

## Holdown Plate

Secure and hold down structural steel endposts between floors or to the foundation embed plate (by others).

ClarkDietrich HDP holdown plates are designed for taller construction and higher tension loads; transferring the tension loads between floors or from structural members to the foundation embed plate (by others). The HDP holdown plates are pre-punched and available in six sizes that can be bolted or welded. They can be used for panelized construction or stick-built construction.

### ALTERNATIVE PRODUCTS

ClarkDietrich Holdown

### PRODUCT DIMENSIONS

**300HDP025:** 1/4" x 3" X 24"

**300HDP038:** 3/8" x 3" X 24"

**300HDP050:** 1/2" x 3" X 30"

**500HDP025:** 1/4" x 5" X 24"

**500HDP038:** 3/8" x 5" X 24"

**500HDP050:** 1/2" x 5" X 30"

### MATERIAL SPECIFICATIONS

**Steel Thickness:** 1/4", 3/8" and 1/2" Plate

**Bolt Hole Size:** 13/16"

**ASTM:** 1/4" and 3/8" A36 Plate  
1/2" A572 Gr50 Plate

**Coating:** Envirocron® Powder Coating

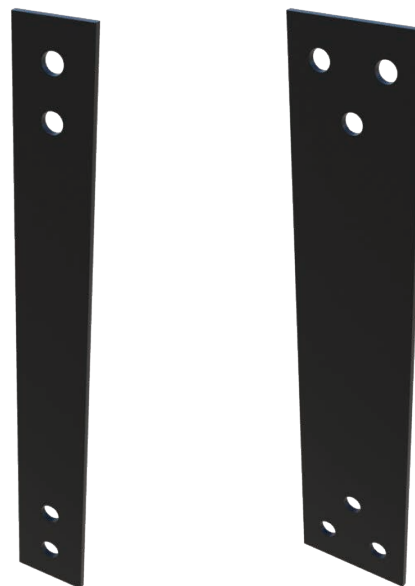
### INSTALLATION

Field trimming, welding or drilling will be required when installing holdown plates. When trimming cold-formed steel, use a grinder or plasma cutter. No torch cutting.

Clean all trimmed, cut, drilled and welded areas and paint with a zinc-rich (cold galvanize) paint.

Endpost must align from level to level and holdown plates set flat on the post components before welding or bolting.

Holdown plates are intended for tension loads and not tested for compression loads. Endposts with bearing gaps must have a structural shim installed for full compression load path.

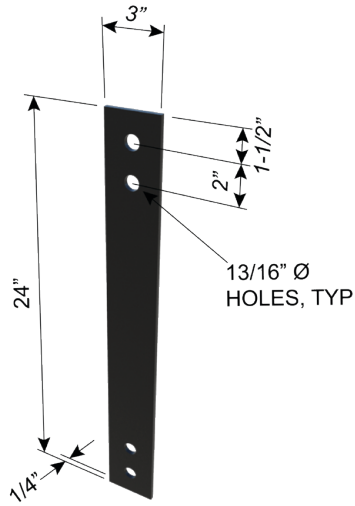


CD holdown plates can be welded or bolted, but a designer of record shall check the endpost connection capacity and provide a specific connection detail for each project.

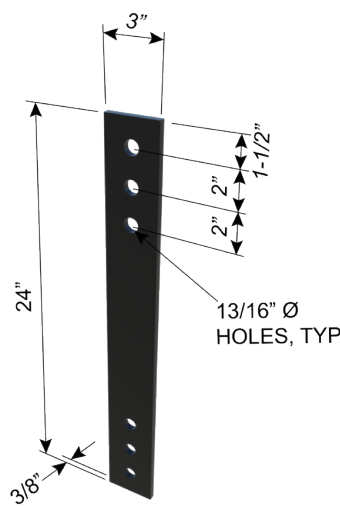
Welding to cold-formed steel endpost members shall be with 97 mils (50Ksi) minimum with a maximum weld size of 1/8" fillet. Welder shall be certified for sheet steel welding.

### ClarkDietrich Holddown Plate (HDP) - 3" Wide

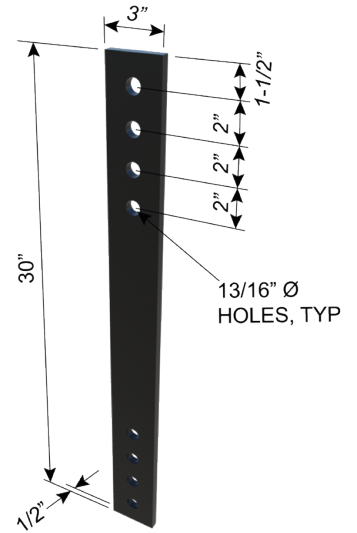
Product code	Thickness	Width	Length	Holes per End	Packaging
300HDP025	1/4"	3"	24"	2	250
300HDP038	3/8"	3"	24"	3	200
300HDP050	1/2"	3"	30"	4	100



300HDP025



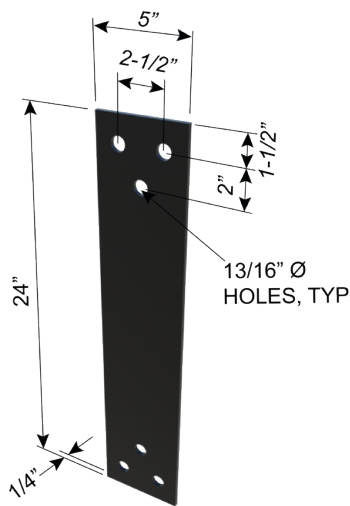
300HDP038



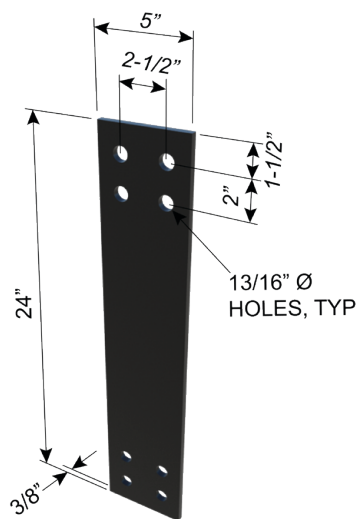
300HDP050

### ClarkDietrich Holddown Plate (HDP) - 5" Wide

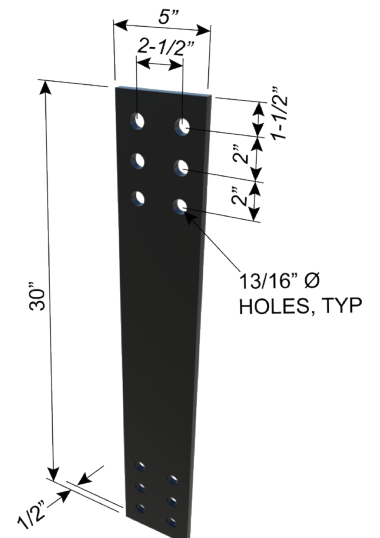
Product code	Thickness	Width	Length	Holes per End	Packaging
500HDP025	1/4"	5"	24"	3	150
500HDP038	3/8"	5"	24"	4	100
500HDP050	1/2"	5"	30"	6	50



500HDP025



500HDP038



500HDP050

## Holdown Plate

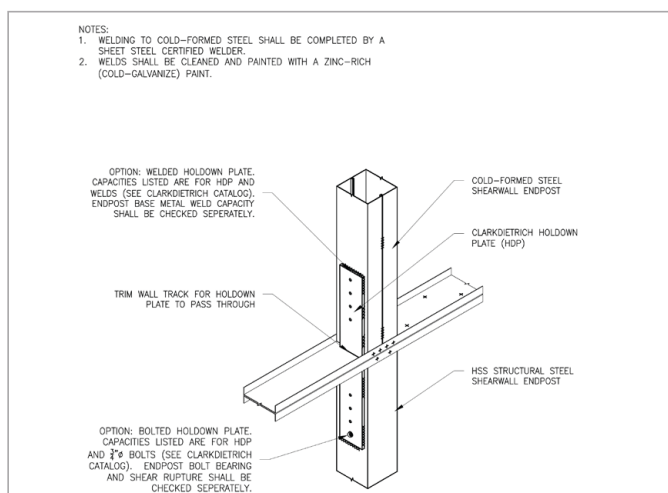
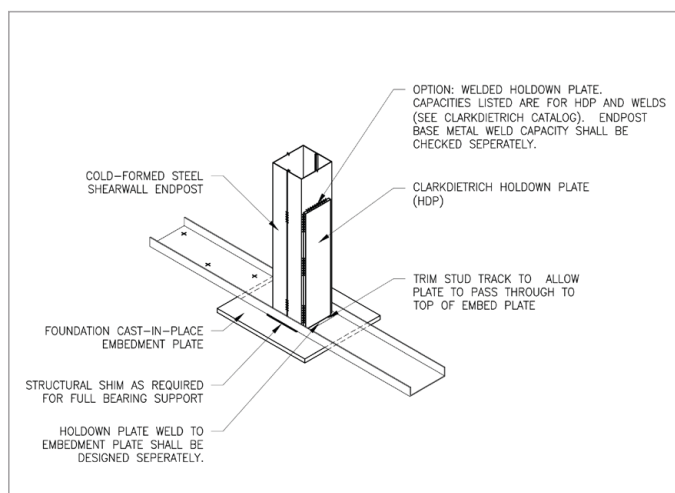
## Holdown Plate (HDP): Bolted

Product code	Plate Dimensions and Properties					Fastener at Each End	HDP Tension Capacities		
	Thickness (in)	Width (in)	Length (in)	Yield Strength (ksi)	Tensile Strength (ksi)		Nominal Strength, kips	ASD load, kips	LRFD load, kips
300HDP025	0.250	3	24	36	58	(2) 3/4" Bolts	27.00	15.86	23.79
300HDP038	0.375	3	24	36	58	(3) 3/4" Bolts	40.50	23.79	35.68
300HDP050	0.500	3	30	50	65	(4) 3/4" Bolts	71.09	35.55	53.32
500HDP025	0.250	5	24	36	58	(3) 3/4" Bolts	45.00	24.47	36.70
500HDP038	0.375	5	24	36	58	(4) 3/4" Bolts	67.50	36.70	55.05
500HDP050	0.500	5	30	50	65	(6) 3/4" Bolts	109.69	54.84	82.27

**Notes:**

- Listed capacities are based on AISI S100-16 (2020) w/S2-20 and ANSI/AISC 360-16.
- Limitations of hole spacing and edge distance are per ANSI/AISC 360-16 Section J3.
- HDP025 and HDP038 plates use A36 steel, HDP050 plate use A572-Gr50 steel.
- For fasteners, use 3/4" x 2-1/2" A325T (full thread) bolts with F436 washers and A563 heavy hex nut.
- Nominal strengths are controlled by HDP plate tensile yielding.
- ASD and LRFD loads are controlled by HDP plate tensile rupture.
- Capacities listed for HDP plate and bolt only, substrate connection capacities should be checked separately.

## TYPICAL CONSTRUCTION DETAILS



Visit our CAD Library at [clarkdietrich.com](http://clarkdietrich.com) to view or download construction details in .dwg, .dxf, and .pdf formats.

## Holddown Plate (HDP): Welded

Product code	Plate Dimensions and Properties					Size of Weld (thickness), w (in)	HDP Weld Tension Capacities		
	Thickness (in)	Width (in)	Length (in)	Yield Strength $F_y$ (ksi)	Tensile Strength $F_u$ (ksi)		Nominal Strength, kips	ASD load, kips	LRFD load, kips
300HDP025	0.250	3	24	36	58	1/8"	27.00	16.17	24.30
300HDP038	0.375	3	24	36	58	3/16"	40.50	24.25	36.45
300HDP050	0.500	3	30	50	65	5/16"	75.00	44.91	67.50
500HDP025	0.250	5	24	36	58	1/8"	45.00	26.95	40.50
500HDP038	0.375	5	24	36	58	3/16"	67.50	40.42	60.75
500HDP050	0.500	5	30	50	65	5/16"	125.00	74.85	112.50

Product code	Longitudinal Weld Length/Side		
	Nominal Strength (in)	ASD load (in)	LRFD load (in)
300HDP025	5	6	6
300HDP038	5	6	6
300HDP050	5	5	5
500HDP025	8	9	9
500HDP038	8	9	9
500HDP050	7	9	9

### Notes:

- Listed capacities and weld lengths are based on AISI S100-16 (2020) w/S2-20 and ANSI/AISC 360-16.
- Listed capacities applicable for Fillet Welds only.
- Listed capacities are based on E60xx or E70xx electrodes for A36 steel plates, E70XX electrodes for A572-Gr50 steel plates.
- Limitations of weld size (thickness of weld) are per ANSI/AISC 360-16 Section J2.
- HDP025 and HDP038 plates use A36 steel, HDP050 plate use A572-Gr50 steel.
- Weld capacities are controlled by HDP plate tensile yielding.
- Capacities listed for HDP plate only, substrate connection capacities should be checked separately.