-beams).
- The tail spans slotted clearance holes.

- Choose the correct tail length / packing combination to suit the flange thickness, see page 12. Location plate / end plate details can be found on page 13.
- Lindapter recommends the use of DTI Washers when using A325 or A490 structural bolts with the Type AF / AAF. For further information refer to page 58.

Material: SG iron, hot dip galvanized.



Product Code	Bolt		Safe Working Loads			Tightening Torque*	Tail Length V		Dimensions				
	Size Z	Grade	Tensile Resistance / 1 Bolt (FOS 5:1)	Slip Resistance ¹⁾ / 2 Bolts (FOS 2:1)			short	medium	Y	X	T1	T2	Width
				Painted Steel ²⁾	Galvanized Steel								
LAF050	1/2"	Gr. 5 / A325	1911	764	877	66	3/16"	1/2"	11/8"	11/16"	11/16"	7/8"	19/16"
LAF062	5/8"	Gr. 5 / A325	3597	1798	2248	177	5/16"	9/16"	13/8"	11/2"	7/8"	11/16"	115/16"
LAF075	3/4"	Gr. 5 / A325	5901	2922	3597	347	3/8"	11/16"	19/16"	19/16"	1"	11/4"	23/16"
LAF100	1"	Gr. 5 / A325	8892	5395	6774	590	9/16"	11/8"	17/8"	23/8"	11/4"	15/8"	31/4"
LAF050	1/2"	A490	2248	899	1169	96	3/16"	1/2"	11/8"	11/16"	11/16"	7/8"	19/16"
LAF062	5/8"	A490	4383	2473	2698	221	5/16"	9/16"	13/8"	11/2"	7/8"	11/16"	115/16"
LAF075	3/4"	A490	6744	4496	5620	477	3/8"	11/16"	19/16"	19/16"	1"	11/4"	23/16"
LAF100	1"	A490	14050 ³⁾	6295	7868	737	9/16"	11/8"	17/8"	23/8"	11/4"	15/8"	31/4"

1) Slip Resistance figures are based on Type AF and Location Plates in hot dip galvanized finish calculated against slip (movement exceeding 0.004" / 0.1mm).

2) Shot blast and painted steel.

3) 3.2:1 Factor of Safety.

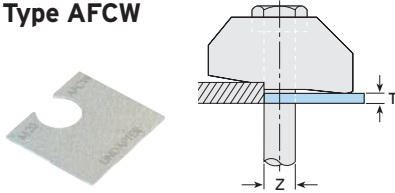
* Torque figures based on bolts / setscrews in an unlubricated condition. For further information on lubricated fasteners see page 58.

Packing Pieces for Types AF and AAF

Packing pieces are used to increase the clamping range to suit a range of flange thicknesses. The Type AF is available with two different tail lengths (short and medium) and the correct combination of packing pieces should be used, see the table at the bottom of the page.

Packing Pieces

Type AFCW



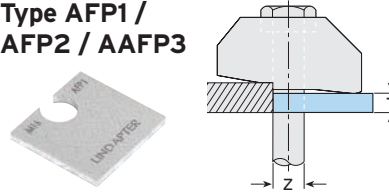
Mild steel, hot dip galvanized.

Product Code	Bolt Size Z	Dimension T
LAF050CW*	1/2"	1/16"
LAF062CW*	5/8"	1/16"
LAF075CW	3/4"	1/16"

* Also compatible with Type AAF clamp.

Note: Type AFCW has a slight bend along its center line which flattens out during installation.

Type AFP1 / AFP2 / AAFP3



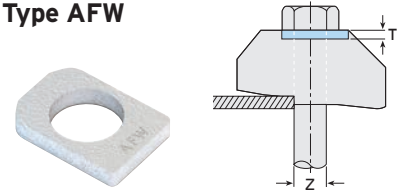
Mild steel, hot dip galvanized.

Product Code	Bolt Size Z	Dimension T
LAF050P1*	1/2"	3/16"
LAF062P1*	5/8"	3/16"
LAF075P1	3/4"	3/16"
LAF100P1	1"	3/16"
LAF050P2*	1/2"	3/8"
LAF062P2*	5/8"	3/8"
LAF075P2	3/4"	3/8"
LAF100P2	1"	3/8"
LAFA075P3*	3/4"	13/16"

* Also compatible with Type AAF clamp.

Also Available

Type AFW



SG iron, mild steel, hot dip galvanized.

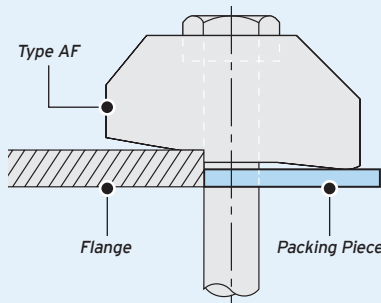
Product Code	Bolt Size Z	Dimension T
LAF050W	1/2"	3/16"
LAF062W	5/8"	3/16"
LAF075W	3/4"	1/4"
LAF100W	1"	3/8"

Note: Type AFW converts the recess to a flat top and is required for A325, A490 and 1" Grade 5 structural bolts.

Tail Length / Packing Piece Combinations for Type AF

Choose the correct combination for your configuration using the table on the right. Please note these calculations are for parallel flanges and beams up to 10° slopes only.

For example, a 3/4" Type AF on a 1 9/16" flange requires 1 x Type AF medium tail (M), 1 x Type AFCW and 2 x Type AFP2.



Flange Thickness	1/2"				5/8"				3/4"				1"			
	AF	AFCW	AFP1	AFP2	AF	AFCW	AFP1	AFP2	AF	AFCW	AFP1	AFP2	AF	AFCW	AFP1	AFP2
3/16"	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/4"	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/16"	S	1	-	-	S	-	-	-	-	-	-	-	-	-	-	-
3/8"	S	-	1	-	S	1	-	-	S	1	-	-	S	-	-	-
7/16"	S	-	1	-	S	1	-	-	S	-	-	-	S	-	-	-
1/2"	M	-	-	-	S	-	1	-	S	1	-	-	S	-	-	-
9/16"	M	1	-	-	M	-	-	-	S	2	-	-	S	-	-	-
5/8"	S	-	-	1	M	-	-	-	S	-	1	-	S	-	-	-
11/16"	M	-	1	-	M	1	-	-	M	-	-	-	S	-	-	-
3/4"	S	2	-	1	M	2	-	-	M	-	-	-	S	-	1	-
13/16"	S	-	1	1	M	-	1	-	S	-	-	1	S	-	1	-
7/8"	M	-	-	1	M	1	1	-	M	2	-	-	S	-	1	-
15/16"	M	1	-	1	M	2	1	-	M	-	1	-	S	-	-	1
1"	S	-	-	2	M	-	-	1	M	1	1	-	S	-	-	1
1 1/16"	S	1	-	2	M	1	-	1	M	2	1	-	S	-	-	1
1 1/8"	M	3	-	1	S	-	-	2	M	-	-	1	S	-	-	1
1 3/16"	S	-	1	2	M	-	1	1	M	1	-	1	M	-	-	-
1 1/4"	S	1	1	2	M	1	1	1	M	2	-	1	M	-	-	-
1 5/16"	M	-	-	2	S	-	1	2	M	-	1	1	M	-	-	-
1 3/8"	S	-	-	3	M	-	-	2	M	1	1	1	M	-	1	-
1 7/16"	M	2	-	2	M	1	-	2	M	2	1	1	M	-	1	-
1 1/2"	M	-	1	2	S	-	-	3	M	-	-	2	M	-	-	1
1 9/16"	M	1	1	2	M	-	1	2	M	1	-	2	M	-	-	1
1 5/8"	M	2	1	2	M	1	1	2	M	1	-	2	M	-	-	1
1 11/16"	M	-	-	3	S	-	1	3	M	-	1	2	M	-	1	1
1 3/4"	M	1	-	3	M	2	1	2	M	1	1	2	M	-	1	1
1 13/16"	S	3	1	3	S	4	-	3	S	3	-	3	M	-	1	1
1 7/8"	S	1	-	4	M	1	-	3	M	-	-	3	M	-	1	1
1 15/16"	M	1	1	3	M	2	-	3	S	2	1	3	M	-	-	2
2"	S	-	1	4	M	3	-	3	S	3	1	3	M	-	-	2

➔ For thicker flanges contact Lindapter.

AF = Type AF | AFCW = Type AFCW | AFP1 = Type AFP1 | AFP2 = Type AFP2 | S = AF short | M = AF medium

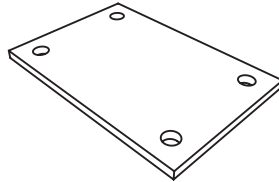
Location and End Plates for Types AF, AAF and CF

These plates ensure the clamps and bolts are located in the correct position relative to the supporting steel. If you would like help choosing a suitable plate, please contact Lindapter.

Location Plate

What is it?

Location plates are simple fabricated items designed to sit between the two sections to be clamped together to ensure the bolts are fixed at the correct centers.



Material: Structural steel A572 Grade 50.
For other grades contact Lindapter.

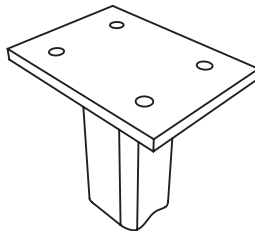
Bolt Size	Hole Ø d	Plate Thickness		Hole Centers C1	Length / Width min L1	Hole Centers C2	Length / Width min L2
		Grd. 5 / A325	A490				
1/2"	9/16"	1/2"	1/2"	$B_1 + 9/16"$	$B_1 + 4"$	$B_2 + 9/16"$	$B_2 + 4"$
5/8"	11/16"	5/8"	5/8"	$B_1 + 11/16"$	$B_1 + 4"$	$B_2 + 11/16"$	$B_2 + 4"$
3/4"	13/16"	3/4"	3/4"	$B_1 + 13/16"$	$B_1 + 6"$ *	$B_2 + 13/16"$	$B_2 + 6"$ *
1"	1 1/8"	1"	1"	$B_1 + 1 1/8"$	$B_1 + 7"$	$B_2 + 1 1/8"$	$B_2 + 7"$

* Plate width for Type AF size 3/4" can be reduced to 5" if required.

End Plate

What is it?

End plates are simple fabricated items that are pre-welded to support frames, bracket or sections, allowing connection to the supporting structure with standard Lindapter clamps.



Material: Structural steel A572 Grade 50.
For other grades contact Lindapter.

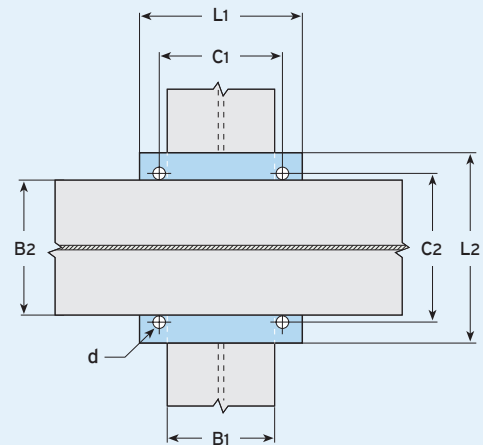
Bolt Size	Hole Ø d	Plate Thickness ¹⁾		Hole Centers C1	Length min L1	Hole Centers C2	Width min L2
		Grd. 5 / A325	A490				
1/2"	9/16"	5/8"	5/8"	$B + 9/16"$	$B + 4"$	$3 1/8"$	$C_2 + 3 1/8"$
5/8"	11/16"	3/4"	1"	$B + 11/16"$	$B + 4"$	4"	$C_2 + 4"$
3/4"	13/16"	1"	1"	$B + 13/16"$	$B + 6"$ *	7"	$C_2 + 7"$
1"	1 1/8"	1 1/4"	1 1/4"	$B + 1 1/8"$	$B + 7"$	$7 7/8"$	$C_2 + 7 7/8"$

1) Depending on the type of connection and associated end plate use, the thickness may need to be modified to comply with accepted local design codes.

* Plate width for Type AF size 3/4" can be reduced to 5" if required.

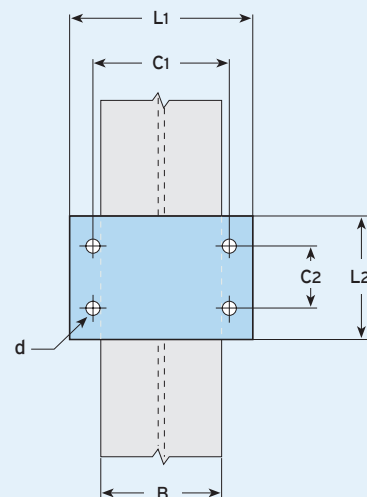
LOCATION PLATE DIMENSIONS

L1 = Location Plate Length, L2 = Location Plate Width,
B1, B2 = Flange Width, C1, C2 = Hole Centers, d = Hole Ø



END PLATE DIMENSIONS

L1 = End Plate Length, L2 = End Plate Width,
B = Flange Width, C1, C2 = Hole Centers, d = Hole Ø



Use Lindapter's Bolt Length Calculator on [page 6](#) to calculate the correct bolt length for your application.