

Drift Head-of-Wall

Head-of-wall drift and deflection connection

Head-of-wall drift and deflection for exterior curtain wall and interior nonload-bearing walls

ClarkDietrich's Drift Head-of-wall Clips are used in deflection conditions for in-fill curtain wall assemblies and/or interior nonload-bearing partitions to provide for both vertical (deflection) and lateral (drift) movement. These clips are used in place of, or in combination with, deflection track.

The Drift Head-of-wall Clips can be attached to the underside of structural members, concrete decks or floor assemblies. Structural attachments are positioned in the center of the slot to allow building drift. The "C" shaped end of the clip is slid inside of the structural stud and not fastened allowing for vertical deflection. Studs must be cut less than full height to enable vertical movement up to 2" (1" up and down).

MATERIAL SPECIFICATIONS

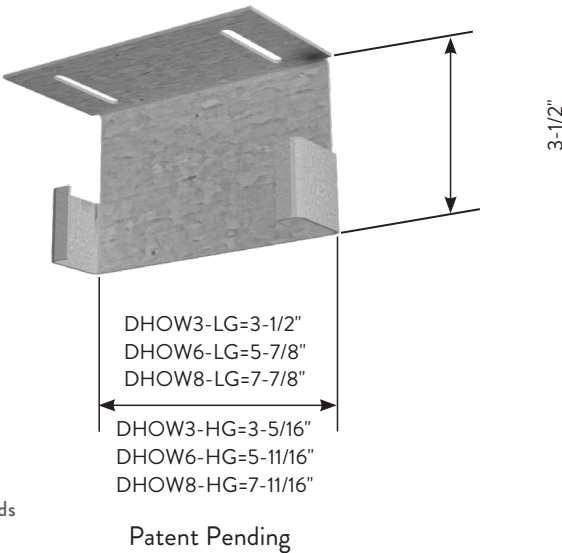
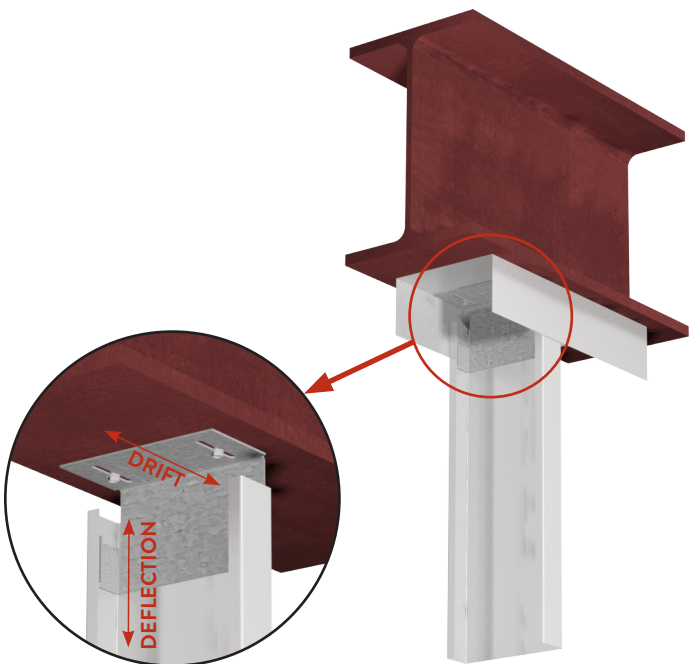
- Gauge: 14 gauge (68mil)
- Design Thickness: 0.0713 inches
- Yield Strength: 50ksi
- Coating: G90
- ASTM: A653/A653M

DHOW-LG Systems				
For attaching 20ga (33mil), 18ga (43mil), or 16ga (54mil) structural studs				
Product code	Thickness Mils (Gauge)	Design thickness	Size (in)	Packaging pcs./bucket
DHOW3-LG	68mil (14ga)	0.0713	3-1/2"	25
DHOW6-LG			5-7/8"	
DHOW8-LG			7-7/8"	

DHOW-HG Systems				
For attaching 14ga (68mil) or 12ga (97mil) structural studs				
Product code	Thickness Mils (Gauge)	Design thickness	Size (in)	Packaging pcs./bucket
DHOW3-HG	68mil (14ga)	0.0713	3-5/16"	25
DHOW6-HG			5-11/16"	
DHOW8-HG			7-11/16"	

INSTALLATION

The Drift HOW clips come in two designs. The DHOW-LG (light gauge) is designed to be installed in structural stud gauges 20ga (33mil), 18ga (43mil) or 16ga (54mil). The DHOW-HG (heavy gauge) is designed to be installed in structural stud gauges 14ga (68mil) and 12ga (97mil). Attachment to the primary structure can be made with 1/4-14 screws, or concrete anchors and shall be driven through the slotted holes and positioned in the center of the slot to allow building drift. To ensure slip, back-out the fasteners about 1/2" turn. The "C" shaped end of the clip is slid inside of the structural stud and is not fastened, which allows for vertical deflection. Drywall screws (in the stud) shall be placed no closer than 4" from the slotted leg of the clip.



# Drift Head-of-Wall (DHOW3)

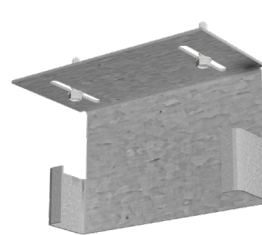
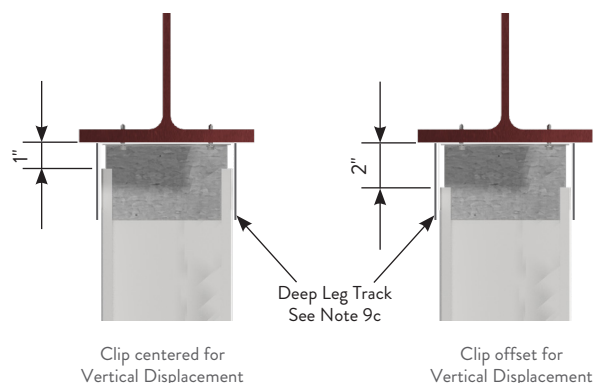
## ALLOWABLE LOADS

Clip designation	Stud thickness Mils (Gauge )	Yield strength (ksi)	Anchors to structure	ASD Allowable Loads (lbs)	
				Vertical Displacement	
				Center (± 1")	Offset (+2" / -0")
DHOW3-LG	33mil (20ga)	33ksi	Anchors to be designed by others	120	90
	43mil (18ga)	33ksi		210	130
	54mil (16ga)	50ksi		360	210
DHOW3-HG	68mil (14ga)	50ksi		510	260
	97mil (12ga)	50ksi		590	360

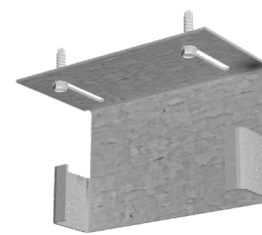
# Drift Head-of-Wall (DHOW3) w/Fasteners

## ALLOWABLE LOADS

Clip designation	Stud thickness ga (mils)	Yield strength (ksi)	Anchors to structure	ASD Allowable Loads (lbs)	
				Vertical Displacement	
				Center (± 1")	Offset (+2" / -0")
DHOW3-LG	33mil (20ga)	33ksi	(2) 1/4-14 Fasteners in 3/16" Steel	120	90
	43mil (18ga)	33ksi		210	130
	54mil (16ga)	50ksi		360	210
DHOW3-HG	68mil (14ga)	50ksi		510	260
	97mil (12ga)	50ksi		590	360
DHOW3-LG	33mil (20ga)	33ksi	(2) 1/4" Hilti Kwik HUS-EZ (2-1/2" Embedment in to 3000 psi cracked concrete)	120	90
	43mil (18ga)	33ksi		210	130
	54mil (16ga)	50ksi		360	210
DHOW3-HG	68mil (14ga)	50ksi		510	260
	97mil (12ga)	50ksi		590	360



Anchors centered for in-plane Drift



Anchors offset for in-plane Drift

## Notes:

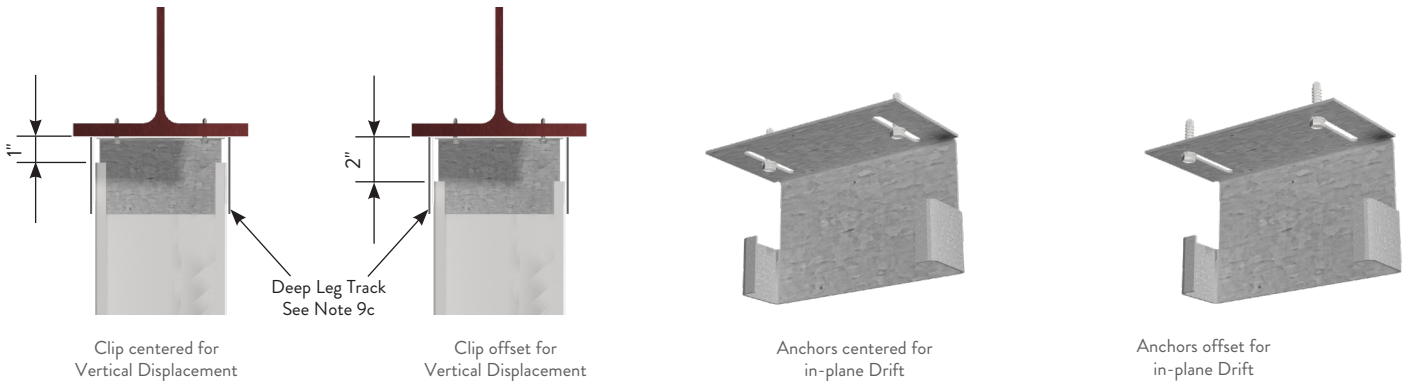
- Table 1 capacities represent the capacity of the clip and the stud connection.
- Table 2 considers capacities when the specified connectors to the structure described in notes 3 and 4 are used.
- (2) 1/4-14 Fasteners shall be used for attachment to steel structure.
- (2) 1/4 Hilti Kwik HUS-EZ Anchors shall be used for attachment to concrete structure.
- Capacities listed in the table/notes do not consider load adjustment for edge distance of concrete anchors. For no reduction in the listed capacities of 1/4" Hilti KWIK HUS-EZ anchors embedded 2-1/2" deep into 3000psi concrete, the following minimum edge distance shall be met:
  - 4-1/2" for uncracked concrete
  - 4-1/2" for cracked concrete
- To minimize the torsional effects of the stud, place stud bridging 12" from the end of the stud.
- Drywall screw (in stud) shall be placed no closer than 4" from the slotted leg of the clip.
- Allowable loads have not been increased for wind, seismic, or other factors.
- Head-of-Wall Drift clip allows up to ( $\pm 1"$ ) of vertical displacement, and ( $\pm 1"$ ) of drift in the plane of the wall.
  - "Center" capacity is for the center configuration of both Drift and Vertical Displacement.
  - "Offset" capacity is for the offset configuration of both Drift and Vertical Displacement.
  - If a deflection track is used, use a 2-1/2" (min) leg track so the stud does not disengage the track.
- To ensure slip,
  - Concrete fasteners shall not be driven completely flush against the connector.
  - Structural steel fasteners -once tightened, back-out the fasteners in steel about 1/2 turn.

Drift Head-of-Wall

Head-of-wall drift and deflection connection

Drift Head-of-Wall (DHOW6)				ALLOWABLE LOADS	
Clip designation	Stud thickness Mils (Gauge)	Yield strength (ksi)	Anchors to structure	ASD Allowable Loads (lbs)	
				Vertical Displacement	
				Center (± 1")	Offset (+2" / -0")
DHOW6-LG	33mil (20ga)	33ksi	Anchors to be designed by others	220	196
	43mil (18ga)	33ksi		340	248
	54mil (16ga)	50ksi		515	261
DHOW6-HG	68mil (14ga)	50ksi		515	275
	97mil (12ga)	50ksi		625	340

Drift Head-of-Wall (DHOW6) w/Fasteners				ALLOWABLE LOADS	
Clip designation	Stud thickness Mils (Gauge)	Yield strength (ksi)	Anchors to structure	ASD Allowable Loads (lbs)	
				Vertical Displacement	
				Center (± 1")	Offset (+2" / -0")
DHOW6-LG	33mil (20ga)	33ksi	(2) 1/4-14 Fasteners in 3/16" Steel	220	196
	43mil (18ga)	33ksi		340	248
	54mil (16ga)	50ksi		515	261
DHOW6-HG	68mil (14ga)	50ksi		515	275
	97mil (12ga)	50ksi		625	340
DHOW6-LG	33mil (20ga)	33ksi	(2) 1/4" Hilti Kwik HUS-EZ (2-1/2" Embedment in to 3000 psi cracked concrete)	220	196
	43mil (18ga)	33ksi		340	248
	54mil (16ga)	50ksi		515	261
DHOW6-HG	68mil (14ga)	50ksi		515	275
	97mil (12ga)	50ksi		625	340



Notes:

- 1 Table 1 capacities represent the capacity of the clip and the stud connection.
- 2 Table 2 considers capacities when the specified connectors to the structure described in notes 3 and 4 are used.
- 3 (2) 1/4-14 Fasteners shall be used for attachment to steel structure.
- 4 (2) 1/4 Hilti Kwik HUS-EZ Anchors shall be used for attachment to concrete structure.
- 5 Capacities listed in the table/notes do not consider load adjustment for edge distance of concrete anchors. For no reduction in the listed capacities of 1/4" Hilti KWIK HUS-EZ anchors embedded 2-1/2" deep into 3000psi concrete, the following minimum edge distance shall be met:

a 4-1/2" for uncracked concrete

b 4-1/2" for cracked concrete
- 6 To minimize the torsional effects of the stud, place stud bridging 12" from the end of the stud.
- 7 Drywall screw (in stud) shall be placed no closer than 4" from the slotted leg of the clip.
- 8 Allowable loads have not been increased for wind, seismic, or other factors.
- 9 Head-of-Wall Drift clip allows up to (±1") of vertical displacement, and (±1") of drift in the plane of the wall.

a "Center" capacity is for the center configuration of both Drift and Vertical Displacement.

b "Offset" capacity is for the offset configuration of both Drift and Vertical Displacement.

c If a deflection track is used, use a 2-1/2" (min) leg track so the stud does not disengage the track.
- 10 To ensure slip,

a Concrete fasteners shall not be driven completely flush against the connector.

b Structural steel fasteners -once tightened, back-out the fasteners in steel about 1/2 turn.

## Drift Head-of-Wall (DHOW8)

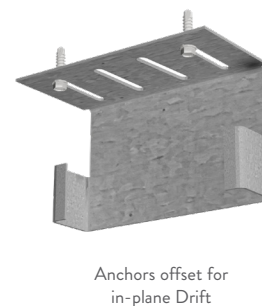
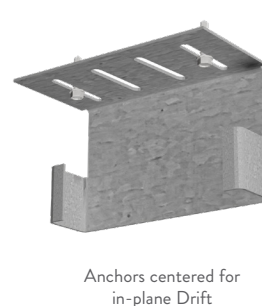
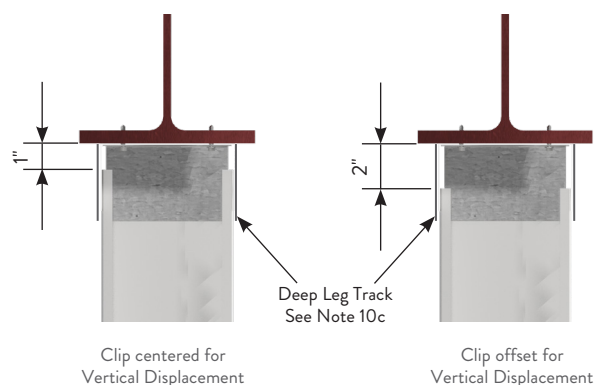
## ALLOWABLE LOADS

Clip designation	Stud thickness ga (mils)	Yield strength (ksi)	Anchors to structure	ASD Allowable Loads (lbs)	
				Vertical Displacement	
				Center (± 1")	Offset (+2" / -0")
DHOW8-LG	33mil (20ga)	33ksi	Anchors to be designed by others	—	—
	43mil (18ga)	33ksi		120	110
	54mil (16ga)	50ksi		200	160
DHOW8-HG	68mil (14ga)	50ksi		260	190
	97mil (12ga)	50ksi		420	280

## Drift Head-of-Wall (DHOW8) w/Fasteners

## ALLOWABLE LOADS

Clip designation	Stud thickness ga (mils)	Yield strength (ksi)	Anchors to structure	ASD Allowable Loads (lbs)	
				Vertical Displacement	
				Center (± 1")	Offset (+2" / -0")
DHOW8-LG	33mil (20ga)	33ksi	(2) 1/4-14 Fasteners in 3/16" Steel	—	—
	43mil (18ga)	33ksi		120	110
	54mil (16ga)	50ksi		200	160
DHOW8-HG	68mil (14ga)	50ksi		260	190
	97mil (12ga)	50ksi		420	280
DHOW8-LG	33mil (20ga)	33ksi	(2) 1/4" Hilti Kwik HUS-EZ (2-1/2" Embedment in to 3000 psi cracked concrete)	—	—
	43mil (18ga)	33ksi		120	110
	54mil (16ga)	50ksi		200	160
DHOW8-HG	68mil (14ga)	50ksi		260	190
	97mil (12ga)	50ksi		420	280



## Notes:

- Table 1 capacities represent the capacity of the clip and the stud connection.
- Table 2 considers capacities when the specified connectors to the structure described in notes 3 and 4 are used.
- (2) 1/4-14 Fasteners shall be used for attachment to steel structure.
- (2) 1/4 Hilti Kwik HUS-EZ Anchors shall be used for attachment to concrete structure.
- For the (2) fasteners attached to the structure, each fastener shall be installed in the any two slots of the clip leg.
- Capacities listed in the table/notes do not consider load adjustment for edge distance of concrete anchors. For no reduction in the listed capacities of 1/4" Hilti KWIK HUS-EZ anchors embedded 2-1/2" deep into 3000psi concrete, the following minimum edge distance shall be met:
  - 4-1/2" for uncracked concrete
  - 4-1/2" for cracked concrete
- To minimize the torsional effects of the stud, place stud bridging 12" from the end of the stud.
- Drywall screw (in stud) shall be placed no closer than 4" from the slotted leg of the clip.
- Allowable loads have not been increased for wind, seismic, or other factors.
- Head-of-Wall Drift clip allows up to ( $\pm 1"$ ) of vertical displacement, and ( $\pm 1"$ ) of drift in the plane of the wall.
  - "Center" capacity is for the center configuration of both Drift and Vertical Displacement.
  - "Offset" capacity is for the offset configuration of both Drift and Vertical Displacement.
  - If a deflection track is used, use a 2-1/2" (min) leg track so the stud does not disengage the track.
- To ensure slip,
  - Concrete fasteners shall not be driven completely flush against the connector.
  - Structural steel fasteners -once tightened, back-out the fasteners in steel about 1/2 turn.